QUICK GUIDE

Electronic Logging Devices
More Than Just Hours of Service Compliance
The trucking industry is facing substantial reforms in the face of recent regulatory activity concerning Hours of Service (HOS) compliance and Electronic Logging Device (ELD) requirements. The Federal Motor Carrier Safety Association (FMCSA) released a proposal on January 31, 2011 mandating that all motor carriers which are currently required to maintain Records of Duty Status (RODS) for HOS record-keeping to use ELDs to “systematically and effectively monitor their drivers’ compliance with HOS requirements”. A Supplemental Notice of Proposed Rulemaking was published on March 12, 2014 containing updates to the 2011 mandate and is now under consideration.

This quick guide will identify the different ways in which ELDs can be used to improve a fleet’s efficiency and productivity, in addition to the expected safety benefits.
Legislature and Regulations

These proposals and regulations being put forward by the FMCSA are addressing a greater ambition to improve HOS compliance through the use of technology. Many fleets are voluntarily adopting ELDs as a way to enhance safety, improve productivity and reduce costs, in addition to achieving superior compliance results.

The FMCSA estimates that nearly 5,700 interstate carriers will use ELDs within the first year of the rule’s implementation, and it sees the use of these devices as a critical way to decrease unsafe driving behavior and increase safety on roads and highways.
Return on Investment with ELDs

Trucking companies are beginning to see the benefits they can realize from implementing this technology. Kelly Frey, executive VP of Turnpike Global Technologies reveals that “The typical early adopter is a private fleet. However, we are seeing a new interest in automated logging among the very large national carriers, too. This is not just about safety; it is about implementing the best business practices.”

The return on investment that organizations can expect to see when they implement an ELD solution include:

- Reduced or eliminated DOT violations
- Improved safety ratings
- Superior HOS compliance
- Reduced maintenance costs with real-time data
- Improved resource utilization
- Greater efficiency and productivity
- Better customer service
- The ability to identify driver performance problems
ELD Requirements

An Electronic Logging Device (ELD) is an computing device that connects directly to a fleet vehicle’s engine. It records the amount of time the vehicle is being driven, as well as collects engine diagnostic and GPS data to help fleets optimize operations and automate regulatory compliance.

The FMCSA proposal requires ELDs to record specific information related to a driver’s duty status, including: identity of the driver, duty status, date, time and location of the fleet vehicle, and distance traveled. These devices must also provide real-time recording of the vehicle’s location and be tamper-resistant to prevent falsification of HOS information.
The April 2010 rule on ELDs for HOS compliance, also known as the 395.16 regulation, has a number of expanded technical requirements. Under this rule, ELDs must enable:

- The recording of location positions using GPS and allow law enforcement personnel to access the information in the device during roadside inspections
- Specifications for internal clock accuracy and data downloaded files, ELD diagnostics, wireless communication and USB standards to be used
- Specifications for recording driving time, electronic log data requirements, and displays of driver HOS status

As a result of the recent proposals and regulations from the FMCSA, motor carriers face the difficult task of complying with mandated driver logging and HOS requirements. Even for motor carrier companies who are not HOS violators, ELDs offer many benefits to improve business practices.
Increased Safety

The main benefit of ELDs is increased safety and compliance. By ensuring compliance with HOS regulation, motor carriers that install ELDs would ensure that their drivers are not driving tired, which has the potential to make the roads safer for other motorists. For example, the National Transportation Safety Board (NTSB) cites driver fatigue as a leading cause in large truck accidents."

Additionally, in a report released by the Department of Transportation (DOT) office of the Inspector General states that “Driver hours-of-service violations and falsified driver logs continue to pose significant safety concerns...During roadside safety inspections, the most frequent violation cited for removing a driver from operation is exceeding allowed hours of service. Use of electronic recorders and other technologies to manage the hours-of-service requirements has significant safety value."
Cost-Benefit Advantage

According to a poll of nearly 1,000 transportation professionals, conducted by J.J. Keller & Associates, Inc., more than 40% of respondents named cost as the biggest reason why they are not using E-Logs, despite estimates from the DOT which show that most carriers could see a cost benefit as a result of implementing an ELD solution.\textsuperscript{viii}

According to Darren Hansen, Transportation Safety Editor at J.J. Keller, “Based on a cost-benefit analysis, the FMCSA estimates the safety benefits of ELDs to be about $890 per year per power unit.”\textsuperscript{ix}
Operational Benefits

For motor carrier companies, ELD benefits extend beyond HOS compliance. Using ELDs can help a company increase productivity gains, crack down on fuel costs and operate more efficiently.

Better Dispatching

In a Fleet Owner article, Bill Bishop, Superintendent of Transportation for Price Chopper, a New England supermarket chain explains how this class of technology drives their fleet’s productivity gains: “If you have a system that enables you to look at your fleet in almost real time, then you can do a much better job of dispatching...If we can see that we have five drivers coming back in and the time each one has left, for instance, then we know who we can give which extra loads to.”

Enhanced Organizational Performance

With ELD technology, companies can realize improvements in KPI goals such as fuel economy and vehicle optimization. ELDs can collect driver log and vehicle mileage data which companies can then analyze to make improvements.
Improved Load Planning

By adding an ELD solution to a fleet, companies can make their load planning process more efficient and increase productivity. Visual interactive mapping tools help dispatchers build routes in real-time with factors such as order types, equipment requirements and service levels. Motor carrier companies can also use the system to monitor equipment assignments to minimize resource downtime.

Reduced Fuel Costs

By monitoring truck idle time caused by drivers and eliminating incidents of speeding, best-in-class motor carriers have achieved significant operational savings in fuel efficiency (MPG). Best-in-class motor carriers can also use data collected by in-vehicle devices to identify under-utilized assets. For example, if a full-service lease cost for a tractor is $1,600 per month, eliminating only one truck from a fleet would result in a savings of $19,200 per year.
Summary

The trucking industry is taking road safety very seriously, and the increasingly rigid hours-of-service regulations are evidence of this. ELDs play a critical role in ensuring HOS compliance and ultimately increased safety. While implementing ELDs has not become an industry-wide mandate yet, there are additional compelling reasons to adopt this class of technology: ELD use is essential for improving productivity and increasing efficiency.

ELDs provide greater transparency into an operation, allowing companies to identify factors that limit productivity. With drivers’ HOS a crucial factor in improving productivity, ELD technology provides companies with accurate, real-time data, putting them on the leading edge of efficiency and performance.
AssetWorks Field Service Solution

AssetWorks Field Service Solution (FSS) makes Hours-of-Service compliance effortless and straightforward. Combining in-vehicle ELDs and in-office software, FSS improves transportation management, eliminates the need for paper logs, and simplifies compliance reporting and record retention. This solution is designed to work in many challenging environments and allows fleets to benefit from greater compliance, with lower administrative costs, ease of use, and safer operations.

In addition to ELDs, AssetWorks Field Service Solution provides customers with a single platform for field ticketing, dispatch, IFTA data collection, vehicle and asset tracking, and pre/post trip vehicle inspection.

For more information on Hours of Service and Electronic Driver Logs, visit www.assetworks.com
Sources


ix Ibid.


xi Ibid


xiii “Smartphones becoming an increased security risk.” by Joe O’Halloran. In Computer Weekly, June 2008