



New Technology Curbs Dangerous Driving and Yields Huge Cost Savings

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Every year, approximately 20% of fleet vehicles are involved in an accident, resulting in damaging costs to businesses.¹ Regardless of the size or type of an organization's fleet, a significant portion of its budget can be eaten away the direct and indirect costs of those accidents.

To stay competitive, organizations must do everything possible to keep operating costs low. Fortunately, most accidents are preventable. By deploying the latest technology to monitor driver behavior and establish and maintain company-wide safety initiatives, they can drastically reduce the risk of accidents and the related costs.

This white paper identifies the true costs resulting from unsafe driving and related accidents, and discusses ways to mitigate those expenses by monitoring driver behavior with an integrated mobile resource management solution.

Accidents Unleash a Tidal Wave of Costs

When a driver has an accident, a wave of costs cuts through the organization. Some of those costs are easy to identify because they are announced in the form of bills for vehicle repairs or medical services. However, the majority of those costs remain largely out of sight while they erode the company's profits.

Direct Costs of Employee Accidents Are Substantial

According to the NHTSA, even if there are no injuries, the average employee accident costs employers \$16,471. If there is an injury, the cost rises to \$76,313. If there is at least one fatality, the cost can skyrocket to \$504,408. Based on these figures, motor vehicle crashes, both on and off the job, cost employers more than \$60 billion annually.²



Here are some of the direct costs of employees' unsafe driving behavior:

- Workman's compensation benefits averaging \$65,000³
- Increases in medical insurance premiums
- Auto insurance and liability claims and settlements
- Physical and vocational rehabilitation costs
- Life insurance and survivor benefits
- Property damage to equipment, products, and other cargo
- Motor vehicle repair and replacement
- Vehicle towing, impoundment and inspection fees
- Municipality or utility fees for damage to roads, signs or poles

Indirect Costs of Employee Accidents Are Even Higher

It's easy to see how direct costs of employee accidents hurt an organization's bottom line and profit margins. However, far too many organizations don't realize that indirect costs can have a much greater impact.

For every \$1 businesses spend on direct costs, they spend \$4 to \$10 on indirect costs.⁴ Also, while direct costs can often be covered by insurance, indirect costs tend to fall solely on the employer. If an organization fails to account for these costs, the financial impact can be overwhelming.

Here are some of the indirect costs that result from unsafe driving behavior:

- Supervisor's time spent rescheduling and making special arrangements
- Fleet Manager's time spent coordinating vehicle repair, replacement, and other tasks
- Reassignment of personnel for missing employees
- Overtime pay to cover work of missing employee
- Employee replacement and training
- Administrative costs involved with documentation of injuries, treatment, absences, and crash investigation
- Fines imposed by OSHA or other government agencies
- Lawyers' fees and other expenses stemming from lawsuits
- Bad publicity, loss of business, and damage to reputation

Businesses Can Take Action to Prevent Accidents

The good news is that most accidents—and their associated costs—are preventable. That's because **more than 90% of road accidents are caused by unsafe behaviors**, such as speeding or using the phone while driving.⁵

By deploying driver and vehicle monitoring technology as a part of a proactive safety program, managers can significantly reduce the number of accidents involving their vehicles. The latest monitoring technology provides detailed information about drivers' behavior, allowing managers to quickly identify risky driving habits and act immediately to correct them. The result is far fewer accidents and significantly lower accident-related costs.

The NHTSA's position on the cost savings achieved by preventing accidents is clear. They have concluded that developing a proactive traffic safety program is one of the best ways to control costs resulting from workplace vehicle crashes, making it a profitable investment of time and resources.⁶

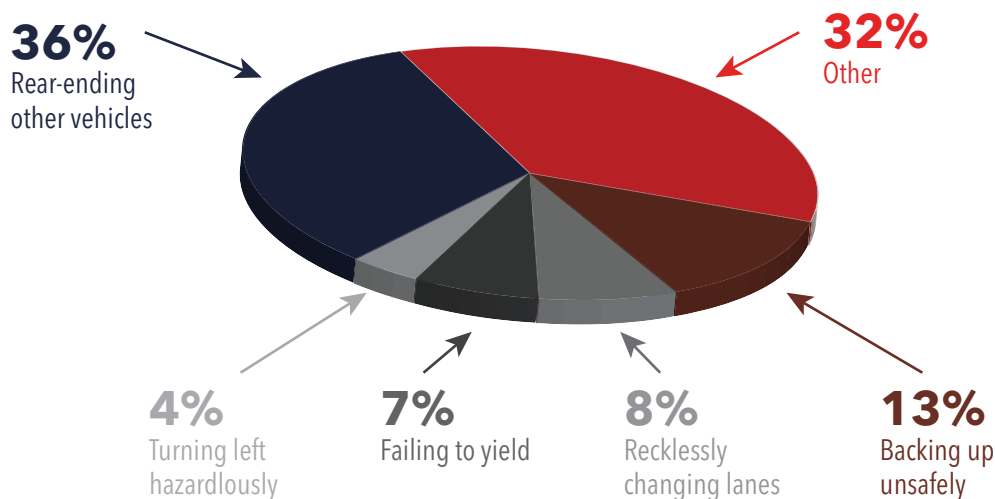
Monitoring Driver Behavior Is Critical to an Effective Safety Program

Many employers seeking to correct poor driver behavior focus primarily on creating written policies and procedures, driver training programs, and a disciplinary action system. Those efforts are part of the solution, but they don't go far enough to give managers control over how drivers actually behave when they are on the road.

The old adage "you can't manage what you can't measure" is especially relevant when attempting to correct poor driver behavior. Managers need to have technology in place that captures data regarding the type of behavior that is proven to contribute to accidents. This information is critical to measuring the effectiveness of any driver safety program.

Understand and Eliminate the Risk of Distracted Driving

Fleet insurance companies have found that there are five accident types that account for as much as 68% of claims, and that distracted driving is frequently a contributing cause.⁷



Fortunately, organizations can use mobile resource management technology to mitigate distractions, collect relevant data, and keep drivers alert and focused on traffic conditions. For example, texting while driving can be avoided by using a two-way, hands-free solution for one-to-one or group voice communication. Dispatchers can also use a next-generation job management system to communicate routes and job information directly to drivers. This eliminates the need for employees to call or text the office while they are on the road.

Put Driver Behavior in Context to Better Identify Risks

Vehicle speed is another important piece of data to monitor. However, simply knowing how fast a vehicle is traveling doesn't provide a complete picture. It's essential to be able to view this data in context and understand how fast the vehicle is traveling **relative to the posted speed limit.**

“More than 20% of all fatal collisions involve a vehicle traveling too fast for conditions or in excess of the posted speed limit.”⁸

Not all vehicle monitoring systems are capable of providing detailed information about both the posted speed limit and how fast the driver is traveling beyond that limit. But the most effective solutions not only make this data available, they also allow managers to set multiple speeding thresholds. For instance, it may be useful to set one threshold for highway driving and another for residential and secondary roads.

By monitoring each driver's speed against posted limits throughout their entire route, managers can better identify and coach risky drivers in their fleet.

An added benefit of monitoring excessive speeding, especially in conjunction with other wasteful behaviors such as idling, is that organizations are empowered to

“Aggressive driving—speeding, rapid acceleration, and braking can lower gas mileage by 33%”

manage their fleet's fuel efficiency more effectively. When a driver travels at safe speeds and keeps idling to a minimum, their vehicle spends more time operating in its optimum fuel economy range.

Research conducted by the U.S. Department of Energy shows that aggressive driving—speeding, rapid acceleration, and braking—can lower gas mileage by 33% at highway speeds and by 5% around town.⁹

Braking, Acceleration, and Cornering Are Indicators of Risk

Through the use of an accelerometer, driver monitoring systems can measure braking, acceleration, and cornering—three effective indicators of risky driving. With the ability to receive real-time alerts and view information about each driver's past performance in these three critical areas, managers can obtain an extremely detailed picture of a driver's overall behavior—and the level of risk they present.

After identifying a driver who has a pattern of hard braking, sudden acceleration, or fast cornering, managers can take steps to eliminate the risky behavior. With a system that monitors both the vehicle and the driver, it is possible to follow up on the effects of these interventions by tracking changes in an individual driver's behavior over time, relative to other drivers in the fleet.

Maximize ROI from a Mobile Workforce Management System

Mitigating costs by monitoring driver behavior is a crucial component of an overall strategy to improve driver safety. But to realize the full potential of a mobile workforce management system, an organization must use it actively and continually.

Once the behavior monitoring system becomes a part of the company's culture, managers can expect to **reduce accidents by as much as 80%**, providing a strong return on their investment.¹⁰

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Because the mobile workforce management provider will become a key partner in the organization's efforts, it is important to select the right one. The chosen provider must offer much more than the basic monitoring and reporting technology needed to define and maintain company-wide safety standards.

Here are a few features to look for when selecting a driver behavior monitoring solution:

- **Monitor drivers, not just vehicles** – Managers need to keep track of individual drivers so they can focus their interventions on those who present the greatest risk.
- **Receive alerts in real time** – With the ability to view notifications when drivers engage in unsafe behavior, managers can intervene BEFORE it causes an accident.
- **View granular data in context** – It is critical to understand the circumstances surrounding a driver's actions, including location and business purpose.
- **Set multiple customized speed thresholds** – Driving on the highway is very different from driving on a residential road. A monitoring solution should recognize this by providing managers with flexibility to set multiple thresholds for different situations.
- **Access other tools that promote safe driving** – The most effective driver behavior monitoring solution will also provide features that discourage unsafe behavior. For example, a two-way, hands-free messaging solution eliminates the need for drivers to use the phone while they are behind the wheel.

These capabilities enable managers to dramatically reduce risky driver behavior and costly accidents.

Research from the Network of Employers for Traffic Safety (NETS) indicates that reducing accident rates from 20% to 13% can yield savings of almost \$600,000 per year for a 500-vehicle fleet.¹¹

“Reducing accident rates from 20% to 13% can yield savings of almost \$600,000.”

With organizations realizing that kind of ROI, any fleet operator in a competitive business that does not act on the opportunity to improve driver safety will quickly find that they are at a disadvantage against more forward-thinking competitors.

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