Brown & Brown

PROPERTY & CASUALTY

Telematics Overview

By Jim Zoda, *Senior Vice President, Risk Control*

What is Telematics?

Vehicle telematics links wireless devices, global positioning satellites (GPS), on-board vehicle diagnostics (ODB), video, black box technologies and fleet management software to collect and transmit driver and vehicle data. Data may include driver location, driver behavior, engine diagnostics and vehicle performance.

Telematics devices collect and transmit GPS and vehicle-specific data via wireless/cellular networks to a centralized server where, through a system of cloud, hardware and software solutions. The data may be optimized, categorized, analyzed and reported on a desktop dashboard to help fleet operators efficiently and effectively manage their mobile assets and resources.

Telematics Users

- Fleet and logistics managers use vehicle telematics to coordinate and optimize the vehicles they manage and gain a comprehensive view of the efficiency and productivity of their fleet.
- Safety professionals and risk managers can use telematics technologies to gain insight into driver behaviors, help identify at-risk drivers and intervene to mitigate and reduce driver risk, including training, one-on-one driver observation, driver coaching, driver re-assignment or disqualification.
- Insurance claim professionals may use vehicle telematics to identify fraud and settle claims efficiently. Data from telematics provides insight into the cause of accidents and the severity of damage.

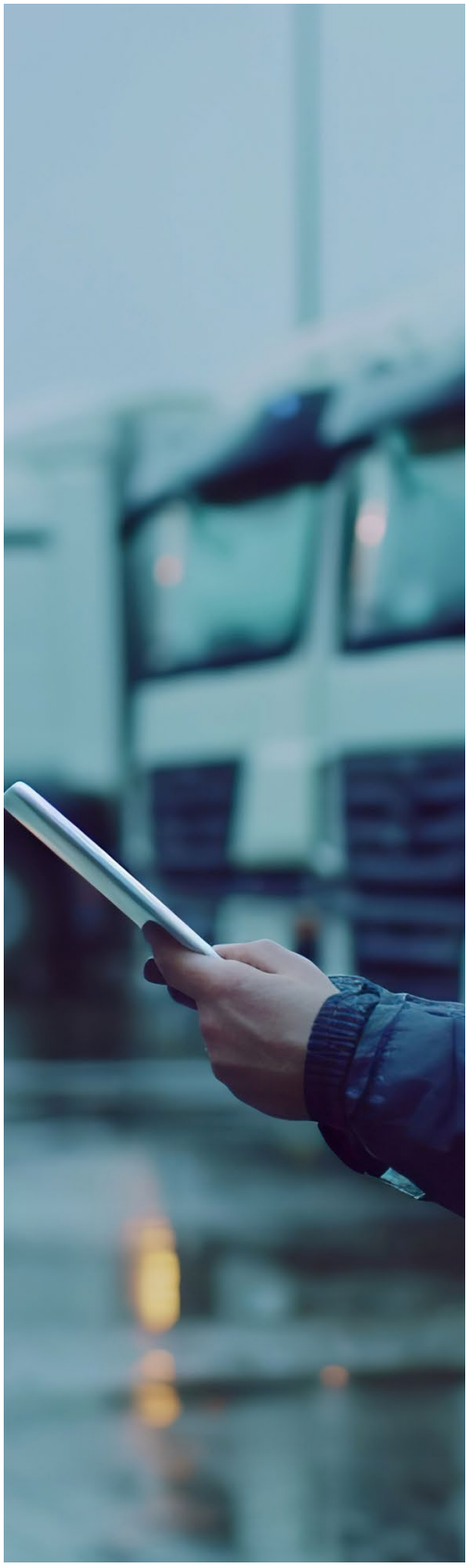
Benefits of Telematics

- Increased efficiency and reduced fuel costs by optimizing route planning, avoiding traffic bottlenecks, cutting engine idling and detecting unauthorized use of vehicles
- Reduced maintenance costs by alerting managers to potential problems before they become severe, enabling timely repair and maximized vehicle uptime
- Reduced administrative costs through automation of tasks such as regulatory reporting, electronic logging of service hours, International Fuel Tax Agreement (IFTA) reporting, vehicle inspections and payroll calculations
- Enhanced safety from data analysis for individual driving habits, targeted training and coaching to improve driver skill and behavior
- Reduced accident frequency and severity
- Improved roadside assistance response
- Improved asset and cargo security and theft recovery
- Improved information to validate claims, identify claim fraud and settle claims faster
- Improved ability to identify and reward exemplary driving
- Improved communication with customers on delivery delays, updated ETAs and improved customer satisfaction

Telematics Indicators

Depending on the system and equipment selected and deployed, some of the data telematics can monitor and capture include:

- Location
- Speed
- Driving Patterns
- Seat Belt Use
- Aggressive Acceleration
- Aggressive/Harsh Braking
- Aggressive Lane Changes
- Aggressive Cornering
- Odometer Readings
- Fuel Consumption
- Engine Idle Time
- Engine Idle Fuel Consumption
- Garaging Locations
- Geofencing
- Cell Phone Usage
- Route Adherence
- Vehicle Battery Charge
- Fuel Level
- Miles to Empty
- Oil Temperature
- Oil Level
- Coolant Temperature
- Vehicle Maintenance Needs
- Engine RPM
- Engine Load %



Telematics Best Practices For Risk Management

Successful execution of a telematics strategy depends on building an organizational infrastructure and processes to review, analyze and react to data inputs with driver training/coaching, driver management and supervisor accountability effectively. There are some telematic best practices to consider integrating into a risk management program, highlighted below.

Establish a cross-functional launch and implementation team:

Create a collaborative setting for all organizational groups related to drivers and vehicles. The implementation team should establish performance objectives and desired outcomes for the telematics technology and create an implementation game plan to help achieve desired results. Organization-wide insight in the selection, procurement, installation, use, maintenance, analysis and reactive administrative actions are invaluable to help create a successful telematics program.

HUMAN RESOURCES

- Driver selection
- Driver qualification
- Performance assessment
- Support for supervisors on effective driver Coaching technique
- Reward/recognition
- Corrective action/disciplinary process

FLEET OPERATIONS

- Vehicle tracking
- Electronic driver logs
- Vehicle inspection reports
- Fuel tax reporting
- Vehicle performance data/engine diagnostics
- Optimization of routes and performance
- Fuel management

SUPERVISION/ COACHING

- Data analysis/awareness
- Confirmation of seat belt use
- Identification of speeding and aggressive driving
- Identification of borderline driver performance
- Individual driver scorecards/ feedback
- Timely individual coaching
- Follow-up to verify behavioral modification and mastery

Effective Vehicle Telematics Program

VEHICLE PROCUREMENT

- Evaluation and adoption of vendor innovations
- Specification of crash avoidance technology for new vehicles
- Testing of new products

INFORMATION TECHNOLOGY (IT)

- Compatibility of input devices
- System integration
- Hardware/software add-ons
- Maintaining upload Connectivity via cellular and cloud-based networks
- Sharing and retention of data

SAFETY/RISK MANAGEMENT

- Policy/procedures/standards
- Driver eligibility standards
- Road testing
- Driver orientation/on-boarding
- Program oversight and communications
- Data analysis
- Accident investigation
- Determination of accident preventability
- Claim resolution/litigation support

TRAINING/PROFESSIONAL DEVELOPMENT

- New driver on-boarding
- Training tools and resources
- Benchmarking/tracking
- Remedial/corrective training

FLEET MAINTENANCE

- Installation/retrofit of GPS, ODB and black box equipment
- Vehicle inspection reports
- Tracking basic vehicle service/ repairs
- Fleet optimization
- Troubleshooting/maintenance of telematics equipment

EXECUTIVE/LEGAL

- Time/workforce resources to manage program
- Assessment of data accuracy and consistency
- Application of standards and policies to achieve desired goals
- Claim resolution/litigation support

Assign an internal program manager:

For a return on time and investment, select a leader who has ample time and adequate resources to manage the program to its full capabilities and advantage.

Make it mandatory and consistent:

Set performance expectations and make these expectations mandatory for all drivers and driver supervisors. Gaps or inconsistencies in execution, such as delayed data reviews or corrective actions or inconsistent driver training or coaching can result in adverse outcomes, specifically in accident litigation. Repeat offenders and drivers unwilling to modify driving behaviors should be disqualified from driving after a reasonable corrective and disciplinary process. Unused or disregarded driver data from telematics devices and/or cameras becomes a significant liability in a litigated crash.

Measure driver speed and other unsafe driver behaviors:

Excessive speed is a factor in almost 30% of traffic fatalities. Drivers that monitor their speed are more aware of unsafe driving of others. Driving slower allows more time to react in emergency situations and allows road safety structures (guardrails, impact attenuators, crash cushions, medians and barriers) to better protect vehicle occupants in a crash. Speeding becomes an increasingly important factor for drivers as roadway surface conditions deteriorate. Establishing and reinforcing good speed control habits effectively improves fleet safety.

Measure seatbelt usage.

Seat belts should always be required for every driver. Corrective action should be taken for those who do not wear their seat belt.

Implement a distracted driving prevention strategy:

Industry data suggests that over 50% of driver trips contain at least one distracted driving event1. Multiple technologies are available to track and mitigate the effects of driver distraction, including driver-monitoring systems, crash avoidance features and systems and cell phone blockers.

Link driver training to telematics data: Provide targeted driver coaching and training to specifically address and correct inappropriate behaviors observed by telematics. Implement a customized training plan based on driver-specific habits and identified behaviors.

Adhere to a disciplinary action program:

It is essential to react to dangerous driving habits captured through telematic devices. Effective behavior modification depends on strict and consistent adherence to the policy. The driver should either change behavior or be replaced by an individual who is less likely to expose the company to loss. Inaction or inconsistent corrective action on deficient performance by fleet safety leadership can adversely affect the risk mitigation benefit of telematics.

Reward positive results and measurable improvements:

A program associated with only discipline and punishment alone will not succeed. Vehicle telematics should be used to measure positive behaviors recognize and reward driver excellence.

Use cameras:

Whether the driver was involved in an accident, driving dangerously or a victim of cargo theft, cameras provide an advantage for the risk-management claims process. Pair forward-facing cameras with telematics to help during accident investigations. Video can show the behavior and reaction of the driver immediately before and after an incident, as well as the behavior of other vehicles, current road conditions and cargo status.

Collect and store relevant documentation:

Create and retain documents for all phases of the telematics implementation and strategy. Comprehensive and accurate documentation establishes and preserves the history of implementation. Accessible instructions and performance expectations for affected managers, supervisors and drivers, creates and sustains a methodology for monitoring and evaluating ongoing performance and continuous improvement initiatives. This serves to protect the organization, leadership and team members against potential vulnerabilities and responsively following incidents.

Improve dispatcher and driver performance:

Use telematics devices to generate efficiencies and save money for organizations. Start tracking specific drivers who seem to be taking more time than needed to complete a shipment. By evaluating the driver, routes and departure/arrival times, you can use data analytics to create more efficient and productive drivers.

Prepare for driver pushback: Reassure drivers that their privacy will be maintained as the devices act as event-only recorders. Share honest and candid information about the functionality of the technology. Explain how telematics will be used to recognize and reward exemplary driving that may otherwise go unnoticed or overlooked. Describe how telematics data may be used to support and corroborate the driver's account of conditions and actions in the event of a crash involving other vehicles.

Comparing Providers

When it comes to comparing telematics system providers, consider equipment features and vendor services based on your company's unique needs, expectations, current fleet composition, driving environments and budget restraints. Some key points to consider when comparing potential providers include the following:

- **Company should have a proven track record:** Reputation in the transportation industry is important.
- **User-friendly interface:** Having new technology for fleet tracking is a great asset, but if people cannot access or use it easily, it becomes worthless.
- **Accuracy:** How accurate is the data? How do the devices react on rough roads? Can device sensitivity be adjusted to filter effects of striking potholes or other road hazard?
- **Reporting and ability to have push reports via email to supervisors:** Find out about the reporting capabilities and make sure they are flexible to your needs.
- **No long contracts:** Sometimes, a better deal can be reached on shorter term contracts – consider avoiding being tied into an overly long contract.
- **Ownership and custody of data:** You should own your data and retain custody of the data at all times; even in the event you eventually change providers. Contracts should prohibit release of driver or company data to outside agencies by the service provider without your express permission.
- **Reliability and uptime:** It is essential to be certain that the data is reliable and consistent. Speaking with existing customers or reading testimonials can help with this.
- **Customer service and after-sales support:** It is very important to know if support and training will be provided after sale. Find out about any extra costs before you enter into a contract.
- **Flexibility and adaptability:** Telematics and fleet tracking are rapidly evolving technologies. Consider choosing a company able to adapt quickly with emerging technology.

How Brown & Brown Can Help

Connect with our Brown & Brown team to learn about our knowledge in your industry, how we build our risk mitigation strategies and how we can aid your business in building a cost-saving program.

Brown & Brown

Find Your Solution at BBrown.com