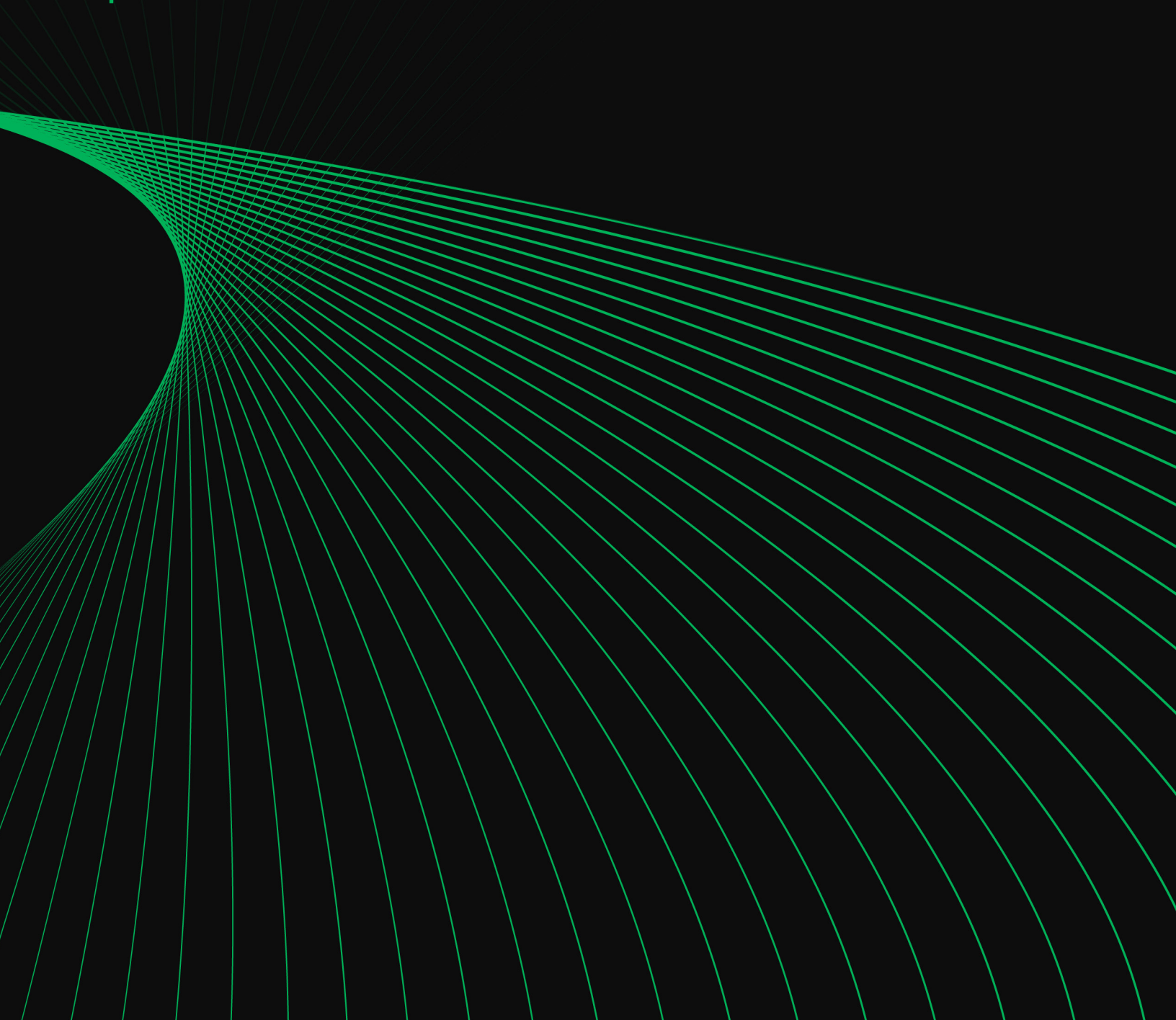




Safety Is Smart Business

Exploring the Cost Savings Potential
of AI-Powered Dash Cams for Fleets



Fighting Against Rising Fleet Costs

Running a fleet-based business has never been costlier, due to rising vehicle and fuel costs, driver scarcity and associated increases in driver wages and benefit costs, and the steady increase in insurance premiums. Fleet operators also face the threat of \$100M+ thermonuclear verdicts that can put a fleet out of business when there are collisions that result in fatalities or severe injuries.

These cost pressures have led to the adoption of fleet management tools that aim to boost efficiency with every mile saved and gallon of fuel left unpumped. These efficiencies are helping lower operating costs, but there are major opportunities and liabilities left unaddressed by telematics alone.

Physical damage coverage increased by 20% to 25%, umbrella liability by 10% to 30%, and auto liability by 10% to 20%, year over year from 2024 to 2025, according to Risk Strategies

Understanding the Costs and Benefits of Safety

Unsophisticated fleets often treat safety investments as merely the cost of doing business. However, unlike compliance, which is truly a box that must be checked in order to operate legally, safety can be approached in a variety of ways. Depending on the path chosen, fleets can generate dramatically different results for their bottom line – not to mention the health and well-being of their drivers and vehicles.

When it comes to selecting driver and fleet safety technology, it is important to be fully aware of both the costs and the benefits of the various technologies out there and know what factors should be considered. The naive approach is to simply compare based on the cost of a hardware device or a software subscription – a ‘check-the-box’ for compliance mindset – rather than understanding all the benefits more deeply. This guide will help fleet leaders understand both the costs and the benefits in greater detail.

The Evolution of Fleet Safety

For the last twenty years, fleet operators have been incorporating new technologies into their vehicles to improve driver safety, reduce collision risk, and combat the rising operating costs of their fleet.

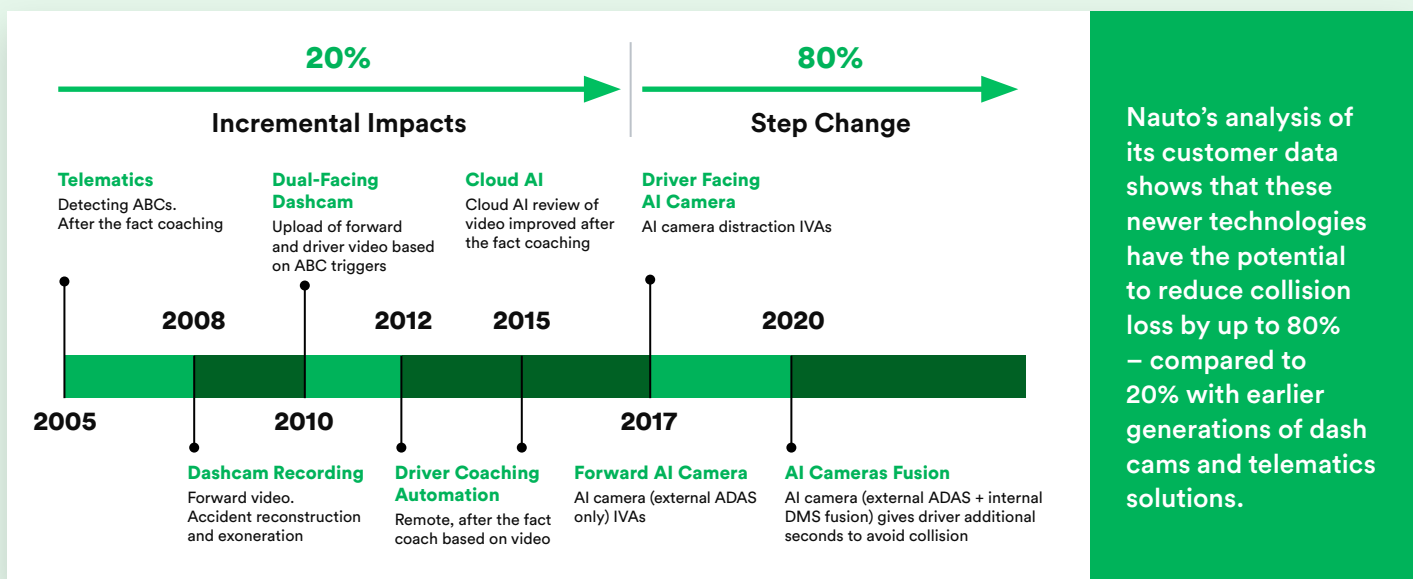
Telematics solutions and early dash cams gave fleet operators the ability to marginally address driver performance, but **only after unsafe behavior or even a potentially serious incident had already occurred**. Driver behavior change was dependent on manual, manager-led driver coaching, which is often ineffective when performed days or weeks after the incident – or may not even occur at all. When it does work, improvement is slow and marginal, evolving slowly because it's constrained by the availability of fleet managers' time.

Forward-facing ADAS (advanced driver-assistance systems) added a focus on external hazards such as forward collision warnings and lane departures, but those only account for ~17% of collision loss vs. 70% for driver behavior-related factors such as distraction, cellphone use, and drowsiness.

While tech innovations in the past have only resulted in incremental improvements in savings, Nauto's AI results in a step change in reducing collision and operational costs. Nauto is at the forefront of the next generation of driver-facing AI-powered dash cams that added real-time in-vehicle alerts (IVAs), establishing a new paradigm that **gives drivers prompt, in-cab feedback so that they can self-correct risky driving behaviors in real-time**.

At Nauto, we've taken safety to new levels with our predictive AI. Our approach to building our AI-powered dash cams is centered on holistically reducing risk for the driver, the vehicle, other road users, and ultimately for the fleet's overall business. By building a predictive safety system that is continuously processing what is going on inside and outside of the vehicle, Nauto has delivered the means to substantially reduce overall operating costs while preventing collisions and saving lives.

Impact of Safety Technology on Collision Loss Reduction



Calculating the ROI of Safety

Understanding the Costs of Fleet Safety

The hard costs of a dash cam system are easy to calculate. Hardware, software, cellular subscriptions, warranty, and installation costs differ from vendor to vendor, but they're not the only costs fleets need to consider. What about the ongoing costs of operating the system? From configuring the system and training the team to benchmarking and reporting, there is significant work to be done to ensure success. Without support from the vendor, a fleet safety solution can burden fleet managers, creating a drag on the productivity of the department and the effectiveness of the solution. Fleet leaders can benefit from a dedicated team that is working to understand their business, while helping the fleet learn how to maximize the new solution.

How Nauto Is Different

At Nauto, our teams deliver value-added services to ensure that both the onboarding and ongoing experiences are optimized through an included customer success manager and training manager, as well as safety and risk advisory services that discover value that is unique to every client. For example, Nauto was able to help a rental car company protect its vehicles and maximize revenues by detecting and recording in-vehicle smoking incidents so customers could be charged.

Understanding the Benefits of Fleet Safety

The biggest benefit of fleet safety is the one you can't put a price tag on: saving lives. But preventing fatalities and injuries by preventing collisions can have a significant impact on the bottom line. From helping rein in insurance costs and pricy judgments to avoiding costly repairs and vehicle and driver downtime, the right fleet safety solution can be a strategic silver bullet for better operations at a lower cost.

The Costs and Benefits of a Fleet Safety Solution

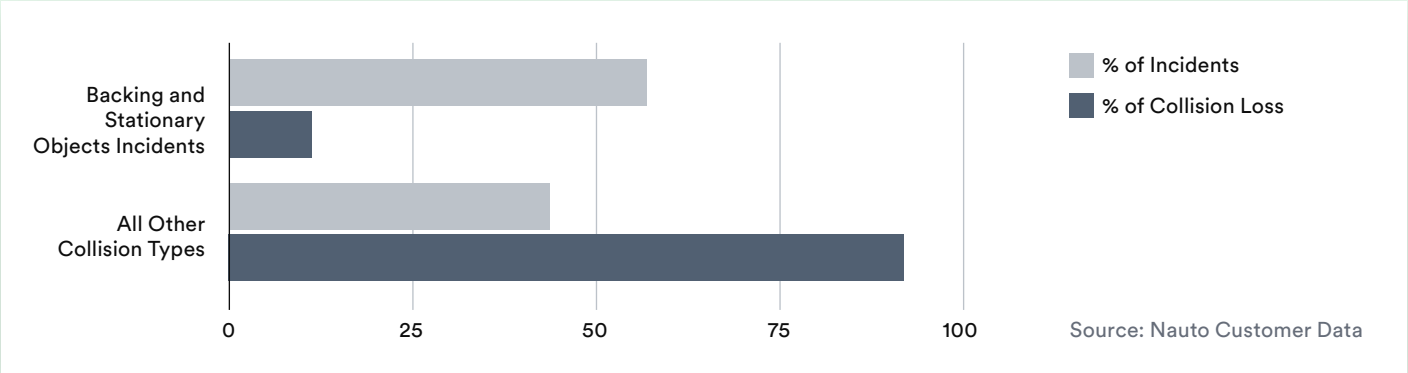
Costs	Benefits	
Cost of Safety System • Hardware • Software • Cellular Contracts • Warranties • Implementation • Ongoing Support	Collision Loss Reduction • Third-Party Liability • First-Party Damages • Vehicle Replacement and Repair • Workers Compensation • Legal Fees and Claim Management Fees • Hazmat Cleanup • Lost Product Driver Retention • Turnover • Recruitment • Training Insurance Premium Savings • Telematics Reductions • Renewal Premium Reductions	Fuel Savings • Less Speeding and Hard Braking • Track Idlers • Fraud Detection Productivity • Less Driver Coaching Needed • Less Driver Monitoring Needed • Less Lost Time for Accidents/Investigations • Lost Revenue • Increased Vehicle Utilization

Collision Loss Reduction

What’s the difference between collision reduction and collision loss reduction?
What if a fleet safety system helped a driver avoid striking a mailman vs. hitting a mailbox? They would both go down as an avoided collision, but the collision loss reduction difference between the two is astronomical, especially if the injury to the mailman were severe or even fatal.

Fleets can sometimes fixate on the more frequent collision types, like backing into a mailbox or other objects. In fact, these types of collisions account for 55% of overall collisions, but they *only* account for **9% of total loss**. All other collisions, including vulnerable road user (VRU) strikes, rear-end collisions, and failure to yield, represent only 45% of collisions, but cause **91% of loss!**

Comparison of Frequency and Collision Loss Based on Incident Type



When evaluating the cost savings potential of a fleet safety system, it’s critical to understand the impact on collision loss because that’s where the cost saving – and life saving – are happening.

The Impact of Nauto Across Different Industries

Source: Nauto Customer Data

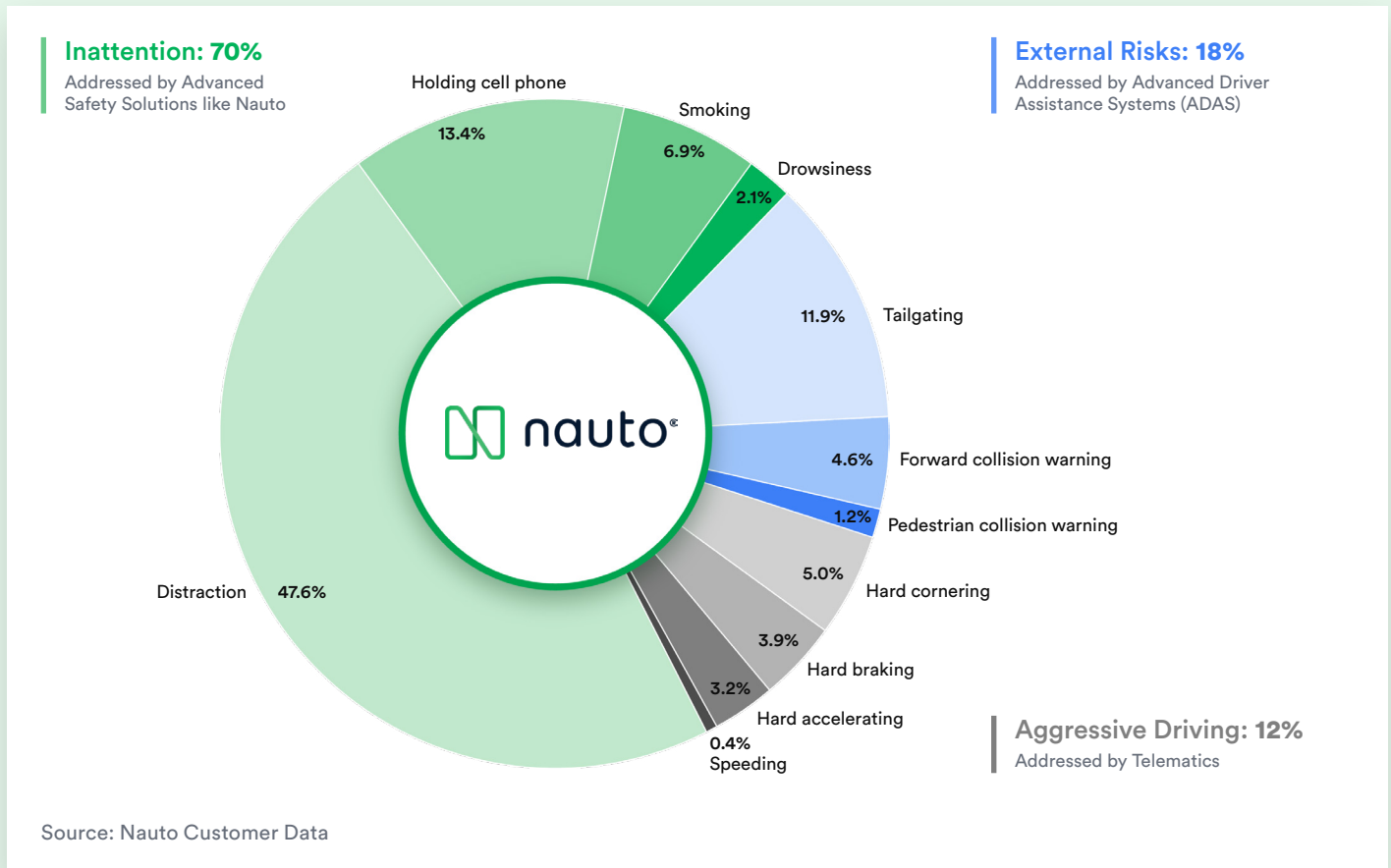
Industry	Distractions	Collision Reduction	Loss Reduction
Last Mile	-80%	-47%	-68%
Utilities	-90%	-55%	-59%
Logistics - Consumer	-90%	-57%	-62%
Services	-83%	-46%	-54%
Other	-68%	-39%	-46%
Logistics - Industrial	-55%	-69%	-78%
Long Haul	-58%	-56%	-62%

Nauto delivers an average of **73% distraction reduction** in just a few weeks and **57% collision loss reduction** across all major fleet segments.

How Nauto Is Different

Nauto's AI is trained to reduce loss by focusing on the riskiest behaviors that are shown to increase collision loss the most. Telematics and driver monitoring technologies might be addressing speeding or hard braking, but Nauto customer data shows that **70% of collision-related losses stem from inattention in its various forms, including distraction, cellphone use, and fatigue.**

Average Contributions to Collision-Related Losses



If distractions are the biggest driver of collision loss, then having AI technology that is the best at quickly and accurately detecting distractions, as well as the most effective at reducing distractions, is critical to maximizing loss reduction. Nauto is also best-in-class for recognizing the signs of driver fatigue and encouraging drivers to take a break. Fatigue-related collisions, like VRU strikes, are rare but can lead to catastrophic results.

Nauto's Predictive Risk Fusion™ addresses the most critical combination risks, such as cellphone usage in tandem with a pedestrian collision warning, by giving drivers more time to react. These are the collisions that can become deadly and cost a fleet many millions of dollars. Nauto's AI dash cams and complete fleet safety system works with vehicles of all types and sizes, ranging from sales fleet sedans and pick-ups through medium-duty trucks and up to Class 7-8 trucks. The system automatically calibrates settings according to vehicle type to ensure the optimal response for each use case.

Repair Costs

Rising repair costs are already showing up in the real world. For example, electronic control unit (ECU) pricing rose by up to 18% in 2025 due to supply chain and tariff pressures. The increased usage of electric vehicles brings with it an average of 20% higher repair costs after a collision compared to internal combustion engine vehicles.

The cost of parts is being impacted as recent model vehicles have more electronics and, in particular, more sensors on the periphery (e.g. radars, ultrasonic sensors, and cameras) that have to be placed on or just above the bumpers or side mirrors to give the best view. This placement means they are often damaged in even moderate impacts that historically caused minor damage.

Moreover, electronic components often have to be replaced outright, versus steel bumpers or fenders that can be repaired. Failing to account for these steady increases can leave budgets tight and make unexpected incidents even more financially disruptive.

How Nauto Is Different

Nauto's AI helps fleet operators **reduce the number of collisions by up to 80%** through its ability to predict and prevent collisions. Fewer collisions mean fewer repairs, giving fleets a buffer from volatile part costs and maintenance expenses.

Even if there is a collision, Nauto helps reduce the severity, so damages are reduced. Nauto's data shows that its customers' collision loss savings often outpace their collision frequency reduction due to the reduced severity of the collisions that occur.

Nauto also leverages a sophisticated machine learning algorithm to detect collisions with a g-force as low as 0.6g compared to 1.5-2g of most other systems. This means fleets are aware of collisions as they occur, can respond faster, and proactively educate their drivers about preventing these minor collisions that drive up repair costs.

Insurance

Premiums for some commercial fleets are jumping up by 25% in 2025, leaving fleets looking for ways to combat this unexpected cost increase. While many factors have led to the increase (rising claims costs, inexperienced drivers, and the cost of repairs and parts), technology offers the best chance to stem the tide against rising rates.

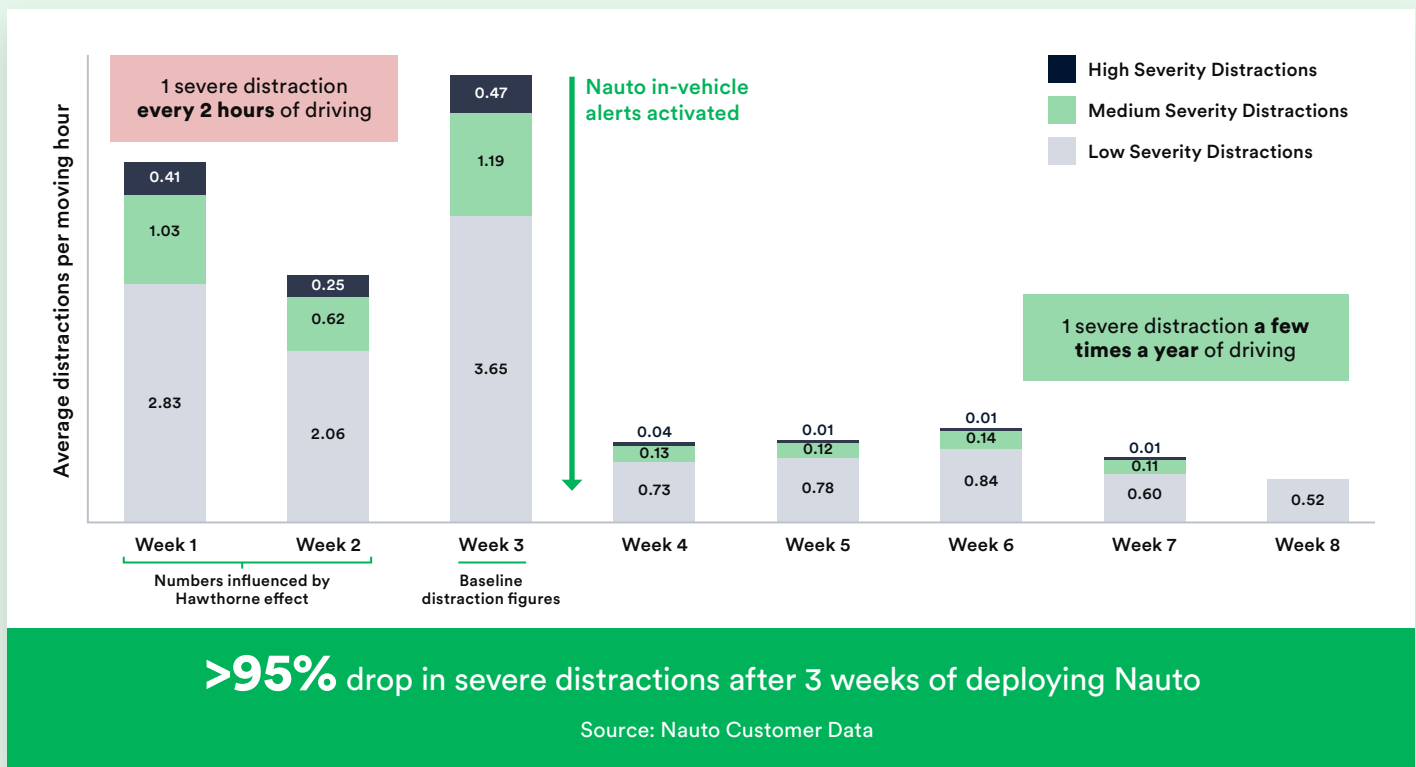
Using telematics solutions can slice 5-10% off of initial premiums because it helps fleets and insurers better track the ABCs (acceleration, braking, and cornering) of each vehicle. However, achieving a consistent discount from insurers with telematics relies on coaching all drivers to see improvements, along with a reduction in the number of claims that are made.

AI safety cameras are the next frontier for fighting against premium increases because they can help reduce behaviors that can lead to collisions. While AI camera systems represent a step change over telematics, competing systems are only achieving loss reductions of 30% or less.

How Nauto Is Different

Nauto is able to provide the evidence of improvement that insurance companies are looking for to lower premiums. The Nauto system has been shown to drive a rapid reduction in distracted driving, with most **drivers cutting down on their distracted behaviors by 80% within two weeks of implementation**. This helps fleets break out of their industry-average premiums and get reduced premiums that reflect their investment and rapid risk reduction.

Nauto's Immediate and Lasting Impact on Decreasing Distracted Behaviors



Because Nauto detects lower g-force incidents than other systems, it can exonerate against more claims. Nauto also helps exonerate fleets and drivers in the case of no-fault incidents or when drivers are wrongly accused, which is crucial in incidents where nuclear verdicts are a higher likelihood, such as a pedestrian strike. This also makes Nauto an ideal solution for combating fraud risk for insurers.

Plus, Nauto's alerts are fast, accurate, and precise, so that the drivers trust the system and adjust their behavior for the long term. Nauto's ability to have a faster, greater, and more sustainable impact on driver behavior translates into the reduction of fleet collisions, including the most severe crashes.

“The biggest cost is often third-party liability. It’s not your own damage, but lawsuits, claims that are filed by others for damage you did to them—and of that, the injuries of third parties are the biggest cost.”

Stefan Heck | CEO, Nauto



Driver Retention

Combatting high driver turnover is a perennial challenge for fleet operators. The American Trucking Associations (ATA) reports **turnover rates around 90% for large truckload carriers and 70% for smaller carriers**. The financial implications are significant: hiring and training a new driver can cost commercial carriers over \$10,000, and for a service fleet, the average cost of turnover for a skilled driver with over a year of experience can exceed \$20,000.

Plus, less experienced drivers are often less safe drivers. A study by the Federal Motor Carrier Safety Administration found that **drivers with less than 5 years of experience had a 41% higher chance of being at fault for a crash** than drivers with 5 or more years on the job.

How Nauto Is Different

While dash cams have made a positive impact on safety, many systems are a negative for drivers. Instead of the around-the-clock in-cab video recording, punitive measurements, and slow, inaccurate alerts that have soured drivers on new technologies, **Nauto places driver privacy and improvement at the center of its solution**. Video is only sent to the cloud and the management dashboard in the case of a high risk behavior or incident, giving drivers autonomy in their “office”.

Nauto in-vehicle alerts feature multiple severity levels, giving drivers a chance to self-correct after an initial, gentle nudge and before the risky behavior becomes more severe. Nauto’s VERA (Visually Enhanced Risk Assessment) score provides a risk-weighted measurement of driver performance that is the most predictive driver/fleet risk scoring system in the industry. Fleets often use VERA as part of their incentive programs because improvements in VERA equate to real savings for fleets. VERA can also be used to quickly identify highest risk drivers so that they can receive extra training – or be reassigned to help improve the overall team’s performance.

By prioritizing driver safety while respecting their privacy, Nauto helps fleets improve driver retention and control costs through reductions in forced driver turnover for poor driving performance and enabling more drivers to qualify for their safety bonus, while spending less time in coaching.

Every **10-point improvement in VERA** score leads to a **21% reduction in collisions**

Fuel Savings

By combining the hard acceleration, braking, and cornering events (ABCs) and speeding detection of telematics with a dash cam, fleets can reduce the driving behaviors that waste fuel. If a truck is going 80mph on a highway with a 65mph speed limit, it could be burning around 30% more fuel due to increased drag and higher engine RPMs. **Rapid acceleration can also cause 30-40% more fuel consumption** than a gradual acceleration because of the transmission's need to downshift and increase RPMs to meet the demands of the driver.

With the right systems, fleets can cut fuel costs by 5% by addressing speeding and acceleration behaviors. Idling is another activity that can waste up to half a gallon of fuel per hour, and most telematics offerings can identify and help train drivers to avoid unnecessary idling.

How Nauto Is Different

The biggest impact Nauto makes at the pump is through its effectiveness in reducing fuel-wasting behaviors like speeding and rapid acceleration in real-time – without additional coaching needed for the majority of drivers. Nauto studies have shown that the Nauto solution can reduce fuel consumption by 5-7% simply by changing driver behavior, even without in-vehicle alerts for ABC events and speeding. Adding appropriately configured alerts for ABC and speeding will increase the fuel savings even more.

For example, **distracted driving and tailgating can lead to hard brakes** because the driver was surprised by a lead vehicle slowing down or there were not maintaining enough following distance to begin with. Aside from additional wear and tear on the brake, the vehicle now must accelerate again, wasting more fuel. Traditional telematics won't see or prevent these behaviors.

Finally, Nauto's core telematics solution can also help in reducing fuel consumption by reducing fraud. By utilizing exception reporting that compares fuel purchases to driving miles, Nauto can help identify phantom fill-ups where the card is used for other purchases but is reported as a fuel purchase, as well as fraudulent fill-ups where another vehicle is fueled in the same transaction. Nauto's core telematics solutions can also reduce gas-guzzling idling and help fleets avoid local fines for excessive idling.

Productivity

One side effect of analyzing drivers through technology is the increase in man-hours needed for monitoring and coaching. From holding broader training sessions that may not be relevant for all drivers to having mandatory 1:1 training and coaching for drivers, the wasted hours for drivers and managers can start to add up.

Many fleets have implemented centralized “control towers” that monitor all events to ensure accuracy and then contact/coach drivers on the events they deem as valid.

Finally, there’s the time drivers, managers, and staff spend related to accidents and incidents such as waiting for police and tow trucks, cleanup, accident investigations, and claim submittals. **Unplanned downtime can cost between \$448 to \$760 per vehicle a day**, not just in repair expenses, but also through lost business opportunities, rerouted schedules, idle labor, and strained customer relationships.

How Nauto Is Different

The best way to lower the cost of manager-led coaching is to reduce the need for it. Nauto empowers drivers to self-coach by giving them access to their VERA safety scores and event videos. Nauto’s fast, accurate in-cab alerts help drivers improve their behaviors in real time, without supervision or intervention. This approach leads to **up to 80% of Nauto drivers self-improving with no manager-led coaching needed.**

If manager-led coaching is needed, our coaching platform simplifies the coaching process by providing a short list of drivers needing coaching, highlighting only selected events for coaching, and using a valuable Smith System type coaching checklist. Managers no longer have to review all events (but they are still available to managers if necessary) or manually coach every single driver.

Measuring the Return on Safety

Fleet safety solutions make an impact beyond the bottom line by protecting drivers as well as others in the community from vehicular incidents. But ultimately, the dollars and cents have to make sense for the business.

At Nauto, we work with our customers and future customers to perform in-depth ROI analyses that help them understand the Total Cost of Safety and how they can see the return on their safety investments. Ultimately, avoiding just one catastrophic accident and a potential nuclear verdict would make Nauto an invaluable addition to a fleet, but here are some questions we would ask to help calculate your potential ROI.

General:

1. How many vehicles are there in your fleet? What is the mix?
2. What are your fleet's:
 - Annual miles
 - Collisions or Collisions per million miles (CPMM)
 - Collision losses
 - Annual maintenance
3. Is your fleet self-insured? If not, what are the basic deductibles, limits, and premiums for your policy?

Collisions:

4. What are the main reasons for collisions? What collisions are driving your losses?
5. Have you measured the total cost of your collisions? How have they changed?

Fuel:

6. How much fuel do you use, and how much do you spend on fuel?
How has this changed?

Drivers:

7. Is driver churn a problem for you?
 - What is the churn rate (%)?
8. Describe how you coach your drivers today and how successful it has been?

Telematics:

9. Are you currently using telematics? If so, which system?
10. What have you used the system for?
 - Vehicle tracking
 - Driver coaching/safety
 - Fuel savings
 - Maintenance
 - Vehicle Utilization
 - Other
11. Have you measured your baseline or savings?



Let's Talk

If your organization is ready to understand how to explore how safety is smart business, reach out to Nauto today. Our team of safety and risk experts can help you uncover how better safety can lead to higher savings.

[Nauto.com/smartbusiness](https://nauto.com/smartbusiness)

