



THE AI-ENABLED VIDEO TELEMATICS GUIDE

The Future of Fleet Management and Safety

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If you're managing a fleet, you know the road is full of risks. In fact, nearly 20% of a company's vehicles are involved in an accident each year.¹ The safety of your team and the public, or the secure delivery of goods, are vital, but you must also consider protecting your hard-earned reputation and bottom line. With commercial auto insurance rates rising sharply in recent years, it's clear that managing these risks effectively is more important than ever.

Modern fleet management is no longer just about tracking your vehicles. AI-enabled telematics offers video proof that can exonerate drivers, improve their safety and speed up the claims process—a game-changing tool for businesses of all sizes that can lead to happier drivers and improved customer service. This investment not only safeguards your reputation but also reduces operational compliance and legal costs, making it a smart choice for any business with vehicles on the road.



Photo Courtesy of Lytx

The American Transportation Research Institute's (ATRI) report indicates a nearly

↑ 50% increase

in commercial auto insurance over the past decade, with a sharp rise between 2018 and 2020.²

But The Real Challenge? Choosing the Right Video Telematics Partner.

With so much on the line, you need a system that does more than just record the road. You need help to stay off the insurance company's radar and keep your fleet running efficiently.

This guide is your first step toward finding that perfect match. You'll discover how AI-Enabled Video Telematics can be a game-changer for your business and learn how to navigate with ease and confidence through the complexities of this relatively new technology. Whether you're looking to upgrade your current GPS tracking system or are starting from scratch, this guide can help you make a choice that will set you up for success.

Research from the AAA Foundation for Traffic Safety indicates that video-based onboard safety monitoring systems could prevent up to **63,000 crashes, 17,733 injuries and 293 deaths** annually.³

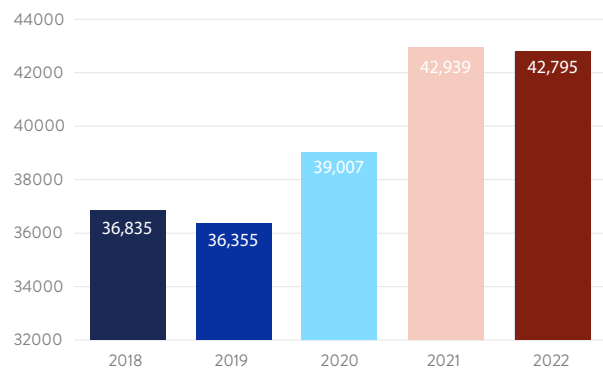


Road Safety Today: Navigating Challenges, Enhancing Protections and Reducing Claims

The Evolving Landscape of Road Safety and Vehicle Crashes

According to the National Highway Traffic Safety Administration (NHTSA), fatal accidents in the U.S. rose by 16% between 2018 and 2022⁴. This alarming trend underscores the critical need for measures to enhance road safety and protect drivers.

U.S. Traffic Fatalities 2018-2022



Understanding the Reasons Behind More Accidents and Fatalities

Let's look at some key reasons why more accidents are happening:

1. **Distracted Driving:** The rise in mobile device use has led to more distracted driving incidents, in which activities like texting or GPS use cause critical driving errors.
2. **Driver Fatigue:** Not getting enough rest can seriously affect a driver's ability to focus and react, leading to accidents.
3. **High Driver Turnover:** The commercial driving industry often faces high turnover rates, leading to a constant influx of less experienced drivers. This turnover can result in a workforce that's perpetually adapting, which might increase the chances of mistakes behind the wheel.
4. **Substance Abuse:** Impaired driving due to substance abuse among truck drivers poses serious risks.
5. **Younger Workforce:** The influx of younger, less experienced drivers has raised concerns about accident risks. These newer drivers might lack the road awareness and experience in handling large vehicles compared to veteran drivers.
6. **Insufficient Training Programs:** In some cases, the training provided to new drivers may not be comprehensive enough to cover all critical aspects of safe commercial driving, further contributing to the risk of accidents.

Addressing the Challenge of Distracted Driving

Distracted driving is more than just phone use – it's anything that takes a driver's attention off the road. Despite the increase in legislation aimed at preventing phone use while driving, and campaigns raising awareness about the associated risks, the ultimate responsibility for ensuring the safe travel of employees remains with businesses.

In 2021 there were an estimated

248,327

distraction-affected injury crashes

(14% of all injury crashes).⁵



Tech to the Rescue

Video telematics systems in vehicles are like having a co-pilot that helps keep an eye on the driver.

The cameras can audibly alert drivers if they seem distracted and help them learn from their mistakes.



Photo Courtesy of Lytx

Role of Cameras in Road Safety

AI-powered video cameras in vehicles have become instrumental in making roads safer. They prevent accidents through in-vehicle alerts, monitoring driving behavior, capturing real-time incident footage and offering critical insights into driving patterns. This technology has become a vital tool in exonerating commercial drivers involved in accidents, often proving their innocence when faced with attempted fraud, accusations or legal challenges.

Impact on Insurance Claims

Video telematics is also changing how insurance claims are handled. When an accident happens, the footage from these cameras provides immediate proof of what happened, which then helps speed up insurance claim processes. It makes determining who's responsible for the accident clearer and fairer for everyone involved. This shift to using video evidence is critical to making sure claims are handled justly and quickly.

How Video Telematics Works: A Not So Technical Deep Dive

Not all dash cams are created equally. Unlike standard dash cams that passively record road activities, video telematics systems offer far more advanced capabilities thanks to a combination of cellular connectivity, artificial intelligence, GPS technology and comprehensive vehicle analytics.



Also, standard dash cams require stored footage to be manually reviewed to identify instances of risky driving, which is time-consuming and inefficient. In contrast, video telematics systems are equipped with intelligence powered by AI.

These smart cams actively detect and alert on a range of risky driving behaviors, including:

- **Distracted Driving Events:** Cell phone use, smoking, yawning, no seat belt, eating or drinking.
- **Accelerometer Events:** Speeding, tailgating, possible impact, harsh acceleration, braking and turning.

Additionally, video telematic systems comprehensively capture and highlight critical events—before, during and after they occur. For instance, if a driver disregards a stop sign or engages in aggressive tailgating, the AI-enabled dash cams can promptly detect these actions and provide an alert along with a recording of the video clip. This proactive approach ensures that significant incidents are not overlooked and reduces the need for time-intensive footage review.

In the context of exoneration and faster insurance claims, these capabilities become even more valuable. Fleet managers can easily access, review and share video clips that capture the moments leading up to, during and following specific incidents directly through the admin portal. This eliminates the need to sift through hours of footage, significantly streamlining the review process.

The Hardware

Video telematics cameras represent a significant evolution over traditional GPS tracking solutions by offering a more comprehensive and detailed view of vehicle operations. The hardware combines the precision of GPS tracking, which provides exact vehicle locations and travel paths, with the rich insights from video monitoring.



Photo Courtesy of GPS Trackit

The hardware of a video telematics system typically includes a windshield-mounted front and rear-facing camera, and optional auxiliary cameras installed around the vehicle. These cameras capture high-quality footage of both the driver's actions and external road conditions. This setup allows fleet operators to closely monitor how the vehicle is being operated, including aspects like speed, braking and turning. It also provides insights into where the driver's attention is focused and what is happening outside the vehicle.

In addition to visual feedback, these systems often incorporate other sensors, such as G-force sensors and microphones, making the units more comprehensive in capturing various types of data. They are designed to be durable, compact and easy to install.

The Software

Software is equally crucial. Look for artificial intelligence (AI) capabilities that can analyze collected data and identify patterns of risky driving behavior, predict maintenance needs based on vehicle performance data, and ensure that the event description matches the video footage and analytics. This level of detailed analysis helps fleet managers make more informed decisions and take proactive measures to address potential issues.



Photo Courtesy of GPS Trackit

Furthermore, these systems can be configured to record specific behaviors or events, such as exceeding designated speed limits or encountering collisions. The video is automatically uploaded to the cloud via cellular connectivity for easy access, review and storage.

Overall, video telematics systems provide a more comprehensive understanding of vehicle operations and driver behavior compared to traditional GPS tracking devices. The scope of data collected by video telematics systems extends beyond mere video footage. These systems also gather a wealth of vehicle analytics data, such as speed, location and other vital parameters. This comprehensive data collection offers fleet managers a holistic view of their fleet operations, enabling more informed decision-making and enhanced operational oversight.

Beyond the Video: Exploring the Additional Benefits of Video Telematics

Comprehensive Driver Training and Development

One of the most impactful benefits of video telematics is its role in driver training and development. Event clips generated by the system are invaluable for coaching purposes. These clips, capturing instances of speeding, distraction and other risky behaviors, offer a clear and objective view of a driver's actions. By reviewing these clips, fleet managers can provide targeted feedback to drivers, focusing on specific areas of improvement. This approach not only enhances driver safety but also contributes significantly to overall productivity. Regular training and feedback using clips help teach safe driving and reduce the likelihood of accidents.

Predictive Maintenance and Operational Efficiency

Video telematics goes beyond monitoring driving behavior; it plays a crucial role in vehicle maintenance and operational efficiency. The system's ability to capture and analyze data related to vehicle performance enables early detection of maintenance needs. By identifying issues before they escalate into significant problems, fleet managers can proactively schedule maintenance, thus reducing downtime and repair costs. Furthermore, video telematics is instrumental in addressing low-speed mystery damages, particularly in parking lots. The video footage helps to pinpoint the cause of such incidents, aiding in quicker resolutions.

Ensuring Regulatory Compliance

Compliance with transportation regulations is a critical aspect of fleet management, and video telematics significantly eases this burden. The system ensures adherence to driving hours, safe driving practices and other regulatory requirements. Additionally, the integration of in-cab cameras, often equipped with night vision capabilities, enhances asset protection. These cameras can detect and record thefts or unauthorized use, providing extra security for the vehicle and its cargo. This dual function of ensuring compliance and protecting assets makes video telematics an indispensable tool for modern fleets.

Incorporating video telematics into fleet operations presents numerous benefits beyond basic monitoring and tracking. From enhancing driver training and improving vehicle maintenance to ensuring regulatory compliance and asset protection, video telematics offers a comprehensive solution to challenges faced by fleet managers. Its role in promoting safety, efficiency and compliance underscores its value in an evolving landscape.

Partnering Up: Key Questions to Identify Your Ideal Video Telematics Ally

Choosing the right video telematics partner is a pivotal decision that can significantly impact your fleet's safety, efficiency and overall management. To ensure you select a partner that aligns with your specific needs, consider these key areas of inquiry:

Assessing Compatibility with Your Fleet Needs

- **Event Clips Generation:** How capable is the system in generating event clips for specific behaviors like speeding, distraction or harsh braking?
- **Behavior-Specific Monitoring:** Can the system be customized to monitor and report on behaviors that are particularly relevant to your fleet operations?
- **Data Analysis and Reporting:** How detailed and user friendly are the data analysis and reporting functionalities? Can they cater to your specific fleet management needs?

Asking these questions will help you gauge whether the provider's solution is a good fit for your fleet's unique requirements.

Evaluating Technology and Innovation

- **AI Capabilities:** What are the AI features of the system, and how do they enhance the monitoring of driver behavior, particularly in terms of distracted driving and aggression?
- **Real-World Application:** How does the system's technology address real-world issues encountered by your fleet?
- **Innovation and Updates:** How frequently does the provider update its system with new features or technological advancements?

Understanding the technological ability of the system is crucial for ensuring that it meets the current and future needs of your fleet.

Assessing Customer Support and Service

- **Ease of Use and Setup:** How straightforward is the process of installing the cameras, setting up event triggers and retrieving video for review?
- **Driver Coaching Support:** How are video snippets and data insights delivered for driver coaching purposes? Are there tools to facilitate this process?
- **Ongoing Support and Training:** What level of customer support and training is provided to ensure effective use of the system?

Good customer support and an easy-to-use system are essential for maximizing the benefits of video telematics.



Preparing for Future Adaptability

- **Integration Capabilities:** How well can the video telematics system integrate with existing GPS tracking systems, and other fleet management and safety tools?
- **Scalability:** As your fleet grows or evolves, how expandable is the system to meet changing requirements? Do you have a single point of contact for easy ordering and support?
- **Future proofing:** What is the provider's commitment to future-proofing their system against upcoming industry changes and technological advancements?

Ensuring the system is adaptable and scalable will help your fleet stay ahead in a rapidly evolving technological landscape.

By addressing these key questions, you can effectively evaluate potential video telematics partners and select a solution that best fits your fleet's unique requirements and goals. The right partnership will not only address your current needs but also support your fleet's growth and evolution over time.

The Evolution of Safety: Modern Features in Today's Video Telematics Landscape

The evolution of video telematics systems has led to the incorporation of several advanced features that significantly enhance fleet management capabilities. These features are designed to offer deeper insights, improve operational efficiency and ensure ease of use.

AI-Driven Analytics and Predictive Capabilities

- **Camera Vision and Machine Learning:** Video telematics systems leverage artificial intelligence algorithms to provide a nuanced analysis of driving behavior. These AI-driven features can detect and alert on various driving events such as hard braking, sharp turns, speeding and more.
- **Real-Time Alerting and Feedback:** One of the key advantages of AI integration is the ability to provide real-time audible alerts. This immediate feedback is invaluable for drivers, allowing them to correct risky behaviors as they occur.
- **Predictive Insights:** Beyond immediate alerts, these systems can predict potential safety risks or maintenance issues. By analyzing trends and patterns in driving data, the system can foresee and notify fleet managers about possible future concerns, facilitating proactive management.

User-Friendly Interface and Data Accessibility

- **Intuitive Dashboards:** The effectiveness of a video telematics system is greatly enhanced by an intuitive user interface. Modern systems offer dashboards that are easy to navigate, making it simpler for fleet managers to access and interpret data.
- **Customizable Reports and Alerts:** These systems often allow customization in reporting and alerts, enabling managers to focus on metrics most relevant to their specific needs.
- **Mobile Accessibility:** With the increasing need for on-the-go management, mobile accessibility of telematics data is a key feature. This ensures that fleet managers can stay informed and make decisions, irrespective of their location.



In summary, modern video telematics systems are equipped with features that transform fleet management into a more data-driven, responsive and efficient process. AI-driven analytics, seamless integration with other fleet tools and user-friendly interfaces are at the forefront of this transformation, making these systems indispensable in the realm of contemporary fleet management.

Embracing the Future of Fleet Management with Video Telematics

The importance of video telematics in modern fleet operations cannot be overstated. First, it plays a vital role in enhancing road safety. By providing a clear view of driver behavior and real-time feedback, it helps in significantly reducing the risk of accidents and improving overall driving standards.

Second, video telematics is instrumental in reducing operational costs. It aids in optimizing routes, improving fuel efficiency and proactively managing vehicle maintenance. This not only helps to cut down expenses but also contributes to the longevity and efficiency of the fleet.

Finally, in the event of disputes or accidents, the video evidence captured by telematics systems is invaluable. It provides irrefutable proof of events, aiding in the swift resolution of disputes and insurance claims. The clarity and objectivity of video evidence ensure fairness and transparency in such situations, protecting both the drivers and the company.

Embrace the future of fleet management with video telematics – a decision that will redefine the efficiency, safety and success of your fleet operations.



Why UScellular® for Video Telematics?

Tailored Solutions for Your Fleet

We don't just throw options at you. We listen first, understand what you really need and then recommend the best from our industry-leading portfolio.

It's all about what fits your fleet perfectly, not one-size-fits-all solutions.

Consultative Approach

Tired of feeling like just a number with your current provider? Experience an approach where your needs are prioritized. We're here to build a lasting, trust-filled partnership. Think of us as the neighbor who's always there to lend a hand, not a distant call center.

We're Invested in Your Success

Experience the freedom of no-contract pricing or zero upfront costs, paired with a wide selection of hardware options. From dashcams to comprehensive fleet and asset tracking, electronic driver logs and temperature monitoring systems, we're dedicated to equipping you with solutions tailored for your success.

Personalized Support

Say goodbye to endless hold music and hello to quick, personalized help. Our dedicated Account Managers and U.S.-based support teams are always ready to help. We're not just supporting your telematics, we're here to make your life easier.

SOURCES:

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³ <https://newsroom.aaa.com/2017/09/truck-safety-technology-can-prevent-63000-crashes-year/>

⁴ <https://crashstats.nhtsa.dot.gov/Api/Public/ViewPublication/813428>

⁵ <https://crashstats.nhtsa.dot.gov/Api/Public/Publication/813443>

Ready to learn more and get started? Contact
UScellular Business for your free video telematics demo today.

Call 855-524-0703 or visit [our website](#)

