



## U.S. TRUCKERS RACE TO DEPLOY ELECTRONIC LOGGING DEVICES

Early data suggests the technology is making the roads safer



**As time runs out for U.S. truckers to upgrade** to electronic logging devices to track how long they're on the road, data from drivers who've already made the switch indicates that the controversial systems are working as intended.

Trucking companies and independent truckers operating Class 8 commercial vehicles were required to start using electronic logging devices (ELDs) by December 2017. A U.S. Department of Transportation (DOT) division that monitors the industry mandated the devices to ensure companies comply with hours-of-service rules that limit drivers to working 14 hours in a day, with no more than 11 hours of driving.

Many small fleets and independent drivers installed ELDs when the regulation took effect. But regulators gave others, primarily midsize and larger fleets, extra time to comply because they had previously installed older-generation electronic tracking systems called automatic on board recording devices, or AOBRDs. The grace period for AOBRD users ends 16 December 2019.

More than half of the 3.5 million trucks required to install ELDs still hadn't switched as of May, according to Trucks.com.

Preliminary data shows that ELD adoption already has led to fewer truckers driving when they're not supposed to. From December 2017 to June 2019, truck-driver inspections that

**ON THE ROAD:** There were 4,657 large trucks involved in fatal crashes in the United States in 2017. In 60 cases, the truck driver was asleep or fatigued.

resulted in at least one hours-of-service violation dropped significantly, from 1.19 percent to 0.57 percent, according to the Federal Motor Carrier Safety Administration (FMCSA), the DOT's trucking regulator.

"I think they're okay," says Michelle Kitchin, a veteran trucker from Grand Rapids, Mich., who drives for a company in the process of making the switch. "If used correctly, they can protect the driver."

ELDs plug into a truck's engine control module through the J1939 vehicle bus to synchronize with the engine and record required data on engine power status, engine hours, vehicle motion, and miles driven. The devices also track the identity of the driver, vehicle, and trucking company. Drivers must also input their duty status to reflect their time spent driving, waiting at a loading dock, sleeping, or on a break. The driver uses the device, which is generally about the size of a sandwich, to transfer the data when requested to the trucking company and vendor.

A typical ELD system consists of a hardware unit and a companion app. The older-generation, AOB RD, systems recorded some but not all of the same data. Many also had display screens that were hardwired to a truck, which meant drivers had to be in the cab to use them.

In the months before the ELD regulation took effect, groups representing small trucking fleets and independent drivers lobbied unsuccessfully to stop it and warned that it would lead drivers to quit rather than switch.

For the most part, that didn't happen. "There was so much ridiculous panic that it would force people out of the industry and drivers couldn't earn a living," says Brian Fielkow, chief executive at Jetco Delivery, a Houston trucking and logistics company. Instead, he says, it forced carriers to charge shippers and receivers more appropriate rates.

Some trucking companies have delayed switching until the last minute, partly to wait for vendors to work out any bugs and partly to wait for prices to drop. Units can cost from several hundred dollars for bare-bones models to US \$1,000 or more. Users may pay additional monthly subscription fees for data storage and analytics.

Jetco, which has 150 drivers and about the same number of trucks, switched from a hardwired system to a tablet-based system several years ago, so moving to ELDs earlier this year was relatively simple, Fielkow says. "The tablet-based system is much more practical given that drivers switch trucks," he says.

The FMCSA allowed suppliers to self-certify their equipment, which resulted in a flood of vendors. As of early September, the agency's database listed more than 470 registered units, with some vendors selling multiple units for different truck types.

As the December deadline approaches, trucking companies that have yet to upgrade can order devices directly from vendors or online through sites such as Amazon.com. Vendors are also selling ELDs at truck stops. Transflo, for example, stocks units at Pilot Flying J Travel

Centers and Love's Travel Stops, among others, according to Doug Schrier, the company's vice president of product and innovation.

The company that Kitchin drives for, Van Eerden Trucking, operates a 150-truck fleet based in Byron Center, Mich., and is just now switching to ELDs.

Van Eerden, which hauls office furniture to the East and West coasts and produce to Michigan on return trips, has figured out that driver relays are the key to keeping freight on the road and drivers within hours-of-service boundaries, Kitchin says. That means that after she drops off a load in California and is on her return trip, Kitchin drives as far as her hours of service will permit. If she has to stop, another driver or driver team meets her and takes her trailer, and she waits for instructions from dispatch about her next load.

"It's keeping us moving, which makes us get more freight," Kitchin says. "We pull more loads because we're doing it this way, which makes everyone more money." —MICHELLE V. RAFTER

*An extended version of this article appears in our Cars That Think blog.*

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**SAFETY FIRST:** A driver records his hours using an electronic logging device. There are currently 2 million truck drivers in the United States, and the field is expected to grow.