
Florida Traffic Safety Information System



Strategic Plan 2017 - 2021

prepared for

Florida Department of Transportation



prepared by

Cambridge Systematics, Inc.

Florida Department of Transportation
Melissa Gonzalez, TRCC Coordinator

Date

April 7, 2017

Action Plan updated: April 2021

Table of Contents

1.0 Introduction.....	1-1
1.1 Strategic Planning Process	1-1
Phase 1 – Assessment of Current Situation	1-2
Phase 2 – Strategic Plan Development	1-2
Phase 3 – Implementation and Monitoring	1-3
1.2 Strategic Plan Organization	1-4
2.0 Florida Traffic Records Coordinating Committee	2-1
2.1 TRCC Mission	2-1
2.2 TRCC Purpose	2-1
2.3 Governance of the TRCC.....	2-2
2.4 Membership on the TRCC.....	2-2
TRCC Executive Board	2-2
TRCC Subcommittees	2-3
3.0 Traffic Records Strategic Plan Elements.....	3-1
3.1 TSIS Vision and Mission.....	3-1
3.2 TSIS Goals, Objectives, and Strategic Action Plan.....	3-1
4.0 Annual Implementation Update	4-1
4.1 Status Report – Traffic Records Projects FY21.....	4-1
4.2 Achievement of Measurable Progress	4-9
Performance Measure #1: Accuracy of Electronic Crash Location Reporting Processed into the FLHSMV Crash Master Database	4-9
Performance Measure Description	4-9
Measurement Technique	4-10
Baseline and Current Values	4-10
Performance Measure #2: Uniformity of EMS Data Submission into the EMSTARS Database	4-11
Performance Measure Description.....	4-11
Measurement Technique	4-11
Baseline and Current Values.....	4-11
4.3 Plans for FY22 Grant Funding.....	4-13
Grant Proposal Process.....	4-13
Project Prioritization Process	4-13
Traffic Records Projects to be Funded in FY22.....	4-13

A. 2020 Traffic Records Assessment Executive Summary.....A-1

B. Strategic Planning Participants B-1

C. Annual Action Plan Updates..... C-1

List of Tables

Table 2.1	Florida TRCC Executive Board Members.....	2-3
Table 2.2	Florida TRCC Subcommittee Members	2-4
Table 4.1	Status Report – Traffic Record Projects from FY21	4-1
Table 4.2	Results for Accuracy of Electronic Crash Location Reporting.....	4-10
Table 4.3	Results for Uniformity of EMS Data.....	4-12

List of Figures

Figure 1.1	Strategic Planning Process.....	1-2
------------	---------------------------------	-----

1.0 Introduction

The Florida Traffic Safety Information System (TSIS) Strategic Plan serves as a guiding document for Florida's Traffic Records Coordinating Committee (TRCC). The plan covers a five-year period from 2017 through 2021. The purpose of the TSIS Strategic Plan is to provide a blueprint for measuring progress towards advancing the accessibility, accuracy, completeness, timeliness, and uniformity of Florida's traffic records systems and strengthening the TRCC program. It also provides Florida state agencies with a common basis for moving ahead with traffic records systems upgrades, integration, and data analysis required to conduct highway safety analyses in the State. The plan sets forth the specific actions and projects that will be undertaken over the next five years to accomplish these goals.

1.1 STRATEGIC PLANNING PROCESS

On April 7, 2017, a voting meeting was held for Florida's Traffic Records Coordinating Committee (TRCC) Executive Board to approve the 2017-2021 TSIS Strategic Plan. All of the meetings were broadcast via web-conference for interested individuals.

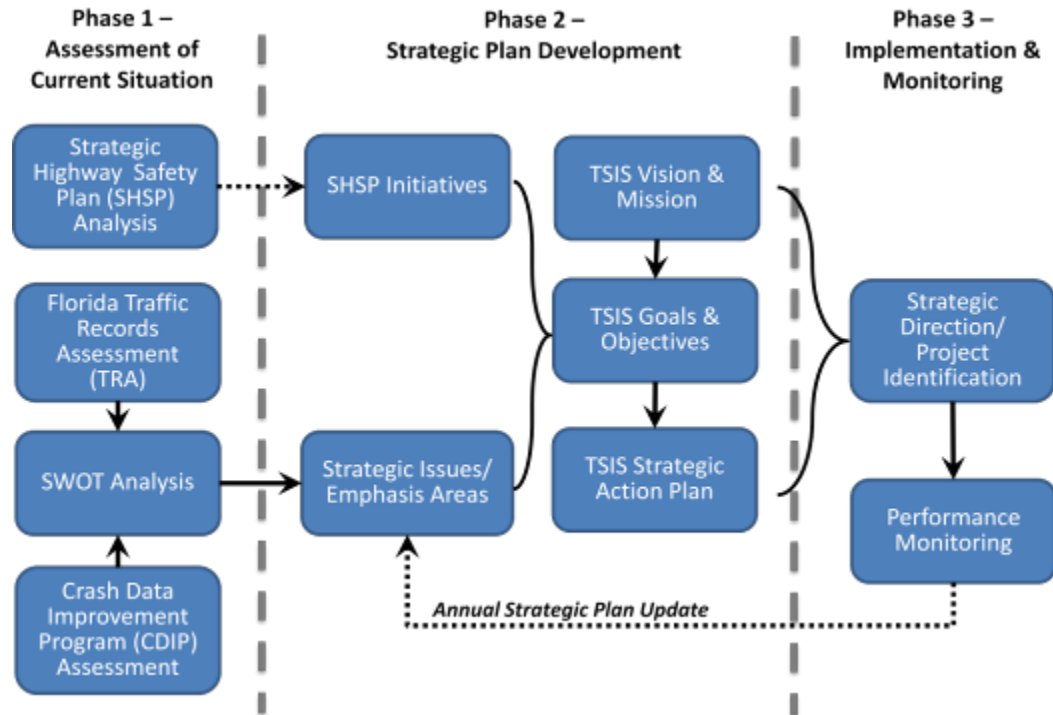
Participants in the strategic planning process included the TRCC Executive Board members and other interested representatives from TRCC member agencies. The following agencies were represented during the strategic planning process: the Florida Department of Transportation (FDOT), the Florida Department of Highway Safety and Motor Vehicles (FLHSMV), Florida Department of Health (FDOH), Agency for Health Care Administration (AHCA), Florida Highway Patrol (FHP), Florida Chief's Association (FCA), Florida Sheriff's Association (FSA), TraCS/ELVIS Florida, University of Florida (UF), Florida Court Clerks and Comptrollers (FCCC), Cambridge Systematics Inc., and National Highway Traffic Safety Administration (NHTSA). Participants in the strategic planning process are listed in Appendix B.

In 2020, the FDOT State Safety Office (SSO) requested that the NHTSA facilitate a new Traffic Records Assessment (TRA), which was conducted from July 21, 2020 and concluded November 12, 2020. The recommendations from this assessment are included in Appendix A.

The planning process spanned a four-month period beginning with several meetings held virtually due to travel restrictions from Covid-19 between June 2020 and July 2020. These meetings focused on the six individual traffic record data systems including data usage and integration. At the December 4, 2020 meeting, the TRCC was presented an overview of the results and discussions on next steps to improve Florida's TSIS began. With the assessment results as an impetus, the TRCC has updated this year's TSIS Strategic Plan's Action Plan (see Appendix C) to provide focus and direction to the high priority recommendations that came out of the assessment process.

The strategic planning process consisted of three phases, as shown in Figure 1.1. The activities that took place during each phase are discussed in more detail below.

Figure 1.1 Strategic Planning Process



Phase 1 – Assessment of Current Situation

Phase 1 involved an assessment of the current situation for Florida’s traffic records information systems. This is largely defined by the traffic records and data collection deficiencies identified in the 2020 Traffic Records Assessment.

Attendees participated in a SWOT analysis to identify strengths (S), weaknesses (W), opportunities (O), and threats (T) of Florida’s traffic records information systems and the Traffic Records Coordinating Committee. The SWOT analysis provided a framework for matching Florida’s strategy to the current situation. The results of the SWOT assessment were used to identify the following goals for the strategic plan: 1) Coordination; 2) Data Quality; 3) Integration; 4) Accessibility, and 5) Utilization.

Phase 2 – Strategic Plan Development

Phase 2 involved the development of the TSIS Strategic Plan, which consists of the vision, mission, goals, objectives, and strategies/action steps for improving the accessibility, accuracy, completeness, timeliness, integration, and uniformity of Florida’s traffic records systems over the next five years.

Strategic planning participants conducted a visioning exercise and agreed the vision and mission should focus on the State's traffic records information systems, and not the TRCC as a group. The vision defines where Florida traffic records information systems will be in five years, while the mission is an overall statement of the desired result of Florida's planning efforts for traffic records systems. The TSIS vision and mission are detailed in Section 3.

Participants agreed the data quality objectives should focus on completeness, timeliness, accuracy, and uniformity, and owner agencies for each system determined whether the strategic plan would address each or a select few of the data quality attributes for their systems. Participants agreed objectives for integration should focus on the ability to link traffic records data through a common or unique identifier, rather than achieving data integration through a data warehouse or similar environment.

Goals, objectives, and strategies/action steps were developed for each of the emphasis areas: timeliness, accuracy, completeness, uniformity, integration and accessibility. The results are detailed in Section 3.

Phase 3 – Implementation and Monitoring

Phase 3 is ongoing and involves identification of potential projects and systems improvement programs designed to move the State's traffic safety information systems in the direction defined by the goals, objectives, and strategies/action steps. Potential projects were identified at the April TRCC Executive Board meeting. Selected projects detail their purpose/description, lead agency, resource requirements, likely timeline, benchmarks, and expected impact on achieving the goals.

For performance monitoring, each owner agency was provided NHTSA's Model Performance Measure for State Traffic Records Systems report to serve as a guide for identifying appropriate performance measures in meeting the TSIS Strategic Plan goals and objectives. Owner agencies will monitor progress on their established performance measures and use a worksheet to report progress on each measure. Performance measures are detailed in Section 3. An update on progress in implementing the 2017 - 2021 TSIS Strategic Plan will be prepared on an annual basis in conjunction with Florida's Section 405(c) grant application process.

1.2 STRATEGIC PLAN ORGANIZATION

The TSIS Strategic Plan is organized as follows:

- Section 1 provided an introduction and overview of the strategic planning process.
- Section 2 describes the operations, governance, and membership of Florida's Traffic Records Coordinating Committee.
- Section 3 presents the TSIS Strategic Plan elements, which include the TSIS vision, mission, goals, objectives, and action steps.
- Section 4 provides a current report on accomplishments for the current fiscal year, and a description of how Florida's Section 405(c) and 402 grant funds will be used to address the goals and objectives of the TSIS Strategic Plan.
- Appendix A provides the 2020 Traffic Records Assessment Executive Summary.
- Appendix B lists the participants in the strategic planning process.
- Appendix C provides the annually updated TSIS Action Plan which lists specific objectives, strategies, and action steps to advance traffic records systems in Florida.

2.0 Florida Traffic Records Coordinating Committee

Florida's Traffic Records Coordinating Committee (TRCC) is a statewide stakeholder forum created to facilitate the planning, coordinating and implementation of projects to improve the State's traffic records information systems. This section summarizes the mission, purpose, governance, and membership of Florida's TRCC.

2.1 TRCC MISSION

Through the coordinated efforts of its member organizations, the TRCC will provide a forum for the creation, implementation, and management of a traffic safety information system that provides accessible, accurate, complete, consistent, integrated, and timely traffic safety data to the State of Florida. The TRCC Executive Board shall include policy level representatives of the following data systems: Crash Data, Roadway Inventory, Citation/Adjudication, EMS/Injury Control, Driver License/Driver History, and Vehicle Registration.

2.2 TRCC PURPOSE

To ensure that accurate, complete, and timely traffic safety data is collected, analyzed, and made available to those agencies and individuals that need the information. Key functions of the TRCC include, but are not limited to:

1. Maintain authority to review Florida's highway safety data and traffic records systems
2. Provide a forum for discussion of highway safety data and traffic records issues and report on any issues to the agencies and the organizations in the State that create, maintain, and use highway safety data and traffic records
3. Consider and coordinate the views of organizations in the State that are involved in the administration, collection, and use of the highway safety data and traffic records system
4. Represent the interests of the agencies and organizations within the traffic records system to outside organizations
5. Review and evaluate new technologies to keep the State's highway safety data and traffic records systems up to date

6. Assist TRCC members applying for public and private funds to support and improve traffic records
7. Approve Florida's annual Section 405(c) application submitted by the Florida Department of Transportation (FDOT) to the National Highway Traffic Safety Administration (NHTSA)
8. Approve expenditures of Section 405(c) funds received by the FDOT
9. Review and approve the Florida Traffic Safety Information System Strategic Plan and any updates to the plan annually if tasks or objectives must be modified based on project progress

2.3 GOVERNANCE OF THE TRCC

The TRCC Executive Board will elect the chair and vice chair of the TRCC from among its membership. The vice chair will serve as chair in his/her absence. The TRCC Executive Board meets, as needed, to discuss issues affecting Florida's Traffic Safety Information System. The TRCC Charter dictates that the TRCC Executive Board will meet at least once annually, however the Board normally meets at least once each quarter to conduct TRCC business. A majority vote of the members present at a meeting of the Executive Board is required to conduct TRCC business. At least four members of the Executive Board must be present to conduct business.

2.4 MEMBERSHIP ON THE TRCC

The TRCC consists of an Executive Board, an Application Review Subcommittee and a Data (Go Team) Subcommittee.

TRCC Executive Board

The membership of the TRCC Executive Board includes representatives from agencies either responsible for managing at least one of the six information systems of the Traffic Safety Information System or with a vital interest in one or more of those systems. These agencies include the Florida Department of Transportation, Florida Department of Health, Florida Department of Highway Safety and Motor Vehicles, the State Court System, Florida Highway Patrol, Florida Sheriff's Association, Florida Chief's Association. Members of the Executive Board are appointed by the heads of their respective agencies. The FDOT State Safety Office provides staff support for the TRCC Executive Board and the TRCC Coordinator.

The Executive Board can vote to extend membership on the Executive Board to other Florida entities, public or private, that are part of the traffic safety information system. Representatives from all Florida entities which are part of the traffic safety information system can participate on the TRCC, but only Executive Board members can vote on TRCC business. Executive Board members who are unable to attend a meeting may provide their written proxy for voting purposes.

Table 2.1 Florida TRCC Executive Board Members

Name	Agency	Traffic Records System Represented
Beth Allman (Chair)	Florida Court Clerks & Comptrollers	Driver License / History Data Citation Law Enforcement / Citation Adjudication Data
Steve McCoy (Vice Chair)	Department of Health	EMS / Injury Surveillance
Chief Virgil Sandlin	Florida Chief’s Association	N/A
Robert Kynoch	Florida Department of Highway Safety and Motor Vehicles (FLHSMV)	Crash Data System Driver Licensing System Vehicle Registration System Citation Adjudication Data
Lora Hollingsworth	Florida Department of Transportation	Roadway System
Captain Lisa Barnett	Florida Highway Patrol / FLHSMV	Crash Citation Adjudication
Deputy Chief Tonya Smith	Tallahassee Police Department	Crash Citation Adjudication

Table 2.1 lists current TRCC Executive Board Members (as of April 2021).

TRCC Subcommittees

The Executive Board can create subcommittees to perform work for the board. Membership on these committees can include representatives from any Florida entity that contributes to or makes use of the traffic safety information system. The TRCC Coordinator serves as subcommittee chair and manages reporting responsibilities. Subcommittees can meet as often as needed to perform the work assigned by the Executive Board. The TRCC Coordinator shall report committee activities and accomplishments to the Executive Board at least quarterly.

The Application Review Subcommittee (last updated January 2021) met on March 12, 2021 to discuss FY22 projects. The responsibility of this committee is to review all concept papers/applications received for Section 405(c) and 402 funds and provide guidance to the Executive Board for potential projects. All proposed projects are prioritized and ranked based on project costs, risk of failure, stakeholder coordination and most importantly the impact on the core systems.

Needs to support the NHTSA Go Team and TRCC Coordinator arose and a Data Subcommittee was established on August 17, 2018. This subcommittee consists of subject matter experts from various stakeholders who represent and hold responsibility and represent each traffic records system. Due to the use and management of traffic records data in their everyday duties this Go Team Subcommittee is also known as the TRCC’s Data Subcommittee.

Table 2.2 TRCC Subcommittee Members

Name	Agency	Application Review Subcommittee	Data Subcommittee
Brenda Clotfelter	Florida Department of Health	x	x
Karen Card	Florida Department of Health		x
Richie Frederick	Florida Department of Highway Safety and Motor Vehicles	x	x
Wilton Johnson	Florida Department of Highway Safety and Motor Vehicles	x	x
Thomas Austin	Florida Department of Highway Safety and Motor Vehicles	x	x
Angela Lynn	Florida Department of Highway Safety and Motor Vehicles	x	x
Amy Pontillo	Florida State University	x	x
Seth Bartee	Florida State University	x	
Zoe Faulkner	Florida State University	x	
Margaret Edwards	Florida State University	x	
Dr. Ilir Bejliri	University of Florida	x	x
Michele Snow	University of Florida	x	x
Benjamin Jacobs	Florida Department of Transportation		x
Dr. Rupert Giroux	Florida Department of Transportation		x
Chris Craig	Florida Department of Transportation	x	
Melissa Gonzalez (TRCC Coordinator/ Subcommittee Chair)	Florida Department of Transportation	x	x

Table 2.2 lists the members of the TRCC Subcommittee Members (as of March 2021).

3.0 Traffic Records Strategic Plan Elements

3.1 TSIS VISION AND MISSION

The following vision and mission statements were developed for Florida's Traffic Records Information System:

Vision: Users have access to quality traffic records data when, where and in the form needed.

Mission: Maximize the efficiency and effectiveness of traffic records data resources, collection, analysis and reporting.

3.2 TSIS GOALS, OBJECTIVES, AND STRATEGIC ACTION PLAN

The following goals were identified for Florida's traffic safety information system based on assessment recommendations and stakeholder input during the strategic planning process:

- **Goal 1: Coordination.** Provide ongoing coordination in support of multi-agency initiatives and projects which improve traffic records information systems.
- **Goal 2: Data Quality.** Develop and maintain complete, accurate, uniform, and timely traffic records data.
- **Goal 3: Integration.** Provide the ability to link traffic records data.
- **Goal 4: Accessibility.** Facilitate access to traffic records data.
- **Goal 5: Utilization.** Promote the use of traffic records data.

Appendix C provides the annually updated TSIS Action Plan which lists specific objectives, strategies, and action steps associated with these goals in order to advance traffic records systems in Florida.

4.0 Annual Implementation Update

4.1 STATUS REPORT – TRAFFIC RECORDS PROJECTS from FY21

Table 4.1 provides the status of recent traffic records projects.

Table 4.1 Status Report – Traffic Record Projects from FY21

Project Lead Agency and Project Title	Section 405(c) Funding	Purpose	Description	Progress
<p>Florida State University (FSU):</p> <p>Traffic and Criminal Software (TraCS) Support, Enhancement, and Training</p>	<p>\$924,268</p>	<p>Improve the timeliness, completeness, accuracy, uniformity, accessibility, and integration of the Crash, Citation / Adjudication, Driver, Vehicle, and Roadway data systems.</p>	<p>The FSU College of Engineering will continue development and enhancements to the TraCS National Model software to include providing updates to meet state and federal guidelines. The TraCS staff will support current and future officers and IT staff by providing training and support and maintain interfaces for case and form management, FCIC/NCIC imports through various vendors and S4's Geo-location tool. Due to the vast number of users, data storage capacity limits are continuously being increased; therefore, it has become apparent that the migration to a centralized Cloud environment will be conducted during this grant cycle.</p> <p>Resources will be allocated to a full-time Systems Architect, two Application Developers, Systems Administrator, an IT Support Specialist; and the following part-time positions: Principal Investigator, Business Office Clerical and Other Personnel Staff Technicians. Funds will also be used to maintain a centralized hosting facility and a secondary disaster recovery site until the cloud environment is established, travel to conduct trainings and setting up new agencies, and expenses for maintenance and support.</p>	<p>TraCS submits crash reports on average of about 6.9 days from the date of the crash to the statewide repository at a 99.99% error free rate.</p> <p>Usage: 50,856 crash reports loaded quarter one or 32% of statewide crashes submitted through TraCS.</p> <ul style="list-style-type: none"> - 26,030 Users - 188 Total Agencies <p>Integration: S4 Geo-Location Tool</p> <ul style="list-style-type: none"> - 91% of total agencies mandated for crash reporting or 183 agencies - 13% of total agencies mandated for citation reporting <p>ELVIS Tool (FCIC/NCIC)</p> <ul style="list-style-type: none"> - 99% of users or 188 agencies <p>Accessibility: Effective April 1, 2021- 147 agencies moved to Cloud Data Hosting Environment</p>

Project Lead Agency and Project Title	Section 405(c) Funding	Purpose	Description	Progress
<p>Florida Department of Health (FDOH):</p> <p>Field Data Collection for National EMS Information System (NEMSIS)</p>	<p>\$442,225</p>	<p>Improve the timeliness, completeness, accuracy, uniformity, accessibility, and integration of the EMS/ Injury Surveillance System, Crash, Roadway, and Vehicle data systems.</p>	<p>The FDOH will work on increasing the number of agencies submitting data to the State repository in compliance with the current NEMSIS standards and work on transitioning agencies into compliance with the NEMSIS Version 3 (V3) standards. The implementation of the V3 data standards improves the compatibility and interoperability of data between state and local systems and the national data system by defining a new framework, model data elements, national database structure and state submission process.</p> <p>The FDOH contractors will also assist and support licensed EMS agencies via direct technical support and trainings and improve the current hosting environment with additional functionalities needed. This project will fund a Project Manager, Technical Business Analyst, Data Modeler / Migration Specialist and Business Intelligence Analyst / Developer. Resources will also cover data hosting services, required vendor change orders, and travel expenses to educate local EMS agencies on data collection standards and to attend conferences for implementation planning.</p>	<p>First submission of V3 to NEMSIS: 12/08/2016</p> <p>Trainings:</p> <p>EMSAC Data Committee work sessions: 11/17/2020; 2/9/2021; 2/24/2021; 3/3/2021; 3/23/2021; 4/27/2021</p> <p>Usage:</p> <p>219 agencies transitioned to Biospatial as of Nov. 1, 2020</p> <ul style="list-style-type: none"> - 219 (75.26%) EMSTARS reporting agencies of 291 total agencies - 215 (98.17%) of 219 EMSTARS reporting agencies are submitting by NEMSIS V3 standards to state incident level repository - 97.63% of EMS runs reports submitted to state repository - 68% of V3 EMS run reports received within 10 hours of run <p>Integration Completed:</p> <p>Biospatial- Crash Records & Trauma Data; ESSENSE; ODMAP- 1/22/2020; Health Information Exchange in process with AHCA;</p>

Project Lead Agency and Project Title	Section 405(c) Funding	Purpose	Description	Progress
<p>University of Florida (UF):</p> <p>Expanding Accessibility Utilization, and Data Integration of Signal Four (S4) Analytics</p>	<p>\$467,346</p>	<p>Improve the Accessibility, Accuracy, Completeness, Integration, Timeliness, Uniformity of the Crash, Roadway, and Citation / Adjudication data systems.</p>	<p>The S4 Analytics is a statewide crash and citations analytical system that allows local, regional and state agencies to analyze, create maps, and statistical reports of crashes and citations in a consistent, uniform and timely fashion. This project with the UF will address several S4 Analytics feature requests and overall system improvements.</p> <p>It will expand the integration of citations with crashes statewide, expand the new reporting module that provides interactive summary charts of crashes and citations, perform data quality analysis and database updates, and perform system monitoring. A full migration of the system will be finalized to a new web platform and promotion of the use of S4 Analytics will be conducted through training webinars and demonstrations at national and state conferences. A new task this fiscal year is to explore data linkage possibilities of EMS data into the S4 database by identifying a selected subset of EMS data.</p> <p>Resources will be provided for personnel to conduct these improvements, travel and equipment expenses.</p>	<p>S4 Database integrates crash reports, citation reports and roadway data.</p> <p>Usage (Oct. 1, 2020-Present):</p> <ul style="list-style-type: none"> - 5,111 users - 706 agencies and 189 contractors - 40,171 user login sessions - 154,927 crash queries generated - 568,931 crash reports retrieved (371,665 bulk + 197,266 individual) - 2,630 citation queries generated - 6,397,972 total crash records in S4 (2011 - Present) - 34,936,163 total citation records in S4 (2011 - Present) <p>Trainings:</p> <p>Four Webinars conducted on 2/9/21 and 2/10/21.</p> <p>EMS Data Meeting held with safety stakeholders on 4/1/2021.</p> <p>Other Updates:</p> <ul style="list-style-type: none"> - Public facing crash dashboard created and went live December 2020. - At present, 70% migration completed. On target for full migration by end of FY.

Project Lead Agency and Project Title	Section 405(c) Funding	Purpose	Description	Progress
<p>Florida Department of Highway Safety and Motor Vehicles (FLHSMV):</p> <p>Crash and UTC Data Improvement</p>	<p>\$123,300</p>	<p>Improve the Accuracy, Completeness, and Uniformity of the Crash and Citation / Adjudication data systems.</p>	<p>The Crash and UTC staff at the FLHSMV will be tasked with improving Florida crash and UTC data to provide the ability for the FLHSMV and traffic safety stakeholders to make more informed and accurate decisions and countermeasures. This project will apply a data driven approach to increase accuracy, completeness, and uniformity of traffic record reporting. The crash program staff will develop a location accuracy report and establish minimum accuracy location standards that law enforcement agencies should meet. This will encourage law enforcement agencies to utilize the tools available for improved geolocation of crash reports. The UTC program staff will continue its ongoing improvement efforts and conduct four train-the-trainer workshops with the Florida Clerk of Courts. These workshops will focus on what constitutes accurate and complete UTC citation submissions and will include targeted content based on the specific accuracy and completeness issues in their counties, which were previously identified by the established performance metrics. Project funding will be provided for personnel services, training materials and travel expenses to conduct these workshops throughout the state.</p>	<p>Crash objectives:</p> <p>Finalized geo-location accuracy statistics to track progress from established baseline measure.</p> <p>Finalizing operational approach to improve location accuracy by 5%.</p> <p>LEA memo to be sent explaining geo-location accuracy, how it is measured, and importance (pending approval).</p> <p>UTC objectives:</p> <p>Baseline measurements for UTC accuracy and completeness established.</p> <ul style="list-style-type: none"> - UTC training curriculum created - RSVP invitations in progress for 4 COC UTC train-the-trainer workshops
<p>Florida Department of Highway Safety and Motor Vehicles (FLHSMV):</p> <p>Driver Data Improvement</p>	<p>\$59,000</p>	<p>Improve the Accessibility, Completeness, and Timeliness of the Driver and Vehicle data systems.</p>	<p>Due to the high volume of incoming drivers in Florida, an electronic and automated process is needed to request and update the driver history record (DHR) from other jurisdictions to Florida's driver data set. A Project Analyst with expertise in process improvement, project management, data analysis and reporting, data security, and systems evaluation will be hired to determine the best technical solution available to perform driver system improvements. A comparison of the automated capabilities for data extraction, loading, and integration among third-party systems is required to make an informed recommendation to improve the overall quality of the data in our driver record system. The FLHSMV will develop a timeliness performance measure for updating the driver history records to the Florida driver data system and will also establish a completeness performance measure for how many driver history records are successfully updated to the record. Project funding will be provided for personnel and office supplies expenses.</p>	<p>Project activities have yet to be conducted due to hiring issues of the Project Analyst.</p>

Project Lead Agency and Project Title	Section 405(c) Funding	Purpose	Description	Progress
<p>University of Florida (UF):</p> <p>Unified and Sustainable Solution to Improve Geo-Location Accuracy and Timeliness of Crashes and Citations</p>	<p>\$168,546</p>	<p>Improve the Accessibility, Accuracy, Completeness, Integration, Timeliness, Uniformity of the Crash and Citation/Adjudication and EMS/Injury Surveillance data systems.</p>	<p>This project with the University of Florida will address the error rate in location data by providing a solution to automatically geo-locate crashes and citations. Geo-location currently requires human editors to manually map crashes at a significant, recurring cost to the state.</p> <p>The project will create a unified geo-location and validation service that can be accessed via the internet by any electronic crash and citation data collection system of any vendor in Florida. This web service solution accomplishes the geolocation and validation of the location by using the Florida Department of Transportation's Unified Roadway Basemap. It has become apparent that citations suffer from the same problem in relation to accurate crash location data. Therefore, the Geo-Location tool will continue efforts in partner with the Traffic and Criminal Software (TraCS) agencies to incorporate the tool not only on their e-crash system but also on their e-citation system. A new task to be accomplished this fiscal year will be to coordinate with the Florida Department of Health on exploring the use of this tool to map EMS reports.</p> <p>Another critical problem that results from errors in location data is the lack of timeliness to run safety analyses. Timely availability of geolocated data will enable earlier detection of challenges and identification of solutions, ultimately saving lives and preventing loss of property. Project funding will be provided for personnel services to provide service of this tool, perform updates, technical support and trainings, travel and equipment expenses, and to implement an improved functionality specifically for citations.</p>	<p>Usage: TraCS currently incorporates this tool on their e-citations and e-crash reports.</p> <ul style="list-style-type: none"> - 91% of total TraCS agencies mandated for crash reporting or 183 agencies. - 13% of total agencies mandated for citation reporting. <p>Number of Geolocated Incidents (Oct. 1, 2020-Present):</p> <ul style="list-style-type: none"> - 110,222 crash reports - 92,135 citation reports - 34,304 traffic warnings - 6,824 tow sheets - 2,331 DUI Citations - 870 Parking Citation - 810 Field Interview Report - 147 Offense Incident Report - 54 Boating Warning - 123 Boating Citation

Project Lead Agency and Project Title	Section 402 Funding	Purpose	Description	Progress
<p>Florida State University (FSU):</p> <p>Electronic License and Vehicle Information System (ELVIS)</p>	<p>\$542,490</p>	<p>Improve the Accessibility, Accuracy, Completeness, Timeliness, Uniformity of the Crash and Citation/Adjudication, Driver, Vehicle data systems.</p>	<p>The Florida State University will maintain and upgrade a data tool to provide access to the Florida Crime Information Center (FCIC) and National Crime Information Center (NCIC) data that will be provided without charge to Florida law enforcement agencies. This web-based solution will improve the accuracy and quality of traffic records data collected by these law enforcement agencies, while also reducing the redundancy and labor costs associated with manual entry.</p> <p>The proposed Electronic License and Vehicle Information System will provide all Florida law enforcement agencies the ability to run queries and to import contact (vehicle and driver) information into multiple traffic data forms. Resources will be allocated to a full-time Systems Architect, Systems Administrator, IT Support Specialist, part-time Principal Investigator, along with maintenance of the tool, operational costs and travel to conduct trainings and provide technical support, as well as finalizing a secondary site for disaster recovery efforts.</p>	<p>Accessibility:</p> <p>Web-Based (no installation required) Tool to run FCIC/NCIC data.</p> <p>Average year-to-date availability: 99.87%</p> <p>Usage:</p> <ul style="list-style-type: none"> - 217 agencies - 22,284 users - 4,760,069 total queries run FY21 (~680,00 per month) <p>45 types of queries performed:</p> <p>Other Updates:</p> <p>Secondary Disaster Recovery Site updates: reformat and reconfiguration of old hardware complete and test backups in place at primary site. Installment pending travel restrictions due to COVID-19.</p>
<p>The District Board of Trustees of Tallahassee Community College (TCC):</p> <p>Traffic Records Coordinating Committee Support</p>	<p>\$48,828</p>	<p>Support for the TRCC and FDOT Safety Office.</p>	<p>Tallahassee Community College will contract with a consultant to provide technical advice and support to the Traffic Records Coordinating Committee (TRCC) Executive Board and its subcommittees. The technical advisor will assist in the update of the Traffic Records Strategic Plan as well as host and maintain the Florida TRCC website.</p>	<p>Meeting facilitation and minutes provided for Dec. 2020 TRCC meeting. Facilitated and participated at the FY22 Application Subcommittee meeting on March 12, 2021 and TRCC Executive Board Voting meeting on April 9, 2021. TRCC website updates completed for quarter 1 and 2.</p>

Project Lead Agency and Project Title	Section 402 Funding	Purpose	Description	Progress
<p>University of Florida (UF):</p> <p>Geolocation-Based Crash Diagramming and FDOT Crash Mapping to Improve Crash Location Timeliness and Quality</p>	<p>\$556,758</p>	<p>Improve the Accessibility, Accuracy, Completeness, Integration, Timeliness, Uniformity of the Crash and Citation / Adjudication data systems.</p>	<p>The FDOT current crash location system has several limitations that is preventing FDOT staff to map crashes in a timely fashion. This system is out of date, slow, requires extensive training, and can only handle on-system crashes, i.e. crashes only on state-maintained roads. FDOT uses a second system to locate off-road system crashes which operates differently from the on-system and as such requires different training and different data management practices. Due to these challenges and the sheer amount of crashes in the state (over 700,000 annually) FDOT experiences delays in providing timely geolocated crashes to Florida traffic improvement stakeholders.</p> <p>Of those 700,000 crash reports submitted by law enforcement agencies, 300,000 crash reports include a crash diagram based on Florida's crash data requirements and federal recommendations provided in the Model Minimum Uniform Crash Criteria Guidelines. This crash diagram is also necessary for the FDOT staff to accurately locate crashes. At this time, many Florida law enforcement agencies do not have a diagramming tool and could use a geo-location tool which would eliminate the discrepancies between the crash address information and the depiction of the same location on the crash diagram.</p> <p>Currently, S4 Analytics provides the automated geolocation of crashes but only for a portion of the crashes. The rest of the crashes are approximately located and not verified by a person. This creates challenges regarding the reliability of data analysis due to the discrepancy between FDOT and S4's location processes. This project with the UF will reduce these 3 systems to a single unified geolocation system for the State of Florida, by enhancing the S4 Geolocation tool to provide a verified crash location not only for FDOT analysts but Florida's traffic improvement stakeholders. This project will also develop a web based diagram tool to work in compatibility with S4's Geo-location tool to improve location accuracy, reduce the time for an officer to complete the crash diagram in the field thus improving timeliness of the data, and aims to increase the utilization of the crash data. This project was originally awarded towards the end of quarter two in FY2020. The UF team will continue their efforts during this FY to complete Phase I.</p>	<p>Crash Diagramming Tool status:</p> <ul style="list-style-type: none"> - Transitioned to a more suitable supporting software framework; - Operation tool on track by end of FY. <p>Geolocation Consolidation status:</p> <ul style="list-style-type: none"> - Mockups and the process flow completed - Data Model complete - Implementation has begun towards developing the editor front-end and constructing the physical database structure. <p>Other Updates:</p> <p>Mockup demo conducted in December 2020.</p> <p>Crash Location Display meeting held on 3/24/21 with safety stakeholders.</p>

Project Lead Agency and Project Title	Section 402 Funding	Purpose	Description	Progress
<p>University of Florida (UF):</p> <p>Central Crash Data Repository and Improved Crash Data Quality</p>	<p>\$189,339</p>	<p>Improve the Accessibility, Accuracy, Completeness, Integration, Timeliness, Uniformity of the Crash data system.</p>	<p>The FLHSMV crash database annually receives approximately 700,000 crash reports. As the statutory custodian of Florida’s crash data, FLHSMV distributes daily copies of statewide crash data and images to two statewide recipients, the FDOT and UF’s S4 Analytics creating three copies of the same information. Considering a 10-year period, the 6 million records of crash data distributed at least 3 times accumulates to about 18 million records duplicated across various databases. Also, approximately 300,000 of the total crash reports submitted require law enforcement agencies to submit crash diagrams. To reduce the time for an officer to prepare these diagrams, law enforcement agencies have been using aerial photography through S4 Analytics as a reference layer which increases the accuracy of information. However, the current FLHSMV ingestion process is unable to support these high-resolution aerial photographs causing a reduction in resolution of the photo and sometimes causing the diagram to be unreadable.</p> <p>This project with the UF will finalize a web service to serve the crash report images to authorized recipients, within necessary privileges and security constraints, from one single location hosted at FLHSMV, thus eliminating the need to distribute multiple copies. In coordination with FLHSMV, the S4 team will finalize the functional and technical specifications needed to support the submittal of aerial photo-based crash diagrams in the FLHSMV’s current ingestion process to contribute to data quality improvements at present and prepare the necessary requirements to support the web-based geolocation diagramming tool in development. Lastly, the synchronization between the FLHSMV, S4 Analytics’, and FDOT’s crash databases will be finalized to provide users the necessary confidence on the reliability of S4 Analytics’ datasets as it will contain the manually verified crash location by FDOT staff and matches the original source from FLHSMV. This project was originally awarded towards the end of quarter two in FY2020. The UF team will continue their efforts during this fiscal year to complete Phase I.</p>	<p>Synchronize the FLHSMV and S4 crash databases:</p> <ul style="list-style-type: none"> - Light synchronization of all crash data for years 2011-2021 complete. - Light synchronization maintained daily. <p>Pending Tasks due to limited IT staff at FLHSMV:</p> <ul style="list-style-type: none"> - Develop an image service for crash reports to be centrally served by FLHSMV only. - Finalize solution to allow FLHSMV support for using aerial photography in crash diagrams.

4.2 ACHIEVEMENT OF MEASURABLE PROGRESS

The provisions of the Section 405(c) grant application require applicant States to demonstrate year-to-year traffic records improvement in at least one of the six core systems in at least one of the six performance areas (to include Other if specified):

- Timeliness,
- Accuracy,
- Completeness,
- Uniformity,
- Integration, and
- Accessibility

For FY22, the Florida TRCC submitted two performance measures which demonstrate significant, system-wide performance; improvements were to the Crash System and the EMS/Injury Surveillance System. The performance measures, and a description of each, are provided below:

1. Accurately located electronic crash reporting (i.e., the average percentage of accurately located electronic crash reports submitted into Florida Department of Highway Safety and Motor Vehicles (FLHSMV) Crash Master Database by law enforcement agencies utilizing the Geo-Location tool) – *Crash/Accuracy*.
2. Uniformity of EMS/Injury data (i.e., the percentage of Florida’s Public or private entities involved in EMS systems which have been licensed by the State of Florida, who are submitting NEMSIS Version 3 compliant run reports to the FDOH EMS Tracking and Reporting System, EMSTARS) – *EMS/Injury /Uniformity*.

Performance Measure #1: Accuracy of Electronic Crash Location Reporting Processed into the FLHSMV Crash Master Database

Performance Measure Description

This performance measure evaluates the **increase of accurately located electronic crash report data** – as demonstrated through the submission of electronic crash reports into the Florida FLHSMV Crash Master Database via law enforcement agencies utilizing the Signal Four (S4) Geo-Location tool.

Measurement Technique

The following measurement was analyzed for this performance measure:

- The average percentage of accurately located electronic crash reports submitted into the Florida FLHSMV Crash Master Database by law enforcement agencies using the Geo-Location tool.

To normalize the accurately located electronic crash data, the average percent of electronic crash reports submitted into the Florida FLHSMV Crash Master Database by law enforcement agencies using the S4 Geo-Location tool were compared for the same period of time (April to March) for consecutive years.

Baseline and Current Values

The achieved improvement is an increase in accurately located electronic crash reports utilizing the Geo-Location tool – as demonstrated through an increase in the average percentage of accurately located electronic crash reports submitted into the Florida FLHSMV Crash Master database by law enforcement agencies utilizing the S4 Geo-Location tool.

Baseline and current values are summarized in Table 4.2. During the baseline period from April 1, 2019 to March 31, 2020, a total of 725,543 electronic crash reports were submitted into the database of which 167,922 crash reports were accurately located using the Geo-Location tool. The average percent of accurately located electronic crash reports was 23.14%. During the current period from April 1, 2020 to March 31, 2021, a total of 567,231 electronic crash reports were submitted into the database of which 140,364 crash reports were accurately located using the Geo-Location tool. The average percent of accurately located electronic crash reports was 24.75%. **The percentage of accurately located electronic crash reports entered into the database increased 1.61% (from 23.14% to 24.75%) when compared to the previous year.**

An increase of accurately located electronic crash reports is expected next fiscal year due to the mandate of this tool in FY20 for all law enforcement agencies submitting crash reports with the Traffic and Criminal Software (TraCS).

Table 4.2 Results for Accuracy of Electronic Crash Location Reporting

Time Period	Performance Results
April 1, 2019 – March 31, 2020 (Baseline)	A total of 725,543 crash reports were submitted electronically into the Crash Master Database at a 23.14% average percentage of accurately Geo-Located crash reports
April 1, 2020 – March 31, 2021 (Current Value)	A total of 567,231 crash reports were submitted electronically into the Crash Master Database at a 24.75% average percentage of accurately Geo-Located crash reports

Performance Measure #2: Uniformity of EMS data submission into the EMSTARS Database

Performance Measure Description

This performance measure evaluates the **uniformity of EMS data submission** – as demonstrated through an increase in the percentage of Florida’s public or private entities involved in EMS systems which have been licensed by the State of Florida, who are submitting National EMS Information System (NEMSIS) Version 3 (V3) compliant run reports to the Florida Department of Health via the Bureau of EMS, Prehospital EMS Tracking and Reporting System (EMSTARS).

Public or private entities involved in emergency medical services systems are minimally required to provide patient care summary level data to the Florida Department of Health, Bureau of EMS, Prehospital Aggregate System per Florida Administrative Code 64J-1.014. This administrative code defines two options for the submission of patient care data. One being the submittal of summary level data to the Prehospital Aggregate System and the second option being the submission of runs reports via EMSTARS.

The patient care data submitted via the Prehospital Aggregate System is only summary information which does not include EMS runs report record level data. Also, the EMS response and patient care summary data does not include information on Incident Date. The runs reports submitted through EMSTARS is Florida’s only database that is collecting and transmitting the incident level data required for NEMSIS compliance. EMSTARS does not accept EMS agency records that are not NEMSIS compliant. EMSTARS reporting requirements far exceed the aggregate summary requirements; therefore, submission of runs data to EMSTARS is voluntary

Currently, Florida has a total of 291 licensed EMS agencies of which 219 are EMSTARS participating agencies. Of the 219 EMSTARS participating agencies, 215 agencies are submitting run reports by V3 data standards.

Measurement Technique

The following measurement was analyzed for this performance measure:

- The percentage of Florida’s public or private entities who are submitting NEMSIS V3 compliant run reports to EMSTARS.

To normalize the uniformity of V3 compliant run reports data submitted, the percent of participating licensed EMS agencies who are submitting NEMSIS V3 compliant run reports via EMSTARS were compared for the same period of time (April to March) for consecutive years.

Baseline and Current Values

The achieved improvement is an increase in the uniformity of EMS run reports as demonstrated through an increase in percent of licensed EMS agencies who are submitting NEMSIS V3 compliant run reports via EMSTARS. For the baseline period, the number of licensed EMS agencies in Florida was 286, of which 211 were EMSTARS participating agencies.

Of the 211 EMSTARS participating agencies, 194 were submitting run reports by NEMSIS V3 data standards. For the current period, the number of licensed EMS agencies in Florida was 291, of which 219 were EMSTARS participating agencies. Of the 219 EMSTARS participating agencies, 215 were submitting run reports by NEMSIS V3 data standards.

The number of licensed agencies fluctuates due to agency mergers, closures and/or new agencies licensed. Florida remains in compliance with the NEMSIS V3 standards to provide a uniform data collection across all licensed agencies.

Baseline and current values are summarized in Table 4.3. For the baseline period from April 1, 2019 to March 31, 2020, 194 of the 211 (91.9%) licensed EMS participating agencies were actively reporting by NEMSIS V3 standards to EMSTARS. For the current period from April 1, 2020 to March 31, 2021, 215 of 219 (98.17%) licensed EMS participating agencies were actively reporting by NEMSIS V3 standards to EMSTARS. **The percent of licensed EMS agencies who are submitting NEMSIS V3 compliant run reports via EMSTARS increased by 6.27% (from 91.9% to 98.17%) when compared to the previous year.**

Table 4.3 Results for Uniformity of EMS Data

Time Period	Performance Results
April 1, 2019 – March 31, 2020 (Baseline)	194 of 211 (91.9%) licensed EMS participating agencies were actively reporting run reports by NEMSIS V3 standards to EMSTARS
April 1, 2020 – March 31, 2021 (Current Value)	215 of 219 (98.17%) licensed EMS participating agencies were actively reporting run reports by NEMSIS V3 standards to EMSTARS

Florida submitted an interim report of progress to NHTSA Region 4 Team on April 7, 2021 and received notice on April 29, 2021 that Florida has demonstrated measurable progress toward achieving the goals and objectives identified in the strategic plan. The NHTSA 405 Traffic Records Review Team will make the final determination with the submittal of the Section 405(c) State Application.

4.3 PLANS FOR FY22 GRANT FUNDING

Grant Proposal Process

For FY22, the State of Florida sought grant proposals for potential projects to advance the goals and objectives of the 2017-2021 TSIS Strategic Action Plan. A draft version of the Action Step Matrix detailing the goals, objectives, and strategies of the Strategic Plan was made available to applicants. Proposals for FY22 Section 405(c) and 402 funding were accepted from January 1 - February 28, 2021.

Eleven funding requests were submitted during that time period totaling \$3,420,342. One concept was submitted by a police department under 405(c) but was deemed not applicable due to being an equipment only request. A new project to improve driver and vehicle data quality attributes based off the NHTSA TRA recommendations was also submitted by the FLHSMV. Eight requests were related to existing statewide TRCC projects and one was to continue to provide support services needed for the TRCC Executive Board and its Subcommittees.

Project Prioritization Process

At the April 9, 2021 meeting, the TRCC Executive Board was advised the state projected an estimated \$2,294,555 in Section 405(c) and an estimated \$1,500,000 in Section 402 funds to be available October 1, 2021. The TRCC Coordinator provided a summary of the Application Subcommittee's recommendations from their March 12, 2021 meeting, after which Executive Board Members asked questions about the proposals.

The Subcommittee recommended to fully fund all 10 project requests. Five statewide projects for a total of \$2,161,184 in Section 405(c) funds and the other 5 statewide projects for a total of \$1,282,001 in Section 402.

The Executive Board voted and approved the 10 statewide projects to be fully funded as the Subcommittee recommended. Ultimately a total amount of \$3,443,185 was approved, with final amounts pending the total Section 405(c) and 402 grant funding approved by the NHTSA.

Traffic Records Projects to be Funded in FY22

See Highway Safety Plan FY22 for approved traffic records project summaries and funding amounts under Section 405(c) and 402.

A. 2020 Traffic Records Assessment Summary

Introduction

The State of Florida has a Traffic Records System with a solid foundation of best practices in many system components and the State uses its Traffic Records Coordinating Committee effectively to continue to improve through collaboration and creative projects. The Citation and Adjudication systems indicate plans to add a DUI tracking system, which would be a helpful addition to one of the premier citation tracking systems in the nation. An impaired driver tracking system that follows offenders throughout the adjudicative process allows law enforcement, alcohol and drug educators and evaluators, therapists, Ignition Interlock providers, probation personnel, and all those who interact with the impaired driver, the opportunity to follow the offenders' progress while helping to establish the types and combinations of sanctions and treatment options that best serve to prevent recidivism.

A great deal of progress has been made in building and improving the enterprise roadway system in this past Assessment period with the All Roads BaseMap and the continuing effort to complete the collection of MIRE Fundamental Data Elements for all public roads in the State. Having a single location referencing system to locate crashes is a means of ensuring the integrity of location data and can provide a means to analyze the effect of targeted enforcement on crash incidence and severity. Efforts to improve quality and accessibility of injury system data have improved ratings and helped to develop a more comprehensive system as well.

The driver and vehicle systems are actively involved Traffic Records stakeholders and report working toward a unified system in the near future. The Crash system is within a single percentage point of being totally electronic, which adds to the integrity of data in terms of timeliness, accuracy and completeness, while improving accessibility of the records and forging the path for integration with driver, vehicle and citation systems.

The development of a data warehouse provides a means by which the effort and expense of data collection and management pays dividends for the State by allowing for ease of access and additional skilled analytical resources available to data users. The warehouse currently contains crash, driver, vehicle, and citation data. Injury Surveillance data could be an obvious next choice for addition to the warehouse.

All in all, the State has made a good deal of progress, has several exciting opportunities and efforts underway and has changed a number of its ratings upward in this last Assessment cycle. It should be noted that the State is being assessed based on an ideal traffic records system--an ideal which might not comport with Florida's organizational/statutory framework. The Advisory is a construct for purposes of comparison; states are not expected to fulfill all aspects of the ideal system. Even so, Florida rated 'meets' or 'partially meets' the ideal on 83 percent of the items rated.

Florida's Traffic Records System and its supporting Coordinating Committee are functioning effectively and are operating in a way that is driving a great deal of progress and success. The one area where the State can improve is its data quality control program and performance monitoring. It is important to track data quality and report it; even though the State has made strides in improving its data quality, it should be monitored to ensure that quality remains high. Degradation of quality can be subtle, and it may take a great deal of time and effort to recover from lost ground if statutory or process changes unintentionally negatively impact that quality. Each system has some good performance measures, but it would behoove the Traffic Records Coordinating Committee to re-evaluate the quality control program and refocus on capturing baseline data and developing numeric goals.

Assessment Results

A traffic records system consists of data about a State's roadway transportation network and the people and vehicles that use it. The six primary components of a State traffic records system are: Crash, Driver, Vehicle, Roadway, Citation/Adjudication, and Injury Surveillance. Quality traffic records data exhibiting the six primary data quality attributes—timeliness, accuracy, completeness, uniformity, integration, and accessibility—is necessary to improve traffic safety and effectively manage the motor vehicle transportation network, at the Federal, State, and local levels. Such data enables problem identification, countermeasure development and application, and outcome evaluation. Continued application of datadriven, science-based management practices can decrease the frequency of traffic crashes and mitigate their substantial negative effects on individuals and society.

State traffic records systems are the culmination of the combined efforts of collectors, managers, and users of data. Collaboration and cooperation between these groups can improve data and ensure that the data is used in ways that provide the greatest benefit to traffic safety efforts. Thoughtful, comprehensive, and uniform data use and governance policies can improve service delivery, link business processes, maximize return on investments, and improve risk management.

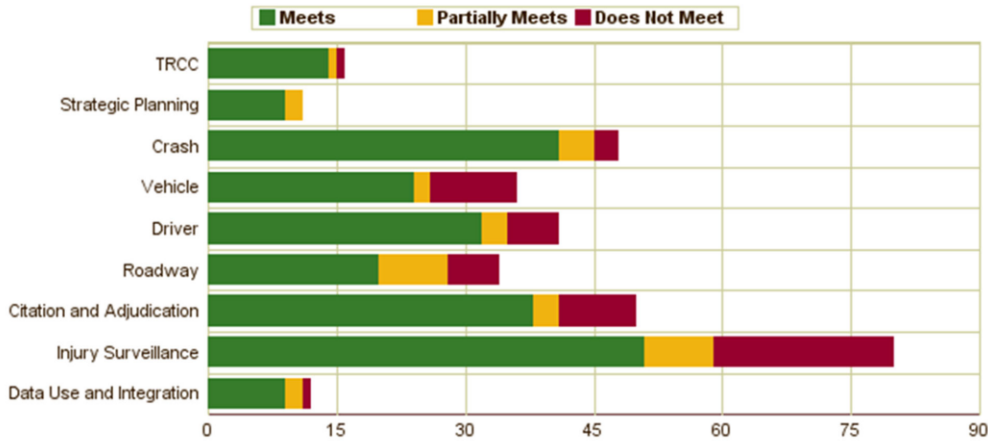
Congress has recognized the benefit of independent peer reviews for State traffic records data systems. These assessments help States identify areas of high performance and areas in need of improvement in addition to fostering greater collaboration among data systems. In order to encourage States to undertake such reviews regularly, Congress' Fixing America's Surface Transportation Act (FAST ACT) legislation requires States to conduct or update an assessment of its highway safety data and traffic records system every 5 years in order to qualify for §405(c) grant funding. The State's Governor's Representative must certify that an appropriate assessment has been completed within five years of the application deadline.

Out of 328 assessment questions, Florida met the Advisory ideal for 238 questions (73%), partially met the Advisory ideal for 33 questions (10%), and did not meet the Advisory ideal for 57 questions (17%).

As Figure 1: Rating Distribution by Module illustrates, within each assessment module, Florida met the criteria outlined in the Traffic Records Program Assessment Advisory 88% of the time for Traffic Records Coordinating Committee Management, 82% of the time for Strategic Planning, 85% of the time for Crash, 67% of the time for Vehicle, 78% of the time for Driver, 59% of the time for Roadway, 76% of the time for Citation and Adjudication,

64% of the time for EMS / Injury Surveillance, and 75% of the time for Data Use and Integration.

Figure 1: Rating Distribution by Module



States are encouraged to use the recommendations, considerations and conclusions of this report as a basis for the State data improvement program strategic planning process, and are encouraged to review the report at least annually to gauge how the State is addressing the items outlined.

Recommendations & Considerations

According to 23 CFR Part 1200, §1200.22, applicants for State traffic safety information system improvements grants are required to maintain a State traffic records strategic plan that—

“(3) Includes a list of all recommendations from its most recent highway safety data and traffic records system assessment; (4) Identifies which such recommendations the State intends to implement and the performance measures to be used to demonstrate quantifiable and measurable progress; and (5) For recommendations that the State does not intend to implement, provides an explanation.”

The following section provides Florida with the traffic records assessment recommendations and associated considerations detailed by the assessors. The broad recommendations provide Florida flexibility in addressing them in an appropriate manner for your State goals and constraints. Considerations are more detailed, actionable suggestions from the assessment team that the State may wish to employ in addressing their recommendations. GO Teams, CDIPs (Crash Data Improvement Program) and MMUCC Mappings are available for targeted technical assistance and training.

TRCC Recommendations

None

Considerations for implementing your TRCC recommendations

- Consideration should be given to ensuring that TRCC meetings are scheduled and held quarterly, a minimum of four times per year. Quarterly meetings help ensure continuity of communication amongst traffic records system stakeholders across the State throughout the calendar year.
- Consideration should be given to establishing a formal traffic records inventory. It can serve as a resource to help traffic records system owners identify areas where there are opportunities for data integration. As data from traffic records systems become more widely used, this will assist in streamlining processes, reducing duplication of effort, and allowing data to be more fully utilized to make roadways safer.
- Consideration should be given to continuing and expanding on the initial user needs survey effort. Conducting similar surveys in the next assessment cycle may be beneficial, allowing the State to work towards identifying training and technical assistance needs across all traffic records systems.

Summary

Florida's Traffic Records Coordinating Committee (TRCC) is comprised of both executive and technical membership. All six core component areas have executive and technical level representation on Florida's TRCC. Participation from executive level members can serve to improve communication and sharing of knowledge across traffic records systems. Active participation across all core component areas at both levels increases collaboration and benefits traffic records system stakeholders.

The Florida TRCC is well established and adequately meets most of the Traffic Records Advisory ideals; however, there are still a few areas that have room for improvement. The Florida TRCC meets three times per year. Consideration should be given to ensuring that TRCC meetings are scheduled and held quarterly. Quarterly meetings help ensure continuity of communication amongst traffic records system stakeholders across the State throughout the calendar year. Even if executive members are unable to attend a fourth meeting, there are many advantages to facilitation of ongoing communication amongst technical level members. In many cases, the TRCC meetings may be the only time these members have an opportunity to work together and discuss challenges and best practices in their respective traffic records areas. The group can work towards establishing a regular, recurring schedule, or set all four dates for the year well ahead, so that meetings are on everyone's calendars far in advance. This gives all members ample opportunity to prioritize the TRCC meetings within their schedules.

It may be beneficial for Florida to pursue a more formal traffic records inventory, as there likely have been changes made to data collection systems, platforms, and processes in multiple traffic records systems over time. An up-to-date traffic records inventory is a useful and pragmatic document that can be used to ensure efforts are not duplicated and data is accessible to those who need it to make data-driven decisions. Florida's TRCC Data Subcommittee has done excellent work to identify data gaps, improve processes,

and enhance overall data quality through participation in a variety of projects. However, a more formal inventory document, shared across system stakeholders would be useful. An inventory can serve as a resource to help traffic records system owners identify areas where there are opportunities for data integration. As data from traffic records systems becomes more widely used, this will assist in streamlining processes, reduce duplication of effort, and allow data to be more fully utilized to make roadways safer.

Florida used a NHTSA GO Team to conduct a user needs survey in 2018. The Florida TRCC should consider expanding on that initial effort and continue conducting similar surveys in the next assessment cycle, working towards identifying training and technical assistance needs across all traffic records systems. Florida can further demonstrate adherence to this ideal by including training and technical assistance needs as a regular topic at TRCC meetings, encouraging the use of training needs assessments by TRCC members, and by fostering TRCC meeting presentations on this topic.

Overall, the Florida TRCC solidly meets the majority of the Traffic Records Advisory ideals and is to be commended for attributing focus to meeting these standards. Over the next assessment cycle, in addition to exploring the considerations mentioned above, it will be beneficial to continue to place attention on maintaining adherence to these Advisory standards. While much effort has been expended ensuring the standards are met, it is equally important the TRCC continues to operate accordingly in the next five years.

Strategic Planning Recommendations

None

Considerations for implementing your Strategic Planning recommendations

- Identifying and addressing training needs should be centralized within the Strategic Plan rather than having the information dispersed across agencies.
- Consideration should be given to highlighting efforts to coordinate with Federal data systems within the Strategic Plan. Another possibility is to provide references to other documents where this information can be found.

Summary

The Florida Traffic Safety Information System Strategic Plan is a well-written and comprehensive document. The strategic plan includes the membership of each level of the TRCC, which include representatives from each of the core data systems as well as other stakeholders. The plan provides a status report of funded projects, demonstrated improvement in two of the core data systems, and plans for Fiscal Year 21 grant funding. The TRCC is responsible for the development, tracking, and evaluation of the Traffic Records Strategic Plan and Florida has developed a very sound system for accomplishing this task. There is a prioritization methodology that the TRCC uses to identify projects funded with Section 405c funds.

The Strategic Plan includes details about each funded project including the responsible agency, its purpose, description, and progress. This information is summarized in an easily digestible table. The Strategic Plan is reviewed and updated annually. Areas of opportunity in the Strategic Plan were identified through the use of the previous Traffic Records Assessment and a recent GO Team report. The TRCC also conducted a survey of

State and local users to aid in the identification of areas and data systems in need of improvement. The TRCC has appointed an Application Subcommittee to assess new technology and consider life cycle costs.

While each of the six core data systems are addressed by the Strategic Plan, the Annual Implementation Update only provides a comprehensive update regarding the accuracy of electronic crash reporting and the uniformity of the of EMS data. The State is to be commended and should be proud of the progress made in these two areas. While not provided in such detail, the TRCC is encouraged to provide updates on the progress of other performance measures and the remaining four data systems.

The Strategic Plan contains much of the recommended information states are encouraged to include, but there are some deficiencies. Technical assistance and training needs are the responsibility of the data system owners and are not addressed by the Strategic Plan. While individual agencies are undertaking efforts to coordinate with Federal traffic records systems, NEMESIS is the only Federal system specifically addressed by the Strategic Plan. The State is encouraged to consider incorporating some of this information into the Traffic Records Strategic Plan or inserting reference points to the specific sections of other reports where the information is housed.

Crash Recommendations

1. Improve the data dictionary for the Crash data system to reflect best practices identified in the Traffic Records Program Assessment Advisory.
2. Improve the data quality control program for the Crash data system to reflect best practices identified in the Traffic Records Program Assessment Advisory.
3. Improve the procedures/ process flows for the Crash data system to reflect best practices identified in the Traffic Records Program Assessment Advisory.

Considerations for implementing your Crash recommendations

- One hundred percent electronic crash reporting by the next Traffic Records Assessment seems very achievable. The State should consider establishing a timeline with goals for each remaining agency for full adoption of electronic crash reporting to help address and facilitate the transition. It would also be helpful to identify obstacles that may be hindering each respective agency's transition to full electronic reporting and explore avenues to help guide decision-makers at all levels.
- Consideration should be given to ensuring continued monitoring, improvement, and expansion to existing integration between the Crash system and Driver, Vehicle, Injury Surveillance, and Roadway systems. Now that it has been established, maintaining this integration between Crash and other systems is crucial. Additionally, identifying ways to encourage agencies submitting via 3rdparty software to also take advantage of these tools is also important so that data quality across crash records is maintained.
- Florida should continue to make use of available NHTSA resources and ensure

they have procedures in place for monitoring and maintaining the performance metrics they have established to ensure they remain relevant and useful to the data system managers in the coming years.

Summary

Since the last assessment, Florida has made positive strides and improvements to its Crash System. They have improved the collection of electronic crash data and have strengthened their performance metrics dramatically. Florida has also established more integration between the Crash system and other State traffic records systems to improve the quality and accuracy of traffic safety data. They have increased the quality of their analytical capabilities and resource tools through the implementation of the Signal Four Analytics program which provides data accessibility in an easy-to-use format.

The Florida Crash System is consolidated into a single database housed within the Florida Department of Highway Safety and Motor Vehicles. Florida utilized MMUCC and ANSI D.16 as part of the establishment of their crash system and recently underwent a MMUCC mapping review based on the 5th MMUCC edition. Measuring a crash system against MMUCC standards is beneficial to the State and can help determine if further improvements or revisions to the crash report form are needed or desired.

In recent years, Florida has continued to make progress transitioning agencies to electronic crash reporting. They have reduced the number of agencies still submitting paper to just 28, reflecting just over 1.1 percent of all crashes submitted to the Crash system during 2019. For a State as large as Florida, this is an impressive accomplishment and excellent progress. The incentive program for submitting electronic crash reports, combined with grant funding opportunities, the FHP laptop surplus program and other initiatives are all great programs implemented to help push agencies towards the goal of 100 percent electronic crash reporting. Given the small number of agencies remaining, 100 percent electronic crash reporting by the next Traffic Records Assessment seems very achievable. It may be beneficial for the State to establish a timeline with goals for each remaining agency for full adoption of electronic crash reporting to help address and facilitate the transition. It would also be helpful to identify obstacles that may be hindering each respective agency's transition to full electronic reporting and explore avenues to help guide decisionmakers at all levels.

Population of data elements in the Crash system from other traffic records systems such as Driver, Vehicle, EMS, Injury Surveillance, or Roadway can have great benefits. Florida has taken positive steps in the area of data integration by linking its Crash system to the Driver, Vehicle, and Roadway systems. The ELVIS and DAVID systems allow officers to validate driver and vehicle information during the crash data collection process. There is also integration with the Roadway system which allows for pre-population of location data and data sharing between the two systems. These data integration components allow for more complete and accurate collection of crash data. Encouraging use of these tools among 3rd-party submitting agencies should also be considered. Crash and EMS data is integrated through BioSpatial, allowing for improved analysis of crash injury outcomes. Additional integration with Injury Surveillance systems should also be explored, as well as continued monitoring and improvement to existing integration between the Driver, Vehicle, and Roadway systems.

Dialogue regarding possible opportunities for improvement or expansion of data linkages, interfaces, and integration amongst the State traffic records systems should be ongoing among TRCC membership where all core traffic records systems managers and stakeholders are represented. As traffic records systems data becomes more widely used, system interfaces and data integration will be crucial. Improved data linkage and integration will streamline processes, improve data quality, reduce duplication of effort, and allow data to be more fully utilized to make roadways safer.

Given the rising importance of traffic safety data which often starts with the Crash system, it is extremely helpful to establish and maintain useful performance measures and to ensure a robust quality control program for improving and monitoring completeness, timeliness, and accuracy. In-depth and detailed agency-level feedback for local law enforcement agencies is also useful. Strong performance measures and performance measure reporting is an important aspect of a successful Crash system. Florida has established an excellent system of performance measures for its Crash system, making great strides since the previous assessment, and they should be proud of the progress made in this area.

Florida should continue to make use of available NHTSA resources and ensure they have procedures in place for monitoring and maintaining the performance metrics they have established to ensure they remain relevant and useful to the data system managers in the coming years. There will also be opportunities to utilize NHTSA GO Teams to help improve traffic records systems processes following the completion of the assessment. Additional resources include the “NHTSA Model Performance Measures for State Traffic Records Systems” document, which is a good resource for identifying and implementing appropriate measures for all traffic systems. It can be found at <http://www-nrd.nhtsa.dot.gov/Pubs/811441.pdf>.

Data accessibility is vital for crash data users. By focusing engineering and law enforcement efforts on locations with the greatest crash risk, traffic fatalities and injuries can be reduced, resulting in safer roadways. Florida’s Signal Four Analytics program offers robust tools for end users to access and analyze crash data for their communities. Continuing to ensure end users are aware of the availability of these tools and receive training on their proper application is key and will lead to improved resource allocation and traffic safety on Florida roadways.

Overall, the Florida Crash System is functioning at a high level, with recent improvements to electronic data collection, data integration across traffic records systems, and performance metrics. Opportunities for crash system growth in the coming years include: drafting and implementing a plan for achieving 100 percent electronic crash data collection among the remaining agencies still utilizing the paper form; expanding already well-established system interfaces and data integration efforts to improve data quality across core component traffic records systems; and maintaining and sustaining useful crash system performance measures implemented since the previous assessment that can be frequently monitored by stakeholders.

Vehicle Recommendations

4. Improve the data quality control program for the Vehicle data system to reflect best practices identified in the Traffic Records Program Assessment Advisory.
5. Improve the description and contents of the Vehicle data system to reflect best practices identified in the Traffic Records Program Assessment Advisory.
6. Improve the interfaces with the Vehicle data system to reflect best practices identified in the Traffic Records Program Assessment Advisory.

Considerations for implementing your Vehicle recommendations

- Florida should consider further developing and adopting a comprehensive data quality management program. The program would consist of, at a minimum, development of performance standards regarding system data timeliness, accuracy, completeness, uniformity, accessibility, and integration. Once performance standards are developed, baseline measures could be taken and metrics monitored on a regular basis. The development and monitoring of data management performance measures will enable the State to continually improve vehicle system data and increase its availability and reliability.
- Florida should consider implementing a vehicle system procedure for receiving and reviewing crash records where discrepancies have been identified during data entry in the crash data system. Adding this feature provides an opportunity to enhance the accuracy of the vehicle records.
- Florida should consider incorporating barcodes on vehicle registration documents to allow for rapid, accurate collection of vehicle information by law enforcement officers in the field using barcode readers or scanners.

Summary

The State of Florida vehicle titling and registration program is administered by the Florida Department of Highway Safety and Motor Vehicles. All vehicle registration and title records are contained in the Florida Real-Time Vehicle Information System (FRVIS).

FRVIS is a real-time data entry and processing system that incorporates data entry validation through field and logical edits. Additionally, FRVIS queries outside databases to confirm Vehicle Identification Number (VIN) information and obtain vehicle title information from NMVTIS. FRVIS is supported by documented data elements and data structures in a comprehensive data dictionary while processing sequences are documented in training manuals for all vehicle title and registration transactions.

FRVIS is further supported by technical system workflow documentation, but no time annotation for routine workflow or alternative operational processing workflow documentation exists. Additional programs supporting FRVIS include: a program for making data corrections by internal quality assurance staff; a program for receiving user feedback to identify problems and receive ideas for system improvement; a program for detecting high frequency errors to identify issues; an audit program; and an evaluation program for long-term trend analyses.

Florida vehicle registration and title documents do not contain barcoded information

allowing for rapid data collection by law enforcement equipped with barcode-reading technology. However, vehicle records for vehicles reported stolen to law enforcement are flagged within the system.

FRVIS is supported by some performance measures as a part of a comprehensive data quality management program described in the Advisory but there are several areas of performance for which measures have not been developed. Additionally, there is no interface with other traffic record systems such as the driver or crash databases. However, it was reported that a unified record system to combine driver and vehicle records is in the process of development.

Driver Recommendations

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

Considerations for implementing your Driver recommendations

- Florida should consider further developing and enhancing a comprehensive data management program for the driver system. The program would consist of, at a minimum, development of performance standards regarding data timeliness, accuracy, completeness, uniformity, accessibility, and integration. Once performance standards are developed, baseline metrics would be captured and monitored on a regular basis. The development and monitoring of data quality performance measures will enable the State to continually improve driver system data and enhance system availability and reliability.
- Florida is encouraged to continue developing and implementing the State-to-State driver history and facial image exchange transfer service.
- Florida should consider implementing one-to-one facial image verification on all driver license transactions.
- Florida indicated that development of ORION is underway with an anticipated implementation in 2023. As changes are planned and implemented, the State should consider utilizing the Advisory as a reference for minimum system functionality and program management that will improve the ratings in future Traffic Records Assessments.

Summary

The Florida Department of Highway Safety and Motor Vehicles is the custodian of driver data, including information related to commercial driver licensure. Florida driver records contain driver demographic data as well as original issuance dates for all classes of licenses, permits, and endorsements, novice driver training information, conviction records, and at-fault crashes. Florida obtains previous state of licensure driving records and provides Florida driver history information and related facial images to other states.

The Florida driver system front-end user processing system is the Florida Driver License Issuance System (FDLIS). The system is supported by detailed data dictionaries describing data structures and data element definitions. The Florida FDLIS contains internal field level edit checks, input masking, lookup table validations, and business rule validations

to enhance accurate data collection. The FDLIS is further supported by a structured change request process to define system or program changes and oversee the development, testing, and documentation of system updates. The FDLIS fully integrates with both CDLIS and PDPS and its users are supported by detailed procedure documentation contained in procedure materials. Additionally, the system is further supported by error correction policies and procedures to correct obvious errors.

The Florida driver system is supported by a comprehensive data system security plan and a formal data purge policy. Driver records and facial images are provided to law enforcement and driver record information is provided to the courts.

The Florida driver program is supported by multiple programs and resources to deter fraud. False identity licensure fraud is deterred through employees receiving fraudulent document recognition (FDR) training and having integrated queries to SSOLV, PDPS, CDLIS and SAVE. Additionally, all license issuances are validated through facial image verification. Commercial Driver License (CDL) fraud is deterred through the recording and storage of testing results and audits of testing providers. Internal fraud is detected or deterred through a series of employee daily work audits, supervisory quality control checks, and internal audits.

The Florida driver system is supported by other proactive programs that promote data quality and identify potential enhancements. High frequency errors are evaluated to identify training issues or items that require system updates. User feedback is formally documented to drive data quality improvement and system enhancements. Sample-based audits are conducted periodically for critical driver record transactions and related database contents. Trend analysis reports are run to monitor activity and plan for workload changes.

Though the Florida driver system is supported by most of the monitoring and feedback programs outlined in the Advisory, the data quality management program, with associated system performance measures and baseline output expectations, is not as developed as the Advisory ideal.

Florida driver data is provided to the TRCC through the Electronic License and Vehicle Information System.

Roadway Recommendations

8. Improve the data quality control program for the Roadway data system to reflect best practices

identified in the Traffic Records Program Assessment Advisory.

9. Improve the interfaces with the Roadway data system to reflect best practices identified in the Traffic Records Program Assessment Advisory.

Considerations for implementing your Roadway recommendations

- FDOT might consider developing more formal project management techniques and status reporting to the TRCC and safety stakeholders for its projects to expand roadway data systems for all public roads.
- Consider expanding the RCI Handbook to include the collected MIRE and FDEs

as well as their referencing numbers.

- Consider expanding roadway system timeliness, accuracy, completeness, uniformity, integration, and accessibility performance measures.
- The State might consider developing collaborative efforts with local roadway system safety stakeholders to collect, manage, and submit local agency roadway data to the enterprise roadway system.

Summary

The Florida Department of Transportation (FDOT) has a geospatial roadway system. The system supports a linear referencing system (LRS) and mapping functionality for all Florida public roads. Florida's roadway system includes approximately 12,103 miles which are State-maintained (10% of the total centerline miles) and approximately 110,996 miles (90%) of non-State-maintained roads.

Florida can identify crash locations using the linear referencing system on State-maintained roadways and latitude/longitude coordinates on non-State-maintained roads.

Florida is similar to many other states nationally, in that, it is in the process of transitioning to the provisions outlined in the Fixing America's Surface Transportation (FAST) Act of 2015 and MAP-21, the Moving Ahead for Progress in the 21st Century Act. The legislation provides guidelines for states to develop a safety data system for all public roads and to perform analyses supporting the strategic and performance-based goals in the Highway Safety Improvement Program (HSIP) and the Strategic Highway Safety Plan (SHSP). FAST and MAP-21 also provide guidance on collecting a subset of the Model Inventory of Roadway Elements (MIRE). The data element subset identified by the Federal Highway Administration (FHWA) is referred to as the Fundamental Data Elements (FDEs). The FDEs are the basic roadway data elements recommended to be collected and linked with crash data for analysis to identify safety problems and to make more effective safety countermeasure decisions for the HSIP. FDOT collects some MIRE FDEs primarily for State-maintained roads. Other MIRE FDEs are collected or obtained through commercially available data from HERE GIS or through relationships with local or regional agencies. The State has established as one of their priorities the goal of collecting the FDEs on all public roads.

FDOT has made significant progress in improving its State Roadway Inventory System since the 2016 Assessment. This progress has been successful through active projects to provide a compatible location referencing system for all Florida public roads. The projects use the FHWA system called the All Road Network of Linear Referenced Data (ARNOLD), the FDOT ARBM (All Roads BaseMap), and the HERE GIS which provides commercially-available local roadway data. When complete, the projects will provide a comprehensive enterprise roadway system for all Florida public roads using the ARBM as the system's foundation. The projects are recognized as a best practice; however, ongoing project status is not clear. FDOT is encouraged to develop performance management for each of the projects and provide regular status reporting to the TRCC and safety stakeholders.

FDOT created the Roadway Characteristics Inventory (RCI) Handbook as the enterprise

roadway system data dictionary. The Handbook provides data element and attribute definitions as well as instructions for those that collect, code, and use the RCI data. The RCI does not document the collection of MIRE FDEs nor does it identify RCI data elements that might conform to MIRE. Additional documentation was provided that supports a State comparison of the MIRE FDEs to the Roadway Characteristics Inventory

(RCI). The documentation provides an evaluation (Cross-reference) of the RCI elements that meet the definition of the MIRE. The documentation also includes the referencing numbering systems for the MIRE and the RCI data elements. The State is encouraged to add information in this document to future editions of the RCI Handbook, and as it expands data coverage to all public roads, it might consider indicating the data elements that are collected and managed for each roadway system, possibly by functional class.

Even though Florida currently obtains some commercially available local data from the HERE GIS and a few data elements from local partnerships, no requirements currently exist for the local jurisdictions on the collection or management of roadway data. The State is encouraged to develop collaborative efforts with local roadway system safety stakeholders to collect, manage, and submit local agency roadway data to the enterprise roadway system under the oversight and support of the Florida TRCC.

Florida has made progress on key components of a comprehensive, roadway data quality control management process that ensures the efficient functioning of the system. FDOT utilizes the DART application that contains SQL queries to perform data edits and validation checks as data is entered into the RCI. The checks enforce the consistency and accuracy of the data elements. The system includes approximately 300 edit checks at this time. Routine quality assurance reviews are conducted by data collectors, feedback about the results is provided, and training is either developed or updated if needed. FDOT's Transportation Data and Analytics Office maintains the Quality Assurance Review Handbook. The Handbook documents several data quality management procedures. This is an excellent resource, and the State is encouraged to expand the document as the enterprise roadway system is expanded to include all Florida public roads. The Handbook mentions some timeliness and accuracy performance management; however, it is not clear if the processes include baseline measurement, actual measures over time or jurisdictions, or ongoing measurement and reporting of results to data collectors, the TRCC, and safety stakeholders.

FDOT is encouraged to review their current performance measures and expand them to include some aspects described in NHTSA's "Model Performance Measures for State Traffic Records Systems." Performance management should include the data quality measures for the timeliness, accuracy, completeness, uniformity, integration, and accessibility of the roadway data; continuous monitoring based on a set of metrics established by the State; and periodic reporting to the TRCC, data collectors, and managers.

Citation and Adjudication Recommendations

10. Improve the data quality control program for the Citation and Adjudication systems to reflect best practices identified in the Traffic Records Program Assessment Advisory.
11. Improve the interfaces with the Citation and Adjudication systems to reflect best practices identified in the Traffic Records Program Assessment Advisory.
12. Improve the procedures/ process flows for the Citation and Adjudication systems to reflect best practices identified in the Traffic Records Program Assessment Advisory.

Considerations for implementing your Citation and Adjudication recommendations

- Develop an interface between the adjudication and crash systems to ensure real-time accurate information is conveyed and utilized by stakeholders of those systems.
- Develop performance measures for the adjudication systems. Relevant measures for accuracy and timeliness for the activities in the court could assist in improving the overall quality of traffic records.
- Develop an interface between the adjudication and driver systems to ensure real-time accurate information is conveyed and utilized by stakeholders of those systems.

Summary

The State of Florida has described a well-developed citation and adjudication system which provides information about citations, arrests and dispositions to the requisite State agencies. Although the State does not have a unified court system, using an impressive array of programs and methods, the State is able to retrieve and organize data from multiple courts and utilize citation and adjudication data for the prosecution of offenders; adjudication of cases; traffic safety analysis; the issuance of citations; and for traffic safety program planning purposes. "Signal Four", a statewide analytical system integrating crash, roadway and citations data is used by local, regional and State agencies to analyze and create maps and statistical reports of crashes and citations. Florida maintains two systems designed to track all citation dispositions-both within and outside the judicial branch, namely the Citation Processing Inventory (CPI) and the Traffic Citation Accounting and Transmission System (TCATS). Florida enjoys statutory authority to assign unique citation numbers and verifies previously issued citation numbers are reconciled. Sixty-seven Florida Clerks of Court convey final dispositions and updates through a mandatory system, resulting in a comprehensive view of enforcement and adjudication activity statewide.

As stated in the ideal, State citation and adjudication agencies should participate in the appropriate national data systems to ensure compatibility and serve data management and exchange needs. Florida participates in and utilizes the systems and standards developed nationally. Ideally, the State maintains system-specific data dictionaries. A data dictionary documents all variables in the data collection form and/or software and all variables in the database. The data dictionary lists the name of the element in the database as well as the commonly understood description. The dictionary should provide an established data definition and validated values for each field in the data system.

Florida has provided evidence these data dictionaries exist and are used in the manner envisioned by the ideal.

The State of Florida has some opportunity for improvement in the use of quality control programs and development of performance measures for the citation and adjudication systems. It is essential that each part of the citation and adjudication systems have a formal data quality assurance program. It would appear that the State has multiple robust sources of data from which meaningful performance measures can be crafted and monitored with the goal of an improved traffic records system. It is unclear if performance measures exist in the disparate court systems prior to the inclusion of data in the statewide mandatory database. The State should consider future enhancements in this area with the development of a performance measure for each of the attributes articulated in the ideal.

Florida is well-positioned to meet the few remaining Advisory ideals in the future. The State has articulated a well-developed citation and adjudication system which has many electronic components. The planned development of a DUI tracking system along with increasing the number of systems integrated with the adjudication systems will bring the State further in that regard by the next assessment.

Injury Surveillance Recommendations

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

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

Considerations for implementing your Injury Surveillance recommendations

- The TRCC should establish a process to identify independent projects that utilize Florida's injury surveillance data for possible inclusion in its highway safety program efforts.
- The TRCC is encouraged to work with the Florida Department of Health and the Agency for Health Care Administration to establish performance measures and metrics for each of the five injury surveillance data systems.
- The Agency for Health Care Administration and Florida Department of Health are encouraged to regularly share data quality reports with the TRCC for the emergency department, hospital discharge, trauma registry, and vital records data systems (similar to the EMS reports already being shared).

Summary

An injury surveillance system provides information about the characteristics and trends in non-fatal injuries, identifies emerging injury problems, identifies at-risk persons, and informs decision-making for programs and policies. With regard to traffic records, an injury surveillance system that is integrated with crash records can describe the true nature and severity of injuries sustained by persons involved in a motor vehicle crash by the status of the vehicle occupant, the type of restraint system used – or not used, the type of vehicle involved in the crash, crash location, or any number of other crash and person

characteristics. An ideal statewide Injury Surveillance System (ISS) is minimally comprised of data from five core components: pre-hospital emergency medical services (EMS), trauma registry, emergency department, hospital discharge, and vital records. This information is invaluable when determining the injury severity, costs, and clinical outcomes of the individuals involved.

Florida has all five major components of a traffic records injury surveillance system and the available data is accessible to both traffic safety stakeholders and the public through either aggregate summary tables or agency-approved data use agreements. The Florida Department of Health's Injury Prevention Program is the lead agency in the ISS and analyzes traffic crashes for the State on an annual basis. The five core data systems are accessible for quality assurance activities by State statute. The Brain and Spinal Cord Injury Program's Central Registry is also a source of information for understanding the effects of traumatic injuries from crashes.

The pre-hospital data collection system, known as the Florida Prehospital EMS Tracking and Reporting System (EMSTARS), is managed by the Florida Department of Health's (FDOH) Bureau of Emergency Medical Oversight (BEMO). The State system is NEMSIS-compliant to version 3.4 and all vendors must be validated by BEMO. The Florida EMSTARS data dictionary is very detailed and available on the FDOH website (two files are available for NEMSIS v1.4 or v3). All software vendors must incorporate appropriate edit checks and validations to ensure that the data falls within acceptable parameters from that dictionary. Agencies may submit data to the BEMO in a quarterly aggregate format or real-time incident level data. At the point of submission, any records rejected by the edit checks and validation rules are noted and returned to the agency for correction and resubmission. The State has established performance measures for five data categories in the State EMS Strategic Plan and a measure related to accuracy is also tracked in the Florida Traffic Safety Information System Strategic Plan. A quarterly progress report is shared with the Traffic Records Coordinating Committee (TRCC) that tracks timeliness, accuracy, completeness, and uniformity performance measures. There is a sound feedback loop through the EMS Advisory Council Data Committee and the FDOH has worked with Biospatial to generate dashboards and reports for each agency.

The statewide emergency department and hospital discharge data systems are managed by the Agency for Health Care Administration (AHCA). Data from both systems is shared quarterly with the FDOH and may be accessible to outside parties; a non-confidential dataset is available upon request and a confidential file may be available upon approval from the FDOH Institutional Review Board. Details about requesting the information are available in the AHCA Information Resources and Data Security Procedures Manual, which is available online. There is a very comprehensive data quality control system in place at AHCA, including 795 hospital discharge and 267 emergency department audits at the point of data submission. Policies, timelines, and thresholds have been established for submitting the data, but no performance measures have been developed. AHCA data administrators hold quarterly data standards meetings for review of the audit process and data user meetings open to all users/submitters. However, data quality reports are not currently provided to the TRCC.

There is a statewide trauma registry, the Next Generation Trauma Registry (NGTR), which is also managed by the FDOH. Although trauma registry data has not been used in traffic safety analyses, a Trauma System Advisory Council and Trauma Quality

Collaborative were recently formed and anticipate conducting such projects. The NGTR complies with the National Trauma Data Bank (NTDB) standard per State statute and also includes several State-specific data fields. Three submission guidelines and data dictionaries are available online: the NTDB standard, the Florida Trauma Registry Data Dictionary with the State-specific fields, and the Florida Acute Care Data Dictionary for trauma patients treated at non-trauma hospitals. The data is made available through summary reports, FDOH IRB approval, and the Biospatial program with plans to build public dashboards. Performance measures and metrics have not been established, but it is anticipated that the Trauma System Advisory Council will complete that effort in the future. As key updates are made to the system, that information and data quality reports are shared with the TRCC.

The FDOH Bureau of Vital Statistics is responsible for managing all vital statistics data including death certificates. As with most other states, Florida collects death certificates from hospitals, funeral homes, and coroners and submits all data to the National Center for Health Statistics (NCHS) for quality review and assignment of cause-of-death ICD-10 codes. The State uses a statewide electronic death registration system (EDRS), and data dictionaries (codebooks) are available online. Summary information is made available through the FLCharts program and confidential data may be accessed upon approval by the FDOH IRB. The State does not conduct quality reviews beyond the in-system edit checks and NCHS efforts and data quality reports are not shared with the TRCC.

Data Use and Integration Recommendations

None

Considerations for implementing your Data Use and Integration recommendations

- Develop a FAQ that describes the general methodology for integrating the individual traffic records systems. While multiple projects have integrated specific data sets for analysis, it is not always clear which data elements are used or how successful the linkage steps have been. Developing a standard methodology for conducting the linkages would be beneficial to all users of the data systems.
- Continue expansion of the data warehouse to include data sets from all traffic records components - specifically, hospital and ambulatory care data.

Summary

Data integration involves the use of disparate datasets in varying combinations to provide data managers, data users, and policy makers the ability to view and analyze data in a manner that is not possible using a single data source. Integrated data can be used to improve problem identification and program evaluation activities at the State and local level by incorporating other traffic records systems to provide additional levels of information and detail. This integrated data can often help decision-makers develop a more accurate picture of existing and emerging highway safety problems and can support more in-depth evaluation of highway safety programs.

The process of integrating data, however, can be challenging as the databases are managed and housed by different agencies and collected for the specific business activities of those agencies. Consequently, the individual data elements within each

system that can be used for integration must be identified and standardized. This can be a difficult and time-consuming process and thus, is not normally identified as a high priority activity within the states.

Overall, Florida has been highly successful using crash data, and other traffic records systems, to support their highway safety efforts. The Florida Department of Transportation (FDOT) and the Department of Highway Safety and Motor Vehicles (FLHSMV) has created a data warehouse to provide a central repository for their crash, vehicle, drivers, and citation data files.

Through this data warehouse and partnerships with other agencies, Florida's highway safety community has on-line access to traffic records data as well as access to skilled personnel that can support the analysis and interpretation of this information.

The ability of Florida's Traffic Records Coordinating Committee (TRCC) to bring together the data owners and facilitate the development of this warehouse is a key component to continuing the development and use of integrated data sets. This effort is supported by the State's data governance policy which is overseen by the State's chief data officers. The departments involved in highway safety and traffic records also have well-documented policies related to the use and integration of their data sets.

While the data warehouse does not currently include injury surveillance data (i.e., EMS, hospital, and trauma registry data), the Florida Department of Health has supported preliminary linkage between the State's EMS records and the crash reports as part of their Biospatial project.

For a full report, please visit: fltrafficrecords.com.

B. Strategic Planning Participants

Executive Board Members

1. Beth Allman, Chair, Florida Court Clerks and Comptrollers
2. Steve McCoy, Vice Chair, Florida Department of Health
3. Lora Hollingsworth, Department of Transportation
4. Robert Kynoch, Department of Highway Safety and Motor Vehicles
5. David Brand, Florida Sheriffs Association
6. Chief Virgil Sandlin, Florida Chief's Association
7. Major Gary Howze, Department of Highway Safety and Motor Vehicles / FHP

Other Participants

8. Danielle King - Department of Transportation
9. Chris Craig - Department of Transportation
10. Joe Santos - Department of Transportation
11. Benjamin Jacobs - Department of Transportation
12. Joey Gordon - Department of Transportation
13. Andrea Hodge - Department of Transportation
14. Major Jeffrey Dixon - Florida Highway Patrol / Department of Highway Safety and Motor Vehicles
15. Stephanie Duhart - Department of Highway Safety and Motor Vehicles
16. Deborah Todd - Department of Highway Safety and Motor Vehicles
17. Richie Frederick - Department of Highway Safety and Motor Vehicles
18. April Langston - Department of Highway Safety and Motor Vehicles
19. Thomas Austin - Department of Highway Safety and Motor Vehicles
20. Thomas Rast - Department of Highway Safety and Motor Vehicles
21. Brenda Clotfelter - Florida Department of Health
22. Joshua Sturms - Florida Department of Health
23. Amy Pontillo Cochran - Florida State University
24. Zoe Williams - Florida State University
25. Lisa Spainhour - Florida State University
26. Ilir Bejliri - University of Florida
27. Ebony Herring - Agency for Health Care Administration
28. Anat Michaeli-Ling - Department of Highway Safety and Motor Vehicles
29. Keely Weaver - Department of Highway Safety and Motor Vehicles
30. Dana Olvera - Department of Highway Safety and Motor Vehicles
31. Michael Randall - Lexis Nexis
32. Gary Sammet - Florida Department of Health
33. Ken Jones - Florida Department of Health
34. Yasmine Fucci - Florida Department of Health
35. Felipe Lorenzo-Luaces - Florida Department of Health
36. Sandy Richardson - National Highway Traffic Safety Administration
37. Danny Shopf - Cambridge Systematics, Inc.
38. Melissa Gonzalez - TRCC Coordinator, Department of Transportation

