

2017 SPECIAL REPORT

# Understanding the FMCSA's ELD Mandate

What You Need to Know and Do About Electronic Logging Device (ELD) Compliance



# Overview

The topic on everybody's mind this year continues to be electronic logging devices (ELDs). On December 10, 2015, the Federal Motor Carrier Safety Administration (FMCSA) issued a mandate requiring commercial trucking companies to use an ELD to record their hours of service (HOS).

The FMCSA stated that the new rule "improves commercial motor vehicle (CMV) safety and reduces the overall paperwork burden for both motor carriers and drivers..., [improving] compliance with the applicable HOS rules."<sup>1</sup>

Is the mandate here to stay? How does an ELD work? When is the compliance deadline? To help carriers and drivers understand what they must know and do to comply with the new mandate, Transflo has prepared this special report entitled *Understanding the FMCSA's ELD Mandate*. The report addresses the following key topics:

1	ELD Foundations
2	FMCSA Requirements
3	Mandate Timeline
4	Facts and Figures
5	Benefits of Using ELDs
6	How to Introduce to Drivers
7	Transflo and ELD
8	Checklist for Success

# ELD Foundations

Moving from paper logs to electronic logs might seem like a big deal, but it's really not. Electronic logs actually look similar to their paper counterparts but come with many automated features that make logging simpler. Logs appear on the screen of a smartphone or other wireless device and can generally be viewed, printed, or emailed to an inspection officer upon request.

## What is an ELD

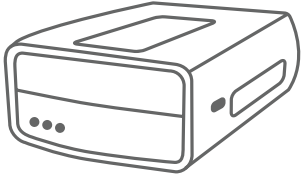
The electronic logging device is a small device that can be held in the palm of your hand and plugged in to your vehicle. Once installed, the FMCSA notes that "an ELD synchronizes with a vehicle engine to automatically record driving time, for easier, more accurate hours of service (HOS) recording<sup>2</sup>." The introduction of ELDs was designed to reduce the burden of manual, paper-based work and replace it with automation that improves compliance.

The ELD involves new technology, new processes, and new benefits. Today, those who need to comply are using a combination of paper logs, automatic on-board recording devices (AOBRDs), ELDs, and other logging software. In the near future, all will be using ELDs.

## How does an ELD work?

Instead of using paper logs, drivers can plug in an ELD then manage logs by using integrated software on a mobile app. The app will even perform some of the functions automatically by receiving truck data from the ELD. In addition to automating and simplifying paper-based logging, an ELD often has additional features that help fleets.

ELDs can monitor engine health and activity, alerting drivers and fleet managers to maintenance issues and usage patterns. ELD software provides information about engine status (on/off), engine hours, idling, vehicle movement, vehicle location, mileage, miles driven, and more. To provide many of these insights and to complement logging features, an ELD may include GPS, accelerometer, and cellular and/or Bluetooth® capabilities.

Feature	Purpose	 <p>Sample Dimensions: Width: 2" Height: 1" Length: 3"</p>
<b>OBD-II Connection</b>	The ELD connects to the engine through the OBD-II port to access engine status, engine hours, idling, and more.	
<b>Accelerometer</b>	An accelerometer measures vehicle movements (side to side, up and down, and front to back).	
<b>GPS</b>	A GPS determines vehicle location through satellite technology.	
<b>Cellular or Bluetooth</b>	A cellular or Bluetooth connection transfers data to a mobile device.	

Bluetooth is a registered trademark of Bluetooth SIG, Inc.

# FMCSA Requirements

As with many regulations, the ELD mandate has taken years to research the logging technology, analyze the regulatory impact, gather public feedback, publish the final rule, and prepare the industry. Some have since wondered whether the ELD mandate will move forward, be amended, or be withdrawn. There has been no indication, however, that the mandate will be withdrawn or amended, and many trucking companies have already moved forward and purchased an ELD so they can be compliant.

In addition to compliance, many carriers have made the move to ELD because the price of an alternative AOBRD is more expensive – often ranging between \$500 and \$2,000 whereas an ELD's price generally ranges between \$100 and \$200. Carriers are also realizing benefits by the simultaneous convergence of fleet drivers moving from AOBRDs to ELDs and owner-operators moving from paper to ELDs. For the first time, the fleet can now have all drivers using the same type of technology.

## Mandate Summary

The electronic logging device rule "requires ELD use by commercial drivers who are required to prepare hours-of-service (HOS) records of duty status (RODS)."<sup>3</sup> In general, if you are already required to maintain RODS, you will still need to do so under the mandate. You'll just meet the requirement by using an ELD. The FMCSA estimates that 3.4 million commercial drivers are subject to this new rule.<sup>4</sup>

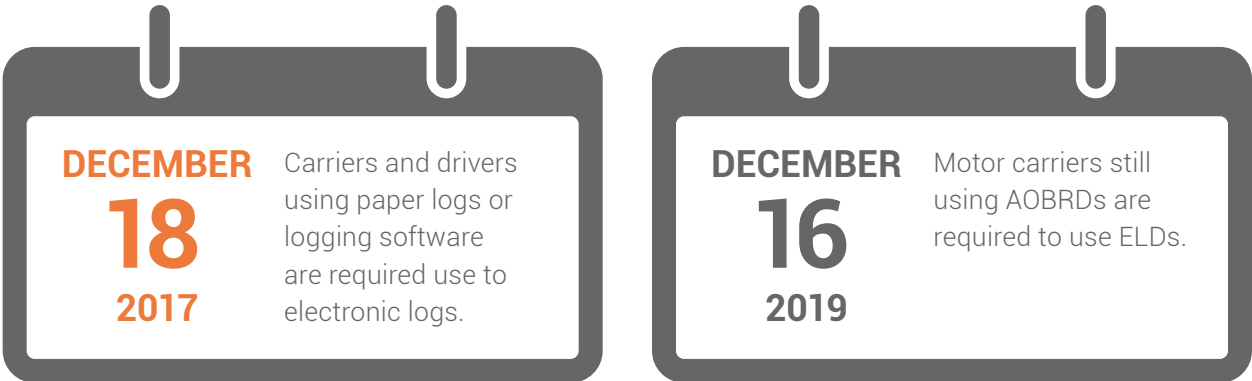
Commercial drivers who use paper RODS for 8 or more days, out of every 30-day period, will need to use an ELD. Motor carriers who use paper logs today will need to use electronic logs under the new mandate. And those currently using AOBRDs will also be required to use ELDs. The FMCSA notes certain exceptions to the mandate.

## Mandate Exceptions<sup>5</sup>:

1. Using paper duty status records for not more than 8 days out of every 30 days.
2. Operating a vehicle that was manufactured prior to the year 2000.
3. Driving a vehicle that is also the product to be delivered (drive-away/tow-away).
4. Using time cards while conducting short-haul operations covered by an exemption.

# Mandate Timeline

If you are required to comply with the new ELD mandate, you must install and use ELDs by the following deadlines:



The timeline below summarizes the important dates and regulatory actions of the ELD Mandate.

- 2012 July 2012: The Commercial Motor Vehicle Safety Act, enacted as part of Moving Ahead for Progress (MAP-21), mandates the ELD rule
- 2014 February 2014: The FMCSA releases Preliminary Regulatory Evaluation of Electronic Logging Devices and Hours of Service Supporting Documents Supplemental Notice of Proposed Rulemaking
- 2014 April 2014: The FMCSA releases Evaluating the Potential Safety Benefits of Electronic Hours-of-Service Recorders Final Report
- 2015 December 2015: The FMCSA releases its final rule with Electronic Logging Devices and Hours of Service Supporting Documents
- 2017 **December 18, 2017: Deadline by which drivers using paper logs must be compliant with new ELD rules**
- 2019 December 16, 2019: Deadline by which drivers using AOBRDs must be compliant with new ELD rules

## Multi-phased Approach

The FMCSA has organized the ruling into three phases of implementation and compliance. They are summarized in the table and descriptions below.

### Approved Log Methods by Phase<sup>6</sup>

	ELD	AOBRD	Logging Software	Paper
<b>Phase 1 Awareness and Transition</b> 2/16/2016 – 12/18/2017	✓	✓	✓	✓
<b>Phase 2 Phased-In Compliance</b> 12/18/2017 – 12/16/2019	✓	✓		
<b>Phase 3 Full Compliance</b> Beyond 12/16/2019	✓			

#### Phase 1: Awareness and Transition

During the awareness and transition phase, carriers and drivers subject to the rule should understand what they need to do and prepare to comply with the ELD mandate. They may install and begin using ELDs.

#### Phase 2: Phased-in Compliance

During the phased-in compliance phase, carriers and drivers subject to the rule may no longer use logging software or paper as a means of compliance. They will now use approved ELDs to comply. AOBRDs installed prior to Phase 2 may also be used to comply.

#### Phase 3: Full Compliance

During the full compliance phase, all carriers and drivers who are subject to the federal mandate must be in compliance by using an ELD that meets the requirements of the rule.

# Facts and Figures

The ELD mandate aims to save time and money as well as improve safety and compliance. Listed below are some interesting stats behind the mandate.



**\$705**  
paperwork savings

By reducing paperwork, companies can save \$705 or more per driver each year. Across your whole fleet, that's powerful math! Here's the breakdown:

Annual Paperwork Savings per Driver <sup>7</sup>	
Elimination of Paper Log Books	\$42
Driver Submitting RODS	\$56
Clerk Filing RODS	\$120
Driver Filing RODS	\$487
<b>Total Savings per Driver</b>	<b>\$705</b>



**11.7%**  
fewer crashes

Trucks using ELDs have 11.7% fewer total crashes and 5.1% fewer preventable crashes<sup>10</sup>.



**3.4**  
million drivers

The FMCSA estimates that 3.4 million commercial drivers are subject to this new rule<sup>4</sup>.



**20**  
hours per driver

How much time do drivers save by moving from paper logs to electronic logs? Fewer and faster inspections as well as less paperwork can save 20 hours of driver time per year<sup>8</sup>. That's 4.5 minutes of time saved per RODS!



**1,500**  
gallons of diesel

1,500 gallons<sup>12</sup> of diesel fuel are burned each year by idling a heavy-duty truck. Insights from ELD reporting can help you reclaim fuel lost to idling and operate more efficiently.



**53%**  
lower violation rate

Trucks equipped with electronic HOS recorders have a 53% lower driving-related HOS violation rate and a 49% lower non-driving-related HOS violation rate than trucks without such devices<sup>9</sup>.

# Benefits of Using ELDs

The following categories can be used to help fleets and drivers better understand how the ELD mandate is beneficial.



## Earn More Revenue

Using an ELD saves time, and that time savings equates to greater earning potential. Fewer and faster inspections as well as less paperwork equal up to 20 hours of time saved each year<sup>8</sup>. Those are hours that can be converted into driving time to earn additional client revenue.



## Save Some Money

Most of the paper log burden falls on drivers. Buying log books, having drivers file and submit records, and performing clerical tasks all have costs. By using an ELD, you can save on many of these costs. In fact, the FMCSA estimated the total annual paperwork savings to be \$705 per driver<sup>7</sup>!



## Avoid Other Expenses

Electronic logging automation improves accuracy of driver logs. Fewer violations mean fewer fines. You'll avoid some of the expenses associated with critical maintenance issues, vehicle downtime, unauthorized vehicle usage, and out-of-route miles.



## Achieve New Efficiency

By using an ELD, drivers and fleets can better plan the day. With the ELD's hours of service, alerts, and GPS features, you'll know when and where to take breaks and stop for the day. Also, insights from speeding and engine idling reports can lead to changes that improve fuel efficiency.



## Improve Safety

Trucks with ELDs have 11.7% fewer total crashes and 5.1% fewer preventable crashes<sup>10</sup>. You'll benefit from accelerometer and accident reconstruction features that validate safe driving, a key factor in determining insurance rates. With real-time ELD mapping, roadside assistance is faster.



## Strengthen Reputation

E-Logs increase compliance and reduce violations, both of which improve CSA scores. They also document safety and compliance success, which could lead to better jobs and higher pay for drivers. Companies may also be more willing to do business with you when they know you're ELD compliant.



## Enhance Quality of Life

ELDs reduce tedious activities like DVIRs and IFTA reporting, including phone calls just to check in. They may also reduce IFTA audit risks. ELDs lead to more meaningful coaching, decreased driving while fatigued, and accurate pay information—enhancing quality of life and reducing driver turnover.



# How to Introduce to Drivers

Most people aren't thrilled about the idea of new regulations changing the way they do business. For the most part, commercial drivers feel the same way. Many view the mandate as infringing on personal privacy. That being said, many also recognize that using an ELD may make the job easier. Routine tasks are automated, and work is completed quickly and accurately. The likelihood of audit may go down. And paperwork completion is less tedious. All of these factors positively affect drivers.

Many drivers also recognize that their fleets achieve benefits from ELD usage. Asset utilization, safety, navigation, fuel efficiency, record-keeping, and compliance may all be improved. That creates a more efficient fleet, and a more efficient fleet is a more profitable fleet. That's a shared benefit with drivers.

You may find the following tips helpful as you introduce an ELD program to drivers:

- 1 Explain**
  - Describe the mandate, openly discuss the pros and cons
  - Involve drivers and key employees early
  - Communicate ELD plans, programs, timelines, and goals well in advance
  - Post announcements, ELD educational material, FAQs etc.
  - Listen to feedback and suggestions, address feelings and concerns
  
- 2 Train**
  - Rollout in "waves," starting with an influential group of employees first
  - Be clear about what's new, what continues, and what discontinues
  - Learn together, gather feedback, make improvements
  - Identify drivers and other employees who will be used to help remaining drivers
  - Involve all layers of employees, ensure executives are visible and supportive
  
- 3 Attain**
  - Achieve stated goals, begin with easier groups and end with harder ones
  - Chart adoption and rollout progress, quantify results and gaps remaining
  - Share ELD examples and success stories with employees
  - Adapt and improve, address any remaining questions or resistance
  - Celebrate success and offer thanks, reiterate key messages, refresh training

# Transflo and ELD

For many years, Transflo has been the preferred provider of mobile and document management solutions for commercial drivers. By adding Transflo Telematics, drivers can now organize and manage their whole workday in one app.

Transflo Telematics is a comprehensive electronic logging solution that addresses the HOS, DVIR, IFTA reporting, and other data needs of commercial drivers and their fleets. It includes the Transflo ELD T7, a fully integrated telematics portal, and a mobile app in one solution.

- Transflo ELD T7 records and transmits electronic log information
- Transflo mobile app allows drivers to manage logs and HOS
- Transflo telematics portal displays fleet, driver, and engine data



“

By combining telematics and mobile in one platform, we are redefining the role of technology in our business operations...Our agent dispatchers and drivers now have better tools to manage their workday.”

- Sean Clancy, CIO, SunteckTTS, Transflo Telematics Client

## Now at Truck Stops

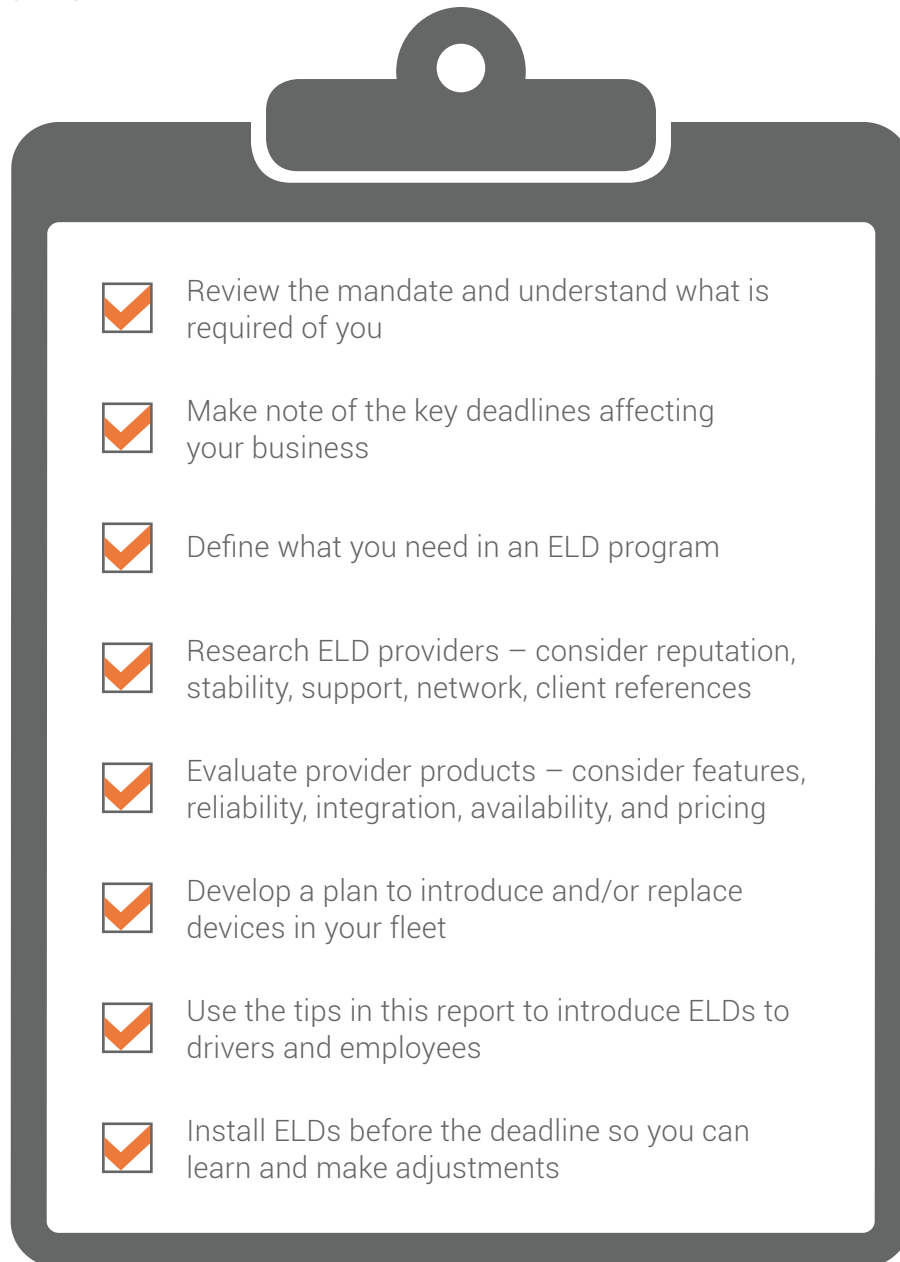
Owner-operators and small fleets may also purchase the Transflo ELD T7 at participating truck stops and travel centers.



<http://www.transflo.com/telematics-elds/>

# Checklist for Success

If you need to comply with the ELD mandate, now is the time to take action. Here are a few steps to help you get started.



The FMCSA also provides an ELD checklist for both drivers and carriers on its website:

Carriers: <https://www.fmcsa.dot.gov/hours-service/elds/eld-checklist-carriers>

Drivers: <https://www.fmcsa.dot.gov/hours-service/elds/eld-checklist-drivers>

# Source References

<sup>1</sup> U.S. Department of Transportation, Federal Motor Carrier Safety Administration. 49 CFR Parts 385, 386, 390, and 395. [Docket No. FMCSA-2010-0167]. Electronic Logging Devices and Hours of Service Supporting Documents; Final Rule. Page 6. December 2015.

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<sup>2</sup> U.S. Department of Transportation, Federal Motor Carrier Safety Administration. fmcsa.dot.gov. Implementation Timeline, updated December 22, 2016.

<https://www.fmcsa.dot.gov/hours-service/elds/electronic-logging-devices>

<sup>3,5</sup> U.S. Department of Transportation, Federal Motor Carrier Safety Administration. Electronic Logging Devices and Hours of Service Supporting Documents; Frequently Asked Questions. Page 1. 2017.

[https://www.fmcsa.dot.gov/sites/fmcsa.dot.gov/files/docs/ELD\\_Rule\\_Frequently\\_Asked\\_Questions\\_0.pdf](https://www.fmcsa.dot.gov/sites/fmcsa.dot.gov/files/docs/ELD_Rule_Frequently_Asked_Questions_0.pdf)

<sup>4</sup> U.S. Department of Transportation, Federal Motor Carrier Safety Administration. 49 CFR Parts 385, 386, 390, and 395. [Docket No. FMCSA-2010-0167]. Electronic Logging Devices and Hours of Service Supporting Documents; Final Rule. Page 224. December 2015.

[https://www.fmcsa.dot.gov/sites/fmcsa.dot.gov/files/docs/FMCSA-ELD-Final-Rule\\_12-10-2015.pdf](https://www.fmcsa.dot.gov/sites/fmcsa.dot.gov/files/docs/FMCSA-ELD-Final-Rule_12-10-2015.pdf)

<sup>6</sup> U.S. Department of Transportation, Federal Motor Carrier Safety Administration. fmcsa.dot.gov. Implementation Timeline, updated December 21, 2016.

<https://www.fmcsa.dot.gov/hours-service/elds/implementation-timeline>

<sup>7,8</sup> U.S. Department of Transportation, Federal Motor Carrier Safety Administration. Preliminary Regulatory Evaluation of Electronic Logging Devices and Hours of Service Supporting Documents Supplemental Notice of Proposed Rulemaking; Regulatory Impact Analysis. Page 50. February 2014.

<https://www.regulations.gov/document?D=FMCSA-2010-0167-0479>

<sup>9,10</sup> U.S. Department of Transportation, Federal Motor Carrier Safety Administration. Evaluating the Potential Safety Benefits of Electronic Hours-of-Service Recorders Final Report. Abstract of Technical Report Documentation Page. April 2014.

<https://www.regulations.gov/document?D=FMCSA-2010-0167-0900>

<sup>12</sup> U.S. Department of Energy, Energy Efficiency and Renewable Energy. Long-Haul Truck Idling Burns up Profits. Page 1. August 2015.

[http://www.afdc.energy.gov/uploads/publication/hdv\\_idling\\_2015.pdf](http://www.afdc.energy.gov/uploads/publication/hdv_idling_2015.pdf)

## About Transflo

Transflo® is the leading mobile, telematics, and business process automation software for the transportation industry. Provided by Pegasus TransTech, the Transflo portfolio digitizes over 400 million documents each year, representing nearly \$40 billion in freight bills. It also delivers real-time communications to thousands of fleets, brokers, and commercial vehicle drivers. Organizations throughout the company's client and partner network look to Transflo to increase efficiency, improve cash flow, and reduce costs.

Learn more at [www.transflo.com](http://www.transflo.com)

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To learn more, visit [www.transflo.com/eld](http://www.transflo.com/eld) or call 813.386.6000.

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