

As commercial fleet operations continue to evolve, many organizations are using telematics systems to better understand vehicle activity, driver performance, and operational trends. This technology is applicable across virtually every sector that operates commercial vehicles, including trucking carriers, towing companies, passenger transit fleets, and many others.

This guide outlines practical ways fleets can use telematics data to strengthen safety performance, improve operational oversight, and support more proactive fleet management.

What is Telematics?

Telematics refers to systems that use GPS technology, onboard vehicle diagnostics, and data communication tools to monitor and transmit vehicle and operational information. Within commercial fleet operations, telematics systems are commonly used to collect and analyze information related to vehicle activity, driver behaviour, equipment performance, and operational trends.

Depending on the system and configuration, telematics platforms may include capabilities such as:

- GPS location and route tracking
- Speed and driving behaviour monitoring
- Vehicle diagnostics and maintenance alerts
- Idle time and fuel usage monitoring
- Electronic logging device (ELD) integration
- Event-based notifications and reporting
- Integrated dash camera systems

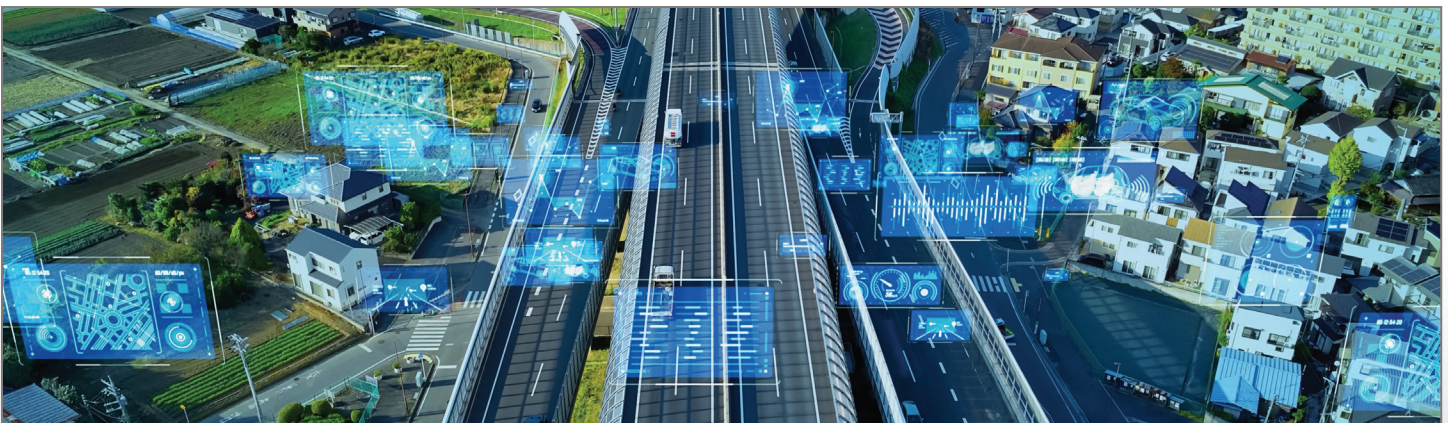
Important reminder: Not all telematics systems are created equal.

Telematics platforms can vary significantly in the type of data they collect, how information is reported, and how easily it can be reviewed and acted upon. Some systems may focus primarily on GPS location and basic driver behaviour, while others may offer more advanced features such as vehicle diagnostics, maintenance alerts, ELD integration, dash camera footage, exception reporting, and fleet-wide trend analysis. Fleets should consider whether the system supports their safety objectives, maintenance practices, compliance needs, reporting expectations, and day-to-day operational oversight.

Key Telematics Monitoring Areas

Telematics systems can generate significant amounts of operational data. To be effective, fleets should establish clear review criteria and focus on the indicators most relevant to their operations, loss history, and risk profile, including:

- **Driver behaviour and safety monitoring:** Driver-related telematics data can help fleets identify elevated driving exposures, recurring unsafe behaviours, and opportunities for additional coaching or corrective action. Common indicators may include speeding, rapid acceleration, harsh braking, aggressive cornering, distracted driving indicators, and fatigue-related operating patterns.



- **Operational oversight and compliance:** Telematics systems may assist fleets in monitoring compliance with internal operating procedures and regulatory requirements. Common indicators may include hours-of-service concerns, ELD-related exceptions, route deviations, unauthorized vehicle use, after-hours activity, and geofence breaches.
- **Vehicle health and maintenance monitoring:** Some telematics platforms may provide information related to vehicle condition, equipment performance, and maintenance-related concerns. Common indicators may include diagnostic trouble codes, engine warning events, excessive idle time, battery voltage concerns, maintenance alerts, and abnormal temperature readings.

Did you know? Dash cameras can add context to telematics data.

Dash cameras are often integrated into telematics systems to provide additional context during driving events and claims investigations. Common installation configurations include forward-facing cameras, driver-facing cameras, and dual-facing camera systems. New generation cameras may include valuable features such as event-triggered recording, low-light video visibility enhancement, and real-time driver alerts to warn drivers of behaviours such as distracted driving. When combined with telematics data, dash cameras can support driver coaching, assist with incident review, and help fleets better understand the circumstances surrounding collisions, near misses, or high-risk driving events.

Turning Data into Action

Collecting telematics data alone does not improve fleet safety. The value of telematics depends on how consistently the information is reviewed, acted upon, and incorporated into fleet management practices.

Effective telematics programs often include:

- Assigned responsibility for data review
- Clearly defined coaching thresholds
- Regular driver performance discussions
- Documented corrective action procedures
- Recognition of positive performance
- Escalation procedures for repeat high-risk behaviours
- Periodic management review of fleet-wide trends

Fleets should focus on identifying recurring patterns rather than reacting solely to isolated events. Consistent review and follow-up can help strengthen accountability, improve operational oversight, and support long-term safety improvement.

Summary

Telematics can help fleets move from reactive loss response to proactive risk management. However, its effectiveness depends on clear expectations, consistent review, documented follow-up, and management commitment. By turning data into meaningful action, commercial fleets can use telematics to support safer drivers, safer operations, and safer roads for the communities in which they operate.

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