North American Standard
Level VIII Electronic
Inspection Basics

Alabama Safety Summit
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The Commercial Vehicle Safety Alliance (CVSA) is a nonprofit association comprised of local, state, provincial, territorial and federal commercial motor vehicle safety officials and industry representatives. The Alliance aims to achieve uniformity, compatibility and reciprocity of commercial motor vehicle inspections and enforcement activities by certified inspectors dedicated to driver and vehicle safety.
Who Are We?

**Class I Members** – State/Provincial/Territorial government agencies leading CMV safety enforcement

**Class II Local Members** – city or municipal police departments

**Class III Associate Members** – Motor carriers, suppliers, insurers, academia, researchers and others.

**Class IV Federal Members** - United States, Canada and Mexico, including: FMCSA, NHTSA, FHWA, DOE, Transport Canada, CCMTA, SCT and Mexico Federal Police.
CVSA Core Activities

• North American Standard (NAS) Inspection Program
  • Operational Policy
  • Inspector and Instructor Certification
  • Inspection Levels
  • Inspection Procedures
  • Inspection Bulletins
  • NAS Out-of-Service Criteria (OOSC)
  • CVSA Decal

• Conferences, Workshops, Symposiums and Summits

• Enforcement Campaigns and Programs

• Advocacy and Outreach
  • Policy Development
NAS Inspection Program

Overview

• 13,000+ CVSA-certified Inspectors
  • 800,000+ Law Enforcement Personnel

• Over 1,400 Fixed Facilities

• Mobile Patrols

• 3.5 Million Roadside Inspections
NAS Inspection Levels

• Level I – Driver/Vehicle Inspection
• Level II – Walk-Around Driver/Vehicle Inspection
• Level III – Driver Only Inspection
• Level IV – Special Studies Inspection
• Level V – Vehicle Only Inspection
• Level VI – Select Radiological Inspection
• Level VII – Jurisdictional Mandated Inspection
• Level VIII – Electronic Inspection
An examination that includes those items specified under the North American Standard Electronic Inspection Procedure. An electronic inspection must include, where required and/or applicable, a descriptive location, including GPS coordinates; electronic validation of who is operating the vehicle; appropriate driver’s license class and endorsement(s) for vehicle being operated; license status; valid Medical Examiner’s Certificate and Skill Performance Evaluation (SPE) Certificate; current driver’s record of duty status; hours-of-service compliance; USDOT or (Canada) NSC number; power unit registration; operating authority; Unified Carrier Registration (UCR) compliance; and federal out-of-service orders.

The North American Standard Level VIII Electronic Inspection is an inspection conducted electronically or wirelessly while the vehicle is in motion without direct interaction with an enforcement officer. To be considered a complete Level VIII Electronic Inspection, a data exchange must include each of the required and/or applicable data points listed in the CVSA North American Standard Level VIII Electronic Inspection definition.
CVSA Level VIII Electronic Inspection data elements

- GPS location
- Who is operating the vehicle
- USDOT or (Canada) NSC number
- Power unit registration
- Operating authority
- UCR compliance
- Federal OOS orders

- Driver’s license
- License status
- Medical Card/SPE
- Record of duty status
- HOS compliance
Why Electronic Inspections

- Inspect more with finite budgets
- Improve selection for inspections
- Dramatic increase in vehicle/carrier/vehicle contacts
- Better maintain traffic throughput
- Mobile enforcement flexibility - Not only at fixed stations
- Essential for autonomous trucks (no driver onboard)
543,061 active carriers with a U.S. DOT number
12.2 million single unit and combination trucks (over 10,000 lbs. GVWR)
13,657 CVSA-certified state and 525 Federal inspectors
3,457,102 total inspections
  • 3,344,964 driver inspections (Levels I, II, III and VI) and
  • 2,382,194 vehicle inspections (Levels I, II, V or VI).
1.7 million trucks (unique VINs) were inspected at least once
Inspectors inspected 1 of every 7 trucks roughly once or twice in 2017
Keeping Up With the Growth of Trucking

Sources: FMCSA Pocket Guide to Large Truck and Bus Statistics; FHWA Highway Statistics
https://www.fhwa.dot.gov/policyinformation/statistics.cfm
Autonomous Trucks

- Autonomous trucking is arriving.
- How does weight and safety enforcement plan to change?
- Enhanced inspections (point of origin) are critical.
- Limited stops by enforcement enroute
- Electronic verification (and possible electronic inspections)
Level VIII - Looking Ahead – Critical Vehicle Inspection Items

- Brake Systems
- Cargo Securement
- Coupling Devices
- Driveline/Driveshaft
- Driver’s Seat
- Exhaust Systems
- Frames
- Fuel Systems
- Lighting Devices
  - Turn Signals, Brake/Tail/Headlamps, Lamps on Projecting Loads

- Steering Mechanisms
- Suspensions
- Tires
- Van and Open-Top Trailer Bodies
- Wheels, Rims and Hubs
- Buses, Motorcoaches, Passenger Vans or Other Passenger Carrying Vehicles
  - Windshield Wipers and Emergency Exits and/or Electrical Cables/Systems in Engine/Battery Compartments/Seating
Level VIII - Looking Ahead

• Vehicle identification
• Fixed and mobile locations
• Queries refined through various databases (Query Central, CDLIS, NLETS, UCR, IRP, IFTA, etc.)
• Resulting inspection report upload to MCMIS (CSA integration?)
• Future aspects could include hazmat, autonomous trucks, critical vehicle inspection items
• We encourage states to continue work toward implementation

CVSA Level VIII Electronic Inspection Forum - Spring 2023
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