

# Quantifying Driving Risk to Reduce Collisions in Commercial Fleets

PROVEN TECHNOLOGY CAN REDUCE COLLISIONS BY UP TO 80%

*In the transport industry, road safety remains a perennial issue for commercial fleets across all industries. With collisions and fatalities near record levels, enterprises are looking for proven solutions that provide measurable benefits in terms of risk mitigation, collision frequency reduction, and loss savings. That's where Nauto comes in.*

One of the most consistent risks in the transport industry is vehicle collision and collision-related financial loss. Annually in the United States, 6 million collisions result in 3 million injuries, over 36,000 deaths, and billions in losses.<sup>1</sup> It's no surprise that addressing collision risk is a top priority for fleets worldwide. Despite the introduction of various new technologies such as telematics and ADAS, to date no mitigation efforts have sufficiently addressed the primary cause of collisions: human error, and in particular distracted driving.

**It's time to change that.**

**Every Year  
in the US:**

**6**  
Million  
Collisions

**3**  
Million  
Injuries

**Billions**  
In Losses

## A mission to reduce collisions and save lives

Nauto's vision is to make transportation safer and more efficient by transforming the way organizations approach risk, safety, and operations. Via state of the art AI, we leverage real-time data to automatically reduce collisions and risk, improve safety, and streamline operations for increased profitability.

Nauto® works with some of the largest fleets in the industry, driving millions of miles each day, to ensure driver safety, risk mitigation, operational efficiency, and rapid ROI. Trusted by more than 700 fleets worldwide, Nauto customers have enjoyed an estimated savings of hundreds of millions of dollars.

## We deliver unrivaled visibility into driver risk

According to a study by NHTSA, more than 94% of collisions are attributable to driver error, and of those incidents 71% were the result of distracted driving. Addressing the variety of potential driver risk factors that may contribute to a collision — from distraction, to speeding, to tailgating, improper turns, and many more — presents a significant technical challenge. Nauto has developed an AI-powered platform that can automatically improve driver performance and help reduce collision loss while mitigating the risk factors of greatest impact.

In contrast to other solutions that rely on vehicle telematics and manual reviews of events after the fact, Nauto's AI-powered platform is able to track and analyze driver behavior in real-time. Our approach is AI-native — it's designed and architected from the ground up to leverage AI across multiple, distributed environments to enable intelligent automation, prediction, and real-time response. Once deployed, Nauto provides in-vehicle alerts for risky behaviors — helping to reduce distraction in as little as a few weeks without any human involvement, which can dramatically lower collisions.



*Nauto's AI in-vehicle alerts can help reduce collisions by up to 80%. It can even provide drivers extra warning time.*

## Demonstrating the value of Nauto

Historically, insurance carriers have relied on measures like age, garage location, claim history, and FICO score to evaluate driver risk. Employers may look at risk factors including prior collisions and training, motor vehicle records, and personal risk factors. However, all of these are lagging metrics that do not measure real-time driver behavior.

In terms of real-time measures, many fleets also use telematics-based systems to track harsh acceleration, braking, and cornering (ABCs) in driver risk scoring, but these do not always provide a true measure of risk, since not all ABCs are necessarily bad.

In contrast, Nauto risk measurements advance the science of tracking and scoring driver behavior in real-time. A leader in the industry, the Nauto platform takes a holistic approach to measuring and tracking risk factors, which include:

1. **Aggressive Driving** — Beyond simple harsh ABCs, we distinguish severity and duration of events and add advanced heuristics to selectively link risky behaviors with real consequences, resulting in fewer, more impactful events for driver coaching.
2. **Attentiveness** — Our AI can detect multiple types of driver distractions, including progressive distractions, and tracks driver fatigue and drowsiness based on a time-series analysis.
3. **High Risk** — These variables include prior collisions, near collisions, and Forward Collision Warnings, soon to be followed by Pedestrian Collision Warnings.
4. **Traffic Violations** — We track speeding events above posted and above a configurable maximum speed, and soon we'll measure running red lights and stop signs.

Nauto analyzes driver risk and combines that with measured vehicle risks and external risks to develop one of the most comprehensive fleet driving risk profiles available. Across these risk categories, we deliver demonstrable dollar savings through four methods of risk reduction:

1. **Real-Time Intervention** — With real-time, in-vehicle alerts (IVAs), Nauto is designed to help drivers avoid collisions. In Nauto case studies, 66% of all drivers respond to IVAs and demonstrate improvement within 2 weeks.
2. **Management Engagement** — By identifying the risky behaviors of a small subset of drivers, Nauto enables management to intervene where necessary with coaching, training, reward/recognition, and/or corrective action.
3. **Comprehensive Behavioral Change** — Via both in-vehicle alerts and management engagement, Nauto promotes improvements in a range of driving risks not specifically addressed by IVAs.
4. **Leveraging Metrics/Best Practices** — By integrating Nauto metrics and best practices in safety programs, fleets can increase management engagement and effectiveness.

## Every day, Nauto is road-tested

Two customer success stories highlight the significant improvements in collision and collision loss our customers experience.

1. First, a major package shipping fleet provided their historical loss data and Nauto was able to build a customer risk profile and provide a statistically significant analysis as to how our technology could reduce losses by incident type. Then, after deployment, we were able to calculate loss reduction based on a more detailed and structured analysis.

Here's what we found:

**92%**

**Distraction  
Reduction**

**82%**

**Collision  
Reduction**

**84%**

**Loss  
Reduction**

- Next, a last mile delivery fleet experienced a rapid 92% reduction in distractions without direct management involvement. Then they enjoyed a further 65% reduction in remaining distractions over time via integration of Nauto metrics and best practices that drove greater management and driver engagement.



## Our “Measure & Reduce Risk in Fleets: Nauto’s AI-Native Approach” white paper is available for download on our website here.

The white paper discusses Nauto’s granular approach to targeting and reducing risk; the methodology by which we quantify the relationship between risk factors, collisions, and collision loss; and customer results that illustrate tangible improvements in driver behavior and collision loss reduction when comparing driver performance before and after deploying Nauto. Dollar savings are estimated via a rigorous data science approach that establishes both correlation between Nauto’s product and reduction in risk factors, and also implied causality between the two.

**Nauto is a leading SaaS provider of enterprise AI and computer vision solutions for commercial fleets and the automotive sector**

Nauto® is the only real-time AI-powered **Driver and Fleet Safety Platform** able to help predict, prevent, and reduce high-risk events in the mobility ecosystem. By analyzing billions of data points from over 1.1+ billion AI-analyzed video miles, Nauto’s machine learning algorithms continuously improve and help to impact driver behavior before events happen, not after. Nauto has enabled the largest commercial fleets in the world to avoid more than 70,000+ collisions, resulting in nearly \$310+ million in savings.

Nauto is located in North America, Japan, and Europe. Learn more at [nauto.com](https://nauto.com) or on [LinkedIn](#), [Facebook](#), [Twitter](#) and [YouTube](#).

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