Florida Traffic Safety Information System



prepared for

Florida Department of Transportation



prepared by

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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

In 2015, the Florida Department of Transportation State Safety Office (FDOT) requested that the National Highway Traffic Safety Administration (NHTSA) facilitate a new Traffic Records Assessment (TRA), which was conducted from September 16, 2015 and concluded January 4, 2016. The recommendations from this assessment are included in Appendix A.

With the assessment results as an impetus, the Department decided to develop a new TSIS Strategic Plan for 2017 through 2021 to provide focus and direction to the high priority recommendations that came out of the assessment process. The strategic planning process spanned a three month period beginning with several meetings held in Tallahassee, Florida in February 2017 and March 2017. These meetings focused on the six individual traffic record data systems including data usage and integration. On April 7, 2017 a voting meeting was held for Florida's Traffic Records Coordinating Committee (TRCC) Executive Board to approve the updated TSIS Strategic Plan. All of the meetings were broadcast via webconference 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), Department of Highway Safety and Motor Vehicles (DHSMV), Florida Department of Health (DOH), Agency for Health Care Administration (AHCA), Florida Highway Patrol (FHP), Florida Chief's Association (FCA), Florida Sheriff's Association (FSA), TraCS/ELVIS Florida, LexisNexis, Cambridge Systematics, Inc., University of Florida (UF), Florida Court Clerks and Comptrollers (FCCC), and NHTSA. Participants in the strategic planning process are listed in Appendix B.

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.

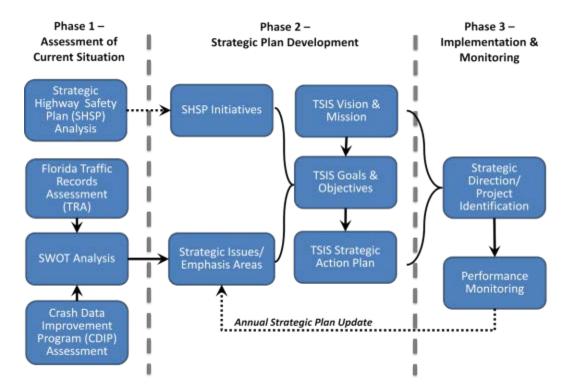


Figure 1.1 Strategic Planning Process

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 2016 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 2017 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 is 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) grant funds will be used to address the goals and objectives of the TSIS Strategic Plan.
- Appendix A provides the 2016 Traffic Records Assessment Executive Summary.
- Appendix B lists the participants in the strategic planning process.

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.

- 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; and
- 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 and Application Review 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. 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 lists current TRCC Executive Board Members (as of April 2017).

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 / 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	Crash Data System
	Motor Vehicles (DHSMV)	Driver Licensing System
		Vehicle Registration System
Lora Hollingsworth	Florida Department of Transportation	Roadway System
Major Gary Howze	Florida Highway Patrol / DHSMV	N/A
David Brand	Florida Sheriff's Association	N/A

TRCC Subcommittee

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 chair of the Executive Board will appoint committee chairs. Subcommittees can meet as often as needed to perform the work assigned by the Executive Board, and committee chairs shall report committee activities and accomplishments to the Executive Board at least quarterly.

Currently, there is an Application Review Subcommittee. This subcommittee was updated in January 2017. The responsibility of this committee is to review all concept papers/applications received for 405(c) funds and provide guidance to the Executive Board on 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.

Table 2.2 lists the members of the TRCC Application Review Subcommittee.

Table 2.2 Traffic Safety Application Review Subcommittee

Name	Agency
Brenda Clotfelter	Florida Department of Health
Richie Frederick	Florida Department of Highway Safety and Motor Vehicles
Amy Cochran	Florida State University
Zoe Williams	Florida State University
Dr. Ilir Bejliri	University of Florida
Joshua Sturms	Florida Department of Health
April Langston	Florida Department of Highway Safety and Motor Vehicles
Chris Craig	Florida Department of Transportation
Danielle King	Florida Department of Transportation
Melissa Gonzalez	Florida Department of Transportation (TRCC Coordinator)

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 multiagency 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.

Table 3.1 summarizes specific objectives, strategies, and action steps associated with these goals in order to advance traffic records systems in Florida over the next five years. An annual implementation update for FY2017 is provided.

Table 3.1 Action Plan for the 2017-2021 Florida Traffic Records Strategic Plan

GOAL 1: COORDINATION

Provide ongoing coordination in support of multi-agency initiatives and projects which improve traffic records information systems.

Objectives	Strategies/Action Steps	Performance Measure and Method	Timeline	Leader	FY2017 Update
1.1 The TRCC Executive Board will meet four times per year with 70 percent participation from representative agencies.	 Schedule full Executive Board meetings no fewer than four times each calendar year. Examine current TRCC Charter to determine membership qualifications and expectations Establish and implement pre-meeting procedures to ensure 70 percent membership participation in each full Executive Board meeting Develop procedure for designating alternates for Executive Board members Identify data managers for agencies with systems to participate in the TRCC Report on percent of member participation in the minutes for each Executive Board meeting 	Number of regular TRCC meetings each year with 70 percent participation	Quarterly	TRCC Chairperson	TRCC Executive Board Meeting were held in: FY15/16 – February 11, 2016; April 19, 2016; May 12, 2016; August 2, 2016; FY16/17-December 16, 2016; April 7, 2017; August 11, 2017; FY17/18- December 8, 2017; April 13, 2018

Objectives	Strategies/Action Steps	Performance Measure and Method	Timeline	Leader	FY2017 Update
1.2 Establish roles and responsibilities for the TRCC	 Ensure TRCC membership includes agencies and organizations representing key data collectors, managers and users or members are positioned to share traffic data information with pertinent organizations. 				Added a TRCC Executive Board member to represent the Florida Sheriff's
Executive Board and working groups by	 Review current TRCC membership to identify missing data systems or agencies with data interests not currently represented 	Gaps in representation identified	Established deadline	TRCC Chairperson	Association and EMS (DOH).
December 2021.	» Add local EMS representation	Additional members invited			
	- Identify similar working groups (e.g., Safe Mobility for Life/ Aging Road				
	Users Coalition) with strategic plans which include a data component and ensure the TRCC includes representatives from those groups, or that a TRCC member shares traffic data information between the two	Similar working groups with traffic data goals or projects identified.			
	groups	Mechanism to share			
	 Promote and market TRCC work through information sharing 	traffic data information established among			
	» Establish a master calendar of potential participation opportunities	similar working groups			
	» Coordinate and communicate data needs among data collectors, managers and users	Master calendar established			
	» Report on outreach efforts to other groups	Outreach efforts			
	 Promote linkage with the Strategic Highway Safety Plan 	conducted and reported			
	 Establish roles and responsibilities for TRCC Executive Board. 	Executive Board roles	Established	TRCC	
	 Identify present Executive Board roles and responsibilities 	and responsibilities	deadline	Chairperson	
	 Discuss and develop Executive Board roles and responsibilities with input from all members 	established			

Objectives	Strategies/Action Steps	Performance Measure and Method	Timeline	Leader	FY2017 Update
1.2 Establish roles and responsibilities for the TRCC Executive Board and working groups by December 2021 (cont.)	 Establish roles and responsibilities for Executive Board assigned working groups. Identify past/present working group roles and responsibilities Develop working group roles and responsibilities with input from all members Establish at least one data working group under the Executive Board. Establish reporting responsibilities for TRCC working group Chairpersons. Establish reporting mechanism/protocols for working group Chairpersons. Working group Chairpersons follow established protocols and report to the Executive Board Executive Board monitors the progress of working group activities. 	Working group roles and responsibilities established Data working group established Reporting responsibilities established Reporting protocols established Number of reports/briefings provided in compliance with protocol	Established deadline Established deadline	TRCC Chairperson/ Working Group Chairperson TRCC Chairperson/ Working Group Chairperson	No progress
1.3 Develop a 5-year Traffic Records Information System (TRIS) Strategic Plan by April 2017.	 Develop a Traffic Records Information System (TRIS) Strategic Plan. Ensure all TRCC members participate in the development of the TRIS Strategic Plan and selection and prioritization of the projects in the Plan Address other needs identified by canvassing collectors, managers, and users of each traffic records system component Develop TRIS Action Plan Identify performance measures for the TRIS Action Plan Identify performance measures for each system and project based on guidelines in NHTSA's Model Performance Measures for State Traffic Records Systems 	5-year TRIS Strategic Plan developed TRIS Action Plan developed TRIS Action Plan performance measures identified	Established deadline	Executive Board	Complete. The TRCC developed a five year Traffic Safety Information System Strategic Plan for years 2017 through 2021.

Objectives	Strategies/Action Steps	Performance Measure and Method	Timeline	Leader	FY2017 Update
1.4 Track progress quarterly of TRIS Strategic Plan implementation	 Implement the Traffic Records Information System Strategic Plan. Establish reporting mechanism and protocols to track progress quarterly of the performance measures for each system and project in the TRIS Strategic Plan 	Reporting mechanism established Protocols established	Established deadline	Executive Board / Project Directors	Reporting mechanism and protocols established in February 2013.
through December 31, 2021.	Track progress of performance measures for each system and project in the TRIS Strategic Plan	Project activity reported	Quarterly	Project Directors	
	 Report progress on meeting performance measure goals to the TRCC quarterly. 	Progress reports submitted to TRCC Executive Board quarterly	Quarterly	Executive Board / Project Directors	Goal leaders reported on quarterly progress.
1.5 Ensure the Section 405(c) grant application is approved and submitted to FFDOT by June 1st annually.	 Report on progress in achieving TRIS Strategic Plan goals and objectives at each TRCC Executive Board Meeting. Include items on each TRCC meeting agenda regarding progress reports on each system and project Include items in each TRCC meeting agenda regarding status of quality measures for each system and project Submit interim progress reports to NHTSA prior to annual submission deadline. Submit a TRCC approved Section 405(c) Application to FDOT by July 1st annually. 	Progress reports provided Interim Progress Report 405(c) grant application submitted by July 1st	Each Meeting Established deadline July 1st	Executive Board / Project Directors TRCC Coordinator TRCC Coordinator	Quarterly updates reported at August and December 2016 TRCC Executive Board meetings. Interim progress report submitted to NHTSA in April/May 2017.
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GOAL 2: DATA QUALITY

Develop and maintain complete, accurate, uniform, and timely traffic records data.

Objectives	Strategies/Action Steps	Performance Measure and Method	Timeline	Leader	FY2017 Update
2.1 Improve completeness of traffic records systems by December 2021.	 Improve the completeness of the Crash Data System by expanding collection of crash reports to include collection of Short Form Reports. Establish and maintain complete data collection of local crash reports, both long form and short form reports for ALL participating law enforcement agencies (LEAs) Develop an analytical approach (scorecard) that identifies the root cause of the common errors discovered and reasons for incomplete crash reports. » Establish performance measurements (baselines) based on 2015 crash data for crash report accuracy and completeness. » Analyze number of reports in the crash data base that would fail one or more of the measures established for accuracy. » Disseminate conclusions by conducting LEA trainings to reduce error rates by 4 percent each year. Establish and maintain a viable communication plan with vendors, agencies and other stakeholders » Establish a process for formalizing feedback to LEAs » Establish and maintain current contact information on key players (vendors, agencies, OPS, DHSMV) » Develop and maintain an online crash manual that is relevant with current practices, policies, and procedures 	Percent of crash records with no missing critical data elements Improve accuracy and completeness of crash reports from 2015 baseline data. Number of crash reports in the crash data base that would fail established baselines due to validation errors Contact Information updated Online crash manual developed Manual reviewed for updates	January 2017 (Complete) January 2017 (Complete) January 2017 (Complete) December 2017 Annually	DHSMV	DHSMV to conduct 11 regional crash and UTC report trainings to further educate LEAs on what constitutes as an accurate and complete report. Process formalized for ecrash but less formalized for paper. On-line crash report manual completed.

Objectives	Strategies/Action Steps	Performance Measure and Method	Timeline	Leader	FY2017 Update	
2.1 Improve completeness of traffic records systems by December 2021.	 Improve completeness of the Roadway Data System by reaching out to local governments and community safety organization for cooperation on roadway data-gathering for roads under local jurisdiction not covered by the Department's Roadway Characteristics Inventory. Establish a plan to create a system to collect additional local 	Percent of total local	FDOT December	Existing systems that could incorporate data: ARNOLD Data Set consists of a layer of all public roads		
	roadway characteristics.	roadway segments that include location coordinates	2021		(excluding those in FDOT network)	
	 Collect volume usage data for non-motorized users Collect local roadway volume data beyond federally eligible and High Performance Monitoring System (HPMS) 			Submitted to FHWA to meet federal requirements.		
	» Increase the collection of additional roadway characteristics (i.e. number of lanes, etc.)	Number of characteristics collected	Quarterly	arterly	needed to full local roads da	Additional work still needed to fully merge local roads data with
	 Publicize the Department's local roads map and encourage use of the map by local governments in their own applications and data interfaces 				current FDOT linear referencing system.	
	» Develop software tools for internal use to create links between local roadway/map data and the FDOT's NavTeq dataset				continues to update the All Roads	
	 Work with local governments to establish relationships for sharing of roadway data 				Basemap based on NavTeq dataset	
	» Gather an inventory of existing data from local governments, MPOs or transportation planning	Established inventory				
	» Meet with at least 5 new local governments, MPOs or other transportation planning agencies each quarter for the purpose of identifying and including authoritative sources of local roadway information in local roads map	Number of local relationships established			FDOT has met with MPOAC to coordinate SHSP safety goals.	
	 Create data dictionary for the Roadway Data System 		December 2021			

Objectives	Strategies/Action Steps	Performance Measure and Method	Timeline	Leader	FY2017 Update
2.1 Improve completeness of traffic records systems by December 2021.	 Improve completeness of the Citation/Adjudication System by monitoring data elements and identifying those elements which are 'critical' and increase the completeness of these fields by 2.5 percent. Review and evaluate existing data; identify critical elements by data mining to compare completeness of data Compare DUI conviction data from the court's dispositions to Driver Record Conviction data to identify incomplete records. Establish a baseline for UTC completeness Maintain training on how to complete the UTC 	Percent of citation records with no missing critical data elements (target – 2.5% increase per year).	Annually December 2021	DHSMV	DHSMV to request grant funding to establish missing / incorrect data to improve the collection of Citation data transmission from the courts (version ICD 6.0.5) Grant requested for FY2017 to increase completeness / accuracy of crash and citation reporting.
	 Improve completeness of the EMS System by continuing to work to increase the number of emergency runs submitting to the state repository. Work on identifying high-volume agencies on their aggregate system and transition agencies to EMSTARS 	Percent of emergency runs contributing to the statewide database	DOH	191 agencies reporting to EMSTARS.	
	 Assist agencies with mapping issues, software, etc. Review and refine the list of critical data elements Reduce the number of missing critical elements (blank elements) 	Number of critical data elements monitored Percent of EMS records with no missing critical data elements	December 2017 Quarterly		Currently monitoring 2 critical data elements. 97% are reporting with no missing critical data elements

Objectives	Strategies/Action Steps	Performance Measure and Method	Timeline	Leader	FY2017 Update
2.1 Improve completeness of traffic records systems by December 2021.	 Improve completeness of the Trauma System. Increase the number of acute care hospitals submitting to the Trauma System Quarterly reporting of compliance to Trauma Centers 	Percent of Trauma centers reporting complete and timely data	Quarterly	DOH	Requested grant funding to conduct training to educate local EMS agencies on data collection standards.

Objectives	Strategies/Action Steps	Performance Measure and Method	Timeline	Leader	FY2017 Update
2.2 Improve accuracy of traffic records systems by December 31, 2018.	 Improve accuracy of the Crash Data System by reducing errors by 20 percent in the next five years. Develop an analytical approach (scorecard) that identifies the root cause of the common errors discovered and reasons for inaccurate crash reports. Establish baselines for data accuracy based on 2015 crash report data. Analyze number of reports in the crash data base that would fail one or more of the measures established for accuracy. Disseminate conclusions by conducting LEA trainings to reduce error rates by 4 percent each year. 	Number of crash reports within the existing database that fail the accuracy test. Improve accuracy and completeness of crash reports from 2015 baseline data. Number of crash reports in the crash data base that would fail established baselines due to validation errors	January 2017 (Completed)	DHSMV	DHSMV to conduct 11 regional crash and UTC report trainings to further educate LEAs on what constitutes as an accurate and complete report.
	 Establish and maintain current contact and contact information on key players (vendors, agencies, OPS, DHSMV) Continue to pursue improving the efficiency of the location coding process, including use of up-to-date maps and utilities Obtain data on scheduled intervals for evaluation Coordinate among the various providers to complete a mapping of all crash systems to identify any redundancies in crash systems and how they relate to one another. Develop and implement more descriptive/user friendly error messages Develop and maintain an online crash manual that is relevant with current practices, policies and procedures 	Promote Signal 4 and Geolocation tool Percent of crashes locatable using roadway location coding method Identify system owners, gathered data and data process. Online crash manual developed and maintained	Annually December 2017 Annually December 2017 December 2018 Annually		DHSMV sent memo to LEA in regards to using S4/Geolocation tool. GoTeam Project Phase I to be completed in 2017. On-line crash report manual completed.

Objectives	Strategies/Action Steps	Performance Measure and Method	Timeline	Leader	FY2017 Update
2.2 Improve accuracy of traffic records systems by December 2021.	 Reduce the occurrence of illegitimate null values from mailed in reports. » Check for missing fields » Review excessive use of "unknown" and/or "other", decreasing the use of these options by 2 percent annually 	Reduce number of crash reports returned to Agency.	Annually December 2021	DHSMV	DHSMV to conduct 11 crash / UTC report training events (2017).
	 Improve accuracy of the Roadway Data System by constant review and improvement in the QA/QC processes for the roadway dataset. Expand coverage of data quality checks to include maps Annually review dataset edits and find ways to improve the monitoring of date error-correction 	Number of new edits implemented	Annually	FDOT	

Objectives	Strategies/Action Steps	Performance Measure and Method	Timeline	Leader	FY2017 Update
2.2 Improve accuracy of traffic records systems by December 2021.	 Improve accuracy of the Driver Records System by identifying and reviewing the use of inconsistent codes, comparing internal data with an independent standard and reducing the frequency of duplicate record entries. Review, evaluate, and analyze driver data to find errors, duplicates and missing data entry elements Track the number of duplicate record entries and reduce those entries by 6 percent in five years Improve integrity of data by identifying and implementing a means to electronically receive and post-conviction codes for all serious and/or major offenses used by AAMVA/FMCSA so that driver record is accurate and consistent when transferred to other jurisdictions Continue to participate in workshops with AAMVA to achieve data accuracy 	Number of driver records with missing data elements. Percent reduction in duplicate record entries (target – 4% per year) Track the number of improvements based on federal or state laws. Number of AAMVA workshops attended	Annually Annually Annually	DHSMV	New citation inventory system handles duplicate citation numbers. DHSMV documenting conviction data edit requirements to increase accuracy. Modernization Project to improve Issuance system by redefining codes / business rules to unify four systems: DL / tag / title / and citation (Dec. 2021)

Objectives	Strategies/Action Steps	Performance Measure and Method	Timeline	Leader	FY2017 Update
2.2 Improve accuracy of traffic records systems by December 2021.	 Improve accuracy of the Vehicle Data System by expanding use of Vehicle Identification Number (VIN) decoding through the Florida Real-Time Vehicle Information System (FRVIS) application and its remaining subsystems. Request programming plan to implement VIN decoding throughout remaining motor vehicle applications Route plan through the agency's governance process 	Percent of vehicle records with no errors in critical data elements Percent of VINs successfully validated with VIN checking software	Annually	DHSMV	DHSMV has not implemented VIN decoding in FRVIS but plan to implement this technology in Electronic Filing System (EFS). EFS project is completed. We are unable to provide the percentage of vehicle records with no errors in critical data elements at this time. DHSMV to begin documentation gathering for FRVIS modernization project
					Dec. 2017 (6-7 year project).

Objectives	Strategies/Action Steps	Performance Measure and Method	Timeline	Leader	FY2017 Update
2.2 Improve accuracy of traffic records systems by December 2021. (cont.)	 Improve accuracy of the Citation/Adjudication System by developing and implementing approval processes for e-citation vendors and monitoring the submission of citations with missing data elements. Establish baseline for UTC accuracy Review existing data standards and make necessary modifications Track the number of duplicates submitted and reduce duplicate submissions by 5 percent through the use of the Citation Inventory System Work with Clerks of Court to reduce TCATs submission errors Monitor the accuracy of selected Disposition/Adjudication data elements (ex: DOB, DL number) 	Baseline established Percent reduction in duplicate record entries Percent of TCATS records with no errors in critical data elements Percent of charge disposition records with no errors in critical data elements	Annually Annually Annually	DHSMV	Grant requested for FY2017 to increase completeness / accuracy of crash and citation reporting. DHSMV to conduct 11 regional crash and UTC report trainings to further educate LEAs on what constitutes as an accurate and complete report.
	 Improve accuracy of the EMS System by implementing three data quality measures. Define three data quality measures Implement Measures Monitor measurements for error in critical data elements on a quarterly basis Improve accuracy of the Trauma System by updating business rule validations on edit checks Improve accuracy by developing quality performance errors for Trauma data Develop accuracy performance measures 	Number of data quality measures defined Number of measures implemented Performance measures established	Quarterly	DOH	

Objectives	Strategies/Action Steps	Performance Measure and Method	Timeline	Leader	FY2017 Update
2.3 Improve uniformity of traffic records systems by December 2021.	 Improve uniformity of the Crash Data System by continuing to comply with MMUCC Standard and Compliance. Continue review of DHSMV processes and MMUCC Standards to ensure consistency and uniformity Perform an analysis on stance of new MMUCC Standards to create baselines on a National Standard. Create an implementation plan for MMUCC Compliance 	Maintain Federal MMUCC compliance percentage. Crash Report comparison to National MMUCC standards.	September 2018 December 2021	DHSMV	MMUCC goal: 90% compliant MMUCC standards analysis to be completed in 2017. Request grant funding to review manual and add MMUCC definitions by Sept. 2018.
	» Develop and maintain an online crash manual that is relevant with current practices, policies and procedures	Online crash manual developed	Annually		On-line manual completed.

Objectives	Strategies/Action Steps	Performance Measure and Method	Timeline	Leader	FY2017 Update
2.3 Improve uniformity of traffic records systems by	 Improve uniformity of the Roadway Data System by working with internal FDOT offices toward integration of roadway data with a Department-wide map that meets the needs of multiple offices. 	Number of interoffice meetings: monitor challenges, improvements, issues; Map dataset created and maintained Percent of MIRE-compliant data elements in the Roadway Data System		FDOT	FDOT is coordinating internally to expand the collection of RCI data to local roads.
December 2021.	» Monitor the process on updating Data Inventory Applications to allow the collection of data from internal and external departments to improve uniformity and integration (i.e. RCI)				Joint Application Requirements (JAR) Sessions conducted to
	» Encourage the use of the Department-licensed NavTeq map for internal objectives that require representation of local roadways, datasets outside of the RCI, and/or representation of divided/undivided roads and linkages not available in the single-line RCI map		Annually		identify needs and functionality for RCI users FDOT has taken steps to improve data applications (pending funding)
	» Work within the Department to assist other offices in getting their		Annually		Completed as requested
	» Work with NavTeq to encourage them to update their roadway features with FDOT-provided data		elements in the	Annually	
	 Improve uniformity of Driver Records System by focusing on driver record data fields not electronically provided via TCATS. Review TCATS data collection and submission process and target specific data elements for improvement for the new ICD6.0.5. Compare targeted fields with data record requirements Establish common rules for data elements (i.e. Naming conventions, address, zip code, etc.) 		September 2018 December 2021	DHSMV	Current grant project to focus on improving completeness/accuracy of crash and citation reporting. Requesting grant funding to target data elements for improvement. Modernization project will create uniformity by creating common rules.

Objectives	Strategies/Action Steps	Performance Measure and Method	Timeline	Leader	FY2017 Update
2.3 Improve uniformity of traffic records systems by December 31, 2021. (cont.)	 Improve uniformity of the Vehicle Data System by completing a data reconciliation/synchronization project with the American Association of Motor Vehicle Administrators (AAMVA) and the National Motor Vehicle Title Information System (NMVTIS) to ensure a uniform data exchange between the two entities. Conduct a comparison and correction (data synchronization) to ensure the data Florida provides is accurate, reliable, and complies with NMVTIS uniform titling standards that will aid in preventing the processing of stolen vehicles in other states. » Engage in a project with the American Association of Motor Vehicle Administrators (AAMVA) to synchronize our data with NMVTIS » Initiate one to one file comparison to determine the root cause of any data discrepancies and correct the data » Ensure an analysis/comparison of Florida's active and cancelled title records 	The percentage of NMVTIS standards-compliant data elements in the Vehicle Data System	Annually	DHSMV	The NMVTIS project has produced the following improvements: Identified the primary reason sending duplicate VIN's. The issue was corrected and we have seen a significant drop in the number of duplicate records being reported to NMVTIS. Reviewing a daily report and removing duplicate records from NMVTIS when applicable. (manual process) Received AAMVA tool (SWI) to correct current / older records. System updates most current title records based on files received from AAMVA (based on states that supply data to AAMVA).

Objectives	Strategies/Action Steps	Performance Measure and Method	Timeline	Leader	FY2017 Update
2.3 Improve uniformity of traffic records systems by December 31, 2021. (cont.)	 Improve uniformity of the Citation/Adjudication System by focusing on citation data fields that are required to be electronically provided via TCATS. Review citation data collection processes and compare data collected by DHSMV to standards set by the TCATS ICD Version 6.0.1. Monitor the collection of select data elements to establish the effectiveness of Department mandated state-wide data standards Establish a baseline for UTC uniformity Continuously review data collection requirements in Appendix C and make enhancements to ensure a 4 percent increase in DHSMV data uniformity Communicate and train on Appendix C and ICD changes to law enforcement and Clerks of Court 	Percent of ICD Version 6.0 compliant data elements t (target – 4% increase per year) Report out on enhancements made Number of training classes held	Annually Annually Annually	DHSMV	Grant requested for FY18 to improve uniformity of crash / citation reporting. DHSMV to conduct 11 regional crash and UTC report trainings to further educate LEAs on what constitutes as an accurate and complete report.
	 Improve uniformity of the EMS System by transitioning agencies to most current NEMSIS compliance standard. Maintain data dictionary in compliance with current NEMSIS standards Implement training on current data dictionary standards Track the percent of EMS runs that are in compliance with the current standard 	Percent of EMS runs that are NEMSIS compliant Number of trainings conducted	Annually	DOH	64% EMS run reports are NEMSIS compliant (up 2%)

Objectives	Strategies/Action Steps	Performance Measure and Method	Timeline	Leader	FY2017 Update
2.4 Improve timeliness of traffic records systems by December 31, 2017.	 Improve timeliness of the Crash Data System by increasing the number of crash reports received within 10 days. 	Percent of crash reports submitted electronically (baseline is 60 percent; target – 10% increase yearly)	Annually	DHSMV	264 agencies are submitting crash reports electronically. 74.3% of Crash reports are being received
	» Develop outreach program and provide training with LEAs to increase their interest in electronic submissions » Decrease time from crash date to date of crash submission by	Number of training classes with LEAs conducted Percentage of crash records aged more	Annually Annually		within the 10 day requirement. DHSMV to conduct 11 crash / UTC report training
	scan and data entry process by 5 percent annually	than 10 days			events (2017) to encourage timeliness.
	 Improve timeliness of the Roadway Data System: To be addressed once data is collected (completeness) 		TBD	FDOT	

Objectives	Strategies/Action Steps	Performance Measure and Method	Timeline	Leader	FY2017 Update
2.4 Improve timeliness of traffic records systems by December 31, 2017. (cont.)	 Improve timeliness of the Driver Records System by measuring both the internal and external average of the length of time between the occurrence of adverse action by a driver and the time it takes for that information to appear in the Department's database. Reduce the average time required for disposition information to be added to the driver record Establish a baseline for the length of time it takes an adverse action by a driver to be entered into the Department's database (external measure) Establish a baseline for the length of time it takes for disposition information to be added to the driver record (internal measure) 	Average number of days from the date of a driver's adverse action to the date the adverse action is entered into the database (target – 2% reduction per year) Average number of days from the date of citation disposition notification by the driver repository to the date the disposition report is entered into the database	Annually	DHSMV	Requested grant to work on improving TCATS submissions September 2018.
	• Improve timeliness of the Citation/Adjudication System by reducing the time between citation issuance and disposition.			DHSMV / Clerks	
	 Establish a baseline for timeliness Increase the number of Clerk of Courts submitting citations electronically Identify counties/agencies with longer average processing times between the issuance of a citation and the disposition; work with these counties/agencies to reduce average processing time Continue education efforts on the benefits of electronic data submission to the Clerks Continue outreach program with Law Enforcement Agencies to increase their interest in and awareness of e-citation programs 	Percent of Clerks submitting electronically Average number of days between citation issuance and disposition Number of LEAs educated on e-citation programs	Annually Annually Annually	Clerks	Currently, 31 COCs that do not accept E-Citation processing.

Objectives	Strategies/Action Steps	Performance Measure and Method	Timeline	Leader	FY2017 Update
2.4 Improve timeliness of traffic records systems by December 31, 2018. (cont.)	 Improve timeliness of the EMS System by continuing to monitor timeliness of submission indicators. Continue to define timeliness measures and monitor quarterly 	Percent of EMS run reports sent within less than 15, less than 10 or less than 2 days of incident.	Quarterly	DOH	32% of EMS run reports sent within 10 days of incident 47% of EMS run reports sent within 30 days of incident
	 Improve timeliness of the Trauma System by establishing timeliness performance measure 	Performance measures established	December 2018		

GOAL 3: INTEGRATION

Provide the ability to link traffic records data.

Objectives	Strategies/Action Steps	Performance Measure and Method	Timeline	Leader	FY2017 Update
3.1 Understand the needs of end users that require linked data by December 2021.	 NHTSA Go Team to identify users/uses, contributors, linkages, and duplications of crash data systems. Establish user needs by conducting crash data survey Create a framework for all system user needs based on survey Form a subcommittee of data system representatives 	Develop a framework for all systems Committee established representing data system owners.		FDOT / DHSMV Data System Owners FDOT State Safety Office TRCC Coordinator	Go Team to complete Phase I in 2017.
3.2 Define the framework by Identifying key data fields needed to facilitate linking traffic records information systems by December 2021.	 Identify key data fields which should exist in all traffic records information systems. Subcommittee (from Objective 3.1) will identify: key data fields which will be linked among the data systems, name for each key data field which will be used across the data systems, and definition for each key data field which will be used across the data systems Progress update will be provided at quarterly TRCC meetings. 	Key data fields identified Progress reports provided	December 2021 Quarterly	Objective 3.1 subcommittee	No progress

GOAL 4: ACCESSIBILITY

Facilitate access to traffic records data.

Objectives	Strategies/Action Steps	Measurement of Progress	Timeline	Leader	FY2017 Update
4.1 Identify high priority user needs and develop a strategy to improve accessibility by December 2021.	 NHTSA Go Team to conduct needs assessment survey for Crash Data Systems Identify agency to lead needs assessment Create a framework based on survey results Apply framework to all other systems 	Needs assessment conducted (survey) Final assessment report delivered to TRCC Executive Board Develop framework for all systems	December 2021	FDOT / DHSMV	Go Team to complete Phase I in 2017. Scope for Phase II is being developed
4.2 Improve accessibility to data for all systems by December 2018.	 Increase public record data availability through online access. Assist agencies with public facing websites to make data available through online access Provide access to real-time summary data reports Implement web development standards to make data accessible as public data based on needs assessment. Provide federal, state, and local agencies with access to the linkable data among traffic safety information system databases. 	Number of users accessing traffic records data Number of users accessing real-time summary data reports User satisfaction with (a) the quality of traffic records data, and (b) their ability to obtain the data when, where, and in the form needed.	December 2018	Executive Board / Data Owners Executive Board	No progress

GOAL 5: UTILIZATION

Promote the use of traffic records data.

Objectives	Strategies/Action Steps	Performance Measure and Method	Timeline	Leader	FY2017 Update
5.1 Increase users understanding of what is available and its use/importance (systems, grant funding, etc.) by December 2021.	 Maintain a metadata resource that describes available data and how it can be accessed. Post metadata resource on respective agency websites. 	Publish on TRCC Website.	Annually	Executive Board	No progress
5.2 Educate users on what systems are available and how to use them by December 2021.	Conduct user training.	Number of training sessions, type, frequency, online tutorials, PowerPoints	Annually	Executive Board / Data Owners	No progress
5.3 Monitor utilization of traffic records data by December 2021.	 Monitor utilization of traffic records data. Monitor utilization of web-based system. Report utilization results by month at quarterly TRCC meetings 	Reports provided	Annually	Data Owners	No progress

Florida Traffic Safety Information System Strategic Plan

4.0 Annual Implementation Update

4.1 STATUS REPORT - TRAFFIC RECORDS PROJECTS from FY16/17

Table 4.1 provides the status of recent traffic records projects.

Table 4.1 Status Report – Traffic Record Projects from FY16/17

Project Name	Project Lead	Section 405(c) Funding	Purpose	Description	Progress
Traffic and Criminal Software (TraCS) Support, Enhancement, and Training	FSU	\$570,000	Improve the timeliness, completeness, accuracy, uniformity, accessibility, and integration of the crash and citation data system	The Florida State University (FSU) College of Engineering will maintain and upgrade the Traffic and Criminal Software (TraCS) National Model software and provide training and support to law enforcement agencies. Programmers will update software to support the completion of both electronic crash and citation forms approved by the Department of Highway Safety and Motor Vehicles (DHSMV). TraCS staff will also work with local law enforcement agencies to implement electronic transmission of crash and citation forms to DHSMV. Funded full-time positions are for two developers, a support person, a systems architect, and part-time positions for an assistant system architect, a network administrator, developer, program coordinator, and a principal investigator.	TraCS reports average about 6 days from the date of the crash to the statewide repository at a 99.99% error free rate. Crash 160,000 crash reports per year - 16,000 users - 150 Agencies Citations - 110 Agencies
Electronic License and Vehicle Information System (ELVIS)	FSU	\$479,000	Improve the timeliness, completeness, accuracy, uniformity, accessibility, and integration of the crash and citation data system	Florida State University will develop an import data tool to provide access to the Florida National Crime Information Center (FCIC) and National Crime Information Center (NCIC) data that will be provided without charge to local law enforcement agencies. The tool will improve the accuracy and quality of crash data submitted by these agencies, while reducing the redundancy and labor costs associated with manual entry. Many agencies currently pay separate licensing costs to query FCIC/NCIC data from providers whose software does not easily partner with TraCS. The proposed electronic License and Vehicle Information system (ELVIS) will provide all Florida law enforcement agencies the ability to run queries and to import contact information in to TraCS forms.	Web-Based (no installation required): FCIC/NCIC data ELVIS / TraCS integration demonstrates a 99.99% error free rate on crash reporting - 100 agencies - 6,783 users - FY16/17: 1,365,187 queries

Project Name	Project Lead	Section 405(c) Funding	Purpose	Description	Progress
Field Data Collection for National EMS Information System (NEMSIS) Compliance	DOH	\$346,695	Improve the timeliness, completeness, accuracy, uniformity, integration and accessibility of Florida's EMS patient care records	The Florida Department of Health will work on increasing the number of agencies submitting data to the State repository in compliance with the current NEMSIS standards. It will also work on transitioning agencies into compliance with the new NEMSIS version 3 standards by December 2016. The grant will fund three contract employees, along with data hosting services.	First submission of V3 to NEMSIS: 12/08/2016 - 182 Agencies submitting - 18 transitioned to NEMSIS V3 - 18,350,908 total runs
Expanding Accessibility, Utilization, and Data Integration of Signal Four Analytics.	UF	\$169,000	Improve the timeliness, completeness, accuracy, uniformity, accessibility, and integration of the crash, roadway, and citation/adjudic ation data system	This project with the University of Florida will address several Signal Four Analytics (S4) feature requests and overall system improvements. It will expand the integration of citations into S4 Analytics beyond Florida Highway Patrol data, update base map databases (e.g., crashes, roadway characteristics, citations) as needed, provide new analytical functionality for pedestrian and bicycle crash analysis, monitor and update servers as needed, and promote the use of S4 Analytics through webinars and demonstrations at State and national conferences.	S4 Database stores both crash and citation reports - 2,400 users - 350 various agencies - 43,000 login sessions - 127,000 queried issues - 420,000 reports retrieved
A Unified and Sustainable Solution to Improve Geo- Location Accuracy and Timeliness of Crashes and Citations	UF	\$96,000	Improve the timeliness and accuracy of the crash and citation data system	This project with the University of Florida (UF) will address the 70 percent error rate in location data that reduces the ability of crashes to be automatically geo-located. Geo-location currently requires human editors to manually map crashes at a significant, recurring cost to the State. The project will solve the geo-location problem by creating a unified geo-location and validation service that can be accessed via the internet, similar to Florida's validation process used for driver and vehicle information. To accomplish this, a web service is being developed using the Florida unified base map. This is the fourth year of a multi-year project that will advance this effort to the production stage. Training and technical support to agencies and vendors will also be provided.	TraCS currently incorporated this tool on their e-citations and e-crash reports. Continued implementation with FHP, APPRIS and TraCS. - 60 agencies - over 40,000 crashes and 20,000 citations located last year - 40% success rate

Project Name	Project Lead	Section 402 Funding	Purpose	Description	Progress
Crash and Citation Data Accuracy Improvement Project	DHSMV	\$162,000	Improve the completeness and accuracy of the crash and citation data system	The Florida Department of Highway Safety and Motor Vehicles (DHSMV) will hire several employees tasked with improving the accuracy of Florida crash and citation data. An Other Personnel Services (OPS) Management Analyst will be hired to review data vendor software and identify suggested "warnings" for data elements with consistent errors. An OPS Trainer will be hired to create and deliver law enforcement training to reduce these errors.	Established a crash report completeness measurement based on individual data elements. (scorecard/baseline) 11 Workshops are in progress.
Traffic and Criminal Software (TraCS) Support, Enhancement, and Training	FSU	\$200,000	Improve the timeliness, completeness, accuracy, uniformity, accessibility, and integration of the crash and citation data system	The Florida State University (FSU) College of Engineering will maintain and upgrade the Traffic and Criminal Software (TraCS) National Model software and provide training and support to law enforcement agencies. Programmers will update software to support the completion of both electronic crash and citation forms approved by the Department of Highway Safety and Motor Vehicles (DHSMV). TraCS staff will also work with local law enforcement agencies to implement electronic transmission of crash and citation forms to DHSMV. Funded full-time positions are for two developers, a support person, a systems architect, and part-time positions for an assistant system architect, a network administrator, developer, program coordinator, and a principal investigator.	Additional funding to cover Personnel Services. Please see TraCS above.
Traffic Records Program Manager / TRCC Coordinator	TCC	\$57,000	FDOT Safety Office support and TRCC Coordinator	Tallahassee Community College (TCC) will hire a full-time Traffic Records Program Manager, who will also serve as the TRCC Coordinator. The individual in this position will work in the FDOT Safety Office and facilitate TRCC meeting coordination and outreach, administer and monitor traffic records grants, and represent the TRCC and data interests at stakeholder and coalition meetings. The Traffic Records Program Manager will also provide data analyst support for the FDOT State Safety Office.	Ongoing
Traffic Records Coordinating Committee Support	TCC	\$95,000	Support for the TRCC and FDOT Safety Office.	Tallahassee Community Collect will contract with a consultant to provide technical advice and support to the TRCC Executive Board and its committees. The technical advisor will update Florida's TRCC Action Plan status as well as host and maintain the Florida TRCC Website.	Ongoing

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 FFY 2017, the Florida TRCC submits two performance measures which demonstrate significant, system-wide performance; one improvement is to the Crash System, and one improvement is to 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 (DHSMV) Crash Master Database by law enforcement agencies utilizing the Geo-Location tool) *Crash/Accuracy*
- 2. Completeness of EMS run data (i.e., the percent of licensed EMS providers who are submitting NEMSIS compliant run reports via the Prehospital EMS Tracking and Reporting System (EMSTARS)) EMS/Completeness

Performance Measure #1: Accuracy of Electronic Crash Reporting Processing into the DHSMV 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 DHSMV Crash Master Database via law enforcement agencies utilizing the 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 DHSMV 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 DHSMV Crash Master Database by law enforcement agencies using the Geo-Location tool were compared for the same 12-month period of time 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 DHSMV Crash Master database by law enforcement agencies utilizing the Geo-Location tool.

Baseline and current values are summarized in Table 4.2. During the baseline period from April 1, 2015 to March 31, 2016, a total of 613,240 electronic crash reports were submitted into the database of which 4,775 crash reports were submitted using the Geo-Location tool. The average percent of accurately located electronic crash reports was 0.78%. During the current period from April 1, 2016 to March 31, 2017, a total of 661,245 electronic crash reports were submitted into the database of which 56,763 crash reports were submitted using the Geo-Location tool. The average percent of accurately located electronic crash reports was 8.58%. The percentage of accurately located electronic crash reports entered into the database increased 7.8% (from 0.78% to 8.58%) when compared to the previous year.

An increase of accurately located electronic crash reports is expected by December 2018 as Traffic and Criminal Software (TraCS) makes this tool mandatory in FY18 for 160 plus law enforcement agencies who use their software.

Table 4.2 Results for Accuracy of Electronic Crash Reporting

Time Period	Performance Results
April 1, 2015 – March 31, 2016 (Baseline)	A total of 613,240 crash reports were submitted electronically into the Crash Master Database at a 0.78% average percentage of accurately Geo-Located crash reports
April 1, 2016 – March 31, 2017 (Current Value)	A total of 661,245 crash reports were submitted electronically into the Crash Master Database at a 8.58% average percentage of accurately Geo-Located crash reports

Performance Measure #2: Completeness of EMS Run Data

Performance Measure Description

This performance measure evaluates the **completeness of EMS run data** – as demonstrated through an increase in the percent of licensed EMS providers who are submitting National Emergency Medical Services Information System (NEMSIS) compliant run reports via the Bureau of EMS Prehospital EMS Tracking and Reporting System (EMSTARS).

Measurement Technique

The following measurement was analyzed for this performance measure:

 The percentage of Florida's public or private entities involved in emergency medical services systems licensed by the State of Florida, who are now submitting NEMSIS compliant run reports to the Florida Department of Health via EMSTARS.

To normalize the timeliness data, the percent of licensed EMS providers submitting NEMSIS compliant run reports via EMSTARS was 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 completeness of EMS run data – as demonstrated through an increase in the percent of licensed EMS providers submitting NEMSIS compliant run reports via EMSTARS. The annual average number of licensed EMS providers in Florida for the baseline period is 278 (annual average calculated based on five years of data). For the current period, the annual average number of licensed EMS providers is 276.

Baseline and current values are summarized in Table 4.3. For the baseline period from April 1, 2015 to March 31, 2016, the number of licensed EMS providers actively reporting to EMSTARS increased from 163 to 181 licensed EMS providers out of 278 average total licensed EMS providers (65.1%). For the current period from April 1, 2016 to March 31, 2017, the number of licensed EMS providers actively reporting to EMSTARS increased from 181 to 194 out of 276 average total licensed EMS providers (70.3%). The percent of licensed EMS providers who are submitting NEMSIS compliant run reports via EMSTARS increased 5.2% (from 65.1% to 70.3%) when compared to the previous year.

Table 4.3 Results for Completeness of EMS Run Data

Time Period	Performance Results
April 1, 2015 – March 31, 2016 (Baseline)	The number of licensed EMS providers actively reporting NEMSIS compliant run reports to EMSTARS increased from 163 to 181 EMS providers out of 278 average total licensed EMS providers (65.1%)
April 1, 2016 – March 31, 2017 (Current Value)	The number of licensed EMS providers actively reporting NEMSIS compliant run reports to EMSTARS increased from 181 to 194 EMS providers out of 276 average total licensed EMS providers (70.3%)

Florida submitted an interim report of progress to NHTSA Region 4 Team on May 19, 2017 and received notice 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 (July 1st).

4.3 Plans for FY17/18 Grant Funding

Grant Proposal Process

For FFY 2018, 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 FFY 2018 Section 405(c) funding were accepted from January 1 – February 28, 2017.

Eight funding requests were submitted during that time period totaling \$2,490,029.16. A request was submitted by a local law enforcement agency for equipment to support electronic crash and citation processing; six requests were related to existing statewide TRCC projects; and a new concept for a statewide project was received.

Project Prioritization Process

At their April 7, 2017 meeting, the TRCC Executive Board was advised the state projected an estimated \$1,803,000 in section 405(c) funds to be available October 1, 2017. The TRCC Coordinator provided a summary of the Application Subcommittee's recommendations from their March 22, 2017 meeting, after which Executive Board Members asked questions about the proposals.

The Subcommittee recommended to fully fund the requests for four of the existing statewide projects for a total of \$882,152. The Traffic and Criminal Software (TraCS) Support, Enhancement, and Training Project was recommended to be funded at \$882,600, which is less \$20,000 for Personnel Services, with the caveat that if TraCS identifies an additional need throughout the year, they can request to be awarded the \$20,000 at a later date. The local law enforcement agency request could not be funded due to being an equipment based only project. As for the Florida Local Roadway Characteristics Project, the subcommittee decided it was not a TRCC priority and that funding for this project should be found from another source.

The State Safety Office decided to fund the Electronic License and Vehicle Information System (ELVIS) under Section 402 funds for the amount of \$516,622. This is less \$11,000 for Personnel Services, also with the caveat that if ELVIS identifies an additional need throughout the year, they can request to be awarded the \$11,000.

The Board voted to approve the five existing statewide projects totaling \$1,764,752, with final amounts pending the total Section 405(c) grant funding received by the State.

Traffic Records Projects to be Funded in FY17/18

Table 4.4 and 4.5 summarizes the traffic records projects to be funded in FY17/18, totaling \$2,365,374.

Table 4.4 Proposed Projects for FY17/18 Section 405(c) Grant Funding

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Project Sponsor / Applicant	Project Description	Funding Requested
University of Florida	A Unified and Sustainable Solution to Improve Geo-Location Accuracy and Timeliness of Crashes and Citations	\$159,881
	This project with the University of Florida (UF) will address the 58 percent error rate in location data that reduces the ability of crashes to be automatically geo-located. Geo-Location currently requires human editors to manually map crashes at a significant, recurring cost to the State. The project will solve the geo-location problem by creating a unified geo-location and validation service that can be accessed via the internet, similar to Florida's validation process used for driver and vehicle information. To accomplish this, a web service was developed using the Florida unified base map. It has become apparent that citations suffer from the same problem in relation to accurate crash location data. Therefore the Geo-Location tool will work in partner with TraCS agencies to incorporate the tool on their ecitations and e-crash systems. This is the fifth year of a multi-year project that will advance this effort to the production stage. Training and technical support to agencies and vendors will also be provided.	
DHSMV	Crash and Uniform Traffic Citation Data Improvement	\$115,901
	The Florida Department of Highway Safety and Motor Vehicles (DHSMV) will hire two employees tasked with improving Florida crash and uniform traffic citation (UTC) data to allow the Department and stakeholders to make more informed and accurate decisions and countermeasures. An Other Personnel Services (OPS) Management Analyst will evaluate the current crash report data elements against the most current MMUCC guideline, perform a forecast trend analysis for the total count of crashes expected from counties/agencies, develop an accuracy and completeness performance scoring mechanism and measurements for UTC submissions and update DHSMV's crash manual to include definitions from the MMUCC for MMUCC specific data elements and attributes. An OPS Coordinator will be hired for scheduling, preparing presentation materials, agendas, surveys, coordinating travel arrangements, documentation and updating manuals as needed.	

Train-the-trainer sessions throughout the state will be conducted to further educate law enforcement agencies (LEA) on what constitutes as accurate and complete crash reports and UTCs. These sessions will be tailored to the audience by utilizing established performance measures applied specifically

to the attending LEAs.

Project Sponsor /		Funding
Applicant	Project Description	Requested
DOH	Field Data Collection for NEMSIS Compliance	\$366,470
	The Florida Department of Health will work on increasing the number of agencies submitting data to the State repository in compliance with the current NEMSIS standards. It will also work on transitioning agencies into compliance with the new NEMSIS version 3 standards by September 2018. The grant will fund 3 contracted employees, along with data hosting services, required vendor change orders, software subscriptions, and travel expenses to inform local EMS agencies on data collection standards.	
University of Florida	Expanding Accessibility, Utilization and Data Integration of Signal Four Analytics	\$239,900
	This project with the University of Florida will address several Signal Four Analytics (S4) feature requests and overall system improvements. It will expand the integration of citations into S4 Analytics beyond Florida Highway Patrol data, update the base map database (e.g., crashes, roadway characteristics, citations) as needed, provide analytical functionality for pedestrian and bicycle crash analysis, monitor and update servers as needed, migrate the system to a new web platform, and promote the use of S4 Analytics through webinars and demonstrations at State and national conferences.	
Florida State University	Traffic and Criminal Software (TraCS) Support, Enhancement and Training	\$882,600
	The Florida State University (FSU) College of Engineering will maintain and upgrade the Traffic and Criminal Software (TraCS) National Model software and provide training and support to law enforcement agencies. Programmers will update software to support the completion of both electronic crash and citation forms approved by the Department of Highway Safety and Motor Vehicles (DHSMV). Resources will be allocated to full-time positions such as a systems architect, two developers, systems administrator, and one support person; and the following part-time positions: network administrator, program coordinator, an assistant systems architect and principal investigator. Funds will also be used to train and enforce the Geo-Location tool to be used to plot crashes for every agency and begin testing the usage of this tool on citations.	
Total		\$1,764,752

Table 4.5 Proposed Projects for FY17/18 Section 402 Grant Funding

Table 4.5 summarizes the proposed traffic records projects funded under Section 402.

Project Sponsor / Applicant	Project Description	Funding Requested
Florida State	Electronic License and Vehicle Information System (ELVIS)	\$516,622
University	Florida State University will maintain and upgrade an import data tool to provide access to the Florida National Crime Information Center (FCIC) and National Crime Information Center (NCIC) data that will be provided without charge to local law enforcement agencies. The tool will improve the accuracy and quality of crash data submitted by these agencies, while reducing the redundancy and labor costs associated with manual entry. Many agencies currently pay separate licensing costs to query FCIC/NCIC data from providers whose software does not easily partner with TraCS. The proposed Electronic License and Vehicle Information System (ELVIS) will provide all Florida law enforcement agencies the ability to run queries and to import contact information into TraCS forms. Resources will be allocated to a full-time systems architect, developer, IT Support Specialist, a network architect, and the following part-time positions: program coordinator, an assistant systems architect and principal investigator.	
TCC	Traffic Records Program Manager / TRCC Coordinator	\$57,000
	Tallahassee Community College (TCC) will hire a full-time Traffic Records Program Manager, who will also serve as the TRCC Coordinator. The individual in this position will work in the FDOT Safety Office and facilitate TRCC meeting coordination and outreach, administer and monitor traffic records grants, and represent the TRCC and data interests at stakeholder and coalition meetings. The Traffic Records Program Manager will also provide data analyst support for the FDOT State Safety Office.	
TCC	Traffic Records Coordinating Committee Support	\$27,000
	Tallahassee Community Collect will contract with a consultant to provide technical advice and support to the TRCC Executive Board and its committees. The technical advisor will update Florida's TRCC Action Plan status as well as host and maintain the Florida TRCC Website.	
Total		\$600,622

A. 2016 Traffic Records Assessment Summary

BACKGROUND

In 2012, the National Highway Traffic Safety Administration published an updated Traffic Records Program Assessment Advisory (Report No. DOT HS 811 644). This Advisory was drafted by a group of traffic safety experts from a variety of backgrounds and affiliations, including: State highway safety offices, the Governors Highway Safety Association (GHSA) and the Association of Transportation Safety Information Professionals (ATSIP), as well as staff from NHTSA, FMCSA, and FHWA. The Advisory provides information on the contents, capabilities, and data quality of effective traffic records systems by describing an ideal that supports quality data driven decisions and improves highway safety. In addition, the Advisory describes in detail the importance of quality data in the identification of crash causes and outcomes, the development of effective interventions, implementation of countermeasures that prevent crashes and improve crash outcomes, updating traffic safety programs, systems, and policies, and evaluating progress in reducing crash frequency and severity.

The Advisory is based upon a uniform set of questions derived from the ideal model traffic records data system. This model and suite of questions is designed to be used by independent subject matter experts in their assessment of the systems and processes that govern the collection, management, and analysis of traffic records data in a given State.

EXECUTIVE SUMMARY

Out of 391 assessment questions, Florida met the Advisory ideal for 219 questions (56%), partially met the Advisory ideal for 53 questions (13.6%), and did not meet the Advisory ideal for 119 questions (30.4%).

As Figure 1 illustrates, within each assessment module, Florida met the criteria outlined in the Traffic Records Program Assessment Advisory 52.6% of the time for Traffic Records Coordinating Committee Management, 56.3% of the time for Strategic Planning, 54.5% of the time for Crash, 51.3% of the time for Vehicle, 57.8% of the time for Driver, 36.8% of the time for Roadway, 75.9% of the time for Citation / Adjudication, 56.1% of the time for EMS / Injury Surveillance, and 46.2% of the time for Data Use and Integration.

Figure 1: Rating Distribution by Module

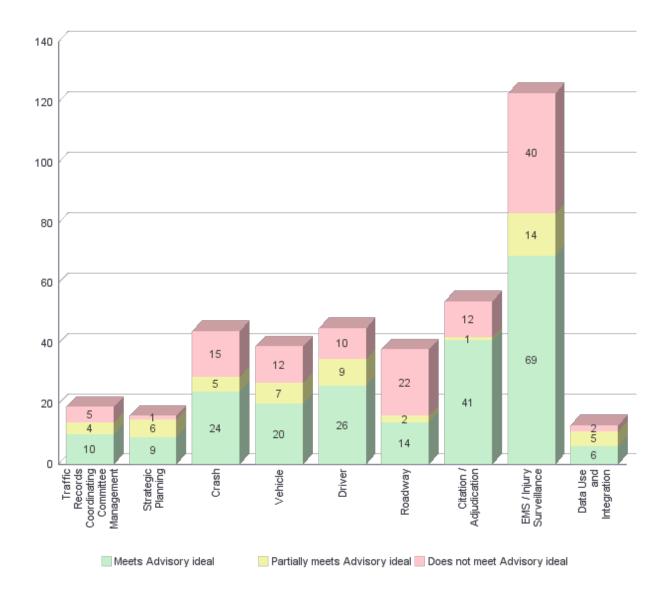


Figure 2: Assessment Section Ratings

	Crash	Vehicle	Driver	Roadway	Citation / Adjudication	EMS / Injury Surveillance
Description and Contents	100.0	61.1%	80.0%	66.7%	100.0	70.6%
Applicable Guidelines	100.0	100.0	100.0	33.3%	78.9%	93.0%
Data Dictionaries	86.7%	90.5%	83.3%	33.3%	100.0	93.3%
Procedures / Process Flow	89.6%	71.2%	96.1%	79.2%	95.1%	86.9%
Interfaces	53.3%	81.8%	90.5%	50.0%	76.2%	33.3%
Data Quality Control Programs	53.6%	67.5%	53.8%	68.2%	71.8%	68.5%
Overall	74.8%	74.8%	78.7%	62.7%	87.3%	75.1%

	Overall
Traffic Records Coordinating Committee Management	77.3%
Strategic Planning for the Traffic Records System	84.9%
Data Use and Integration	73.7%

Recommendations

Figure 2 shows the aggregate ratings by data system and assessment module. Each question's score is derived by multiplying its rank and rating (very important = 3, somewhat important = 2, and less important = 1; meets = 3, partially meets = 2, and does not meet = 1). The sum total for each module section is calculated based upon the individual question scores. Then, the percentage is calculated for each module section as follows:

$$Section \ average \ (\%) = \frac{Section \ sum \ total}{Section \ total \ possible}$$

The cells highlighted in red indicate the module sub-sections that scored below that data system's weighted average. The following priority recommendations are based on improving those module subsections with scores below the overall system score. 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."

Florida can address the recommendations below by implementing changes to improve the ratings for the questions in those section modules with lower than average scores. Florida can also apply for a NHTSA Traffic Records GO Team, for targeted technical assistance.

MAJOR RECOMMENDATIONS

TRCC Management

Summary

Florida is generally well served by an active and fully supported Traffic Records Coordinating Committee (TRCC) with buy-in, oversight, and regular participation by executives at the highest levels of traffic records management and who have the power to direct the agencies' resources for their respective areas of responsibility. The Florida TRCC Charter clearly establishes an Executive Board that meets at least three times a year and the State is to be commended on establishing this core group of experts, managers, and policy-makers that have made traffic records data systems a priority in Florida highway safety.

Florida has representation at the Executive level and one subcommittee focused on grant-funded (405c) projects review and recommendation. The Executive Council comprises eight members and the Application Review Committee comprises four members, one of whom is also on the Executive Board. The Application Review Committee's function is to review, comment, and make recommendations to the Executive Board on applications to receive funding for traffic records systems projects. Based on recommendations from the subcommittee, the Executive Board votes to approve, amend, or deny funding for proposed projects.

There are only eleven current and active TRCC members, which is an indication that Florida has an opportunity to grow its TRCC to include more technical level expertise, either by creating a named TRCC technical 'board' or committee, or through the creation of another subcommittee focused on some technical aspect of traffic records in the State. The Executive Board can establish technical subcommittees per the Charter and there was a technical level subcommittee established in 2012, though since disbanded, which could be reconstituted to create corresponding technical membership to match and support the executive membership.

Stakeholders are mentioned as having a place at the table in the TRCC, but the roster and minutes indicates minimal numbers of participants at each meeting.

Florida has a designated TRCC Coordinator that is responsible for the scheduling and facilitation of TRCC meetings and monitoring of TRCC goals and funded project progress. Florida also utilizes the services of a contractor to support the TRCC and the TRCC Coordinator. This support system is a critical component to the continual functionality of oversight of federal funding and strategic planning handled by the TRCC. Florida is to be commended for its commitment to a functional and active TRCC that demonstrates accountability and transparency in the management of federal funding and the traffic records program.

Florida has an opportunity after this assessment to write a new plan and to expand the membership of the TRCC. Given the breadth of technical projects funded through the 405c program, and the depth of investment in technologies to improve the records systems, an opportunity to recruit members from Information Technology (IT) groups to serve on the TRCC and provide formal consultation in the evaluation and awarding of funding for software and hardware upgrades and maintenance should be considered. Continual monitoring of these projects to ensure a healthy return on investment can occur within the TRCC with greater input and participation of IT personnel throughout the year and the life of the strategic plan. The Application Review Committee does a thorough and impressive review of projects to ensure they are in line with the strategic plan and are a sound investment of federal funds, and adding IT specialists to this subcommittee could provide an additional check and balance to ensure the projects comply with other IT initiatives planned around the State that could improve the efficacy of traffic records projects. Including appropriate IT agents would help ensure that technical projects approved by the TRCC will function within the technological framework and long-range planning of other systems in Florida, especially those that encompass or interface with the traffic records systems.

Florida has a TRCC Charter, recently revised and signed by the TRCC Chair and Governor's Representative for Highway Safety, establishing an Executive Board responsible for the State's Traffic Records Strategic Plan, a five-year plan based on recommendations from the most recent Traffic Records Assessment and the needs of the member agencies to improve their records systems. The TRCC is clearly involved in all levels of the strategic planning process, and great detail is provided on the strategies and projects the TRCC has prioritized in the five-year plan. The Florida Traffic Records Strategic Plan, and the Action Plan therein, consists of strategies to improve all the core systems in the traffic records program. Included for each strategy, and subsequent actions steps, are performance measures and the methods for calculating the measures. Each measure is evaluated annually and is included in a status report as part of the annual update to the strategic plan. There are performance measures for all the core systems, and a status update is included for each annually. Measures showing progress that qualifies the State for subsequent federal funding are also included in the annual plan update. The action plan is an easy-to-read and straightforward document that any inside or outside observer can reference to understand the state of traffic records projects in Florida and how the TRCC tracks progress to meet the objectives of the strategic plan.

The Executive Board of the TRCC is responsible solely for the approval and allocation of NHTSA 405c funds that are significant amounts of funds altogether. There is a formal process of review indicating the amounts of funds allocated for each project in the 405c program, and evidence is provided showing the deliberative process for the most recent year's federal funding allocations. At this time, the Florida TRCC is not casting a wide net in applying for and allocating additional federal funding to traffic records projects. Given the well-established and commendable process for allocating 405c funds, Florida is poised to also leverage additional funding to further support the strategic plan objectives and have greater success in investing in technologies to move the State forward. The State is encouraged to consider forming a subcommittee, or to designate a meeting or two each year, to review all possible available funds and serve to at least

indicate favorable or unfavorable guidance on the use of a wider range of funds to support the State's strategic plan and priority projects therein.

The TRCC is fully engaged in ensuring that the process for monitoring and allocating federal funding is appropriate and efficient, and deliberate time is established to improve the function of the TRCC itself. Project directors are included in the meetings to provide brief updates, but there does not appear to be very many other participants in the meetings bringing issues to the table for discussion and problem-solving. While not all stakeholders are bringing a wide range of items to the TRCC, the meetings are focused intently on the projects and funding that have been given the highest priority for the year (and for the five years encompassing the current strategic plan). While more stakeholders should ideally be represented and participating (something that can and should occur in subcommittees and working groups), it is evident that the Executive Board is fully committed to the most critical functions of the TRCC. Reforming the technical committee or establishing another technical working group that would involve more stakeholders would enable meaningful coordination among stakeholders and serve as a forum for the discussion of Florida's traffic records programs, challenges, and investments. The involvement of a wider range of members would also help the TRCC Coordinator identify needs for more technical assistance and training within stakeholder agencies.

The Florida TRCC itself does not maintain an inventory of all traffic records systems; however, each individual agency maintains an inventory of their own systems. The State TRCC Chair and/or Coordinator could obtain the individual inventories or pursue obtaining data dictionaries from each of the core system owners to help identify gaps in systems or opportunities for compliance reviews with federal standards, such as MMUCC. The TRCC, as the central authority in the State for traffic records systems, should maintain documentation pertaining to each of the core systems. An inventory of all systems will help the TRCC identify which systems would qualify for future funding and benefit from projects aimed at integrating the systems. As Florida's systems are upgraded and transitioned more fully to electronic collection and maintenance, opportunities for improving the data systems through integration will abound and an inventory will be crucial to identifying areas of potential integration and help support the prioritization of system improvements.

The Florida TRCC is not directly involved in the monitoring of a quality control program and indicates only indirect involvement through the members of the Executive Board member agencies that have their own quality control programs. The Florida TRCC has developed performance measures for the objectives and strategies in its plan that covers most of the core traffic records systems but only indicates an annual update of the measures as it is required to do for the submission of the 405c requirements in the Highway Safety Plan. Quarterly monitoring of the measures would allow the State to establish benchmarks for each measure to determine if progress will be achieved by the time of the annual review. Devoting a portion of the agenda at each of its three meetings would allow the TRCC Executive Board to check in on progress, and also encourage greater participation on the TRCC by the agencies in charge of the systems being measured.

Strategic Planning Recommendations

Summary

The Florida Traffic Records Coordinating Council is the State's Traffic Records Coordinating Committee (TRCC), and it is responsible for the development and maintenance of a strategic plan. The Florida Strategic Plan is a 5-year plan that is updated annually to include funded project's efforts to advance the strategic objectives. The current plan was developed by the TRCC at the conclusion of the prior NHTSA Traffic Records Assessment and a FHWA CDIP evaluation. The recommendations from those evaluations were the basis of an internal SWOT (Strengths, Weaknesses, Opportunities, and Threats) analysis of Florida's traffic records systems undertaken by the TRCC. The TRCC developed the vision and mission, goals and objectives (performance measures), and the strategies and action steps of the five-year plan.

In addition to the multi-year vision, the Action Plan component of the Strategic Plan indicates a timeline/deadline and responsible party for every objective and most of the strategies and action steps. The Strategic Plan addresses many of the performance measures for each of the core systems but does not specifically include a strategy for each of the six measures across all six systems. The TRCC has prioritized improvements to each of the systems that can be reasonably accomplished in five years.

The TRCC is charged with monitoring the Plan annually and approving funding. The TRCC employs the four-box analysis process in determining the priorities for projects seeking federal funds to meet the objectives in the Strategic Plan. Initial projects in the development of the current plan were identified through this process, and subsequent annual reviews use the same process along with a two-tiered system of subcommittee review of projects, recommendations to the Executive Board, and Executive Board approval.

The Plan includes detailed project allocations and descriptions of how each funded project is addressing traffic records systems deficiencies and strategic priorities. The Plan documents a formal, deliberative process being used by the TRCC to allocate NHTSA funding, as the TRCC provides oversight to the Traffic Safety Data Improvement funds. However the Strategic Plan provides little coordination with other federal funding sources for various traffic record systems from other non-NHTSA agencies, such as FHWA, HHS (Department of Health and Human Services), etc.

The TRCC is not involved directly with addressing any impediments to coordination with the traffic systems components, because those are handled directly by the responsible agency. The State indicates that it has no major issues with coordination or interfacing with federal data systems. However the TRCC Strategic Plan shows minimal consideration for additional, proactive interfaces between federal data systems. Also, the TRCC strategic planning considerations have been somewhat focused on those systems for which the TRCC provides funding for improvement. While the agencies responsible for interfacing with all federal systems are active participants on the TRCC, there have not been any requests from these agencies to make system improvements, nor have any

been identified. A consideration of future TRCC Strategic Plans could include a proactive, comprehensive survey of the state's traffic record systems, their interconnectivity, and opportunities for enhancing interfaces.

The State indicates that an evaluation of technological functionality and advances are included in the deliberation process for projects approved and monitored by the TRCC. The TRCC technical committee reviews applications for funding and makes suggestions for funding based on the lifecycle of current equipment in addition to the quality (expected lifecycle) of new equipment.

Beyond the specific funded projects, the TRCC does not directly address technical assistance and training needs. There is not a process in the TRCC's Strategic Plan for holistically providing such assistance and training support. The specific agency responsible for the data system provides the required technical assistance and training needs.

The TRCC Strategic Plan acknowledges the needs of all stakeholders, however those needs are identified only through the word of mouth from advocates on the TRCC who bring up local needs and concerns.

Overall the Florida TRCC Strategic Plan is comprehensive was and developed by a robust TRCC based on outside assessments and internally identified needs. The Strategic Plan is a best-practice example of documenting the relationships of funded projects and their identified strategic goals.

The strategic goals are used as a basis for funding decisions, and progress is measured in comparison with those goals. The Strategic Plan focuses on data system needs that receive funding from the TRCC and are responsive to identified needs and deficiencies. Additionally, while the TRCC has a strong statewide focus and the data systems are statewide, feedback from locals and other user-level stakeholders would improve the perspective of the plan especially with respect to technical assistance and training. Overall the Florida TRCC Strategic Plan meets a majority of the advisory ideals.

Crash Records Recommendations

- Improve the interfaces with the Crash data system to reflect best practices identified in the Traffic Records Program Assessment Advisory.
- Improve the data quality control program for the Crash data system to reflect best practices identified in the Traffic Records Program Assessment Advisory.

Summary

The Florida Crash System is consolidated into a single database housed within the Florida Department of Highway Safety and Motor Vehicles. The data is then shared with the Florida Department of Transportation and with local law enforcement agencies and traffic safety professionals via the FIRES web portal. Data accessibility via the FIRES web portal allows local agencies quick and easy access to their crash data and provides data analytics and geospatial analysis capabilities to help facilitate making data-driven decisions and to prioritize law enforcement and engineering efforts.

Florida has made positive strides in recent years and currently stands at 82% electronic crash reporting statewide. Grant funding continues to be utilized to help increase the level of electronic reporting and to eliminate paper reporting. However, there does not appear to be a formal plan or timeline for 100% electronic crash reporting. It would be beneficial for the State to establish a timeline with agency-by-agency goals for adoption of electronic crash reporting. It would also be helpful to identify obstacles that may be hindering each respective agency's transition to full electronic reporting and could be used to help guide decision-makers at all levels.

Florida utilizes MMUCC, ANSI D-16, and D-20 as primary sources for defining its crash system. It has been several years since a review has been conducted comparing Florida's data elements and attributes to the MMUCC standards. A more current analysis of Florida's crash system against MMUCC standards may be beneficial to the State and help determine if further improvements or revisions to the crash report form are needed or desired. NHTSA recently released MMUCC Mapping Guidelines to help states with this process. This document can be found at http://www-nrd.nhtsa.dot.gov/Pubs/812184.pdf.

There is an opportunity to improve and expand the performance measures used by Florida's crash system by making use of NHTSA resources and the FHWA CDIP program. Performance measures should be designed to provide important actionable information to the data system managers. The "NHTSA Model Performance Measures for State Traffic Records Systems" document is a good resource for identifying and implementing measures for all the traffic records datasets. It can be found at http://www-nrd.nhtsa.dot.gov/Pubs/811441.pdf. There will also be opportunities to utilize NHTSA Go-Teams to help improve traffic records systems processes following the completion of the assessment. Strengthening performance measures and performance measure reporting is an important aspect of a successful crash system.

Because of the variety of different ways in which crash data and reports are submitted to the crash system, it would be extremely helpful to establish performance measures, to use audits, and to have a more robust quality control program, for improving completeness, timeliness, and accuracy. Crash reports can still be submitted on paper, through TraCS, and via a number of different 3rd party vendors. Improved performance measures and oversight in these areas will help ensure the completeness, timeliness, and accuracy of all crash data in the State's repository.

Population of data elements in the crash system from other traffic records systems such as Driver, Injury Surveillance, or Roadway can have great advantages. Discussion regarding opportunities for improvement or expansion of data linkages, interfaces, and integration amongst the state traffic records systems should begin with the TRCC 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 will assist in streamlining processes, improve data quality, reduce duplication of effort, and allow data to be more fully utilized to make roadways safer. Expansion of the Electronic License and Vehicle Information System (ELVIS) initiative is definitely a step in the right direction, and its promotion and use has potential to be of great benefit.

Overall, the Florida Crash System seems to be functioning well under its current structure, with continued increases in the percentage of electronic crash reporting and with flexible data accessibility options and data analytics for end users via the FIRES web portal.

Opportunities for crash system growth in the coming years include: establishing a formal plan and targeted timeline to achieve 100% electronic crash reporting prior to the next traffic records assessment, expanding system interfaces and data integration efforts to improve data quality across core component traffic records systems, and instituting a more formal performance measurement program with meaningful measures that can be actively monitored and reported regularly to stakeholders.

Vehicle Recommendations

- Improve the description and contents of the Vehicle data system to reflect best practices identified in the Traffic Records Program Assessment Advisory.
- Improve the procedures / process flows for the Vehicle data system to reflect best practices identified in the Traffic Records Program Assessment Advisory.
- Improve the data quality control program for the Vehicle data system to reflect best practices identified in the Traffic Records Program Assessment Advisory.

Summary

The Department of Highway Safety and Motor Vehicles (DHSMV) is the custodian of the Florida vehicle data system. The Florida Real-time Vehicle Information System (FRVIS) stores the records of registered vehicles that contain identification and ownership information, vehicle make, model, year of manufacture, body type, and adverse vehicle history (title brands).

Florida is a 'step 6 - blue' PRISM participating state and is an active NMVTIS participant. The State's vehicle data system, FRVIS, sends title information to NMVTIS during title transactions (real-time). When NMVTIS is unavailable during the title transactions or when title transactions are finalized, NMVTIS transactions are submitted in a nightly batch process. The State incorporates brand information on the vehicle record that are recommended by AAMVA. The vehicle data system has a documented definition for each data field, as evident in the provided data dictionary and the Motorist Services Data Dictionary Addendum.

The vehicle system flags and identifies vehicles reported as stolen to law enforcement authorities. The vehicle system is updated nightly in a batch process receiving information on stolen vehicles. Law enforcement agencies use their data system to receive text and audible alerts when they query a vehicle that has been reported as stolen. The text alert shows up as white text on a red background at the top of the officer's screen. Stolen vehicle checks are performed each time an officer queries a vehicle, and stolen vehicle checks are performed both by tag number and VIN number when available. Stolen vehicle checks through ELVIS are performed statewide through FCIC and nationally through NCIC. The vehicle data system removes flags when a stolen vehicle has been recovered or junked. Law enforcement agencies report initial information for flag removal, and the stolen vehicle flag is removed from the vehicle data system through a nightly batch process. This end-to-end process is exemplary and Florida is a good example in this area for other states to reference.

The Florida vehicle system data can be used to verify and validate the vehicle information during initial creation of a citation or crash report. Law enforcement agencies using the state funded FCIC/NCIC system, ELVIS, have access to the vehicle and driver system through queries of tag numbers, VIN numbers, decal numbers, title numbers, and driver license numbers while they are creating initial crash and citation forms.

Florida does not print a barcode on registration documents, but law enforcement obtains the vehicle information effectively. Queries performed through ELVIS return real time information from the vehicle and driver systems of all 50 states and Canada, allowing the officer to verify and validate the responses while on scene with the vehicles and drivers present. This information can also be automatically populated onto crash and citation forms using the State-funded crash and citation reporting software, TraCS.

Florida grants authority to quality control staff working with the statewide vehicle system to amend obvious errors and omissions. Regional office administrators/supervisors also

have the authority to amend other types of errors and omissions in the vehicle data system.

To provide oversight, Florida preforms some transaction analyses and audits five percent of driver license and motor vehicle transactions to ensure the accuracy of the processed data. Also, the State uses its the Performance Accountability Measurement System (PAMS) report to track some of the transaction processes such as the average appointment wait time or the total number of stakeholder outreach events.

In addition, the State uses several procedures to detect high frequency errors and to update training materials. Transactional reviews are performed, and common errors are analyzed when detected. Any procedural updates or revisions that may contribute to reducing the error are suggested to the Bureau responsible for updating manuals and procedures. Also, if it is determined that enhanced training is needed to assist in mitigating these frequent errors, recommendations are made to the training development area. Data quality feedback from key users is communicated through State's Work Request Authorization and Prioritization (WRAP) process, the Technical Assistance Center (TAC), and the field support desk. WRAPs are then prioritized through DHSMV's Tier I, II and III governance process. Technical alerts are sent out to all tax collector personnel for any changes made to the system or advising of any known issues. This is another category that Florida has done very well in and is a good example for other states.

Overall the Florida systems are meeting and excelling in a number of key advisory ideals. There are, however, some categories that have room for improvement.

Opportunities

A barcode on the registration document would be helpful if ELVIS were not accessible or for other States that have barcode readers. The 2D PDF417 standard endorsed by the American Association of Motor Vehicle Administrators is recommended.

The data dictionary would be improved if it contained edit checks and data collection rules.

Documentation covering steps from initial event to final entry into the vehicle data system would be improved with a process flow diagram depicting the vehicle data system.

Performance measures for the recommended quality controls would enable managers to determine areas needed improvement.

Driver Recommendations

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

Summary

The Department of Highway Safety and Motor Vehicles (DHSMV) has custodial responsibility of the Florida Driver License Information System (FDLIS). The driver data system maintains records of all Florida drivers with critical information such as the driver's license number, license type, license status, conviction history, and crash involvement.

Florida captures and retains the dates of original issuance for all permits, licenses, and endorsements. The State maintains the Traffic Citation Accounting Transmission System (TCATS). Driving under the influence (DUI) and other traffic citations are reported from TCATS to FDLIS. In addition, the State has a data system that tracks education, enforcement, and treatment information related to DUI offenders. The Florida driver system contains detailed driver's traffic violation information, and the system captures the course type and the date of completion of driver improvement courses. However, the State's driver data system does not capture information on novice drivers' training histories.

The State's driver data system interacts with the National Driver Register's Problem Driver Pointer System (PDPS) and the Commercial Driver's License Information System (CDLIS). The contents of the Florida driver data system are documented with data definition for each data field. Edit checks and data collection rules are performed as part of the driver data system update processes. Florida is in the process of documenting those rules through the Motorist Modernization efforts. The data dictionary is updated as needed due to, for instance, legislative changes or requests from data system users.

Florida maintains the Driver License Operations Manual with detailed information related to the licensing, permitting, and endorsement issuance procedures. The State maintains process flow documents detailing the reporting and recording of relevant citations and convictions. Ninety percent of citations and convictions are submitted electronically from TCATS to the driver data system. Florida has a process flow diagram outlining the driver data system's key process flows and performs both automated and manual error correction or error handling processes. The State also has documented procedures and rules for purging data from the driver data system.

Florida has complied with Federal Real ID requirements since January 2010. The State has established extensive procedures to detect false identity licensure fraud for all driver licenses including commercial driver licenses (CDL). Florida has a DL Fraud Unit for complaints of possible fraudulent activity and the Quality

Assurance Program which conducts reviews of driver license and motor vehicle transactions to determine compliance with federal, state laws, regulations, and policies.

Policies and procedures to maintain appropriate system and information security are well established, as well as laws, rules, and procedures that regulate proper access and release of driver information from the driver data system.

Separate from the use of various systems (e.g., Driver and Vehicle Information Database) for interface between them, the Florida driver and crash data systems are not directly linked. However, there are direct linkages between Florida driver data system and the State's citation and adjudication systems. In addition, there is an interface link between the driver system and the Problem Driver Pointer System (PDPS), the Commercial Driver License Information System (CDLIS), the Social Security Online Verification (SSOLV) and the Systematic Alien Verification for Entitlements (SAVE) system. The State's law enforcement agencies can have granted access to the driver data system through the Driver and Vehicle Information Database (DAVID). Florida also has the capability to grant access to information in the driver system through DAVID to authorized court personnel and authorized personnel from other States.

Florida does not have a formal, comprehensive data quality management program for the driver system, as envisioned in the Advisory. However, the State has the Quality Assurance Unit which performs quality assurance processes for data management and produces reports, for specific jurisdictions, indicating the number and the percentage of specific driver system data elements (e.g., name, DOB, etc.) that are processed completely, accurately, or in compliance with DHSMV's policies and procedures. Florida has edit checks and validation rules for the driver data system. In addition, several methods are used to identify errors such as quality assurance reviews, customer complaints, and member contact with the procedure group. The Quality Assurance Program conducts independent reviews at the request of law enforcement and DHSMV and/or Tax Collector personnel for improper issuance or non-compliance with DHSMV policies or procedures. The State does not have established performance measures and numeric goals for timeliness, accuracy, completeness, uniformity, integration, and accessibility of the driver data system.

Opportunities

Florida should establish procedures to capture novice drivers' training histories, including provider names and types of education. Likewise, the driver data system should capture detailed information on driver improvement training history. The State should also establish a link between crash and driver data system.

Although many components and characteristics of the Florida driver data system are impressive, the State should consider start developing a formal data quality control program. Such a program will allow the State a greater ability to fully understand the quality of their driver data system. Establishing performance measures such as timeliness, accuracy, completeness, uniformity, integration, and accessibility, will be a great tool for data managers and data users to quickly and easily recognize areas in the driver system that need improvement.

In addition, the State should consider performing periodic independent sample-based audits to examine driver reports and conducting periodic comparative and trend analyses to identify unexplained differences in data across years and jurisdictions.

Finally, data quality reports based on performance measures should be created and provided to the State's TRCC committee for regular review.

Roadway Recommendations

- Improve the applicable guidelines for the Roadway data system to reflect best practices identified in the Traffic Records Program Assessment Advisory.
- Improve the data dictionary for the Roadway data system to reflect best practices identified in the Traffic Records Program Assessment Advisory.
- Improve the interfaces with the Roadway data system to reflect best practices identified in the Traffic Records Program Assessment Advisory.

Summary

The custodian of Florida's roadway data system is the Florida Department of Transportation (FLDOT). Currently FLDOT collects only a limited amount of data on higher functional classes of roadways. FDOT does not currently collect local roadway data, and local agencies do not currently have the ability to submit roadway data to the State's statewide roadway data system. Specifically, the roadway inventory only covers state maintained centerline miles and roads functionally classified above "local", which accounts for approximately 25% of the total roadway centerline miles. Also, only the state-maintained roadways are in the location referencing system; they are less than 10% of the centerline miles of public roadways within the state.

The State has indicated that not all of the MIRE Fundamental Data Elements are collected for all public roads, and any additional collected data elements do not conform to the data elements included in MIRE.

The State has the ability to identify crash locations using a referencing system which is compatible with the one used for roadways for State-maintained roadways. The FDOT State Safety Office processes crash locations by referencing the feature data on actively maintained roadways and determines crash coordinates within the linear-referencing framework. Crash data is incorporated into the enterprise roadway information system for State-maintained roadways. The FDOT State Safety Office locates all crashes reported on a Florida Traffic Crash Report long form and incorporates location references into the Roadway Characteristics Inventory linear referencing.

Since the roadway system does not include local system data, there are no performance measures for the quality of the local system data. Additionally, FLDOT did not have a documented accessibility performance measure nor a performance measure for data integration with other data systems. FLDOT has established performance measures for timeliness, accuracy, completeness, and uniformity. For the data collected, there are

hundreds of pre-determined data quality checks for consistency and accuracy that are run by the data collectors, by District Statistics Administrators, and by quality control personnel as needed. The State has not reported a formal, regular process to run these reports periodically.

The State additionally has well-documented procedures in the RCI Handbook and User Manual. This document should continue to be kept up-to-date. This documentation should also be expanded to include a data dictionary that includes all data elements and to process updates to the data dictionary as needed.

Collected roadway data is automatically archived by FDOT to allow for historic querying.

Overall, the system functionality meets the advisory ideals; however, it is limited to the data collected on State-maintained roadways. Meeting the advisory would require the inclusion of data for all public roadways and to have performance measures applied to the entire system. In addition to including local data, consideration should be given to interfacing with regional and local data custodians, such as MPOs. The collected data elements should be updated for inclusion of the MIRE FDEs. Finally, a review of the data dictionary should be made with the addition of any data elements that might be needed to apply to the inclusion of roadway data for non-State-maintained roadways.

Citation / Adjudication Recommendations

- Improve the applicable guidelines for the Citation and Adjudication systems to reflect best practices identified in the Traffic Records Program Assessment Advisory.
- Improve the interfaces with the Citation and Adjudication systems to reflect best practices identified in the Traffic Records Program Assessment Advisory.
- Improve the data quality control program for the Citation and Adjudication systems to reflect best practices identified in the Traffic Records Program Assessment Advisory.

Summary

The State of Florida has established itself as a leader in the field of data collection and use related to traffic citations and their adjudication. One of the best ways to address traffic enforcement, in order to ensure that it is well-executed, provides ample return on investment, and is fairly and equitably adjudicated, is through a statewide citation tracking system. Florida has had such a system for several years—the Traffic Citation and Accounting Transmission System (TCATS). This system allows the State to track each citation through its lifecycle, from assignment of a number to issuance to a violator to transmission to court, through the adjudication of charges and, if appropriate, to the driver history file. This tracking provides a great deal of useful information to traffic

safety professionals. The data can be used to monitor the effectiveness of enforcement in preventing or mitigating the severity of crashes and is used in the State of Florida to identify the best way to design educational campaigns and directed enforcement activities.

The Florida Department of Highway Safety and Motor Vehicles (DHSMV) is responsible for centralized citation numbering for both paper and electronic citations. This oversight prevents duplicate numbers and sets up a means by which to ensure that citations, once issued, are tracked throughout their lifecycles, no matter whether the prosecutor declined to file the charges, or while charges are pending during a deferral period.

Court data is kept in a single system as well, using the Court Clerk Information System (CCIS) that includes all data from all courts. Also, these excellent systems are supported by robust data dictionaries that serve to assure that data collection is uniform and that data users are adequately informed about the quality of the data they analyze. The TCATS system updates are followed by additional training about the changes and by updates to the documentation for users. The State appears to use the newest versions of software available for it's Court Management systems.

While Florida's state-of-the-art systems are very commendable, there remain several opportunities to improve. Information regarding dismissed charges and pending charges related to deferrals is not captured on the driver history file, a fact which limits analysis of driver behavior.

Having the ability to track impaired drivers could be improved through the development of a comprehensive DUI tracking system. Such systems should be interactive, available to all those who provide services to DUI violators and prevent reinstatement of driving privileges until all court-ordered or administrative sanctions have been fulfilled. Additionally, such a tracking system should include fees and fines paid by impaired drivers.

The ability to record all types of education (and curricula), treatment, assessment, sanctions (such as ignition interlock) and therapy assigned to these drivers allows the State to assess what types of programs and sanctions are most effective in preventing recidivism and allowing the drivers to become compliant and re-enter the system, which gives more incentive to remain compliant with requirements and laws.

The State has wisely elected to audit on request and provide data to individual agencies related to their timeliness and accuracy. This is a means of encouraging law enforcement agencies to maximize their efforts to provide excellent data and assures that State systems managers have an indication of the health of their data systems. The State would be well served to develop and measure other system aspects, such as completeness, integration, uniformity, and accessibility. While having most citations issued electronically does positively impact uniformity and completeness, measurements help to insure that these aspects of the data remain optimal. Even when

edits catch incomplete data fields, it is important to measure and calculate which fields are problematic to determine why the problem exists. Then solutions to solve the problem(s) can occur. Even with excellent data quality, some aspects of data may at times degrade. Having a means to measure and keeping track of such measures insures that degradation of data quality may be quickly uncovered and equally quickly addressed. Florida's citation and adjudication appears to be excellent and measures help to make that fact clear.

EMS / Injury Surveillance Recommendations

- Improve the description and contents of the Injury Surveillance systems to reflect best practices identified in the Traffic Records Program Assessment Advisory.
- Improve the interfaces with the Injury Surveillance systems to reflect best practices identified in the Traffic Records Program Assessment Advisory.
- Improve the data quality control program for the Injury Surveillance systems to reflect best practices identified in the Traffic Records Programs Assessment Advisory.

Summary

An ideal statewide Injury Surveillance System (ISS) is comprised of data from five core components: pre-hospital emergency medical services (EMS), trauma registry, emergency department, hospital discharge, and vital records. This data provides more detailed information on the nature and extent of injuries sustained in a motor vehicle crash than can be found in other components of the traffic records system. Consequently, this information is invaluable when determining the severity, cost, and clinical outcomes of the individuals involved and can be used to support injury prevention programs on the State and local level.

Overall, Florida collects and maintains information on all five components; the Emergency Medical Services Tracking and Reporting System (EMSTARS), the Florida Trauma Registry and vital records system maintained by the Florida Department of Health and Environment; and the emergency department and hospital discharge data maintained by the Agency for Health Care Administration. While this data has been used to provide basic information related to motor vehicle crashes in the State, there is an opportunity for more extensive coordination and use of these resources.

Emergency Medical Services

Florida's EMSTARS is a NEMSIS compliant database of patient incident records submitted by the majority of EMS agencies in the State. Since aggregate reporting of EMS data is mandated (by Florida Administrative Code 64J-1.014), participation in EMSTARS is voluntary. The system was developed to bring the State into NEMSIS compliance and to allow EMS providers the ability to collect incident level data that can be used to improve health care delivery and support injury prevention activities. The ability to collect information, develop benchmarks, and assess trends in Florida's EMS

system is critical to ensuring the protection, promotion and improvement of the health for all people in Florida. Florida is currently the highest-ranking state in total number of records submitted to NEMSIS.

The Emergency Medical Services Section encourages the use of EMS data for the advancement of medical research as well as for local, regional, and State-level quality improvement efforts. Aggregated State-level reports and data request forms can be found on the Department of Health's website.

The Emergency Medical Oversight Continuum of Care Data Warehouse currently hosts data from the EMSTARS patient care records that are linked with hospital discharge and emergency department data from the Agency for Health Care Administration. A comprehensive data warehouse business strategy is under development to enhance this capability to ensure valid health information is accessible to researchers and providers in the State. This linkage provides a wealth of information and consideration should be given to adding additional traffic record components, notably crash, to the warehouse.

Trauma Registry

The Florida Trauma Registry collects patient data from the State's 27 trauma centers as authorized by Florida Statute. Additionally, as of January 2015, data is also collected on trauma cases that are treated at the State's acute care hospitals. The State's trauma registry is based on the National Trauma Data Standard with the addition of several State-specific fields. The trauma registry data manual describes the data elements, the inclusion criteria, and the reporting requirements.

Performance reporting is conducted through quarterly compliance reports created for each trauma center. The report tracks the number of records submitted, the number of late records, and the number of records exceeding the error threshold. An annual report summarizing the reasons for rejecting records is also produced. Data quality and reporting issues are addressed regularly between the Department of Health and individual trauma centers.

The trauma registry data is used by the individual trauma centers to support a variety of activities, including performance improvement, outcomes research, and resource utilization. Data is also used by the Department of Health to support statewide planning and injury prevention initiatives.

Emergency Department and Hospital Discharge Data Systems

The Agency for Health Care Administration collects and maintains data for all inpatient, emergency department, ambulatory surgery, and outpatient services from 269 of the State's 294 facilities. Approximately 2.5 million inpatient records and 5.5 million emergency department records are collected each year.

Hospital data can be requested through the Florida Center for Health Information and Policy Analysis. The Center also maintains a website, FloridaHealthFinder.gov, that contains data dictionaries, data use agreements, and a query tool. In 2014, there were 17,739 persons admitted to a hospital as the result of a motor vehicle crash. The average charge for these patients was \$116,971.

Vital Records

The Florida Department of Health's Bureau of Vital Statistics collects and maintains all vital records for the State, including mortality data. Vital records are used regularly to identify problems related to motor vehicle crashes including a recent report describing fatal and non-fatal injuries sustained by children under 5 years of age. Data may be requested from the Bureau of Vital Statistics with an approved data use agreement.

With the system components that are in place, there are some considerations that may help the State maximize the use of its injury surveillance system to support its highway safety efforts. First, all ISS components should have representation on the TRCC. At the very least, communication should be enhanced to identify opportunities to increase the use of ISS data as is currently being done with the trauma registry. Second, to evaluate and improve data quality of these systems, performance measures for each should be established. While States generally have guidelines related the timeliness, accuracy, and completeness of reports, performance measures can be used to regularly keep track of each system's function, progress, and success. The 'Model Performance Measures for State Traffic Records Systems' publication provides example performance measures for each attribute and data system. Third, efforts should be made to require submission of record level data to the State and to obtain data from 100% of the State's ambulance services into EMSTARS. Fourth, use the ICD codes in the hospital databases to derive a severity score. Using hospital data to define serious injuries is more objective than using the KABCO score from the crash report. Finally, as mentioned earlier, crash data should be included in the Continuum of Care Data Warehouse if feasible. Florida should be commended for continuing its efforts to develop its core injury surveillance data into an important resource to define, evaluate, and support highway safety programs and projects.

Data Use and Integration Recommendations

 Improve the traffic records systems capacity to integrate data to reflect best practices identified in the Traffic Records Program Assessment Advisory.

Summary

The State of Florida has been very successful in the area of Data Use and Integration. There is access to crash and citation data through an Internet portal that contains ad hoc reporting and the ability to create some analytics capability. In addition, behavioral program managers have access to a robust crash system portal that maps and classifies crashes by type and circumstance.

Successful linkages of various data sources were reported. In particular, citation and adjudication data, driver data, vehicle data, Florida Highway Patrol activity data have been integrated into a singular data warehouse at DHSMV where analytics can be performed. Ad-hoc analysis is performed for legislative needs, grant purposes, and research through the DHSMV performance management office. Analyses were provided that link driver demographics, vehicle type, and citation data. Crash data is integrated with vehicle data for purposes of analysis and has been used to determine the crash involvement of vehicles with the title brand "rebuilt" in crashes. Reports were provided covering analyses of crash incidences involving newer versus older vehicles and involving rebuilt vehicles.

Opportunities exist to explore additional linkages. Roadway and crash data have not yet been linked, nor have crash and injury surveillance data.

B. Strategic Planning Participants

Executive Board Members

- 1. Beth Allman, Chair, Florida Court Clerks and Comptrollers
- 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

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- 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
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