ELD | ELECTRONIC LOGGING DEVICE

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

Technical Specifications Public Meeting

September 6, 2019

Introducing: Our Presenters

Facilitator: **Britt Phillips**

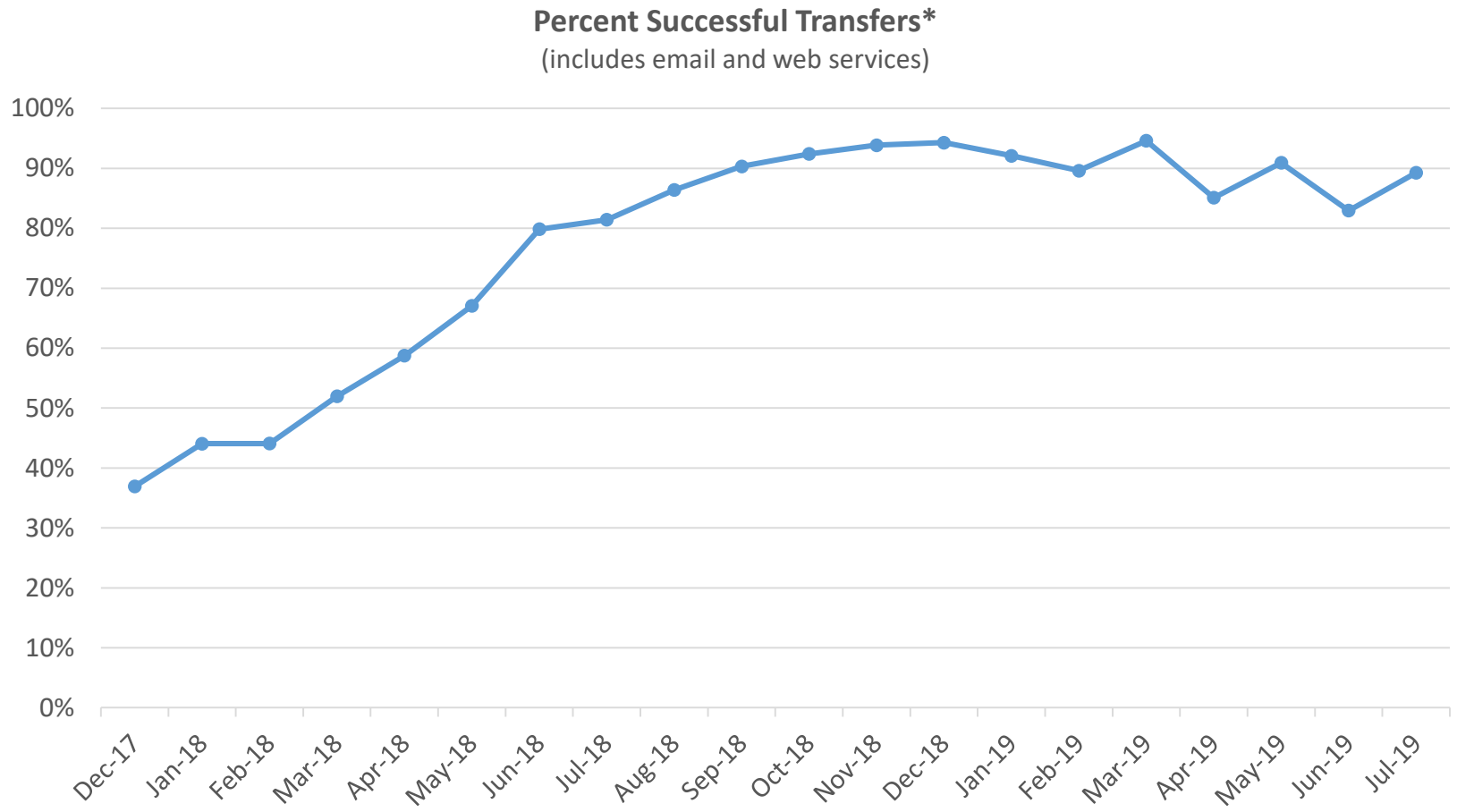
Presenters:

- **Joe DeLorenzo**, Director of the Office of Enforcement and Compliance
- **Donnice Wagoner**, Transportation Specialist, Enforcement Division
- **Danielle Smith**, Transportation Specialist, Passenger Carrier Division
- **Brian Baker, Andrew Nagel, and Walt Zak**, ELD Technical Team

ELDS AND DATA TRANSFER

Data Tracking To-Date

ELD Data Transfers



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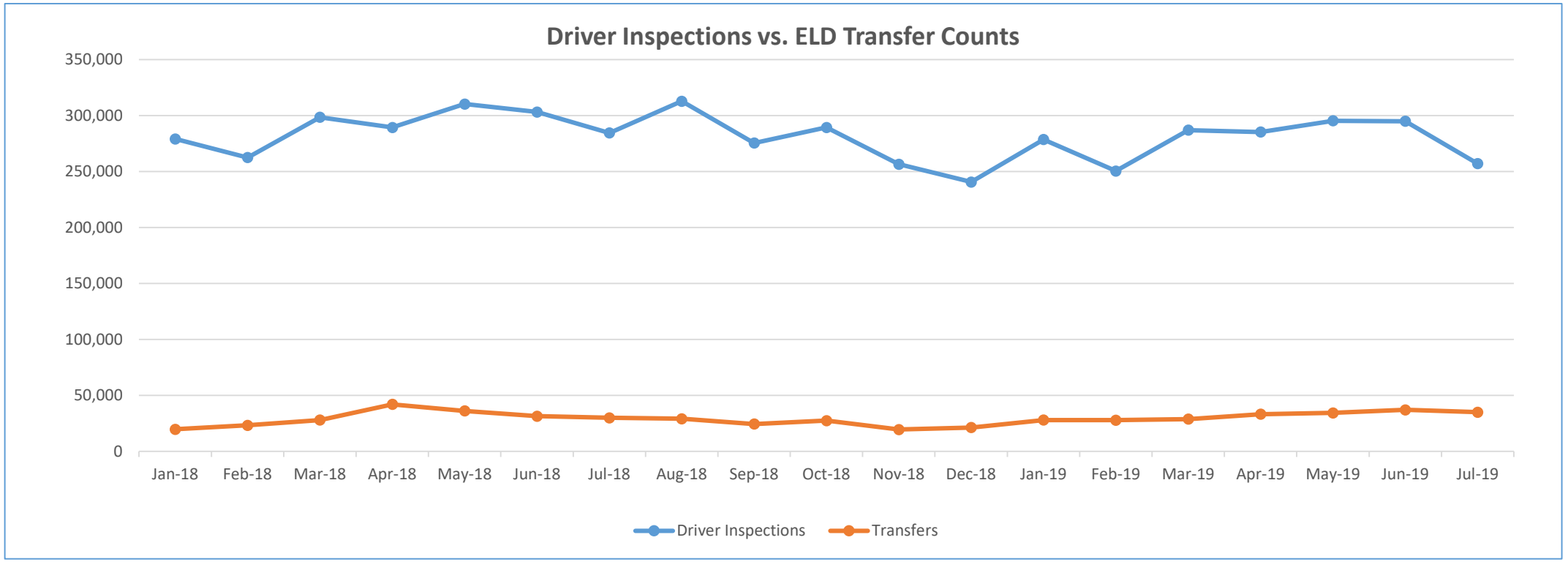
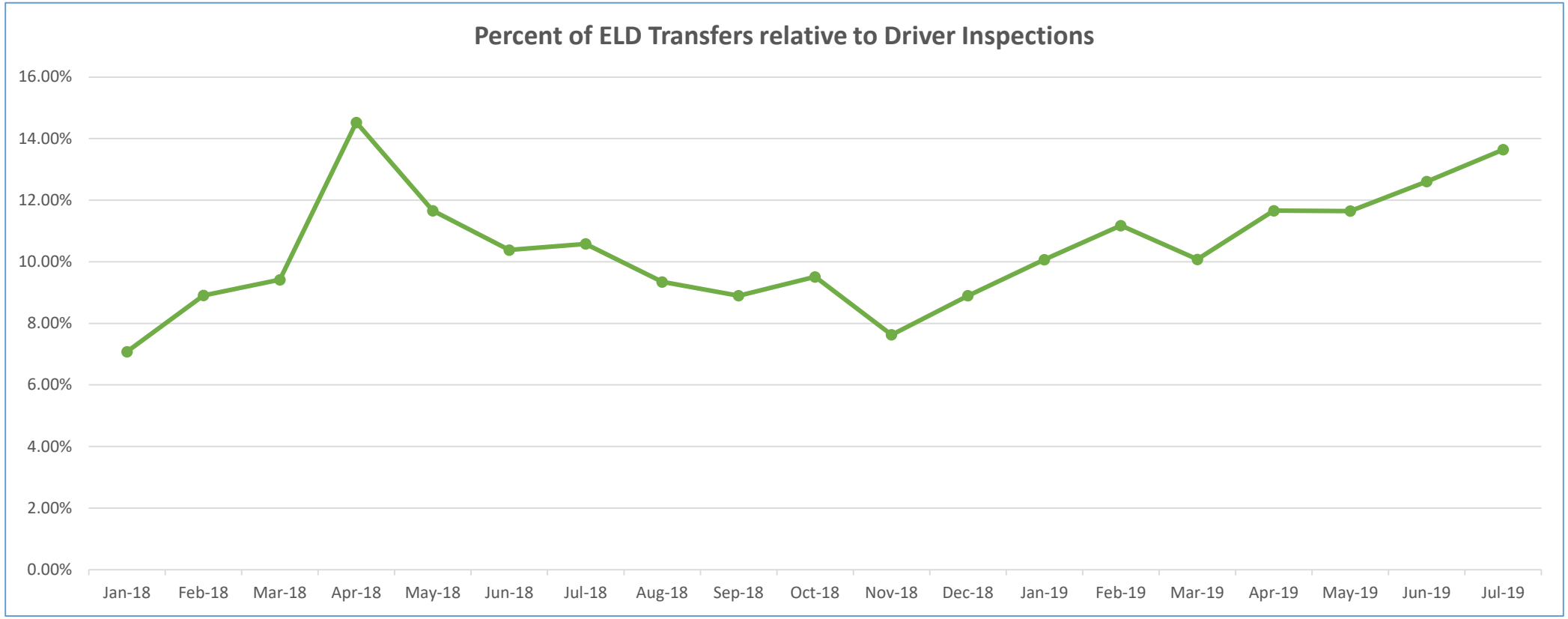
*Successful = Valid/Warning

Looking Toward Phase 3



Looking Toward Phase 3



AGENDA & GROUND RULES

Transitioning AOBRDs to ELDs

Preparing for Phase 3

Phase 3: Full Compliance

Per 395.8(a)(1)(iii):

A motor carrier that installs and requires a driver to use an automatic onboard recording device in accordance with § 395.15 before December 18, 2017 may continue to use the compliant automatic on-board recording device ***no later than December 16, 2019***.

Data Transfer to Safety Official

1988 AOBRD RULE	ELD RULE
Not addressed.	Device must support one complete option, which includes both methods; either telematics (web services and email) or local transfer (Bluetooth and USB)

Internal Synchronization

1988 AOBRD RULE	ELD RULE
Integral synchronization required, but term not defined in the Federal Motor Carrier Safety Regulations (FMCSRs).	Integral synchronization interfacing with the CMV engine electronic control module (ECM), to automatically capture engine power status, vehicle motion status, miles driven, engine hours. (CMVs older than model year 2000 exempted.)

Recording Vehicle Location Information

1988 AOBRD RULE	ELD RULE
Required at each change of duty status. Manual or automated.	Requires automated entry at each change of duty status, at 60-minute intervals while CMV is in motion, at engine-on and engine-off instances, and at beginning and end of personal use and yard moves.

Driver Edits

1988 AOBRD RULE	ELD RULE
Edits allowed. Clarified through regulatory guidance. • Supervisory. • Driver. • No driving time may be reduced.	Must not allow automatically recorded driving time to be shortened or ELD username to be edited/reassigned, *except c*orrection of errors with team drivers and assignment of Unidentified Driver Records.

Q&A

- How many of your customers are still using AOBRDs?
- What are the biggest challenges that you and your customers are facing? How have you overcome those challenges?
- What is your outlook for completion by December of 2019.
- How many of you plan to continue supporting AOBRDs after December 16, 2019, offering them to those exempt from the ELD rule?

Keeping Your ELD Compliant

Common ELD Issues and How To Resolve Them

File Compliance: Common Issues

- Missing required fields
- Field value outside valid range
- Invalid field length
- Invalid ELD registration information
- Incorrect file data check value
- Incorrect line data check value
- Invalid date
- Invalid time
- Sequence numbers
- Missing diagnostics/malfunctions

Display Discrepancies

- Including Events
- Recording and Transferring Time Data
  - UTC, Daylight Savings Time, etc.
- Event Annotations
- Driver away from CMV (no ECM)

Malfunctions and Diagnostic Events

Per Section 4.6

An ELD must have the capability to monitor its compliance with the technical requirements of this section for the detectable malfunctions and data inconsistencies listed in Table 4 of this appendix and must keep records of its malfunction and data diagnostic event detection.

Types of Malfunctions and Data Diagnostic Events (Table 4)

Code	Malfunction Description
P	“Power compliance” malfunction
E	“Engine synchronization compliance” malfunction
T	“Timing compliance” malfunction
L	“Positioning compliance” malfunction
R	“Data recording compliance” malfunction
S	“Data transfer compliance” malfunction
O	“Other” ELD detected malfunction

Code	Data Diagnostic Event
1	“Power data diagnostic” event
2	“Engine synchronization data diagnostic” event
3	“Missing required data elements data diagnostic” event
4	“Data transfer data diagnostic” event
5	“Unidentified driving records data diagnostic” event
6	“Other” ELD identified diagnostic event

Q&A

- Are there any areas of the technical specifications that need clarification?
- What methods do you use to monitor your devices' performance?
- How are you handling ELD malfunctions? What are the most common issues you are seeing? Are they hardware or software related?

BREAK

Resolving Device Issues

And Device Decertification

Be Proactive

- Monitor your device performance – check return values
- Respond to customer questions
- Resolve issues before they become problems

Keep Your Device Listing Up-To-Date

- Carriers use the ELD List to shop for devices – your listing must be current
- Section 5.2.1 – providers must disclose required information about “each model and version”
- Update after any significant changes
- Devices with outdated listings may be subject to the 5.4 decertification process

FMCSA Outreach

- FMCSA will contact vendors with known device issues
- Providers are responsible for resolving device issues in a timely manner
- Issues may be elevated to FMCSA to initiate the 5.4 decertification process

5.4 Decertification Process

1. Notice
2. Response
3. 60 days for provider to comply
4. Agency Action
5. Administrative Review

Resources from FMCSA

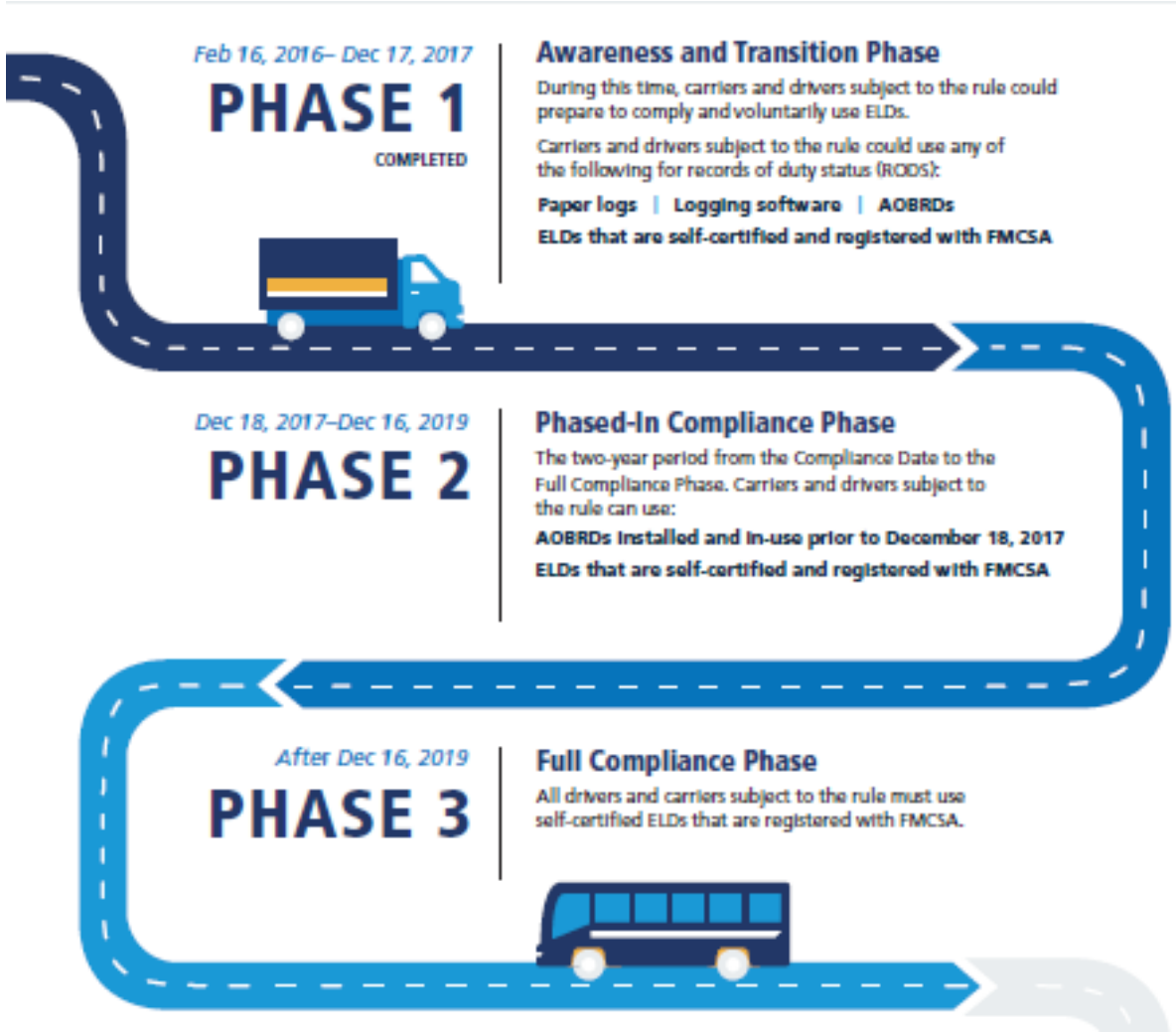
- FMCSA File Validator
- ICD/Web Development Handbook
  - Web services and email test procedures
- Safety official view of test files
- ELD Technical Specification Frequently Asked Questions
- Web eRODS
- Data Transfer Summary Report
  - History of all successful/unsuccessful data transfers from each device, by data transfer method and by motor carrier/customer.
  - List of any issues in your ELD output files (“Error” or “Warning”)

Q&A

- How many of you have used the FMCSA File Validator or web eRODS?
  - How did it help you monitor your device's compliance?
  - What other tools or information would be helpful in monitoring compliance?
- Can you tell us what methods you have found most effective for detecting issues with your devices?
- What methods do you have in place to track device issues and ensure they are being addressed efficiently?

Next Steps

Timeline


Feb 16, 2016– Dec 17, 2017
PHASE 1
COMPLETED
Awareness and Transition Phase
During this time, carriers and drivers subject to the rule could prepare to comply and voluntarily use ELDs.
Carriers and drivers subject to the rule could use any of the following for records of duty status (RODS):
Paper logs | Logging software | AOBRDs
ELDs that are self-certified and registered with FMCSA
Dec 18, 2017–Dec 16, 2019
PHASE 2
Phased-In Compliance Phase
The two-year period from the Compliance Date to the Full Compliance Phase. Carriers and drivers subject to the rule can use:
AOBRDs installed and in-use prior to December 18, 2017
ELDs that are self-certified and registered with FMCSA
After Dec 16, 2019
PHASE 3
Full Compliance Phase
All drivers and carriers subject to the rule must use self-certified ELDs that are registered with FMCSA.

Contact Us

ELD Technical Team

ELDTech@dot.gov

Data Transfer Options

Telematics:

Web Services

Email

Local Transfer:

Bluetooth

USB 2.0