

Why vehicle telematics?



At Nationwide, we have found that over 58% of our customers with 25 or more vehicles have a vehicle telematics system. Telematics is growing quickly for companies with fewer than 25 vehicles as well. Very few companies that have had telematics discontinue their use. At a cost of around \$300 a vehicle per year, these organizations have found telematics to have a positive return on investment based on:

- Improved customer service and efficiencies
- Reduced vehicle operating costs
- Reduced accidents and stabilization of insurance costs
- Controlling vehicle misuse and theft

Improved customer service and efficiencies

Many organizations implement telematics with the primary goal of improving customer service and efficiency. Knowing where your vehicles are, or where they have been allows you to:

- Provide customers with accurate times of arrival
- Dispatch vehicles that are closest to a customer's location
- Identify shorter routes and assist with route planning. Telematics is starting to incorporate contextual data such as traffic, road, and weather conditions which also can aid a driver or business owner.
- Identify when drivers have gone off-route or made personal stops/errands, which leads to delays.
- Record arrival and departure times, validating the:
 - Driver showed up on time
 - Vehicle was at a location for a specific time period (hours billed confirmation, etc.)

Organizations are also using telematics to improve internal efficiencies. Examples include:

- A warehouse manager knowing when a vehicle will return so a forklift operator is ready to unload the truck the minute it arrives for a quick turn-around.
- A backhoe operator using a phone app to monitor the location of dump trucks they are loading so they can stay productive doing other things while waiting for a truck to arrive.

Reduction in vehicle operating costs

Fuel expense is typically a fleet's largest variable cost. Driving behavior heavily influences fuel consumption. Speeding, harsh acceleration and hard braking are all events that indicate aggressive driving, which significantly increases fuel consumption. Fueleconomy.gov indicates aggressive driving can lower your gas mileage by 15% to 30% at highway speeds and 10% to 40% in stop-and-go traffic. For a pickup driving 15,000 miles a year an improvement in fuel economy of 10% at \$3.60 a gallon covers 90% of the annual telematics expense.¹ Managing vehicle idle time and effective route management can result in additional fuel savings.

Aggressive driving also increases wear and tear on tires, brakes, and suspension systems. Reducing aggressive driving extends the life of these vehicle components, resulting in further savings and less vehicle down time.

Many telematic systems can monitor engine diagnostic codes (DTC), which alert managers and/or drivers to engine problems. With DTC monitoring, an organization minimizes the chance of engine damage or a breakdown due to not knowing a dashboard engine warning light is on. DTC alerts include an explanation of the engine problem so decisions can be made regarding the repair before the vehicle returns.

Some telematics systems include a maintenance scheduling feature that alerts when service is due based on tracked vehicle mileage.

From an environmental standpoint, improving fuel economy results in fewer greenhouse gas emissions and extending vehicle component life means a reduction in materials to landfills.

Additional resources on operational cost savings:

1. **Commercial Vehicle Sales Are Ailing, So Why Is The Connected Truck Telematics Market Still In Good Health?** (<https://www.forbes.com/sites/sarwantsingh/2020/06/03/commercial-vehicle-sales-are-ailing-so-why-is-the-connected-truck-telematics-market-still-in-good-health/?sh=4240463c7e12>) *Forbes, June 3 2020.*
2. **Inflation and Transportation, Bureau of Transportation Statistics** (<https://data.bts.gov/stories/s/Transportation-and-Inflation/f9jm-cqwe/>)
3. **Making the 'CASE' for Fleet Telematics** (<https://www.automotive-fleet.com/336231/making-the-roi-case-for-telematics>) *Automotive Fleet*
4. **Fuel cost calculator** (<https://www.fueleconomy.gov/feg/savemoney.jsp>) *U.S. Department of Energy, Fueleconomy.gov*
5. **Fleet Technology Trends Report 2023** (<https://www.verizonconnect.com/fleet-technology-trends-report/>) *Verizon Connect*
6. **8 Steps for Documenting the ROI of Telematics** (<https://www.automotive-fleet.com/10162456/8-steps-for-documenting-the-roi-of-telematics>) *Automotive Fleet*

Reduction in accidents

Auto accidents are the leading cause of work-related fatalities in the U.S. When not fatal, injuries are often severe.

Injuries to passengers in other vehicles can be the largest liability exposure most organizations face. So-called “nuclear verdicts,” or jury awards over \$10 million, have been on the rise. In 2019 alone there was a 300% increase in verdicts of more than \$20 million when compared to the average from 2001 to 2010.² Auto accidents make up a large number of these verdicts.

Unsafe driving behavior is the primary causal factor in over 93% of serious accidents.³ Reducing unsafe driving: speeding, harsh acceleration, harsh braking, hard cornering, etc. can be accomplished through a well-managed telematics program. More advanced systems utilizing cell phone apps and dashcams can identify and deter distracted or fatigued driving. Fewer unsafe events typically equate to fewer accidents.

While less prominent, some systems can identify when an accident occurred and send an alert to responsible staff. Telematics can also assist in locating drivers who may be unresponsive due to a medical emergency.

Stabilization of insurance and accident costs

The cost of commercial auto insurance has increased substantially over the past 10 years largely due to the increased costs of vehicle repair and replacement, medical bills, legal defense expense and large civil suit awards.

Many commercial insurers will not provide a premium discount just for having telematics, a telematics system will not reduce accidents unless it is well managed. Insurers may look for an improvement in driving behavior and a reduction of accidents to determine the effectiveness of an insured's telematics program. Several top commercial insurers are starting to offer other incentives, such as subsidies, to encourage the use of telematics and the sharing of data. Nationwide has several telematics offerings available to commercial customers. Contact your agent or your Loss Control Services Representative for more information.

Fewer accidents result in immediate savings in the way of saved deductibles and rental costs associated with replacement vehicles. The lack of available repair parts or vehicle replacements due to COVID-19 supply chain shortages has significantly impacted vehicle availability. Even a minor accident can keep vehicles off the road for long periods of time. Indirect costs associated with employee down time and customer dissatisfaction from missed or delayed service or deliveries are also diminished.

Controlling vehicle misuse and thefts

Telematics can be used to control costs associated with an employee's misuse of vehicles, such as driving vehicles for personal use, long vacations, etc. Geofences can be set up to track when a vehicle has left a predefined area and "curfews" can be set up to track/alert when a vehicle is operated after hours. Geofences and curfew features can assist with potential theft indications and finding stolen vehicles. Educated thieves know to remove a telematics device so they cannot be tracked. However, most telematic systems send an alert that the telematics device has been removed or disabled, indicating possible theft.

Selecting a telematics system

The benefits of telematics to an organization vary greatly based on an organization's operations, vehicle size and vehicle use. Telematics service providers vary considerably in the services they provide and features they offer. Organizations should complete a thorough review of their needs before shopping for a telematics provider to ensure the system meets their needs.

Additional Resources:

- **Telematics Selection Guide** (https://mylosscontrolservices.com/Images/335%20CMO-1126AO%20Telematics%20Selection%20Guide%20%28Advanced-A%29_tcm148-20921.pdf) — PDF
- **Telematics Implementation and Coaching Guide** (https://mylosscontrolservices.com/Images/336%20CMO-1127AO%20Telematics%20Implementation%20and%20Coaching%20Guide%20%28A%29_tcm148-20670.pdf) — PDF
- **Telematics and Smartphone Apps** (https://mylosscontrolservices.com/Images/368%20CMO-1340AO%20Telematics%20and%20Smartphones%20%28A%29_tcm148-20922.pdf) — PDF
- **Everything You Need to Know About Dashcams** (<https://mylosscontrolservices.com/learning-center/articles/everything-you-need-to-know-about-dashcams>)
- **Distracted Driving Prevention Technology** (<https://mylosscontrolservices.com/learning-center/articles/distracted-driving-prevention-technology>)

¹ Fuel savings example: 15,000 miles at 20MPG = 750 gallons. At \$3.60 per gallon an annual fuel cost of \$2,700. A 10% improvement = \$270 which is 90% of the average \$300 cost of telematics.

² The rise of nuclear verdicts and how to rein them in. Verisk, August 24, 2021

³ Traffic Safety Facts, National Highway Traffic Safety Administration, Critical Reasons for Crashes Investigated in the National Motor Vehicle Crash Causation Survey, DOT HS 812 115, February 2015

Providing solutions
to help our members
manage risk.[®]

For your risk management
and safety needs, contact
Nationwide Loss Control
Services: 1-866-808-2101
or LCS@nationwide.com.