



TEXAS DEPARTMENT OF TRANSPORTATION



TTI 2016 TRAFFIC SAFETY CONFERENCE COLLEGE STATION, 6/7/2016

BREAK OUT SESSION 10: CRASH DATA & ANALYSIS

Topic: Crash Record Information System (CRIS) program updates and dashboards
Presented by: Texas Department of Transportation

Agenda

- Texas Crash Reports and Data
- CRIS Production Statistics
- Submission of Crash Reports
- CRASH Benefits
- Submission Service Benefits
- Paper Report Benefits
- CRASH Overview
- CROPS Overview
- CRIS Business Intelligence Tool, MicroStrategy
- Upcoming Enhancements
- Contact Information

Texas Crash Reports and Data

TxDOT is dedicated to providing continual support and updates that assist law enforcement agencies in reporting Texas crashes.

The information gained from the crash reports, supports TxDOT's overall goal of reducing fatalities and increasing the safety of the traveling public.

The Crash Record Information System (CRIS) and all components are to support this overall goal.

- Electronic crashes are being submitted, on average, in 2 days or less compared to the 20+ days for submitting paper crash reports.
- As of June 2016:
 - TxDOT receives 88.1% of all Texas crash records electronically
 - 56.1% CRASH
 - 32.6% Submission Services and
 - 11.3% via paper reports.
 - The cost to process an electronic record is \$1.99 as compared to a paper record \$7.10.

Submission of Crash Reports

In addition to paper records, TxDOT offers two methods for electronic submission:

1. **Crash Reporting & Analysis for Safer Highways (CRASH)** – A component of TxDOT's Crash Record Information System (CRIS) that is online and was developed to support law enforcement in electronically submitting crash reports. CRASH is integrated with TLETS (TxDPS), RTS (TxDMV) and provides agencies with statewide access to crash data.
2. **Submission Services** – TxDOT's CRIS system can integrate with record management systems to receive an agencies crash reports electronically. The integration includes business rules that enable the submission service vendors to handle issues with a crash reports quickly and effectively.

CRASH Benefits (55.8% of crash reports received)

1. No software or license cost to the reporting agency
2. Immediate submission and electronic approval process of crash reports
3. CRASH Help Desk available 6AM to 6PM, 7 days per week, 365 days per year
4. Access to statewide crash data using CRIS Business Intelligence Tool, Microstrategy*
5. Access to crash report related dashboard and canned reports specifically created for law enforcement agencies.
6. Legislative mandates and system updates/refreshes managed by TxDOT

*Full access to Microstrategy requires training

Submission Services Benefits (32.3% of crash reports received)

1. Allows law enforcement agencies to utilize internal application for submitting crash reports
2. Allows for integration with Records Management Systems (RMS) that may include additional needed information such as arrests
3. Technical vendor provides support to assist agencies in sending crash reports to TxDOT

Paper Report Benefits (11.9% of crash reports received)

1. Low to no technical costs to the reporting agency

CRASH Overview

CRASH is an application within CRIS where law enforcement officers enter the crash reports.

CRIS CRASH
Crash Records Information System

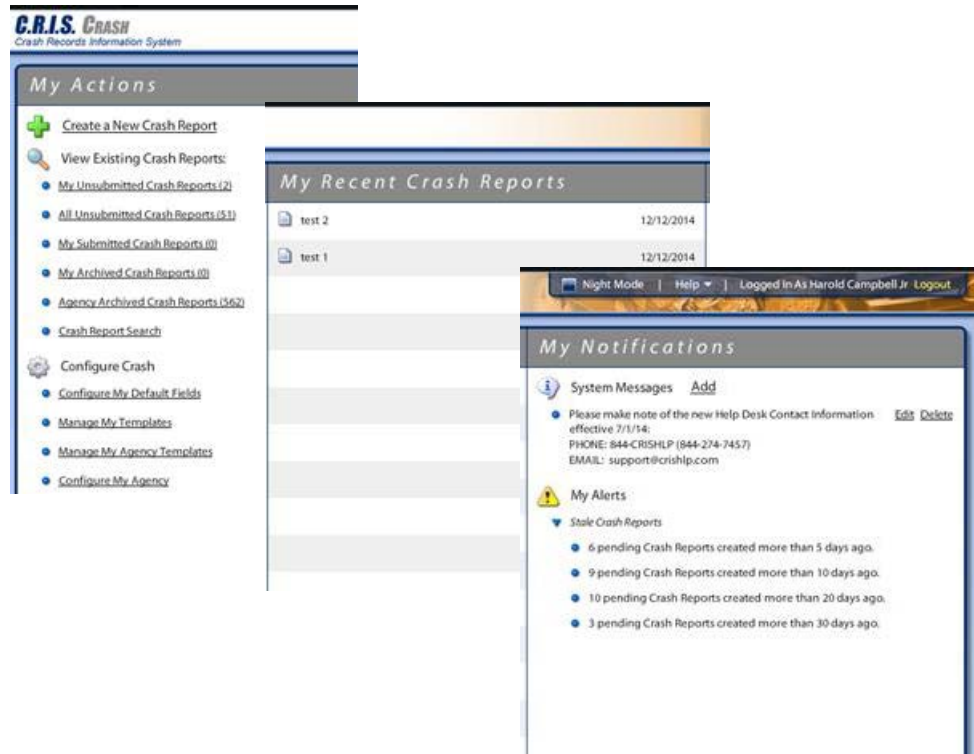
Night Mode | Help | Logged In As Kellie Pierce Logout

My Actions	My Recent Crash Reports	My Notifications
<ul style="list-style-type: none"> Create a New Crash Report View Existing Crash Reports:<ul style="list-style-type: none">My Unsubmitted Crash Reports (0)My Submitted Crash Reports (0)My Archived Crash Reports (0)Crash Report Search Configure Crash<ul style="list-style-type: none">Configure My Default FieldsManage My TemplatesConfigure My Agency Request an Extract	<p>You have no recent Crash Reports</p>	<ul style="list-style-type: none"> System Messages<ul style="list-style-type: none">1. Monday, 2/29/16 at 6 PM will be the last extraction to the data entry vendor.2. Sunday, 3/6/16 starting at 2 PM 13.3 CRIS software release will be deployed, CRIS will be unavailable during this time.3. Monday, 3/7/16 at 7 AM CRIS will be available.When RTS pre-population is invoked, it is important to ensure that you correct the name field populated. The system places First and Last name within the First name field. Please separate this information as this affects the image and data captured.Crashes submitted through the CRASH system should not be mailed into TxDOT.Supplements: If original crash was submitted through mail, then you must complete and submit supplement through mail. If you submit an original through the CRASH system, then the supplement must be completed in CRASH. My Alerts<p>There are no Alerts at this time</p>

Need Help? Email the [Help Desk](#) or call (844) CRIS-HLP

Crash Landing Page Overview

- Touch Screen, Keyboard and Mouse Enabled
- Night Mode
- My Actions
 - Create a New Crash Report
 - View Existing Crash Reports
 - Configure Crash Defaults
- My Recent Crash Reports
- My Notifications and Alerts



Notifications and Alerts

- Notifications

- Application maintenance schedule is provided on an annual basis and Draft copy Release notes are published 2 weeks prior to Final copy Release deployment.

- Alerts

- Stale Crash Reports
 - Investigator will receive after 5 days
 - Investigator/Supervisor will receive after 10 & 20 days
 - 30 day alert will delete the Web Crash ID record
- Crashes Awaiting Approval
 - Approver will receive after 5 days
 - Approver will receive after 10 & 20 days
 - 30 day alert will delete the Web Crash ID record
- Investigator will receive Pending Alcohol and Drug Specimen Results after 45 days

Crashes Status Workflow

Depending on your User Role, you can review the status of a crash report. Examples include:

- Review rejected crash reports
- Review crash reports that have not been submitted
- Review archived crash reports for supplementation
- Ability to search for crash records including pdf. images of the CR-3

Supervisors can manage reports at a higher level. For example:

- Review reports submitted by team members
- Edit, delete or reassign reports that need to be submitted
- Edit, approve or reject reports that are ready for approval
- Review archived reports



View Existing Crash Reports:

- [My Unsubmitted Crash Reports \(0\)](#)
- [All Unsubmitted Crash Reports \(45\)](#)
- [My Submitted Crash Reports \(0\)](#)
- [My Archived Crash Reports \(0\)](#)
- [Agency Archived Crash Reports \(562\)](#)
- [Crash Report Search](#)

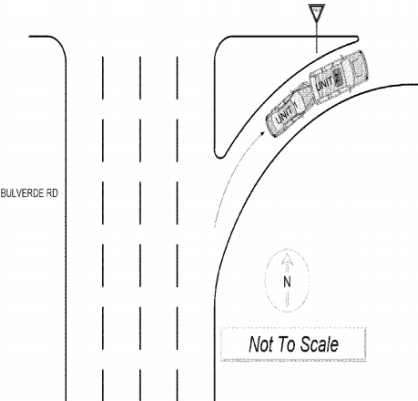
Automated Data Entry and System Integration

- Fields from the CR-3 form are within CRASH, for automated data entry.
- CRIS is integrated with TxDPS's TLETS and TxDMV's RTS to assist with more efficient data entry.

The screenshot displays the CRIS (Crash Records Information System) web application. The interface features a blue sidebar on the left with navigation links: ID & Location, Units & Persons, Property Damage, Factors & Conditions, Narrative & Diagram, Investigator, and Summary. The main content area is titled 'ID & Location' and shows a report for 'Web Crash ID 267180'. It includes sections for 'Crash Identification' with fields for Crash Date (with a date picker), Crash Time, Case ID, and Local Use; 'Exceeds \$1000 Damage' with a Yes/No selection; 'Crash Location Information' with County and City dropdowns, Latitude, and Longitude fields; and 'Road On Which Crash Occurred' with Roadway, Roadway System, Highway Number, Roadway Part, Street, Block Number, Prefix, Name, Suffix, and Street Description fields. A note at the bottom states: 'Check the Private Road box if the crash occurred completely within a private drive or road, private property or parking lot and did not originate on the trafficway.' The bottom of the screen shows a status bar with 'Local intranet | Protected Mode: Off' and a zoom level of 110%.






Narrative and Diagram

- Allows 12,000 characters
- Includes spell check
- Allows copy and paste from external sources (Word, TLETS, Notepad...)

Narrative	
CHALLENGE. <u>Challenge.</u>	
NARRATIVE AND DIAGRAM	<p>Investigator's Narrative Opinion of What Happened (Attach Additional Sheets if Necessary)</p> <p>UNIT 1 WAS TRAVELING NORTH BOUND ON BULVERDE RD ATTEMPTING TO HEAD EAST ON STATE LOOP 1604 E FRONTAGE RD. UNIT 2 WAS IN FRONT OF UNIT 1 TRAVELING THE SAME DIRECTION. UNIT 2 CAME TO A STOP AT THE YIELD SIGN.</p>
	<p>Field Diagram - Not to Scale STATE LOOP 1604 E</p>  <p>BULVERDE RD</p> <p>Not To Scale</p>

Crash Report Validation

- Once a crash report is submitted through CRIS, there are automated validation using business rules
 - Users receive Fatal and Warning error messages
 - The purpose of this is to allow officers to revise records and also, records to be as accurate as possible

Fix	Refresh	<input checked="" type="checkbox"/> Show Errors	<input checked="" type="checkbox"/> Show Warnings	Copy All to Clipboard	Close
	Rule ID	Message			
	1.1.178.1	The Roadway Type field must contain a valid value. (CR100: 4.6.3.4)			
	1.1.177.1	The Entering Roads field must contain a valid value. (CR100: 4.6.3.3)			
	1.1.176.1	The Light Condition field must contain a valid value. (CR100: 4.6.3.2)			
	1.1.175.1	The Weather Condition field must contain a valid value. (CR100: 4.6.3.1)			
	1.1.21.2	The Case ID is blank. (CR100:3.2.3)			

Crash Report Online Purchase System

- TxDOT has built an application that will allow the public to purchase crash reports online 24 hours per day, 7 days per week and 365 days per year.
- The Crash Report Online Purchase System requires that a single crash report be returned from a search before adding it to the cart.
- Multiple crash reports can be purchased via a single transaction, but must be added to the cart one by one before checking out.

The screenshot shows the C.R.I.S. (Crash Records Information System) interface. At the top, there's a blue header with the C.R.I.S. logo and the text "Crash Records Information System". To the right of the header are links for "View Cart (0 Items)" and "Help". Below the header is a breadcrumb trail: "Home > Crash Report Search".

The main content area has a title "Crash Report Online Purchase System" with a blue arrow icon. Below this, a prompt says: "Please enter the name of a person involved and at least one of the other fields below:". The search form includes:

- Person Involved In Crash:** A section with "First Name" and "Last Name" input fields, and a "Matches Exactly" dropdown menu.
- Crash Date:** An input field labeled "Crash Date" with a date format hint "MM/DD/YYYY".
- County:** A dropdown menu labeled "County...".
- City:** A dropdown menu labeled "City...".

Below the search form, a CAPTCHA verification section says "Verify the following two words to continue:". It displays two images: a word "chuck" and the word "and", followed by a CAPTCHA logo. Below these is a text input field labeled "Type the text" and a "Privacy & Terms" link.

At the bottom of the form are two buttons: "Search" and "Reset".

CRIS Business Intelligence-MicroStrategy (MSTR)

MicroStrategy (MSTR) is the business intelligence tool that sits atop of the CRIS data warehouse and is used to analyze crash data.

With MSTR TxDOT and authorized users can:

- Obtain highly specific data – such as how many fatalities occurred between 1001-2000 East Riverside Drive, Austin between the July and September of 2010.
- Obtain generalized data – such as, how many pedestrians were involved in crashes across the state of Texas in 2015
- Leverage existing or “canned” reports created for law enforcement agencies
- Leverage dashboards for upper management
- Leverage report subscriptions, to receive information on a daily/monthly basis.

CRIS Business Intelligence-MicroStrategy (MSTR)

The ability to run/receive reports within the CRIS MSTR depends on the specific role provided:

- CRIS Report Recipients – No training required for this access. Report Recipients receive reports via email through a subscription that are established and maintained by TxDOT.
- Law Enforcement Reports Users – No training required for this access. LE Report Users are enabled to use MSTR and will have access to an Investigating Agency folder, enabling the ability to run canned reports.
- CRIS Report Analysts – Successful completion of MSTR training and Non-Disclosure Agreement Required for the CRIS Report Analyst access. These users will be able to create and modify reports and dashboards.

Upcoming Enhancements

Release 14.0 (planned for August 2016)

- Query Application
- LDMx Replacement
- Chat Support with Help Desk available in CRASH
- Ability to add up to 15 towed units to a power unit
- Agency Crash Managers will be notified when a supplement requests are set to Approver and Crash User

Upcoming Releases

- Migrate CRASH and Search away from Adobe Flash and onto HTML5
- Automation of the CR-2 Driver Crash Reports
- Enable the ability for agencies to transition user management (on/off prem IdP)
- CRASH Mobile Application
- Automated Training Program

Contact Information

If you have any follow up questions or concerns, please contact one of the following:

TxDOT Director of Crash Data and Analysis:

Kellie Pierce, (512) 416-3137 or kellie.pierce@txdot.gov

CRIS Support:

(512) 486-5711 or TRF_CRASH@txdot.gov

CRIS Help Desk:

(844) 274-7457 (CRISHLP) or support@crishlp.com

CRIS Microstrategy Assistance:

Larbi Hanni at (512) 416-3260 larbi.hanni@txdot.gov