

A data gold mine

Joe Doerr discusses why telematics are a fleet manager's most important set of tools.

Fleet managers have a variety of responsibilities – selecting and purchasing vehicles, designing and implementing maintenance schedules, record keeping, driver management – and all of these responsibilities take a tremendous amount of time and effort. Fleet managers are often stretched thin, and any help they can get – technological or otherwise – is usually welcomed.

This is partly why telematics can be so helpful for organizations. Telematics have been designed to assist fleet managers in a number of ways, including helping them plan for unforeseen events, be more productive and react to issues in real time.

According to Fleetcarma, the term telematics is a combination of the words “telecommunications” and “informatics,” and can be defined as technology that informs “people how well their machines are working” by using a “system that collects data to provide you with actionable information and guidance.”

Fleet telematics uses a combination of GPS and telecommunications systems to give companies real-time data about their fleet's location, drivers' behavior, and vehicle diagnostic information. Using the internet, sensors, cameras, cellular-baseband radios, and complex algorithms to monitor things like driver performance, a truck's mechanical status and other critical truck safety issues, telematics can be a fleet manager's best friend. Some of the most common telematics systems are GPS devices, on-board diagnostic systems and cameras.

Telematics and CSA

When CSA was launched in 2010, it gave companies subject to Federal Motor Carrier Safety Regulations (FMCSRs)

the ability to analyze violations captured within the Safety Measurement System (SMS) and target those behaviors to improve their safety profile. The SMS is a great platform for companies to use to set benchmarks and focus on areas where they need to improve. However, using SMS in this way is still somewhat reactive because adjustments are being made after drivers have been found to be non-compliant, rather than before.

Bad driving behaviors and habits are learned and executed over a long period of time. A driver could potentially drive recklessly hundreds of times before ever being caught. By using the data produced by telematics, fleet managers and companies are taking a proactive approach to improving their safety profile, as well as meeting federal regulations and capitalizing on the ability to monitor behaviors that lead to violations and areas of non-compliance. In fact, top violations for drivers in roadside inspections have the potential to be drastically reduced through the usage of telematics.

In 2017, 58 percent of all traffic enforcement violations came from moving violations, with 16.14 percent of those violations stemming from speeding six to 10 miles per hour over the posted speed limit. Telematics can easily track this data so fleet managers can see it in real time and ask their drivers to slow down.

Likewise, if you are using a mobile platform via a cellular phone you have the ability to monitor phone usage, such as texting and talking on a handheld device, as opposed to being hands-free. Of course, on-board cameras can help with seat belt violations, which made up a staggering 15.34 percent of violations last year. Not only is that number shocking, it's unnecessary – and expensive.

Unsafe driving and HOS

Two of the FMCSA Behavior Analysis and Safety Improvement Categories (BASICS) that telematics could have an instant impact on are unsafe driving and Hours of Service (HOS). Real time data allows you monitor HOS, allowing you to make sure your drivers are maintaining compliance within the HOS regulation,



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and gives instant feedback on how safely or unsafely drivers are operating during the course of their work day.

As a reminder, the HOS BASIC addresses the requirements within the FMCSRs at 49 CFR Parts 392 and 395. This BASIC includes violations of the regulations pertaining to Records of Duty Status (RODS) as they relate to HOS requirements and the management of commercial motor vehicle (CMV) driver fatigue. Some example roadside safety violations that may cause a motor carrier to rank poorly in this BASIC include a driver operating more hours than allowed under HOS regulations and falsification of RODS. By using telematics to track how far drivers are driving, and when, fleet managers can stay on top of exactly when a driver needs to rest.

Similarly, the Unsafe Driving BASIC addresses the requirements within the FMCSRs, specifically 49 CFR Parts 392 and 397, and refers to the operation of commercial motor vehicles (CMVs) by drivers in a dangerous or careless manner. Some example roadside safety violations that may cause a motor carrier to rank poorly in this BASIC include speeding, reckless driving, improper lane change,



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and inattention. Again, telematics can capture this data and fleet managers can make real-time decisions on how to address these behaviors with drivers.

Teletrac Navman, a provider of telematics and fleet management technology, believes that as federal compliance fluctuates, a telematics system that includes an HOS solution can make record-keeping efficient and more reliable for drivers.

“No more getting dinged for non-compliance just because of a lost form,” wrote Teletrac Navman writer Sarah Barbod. “Two-way communication can take the guesswork out of handling unexpected situations on the road, such as bad weather or a major traffic jam. Turn by turn directions help drivers detour around construction efficiently instead of wasting time caught in traffic. Safety analytics helps managers identify

which drivers are practicing safe driving habits, and which drivers need additional training – thus increasing the fuel efficiency and safety of the entire fleet for substantial cost savings.”

Leveraging data

According to Sam Madden of Cambridge Mobile Telematics, “telematics can also play a major role in helping truck owners leverage the real-time data to take operations to a new level.” A few of the most effective management practices he’s observed recently include:

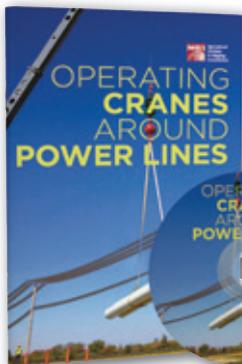
- Providing fleet drivers trip-by-trip feedback and insights on driving behavior and performance (including at-risk speeding, phone distraction, hard braking and more) to spark improvements.
- “Gamifying” safe driving to motivate individual drivers and teams to

compete for better scores, badges, prizes and bonuses.

■ Using advanced analytics and machine learning technology to capture and convert risky driving activities into actionable insights, scores and performance feedback. Madden goes on to write that those practices can be combined with traditional management approaches like vehicle, driver and location-based tracking and history to give truck owners more transparency and control. And more transparency and control, especially for fleet managers, is always a good thing.

For more information on telematics systems and how to put them to work for you, or for questions regarding any of the seven BASICS, contact Joe Doerr or another NBIS risk management specialist today at 1.877.860.RMSS (7677). ■

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