EROAD

Encourage safe driving through best-in-class driver behavior analytics

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Every company wants to keep its drivers and the public safe, manage and maintain its CSA scores, and protect its reputation by ensuring a high standard of driving in company vehicles.

The question is how does a committed and safety-minded company promote safe driving? Does consistent use of best-in-class driver behavior analytics based on data from an accurate on-board device make a difference, helping to reduce speeding and other poor driving behaviors?

The answer is yes.

Organizations that use EROAD's driver behavior analytics have 38% fewer speeding events than organizations that don't view them at all.

SPEEDING FREQUENCY
EVENTS PER 100 MILES

■ Engaged with Driver Analytics
■ Unengaged with Driver Analytics

53.4   33.1

Speeding Frequency
↓ 38%

The challenge

In 2013, the FMCSA (Federal Motor Carrier Safety Administration) reported 3,541 fatal crashes involving large trucks. Driving too fast for the conditions was identified as the number one driver-related factor.

Violations may impact your CSA score and flag your company for FMCSA audit. Crashes or unsafe driving violations will reduce your overall rating which may lead to lost business and inability to obtain insurance.

Civil or criminal penalties, or even third party litigation can hit your business hard. Generally, it is the employing motor carrier, rather than the violating driver, that is assessed for penalties or the target of court action.

Operational downtime and costs related to the accident will directly hit your bottom line if you are self-insured. Even if you have good third-party insurance coverage, you may have a deductible to pay or coverage options that you haven't taken up such as liabilities for injuries or damage to other people or property if your driver is at fault for an accident.

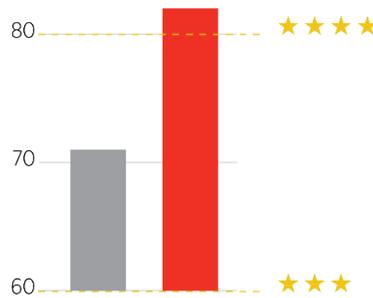## Meeting the challenge with best-in-class driver behavior analytics

Changing on-road driving behavior takes time; the great news is that it is highly achievable.

EROAD has found that a consistent attention to and monitoring of driving behavior analytics is the key to improvement.

Customers who regularly interact with EROAD's Leaderboard have an average vehicle rating of **Four Stars**, compared with customers who did not; low engagement resulted in an average vehicle rating of **Three Stars.**

MEDIAN LEADERBOARD SCORE FOR AN ORGANIZATION

■ High viewership
■ Low viewership

★ ★ ★ ★

★ ★ ★

80

70

60

Make sure that you are using great analytics that will give your business the edge. Look for:

Anonymized benchmarking of your vehicles and drivers against those in other companies. The best analytics are based on big data analyses resulting from access to billions of driving miles, allowing you to compare your driver, vehicle and fleets' driving behavior against the wider driving population. Is your driver the best in your company, or truly best of breed?

Intuitive and easy to read analytics. Sophisticated reporting shouldn't mean incomprehensible. Your team will come from a variety of backgrounds, and reports should surface key facts and insights in an accessible manner to have maximum impact and boost safety outcomes.

Feedback on risky driving behaviors in addition to speed. Harsh braking and sharp acceleration events can be leading indicators of overly aggressive driving, alongside failing to scan the road ahead. This could be a strong indicator of the need for targeted driver training.

Specific actionable insights. Give your driver trainer or fleet manager a head start as they coach the drivers. It's much more powerful to tell a driver '*Your fastest over-speed was 78mph near I-5 N, LaCenter, Washington at 21:42 on Jun 1st'* than merely offering generic feedback resulting in your driver having to remember or guess.

Monitoring sub-contractor or partner driving. To maintain a high standard of driving across all vehicles driving for you, often wrapped with your branding out there on the road, you need a view not only across your own drivers, but also any owner-operators you employ.

Organizational speeding trends. To monitor progress against targets, you need not only simple speed event count reporting, but also metrics that report how the frequency of speeding is trending over a month or quarter.

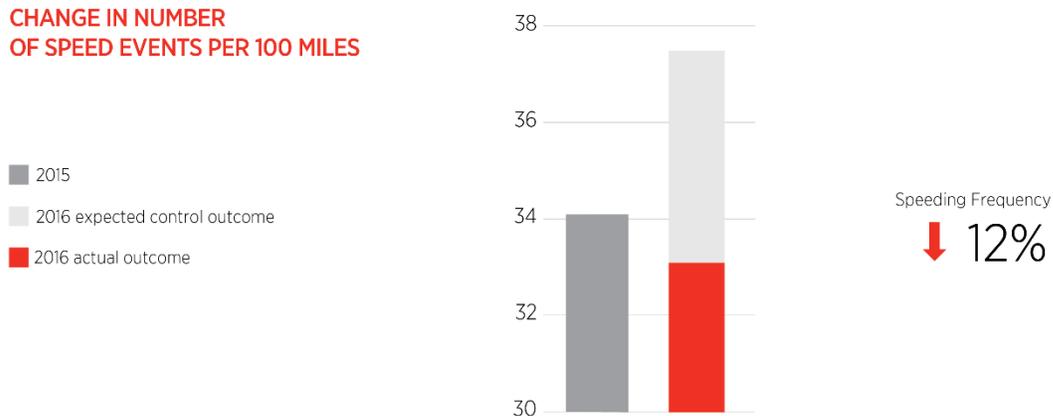## Seven ways to boost safe driving across your organization

To get the most out of the technology, the data it offers needs to become embedded into your daily fleet management practises: Your daily engagement makes a difference.

Tips to improve driving behavior

1. Regular and consistent viewership of your company's driver behavior analytics and trends. If you, as an owner, fleet manager or driver safety director aren't paying attention to whether driving is improving or deteriorating, why would your drivers?

2. Make easy-to-read over speed charts or other comparative driver analytics available to drivers as they go on and off their shifts, on a tablet, laptop or pin-up printouts.

3. Incorporate specific driver behavior metrics into driver performance appraisals. Some tools, such as EROAD's Driver Insight, provide a ready to use, one page summary of behavior.

4. Identify key metrics of concern, such as highest over speed locations from EROAD's Over Speed Dashboard, and share them in your safety and staff meetings.

5. Schedule key reports to be delivered to the fleet managers' inbox daily or weekly. Some days you and your team are just too busy to log into the fleet management system.

6. Reward great driving to foster positive and safe competition. Use driver ranking analytics such as EROAD's Leaderboard to identify the top driver for the week and incentivize with vouchers, or inclusion in a more formal driver rewards program.

After introduction of the EROAD's driver behavior analytics, engaged customers saw an average 12% decrease in speeding frequency between expected control and actual outcome.

**CHANGE IN NUMBER
OF SPEED EVENTS PER 100 MILES**

■ 2015
□ 2016 expected control outcome
■ 2016 actual outcome

Speeding Frequency
↓ 12%

Your onboard device should be accurate, trusted, powerful

Great driver behavior analytics starts with the quality of the onboard device in your driver's cab.

If you're seeing straight lines all over your maps, not journey lines that actually follow the roads, then the quality of your data and reporting is going to be second-rate.

Questions to ask your technology partner

How accurate is the location reporting of the onboard device?
For fine-grained and precise reporting on driver behavior events, the onboard device should report back frequently.

Has accuracy been independently verified?
Has the unit's accuracy been independently verified by an independent third party or regulator, and within what +/- % accuracy?

Is the onboard device secure and tamper evident?
Accurate event reporting requires a unit which is secure, with no 'missing miles.' If the driver is tampering with the unit to mask journeys or other poor behavior, you need to know.

Does the onboard device provide an easy-to-use driver ID solution?
Reporting needs to be available on driver performance (versus truck performance) for increased accountability. With a simple driver ID solution, driving behavior measures can be embedded into appraisals, and training can better-targeted.

Can the onboard device deliver real-time feedback to the driver?
Units that deliver real-time safety information to drivers through visual and audible alerts in a safe manner, provide feedback when drivers are best able to adjust their driving – when they're out on the road.

'The key to a successful safety culture is easy access to data that is available immediately for use and customized to the respective audience.' *FMCSA's Office of Analysis, Research, and Technology.*

What is your provider's up-time?
You want to know where your vehicles are, and what they are doing all of the time. A professional technology provider will not have regular outages. Look for uptime north of 99.9%.

How does your provider support you in real time when you have questions?
If you have a query, you want it by answered by knowledgeable help desk staff working in the same time zone as you and who spend time on developing strong relationships.

Let's get going

Safe driving programs, partnered with the best fleet management technology, deliver measurable benefits above and beyond improving driving, reducing incidents and the likelihood of audits.

Further benefits include improved fuel consumption, reduced wear and tear on vehicles, reduced insurance cost, and mitigation of investigations or litigation through auditable records of your safe driving program in action.

EROAD can partner with you on this journey, supplying world-class technology and analytics to deliver the highest degree of accuracy and the most measurable improvements you want to drive through your fleet.

- Since EROAD was established in 2000, its in-vehicle hardware device 'Ehubo' has tracked billions of travel miles across the globe.
- Highly accurate event reporting is driven by EROAD's trusted, intuitive, accurate, powerful Ehubo.
- EROAD's tamper-evident Ehubo continuously transmits encrypted data via the cellular network.
- Our Leaderboard benchmarks driver behavior against the EROAD drivwing population, so you know whether your driver is good or great.
- Driver behavior analytics expose potential problem areas and trends, and deliver actionable insights about speeding, harsh braking and sharp acceleration.
- EROAD's easy-to-use driver identification solution allows accurate monitoring by showing which driver is in which vehicle for greater driving accountability.
- The EROAD solution achieves an industry-leading 99.98% service uptime.
- The EROAD solution has received an independent, unqualified opinion by the Oregon Secretary of State Audit Division. This state government audit concluded that the EROAD technology platform was accurate and reliable. Additionally the New Zealand Transport Agency's audit of the Ehubo confirmed distance to be accurate within +/-0.5% accuracy compared to a mechanical odometer.

Study

EROAD studied the effect of EROAD engagement on driver behavior in June 2016 across 1344 organizations for the periods prior to and after the introduction of EROAD's driver behavior analytics including the Leaderboard, Insights and Driver Safety Reports. Authored by Gareth Robins, EROAD Analytics Engineer.

About EROAD, Inc.

EROAD, Inc. is a leading transportation technology and services company, headquartered in Tualatin, Oregon. EROAD's in-vehicle technology and global electronic platform enables carriers to efficiently utilize their capital and reduce the costs associated with fleet operations and management. EROAD offers a complete suite of user-friendly compliance and telematics solutions, including automated IFTA, electronic weight-mile tax, ELD-ready electronic logbook, support for driver safety, vehicle maintenance, fuel and fleet utilization reporting. EROAD's independently proven, secure platform guarantees accurate data that you can rely on to provide insight and competitive advantage.
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