



# How to Fortify Your Fleet Safety and Compliance Program

An Essential Tool for Fleet Managers,  
Safety and Compliance Professionals,  
and Operations Executives

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## Why Better Driving Safety is an Imperative

Driving safety has a pervasive impact on organizations operating private and for-hire fleets. Efficiency metrics, regulatory compliance, top-line revenue, and bottom-line results all depend on the safe performance of drivers, vehicles, and trailers. Specifically, margin impediments caused by safety issues are felt more acutely due to increased fuel pricing and other market dynamics.



## Changes in Insurance Costs and Liability

Commercial auto insurance pricing has continually increased for years. In Q4 2021, WTW, a multinational insurance advisor, reported the [17th consecutive quarter](#) of at or near double-digit price increases. More recently, Fitch Ratings, one of the three largest US credit rating agencies, cited [43 consecutive quarters with increases](#) in commercial auto renewal premium rates. Significant contributors to this pattern include a 43% increase in large truck-related fatalities from 2010-2019, coupled with a 967% increase in average verdict amount over roughly the same period. These judgments are commonly referred to as “nuclear” verdicts.

In contrast to policy cost increases, minimum liability coverage requirements for for-hire property carriers have [remained flat at \\$750,000 or \\$1 million for certain insurance carriers](#). As a result, companies that choose or are compelled to elect minimum coverage based on affordability, can face existential financial risk if found at-fault for a fatal accident.

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## Unplanned Maintenance and Downtime

Unplanned vehicle, asset, and driver downtime stemming from safety issues can dramatically weaken financial performance and operational efficiency. To this end, the overall cost per mile for repair and maintenance increased by 39% since 2008, per the American Transportation Research Institute. The latest full year of data from the American Trucking Association showed increases of 14.2% for labor and 8.8% for parts.

Beyond direct repair costs, safety issues can immediately impact revenue and operational efficiencies. Down vehicles and sidelined drivers are not productive. For example, it is estimated that the average service truck generates \$30,000 per month. Driving safety issues potentially compromise this revenue.

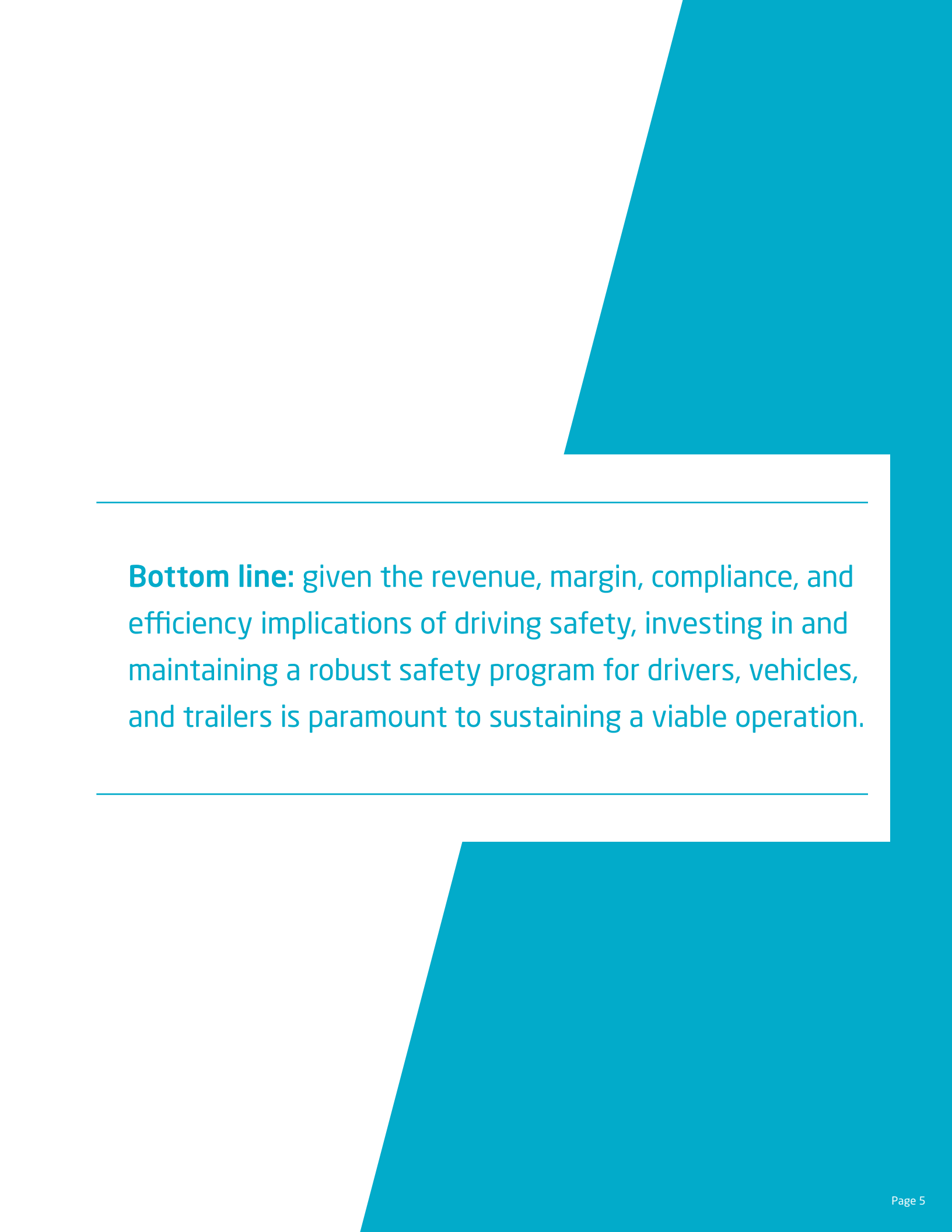


## Key Safety-Related Compliance Requirements

Specific oversight measures have been implemented to curb safety issues, including several mandatory processes for carriers subject to these regulations. Relevant safety initiatives include the FMCSA Safety Measurement System which ranks carriers for safety, Electronic Logging Devices (ELD) targeting driver fatigue, and Driver Vehicle Inspection Reports (DVIR) for vehicle safety. Poor performance or failure to comply with each of these can trigger various punitive measures as indicated in the table below.

Compliance Requirement	Overview	Additional Resources
<b>Safety Measurement System (SMS):</b>	Identifies carriers with potential safety problems. Percentile rankings derived from a complex formula identify carriers designated for intervention. For example, general carriers at or below the 65th percentile for “Unsafe Driving, Crash Indicator, HOS Compliance” are tagged for intervention. Escalation beyond intervention can include Offsite Investigation, Onsite Focused Investigation, and Onsite Comprehensive Investigation. Further intervention may include a voluntary Cooperative Safety Plan (CSP), formal Notice of Violation (NOV), Notice of Claim (NOC) with assessment and civil penalties, and Operation Out of Service Order (OOSO) to cease operations.	<a href="#">SMS Methodology</a> <a href="#">FMCSA Intervention Categories</a>
<b>Electronic Logging Device (ELD)</b>	Congressional mandate focused on improving safety by streamlining tracking, managing, and sharing records of duty service (RODS) for commercial buses and trucks engaged in interstate commerce. ELDs record hours of service (HOS) directly from vehicle engine data. Devices must be compliant with technical standards, certified by manufacturers, and registered on the FMCSA website. Those not in compliance are subject to a number of penalties including out-of-service placement, adverse impacts to CSA BASIC scores, and fines.	<a href="#">Summary of Hours of Service Driving Limits</a> <a href="#">FMCSA ELD Final Rule</a>
<b>Driver Vehicle Inspection Report (DVIR)</b>	Mandates drivers employed by motor carriers submit a report at the end each workday listing any defects or deficiencies which would affect the safe operation of the vehicle or result in mechanical breakdown. Before operating a vehicle, drivers subject to DVIR rules must also inspect the vehicle and be satisfied it is in safe operating condition. If the last vehicle inspection report lists deficiencies, the driver must review and sign to acknowledge and certify required repairs were completed. Consequences for non-compliance include daily fines for failing to complete a DVIR and larger monetary penalties for falsifying a DVIR to hide a safety defect or failing to repair a reported safety defect.	<a href="#">FMCSA Motor Carrier Safety Planner</a> <a href="#">FMCSA DVIR Final Rule</a>

Adverse information on a carrier’s safety record can further impact both revenue and profit. Through the FMCSA, data on carriers is available to the public, including potential customers and insurance underwriters. For property carriers, this includes inspection and crash data, investigation results, and measures for all public Behavior Analysis and Safety Improvement Categories (BASICS). For passenger carriers, all safety information tracked by the FMCSA is available to the public.



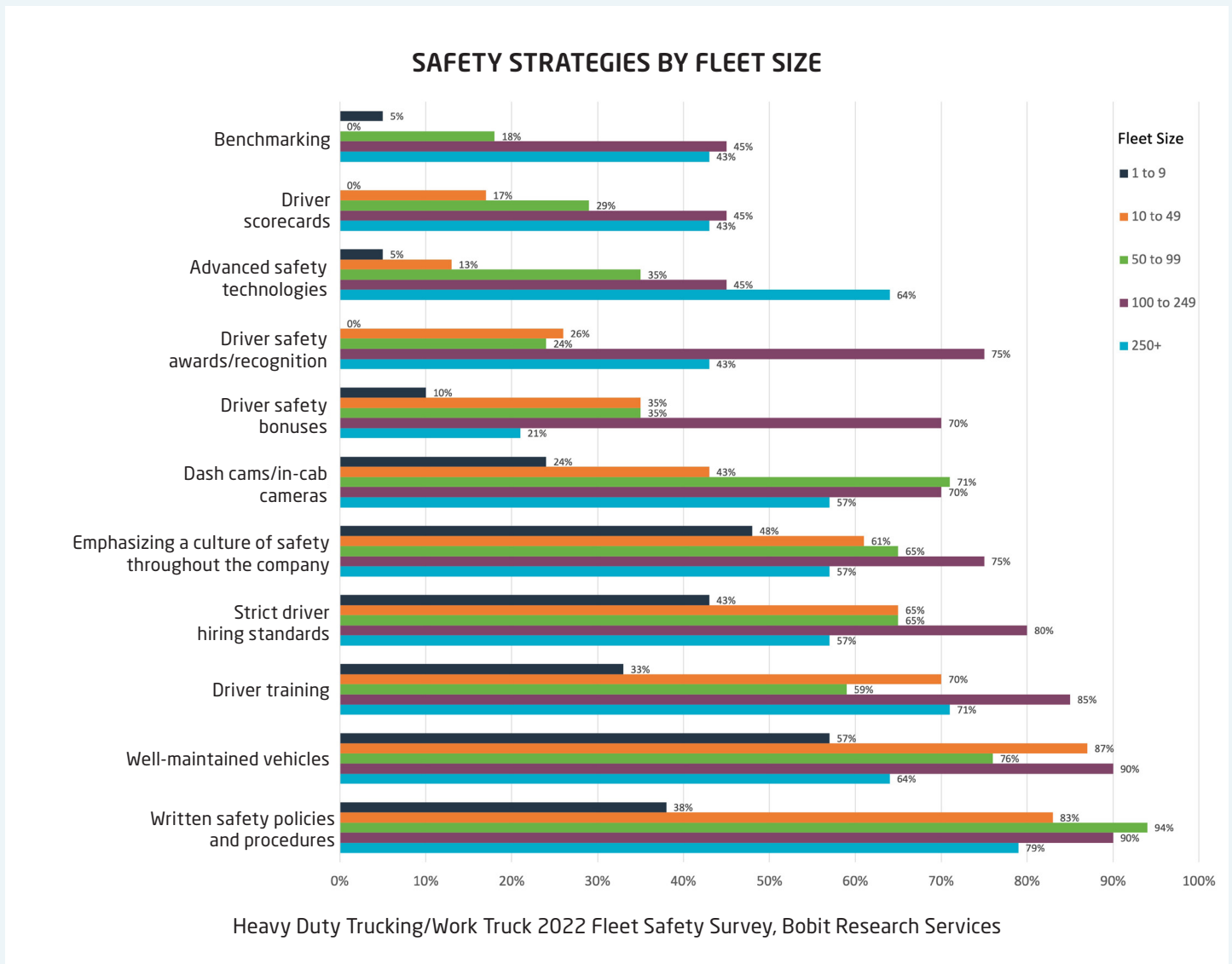
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**Bottom line:** given the revenue, margin, compliance, and efficiency implications of driving safety, investing in and maintaining a robust safety program for drivers, vehicles, and trailers is paramount to sustaining a viable operation.

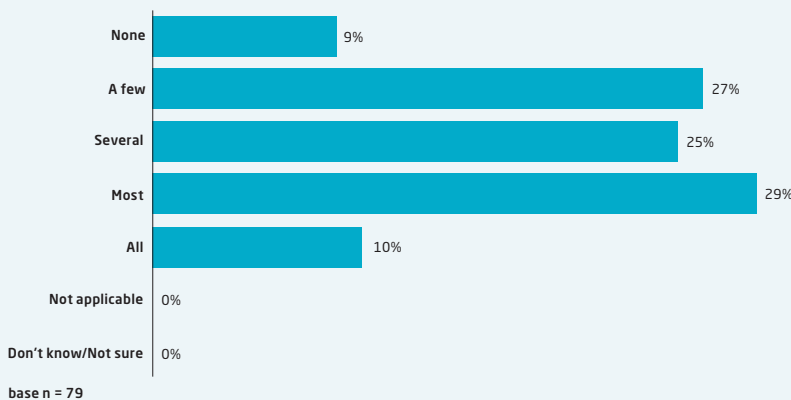
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## How Effective Are Current Solutions?

A [2022 survey by Heavy Duty Trucking and Work Truck Magazine](#) identified the top 10 current safety strategies, segmented by fleet size. More than half of all fleets with 10 or more vehicles have implemented the top five strategies, involving written policies, maintenance, training, hiring practices, and safety culture.



### Of the crashes your fleet was involved in 2021, what percentage of accidents were preventable?



Further data indicates that additional focus is warranted to address safety and related compliance issues, in order to achieve fewer accidents, improved efficiency, and reduced repair, insurance, and downtime costs.

To this end, 39% of fleets indicated most or all of 2021 accidents were preventable, per the [Fleet Safety and Accident Management Study](#) from Bobit Research Services, the publisher of Work Truck and Heavy Duty Trucking Magazines. This data clearly shows that as an industry, there is considerable room for improvement.

## How to Fortify Your Safety & Compliance Program

The majority of fleets with at least 10 vehicles currently rely on written policies and procedures, maintenance, training, hiring practices, and promotion of a safety culture. In addition to these fundamental steps, an advanced telematics platform is ideal for augmenting safety and compliance capabilities. Adding this technology to help build a sterling compliance and safety framework affords the following potential impacts:

- ✓ Minimize risky driving behaviors
- ✓ Prevent avoidable accidents
- ✓ Avoid liability for no-fault accidents
- ✓ Reduce unplanned repair and maintenance costs
- ✓ Heighten operational efficiency
- ✓ Elevate CSA scores
- ✓ Delight customers and prospects
- ✓ Exercise more control over coverage rates

The following is a recommended recipe for employing telematics in order to bolster your safety and compliance program:

### Scope the Problems in Your Shop

Effecting greater transparency in driver behavior enables you to hone-in on actual conduct and better target and training and coaching for maximum impact. **Advanced telematics with AI technology** allows you to automatically detect undesired behaviors and violations such as speeding and harsh acceleration, braking, and cornering. **Driver Scorecards** can be employed to curate this data, with customized weightings, simplifying oversight at the group and individual levels. Beyond coaching, scorecards can be also be used to showcase top performers, for managers who prefer to implement a reward system.

**AI-driven Video** can also be utilized to pinpoint distracted driving incidents, which have been labeled the primary gap in driver performance.

### Reinforce Training For Observed Behaviors

Once unwanted behaviors have been identified, **in-cab alerts, scorecards, and video** are excellent tools to facilitate or supplement coaching. Incorporating empirical data in this process removes opinions, resulting in more objective, fact-based discussions.

### Capture Incident Data

With the CalAmp solution, **curated video** automatically documents nine seconds before until five seconds after an incident, giving you a clear view of what happened in the cab and in front of your vehicle. Arming your insurance company or attorney with this data can provide definitive proof of no-fault, demonstrate mitigating circumstances in an accident, and discredit any false claims.

**Accident reconstruction capabilities** remove guesswork by capturing essential incident details including the force of the crash, direction of impact, and speed prior to impact. This capability can then be employed to achieve a more-timely disposition by automating incident reports, facilitating investigative services, and streamlining the claims process.

## Automate Maintenance Monitoring and Scheduling

**Precision scheduling, alerts, and reporting** help streamline routine maintenance management, preventing serious issues from cropping up. Alerts from the telematics system can also flag impending safety risks with **automated warnings** for tire pressure, open trailer door, wheel-end temperature, vehicle diagnostics, and other developments requiring immediate attention.

## Elevate CSA Scores

Improving CSA scores is critical to avoid FMCSA penalties, control insurance costs, and pass scrutiny by customers and prospects tracking published data. The FMCSA collects data from inspections, crash reports, and Acute and Critical Violations identified during previous investigations. Data is then collated and assessed based on seven [Behavior Analysis and Safety Improvement Categories \(BASICS\)](#), as well as an "Insurance/Other" indicator for registration, insurance, and other reporting requirements. The BASICS are:

- Unsafe Driving
- Crash Indicator
- Hours-of-Service (HOS) Compliance
- Vehicle Maintenance
- Controlled Substances/Alcohol
- Hazardous Materials (HM) Compliance
- Driver Fitness

Advanced telematics can directly influence scores by impacting **safe driving, accident avoidance, inspections, HOS compliance, and maintenance-related measures**.

## Ensure ELD Compliance

Advanced telematics helps you avoid costly hours-of-service issues and maintain full compliance with a reliable ELD solution. As an example, the CalAmp solution offers:

- Full compliance with US, Mexican, and Canadian regulations
- Small footprint, 7" rugged tablet, resistant to 4-ft. drops, dust, and water (IP54 rated)
- Driver-friendly interface with a screen that can be used with gloves on
- Spanish and French language support
- Extensive reporting capabilities

## Streamline DVIR Reporting

Advanced telematics offers electronic inspection and reporting capability to quickly perform mandatory pre- and post-trip inspections. With the CalAmp solution, you can:

- Use pre-populated checklists to guide drivers through the inspections.
- Add notes, take photos, attach DTC codes, and capture audit logs to improve clarity and maintain oversight.
- Choose basic and detailed reporting options
- Immediately isolate inspections citing defects and repair status



## Employ Telematics to Bolster Safety and Compliance

Steps	Fleet Telematics	Driver Scorecard	Dash-cam Video	In-cab Alerts	Accident Reconstruction	Maintenance Scheduling	Maintenance Alerts & Reporting	Predictive Maintenance	ELD	DVIR
1 Scope the problems in your shop										
2 Reinforce training for observed behaviors										
3 Capture critical incident data										
4 Automate maintenance										
5 Improve compliance & boost CSA scores										

**Contact a CalAmp representative today to fortify your safety and compliance program.**

## About CalAmp

CalAmp (Nasdaq: CAMP) provides flexible solutions to help organizations worldwide monitor, track and protect their vital assets. Our unique combination of software, devices and platform enables over 14,000 commercial and government organizations worldwide to increase efficiency, safety and transparency while accommodating the unique ways they do business. With over 10 million active edge devices and 275+ issued or pending patents, CalAmp is the telematics leader organizations turn to for innovation and dependability. For more information, visit [calamp.com](http://calamp.com), or LinkedIn, Facebook, Twitter, YouTube or CalAmp Blog.

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15635 Alton Parkway, Ste 250, Irvine, CA 92618  
Tel: 888.3CALAMP • [calamp.com](http://calamp.com)

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