

EIGHT WAYS TO USE DATA TO MANAGE SAFE DRIVING

The sources and amount of data available in trucking are rapidly accelerating, and much of this data is relevant to safety. In addition to providing information that helps you improve fleet operations and stay compliant with regulations, myriad devices and systems now detect aggressive driving behaviors, speeding, drowsy driving, distractedness and more.

Fleets can dramatically enhance safety when armed with this data, but it's only useful if management understands it and takes action accordingly. You face choices on two fronts—deciding which products to employ in collecting safety-related data and selecting applications and methods to help you organize and interpret the numbers. The ways to monitor and manage driving practices will no doubt continue expanding. But the possibilities don't have to be paralyzing. Try using new technologies with driver volunteers or focus groups to see which solutions will work best for your fleet. Here are eight ways to gather and use data to manage safe driving:



TELEMATICS

The telematics hardware, or black box systems, you rely on for vehicle remote diagnostics, location data and preventive maintenance scheduling can provide in-depth information about driver behavior. Text messages and emails can alert safety managers and give them detailed reports.

ELDs

A federal regulation is set to require electronic-logging devices for most commercial trucks beginning next year in order to collect hours-of-service data. Many ELDs are capable of much more, though. Safety information the devices can transmit includes: speed, hard braking and rapid acceleration. Because the devices can tell you where trucks are and how many hours drivers have left, you can avoid assigning drivers to loads they shouldn't try to deliver based on hours of service or fatigue.

VIDEO SAFETY SYSTEMS

Besides offering liability protection and training capabilities, video safety systems also help fleets manage risk. Video safety systems can detect aggressive driving, lane departures, space cushions and objects such as pedestrians and traffic signals. They can send clips of critical-safety events to fleet managers within minutes. Some systems score drivers based on swerving, speeding or hard braking, and have the ability to give drivers credit for safe behaviors as well.

HEADSETS

Due to privacy concerns, many fleets are reluctant to use in-cab cameras. Headsets, such as those by Maven Machines, could provide an effective alternative. The headsets measure subtle movements as drivers scan mirrors, gauges and objects inside and outside the cab. They perceive head bobs or lack of head movement as signs of drowsiness or fatigue. Reports to fleets include driver-risk assessments, speed and location data. Using phones and third-party telematics systems, reports also can pinpoint hard-braking and swerving events.

IN-CAB CAMERAS

Lenses are pointing the opposite direction, too, with dash-mounted cameras that monitor the driver for fatigue and distraction. These units recognize movements, such as the driver's eyelids closing or head nodding, and then issue a warning to the driver. Footage from in-cab cameras also can be used to determine if distracted driving was a factor in an incident. Most systems send reports to fleets only when critical events occur.

TAKE ADVANTAGE OF "BIG DATA" PLATFORMS TO MANAGE SAFETY AND OTHER INFORMATION

Numerous vendors are helping fleets make sense of the mountains of data now at their disposal. They gather data from multiple sources, including mobile devices, ELDs and telematics systems, and organize it so it's digestible and meaningful. Fleets can then use the information to improve safety, compliance and retention. Some of the leading companies/products in this field include: [Omnitracs Analytics \(formerly FleetRisk Advisors\)](#), [Vigillo's Athena](#), [Lytx](#), [SmartDrive](#) and [Transportation Performance](#).

DEVELOP PROCEDURES FOR RESPONDING TO THE SAFETY INSIGHT YOU GAIN

Whether you use a platform solution or crunch the numbers in house, taking action is essential to benefiting from your data-seeking efforts. Some fleets dedicate one or more members of their safety teams to studying safety events reported by various tools, counseling or recognizing individual drivers and suggesting companywide changes based on overall trends.

GIVE DRIVERS FEEDBACK

This should be a critical part of your action plan, and options abound. Many fleets send drivers scorecards that compare their safety-related performance to that of their peers. Use scores or information from your big-data platform (such as lists of drivers most likely to have preventable accidents) to reward your top performers and hold remediation talks with those at risk. Often, they're struggling with a personal issue.