NEBRASKA TRAFFIC RECORDS SYSTEM PLAN

FY2022 – FY2026

Prepared by Nebraska's Traffic Records Coordinating Committee

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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 Transportation's Crash File.
- Enhance the Nebraska Department of Motor Vehicles (DMV) Driver/CMV Record Files.
- Enhance and expand the Crash Outcome Data Evaluation System (CODES) infrastructure.
- Nebraska Criminal Justice Information System (NCJIS) and the NCJIS System Improvements.
- Implement a Citation Tracking System.
- 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
- Administrator, Nebraska Department of Transportation - Highway Safety Office
- 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 (HSO) 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 February 11, 2021 to May 13, 2021.

The scope of this assessment covered all 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 May 2026 which will provide a benchmark for progress on the recommendations from the 2021 assessment and provide the detail to create the next Traffic Records Plan.

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 2). 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 TraCS or other collection software databases and into NDOT's database. Mike Fargen (see project 2)*
- 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 3 & 4)*
- Improve the interfaces with the Crash data system to reflect best practices identified in the Traffic Records Program Assessment Advisory. *Sean Owings (see project 6)*

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 – Drew Bigham (see project 10)*

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 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 – Drew Bigham (see project 12).*

  DUI cases are not currently tracked. However, all 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 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. *Drew Bigham (see projects 7 and 8)*

Traffic Records Coordinating Committee (TRCC)
- Develop basic quality metrics for each system component and report on them regularly. *HSO – Christine Mohlman (see project 14)*
- Develop a traffic records inventory. *HSO – Christine Mohlman (see project 13). The table has been created and coordination with data managers is in process.*
- Conduct a training needs assessment for all TRCC core data system users. HSO - *Christine Mohlman (see project 34)*

Driver Records
- Improve the data dictionary for the Driver data system to reflect best practices identified in the Traffic Records Program Assessment Advisory. *DMV - Sara O'Rourke & [vacant] (see project 17)*
- Improve the data quality control program for the Driver data system to reflect best practices identified in the Traffic Records Program Assessment Advisory. *DMV - Sara O'Rourke & [vacant] (see project 18)*

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 process flow documents.

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. *DHHS – John Goza (see projects 21 - 27)*

Roadway Information
- Allow access to roadway data for consumption and updates. *NDOT – Mark Lindemann (see project 30)*
- 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. *NDOT – Mark Lindemann (see project 30)*

Strategic Planning
- Charge the TRCC with updating the Traffic Records Plan addressing the recommendations in the 2021 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 February 17, 2021 to May 19, 2021 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 including the launch of the new Crash Information Database on 1/1/2021.

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

- o 85.6% of crash reports in 2020 were submitted electronically to the Nebraska Department of Transportation (NDOT).
- 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, the report is instantly available within the Crash Information Database (CID) and Storefront. Law enforcement has a maximum of ten days to report a crash. This rule applies unless the report has a partial match within the CID system.

Timeliness of Injury through Property Damage Only (PDO) Crashes – Electronic
Once a report has been approved it is instantly available within the CID and Storefront. Law enforcement has a maximum of ten days to report a crash. This rule applies unless the report has a partial match within the CID 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 or scanned and emailed to NDOT Highway Safety Section. Upon receipt of the mail/email 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 as reference material for six months. 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, State Property Damage, and then the remaining reports are processed by the first in - first out method.

- All crash records not on private property are coded with latitude/longitude coordinates, which averages 45 days behind current date. Adding latitude/longitude at the time of submitting 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. **Baseline:** Currently at 79.91% within 10 days.	95% of crash data submitted to NDOT electronically within 10 days of the crash.		1
	Complete crash data entered into {electronic system} within 3 days (except fatal crashes). **Baseline:** Currently at 10 days.	100% within 3 days.		1
Accuracy	Deploy a "smart map" point-and-click interface for law enforcement officers to indicate the precise locations from an electronic map. **Baseline**: Not accurately measured.	100% of location data auto-populated on crash form.		4
	Establish a comprehensive, formal quality control program for crash data.	• A complete set of data quality performance measures for the crash system covering timeliness, accuracy, completeness, uniformity, integration, and accessibility. • A formal method of tracking errors and providing feedback to law enforcement agencies. • A link between error tracking and training. • Coordination with users to ensure that errors noted by users are logged, corrected, and addressed in training. • Periodic audits of crash reports comparing the narrative and diagram to the coded information on the form. • Oversight by the Traffic Records Coordinating Committee, to include devoting time on the agenda to review data quality measurements.		3, 4, & 5
	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	3

Table 1: Crash Records System (continued)

Quality Category	Status/Baseline	Target/Objective	Performance Measure Progress	Project #
Completeness	Generate measures of crash data completeness. **Baseline:** Not measured – not addressed.	100% of all MMUCC data included in all crash records.		3
Uniformity	Redesign data collection form in reference to current Model Minimum Uniform Crash Criteria (MMUCC) Version. **Baseline:** Version 5.0 compliant.	100% compliant with the current MMUCC Version.		4
	Improve the data dictionary to ensure consistency. **Baseline:** Not currently produced – not addressed.	100% consistent data that follows data dictionary and procedures.		4
Accessibility	Make crash query data available to researchers and public. **Baseline:** Current data is available in the NTIP system.	User Interface to allow data users immediate access to publicly available crash data. Reports can be requested.	100% but continue to improve.	6
Data Integration	Produce metrics of data integration. **Baseline:** No formal report – not addressed.	Automatic integration between roadway, driver, vehicle, and injury surveillance datasets		6

B.   Roadway Data Component Status

The Nebraska Department of Transportation (NDOT) collects and maintains roadway features of all public roads in the State. The data is 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 9,942-mile State highway system. The State road system represents over ten percent of the 98,005-mile public road system. In addition to the State system of roads there are 77,872 miles of county roads, and 10,188 miles of municipal streets. NDOT is in the process of collecting road features data on the local road system and currently have surface type, road width, and shoulder width on 67 percent of the local public road system.

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 Crash Information Database (CID) system. Along with their partners on the Nebraska Interagency Safety Committee, NDOT developed the Nebraska Strategic Highway Safety Plan in order to address the frequency, rate and factors contributing to fatal and serious injury crashes. The Interagency Safety Committee then undertook a screening process that ultimately resulted in the selection of six areas of focus—the Critical Emphasis Areas—for the Plan:

- Increasing Seat Belt Usage
- Reducing Roadway Departure Crashes
- Reducing Impaired Driving Crashes
- Reducing Intersection Crashes
- Reducing Young Driver Crashes
- Reducing Older Driver Crashes

NDOT uses data from the IHI and the CID 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. 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.

NDOT is aware of the analytic software tools recommended in the Highway Safety Manual. Adoption will 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, NDOT will also have to consider the Fundamental Data Elements (FDE) required in the Model Inventory of Road Elements (MIRE) guideline. NDOT is progressing toward collection of the MIRE FDE by the 2026 deadline. NDOT has started implementing safety analysis software with integration to currently available MIRE data.

Interface with Other Traffic Records System Components
NDOT recognizes the importance of a Location Reference Systems (LRS) for public roads through the All Roads Network Of Linear referenced Data (ARNOLD) requirement. NDOT's LRS is a Reference Post based referencing system. All State roads and most non-state roads have been inventoried in the LRS. The remaining public roads use road or street name and latitude/longitude coordinates and are in the process of being converted to the LRS. This provides the capability to interface roadway and crash data from the IHI and the CID. The accurate location of data would be greatly enhanced with an electronic locator tool that identified the LRS information.

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	30
	240 days from crash event to location coding of crashes	100% coded at time of entry	Currently at 240 days from crash event	2
	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	30
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	30
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	30
	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	30
	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.	30
Uniformity	All data elements consistent with historic data definitions.	100% of data matches definitions	This target is currently being met.	30
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.	30
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	30

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 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.

The Nebraska driver data system interacts with the National Driver Register's Problem Driver Pointer System (PDPS) and the Commercial Driver's License Information System (CDLIS), the Social Security Online Verification System (SSOLV), and the Systematic Alien Verification for Entitlement (SAVE) system. In addition, Nebraska uses the State-to-State (S2S) program to exchange driver history information electronically with other States.

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. daily.	100% completed daily	15
	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.	15
	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.	15
	100% of in-state convictions are being received same day.	100% of in-state convictions received electronically on same day.	Target currently being met.	15
Accuracy	% of duplicate records for individuals requiring correction = 2%.	98% duplicate free	To be determined.	17
	Frequency of CDL desk audits to assure data validity.	Daily	We audit all CDL records processed each day.	17
	% of errors found during CDL audits of critical data elements.	98% error free	We currently have a 4% error rate on CDL desk audits.	17

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.	15
	% 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 15 states including Nebraska.	15
	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 15 states including Nebraska.	15
Uniformity	% of Social Security Numbers verified online = 100%.	100%	Goal currently being met.	17
	% of immigration documents verified online = 100%.	100%	Goal currently being met.	17
	% 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 15 states including Nebraska.	17
Accessibility	Base: 140,000 driver's licenses processed online.	Increase by 10% each calendar.	79,612 driver's licenses processed from 1/1/15 - 12/31/15	17
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.	15

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 services deal with commercial motor vehicles and operators, aspects that are not addressed in this traffic records assessment. There were 2,398,328 registered vehicles listed at the end of 2020.

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).

Nebraska's vehicle data system includes a number of best practices. The system's custodial responsibility resides with the State Department of Motor Vehicles. The State validates Vehicle Identification Numbers using VINtelligence software. The system operates in real-time and provides data to NMVTIS in real-time as well. The vehicle data system incorporates AAMVA brands and records title brand history as is noted on the NMVTIS system. Stolen vehicles are flagged in the Nebraska system as well. The State participates at the Enhanced level in the PRISM system.

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.	20
Accuracy	Registration data is updated upon entry.	99%	Target currently being met.	20
	% of errors found during data audits of critical data elements.	5% or fewer.	To be determined.	20
Completeness	All the vehicle information is contained in records.	100%	Target currently being met.	20
Uniformity	All data elements consistent with data definitions.	99%	To be determined.	20
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.	20
Data Integration	Law Enforcement Agencies can access DMV data to auto-populate crash reports with vehicle information	Provide interface for 100% of electronic users.		19
	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.	

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. Several 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 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. NCJIS publishes the electronic citation data specification to allow data from every local agency regardless of agency software. 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	• Computer Aided Dispatch (CAD) Record Number • Citation/Arrest/Incident Number, Court Case Number • Location (street address, description, coordinates, etc.) • Personal ID (name, address, Driver License number, etc.)
Citation/Adjudication Linkages to Driver/Vehicle Files	• Driver and Owner Names, Driver License Number • Driver and Owner Addresses (location code, coordinates) • Vehicle Plate Number, Vehicle Identification Number

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.	8
	Average time convictions sent to DMV from courts = 24 hours, immediately upon conviction – currently real time.	Real time	Currently meeting this target.	8
Accuracy	% "errors" found during data audits of critical data elements = Not tracked	< 1%	To be determined	8
	% violations narratives that match the proper statute = Not tracked	100%	To be determined	8
Completeness	% traffic citations statewide written on a uniform citation = (required by statute)	100% (required by statute)	Currently meeting this target.	8
	Examine use/utility of MIDRIS DUI tracking system for changes/updates. Currently not implemented.		Develop a system to track DUI and related data	11

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.	8
Accessibility	Data available to other departments, researchers, public is available when issued electronically	100% of public data available	Planned for future development	11
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.		11
	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 other vendors. Currently pending due to notary requirements.	11
	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.	

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 402/405c 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 seatbelt facts and motorcycle data updated through 2019 and a variety of fact sheets covering impaired driving, safety equipment use, and crash severity.

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

The Office of Emergency Health Systems Emergency Medical Services (EMS) Program within DHHS provides regulatory authority for EMS activities within Nebraska. The State is divided into four EMS regions containing 427 licensed EMS Services that respond to approximately 297,000 calls for service each year. In 2016, the Electronic Nebraska Ambulance Rescue Service Information System (ENARSIS) required EMS Services to submit all patient care reports electronically and within 72 hours of completion of a call. The State's EMS agencies are reporting data to DHHS directly through ENARSIS which is compliant with NEMSIS V.3.4. A fifty-cent surcharge on vehicle registration fees provide the initial and on-going funding for the EMS data collection system.

Table 6: EMS Data Component

Quality Category	Status/Baseline	Target/Objective	Performance Measure Progress	Project #
			As of 1/1/2021	
Timeliness	% EMS reports sent to governing agency within 10 days of incident. **Baseline:** 38	100% of EMS reports sent to governing agency within 72 hours of incident.	90.44%	25
	% EMS reports sent to governing agency within 30 days. **Baseline:** 50	100% of EMS reports sent to governing agency within 72 hours of incident.	96.66%	25
	Mean # days from incident to data availability on statewide system. **Baseline:** 100	3 days	20.2 days	25
Accuracy	% EMS run locations that match statewide location coding. **Baseline:** 13	100%	98.75%	25
Completeness	% of EMS agencies contributing to the statewide database. **Baseline:** 13	100%	382/432=88.4%	25
	% "missing" found during data audits of critical data elements. **Baseline:** 8	< 5%	Future measure planned	25
Uniformity	% of records on EMS database that meet the current NEMSIS standards. **Baseline:** 92	> 90% of records	26.85%	25
Accessibility	Data available to other departments, researchers and public.	Respond to aggregate and generate factsheets and reports.	Planned for future development	31
Data Integration	% data collected through NARSIS, ENARSIS, and Omaha Fire and Rescue linked to CODES.	100% of records collected electronically.		21

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.	25
	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.	25
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%	25
	% 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%	25
Completeness	%" missing" found during data audits of critical data elements. **Baseline:** 0	<1% of critical data elements found "missing".	Future measure planned.	25
Uniformity	% of hospitals participating in statewide database. **Baseline**: 95%	100% of hospitals participating in statewide database.	Future measure planned.	25
Accessibility	Data available to other departments, researchers and to the public. **Baseline:** Respond to aggregate and generate factsheets and reports.	Online query access by approved departments.	Selected for implementation by TRCC.	26
Data Integration	% data collected linked in CODES.	99% Linked.	Selected for implementation by TRCC.	26

3.   Trauma Registry

Nebraska is divided into four trauma regions with 51 designated trauma centers throughout Nebraska. These trauma centers are designated as Comprehensive (2 hospital), Advanced (3 hospitals), Pediatric Advanced (1 hospital), General (5 hospitals), and Basic (40 hospitals). Comprehensive trauma centers are verified by the American College of Surgeons which is used to obtain state trauma designation. Advanced, General, and Basic trauma centers may be verified by the American College of Surgeons criteria to obtain state trauma designation or meet state regulatory requirements for state trauma designation. DHHS provides a web-based Trauma Registry that all hospitals with an emergency department are encouraged to participate in regardless of designation. All designated hospitals are required to submit data either directly or import into the Trauma Registry provided by DHHS.

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. **Baseline:** 30 days	To have data entered within 15 days of discharge	Median: 51 days	25
	Number of days from end of month of discharge until data is available for analysis on a state level. **Baseline:** 30 days	To have data received and available quickly to be able to monitor current trends	Median: 45.5 days	25
Accuracy	% "missing" found during data audits of critical data elements. **Baseline:** <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.	25
Completeness	% of discharges containing a valid E-CODE. **Baseline:** >95%	To have a complete database	Currently at 97.1%	25
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	25
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	26
Data Integration	% data collected linked to CODES	100% of data collected linked to CODES	Selected for implementation by TRCC	26

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. **Baseline:** 10 days	5 days from death discharge.	Future measure planned.	25
	Number of days from end of quarter/year until final data is available for analysis on a state level. **Baseline:** 6 months	3 months from end of quarter.	Future measure planned.	25
	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 21st, 2016.	25
Accuracy	% "missing" found during data audits.	< 10% data missing.	To be determined.	25
Completeness	% of injury-related fatalities containing a valid cause code.	100% of fatalities contain valid code.	Future measure planned.	25
Uniformity	% of death records that are reported through the electronic system.	100% of records reported electronically.	49%	25
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.	26

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	26

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 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 2020, the CODES 2018 dataset will be generated)	13 months from the end of the year, the CODES dataset will be generated		22
Accuracy	% accuracy and consistency of ENARSIS data	By 2022, >80% of yearly crash records indicating EMS transport are linked		25
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)		25
Uniformity	% data from State EMS agencies compliant with NEMSIS 3.0 standards	100% of EMS agencies compliant with current NEMSIS standards	85% of EMS agencies are compliant with NEMSIS	25

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		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		26

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	Investigator's Electronic Crash Reporting System	Crash Records	Analyzing different strategies/possible use of TraCS and other systems.	Yes	4/21/22
2	Develop a "Smart Map" Harmonized location referencing system	Crash & Citation/ Adjudication	Testing new system.	Yes	4/21/22
3	Improve the data quality control program for the Crash data system	Crash Records	Implement performance measures and trend analysis to assess data quality	Yes	4/21/22
4	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	4/21/22
5	Improve the procedures/ process flows for the Crash data system	Crash Records	Create process flow diagram for collection, reporting and posting	Yes	4/21/22
6	Improve the interfaces with the Crash data system	Crash Records	Real-time interfaces for driver, vehicle & roadway systems	Future planned development	4/21/22
7	Data Dictionary	Citation/ Adjudication	Include edit checks/validation rules, detailed text-based descriptions, and note which elements are captured through linkage	Yes	2/1/22
8	Improve the data quality control program for the citation/adjudication system	Citation/ Adjudication	Implement performance measures and trend analysis to assess data quality	Yes	2/1/22

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
9	Citation Tracking	Citation/ Adjudication	Track citations from point of issuance to posting on the driver file	Yes	2/1/22
10	Linkage	Citation/ Adjudication	Linked with driver, vehicle, crash	Yes	2/1/22
11	Establish a linked DUI system (MIDRIS)	Driver & Citation/ Adjudication	Linked to the driver system electronically. With Driver Data and sanctions included. Include all citations written	Yes	3/1/22
12	Develop Traffic Records Inventory	TRCC Management	Table created, working with data managers to complete	Yes	5/1/22
13	Improve quality control and quality improvement programs.	TRCC Management	Include timeliness, accuracy, completeness, uniformity, integration & accessibility for all 5 data systems	Yes	4/21/22
14	Complete a lifecycle cost consideration for projects	TRCC Management	To ensure long-term projects are successful beyond federal funding	Yes	4/21/22
15	Create a process flow	Driver	Create process flow (flow chart)	Future planned development	4/21/22
16	Create a data dictionary	Driver	Definitions and elements	Future planned development	4/21/22
17	Improve the data quality control program for the Driver data system	Driver	Implement performance measures and trend analysis to assess data quality	Future planned development	4/21/22
18	Deny PRISM Reincarnated carriers	Vehicle	Improve safety by denying registration	No	4/21/22
19	Create workflow documentation	Vehicle	Include NMVTIS	No	4/21/22
20	Create System Performance Measures	Vehicle	Timeliness, accuracy, completeness, uniformity, integration, and accessibility.	No	4/21/22
21	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	1/1/22
22	Create a CODES database linking crash, EMS, Hospital Discharge, and death certificate data	EMS/Injury Surveillance	77% of 2012 data was linked.	Yes	4/21/22
23	Project Name: E-CODE Data Quality Improvement	EMS/Injury Surveillance	2/13/14 data results not complete records.	Yes	4/21/22

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	Create a data dictionary	EMS/Injury Surveillance	Definitions and elements	Yes	1/1/22
25	Create System Performance Measures	EMS/Injury Surveillance	Timeliness, accuracy, completeness, uniformity, integration, and accessibility with goals	Yes	4/21/22
26	Interfaces/linkage	EMS/Injury Surveillance	For EMS Hospital data.		4/21/22
27	Include rehabilitation data	EMS/Injury Surveillance	Interface or linkage.	Yes	4/21/22
28	Track frequency, severity, & nature of injuries in MVC	EMS/Injury Surveillance	Create linkage	Yes	4/21/22
29	Allow access to data	Roadway	Allow access for consumption and updates	Yes	5/27/22
30	Improve the data quality control program for the Roadway data system	Roadway	Implement performance measures and trend analysis to assess data quality	Yes	5/27/22
31	Provide truly integrated data.	Data Use & Integration	Integrate data from all six components	Yes	4/21/22
32	Conduct a Training Needs Assessment	TRCC Management	Improve data and user's ability to efficiently use the data.	Yes	4/21/22
33	Replace the Crash Information Database	Crash	Update database adding current MMUCC fields	Yes	4/21/22
34	Crash and Roadway Data Interface for Roadway Safety Analysis	Crash	Link crash data and Linear Referencing System roadway data in safety analysis software	Yes	4/21/22

VI. Projects Selected for Implementation

The following projects were selected for implementation by the TRCC:

Project # 1	Project Name: Investigator's Electronic Crash Reporting System					
Lead Agency: NDOT	**Contact Information:** Sean Owings sean.owings@nebraska.gov (402) 479-4628					

Project Description / Purpose:
To improve the investigator's electronic crash reporting system.

System: Quality Category Project will Address: Crash Records

Target or Deficiency Project will Address:
- To reduce the current average of 2 hours to an average of less than 30 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.

Update:
NDOT received 85.6% of crash reports electronically in 2020.
In August 2021, Legislative Bill 174 went into effect and included the following changes: 1) Increase minimum property damage crash reportability threshold from "greater than $1,000" to "equal or exceeds $1,500," 2) Remove requirement for a driver to complete driver's report if the crash is investigated by an officer, and 3) Redact all birth dates and driver's license numbers from publicly available investigator's crash reports." These changes will be implemented into NE's crash reports.
2022: NDOT and NSP are working with Omaha PD to move to all-electronic crash reports, citations, etc. this fiscal year.
 4/21/2022: Omaha PD is projected to be electronic by July; a TraCS update is projected for May 3.

Estimated Budget/Funding Source by Year:	Source	2022	2023	2024	2025	2026
	Section: 405c	$0	$0	$0	$0	$0

Project # 2	Project Name: Develop a "Smart Map" Harmonized Location Referencing System	
Lead Agency: NDOT/NCC	**Contact Information:** Sean Owings and sean.owings@nebraska.gov (402) 479-4628	Drew Bigham drew.bigham@nebraska.gov (402) 471-3992

Project Description / Purpose:

Deploy a "smart map" point-and-click interface for law enforcement officers to indicate the precise locations from an electronic map. The "smart map" would use the identified crash location latitude/longitude to interface with NDOT's LRS and roadway inventory data. Ability to overlay enforcement with citation and crash records.

System: Quality Category Project will Address: Traffic Records

Target or Deficiency Project will Address:

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. 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 map's latitude/longitude data into the TraCS or other collection software databases, identify the LRS route and reference post information, and transmit the latitude/longitude and LRS information into NDOT's database.

Update:

The TLT (TraCS Location Tool) is built into TraCS. All agencies using this reporting method will use the TLT to place the crash's location.

February 2022: Drew Bigham replaced Mike Fargen at the Nebraska Crime Commission.

4/21/22: The new NTIP system can take a high-resolution image and auto-generate a line image of the intersection; this enhancement has taken a two-week task and reduced it to under ten minutes.

Estimated Budget/Funding	Source	2022	2023	2024	2025	2026
Source by Year:	Section: 405c	$0	$0	$0	$0	$0

Project # 3	Project Name: Establish a comprehensive, formal quality control program for crash data
Lead Agency: NDOT	**Contact Information:** Sean Owings sean.owings@nebraska.gov (402) 479-4628

Project Description / Purpose:

Establish a comprehensive, formal quality control program for crash data.

System: Quality Category Project will Address: Crash Records

Target or Deficiency Project will Address:

- A complete set of operationally relevant data quality performance measures for the crash system covering timeliness, accuracy, completeness, consistency, integration, and accessibility.
- A formal method of counting and tracking errors and providing feedback to law enforcement agencies.
- 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.
- 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.
- Periodic audits of crash reports comparing the narrative and diagram to the coded information on the form.

Update:

4/21/22 - This functionally is built into the new CID MMUCC 5 database and workflow which went live on 1/1/2021. NDOT is developing a new quality control program based on the functionality of the new database. The quality control program will establish a formal process of accessing crash data quality with robust performance measures. NDOT will use NHTSA's Model Performance Measures for State Traffic Records Systems as guide during development of the quality control program.

Estimated Budget/Funding	Source	2022	2023	2024	2025	2026
Source by Year:	Section:	$0	$0	$0	$0	$00

Project # 4	Project Name: Improve the Data Dictionary for the Crash Data System					
Lead Agency: NDOT	**Contact Information:** Sean Owings sean.owings@nebraska.gov (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:
This functionally is built into the new CID MMUCC 5 database and workflow which went live on 1/1/2021. NDOT is developing a full set of new data dictionary documentation based on the new database.
4/21/22: Estimated that 2021 year-end data will be completed around Sept 2022.

Estimated Budget/Funding Source by Year:	Source	2022	2023	2024	2025	2026
	Section: 405c	$0	$0	$0	$0	$0

Project # 5	Project Name: Improve the Process/Procedures Flows for the Crash Data System					
Lead Agency: NDOT	**Contact Information:** Sean Owings sean.owings@nebraska.gov (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:
This functionally is built into the new CID MMUCC 5 database and workflow which went live on 1/1/2021.
NTIP will have an update in June 2022 that will allow two different data systems running parallel to each other: 2021 and future crashes; 2020 and past crashes.
4/21/2022: The new NTIP system can take a high-resolution image and auto-generate a line image of the intersection; this enhancement has taken a two-week task and reduced it to under ten minutes.

Estimated Budget/Funding Source by Year:	Source	2022	2023	2024	2025	2026
	Section: 405c	$0	$0	$0	$0	$0

Project # 6	Project Name: Improve the Interfaces with the Crash Data System					
Lead Agency: NDOT	**Contact Information:** Sean Owings sean.owings@nebraska.gov (402) 479-4628					
Project Description / Purpose: Improve the timeliness and availability with real-time interfaces for driver, vehicle, and roadway data systems.						
System: Quality Category Project will Address: Traffic Records						
Target or Deficiency Project will Address: Improve the integration and accessibility of the crash data by providing real-time links with three other data systems. **Update:** This functionally is built into the new CID MMUCC 5 database and workflow which went live on 1/1/2021. NDOT is developing data integration and improving accessibility as the new database is stabilized. 4/21/2022: The new NTIP system can take a high-resolution image and auto-generate a line image of the intersection; this enhancement has taken a two-week task and reduced it to under ten minutes. Once Omaha PD becomes electronic, it is estimated that only 10% of crash reports will be paper.						
Estimated Budget/Funding Source by Year:	**Source**	**2022**	**2023**	**2024**	**2025**	**2026**
	Section: 405c	$0	$0	$0	$0	$0

Project # 7	Project Name: Citation/Adjudication System Data Dictionary					
Lead Agency: Nebraska Crime Commission	**Contact Information:** Drew Bigham drew.bigham@nebraska.gov (402) 471-3992					
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: Create an approved data dictionary for the Citation/Adjudication system including all databases. **Update:** 07/24/2020: eCitation data is validated during a testing phase when onboarding new LEA agencies onboard. The NCC has the XML spec for the eCitation data collection process available on the NCC website. 2/1/2022: Drew Bigham replaced Mike Fargen at the Nebraska Crime Commission.						
Estimated Budget/Funding Source by Year:	**Source**	**2022**	**2023**	**2024**	**2025**	**2026**
	Section: 405c	$255,000	$487,710	$325,205	$316,534	$296,000

Project # 8	Project Name: Improve the Data Quality Control Program for the Citation/Adjudication System
Lead Agency: Nebraska Crime Commission	**Contact Information:** Drew Bigham drew.bigham@nebraska.gov (402) 471-3992

Project Description / Purpose:
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.

System: Quality Category Project will Address: Traffic Records

Target or Deficiency Project will Address:
Improve data accuracy by tracking all needed improvements. Develop a performance measure grid with all six attributes being updated annually.

Update:
07/24/2020: Live data outside of the test environment is validated per the Nebraska Supreme Court Uniform Form specifications. Non-Nebraska Supreme Court variables (i.e., lat/long) are also validated. Validation also includes contingency variables reviews. Amazingly, NCC sees only 3-4 citations with errors every quarter.
In December 2021, Mike Fargen left the Crime Commission and Interim Director Nicole Carnes-Woutzke temporarily took his place during the hiring process for his replacement.
2/1/2022: Drew Bigham replaced Mike Fargen at the Nebraska Crime Commission.

Estimated Budget/Funding Source by Year:	Source	2022	2023	2024	2025	2026
	Section: 405c	$0	$0	$0	$0	$0

Project # 9	Project Name: Citation Tracking System
Lead Agency: Nebraska Crime Commission	**Contact Information:** Drew Bigham drew.bigham@nebraska.gov (402) 471-3992

Project Description / Purpose:
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.

System: Quality Category Project will Address: Citation and Adjudication Records

Target or Deficiency Project will Address:
Launch an integrated system that will track 100% of citations through adjudication.

Update:
07/24/2020: XSD/XML is publicly available for all vendors to adhere to. eFiling application is finalized, NCC anticipates prosecutors to begin to use by EOY. Further launch of this system is planned for FY2021.
2021: Testing XML Data with two vendors.
3/1/2021: Still working to get the new crash form integrated into NCJIS.
12/1/2021, Mike Fargen left the Crime Commission and Interim Director Nicole Carnes-Woutzke temporarily took his place during the hiring process for his replacement.
1/1/2022: eFiling is being set up with County and City Attorneys.
2/1/2022: Drew Bigham replaced Mike Fargen at the Nebraska Crime Commission.

Estimated Budget/Funding Source by Year:	Source	2022	2023	2024	2025	2026
	Section: 405c	$255,000	$487,710	$325,205	$316,534	$296,000

Project # 10	Project Name: Citation/Adjudication Data Linkage
Lead Agency: Nebraska Crime Commission	**Contact Information:** Drew Bigham drew.bigham@nebraska.gov (402) 471-3992

Project Description / Purpose:

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.

System: Quality Category Project will Address: Traffic Records

Target or Deficiency Project will Address:

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.

Update:

07/24/2020: Crash Form does not require the Citation number as a required field. Linking two data collection projects will be only available when data is present in both places. Citation data is available for prosecutors in NCJIS, see eFiling enhancement above in Project #14.

2021: NCC no longer has a preferred RMS vendor.

2/1/2022: Drew Bigham replaced Mike Fargen at the Nebraska Crime Commission.

Estimated Budget/Funding Source by Year:	Source	2022	2023	2024	2025	2026
	Section: 405c	$0	$0	$0	$0	$0

Project # 11	Project Name: Establish a Linked DUI System (MIDRIS)
Lead Agency: Nebraska Crime Commission / Department of Motor Vehicles	**Contact Information:** Drew Bigham (vacant) drew.bigham@nebraska.gov @nebraska.gov (402) 471-3992 402-471-

Project Description / Purpose:

Linked to the driver system electronically. Include driver sanctions and all citations written by law enforcement.

System: Quality Category Project will Address: Traffic Records

Target or Deficiency Project will Address:

Improve data completeness and linkage by linking 100% of alcohol involved citations through the justice system to the driver records.

Update:

07/24/2020: NCC will work with DMV to establish metric to ensure 100% linkage.

2/1/2022: Drew Bigham replaced Mike Fargen at the Nebraska Crime Commission.

3/1/2022: Kathy Van Brocklin retired from the DMV; a replacement will be hired.

Estimated Budget/Funding Source by Year:	Source	2022	2023	2024	2025	2026
	Section: 405c	$0	$0	$0	$0	$0

Project # 12	Project Name: Develop Traffic Records Inventory					
Lead Agency: TRCC Management/HSO	**Contact Information:** Christine Mohlman christine.mohlman@nebraska.gov 402-471-2567					

Project Description / Purpose:
Create a document that contains the description and details of all the traffic records data including the data manager for each system.

System: Quality Category Project will Address: Traffic Records

Target or Deficiency Project will Address:
Improve the completeness of all the data systems to allow integration.

Update:
2/1/2022: Updates to the Traffic Records System Plan were made.
4/21/2022: Staffing updates to the Traffic Records System Plan were made.
5/1/2022: Updates to the Traffic Records System Plan were made.
6/9/2022: Updates to the Traffic Records System Plan were made for the yearly Highway Safety Plan.

Estimated Budget/Funding Source by Year:	Source	2022	2023	2024	2025	2026
	Section: 405c	$0	$0	$0	$0	$0

Project # 13	Project Name: Improve Quality Control and Quality Improvement Programs					
Lead Agency: TRCC Management/HSO	**Contact Information:** Christine Mohlman christine.mohlman@nebraska.gov 402-471-2567					

Project Description / Purpose:
Develop quality control guidelines for all six data systems including timeliness, accuracy, completeness, uniformity, integration, and accessibility.

System: Quality Category Project will Address: Traffic Records

Target or Deficiency Project will Address:
Allows the opportunity to measure all performance goals for all data systems.

Update:
Selected for implementation by the TRCC.
A request has been sent to each data system manager with format and guidelines.

Estimated Budget/Funding Source by Year:	Source	2022	2023	2024	2025	2026
	Section: 405c	$0	$0	$0	$0	$0

Project # 14	Project Name: Develop a Lifecycle Cost Consideration for Projects						
Lead Agency: TRCC Management/HSO	**Contact Information:** Christine Mohlman christine.mohlman@nebraska.gov 402-471-2567						
Project Description / Purpose: Develop a lifecycle cost consideration for projects to ensure long-term projects are successful beyond federal funding.							
System: Quality Category Project will Address: Traffic Records							
Target or Deficiency Project will Address: Improve the completeness of projects by considering the long-term and on-going costs. **Update:** Selected for implementation by the TRCC. The lifecycle cost consideration is reviewed during the initial grant contract proposal application review.							
Estimated Budget/Funding Source by Year:	**Source**	**2022**	**2023**	**2024**	**2025**	**2026**	
	Section: 405c	$0	$0	$0	$0	$0	

Project # 15	Project Name: Create a Process Flow for the Driver Data System						
Lead Agency: Department of Motor Vehicles	**Contact Information:** Sara O'Rourke (vacant) sara.Orourke@nebraska.gov @nebraska.gov 402-471-2670 402-471-						
Project Description / Purpose: Develop a process flow chart for the driver data system to document all processes.							
System: Quality Category Project will Address: Traffic Records							
Target or Deficiency Project will Address: Improve the accuracy of the driver data system. **Update:** 3/1/2022: Kathy Van Brocklin retired from the DMV; a replacement will be hired. 4/14/2022: The Highway Safety Office had a meeting with the DMV to discuss their ongoing projects and future plans to merge different databases (such as driver and vehicle). DMV is planning to allow car dealerships to submit titles electronically.							
Estimated Budget/Funding Source by Year:	**Source**	**2022**	**2023**	**2024**	**2025**	**2026**	
	Section: 405c	$0	$0	$0	$0	$0	

Project # 16	Project Name: Create a Data Dictionary for the Driver Data System.					
Lead Agency: Department of Motor Vehicles	**Contact Information:** Sara O'Rourke (vacant) sara.Orourke@nebraska.gov @nebraska.gov 402-471-2670 402-471-					
Project Description / Purpose: Create a data dictionary for the driver data system that will include all the data elements, validation rules and any elements that will be captured through linkage.						
System: Quality Category Project will Address: Traffic Records						
Target or Deficiency Project will Address: Improve the accuracy and completeness of the driver system data. **Update:** 3/1/2022: Kathy Van Brocklin retired from the DMV; a replacement will be hired. 4/14/2022: The Highway Safety Office had a meeting with the DMV to discuss their ongoing projects and future plans to merge different databases (such as driver and vehicle).						
Estimated Budget/Funding Source by Year:	**Source** Section: 405c	**2022** $0	**2023** $0	**2024** $0	**2025** $0	**2026** $0

Project # 17	Project Name: Implement the Quality Control Program for the Driver Data System					
Lead Agency: Department of Motor Vehicles	**Contact Information:** Sara O'Rourke (vacant) sara.Orourke@nebraska.gov @nebraska.gov 402-471-2670 402-471-					
Project Description / Purpose: Develop quality control program for the Driver data system including timeliness, accuracy, completeness, uniformity, integration, and accessibility.						
System: Quality Category Project will Address: Traffic Records						
Target or Deficiency Project will Address: Improve the accuracy of the driver data system. **Update:** 3/1/2022: Kathy Van Brocklin retired from the DMV; a replacement will be hired. 4/14/2022: The Highway Safety Office had a meeting with the DMV to discuss their ongoing projects and future plans to merge different databases (such as driver and vehicle). DMV is planning to allow car dealerships to submit titles electronically.						
Estimated Budget/Funding Source by Year:	**Source** Section: 405c	**2022** $0	**2023** $0	**2024** $0	**2025** $0	**2026** $0

Project # 18	Project Name: Deny PRISM Reincarnated Carriers					
Lead Agency: Department of Motor Vehicles	**Contact Information:** Cathy Beedle cathy.Beedle@nebraska.gov 402-471-3894					
Project Description / Purpose: Develop the process to deny registration to the PRISM reincarnated carriers.						
System: Quality Category Project will Address: Traffic Records						
Target or Deficiency Project will Address: Improve the accuracy of the vehicle data systems. **Update:**						
Estimated Budget/Funding Source by Year:	**Source**	**2022**	**2023**	**2024**	**2025**	**2026**
	Section: 405c	$0	$0	$0	$0	$0

Project # 19	Project Name: Create Workflow Documentation for the Vehicle Database					
Lead Agency: Department of Motor Vehicles	**Contact Information:** Betty Johnson betty.Johnson@nebraska.gov 402-471-3909					
Project Description / Purpose: Create a workflow document for the vehicle system that includes National Motor Vehicle Title Information System (NMVTIS).						
System: Quality Category Project will Address: Traffic Records						
Target or Deficiency Project will Address: Improve the uniformity of the vehicle data with a complete workflow document so all users follow the same guidelines. **Update:** 4/14/2022: The Highway Safety Office had a meeting with the DMV to discuss their ongoing projects and future plans to merge different databases (such as driver and vehicle).						
Estimated Budget/Funding Source by Year:	**Source**	**2022**	**2023**	**2024**	**2025**	**2026**
	Section: 405c	$0	$0	$0	$0	$0

Project # 20	Project Name: Create Vehicle System Performance Measures					
Lead Agency: Department of Motor Vehicles	**Contact Information:** Betty Johnson betty.Johnson@nebraska.gov 402-471-3909					
Project Description / Purpose: 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.						
System: Quality Category Project will Address: Traffic Records						
Target or Deficiency Project will Address: Improve the accuracy of the vehicle data system. **Update:** Project will be considered in the future.						
Estimated Budget/Funding Source by Year:	Source	2022	2023	2024	2025	2026
	Section: 405c	$0	$0	$0	$0	$0

Project # 21	Project Name: Nebraska Emergency Medical Services Data Quality Improvement					
Lead Agency: DHHS	**Contact Information:** John Goza John.Goza@nebraska.gov (402) 471-0566					
Project Description / Purpose: 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.						
System: Quality Category Project will Address:						
Target or Deficiency Project will Address: 100% of EMS records will be submitted electronically in eNarsis. **Update:** In September 2021, discussions were held about preparing five-year EMS reports. For fiscal year 2022, Nebraska EMS and Nebraska E-Codes both have their own award contract with the Highway Safety Office, in place of a single contract between the two. 1/1/2022: Office of Emergency Health Systems created an E-NARSIS Elite account for DHHS.						
Estimated Budget/Funding Source by Year:	Source	2022	2023	2024	2025	2026
	Section: 405c	$0	$0	$0	$0	$0

Project # 22	Project Name: CODES – Linking data
Lead Agency: DHHS	**Contact Information:** John Goza John.Goza@nebraska.gov (402) 471-0566

Project Description / Purpose:
To create a CODES database linking crash, EMS, Hospital Discharge, and death certificate data. Resolve errors and issues with final data.

System: Quality Category Project will Address:

Target or Deficiency Project will Address:
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.

Update:
Annual reports created for: CODES, motorcycle helmet use, seat belt use.
4/21/2022: DHHS received the 2020 Hospital Discharge data.

Estimated Budget/Funding	Source	2022	2023	2024	2025	2026
Source by Year:	Section: 405c	$0	$0	$0	$0	$0

Project # 23	Project Name: E-CODE Data Quality Improvement
Lead Agency: DHHS	**Contact Information:** John Goza John.Goza@nebraska.gov (402) 471-0566

Project Description / Purpose:
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.

System: Quality Category Project will Address:

Target or Deficiency Project will Address:
The target is to annually assess the data quality of the E-CODE data and provide data quality improvement feedback.

Update:
For fiscal year 2022, Nebraska EMS and Nebraska E-Codes both have their own award contract with the Highway Safety Office, in place of a single contract between the two.
4/21/2022: Updated E-CODE data to pull more ICD-10 codes from annual raw hospital discharge data.

Estimated Budget/Funding Source by	Source	2022	2023	2024	2025	2026
Year:	Section: 405c	$0	$0	$0	$0	$0

Project # 24	Project Name: Create a Data Dictionary for the EMS/Injury Surveillance Systems					
Lead Agency: DHHS	**Contact Information:** John Goza John.Goza@nebraska.gov (402) 471-0566					
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 accuracy and uniformity of the EMS/Injury Surveillance System data. **Update:** Working with Nebraska Hospital Association (NHA) to develop annual reports for hospitals. 1/1/2022: Office of Emergency Health Systems created an E-NARSIS Elite account for DHHS.						
Estimated Budget/Funding Source by Year:	**Source** Section: 405c	**2022** $0	**2023** $0	**2024** $0	**2025** $0	**2026** $0

Project # 25	Project Name: Create System Performance Measures for the EMS/Injury Surveillance Systems					
Lead Agency: DHHS	**Contact Information:** John Goza Tim Wilson John.Goza@nebraska.gov Tim.Wilson@nebraska.gov (402) 471-0566 402-471-0124					
Project Description / Purpose: 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.						
System: Quality Category Project will Address: Traffic Records						
Target or Deficiency Project will Address: Improve the data in the EMS/Injury Surveillance systems. **Update:** Working with Nebraska Hospital Association (NHA) to develop annual reports for hospitals based on their desired information. 1/1/2022: Office of Emergency Health Systems created an E-NARSIS Elite account for DHHS. 4/21/2022: DHHS received the 2020 Hospital Discharge data.						
Estimated Budget/Funding Source by Year:	**Source** Section: 405c	**2022** $0	**2023** $0	**2024** $0	**2025** $0	**2026** $0

Project # 26	Project Name: Interfaces/linkage for EMS/Injury Surveillance Systems		
Lead Agency: DHHS	**Contact Information:** John Goza John.Goza@nebraska.gov (402) 471-0566	Tim Wilson Tim.Wilson@nebraska.gov 402-471-0124	

Project Description / Purpose:
Link all EMS/Injury surveillance systems possible within current statutes.

System: Quality Category Project will Address: Traffic Records

Target or Deficiency Project will Address:
Improve the linkage of the EMS/Injury Surveillance data.

Update:
In 2022, DHHS is working with the Nebraska Hospital Association (NHA) for 2020 data linkage and developing annual reports for hospitals.
1/1/2022: Office of Emergency Health Systems created an E-NARSIS Elite account for DHHS.
4/21/2022: DHHS received the 2020 Hospital Discharge data.

Estimated Budget/Funding Source by Year:	Source	2022	2023	2024	2025	2026
	Section: 405c	$0	$0	$0	$0	$0

Project # 27	Project Name: Include Rehabilitation Data in the EMS/Injury Surveillance Data Systems		
Lead Agency: DHHS	**Contact Information:** John Goza John.Goza@nebraska.gov (402) 471-0566	Tim Wilson Tim.Wilson@nebraska.gov 402-471-0124	

Project Description / Purpose:
Add rehabilitation data to the current data systems.

System: Quality Category Project will Address: Traffic Records

Target or Deficiency Project will Address:
Improve the completeness of the EMS/Injury Surveillance data.

Update:
As of July 2020, the Trauma Regulations are going to a third hearing and then through the remaining approvals. This will include updates for Rehab and Burn centers data collection requirements.

Estimated Budget/Funding Source by Year:	Source	2022	2023	2024	2025	2026
	Section: 405c	$0	$0	$0	$0	$0

Project # 28	Project Name: Track Frequency, Severity, & Nature of Injuries in MVC					
Lead Agency: DHHS	**Contact Information:** John Goza John.Goza@nebraska.gov (402) 471-0566					
Project Description / Purpose: Track the frequency, severity, and nature of injuries in Motor Vehicle Crashes (MVC). This information will improve the completeness of traffic record data.						
System: Quality Category Project will Address: Traffic Records						
Target or Deficiency Project will Address: Improve the completeness of EMS/injury surveillance data. **Update:**						
Estimated Budget/Funding Source by Year:	**Source** Section: 405c	**2022** $0	**2023** $0	**2024** $0	**2025** $0	**2026** $0

Project # 29	Project Name: Allow Access to Roadway Data					
Lead Agency: NDOT	**Contact Information:** Mark Lindemann Mark.Lindemann@nebraska.gov 402-479-4755					
Project Description / Purpose: Allow access to the roadway data for information users and other departments that could update the information.						
System: Quality Category Project will Address: Traffic Records						
Target or Deficiency Project will Address: Improve the accessibility of the roadway data. **Update:** 5/27/2022: Mark Lindemann left his position; replacement will be hired.						
Estimated Budget/Funding Source by Year:	**Source** Section: 405c	**2022** $0	**2023** $0	**2024** $0	**2025** $0	**2026** $0

Project # 30	Project Name: Develop a Quality Control Program for the Roadway Data					
Lead Agency: NDOT	**Contact Information:** Mark Lindemann Mark.Lindemann@nebraska.gov 402-479-4755					

Project Description / Purpose:
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.

System: Quality Category Project will Address: Traffic Records

Target or Deficiency Project will Address:
Improve the data accuracy of the roadway data system.

Update:
5/27/2022: Mark Lindemann left his position; replacement will be hired.

Estimated Budget/Funding Source by Year:	Source	2022	2023	2024	2025	2026
	Section: 405c	$0	$0	$0	$0	$0

Project # 31	Project Name: Provide Truly Integrated Data					
Lead Agency: TRCC Management/HSO	**Contact Information:** Christine Mohlman christine.mohlman@nebraska.gov 402-471-2567					

Project Description / Purpose:
Work with all data system administrators to integrate all the traffic records systems.

System: Quality Category Project will Address: Traffic Records

Target or Deficiency Project will Address:
Improve data integration of all the data systems.

Update:
2021-2022: Held quarterly TRCC meetings to collaborate with all Contributors.

Estimated Budget/Funding Source by Year:	Source	2022	2023	2024	2025	2026
	Section: 405c	$0	$0	$0	$0	$0

Project # 32	Project Name: Conduct a Training Needs Assessment					
Lead Agency: TRCC Management/HSO	**Contact Information:** Christine Mohlman christine.mohlman@nebraska.gov 402-471-2567					
Project Description / Purpose: Conduct a training needs assessment with all core data system users.						
System: Quality Category Project will Address: Traffic Records						
Target or Deficiency Project will Address: Improve data and user's ability to efficiently use the data. This process will also be used to tack the various trainings offered. **Update:**						
Estimated Budget/Funding Source by Year:	Source	2022	2023	2024	2025	2026
	Section: 405c	$0	$0	$0	$0	$0

Project # 33	Project Name: Highway Safety Information System Database Rewrite
Lead Agency: NDOT	**Contact Information:** Sean Owings sean.owings@nebraska.gov (402) 479-4628

Project Description / Purpose:

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.

System: Quality Category Project will Address: Traffic Records

Target or Deficiency Project will Address:

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.

Update:

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 27th 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.

7/16/20: The vendor (LexisNexis) to date has created the Administration, Transcriber, Transcriber Quality Control, and Indexing screens. Work is currently being done on the Location Mapping and Location Mapping Quality Control screens; as well as, the workflow, incoming electronic report matching, and report validation processes. The MMUCC5 (CID) project is on schedule with a "go-live" date of January 1, 2021.

5/27/21: MMUCC 6, Crash Information Database (CID) system was launched 1/1/2021, but some reporting details continue to be resolved. A NHTSA Go-Team will be requested to verify the MMUCC mapping as soon as all issues are resolved.

July 2021: Justice Data Solutions (JDS) completed their system's front-end process to allow agencies reporting through JDS system to enter a MMUCC 5 report.

10/18/2021: The Investigator Crash Reporting system (ICR) passed State certification and is targeting the end of the year to have the Omaha Police Department (OPD) officers trained and the ICR deployed. ICR going live in Q1 of 2022.

Estimated Budget/Funding Source by Year:	Source	2017	2018	2019	2020	2021
	Section: 405c	$0	$100,000.00	$0	$0	$0

Project # 34	Project Name: Crash and Roadway Data Interface for Roadway Safety Analysis					
Lead Agency: NDOT	**Contact Information:** Sean Owings sean.owings@nebraska.gov (402) 479-4628					

Project Description / Purpose:

Improve interface of crash data and roadway data by linking crash data, roadway LRS, and roadway data in a new safety analysis software. The newly linked roadway data will include MIRE FDE data.

System: Quality Category Project will Address: Traffic Records

Target or Deficiency Project will Address:

Improve the interfaces with crash data system to reflect best practices.

Update:

NDOT kicked off implementation of AASHTOWare Safety analysis software and is identifying and compiling roadway, LRS, and crash data. Implementation is planned for completion in 2022.

Estimated Budget/Funding Source by Year:	Source	2022	2023	2024	2025	2026
	Section: 405c	$0	$0	$0	$0	$0

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
CAD	Computer Aided Dispatch		NCJIS	Nebraska Criminal Justice Information System
CID	Crash Information Database		NDOT NEMSIS	Nebraska Department of Transportation National Emergency Management System Information System
CODES	Crash Outcome Data Evaluation 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
ED	Emergency Department		NMVTIS	National Motor Vehicle Title Information System
EMS	Emergency Medical Services			
ENARSIS	Electronic Nebraska Ambulance Rescue Service Information System		NTRACS	National Trauma Registry-American College of Surgeons
ERS	Nebraska's Electronic Registration System		OPD	Omaha Police Department
FHWA	Federal Highway Administration			
Highway Safety Manual	American Association of State Highway and Transportation Officials www.highwaysafetymanual.org/Documents/HSMP-1.pdf		PDO	Property Damage Only
HPMS	Highway Performance Monitoring System		SAFETEA-LU	The Safe, Accountable, Flexible, Efficient Transportation Equity Act: A Legacy for Users of 2005
HSI	Highway Safety Information		SAS	Statistical Analysis Software
HSIP	Highway Safety Improvement Program		SHSP	Strategic Highway Safety Plan
HSO	Nebraska Department of Transportation - Highway Safety Office		TRA	Traffic Records Assessment
IHI	Integrated Highway Inventory			
IRP	International Registration Plan		TraCS	Traffic and Criminal Software
JUSTICE	Nebraska Trial Courts Case Search System			
LEA	Law Enforcement Agency			
LRS	Location Reference Systems		TRCC	Traffic Records Coordinating Committee
MACH	Mobile Architecture for Communications Handling		Traffic Safety Information System Improvement Program	Implementation of the Traffic Records System Plan Targets and priorities
MIDRIS	Model Impaired Driving Records Information System		U.S. DOT	United States Department of Transportation