Memorandum

Date: 8/19/2020
To: TRCC Members
From: Jon Graber
Subject: Update to TRCC Strategic Plan and Re-Vote

Summary:
NHTSA reviewed the Texas TRCC's Traffic Safety Information System (TSIS) Strategic Plan and found that the previously used performance measures were not in compliance with regulations.

Specifically, the performance measures must compare a 12-month period from April 1 – March 31 of the current year to the previous year and show improvement.

TRCC administrators worked with TRCC members from crash (TxDOT), citation (DPS), and EMS (DSHS) data to bring their performance measures in line with the regulations. The following changes were made:

1. The crash data performance measure was split into four separate PMs and updated with more recent data.
2. The EMS performance measure was updated with more recent data.
3. The DPS Completeness PM was updated to an annual comparison instead of monthly.
4. The two DPS Accessibility PM's were removed since DPS updated their system and is not able to pull the information NHTSA requested we update.

The TSIS now has six performance measures that meet NHTSA's requirements.

Action Item:
Please review the performance measure changes found on pages 37-42 of the TSIS and reply all to the email if you approve or disapprove and your reasons for disapproving by COB Wednesday, August 26, 2020.

Detailed Explanation:
NHTSA informed TxDOT and TRCC administrators that, "§ 1300.22(b)(3)(ii) of NHTSA's State highway safety grant program final rule requires States to demonstrate quantitative improvement to a core traffic records database and provide supporting documentation covering a contiguous period starting no earlier than April 1, 2019 (April 1, 2019 - March 31, 2020) that demonstrates quantitative improvement to the comparable 12-month baseline period (April 1, 2018 - March 31, 2019)."

Based on that guidance, the following changes were made to the TSIS:

1. The crash data performance measures were previously one performance measure that looked at four different metrics through March 31, 2019. None of those metrics showed improvement based on data through March 31, 2019. TxDOT provided an additional year's worth of data through March 31, 2020 for all four metrics. With the additional data, all four metrics showed improvement on an annual comparison. Additionally, since the metrics all measured different aspects of crash data, each metric was made its own performance measure.

   In summary, there are now four crash data performance measures that meet NHTSA's requirements.

2. The EMS data performance measure did not have data through March 31, 2020. DSHS provided the additional data through March 31, 2020 which showed improvement compared to the previous period of April 1, 2018 – March 31, 2019.

   In summary, there is now one EMS data performance measure that meets NHTSA's requirements.

3. DPS previously provided information for three citation data performance measures (two accessibility measures and one completeness measure) that were evaluated on monthly and not annual comparison.

   The completeness measure was updated to an annual comparison that meets NHTSA's requirements based on additional data provided by DPS.

   The two accessibility measures were removed because DPS was unable to update them with annual data due to an update in their system.

   In summary, there is now one citation data performance measure that meets NHTSA's requirements.

Texas Traffic Records Information System Strategic Plan

FY 2020

Texas Traffic Records Coordinating Committee

Table of Contents

Acronyms

AAMVA – American Association of Motor Vehicle Administrators
BAC – Blood Alcohol Concentration
CDL – Commercial Driver License
CDLIS – Commercial Driver's License Information System
CMS – Court Management System
CRASH – Crash Reporting and Analysis for Safer Highways
CRIS – Crash Records Information System
DDACTS – Data Driven Approaches to Crime and Traffic Safety
DRIR - Driver License Image Retrieval
DSHS – Department of State Health Services
DUSA – Data Sharing and Updates Application
EMS – Emergency Medical Services
FARS – Fatality Analysis Reporting System
FDE – Fundamental Data Elements
GRID – Geospatial Roadway Inventory Database
HEAT – Helpdesk Expert Automation Tool
HPMS – Highway Performance Monitoring System
IADLEST - International Association of Directors of Law Enforcement Standards and Training
LRS – Linear Referencing System
MIRE – Model Inventory of Roadway Elements
MMUCC – Model Minimum Uniform Crash Criteria
NEMSIS – National Emergency Management Information System
NIEM – National Information Exchange Model
NMVTIS – National Motor Vehicle Title Information System
OCA – Office of Court Administration
PDPS – Problem Diver Pointer System
PRISM – Performance and Registration Information System Management
RMS- Records Management System
RTS – Registration Title System
SAVE – Systematic Alien Verification of Entitlements
SPURS – State Police Unified Reporting System
SSOLV - Social Security Online Verification
THCIC – Texas health Care Information Collection
TLETS – Texas Law Enforcement Telecommunication System
TRCC – Traffic Records Coordinating Committee
TTI – Texas A&M Transportation Institute
TxDMV – Texas Department of Motor Vehicles
TxEver – Texas Electronic Vital Events Registry
TxDOT – Texas Department of Transportation
TxDPS – Texas Department of Public Safety
STRAP – State Traffic Records Assessment Program
VIN – Vehicle Identification Number

Introduction

The FY 2020 update to the Texas Traffic Records Information System Strategic Plan was developed by the Texas Traffic Records Coordinating Committee (TRCC) with support from the Texas Department of Transportation (TxDOT) and the Texas A&M Transportation Institute (TTI) to advance the performance and quality of the State's traffic records data.

The Texas TRCC includes members representing the six core traffic records databases in Texas:

- Crash – TxDOT
- Citation/Adjudication - Texas Department of Public Safety (TxDPS) and Office of Court Administration (OCA)
- Driver – TxDPS
- Injury Surveillance – Texas Department of State Health Services (DSHS)
- Roadway – TxDOT
- Vehicle – Texas Department of Motor Vehicles (TxDMV)

The TRCC is a partnership of representatives from the transportation, law enforcement, criminal justice, and health professions. This statewide group of stakeholders uses the TRCC as a forum for the planning, coordination and implementation of projects to improve the State's traffic records system. The TRCC uses Federal "State Traffic Safety Information System Improvement Grants (405c)" and other funds to promote projects to improve the accessibility, accuracy, completeness, consistency, timeliness, and uniformity of the traffic records systems in Texas. These projects include efforts to improve individual databases as well as to promote linkages between the core traffic records systems through the development of interfaces to improve direct business needs and integration to improve data analysis.

TRCC Governance

As stated in the February 2, 2006 Federal Register (Vol. 71, No. 22), the Texas TRCC:

a) Includes representatives from highway safety, highway infrastructure, law enforcement and adjudication, public health, injury control and motor carrier agencies and organizations;

b) Has authority to review any of the State's highway safety data and traffic records systems and to review changes to such systems before the changes are implemented;

c) Provides a forum for the discussion of highway safety data and traffic records issues and report on any such issues to the agencies and the organizations in the State that create, maintain and use highway safety data and traffic records;

d) Considers and coordinates 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;

e) Represents the interests of the agencies and organizations within the traffic records system to outside organizations; and

f) Reviews and evaluates new technologies to keep the highway safety data and traffic records systems up-to-date.

Executive Charter

Whereas the State of Texas and local governmental agencies have concluded and recognized the need to create a committee to assist with the integration of Traffic Records information to enhance decision making in order to save lives and injuries on Texas highways;

And, whereas the State of Texas and local governmental agencies have agreed to collaborate in the development and implementation of a Traffic Safety Information Systems Improvement Program to provide more timely, accurate, complete, uniform, integrated and accessible data to the traffic safety community;

And, whereas the State of Texas and local governmental agencies have agreed to collaborate in the development and implementation of a Traffic Safety Information Systems Strategic Plan to assure that all components of the State Traffic Safety Information System Improvement Program are coordinated;

Therefore, the following Charter is hereby established to help in direction of a Traffic Records Coordinating Committee (TRCC) as agreed upon by the participating agencies.

A. Objective

To provide an interagency Traffic Records Coordinating Committee (TRCC) composed of voting members from the Texas Department of Public Safety (TxDPS), Texas Department of Transportation (TxDOT), Texas Department of State Health Services (DSHS), Texas Department of Motor Vehicles (TxDMV) and The Office of Court Administration (TxOCA) whose purpose is to provide executive direction on all matters related to the Texas Traffic Safety Information Systems (TSIS) and the Traffic Safety Information Systems Improvement Program within the State.

B. TRCC Goals

To improve the timeliness, accuracy, completeness, uniformity, and accessibility of the data of the state that is needed to identify priorities for national, state and local highways and traffic safety programs.

To provide for the comprehensive collection, maintenance and dissemination of Texas traffic safety related data in order to set the direction for traffic safety improvement measures.

To ensure that all Traffic Safety Information Systems improvement projects move forward on schedule and within budget.

C. TRCC Authority

The TRCC operates under the authority of TxDOT and shall consist of voting members from TxDPS, TxDOT, DSHS, TxDMV and the TxOCA.

Each member shall serve at the discretion of their Department Director and shall have the authority to recommend projects for funding to support the Texas Traffic Safety Information System Improvement

Program. Final funding authority resides with the Traffic Records Coordinator at the Texas Department of Transportation.

D. TRCC Purpose

To evaluate the effectiveness of the committee's efforts to make improvements as needed.

To provide oversight to link state data systems within the state, such as systems that contain medical, economic data and crash information.

To provide oversight and investigate linking crash data to other crash data systems within the state with information relevant to crashes.

To ensure that all Traffic Safety Information System improvement projects meet and/or exceed the expectations of the above stated purposes.

To provide oversight to the development of the State's Traffic Safety Information System Strategic Plan.

E. TRCC Duties and Responsibilities

The duties of the TRCC include but are not limited to:

The TRCC will provide executive direction and oversight for the current Traffic Safety Information Systems.

The TRCC will provide executive direction and oversight for the Traffic Safety Information System Improvement Program.

The TRCC will provide executive direction, oversight and formal approval of the Traffic Safety Information System Strategic Plan.

The TRCC will have the authority to review any of the State's highway safety data and traffic records systems and to review changes to the systems before the changes are implemented.

The TRCC will provide a forum for discussion and reporting of highway safety data and traffic records issues back to the agencies and organizations that created maintain and use highway safety data and traffic records.

The TRCC will 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 systems.

The TRCC will represent the interests of the agencies and organizations within the traffic records system to outside organizations.
The TRCC will review and evaluate new technologies to keep the highway safety data and traffic records systems up to date.

I, Michael Chacon, as TRCC Coordinator, hereby certify that this charter legally mandates the TRCC with specified functions as contained within

Signed

_____ _____

Michael Chacon, P.E., Date
Texas Department of Transportation
Traffic Safety Division Director
TRCC Coordinator and Chair

Executive Committee Members

TRCC members include administrative staff from TxDOT, representatives from the core traffic records databases, and the technical advisor. The table below identifies each member and their role/database they represent.

Name	Title	Agency	TRCC Role
Michael Chacon	Traffic Safety Division Director	TxDOT	Chair
Terry Pence	Traffic Safety Program Manager	TxDOT	Vice-Chair
Larry Krantz	Police Traffic Services Program Manager	TxDOT	Coordinator
Capt. Jodie Tullos	Director of the Highway Safety Operations Center	TxDPS	Citation/Adjudication
Casey Kennedy	Director of Information Resources	OCA	Citation/Adjudication
Jim Hollis	Director of the Crash Data and Analysis Section	TxDOT	Crash
Larbi Hanni	Branch Manager of Data Integrity and Analysis	TxDOT	Crash
Angie Suarez	Asst. Manager Driver License Division/Enforcement & Compliance Service	TxDPS	Driver
Dan Dao	Manager of Office of Injury Prevention	DSHS	Injury Surveillance
Pierce Baumann	Manager of EMS/Trauma Registry	DSHS	Injury Surveillance
David Freidenfeld	Director of Data Management and Traffic Analysis	TxDOT	Roadway
Tim Thompson	Deputy Director Vehicle Titles and Registration Division	TxDMV	Vehicle
Jon Graber	Asst. Transportation Scientist	TTI	Technical Advisor

TRCC and Strategic Planning

Texas employs a single tier model for its Traffic Records Coordinating Committee (TRCC) commonly referred to as the TRCC Executive Committee. The committee meets quarterly and consists of member agencies who have custodial responsibility for the core traffic records systems. A basic charter signed by the TxDOT Traffic Safety Division Director formally establishes the TRCC and outlines its authority, purpose, and overarching goals. The committee primarily focuses its quarterly meetings on high level planning activities and the development of improvement projects each year for NHTSA Section 405(c) grants. Time is also allocated across meetings for updates on existing traffic records improvement projects. In addition to the Executive Committee and its quarterly meetings, the State also benefits from a designated program manager who oversees the work of qualifying for and monitoring traffic records grants.

The TRCC publishes its Texas Traffic Safety Information System Strategic Plan within the Texas Highway Safety Plan. The Plan contains much useful information such as the TRCC Charter, the voting members, performance measures, information on current improvement projects, and more.

TRCC and Strategic Planning 2019 STRAP Recommendations

NHTSA completed the State Traffic Records Assessment Program (STRAP) of Texas in May 2019. The TRCC section received a score of 64.7% and the Strategic Planning Section received a score of 55.6%.

Below is a summary of the STRAP TRCC and Strategic Planning recommendations and responses.

STRAP Numbers	STRAP Recommendation	Texas Response	Implementation Status
1-5, 29	Restructure the TRCC to more closely align with the Traffic Records Program Assessment Advisory. The current TRCC functions as both the executive and technical TRCC. Creating a two-tier structure could improve coordination and effectiveness of the TRCC.	TRCC created two subcommittees. One is to advise the development of an intersection inventory. The other is to provide traffic record user stakeholder advice to the TRCC.	Ongoing
6	Execute a more detailed charter expressly agreed to by all member agencies. Any efforts to enhance the structure of the committee in order to improve effectiveness and overall impact should include a significant expansion of the charter. Additional detail around roles and authority, specific member agencies and their representatives, and how a more technical-focused team would interact with a policy-focused executive tier would be in order.	This effort will be pursued at a later date following the completion of higher priority objectives.	None

10	Implement a performance measurement and quality control program. System-specific quality control programs such as high-frequency error reports, sample-based audits, and data quality feedback surveys will ensure the TRCC can readily identify data system deficiencies and capitalize on opportunities for improvement.	Performance measures are being developed as part of TTI's FY20 technical assistance to the TRCC.	Ongoing
12	Create a comprehensive Traffic Records Inventory. An effective inventory would provide high-level overviews of each system and its sub-systems, basic flowcharts or diagrams to illustrate how data are collected and processed, a description of the technical architecture, easy-to-use data dictionaries, and contact information for system administrators or managers.	This effort was developed as part of TTI's FY19 technical assistance to the TRCC.	Complete
12	Create a comprehensive Traffic Records Process Flow showing inputs and outputs for all traffic records related data.	A basic flow chart was developed in FY19.	Complete
20-24	Restructure the TRCC Strategic Plan to more closely align with the Program Advisory and better serve the State. A restructured Plan would clearly define the policy goals and objectives of the Executive TRCC and the technical goals and objectives of the Technical TRCC.	This effort was developed as part of TTI's FY19 technical assistance to the TRCC.	Complete

1-5, 29	Allow the existing committee to take on tasks that currently are excluded by virtue of being "technical committee" work. Add both executive and technical members to broaden the scope. Reflect these changes in the TRCC Strategic Plan. The current TRCC membership has no local agency highway engineers or technicians, first responders, or traffic safety enforcement personnel. It gets no direct input from local data collectors and users.	TRCC created two subcommittees. One is to advise the development of an intersection inventory. The other is to provide traffic record user stakeholder advice to the TRCC. These subcommittees included engineers, law enforcement, researchers, and other stakeholders.	Ongoing
20-24	Revise the organization and presentation format of the Plan to highlight key inter-relationships of the Plan and improve the readability of some Plan sections. The Plan should contain format changes that better highlight the relationships between State goals, identified deficiencies, the project action plan for the current year plus two more, and progress over time. It should explain processes and methods used to arrive at program decisions, and it should expand performance measures.	This effort was developed as part of TTI's FY19 technical assistance to the TRCC.	Complete

32	Texas should consider scheduling a special event lasting one to two days during which small and large group planning exercises are led by a professional strategic planning facilitator. Such an event should include stakeholders beyond the current TRCC makeup. It should be viewed as an opportunity for outreach, education, and inclusion. The results from such a facilitated meeting are not set in stone but offer TRCC planners a wealth of information to augment the assessment results and use them in developing the next strategic plan.	The TRCC created an advisory subcommittee which includes various stakeholders to provide input to the TRCC. Additionally, TRCC administration presented to multiple stakeholder organizations in FY19 to inform them of the TRCC and solicit their feedback.	Ongoing

TRCC and Strategic Planning Strategic Plan Objectives

TxDOT and the TRCC Technical Advisor developed the following objectives based on the STRAP and the needs of TxDOT and the TRCC. The following table summarizes specific objectives to improve the Texas TRCC and Strategic Planning over the next five years and the strategies/action steps necessary to achieve those objectives.

Over the next three years, the Texas TRCC Administration plans continue to promote subcommittees to provide technical guidance. This includes a technical advisory subcommittee which will bring in a diverse number of stakeholders to provide advice to the TRCC and an intersection database development subcommittee to guide the development of an intersection database. These subcommittees will allow the TRCC to broaden the number of people and positions contributing to the TRCC.

Objective	**Strategies/Action Steps**	**Timeline**
1.1 Create TRCC sub-committees	• Create project development subcommittee that will include LEOs, LE analyst, researchers, engineers, and other stakeholders • Create an intersection subcommittee to assist with the development of an intersection database (6.2)	Complete

1.2 Create a TRCC performance measure and quality control program	• Create performance measures and data quality control programs for each database • Develop plan for the TRCC to periodically review the performance measures	Sept. 30, 2020
1.3 Create a comprehensive Traffic Records Inventory	• Collect data dictionaries from each database • Summarize into one document	Complete
1.4 Create a Process Flow Chart of the Texas Traffic Records System	• Collect flow charts, inputs, and outputs from each database • Combine into one flow chart for the whole system	Complete
1.41 Enhance Process Flow Chart of the Texas Traffic Records System	• Add additional information to the process flow chart such as how TxDMV and TxDPS receive vehicle and driver data from the counties	TBD
1.5 Add additional members to the TRCC as needed	• Identify additional members to add to the TRCC	Annually
2.1 Update the TRCC Strategic Plan to follow the same format as the STRAP.	• Update the Strategic Plan based on the input of each TRCC member	Complete
2.2 Annually update the objectives of the TRCC Strategic Plan	• Meet with each TRCC member to identify completed objectives, modifications to current objectives, and additional objectives to add	Annually
2.3 Update the TRCC charter	• Update the charter to include additional members/positions, member agencies, sub-committees, etc.	TBD

Crash Data System

The Texas Department of Transportation (TxDOT) is the custodial agency for crash report processing in the State and law enforcement agencies are required to submit all reportable crashes to TxDOT within 10 business days. Crash records are stored in a central repository called the Crash Records Information System (CRIS).

Law enforcement can submit crash reports electronically to TxDOT via the Crash Reporting and Analysis for Safer Highways (CRASH) application, E-Submission, or the CRIS Mobile Application. CRASH is a website that allows law enforcement to enter crash data online and submit electronically to TxDOT. E-Submission allows law enforcement to have their records management system (RMS) submit electronically to TxDOT on their behalf. CRIS Mobile Application allows law enforcement to take a picture of a CR-3 crash report and submit electronically to TxDOT via the application. All methods require crash reports be validated by over 800 business rules prior to submission.

The crash system uses the guidelines from FARS, ANSI D16.1, and MMUCC for their injury and fatal crash definitions. The State is already using the MMUCC version 5 definition for "suspected serious injury" and is in the process of aligning the label and definitions for Suspected Minor Injury, Possible Injury, and Fatal Injury.

CRIS maintains the crash data in multiple relational datasets. The Crash Report Online Purchase System (CROPS) is a component of CRIS that enables the purchase of Texas crash reports using a credit, debit, or ACH. Redacted crash reports can also be purchased through CROPS. CROPS is open and available to the public 24 hours, 7 days a week. CRIS Query component is an externally facing application, open to the public, that allows users to pull publicly available crash data and summarize, export, and map Texas crashes statewide and for specific areas. Crash data is also available to all CRASH users and individuals associated with an agency of the United States, Texas, or a Texas local government that has use for the information for accident prevention purposes via MicroStrategy, a business intelligence tool used to create analytical reports.

Crash data is used by many traffic safety stakeholders to conduct problem identification, project prioritization, and resource allocation. Problem identification is conducted for the Highway Safety Plan and the Crash Analysis and Visualization (CAVS) tool is used to enhance the process of selecting safety projects and submitting them for HSIP funding consideration. Many law enforcement agencies are using Data-Driven Approaches to Crime and Traffic Safety (DDACTS) to make decisions on staffing and scheduling, which includes using crash data. TxDOT strives to make crash data available to law enforcement, engineers, analysts, researchers, and the public to promote improved traffic safety in Texas.

Crash Data 2019 STRAP Recommendations

NHTSA completed the State Traffic Records Assessment Program (STRAP) of Texas in May 2019. The Crash data section received a score of 64.6%. Crash data is very strong in the "Description and Contents" and "Applicable Guidelines" sections but opportunities for improvement exist in the "Interfaces" and "Data Quality Control Program" sections.

STRAP Sections						
Description and Contents	**Applicable Guidelines**	**Data Dictionaries**	**Procedures / Process Flow**	**Interfaces**	**Data Quality Control Programs**	**Overall**
96.4%	80.0%	70.0%	66.7%	33.3%	48.6%	64.6%

Below is a summary of the STRAP crash data recommendations and responses.

STRAP Numbers	STRAP Recommendation	Texas Response	Implementation Status
48-51	Improve and expand the data dictionary to include all the data elements and their attributes, as well as the data edit checks and validation rules. The State could then also incorporate the business logic (documented separately) into the dictionary for ease of use.	The data dictionary, including the definitions and allowable values are documented in one document. Business rules are documented separately. This is more user friendly and a single combined document would be cumbersome due to frequent updates to the business rules.	None
66-73	Develop performance measures for all six attributes of the crash data system: timeliness, accuracy, completeness, uniformity, integration, and accessibility.	Performance measures will be developed as part of TTI's FY20 technical assistance to the TRCC.	Ongoing
74-79	Establish audit procedures using the performance measures developed under the data quality control program.	This effort will be pursued following the development of the performance measures.	Planned
58-62	Develop interfaces/integrate with other core traffic records.	Efforts to integrate/interface with other core traffic records will be pursued when appropriate.	Ongoing

74	The procedures for returning rejected crash reports is well documented but there is no mechanism to track returned reports. In addition to developing such a tracking system, the State could also begin to track high frequency errors and omissions to address improved training and system enhancements.	The mobile app deployed in Aug. 2019 tracks reports that are returned to LEOs and will keep track of which reports have been returned and which have been re-submitted. This will include tracking L1 (main component) and L2 (business rule) returns. TxDOT is in the process of review business rules for potential changes and is in the process of kicking off efforts to train law enforcement on the business rule changes.	Ongoing
47	The crash system uses the guidelines from FARS, ANSI D16.1, and MMUCC for their injury and fatal crash definitions. The State is already using the MMUCC version 4 definition for "suspected serious injury" but has chosen not to adopt the other injury severity definitions.	TxDOT is planning to align the label and definition for Suspected Minor Injury, Possible Injury, and Fatal Injury. TxDOT will be testing CY2020 and in production CY2021.	2021

Crash Data Strategic Plan Objectives

TxDOT and the TRCC Technical Advisor developed the following objectives based on the STRAP and the needs of TxDOT. The following table summarizes specific objectives to improve the Texas crash data system over the next five years and the strategies/action steps necessary to achieve those objectives.

Objective	**Strategies/Action Steps**	**Timeline**
3.1 Develop performance measures for the crash data system	• TRCC has provided funding to TTI for technical assistance which includes developing performance measures in FY20 • TTI will research performance measures from other states to identify examples for Texas • TTI will work with each TRCC member to develop performance measures for their agency	Sept. 30, 2020
3.2 Establish crash data audit procedures using the performance measures developed under the data quality control program	• Develop performance measures (3.1) • Work with TRCC Technical Advisor to establish a data quality control program	Sept. 30, 2020

3.3 Develop interfaces/integrate with other core traffic records	• Link crash vehicle damage data with TxDMV data to reduce salvage title fraud • Link NHTSA's VIN recall tool to the crash report purchasing system • Develop crash-roadway interface that allows officers to select the crash location on a map and then auto-populate the location information (street, roadway type, etc.) into the CR-3	TBD
3.4 Pursue MMUCC compliance of the crash report form and the CRIS database	• Request NHTSA Go-Team MMUCC Assessment • Develop an action plan detailing which recommendations will be pursued	TBD
3.5 Establish an ongoing law enforcement training program specifically dedicated to improving crash data timeliness, completeness, accuracy, and consistency	• An Automated Training Program is planned, which will assist in ongoing and updated training for CRASH users • TxDOT is in progress developing a curriculum for law enforcement to address timeliness, completeness, accuracy, and consistency	TBD
3.6 Work to include crash typing in the pedestrian crash reporting. Use the Pedestrian Crash Analysis Tool (PBCAT) for categories on crash typing	• TxDOT is working on a new interpreted field to capture pedestrian and pedicyclist information • TxDOT will be testing CY2020 and in production CY2021	2021
3.7 Achieve 100% electronic crash report submission through CRASH, Submission Services, or CRIS Mobile Application	• HB 312 requires electronic crash report submission by 9/1/19 (Complete) • TxDOT is developing an app to allow LEAs not using CRASH or Submission Services to submit electronically. App will be deployed Aug. 2019 (Complete) • Continue to train LEAs on submitting crash reports through CRASH	Complete
3.8 Modify pre-existing data dictionary to be NIEM compliant	• Review NIEM standards to identify a list of necessary modifications	TBD

Vehicle Data System

The Texas Department of Motor Vehicles (TxDMV) has custodial responsibility for the State's vehicle data system that maintains all vehicle title and registration records in the Registration and Title System (RTS). Critical information related to ownership and identification of the State's vehicles (e.g., vehicle make, model, year of manufacture, body type, and title brands) is stored in RTS. The system allows for easy upgrades and enhancements to the application and provides an efficient way to maintain and operate the code, while ensuring data integrity and security.

Texas validates every Vehicle Identification Number (VIN) via the VINtelligence verification software. The State's vehicle registration sticker is barcoded using the 2D standard which allows law enforcement rapid and accurate collection of vehicle information. The State also includes a PDF-417 barcode on the registration renewal notice that can be scanned during the registration renewal processing.

The State provides title information to the National Motor Vehicle Title Information System (NMVTIS) through a nightly batch process. Texas queries and verifies all qualifying vehicle transactions through NMVTIS prior to issuance of a new title through a nightly batch process. In addition, the State participates in the Performance and Registration Information Systems Management (PRISM) program at the highest level of PRISM operations (level 8 – Gold Level).

The State's vehicle system data is not completely processed in real-time. Some update procedures are tied to batch processes and the time to update records through these procedures range from 24 to 48 hours. Texas has automated edit checks and validation procedures during various stages of the data entry process. Only specific staff at the State and County level have the State's permission to correct the vehicle system data. Further, the State maintains different error reports that are regularly reviewed by staff and used to evaluate needs for procedural or programming changes, updates to the State documentation, and/or training modifications. The Vehicle Data Management staff has principal responsibility for error corrections within the vehicle data system. In addition, Texas has well established protocols (e.g., information bulletins and webinars) to communicate error occurrences and updates with key users and to receive users' inputs about potential changes or updates. The State also uses a change management process to triage and assess inputs that are received from key users and to initiate and prioritize further actions.

Vehicle Data 2019 STRAP Recommendations

NHTSA completed the State Traffic Records Assessment Program (STRAP) of Texas in May 2019. The Vehicle data section received a score of 72.4%. Vehicle data was rated perfectly in the "Description and Contents", "Applicable Guidelines", and "Data Dictionary" sections but opportunities for improvement exist in the "Interfaces" and "Data Quality Control Program" sections.

STRAP Sections						
Description and Contents	**Applicable Guidelines**	**Data Dictionaries**	**Procedures / Process Flow**	**Interfaces**	**Data Quality Control Programs**	**Overall**
100%	100%	100%	80.3%	57.6%	45.3%	72.4%

Below is a summary of the STRAP vehicle data recommendations and responses.

STRAP Numbers	STRAP Recommendation	Texas Response	Implementation Status
90-98	Create a process flow diagram for the entire vehicle data system.	The State maintains the print title flow diagram and numerous detailed use case diagrams that specify different processes and procedures within the vehicle data system. However, the State does not have a process flow diagram describing the whole vehicle data system due to the complexity of the system. Flow diagrams for specific processes can be developed on an as needed basis if necessary.	None
83-85	Efficiency could be improved by using real-time NMVTIS query process instead of currently used batch process.	TxDMV has written a white paper detailing their decision not to pursue real-time processing which include potential customer service issues if there are delays or problems with the real-time system.	None
102	Develop automated programs to use vehicle system data to verify and validate the vehicle information during initial creation of a citation or crash report.	The vehicle data system can be queried by law enforcement via the Texas Law Enforcement Telecommunications System, and the vehicle information can be used for validation purposes during the creation of citations and crash reports. However, the State does not have established automated processes to validate vehicle information during the initial creation of a citation or crash report.	None

107-113	Develop performance measures for all six attributes of the vehicle data system: timeliness, accuracy, completeness, uniformity, integration, and accessibility.	Performance measures will be developed as part of TTI's FY20 technical assistance to the TRCC.	Ongoing
114-118	Establish audit procedures using the performance measures developed under the data quality control program.	This effort will be pursued following the development of the performance measures.	Planned
99-103	Develop interfaces/integrations with other core traffic records.	Efforts to integrate/interface with other core traffic records will be pursued when appropriate. Linking with driver license (DL) data can help validate DL at time of registration and titling.	Ongoing

Vehicle Data Strategic Plan Objectives

TxDMV and the TRCC Technical Advisor developed the following objectives based on the STRAP and the needs of TxDMV. The following table summarizes specific objectives to improve the Texas vehicle data system over the next five years and the strategies/action steps necessary to achieve those objectives.

Objective	**Strategies/Action Steps**	**Timeline**
4.1 Develop performance measures for the vehicle data system	• TRCC has provided funding to TTI for technical assistance which includes developing performance measures in FY20 • TTI will research performance measures from other states to identify examples for Texas • TTI will work with each TRCC member to develop performance measures for their agency	Dec. 31, 2020
4.2 Establish vehicle data audit procedures using the performance measures developed under the data quality control program	• Develop performance measures (4.1) • Work with TRCC Technical Advisor to establish a data quality control program	Dec. 31, 2020
4.3 Develop interfaces/integrations with other core traffic records	• Link crash vehicle damage data with TxDMV data to reduce salvage title fraud	TBD

4.4 Collect odometer reading data to help enforce the Truth in Mileage Act	• Identify sources of odometer reading data, such as from state vehicle inspections or law enforcement • Identify how to link odometer reading data to the vehicle record	TBD

Driver Data System

The Texas Department of Public Safety (TxDPS), Driver License Division has custodial responsibility of the Texas driver data system, which contains nearly 20 million records. The driver system maintains all critical information including driver's personal information, license type, endorsements, status, conviction history, crash involvement and driver training.

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 data dictionary are documented with each field defined and value depicted. The driver system also has edit checks and data collection guidelines. Updates to the data dictionary and edit checks are all documented and tracked.

Texas maintains accurate and up-to-date procedural manuals regarding the issuance of the driver credential and the reporting and recording of driver education training. These procedures are maintained electronically in a Resource Guide. TxDPS maintains documentation called Evaluate Enforcement Action for further action related to changes in driver license status, which includes an audit log for any changes made. The Cherwell Service Management documents errors and resolutions by tracking customer interactions. Documented procedures are also maintained for the recording of non-citations and convictions. A third-party vendor is responsible for the reporting of criminal convictions.

Texas has established model procedures to detect fraud pertaining to the driver data system. Facial recognition software is used for all photos captured each day, American Association of Motor Vehicle Administrators (AAMVA) fraudulent document recognition training is provided to all front-line staff and documents are validated through the Systematic Alien Verification of Entitlements (SAVE) program.

There is a Fraud Team that works with law enforcement to detect potential fraudulent activity. Internal fraud is monitored through weekly audits of issuance transactions and the iWatch Program, which allows employees and customers to anonymously report fraudulent activity. Texas has established procedures to prevent Commercial Driver License (CDL) fraud and appropriately maintain system and information security.

Crash data is transmitted in a daily batch file to the driver system. Citation data is sent electronically from certain courts and vendor.

Texas has an interface link between the driver system and the Problem Driver Pointer System (PDPS), the Commercial Driver License Information System (CDLIS), and the Social Security Online Verification (SSOLV). Access to the driver data is provided to law enforcement and photographs are shared with approved law enforcement agencies through the Driver License Image Retrieval (DLIR) system. The State currently does not grant access to information in the driver system to authorized personnel from other States, except for information that is provided through PDPS and CDLIS.

Driver Data 2019 STRAP Recommendations

NHTSA completed the State Traffic Records Assessment Program (STRAP) of Texas in May 2019. The Driver data section received a score of 67.5%. Driver data was rated perfectly in the "Applicable Guidelines" and "Data Dictionary" sections but opportunities for improvement exist in the "Interfaces" and "Data Quality Control Program" sections.

STRAP Sections						
Description and Contents	**Applicable Guidelines**	**Data Dictionaries**	**Procedures / Process Flow**	**Interfaces**	**Data Quality Control Programs**	**Overall**
76.7%	100.0%	100.0%	82.4%	57.1%	45.3%	67.5%

Below is a summary of the STRAP crash data recommendations and responses.

STRAP Numbers	STRAP Recommendation	Texas Response	Implementation Status
136	Explore the creation of policy for purging of obsolete data in driver system.	The record retention requirement in Texas is 125 years. There are no plans to create a purge policy	None
134	Create a process flow diagram outlining the driver system's key data process flow, including inputs from other components.	All process flows are documented in written use cases and specification documents. Diagrams are not part of these documents. There are no plans to create diagrams at this time.	None
143-149	Develop interfaces/integrate with other core traffic records	The State's crash and citation data is not electronically linked to the driver system. However, crash occurrence is transmitted in a daily batch file to the driver system. Citation data is sent electronically from certain courts and vendor. Improved links will be explored as part of ongoing TRCC efforts.	None
150-158	Develop performance measures for all six attributes of the driver data system: timeliness, accuracy, completeness, uniformity, integration, and accessibility.	Performance measures will be developed as part of TTI's FY20 technical assistance to the TRCC.	Ongoing
159-163	Establish audit procedures using the performance measures developed under	This effort will be pursued following the development of the performance measures.	Planned

	the data quality control program.		
137, 145	Develop a DUI Tracking Database	DPS has transitioned to using SPURS to track DWIs internally and is working on providing data for external stakeholders.	In Progress

Driver Data Strategic Plan Objectives

The TRCC Technical Advisor developed the following objectives based on the STRAP. The following table summarizes specific objectives to improve the Texas driver data system over the next five years and the strategies/action steps necessary to achieve those objectives.

Objective	**Strategies/Action Steps**	**Timeline**
5.1 Develop performance measures for the driver data system	• TRCC has provided funding to TTI for technical assistance which includes developing performance measures in FY20 • TTI will research performance measures from other states to identify examples for Texas • TTI will work with each TRCC member to develop performance measures for their agency	Sept. 30, 2020
5.2 Establish driver data audit procedures using the performance measures developed under the data quality control program	• Develop performance measures (5.1) • Work with TRCC Technical Advisor to establish a data quality control program	Sept. 30, 2020
5.3 Develop interfaces/integrations with other core traffic records	Linkages will be explored as part of ongoing TRCC efforts.	TBD

Roadway Data System

The Texas Department of Transportation (TxDOT) is the agency responsible for collecting and maintaining the roadway information system for the State. According to Highway Statistics 2018 (Federal Highway Administration), TxDOT maintains 80,455 miles of state-owned highways. This mileage represents roughly 26% of the 314,648 miles of road in Texas. The remaining miles of road are maintained by the 254 counties, over 1,200 municipalities, a variety of federal agencies, and various toll road authorities.

Roadway and traffic data elements are maintained within a statewide linear referencing system (LRS). Through this LRS, TxDOT maintains data on all 314,648 miles of public road and enables linkages between road, traffic data, bridge, and pavement condition databases in the Geospatial Roadway Inventory Database (GRID). As all the information contained within GRID is maintained by TxDOT, the data is collected according to a set of collection, management, and submission standards to insure the similar information quality. Local data is submitted to TxDOT and manipulated to be included in the system.

TxDOT maintains a data dictionary for all data elements including many of the Model Inventory of Roadway Elements (MIRE) Fundamental Data Elements (FDEs). MIRE FDE elements required by the Highway Performance Monitoring System (HPMS) are included and documented.

Roadway Data 2019 STRAP Recommendations

NHTSA completed the State Traffic Records Assessment Program (STRAP) of Texas in May 2019. The Roadway data section received a score of 61.7%. Roadway data received a strong score in the "Description and Contents" section but opportunities for improvement exist in the "Data Dictionary" and "Data Quality Control Program" sections.

STRAP Sections						
Description and Contents	**Applicable Guidelines**	**Data Dictionaries**	**Procedures / Process Flow**	**Interfaces**	**Data Quality Control Programs**	**Overall**
93.3%	66.7%	46.7%	70.8%	72.2%	47.3%	61.7%

Below is a summary of the STRAP roadway data recommendations and responses.

STRAP Numbers	STRAP Recommendation	Texas Response	Implementation Status
169-172	Include the remaining Model Inventory of Roadway Elements (MIRE) Fundamental Data Elements (FDEs).	Currently TxDOT is working on collecting county level data through the Data Sharing and Updates Application (DUSA). In the long term TxDOT will work on obtaining municipal level data. TxDOT is developing a crowd source tool to develop an intersection inventory and has begun steps to purchase a third	Ongoing

		party tool to manage the intersection data.	
168	TxDOT should further their safety analyses by interfacing the available data, such as crash data, via the LRS.	Roadway data is linked to crash data in the Crash Records Information System (CRIS) but crash data is not linked to roadway data in the roadway data. There are no plans to pursue this linkage at this time.	None
190-201	Develop performance measures for all six attributes of the roadway data system: timeliness, accuracy, completeness, uniformity, integration, and accessibility.	Performance measures will be developed as part of TTI's FY20 technical assistance to the TRCC.	Ongoing
186-189	Establish audit procedures using the performance measures developed under the data quality control program.	This effort will be pursued following the development of the performance measures.	Planned

Roadway Data Strategic Plan Objectives

TxDOT and the TRCC Technical Advisor developed the following objectives based on the STRAP and the needs of TxDOT. The following table summarizes specific objectives to improve the Texas roadway data system over the next five years and the strategies/action steps necessary to achieve those objectives.

Over the past two years, support for GRID from TxDOT's IT vendor has been limited to one small enhancement project. This project addressed a small handful of minor, but important issues with the GRID system. TPP expects to continue to work with TxDOT's IT vendor to make a series of high-priority enhancements to the GRID application. IT has committed to securing dedicated resources to continue to enhance and improve the GRID application. TPP also successfully transitioned from maintaining base Roadway Network geometry data in ArcGIS 10.x to maintaining it in ArcGIS Pro. Future enhancements also include transitioning from raster to vector tiles, resurrecting the city street inventory program, developing an intersection and interchange inventory, and implementing performance measures for Roadway Inventory updates.

Objective	**Strategies/Action Steps**	**Timeline**
6.1 Include the remaining Model Inventory of Roadway Elements (MIRE) Fundamental Data Elements (FDEs)	• Participation by counties in submitting roadway inventory updates through TPP's online Data Sharing and Updates Application (DUSA) system grew from 68 in 2018 to 75 in 2019 (with 43 participating in both years). The number of updates grew from 9,800 to 19,300. • Identify how to obtain municipal data	TBD

6.2 Develop an intersection database	• Crowd sourcing tool will be used to create the initial database (In Progress) • Create intersection subcommittee to provide guidance on the development of an intersection database (Complete) • Identify a vendor to maintain the database (Complete)	Ongoing
6.3 Develop performance measures for the roadway data system	• TRCC has provided funding to TTI for technical assistance which includes developing performance measures in FY20 (Complete) • TTI will research performance measures from other states to identify examples for Texas (Complete) • TTI will work with each TRCC member to develop performance measures for their agency (In Progress)	Sept. 30, 2020
6.4 Establish roadway data audit procedures using the performance measures developed under the data quality control program	• Develop performance measures (6.3) • Work with TRCC Technical Advisor to establish a data quality control program	Sept. 30, 2020
6.5 GRID Enhancements	• Identify and prioritize enhancements (Complete) • TxDOT IT vendor has completed some enhancements and is currently (April 2020) working on another enhancement • Work with TxDOT IT to identify long term support for remaining enhancements	Ongoing
6.6 Upgrade to ArcGIS Pro	• Convert custom ArcMap tools/toolbars used for editing roadway network to ArcPro	Complete
6.7 Restart the city street inventory program	• Expand outreach of DUSA application to cities • Coordinate with regional E911 entities to obtain local roadway linework	December 31, 2021
6.8 Statewide review of important on-system roadway attributes	• Review important roadway attributes including traffic volume, presence and type of medians, and number of lanes	In Progress

Citation and Adjudication Data System

Texas does not have a unified court system and lacks a statewide citation system. Instead, courts and law enforcement agencies are independent of one another regarding the management of citations. There are numerous court management systems (CMS) and records management systems (RMS) in use by courts and law enforcement agencies around the state. Consequently, there is no citation data uniformity across the state and records are created and stored by each individual agency instead of in a central reporting system and repository.

The Office of Court Administration (OCA), through TRCC funding, explored the development of a citation repository that would collect information on all citations issued in the state, but not the adjudication. Due to the cost of development and maintenance this effort was not pursued.

DPS and OCA both have representatives on the TRCC to represent the needs and interests of law enforcement and the courts as the TRCC explores ways to improve citation reporting.

Citation and Adjudication Data 2019 STRAP Recommendations

NHTSA completed the State Traffic Records Assessment Program (STRAP) of Texas in May 2019. The Citation and Adjudication data section received a score of 50.3%. Citation and Adjudication data has many opportunities for improvement in the "Applicable Guidelines", "Data Dictionaries", "Interfaces" and "Data Quality Control Program" sections. The many areas for improvement are primarily due to the lack of a statewide citation system.

STRAP Sections						
Description and Contents	**Applicable Guidelines**	**Data Dictionaries**	**Procedures / Process Flow**	**Interfaces**	**Data Quality Control Programs**	**Overall**
61.4%	43.9%	36.5%	69.1%	40.5%	43.6%	50.3%

Below is a summary of the STRAP citation and adjudication data recommendations and responses.

STRAP Numbers	STRAP Recommendation	Texas Response	Implementation Status
244-249	Develop baseline measures for aspects of data quality before implementation of the new citation system, in an effort to demonstrate data improvements that are attributable to the new system.	OCA has done some work to identify data elements that should be measured before and after the implementation of a statewide citation system.	Partial

205	Establish a statewide citation tracking system.	The TRCC and OCA looked into creating a citation repository but several issues including funding for maintenance once the database was created could not identified. There are no plans in the immediate future to pursue a statewide citation database.	None
244-253	Establish a formal and comprehensive data quality control program including the development of performance measures.	Performance measures will be developed as part of TTI's FY20 technical assistance to the TRCC.	Ongoing
244-253	Establish audit procedures using the performance measures developed under the data quality control program.	This effort will be pursued following the development of the performance measures.	Planned
229-230	Collect accurate BACs for DUI arrests, rather than ranges, in order to ascertain the role of high BAC in recidivism.	Data on BAC level, collection type (blood/breath), and test location (Hospital, PD, etc.) is collected on different systems. DPS has developed a new system (SPURS) and is currently working on procedures to extract BAC data and analyze.	Ongoing
229-230	Develop a DUI Tracking Database.	DPS has transitioned to using SPURS to track DWIs internally and is working on providing data for external stakeholders.	In Progress

Citation and Adjudication Strategic Plan Objectives

TxDPS, OCA, and the TRCC Technical Advisor developed the following objectives based on the STRAP and the needs of DPS, OCA, courts, and law enforcement around the state. The following table summarizes specific objectives to improve the Texas citation and adjudication data system over the next five years and the strategies/action steps necessary to achieve those objectives.

Objective	Strategies/Action Steps	Timeline
7.1 Develop baseline measures for aspects of data quality before implementation of the new citation system, in an effort to demonstrate data improvements that are attributable to the new system	• Work with OCA and TxDPS to identify data elements that should be measured and tracked	TBD
7.2 Develop performance measures for the citation data system for TxDPS	• TRCC has provided funding to TTI for technical assistance which includes developing performance measures in FY20 • TTI will research performance measures from other states to identify examples for Texas • TTI will work with each TRCC member to develop performance measures for their agency	DPS has created Completeness and Accessibility Performance Measures.
7.3 Establish citation data audit procedures using the performance measures developed under the data quality control program	• Develop performance measures (7.2) • Work with TRCC Technical Advisor to establish a data quality control program	DPS is monitoring its Completeness and Accessibility Performance Measures monthly.
7.4 Collect accurate BACs for DUI arrests, rather than ranges, in order to ascertain the role of high BAC in recidivism	• Work with TxDPS to see if SPURS will accomplish this	TBD
7.5 Develop a DUI Tracking Database	• DPS is planning to develop processes to link and analyze crash, citation, and SPURS data containing DWI clues.	TBD
7.6 Promote both correct and uniform charging language	• OCA is working on a statewide database for case data. Part of that effort is encouraging everyone to use the AIS code	TBD

Injury Surveillance Data System

Texas has the five major components of a traffic records injury surveillance system (pre-hospital emergency medical services (EMS), trauma registry, emergency department, hospital discharge, and vital records) and most of that data is available and accessible to traffic safety partners, as well as the public through either aggregate summary tables or department approved data use agreements. The traffic safety community in Texas has used each of the available data sets collaboratively to identify problems and evaluate programs, such as pedestrian safety, which illustrates the strength and effect of having such data available. Related data sets, such as submersion, traumatic brain injury, and spinal cord injury, are also available for incorporation into analyses.

The pre-hospital data collection system is managed by the Department of State Health Services (DSHS) Office of EMS/Trauma Registries and all data is submitted electronically. The data management system is NEMSIS-compliant (version 3.3.4) and incorporate appropriate edit checks and validations to ensure that the data falls within acceptable parameters. There is formal documentation of a data dictionary and user manuals for providers.

The statewide emergency department and hospital discharge data systems are managed by the Texas Health Care Information Collection (THCIC). There are publicly available documents related to these systems, including data dictionaries.

There is a statewide trauma registry that is also managed at the DSHS Office of EMS/Trauma Registries. It is compliant with the National Trauma Data Standard and a data dictionary is readily available.

The DSHS Vital Statistics section is responsible for managing all vital statistics data including death certificates. The Texas Electronic Vital Events Registry (TxEver) is used to manage that data. As with most other States, Texas collects death certificates from hospitals, funeral homes, and coroners and submits all data to the National Center for Health Statistics (NCHS) for quality review and assignment of cause-of-death ICD-10 codes.

Injury Surveillance Data 2019 STRAP Recommendations

NHTSA completed the State Traffic Records Assessment Program (STRAP) of Texas in May 2019. The Injury Surveillance data section received a score of 64.5%. Injury Surveillance data received strong scores in the “Applicable Guidelines” and “Procedures/Process Flow” sections but opportunities for improvement exist in the “Interfaces” and “Data Quality Control Program” sections.

STRAP Sections						
Description and Contents	**Applicable Guidelines**	**Data Dictionaries**	**Procedures / Process Flow**	**Interfaces**	**Data Quality Control Programs**	**Overall**
70.6%	82.5%	66.7%	77.0%	33.3%	56.7%	64.5%

Below is a summary of the STRAP injury surveillance data recommendations and responses.

STRAP Number	STRAP Recommendation	Texas Response	Implementation Status
257	Pursue access to the emergency department data set.	Currently DSHS has access to hospital discharge data and emergency department data but needs to obtain an ongoing IRB approval.	Complete
302-306, 333	Document processes for returning records to submitting agencies for correction and following through to ensure resubmission.	Approximately 100% of Trauma and EMS records are submitted electronically. These records are automatically checked against the schema and web validation checks. Rejected records are automatically returned to the sender along with a feedback report detailing the reason for the rejection. DSHS is developing ways to monitor and reach out to customers who have rejected records.	Ongoing
318-324, 334-339, 350-356, 366-372	Establish a formal and comprehensive data quality control program including the development of performance measures.	Performance measures will be developed as part of TTI's FY20 technical assistance to the TRCC.	Ongoing
325-330, 341-346, 357-362, 373-378	Establish audit procedures using the performance measures developed under the data quality control program.	This effort will be pursued following the development of the performance measures.	Planned
330, 346, 362, 378	Participate in and share data quality metrics with the Traffic Records Coordinating Committee.	DSHS provides data quality metrics requested by the TRCC.	Ongoing
	Expand (or create) a relationship between the Department of State Health Services Vital Statistics section and the Fatality Analysis Reporting System analyst.	DSHS will continue to develop methods to match EMS and death certificate data from Vital Statistics with FARS.	Ongoing

312-314	Develop interfaces/integrate with other core traffic records.	DSHS currently receives crash data from TxDOT that is linked with EMS data, which is then linked with Trauma data. Current issues center on ownership of the shared data and how best to use it.	Ongoing

Injury Surveillance Data Strategic Plan Objectives

DSHS and the TRCC Technical Advisor developed the following objectives based on the STRAP and the needs of DSHS. The following table summarizes specific objectives to improve the Texas vehicle data system over the next five years and the strategies/action steps necessary to achieve those objectives.

As the Emergency Medical Services (EMS) & Trauma Registry program (EMSTR) moves forward the program will focus on finding ways to collect data more efficiently and leveraging the use the use of valuable EMS and Trauma Data. The program will do a technical/systematic third-party review of the current vendor and determine if there are more efficient and appropriate ways for the state to collect data. EMSTR will also utilize new tools to access and analyze data faster and more efficiently. This multi-year data access project will result in sharing data with stakeholders, so they utilize the EMSTR data to inform their strategies and goals. Lastly the program will continue linking motor vehicle crashes and medical information to fully understand the health outcomes of crashes.

Objective	**Strategies/Action Steps**	**Timeline**
8.1 Pursue access to the emergency department data set	• Program has obtained emergency department data and is in the process of performing initial analysis	Aug. 31, 2021
8.2 Develop performance measures for the injury surveillance data system for DSHS	• TRCC has provided funding to TTI for technical assistance which includes developing performance measures in FY20 • TTI will research performance measures from other states to identify examples for Texas • TTI will work with each TRCC member to develop performance measures for their agency	Sept. 30, 2020
8.3 Establish injury surveillance data audit procedures using the performance measures developed under the data quality control program	• Develop performance measures (8.3) • Work with TRCC Technical Advisor to establish a data quality control program	Sept. 30, 2020

8.4 Collaborate with TxDOT to improve FARS data completeness	• Identify FARS variables that EMS Registry can help inform • Determine the feasibility of matching FARS records to EMS registry records • Develop data sharing procedures and policies to share data across both systems • Monitor data quality enhancement and integration of both FARS and EMS Registry.	TBD
8.5 Continue the many uses of the EMS/Trauma Registry, including injury prevention programs and trauma designation processes, and publicize these through involvement with the TRCC and through injury prevention and EMS conferences	• Continue outreach efforts which have previously included DSHS staff holding stakeholder webinars presenting EMS and Hospital Summary Reports and making presentations at Texas Public Health Association, Texas Trauma Coordinator's Forum; and GETAC's Injury Prevention Committee, EMS Committee, and Trauma Systems Committee • Work with TxDOT and other traffic safety stakeholders to identify traffic safety related questions DSHS should be looking at • Create a more formal communications plan or platform to better disseminate the data and analysis	Ongoing
8.6 Seek legislative funding to support the ongoing operation and needs of the EMS/Trauma Registry data collection system	• Secured DSHS matching funding for TxDOT e-Grant for FY2019.	Ongoing
8.7 Use the hospital discharge dataset to calculate the number of major trauma cases in Texas in order to estimate the extent of underreporting to the EMS/Registry	• Program has obtained hospital discharge data in 2018 • Work with TxDOT and other traffic safety stakeholders to identify traffic safety related questions DSHS should be looking at	Ongoing
8.8 Continue linkage project to match EMS runs to major trauma cases in the Registry for the dual benefit of improving EMS information on trauma cases and providing EMS agencies with outcome information	• The Injury Epidemiology & Surveillance Branch has successfully linked EMS and trauma hospitalizations with crash data for 2010-2016	Ongoing

8.9 Link the crash and EMS/Trauma Registry data, once crash data become available, so that the burden of motor vehicle crashes in Texas can be better understood	• In progress: TxDOT provides a data extract file to DSHS to use in their EMS & Trauma Registries system to link crash data with EMS and trauma hospitalizations. The EMS and Trauma Programs have successfully linked EMS and trauma hospitalizations with Crash data for 2010-2015 • Work with TxDOT and other traffic safety stakeholders to identify traffic safety related questions DSHS should be looking at • Create a more formal communications plan or platform to better disseminate the data and analysis	Ongoing
8.10 Collaborate with all data-sharing partners in the developing protocols, memoranda of understanding, and data sharing agreements and methodologies that will enable the injury prevention and traffic safety community to conduct analytical and research activities as authorized users. This should be done under the guidance of the TRCC	• Ongoing. Currently collaborating with Texas A&M Transportation Institute, local hospitals, and local public health agencies to study factors on crashes.	Ongoing
8.11 Determine the feasibility of removing restrictions regarding linkage of the hospital discharge database to other systems in the Injury Surveillance System	• Program has been able to obtain hospital discharge data and is in the process of evaluating linkages to crash data.	Ongoing

Performance Measures

TxDOT, DSHS, and TxDPS provide annual performance measures to be included in the strategic plan.

Performance Measure #1: Completeness of Crash Reporting

A. Performance Measure Used to Track Improvements

Completeness of the crash data - The number of crash reports submitted to TxDOT.

B. Narrative Description of Calculation / Estimation Method

Previous Period (April 1, 2018 – March 31, 2019):

The number of crash records submitted during the previous reporting period was 631,363.

Current Period (April 1, 2019 – March 31, 2020):

The number of crash records submitted during the current reporting period was 643,329.

Evaluation:

There was an increase of 11,966 crash reports submitted to TxDOT.

Required Data	April 1, 2013 – March 31, 2014	April 1, 2014 – March 31, 2015	April 1, 2015 – March 31, 2015	April 1, 2016 – March 31, 2017	April 1, 2017 – March 31, 2018	April 1, 2018 – March 31, 2019	April 1, 2019 – March 31, 2020
Number of crash reports submitted	528,474	568,308	611,769	629,520	619,274	631,363	643,329

C. Title, Number and Strategic Plan page reference for each Traffic Records System improvement project to which this performance measure relates

This performance measure references the following objectives found on page 18 of the strategic plan:

- 3.5 Establish an ongoing law enforcement training program specifically dedicated to improving crash data timeliness, completeness, accuracy, and consistency

- 3.7 Achieve 100% electronic crash report submission through CRASH, Submission Services, or CRIS Mobile Application

Performance Measure #2.1: Timeliness of Crash Reporting

D. Performance Measure Used to Track Improvements

Timeliness of the crash data - The number of crash reports available for reporting within 30 days of the date of the crash.

E. Narrative Description of Calculation / Estimation Method

Previous Period (April 1, 2018 – March 31, 2019):

The number of crash records available for reporting within 30 days of the date of the crash

during the previous reporting period was 600,402.

Current Period (April 1, 2019 – March 31, 2020):
The number of crash records available for reporting within 30 days of the date of the crash during the current reporting period was 626,764.

Evaluation:
There was an increase of 26,362 crash records available for reporting within 30 days of the date of the crash.

Required Data	April 1, 2013 – March 31, 2014	April 1, 2014 – March 31, 2015	April 1, 2015 – March 31, 2015	April 1, 2016 – March 31, 2017	April 1, 2017 – March 31, 2018	April 1, 2018 – March 31, 2019	April 1, 2019 – March 31, 2020
Number of crash records available for reporting within 30 days of the date of crash	463,101	525,190	557,684	595,816	593,648	600,402	626,764

F. Title, Number and Strategic Plan page reference for each Traffic Records System improvement project to which this performance measure relates
This performance measure references the following objectives found on page 18 of the strategic plan:

- 3.5 Establish an ongoing law enforcement training program specifically dedicated to improving crash data timeliness, completeness, accuracy, and consistency

- 3.7 Achieve 100% electronic crash report submission through CRASH, Submission Services, or CRIS Mobile Application

Performance Measure #2.2: Timeliness of Crash Reporting

A. Performance Measure Used to Track Improvements
Timeliness of the crash data - Average number of days between date of crash and availability in warehouse

B. Narrative Description of Calculation / Estimation Method
Previous Period (April 1, 2018 – March 31, 2019):
The average number of days between date of crash and availability in warehouse during the previous reporting period was 12.27.

Current Period (April 1, 2019 – March 31, 2020):
The average number of days between date of crash and availability in warehouse during the current reporting period was 9.08.

Evaluation:

The average number of days between date of crash and availability in warehouse improved by 3.19 days.

Required Data	April 1, 2013 – March 31, 2014	April 1, 2014 – March 31, 2015	April 1, 2015 – March 31, 2015	April 1, 2016 – March 31, 2017	April 1, 2017 – March 31, 2018	April 1, 2018 – March 31, 2019	April 1, 2019 – March 31, 2020
Average number of days between date of crash and availability in warehouse	20.77	17.42	22.92	12.06	10.92	12.27	9.08

C. Title, Number and Strategic Plan page reference for each Traffic Records System improvement project to which this performance measure relates

This performance measure references the following objectives found on page 18 of the strategic plan:

- 3.5 Establish an ongoing law enforcement training program specifically dedicated to improving crash data timeliness, completeness, accuracy, and consistency

- 3.7 Achieve 100% electronic crash report submission through CRASH, Submission Services, or CRIS Mobile Application

Performance Measure #2.3: Timeliness of Crash Reporting

A. Performance Measure Used to Track Improvements

Timeliness of the crash data - Percentage of all crash reports entered into the database available for reporting) within 30 days after the crash

B. Narrative Description of Calculation / Estimation Method

Previous Period (April 1, 2018 – March 31, 2019):

The percentage of all crash reports entered into the database available for reporting) within 30 days after the crash during the previous reporting period was 95.10%.

Current Period (April 1, 2019 – March 31, 2020):

The percentage of all crash reports entered into the database available for reporting) within 30 days after the crash during the current reporting period was 97.43.

Evaluation:

There was a 2.33 % increase in the percentage of all crash reports entered into the database available for reporting) within 30 days after the crash.

Required Data	April 1, 2013 – March 31, 2014	April 1, 2014 – March 31, 2015	April 1, 2015 – March 31, 2015	April 1, 2016 – March 31, 2017	April 1, 2017 – March 31, 2018	April 1, 2018 – March 31, 2019	April 1, 2019 – March 31, 2020
Percentage of all crash reports entered into the database available for reporting) within 30 days after the crash	87.63%	92.41%	91.16%	94.65%	95.86%	95.10%	97.43%

C. Title, Number and Strategic Plan page reference for each Traffic Records System improvement project to which this performance measure relates

This performance measure references the following objectives found on page 18 of the strategic plan:

- 3.5 Establish an ongoing law enforcement training program specifically dedicated to improving crash data timeliness, completeness, accuracy, and consistency

- 3.7 Achieve 100% electronic crash report submission through CRASH, Submission Services, or CRIS Mobile Application

Performance Measure #3: Completeness of the EMS/Trauma Registry

A. Performance Measure Used to Track Improvements

Completeness of the registry data – Percentage of patient care records with no missing critical data elements.

B. Narrative Description of Performance Measure Calculation

Previous Period (April 1, 2018 – March 31, 2019):

The number of Hospital (Trauma Registry) records submitted was 158,745. The percentage of patient care reports with no missing *critical* data elements was 89.8%.

Current Period (April 1, 2019 – March 31, 2020):

The number of Hospital (Trauma Registry) records submitted was 151,903. The percentage of patient care reports with no missing *critical* data elements was 94.2%.

Evaluation:

There was a 4.9%% increase in the percentage of Hospital (Trauma Registry) patient care reports with no missing critical data elements. Note, data provided here is preliminary.

Finalized Hospital (Trauma Registry) data will be finalized in 2022 and may differ from preliminary data provided here due to ongoing record submission and data cleaning.

Previous Period	**Current Period**
April 1, 2018 – March 31, 2019	April 1, 2019 – March 31, 2020
The percentage of Hospital (Trauma Registry) patient care reports with no missing critical data elements. Discharge Date and Time: 89.8 %	The percentage of Hospital (Trauma Registry) patient care reports with no missing critical data elements. Discharge Date and Time: 94.2%

Improvement

Critical Date Element	Percent Change
Discharge Date and Time:	4.9**%**

C. Title, Number and Strategic Plan page reference for each Traffic Records System improvement project to which this performance measure relates

This performance measure references the following objective found on page 36 of the strategic plan:

- 8.5 Continue the many uses of the EMS/Trauma Registry, including injury prevention programs and trauma designation processes, and publicize these through involvement with the TRCC and through injury prevention and EMS conferences

- 8.8 Continue linkage project to match EMS runs to major trauma cases in the Registry for the dual benefit of improving EMS information on trauma cases and providing EMS agencies with outcome information

- 8.9 Link the crash and EMS/Trauma Registry data, once crash data become available, so that the burden of motor vehicle crashes in Texas can be better understood

Performance Measure #4: Completeness of DPS Citation Data

A. Performance Measure Used to Track Improvements

Completeness of DPS Citation Data – Percentage of DPS citation records with no missing critical data elements. DPS' goal is to achieve/maintain at minimum 98% of citation records with no missing critical data elements.

B. Narrative Description of Performance Measure Calculation

Previous Period (4/1/2018 – 3/31/2019):

The percentage of DPS citation records with no missing *critical* data elements was 98.68%.

Current Period (4/1/2019 – 3/31/2020):

The percentage of DPS citation records with no missing *critical* data elements was 98.77%.

Evaluation:

There was a .09% increase in the percentage of DPS citation records with no missing critical data elements.

C. Title, Number and Strategic Plan page reference for each Traffic Records System improvement project to which this performance measure relates

This performance measure references the following objective found on page 31 of the strategic plan:

- 7.2 Develop performance measures for the citation data system for TxDPS
- 7.3 Establish citation data audit procedures using the performance measures developed under the data quality control program

FY21 Funded Projects

This section provides an overview of projects recommended for funding in FY21.

Agency	eGrants ID	Title	FY2021 Recommended Awarded
TxDOT	TBD-CRIS	CRIS Help Desk	1,375,000.00
Texas Municipal Police Association	2021-TMPA-G-1YG-0016	Law Enforcement Advanced DWI Reporting System (LEADRS)	902,156.51
Texas Department of Public Safety	2021-TDPS-G-1YG-0107	State Traffic Records System Improvement and Expansion of Crash Data Analysis	1,000,391.37
Texas A&M Transportation Institute	2021-TTI-G-1YG-0064	Improving Crash Records through Identifying Barriers and Training Law Enforcement Officers	108,223.81
Texas A&M Transportation Institute	2021-TTI-G-1YG-0035	Providing Technical Assistance to the Texas Traffic Records Coordinating Committee (TRCC)	104,216.09
Texas Department of State Health Services - ISG	2021-TDSHS-IS-G-1YG-0113	Emergency Medical Services and Trauma Registry Data Transition	957,960.05
International Association of Directors of Law Enforcement Standards and Training	2021-IADLEST-G-1YG-0151	Using Data Driven Strategies and Agency and Analytical Training to Reduce Crashes and Social Harms	395,000.00

Crash Records Information System Projects (CRIS)

Funding supports various aspects of CRIS, including the training of law enforcement to us the online reporting system CRASH, updates to CRASH and CRIS. Additionally, funding covers reviewing the current standards for NEIM, CJIS and MMUCC to enhance CRIS to ensure compliance, provide CRIS Help Desk Services, and support automated Annual Spatial Load.

Law Enforcement Advanced DWI/DUI Reporting System (LEADRS)

Law Enforcement Advanced DWI Reporting System (LEADRS) is a Driving While Intoxicated (DWI) reporting system for law enforcement created to streamline the DWI arrest process while increasing the quality of the case for prosecution. This year, LEADRS is creating an analytical module for utilization of this data from arrest through court adjudication.

Since 2005, LEADRS has been used by many Texas law enforcement agencies to process DWI arrests. Comprehensive information from DWI cases to include defendant information, vehicle information, reason for stop, Standardized Field Sobriety Testing (SFST) clues, signs of intoxication, type of intoxication, toxicology, and final case disposition are all data sources LEADRS captures.

LEADRS staff coordinates with the Texas District and County Attorney's Association (TDCAA) to provide legal direction and to create charging documents for DWI cases. The Texas Alcoholic Beverage Commission (TABC) has direct access to all LEADRS cases involving a defendant who left a business that serves alcohol. This provides TABC with real-time data for follow-up investigations. In 2018, LEADRS began using this technology to build a Drug Recognition Expert (DRE) module. LEADRS staff have been coordinating with the International Association of Chiefs of Police (IACP) and the National Highway Traffic Safety Administration (NHTSA) to ensure our module is current and captures information needed for drug data analysis.

State Traffic Records System Improvement and Expansion of Crash Data Analysis (TxDPS)

It is vital that DPS be able to monitor the quality of citation and crash related data to improve the accuracy and accessibility of its data analysis products. This funding request is to: 1) retain the full-time employees hired through the FY 2015 – FY 2019 Traffic Safety grants; 2) maintain current analytical software for 26 workstations, in furtherance of improving our data, data accuracy and related processes, and to move towards acquiring and analyzing data from other stakeholder agencies; and 3) routinely provide and continue to expand the accessibility of relevant highway safety data products to vested internal and external stakeholders.

Through continued data analysis by these grant-funded employees, DPS will be able to thoroughly evaluate and improve the accuracy and accessibility of citation and crash-related data. To increase accuracy HSOC will continue to conduct regular data extraction of citation information from its databases to seek out missing critical data fields. From this, HSOC will provide leadership with suggestions for training and resource material, which can be utilized to better educate personnel on the importance of complete and accurate data entry.

Improving Crash Records through Identifying Barriers and Training Law Enforcement Officers (TTI)

To improve the accuracy and completeness of crash data, the Texas A&M Transportation Institute (TTI) is proposing a project to identify barriers to completing crash forms and then develop training materials for law enforcement officers. The project will be completed through the following objectives: 1) conducting a crash analysis to identify key fields commonly left blank or incomplete by police officers in CRIS data; 2) conducting focus groups to determine barriers to completing crash forms as accurately and completely as possible; 3) conducting a review of current educational efforts and materials being utilized to educate law enforcement officers; and 4) developing training materials for law enforcement agencies and officers aimed.

Providing Technical Assistance to the Texas Traffic Records Coordinating Committee (TTI)

TTI will provide technical assistance to the TRCC by assisting the TRCC coordinator with each TRCC meeting, including the development of the meeting agenda and the taking of minutes. Additionally, the technical advisor will work with each TRCC member to update their section of the strategic plan and to monitor performance measures for their respective database. Also, the technical advisor will assist with coordinating the steering and intersection database subcommittees. Finally, TTI will conduct a feasibility study integrating traffic records data using the Texas Virtual Data Library.

Assessment and Gap Analysis of Data Issues to Determine EMS/Trauma Registries System Enhancements (DSHS – ISG)

The EMS & Trauma Registry program (EMSTR) program has made huge strides in being able to collect EMS & Trauma data in national standards in Texas. In 2019 Texas was in the top 5 of states submitting the most records in the country. The EMSTR program continues to find ways to improve system performance and make data available to their stakeholders. A large continuing project for the program will be obtaining improved data access solution. This will increase the speed and access to registry data that the program does not currently have. The program will also continue to expand their data sharing efforts by creating new tools for accessing and manipulating data at local geographic levels. These efforts will allow stakeholders to inform their local and state injury prevention efforts.

Reduce Crashes and Crime by Expanding the DDACTS Model and Technical/Analytical Support (IADLEST)

The International Association of Directors of Law Enforcement Standards and Training (IADLEST) provides training to law enforcement on the principals of Data Driven Approaches to Crime and Traffic Safety (DDACTS) model which reinforces the need for timeliness, completeness, and accuracy when reporting crash data to the Texas Crash Reporting Information System (CRIS) database as a cornerstone in the foundation for developing holistic data-driven solutions to guide law enforcement, engineering and education efforts toward reductions in Social Harms.