

Electronic In-Motion Truck Inspections (Level VIII Inspections)

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U.S. Department of Transportation
Federal Motor Carrier Safety Administration

Federal Motor Carrier Safety Administration

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SAFETY
RESEARCH
FORUM



VIRTUAL EVENT



Level VIII Electronic Inspection Concept



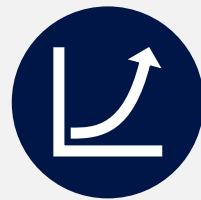
The Level VIII Electronic Inspection would be:

- **Conducted electronically**, while the vehicle is **in motion** at roadway speeds, without direct interaction with a safety official.
- Focused on **driver and carrier compliance**.

Level VIII Inspections may be able to help us:



**COLLECT MORE
DATA ON MORE
CARRIERS**



**KEEP PACE WITH
GROWTH OF CMV
POPULATION**



**SAVE TIME &
PRIORITIZE
RESOURCES**



**LIMIT EMISSIONS &
FUEL USE
FOR INSPECTIONS**

Why Do We Need an Operational Test?

Until now, the technology required to implement Level VIII Inspections has **not been developed or tested**.



What technology will collect and transmit the Level VIII data?



How will the data get to States and FMCSA securely and in real time?



How will violations be determined without human intervention?

We also need to evaluate **how** FMCSA could use Level VIII Inspections to improve safety and the **pros and cons** of using this approach.

Operational Test Objectives

1 Test the technical feasibility of transferring and evaluating Level VIII data while vehicles are in motion

2 Develop and evaluate use cases, implementation options, and policies

3 Measure the safety, climate, and operational impacts

Operational Test Approach

COLLABORATIVE

- Leverage expertise and connections
- Engage key stakeholders



FMCSA



CVSA



**Tech
Providers**



**State
Partners**



**Motor
Carriers**

Contractor: U.S. DOT Volpe Center

PHASED

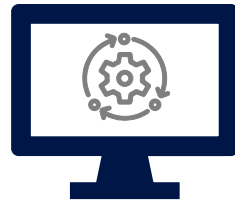
- Start test quickly and continuously adjust
- Learn more before having an impact on operations or systems



Phase 1 Process

Goals:

- Set up and test the **technology** to transfer data
- Manually process and **analyze** data



TRIGGER & SEND

Third-party
technology solution

RECEIVE & SEND

State inspection
system

RECEIVE

FMCSA web services
& databases

ANALYZE

Operational test
team

Progress and Next Steps



Accomplishments

PLANNING AND PREP

- Steering Committee
- CVSA Committee and Subgroup

START OF DATA COLLECTION

- Limited subset of data at start
- Incremental rollout



Upcoming Milestones

INCORPORATE ELD DATA once legal framework is in place to use it for analysis

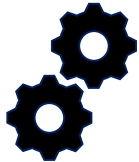
COLLECT FULL SET OF DATA to support Phase 1 analysis:

- Up to nine carriers
- Multiple States
- Multiple tech providers

Anticipated Outcomes



Each phase will produce **analysis** to determine whether to continue the test and if so, shape the subsequent phase. Analysis will include the potential **safety, efficiency, and climate impacts** of using electronic inspections.



The test will help FMCSA determine **whether to implement a Level VIII program** and, if so, how the program should be **designed and incorporated** into other systems.



The test will help FMCSA identify any **challenges** that need to be overcome before implementation.



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Level VIII

The graphic for 'Level VIII' consists of the number '8' formed by a grid of green circles of varying sizes, with the largest circles forming the outline and smaller ones filling the interior.

INSPECTION OPERATIONAL TEST

<https://www.fmcsa.dot.gov/level-viii-inspections>



Questions?
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