Texas Traffic Records Information System Strategic Plan

FY 2019

Texas Traffic Records Coordinating Committee

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# 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 2019 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)](https://www.govinfo.gov/content/pkg/FR-2006-02-02/pdf/FR-2006-02-02.pdf), 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

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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 Injury Prevention | DSHS | Injury Surveillance |
| Rob Klein | Project Manager – Trauma Registry System | 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, four 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 Administration is working to create a data subcommittee that will include LE and others directly involved in inputting and using traffic records data. | 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 will be developed as part of TTI's FY20 technical assistance to the TRCC. | Planned |
| 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 will be developed as part of TTI's FY19 technical assistance to the TRCC. | Ongoing |
| 12 | Create a comprehensive Traffic Records Process Flow showing inputs and outputs for all traffic records related data. | This effort will be developed as part of TTI's FY19 technical assistance to the TRCC. | Ongoing |
| 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 will be developed as part of TTI's FY19 technical assistance to the TRCC. | Ongoing |
| 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 Administration is working to create a data subcommittee that will include LE and others directly involved in inputting and using traffic records data. Additional subcommittees will be considered as the need arises. | 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 will be developed as part of TTI's FY19 technical assistance to the TRCC. | Ongoing |
| 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. | TRCC Administration will be touring the state to seek input from stakeholders on objectives to include in the strategic plan. | 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 to develop 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. Additionally, TRCC administration will develop a system wide process flow and gather all data dictionaries for each database to help facilitate the identification of meaningful linkages that could be pursued.

|  |  |  |
| --- | --- | --- |
| **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) | Sept. 30, 2020 |
| 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 | Sept. 30, 2019 |
| 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 | Sept. 30, 2019 |
| 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 | Sept. 30, 2019 |
| 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 or E-Submission. 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. Both methods require crash reports be validated by over 800 business rules prior to submission. Until September 1, 2019, law enforcement may also submit paper reports via mail. However, in 2017, the 85th Texas Legislature passed into law Senate Bill 312 which requires that all investigating agencies submit crash records electronically by September 1, 2019.

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 not yet adopted the other injury severity definitions into the data dictionary.

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 or debit card, and beginning May 1, 2019, will be accepting Automated Clearing House (ACH) as a payment option as well. 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 certain state agencies 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 elements of a data dictionary, including the definition, allowable values, and business rules are documented, but in separate documents. This is more user friendly and a single combined document would be cumbersome. | 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. | Planned |
| 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 being deployed in Aug. 2019 will track 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 can run reports on data changes and has run reports to look at effects of business rule changes. | None |
| 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 would first need to verify the current definitions compared to the new FARS and ANSI D16.1 definitions and check what changes need to be made. | None |

## 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 | • Review NHTSA Go-Team MMUCC Assessment for recommendations that could be pursued • 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 | TxDOT continues to provide CRASH training to CRASH agencies via webex and in person. An Automated Training Program is planned for CY 2020, which will assist in ongoing and updated training for CRASH users | 2020 |
| 3.6 Work to include crash typing in the pedestrian crash reporting. Use the Pedestrian Crash Analysis Tool (PBCAT) for categories on crash typing | A plan was developed to address this, but currently this is not a high priority issue to address | TBD |
| 3.7 Achieve 100% electronic crash report submission through CRASH or Submission Services | • HB 312 requires electronic crash report submission by 9/1/19 • TxDOT is developing an app to allow LEAs not using CRASH or Submission Services to submit electronically. App will be deployed Aug. 2019 • Continue to train LEAs on submitting crash reports through CRASH | Sept. 1, 2019 |
| 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 refactored RTS is an improved version of the legacy RTS. The objective was to improve the underlying technical implementation with modern, more agile and sustainable technology, while preserving the existing application functionality. The system allows for easier upgrades and enhancements to the application and a more 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. | Planned |
| 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 | Sept. 30, 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 | Sept. 30, 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 Helpdesk Expert Automation Tool (HEAT) 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 is working on a project that would allow for electronic linkage for the citation system and the driver system as well as other traffic records data systems. The Texas Office of Court Administration (OCA) is in the beginning stages of developing a new statewide court reporting system, which could provide electronic linkage between the new adjudication system and the driver system.

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. | Planned |
| 159-163 | 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 |
| 137, 145 | Develop a DUI Tracking Database | TxDPS will begin using TraCS in mid-2020. If other LEAs in Texas begin using TraCS this could serve as the foundation to a DUI tracking database in the long-term. | None |

## 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 2016 (Federal Highway Administration), TxDOT maintains 80,484 miles of state-owned highways. This mileage represents roughly 26% of the 313,656 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 313,656 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. Additionally, TxDOT has begun researching vendors to develop an intersection database. | Ongoing |
| 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. | Planned |
| 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.

Due to a premature end to the original GRID project as well as changing business process and reporting requirements, TPP expects to work with TxDOT’s IT vendor to make a series of 30+ high-priority enhancements to the GRID application. Other plans include transitioning from ArcGIS 10.x to ArcGIS Pro for GIS-based data maintenance, resurrecting the city street inventory program, developing an intersection and interchange inventory, and identifying 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) | • Have all counties submit data through DUSA • Identify how to obtain municipal data | TBD |
| 6.2 Develop an intersection database | • Identify funding source(s) to build and maintain database • Create intersection subcommittee to provide guidance on the development of an intersection database • Identify a vendor to construct the database • Identify who will be responsible for maintaining and updating the database | TBD |
| 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 • 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 |
| 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 • Work with TxDOT IT vendor to implement enhancements | May 21, 2020 |
| 6.6 Upgrade to ArcGIS Pro | • Convert custom ArcMap tools/toolbars used for editing roadway network to ArcPro | Sept. 1, 2019 |
| 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, 2020 |

# 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 is currently upgrading their RMS to the National Model. Once DPS has deployed the National Model by FY2021, there may be a possibility for other law enforcement agencies in the state to be able to receive licensure to also adopt the National Model as their RMS since it was originally developed using federal funds. This has allowed many states to use the National Model as a basis for a statewide citation system and repository. This method will be explored by the TRCC for Texas as well.

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. TxDPS will begin using the National Model in mid-2021. If other LEAs in Texas are able to begin using the National Model this could serve as the foundation to a statewide citation system and repository in the long-term. | 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. | Planned |
| 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 is developing a new system (SPURS) which may be able to do this. BAC data cannot be pulled from citations since those are issued at time of arrest and BAC is determined afterword. SPURS may be able to also track drugs found in a person's system which could be used to monitor trends. | None |
| 229-230 | Develop a DUI Tracking Database. | TxDPS will begin using the National Model in mid-2021. If other LEAs in Texas begin using the National Model this could serve as the foundation to a DUI tracking database in the long-term. | None |

## 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 Establish a statewide citation tracking system | • Work with TxDPS and National Model Administration to identify feasibility of using the National Model as a way to establish a statewide citation tracking system and repository  • Create a uniform statewide citation that can be sequentially numbered and tracked. | TBD |
| 7.3 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 | Sept. 30, 2020 |
| 7.4 Establish citation 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 |
| 7.5 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 |
| 7.6 Develop a DUI Tracking Database | • Work with TxDPS TraCS to identify feasibility of using the National Model as a way to establish a statewide DUI tracking database | TBD |
| 7.7 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, spinal cord injury, and poison control registries, 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 System 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 System. 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. DSHS should be able to get access to emergency department data within two years but would need to obtain an ongoing IRB approval. | None |
| 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 will monitor and reach out to customers who have rejected records. | In progress |
| 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. | Planned |
| 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 can provide an annual summary of the data if requested by the TRCC. | None |
|  | Expand (or create) a relationship between the Department of State Health Services Vital Statistics section and the Fatality Analysis Reporting System analyst. | DSHS would need to hire an epidemiologist to input the data (EMS and death certificate data from Vital Statistics) into FARS. | None |
| 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. | None |

## 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 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 | 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 Hire an epidemiologist to input data into FARS and serve as an analyst for data requests related to traffic safety | • Confirm with FARS that hiring an epidemiologist is the best approach for inputting data into FARS • Identify funding source to support the hiring of an epidemiologist • Identify data request/analysis questions the epidemiologist would be tasked with fulfilling • Develop a data sharing agreement with TxDOT to specify how and to whom linked crash and injury surveillance data will shared | 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 | TBD |
| 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. | TBD |
| 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 | TBD |
| 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 hospital records 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 Hospital records. The EMS and Trauma Programs have successfully linked EMS and hospital records 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 and Dell Medical School to study geographic influences 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: Timeliness of Crash Reporting

1. **Performance Measure Used to Track Improvements**

Crash/Timeliness 2 - The percentage of crash reports entered into the database within 30 days

after the crash.

1. **Narrative Description of Calculation / Estimation Method**

Previous Period (April 1, 2016 – March 31, 2017):

The number of crash records submitted was 628,634. The percentage of all crash reports entered into the database (available for reporting) within 30 days after the crash was 94.78%.

Current Period (April 1, 2017 – March 31, 2018):

The number of crash records submitted was 614,812. The percentage of all crash reports entered into the database (available for reporting) within 30 days after the crash was 96.57%.

Evaluation:

There was a 1.9% 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** |
|
| Number of crash reports submitted | 528,181 | 567,601 | 610,586 | 628,634 | 614,812 |
| Average number of days between date of crash and availability in warehouse | 19.8 | 15.59 | 20.73 | 11.08 | 9.29 |
| Number of crash records available for reporting within 30 days of the date of crash | 463,105 | 525,199 | 557,696 | 595,826 | 593,701 |
| Percentage of all crash reports entered into the database (available for reporting) within 30 days after the crash | 87.68% | 92.53% | 91.34% | 94.78% | 96.57% |

1. **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 or Submission Services

## Performance Measure #2: Completeness of the EMS/Trauma Registry

1. **Performance Measure Used to Track Improvements**

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

1. **Narrative Description of Performance Measure Calculation**

Previous Period (April 1, 2015 – March 31, 2016):

The number of Hospital (Trauma Registry) records submitted was 141,546. The percentage of patient care reports with no missing *critical* data elements was 46.1%.

Current Period (April 1, 2016 – March 31, 2017):

The number of Hospital (Trauma Registry) records submitted was 154,577. The percentage of patient care reports with no missing *critical* data elements was 61.0%.

Evaluation:

There was a 30.4% increase in the percentage of Hospital (Trauma Registry) patient care reports with no missing critical data elements.

|  |  |
| --- | --- |
| **Previous Period** | **Current Period** |
| April 1, 2015 – March 31, 2016 | April 1, 2016 – March 31, 2017 |
| The percentage of Hospital (Trauma Registry) patient care reports with no missing critical data elements.  Discharge Date and Time:       46.1% | The percentage of Hospital (Trauma Registry) patient care reports with no missing critical data elements.  Discharge Date and Time:      60.1% |
| **Improvement**  Critical Date Element                         Percent Change  Discharge Date and Time:                          30.4**%** | |

1. **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 #3: Completeness of DPS Citation Data

1. **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 97% of citation records with no missing critical data elements.

1. **Narrative Description of Performance Measure Calculation**

Previous Period (January 2018):

The percentage of DPS citation records with no missing *critical* data elements was 98.72%.

Current Period (February 2018):

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

Evaluation:

There was a .04% decrease in the percentage of DPS citation records with no missing critical data elements.

1. **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:

* + 7.4 Establish citation data audit procedures using the performance measures developed under the data quality control program

## Performance Measure #4: Accessibility of DPS Citation Data

1. **Performance Measure Used to Track Improvements**

Accessibility of DPS Citation Data – Percentage of DPS citation records’ end users with access to citation data. DPS’ goal is to achieve at minimum 25% of citation records end users’ with access to citation data.

1. **Narrative Description of Performance Measure Calculation**

Previous Period (January 2018):

The percentage of DPS citation records’ end users with access to citation data was 17.79%.

Current Period (February 2018):

The percentage of DPS citation records’ end users with access to citation data was 17.79%.

Evaluation:

There was no change in the percentage of DPS citation records’ end users with access to citation data.

1. **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:

* + 7.4 Establish citation data audit procedures using the performance measures developed under the data quality control program

# FY20 Funded Projects

This section provides an overview of projects recommended for funding in FY20.

|  |  |  |  |
| --- | --- | --- | --- |
| **eGrants ID** | **Title** | **FY2020 Amount Awarded** | **Fund  Source** |
| TBD-CRIS | CRIS Help Desk | $1,375,000 | FS405c |
| 2020-TTI-G-1YG-0043 | Providing Technical Assistance to the Texas Traffic Records Coordinating Committee (TRCC) | $99,194 | FS405c |
| 2020-TMPA-G-1YG-0006 | LEADRS - Law Enforcement Advanced DWI Reporting System | $900,000 | FS405c |
| 2020-TDSHS-IS-G-1YG-0133 | EMS and Trauma Registry Data Analytics | $1,000,000 | FS405c |
| 2020-TDPS-G-1YG-0142 | State Traffic Records System Citation Database | $925,000 | FS405c |
| 2020-IADLEST-G-1YG-0168 | Reduce Crashes & Social Harm Through a Data Driven Strategy & Agency/Analytical Training and support | $400,000 | FS405c |

## 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.

## Providing Technical Assistance to the Texas Traffic Records Coordinating Committee (TRCC) (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, to develop performance measures for their respective database, and a data quality program to monitor the newly developed performance measures. Furthermore, the technical advisor will assist with coordinating the steering and intersection database subcommittees.

## 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.

## 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 FY2019 the program will utilize the results of the gap analysis and needs assessment from FY2018 to make final improvements and changes to their data collection tool. These improvements are aimed at improving the long-term sustainability of the product and improving efficiency of data collection. The final step in this process will be to evaluate the system in FY2020 to determine the long-term suitability of the data collection software and determine if a different approach is needed. During both FY2019 and FY2020 the program will take strides to improve data analysis and dissemination. EMSTR will work in FY2020 to find solutions to access and analyze data more efficiently. In both FY2019 and FY2020 EMSTR will provide stakeholders and Texans more reports and analysis on data collected by the program to inform injury prevention activities and patient care best practices.

## State Traffic Records System Citation Database (TxDPS)

In order for citation and other related data to be useful in a proactive law enforcement environment, it is vital that DPS be able to provide analysis of citation data to improve completeness and accessibility. This funding is to 1) retain full-time employees hired through previous fiscal years Traffic Safety grants by providing competitive salaries; 2) provide for training of Highway Safety Operations Center (HSOC) personnel; 3) purchase analytical software, all in furtherance of continuing to improve our data and related processes, and to move towards acquiring and analyzing data from other law enforcement agencies; 4) aid in bridging the state level crash analysis gap by supporting the STEP program with analytical products; and 5) strive to obtain/develop and implement a real-time predictive analytic model for use in assignment of enforcement assets around the state.

Through continued data analysis by these grant-funded employees, DPS will be able to thoroughly evaluate and improve the completeness and accessibility of the citation data. Moreover, HSOC staff continues to aggressively analyze critical data elements to identify specific causes and/or methodologies that will lend themselves to significant improvement.

## 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) provide training to law enforcement on the principals of Data Driven Approaches to Crime and Traffic Safety (DDACTS) which encourages the use of data to drive enforcement efforts and reinforces the need for timeliness, completeness and accuracy when reporting crash data to the Texas Crash Reporting Information System (CRIS) database.