

Motor Carrier Safety: Research, Technology, and Direction



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Agenda

- **Mission and Activities**
- **Technology Projects**
 - QC-ACE/ITDS
 - COMPASS
- **Research Projects**
 - Driver Focus
- **Discussion**

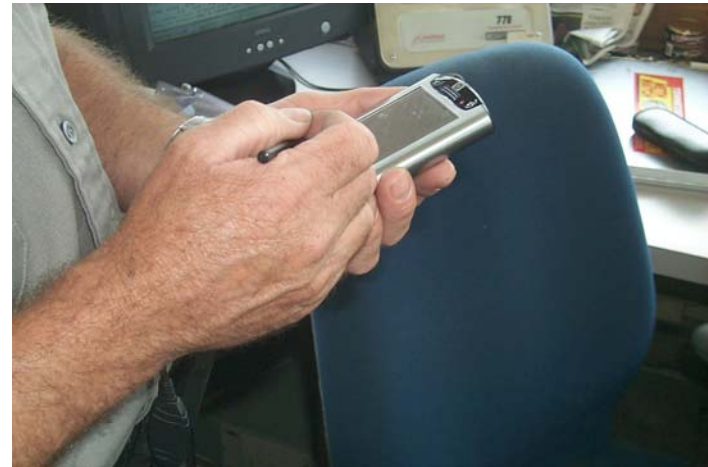


TSSC Mission and Activities

- **Mission - To improve the safety of our transportation network**
- **Software development for state and federal safety enforcement specialists nationwide**
- **Safety-related research and analysis**
- **Presentations and training**

On-going Technology Projects

- **Software for commercial vehicle and driver inspections**
 - Aspen, ISS, PIQ
CDLIS Access
- **For compliance reviews**
 - CaseRite, UFA,
ProVu, eFOTM
- **Web-based development**
 - Query Central, FMCSA Information Systems site



Recent Technology Projects

- **Query Central – Automated Commercial Environment (ACE) /International Trade Data System (ITDS) Interface**
 - Working with U.S. Customs and Border Protection
- **COMPASS**
 - FMCSA IT Modernization initiative to transform the way they do business and align their information technology with their business operations

QC-ACE/ITDS Interface

- **Ability to identify and contain unsafe CMVs and drivers before they reach our nation's roads**
 - **The carrier submits an electronic manifest through ACE/ITDS which sends the manifest data to QC**
 - **QC processes the manifest data against multiple federal and state data sources to determine if the driver and/or vehicle needs to be seen by FMCSA at the border**
 - **QC sends a response through ACE/ITDS either clearing or identifying problem areas**
 - **ACE notifies the carrier of the result and lists any specified issues**
 - **This gives carriers the opportunity to resolve any safety issues prior to arrival at the border**

QC-ACE/ITDS Interface (cont.)

- **FMCSA inspects those problem drivers/vehicles when they arrive at the border**



COMPASS

- **An effort to transform the way FMCSA does business and to align their information technology with their business operations**
 - **Increase productivity and efficiency**
 - **Improve data accessibility through simple sign-on and easier navigation**
 - **Improve data consistency through database consolidation and integration**
 - **Enable better policy and program decisions through improved data quality**

Recent Research Projects

- **Development and Implementation of a Driver Safety History Indicator into ISS**
- **Commercial Motor Vehicle Driver Risk Factors Study**
- **Improving Driver Identification Data Collected**



Development & Implementation of a Driver Safety History Indicator

- **Examined creating a new measure for ISS**
 - Based on the traffic conviction history of a carrier's drivers
 - Calculated by a weighted sum of the drivers' convictions divided by the number of drivers
- **Determined that this new measure is associated with crash rates**
- **Pilot test as part of ISS was conducted in eight states**
 - Resulted in increased driver out-of-service rates
- **Currently working on full deployment**

Commercial Motor Vehicle Driver Risk Factors Study

- **Main objective is to identify, verify, quantify, and prioritize commercial driver risk factors**
 - **Personal factors such as demographic characteristics, medical conditions, personality traits, and performance capabilities**
 - **Work environmental conditions, such as carrier operations type, and compensation method**
 - **Will link the characteristics of individual drivers with their driving histories, especially the presence or absence of crashes**

Contact Info and Discussion

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