COMPASS

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

Internal data entry based on paper submissions

- 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.

Mobile Client - Investigations

- 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

Future – Wireless Inspection

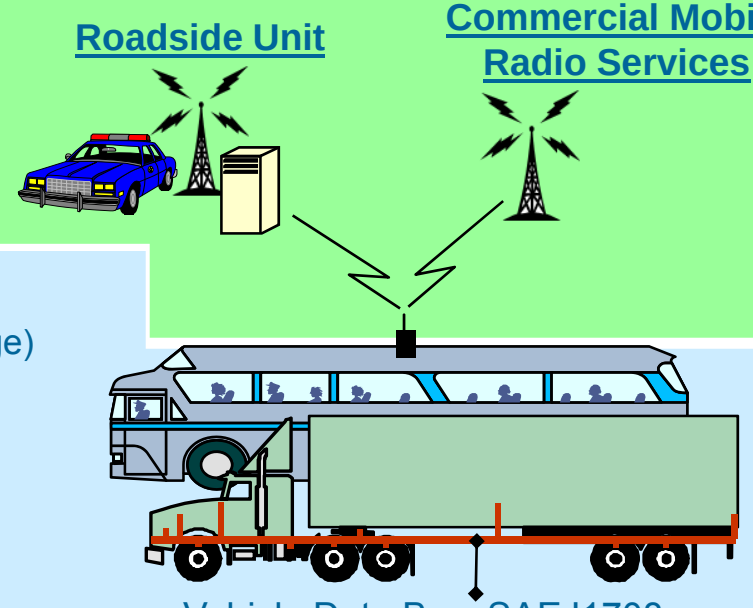
- A process where public sector entities (people and systems) examine the condition of the vehicle and driver by assessing data collected by on-board systems
  - The data used in the assessment is termed the “Safety Data Message Set”
  - Delivered using wireless communications in real time to the public 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

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

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



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	Steering
Brakes	Suspension
Electrical	Tires
Engine	Trailer
Fuel system	Transmission
Lane departure	Vehicle position
Lighting	

Other electronic components

Vehicle Data Bus: SAEJ1708
Standard Messages: SAEJ1587, SAEJ1939

Advanced Monitoring System Data
Collision warning

Contacts / Discussion

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