2021 GHSA Annual Meeting

Virginia
Traffic Records Electronic Data System (TREDS)

September 11-15, 2021
Before TREDs
Centralized Accident Processing
(Mainframe)
- No state law/mandate for electronic reporting
- 9,000+ law enforcement
- 116,000+ paper police crash reports
- Missing 40% of CMV crash data
• NO electronic crash reporting
• 12-16 month backlog
• NO inter-agency sharing
• Data quality is incomplete, inconsistent, inaccurate
RED rating
Federal Government
(Non-compliant with National Standards)
What did we do....?

- Created a new crash form including a CMV page to conform with national standards
- Replaced 25 year old legacy system
- Launched Virginia’s Traffic Records Electronic Data System (TREDS)
What is TREDS….?

- Automates and centralizes the Commonwealth’s crash information
- Consolidates crash and highway related data into one accessible database
- Transforms data into various formats for reporting, mapping and analysis
What is TREDs....?

100% Electronic submission
What is TREDs…..?

- 325 business rules
- 55% auto accepted
- 88% LE submissions within 0-7 days
- 99.99% crash location data verified
Automates priority of crash reports based on crash type

- 1st priority - fatal crashes
- 2nd priority - CMV crashes
- 3rd priority - medical related crashes

What is TREDS....?
GREEN rating
Federal Government
TREDS Data Share Points – 0 to 16

- Crash Data
- Driver-Vehicle-Records
- Roadway System
- VT-Crash Location Data
- MC Student Training Data
- Click-It-or-Ticket Data
- DUI Strikeforce Data
- Medical Review Data
- Uninsured Data
- Ignition Interlock System
- SafetyNet Data
- FARS-CRSS-CISS
- Vital Records
- Conviction Data
- BAC (Forensic Science)
- Reverse Integrations
Real-Time Reporting

Reporting Tool

Mapping Tool

Quality Control Reporting Tool

Traffic Crash Data
- Create an Interactive Crash Data Report
- Explore the High Crash Location Map
- Explore the Crash Location Map by Jurisdiction

Data Quality Control Report

Report Date: 10/09/2014

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Department of Motor Vehicles Virginia Highway Safety Office
Best Practices in Integrations

FARS/CRSS/CISS - EDT

Ignition Interlock
Virginia FARS
(Fatality Analysis Reporting System)
Daily electronic transfer of fatal crash data between Virginia and NHTSA

800 fatal crash records are transmitted yearly
Pre-codes 120 FARS fields (61%)

Reduces data entry time 2 hours a day

Eliminates data entry errors
Virginia CRSS
(Crash Report Sampling System)
What is CRSS …?

- Estimates the overall national crash picture
- Identifies highway safety problem areas and measure trends
- Drives consumer information initiatives
Average 122,000 crash records are transmitted yearly

No PII information

Data transmission is encrypted
Virginia CISS
(Crash Investigation Sampling System)
What is CISS …?

- Randomly samples crash reports
- Collects data on injury and fatal crashes involving at least one passenger vehicle
- Obtains evidence from the crash site (skid marks, fluid spills, and struck objects)
- Documents vehicle crash damage
Average 8,600 crash records are transmitted yearly

No PII information

Data transmission is encrypted
Virginia Ignition Interlock System
24 local ASAPs and 4 vendors
Manual workflow process
No standardized statewide Ignition Interlock System
No automation/technology
Automated and integrated 24 ASAP offices and 4 vendor systems

Reduced the time to create a case from 10 minutes to 2 minutes
Ignition Interlock System

- 108% increase of cases from 2012 (4,725) to 2019 (9,845)
- 76,000+ electronic cases created and tracked since 2013
How did WE get here YOU ASK … ?

- Virginia Highway Safety Office is located at DMV
- Access to the Crash/Driver/Vehicle Systems
- Began building partnerships one by one (TRCC expansion)
Traffic Records Coordinating Committee

- 3 members in 2006
- 16 members in 2021
- 17 subcommittees with members assigned as needed
Future Enhancements
Future Enhancements

- VPic integration with NHTSA
- Auto populate driver/vehicle fields in TREDS and Ignition Interlock System
- Citation integration with TREDS
Thank you

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