Improving Data Capture
Online and Offline

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Agenda

► COMPASS vision for streamlining and improving safety data capture in the office and at the roadside
  • FMCSA’s internal data entry based on paper submissions
  • External data entry
  • Offline data collection

► Process improvements
  • Data edit checks, business rules, hints / wizards
  • Features of the offline data collection tool
  • Wireless roadside inspection
Over time, it is anticipated that the number of paper submissions will decrease

For those still received

• Pre-populate as much data as possible
• Stringent data entry edit checks
• Logic checks of final submission based on clearly defined business rules
External data entry

For data entry by FMCSA customers

- Wizard capability with question prompts to ensure correct and complete forms/data are submitted
- Pre-populate as much data as possible
- Stringent data entry edit checks
- Logic checks of final submission based on clearly defined business rules
Data Collection / Mobile Client

► A single field application that facilitates
  • Inspections
  • Reviews / Audits / Investigations
  • Enforcement
  • Crash data collection

► Connectivity – works online or offline
  • Allows users to work offline and later sync with the central system / enterprise database when connected
  • Provides real-time carrier, vehicle, and driver validation if connected
Electronic Data Collection / Mobile Client

► Barcode
► Magnetic stripe
► Digital signature
► Transponder / RFID
► EOBR / Electronic logbook
► Vehicle sensor
► Digital image
► Document image
► Performance Based Brake Tester information
Inspection and Review Process - Issues

► Connectivity
  • One user name and password
  • Available on or off-line

► Integration / Consolidation of Applications
  • No need to determine which application to use when

► Data Quality
  • Standardization, consistent edit checks

► Flexibility
  • Standard interface / data exchange capability for use with other state systems
Mobile Client - Inspections

- **Prioritization model** to identify which commercial vehicles should be selected for an inspection.

- The **software to record an inspection will be updated** to better reflect the business process and to allow data to flow directly into the central enterprise database.

- This release will include:
  - **Selecting** an entity for an inspection,
  - **Entering** the inspection details,
  - **Reviewing and approving** the inspection and then matching the inspection to the correct entity in the enterprise database, and
  - Implementation of a **streamlined reconciliation** of Carrier certifications against the original inspection records.

- This release will also include all of the functionality to **perform the queries involved with clearance checks**, the services to receive queries from and send responses to ACE/ITDS, and to make the data from the queries available during border inspections.
This release includes functionality to:

- Select a carrier for review,
- Scheduling a review,
- Preparing for the review – trend analysis,
- Conducting the review,
- Reviewing and authorizing the review once it is complete, and
- Starting an enforcement case when necessary which will include generating the Notice of Claim.

In selecting the carrier for review, the new prioritization model would be utilized - business rules/intelligence to identify carriers evading compliance

May include capability for the carrier to electronically submit data and documents prior to the review
Mobile Client - Crashes

Provide functionality to support and improve

- Crash investigations
- Crash recording process - image capture
- Crash data quality
- Uploading of state crash information
- Analysis of crash information to avoid future crashes
A process where public sector entities (people and systems) examine the condition of the vehicle and driver by assessing data collected by on-board systems

- The data used in the assessment is termed the “Safety Data Message Set”
- Delivered using wireless communications in real time to the public sector infrastructure
- Contains basic identification data (for driver, vehicle, carrier, container, and cargo), record of duty status, and vehicle condition data
Wireless Roadside Inspection
Concept Overview

**Evaluation of SDMS information may result in:**
- Updated carrier safety rating
- Updated driver safety rating
- Warning or citation
- Roadside interception
- Standard inspection

**SDMS information may be sent to:**
- FMCSA IT infrastructure
- Statewide operations/law enforcement dispatch center
- Associated inspection station
- Motor carrier/motor coach company

**SDMS information may be accessed by authorized:**
- Roadside enforcement
- Motor carrier/motor coach company
- Safety analysts

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**Safety Data Message Set (SDMS)**

**EOBR Data**
- Duty Status
  - Driver status
  - Date
  - Total miles today
  - Vehicle number
  - Carrier name
  - Main office address
  - Period start time
  - Co-driver name
  - Hours
  - Shipping document ID
- Location of Duty Status Change

**Identifiers** (** from a J1587/J1939 message)**
- Driver license jurisdiction, ID **
- Vehicle identification number (VIN) **
- Motor carrier/coach USDOT number

**J1587/J1939 Data**
- Air system
- Brakes
- Electrical
- Engine
- Fuel system
- Lane departure
- Lighting
- Other electronic components

**Vehicle Data Bus: SAEJ1708**
**Standard Messages: SAEJ1587, SAEJ1939**

**Advanced Monitoring System Data**
- Collision warning
Contacts / Discussion

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