

Predictive Collision Alerts

PRODUCT OVERVIEW

Reducing fleet collisions requires more than safety policies, traditional driver training, and physics-based ADAS systems. Nauto **Predictive Collision Alerts** are the first in the industry to simultaneously fuse critical inputs, including driver behavior, to provide drivers with enough time to react and prevent imminent collisions in real-time.

\$82k

Average fleet cost per rear-end collision, the largest contributor to fleet loss costs.²

27%

Limited percentage of rear-end collisions avoided due to FCW alerts.³

71%

Percentage of rear-end collisions are caused by distracted driving.⁴

PREDICTIVE COLLISION ALERTS

Nauto Predictive Collision Alerts simultaneously synthesize driver behavior, traffic elements, vehicle movement, and critical contextual data to identify and alert drivers of imminent collisions in real-time.



2x driver reaction times

Predictive Collision Alerts could give drivers as much as 100 extra feet to react to a potential collision when traveling at 60 mph.⁵



Equip your drivers

Predictive Collision Alerts are 400% more effective compared to traditional approaches in reducing rear-end collisions.⁶

“We evaluated multiple AI-powered products to support our commitment to driver safety. We expect Predictive Collision Alerts to further reduce our number of rear-end collisions.”

Greg McLeod
Pepin Distributing

Nauto's proprietary Multi-Tasked Convolutional Neural Networks and data analytics models are designed to simultaneously synthesize critical inputs to identify and alert drivers of imminent collisions in real-time.

CRITICAL INPUTS ASSESSED FOR REAR-END COLLISIONS

TYPE	DETECTOR	METHOD
Driver Behavior	Driver distraction (looking down, left, right, up) Drowsiness	In-vehicle AI, Interior image sensor
Traffic Elements	Lead vehicle position Lead vehicle speed	In-vehicle AI, Interior image sensor
Vehicle Movement	Vehicle speed Braking	GPS sensor, IMU sensor
Contextual Data	Historical collision trends Driver response time	Nauto and third-party data sources

1. Driver Safety Study. Reduce Distracted Driving with Real-Time In-Vehicle AI. Nauto. 2019.
2. Oliver Wyman (2020). The Road to Managing Risky Behaviors.
3. Accident Analysis & Prevention (2017).
4. Oliver Wyman (2020). The Road to Managing Risky Behaviors.
5. Based on comparison to minimum warning time of 2 seconds required of FCW systems by NHTSA (2005). Forward Collision Warning Requirements Project.) and assuming a human time to process a warning of 1 second (Green, M. (2000). How long does it take to stop? Methodological analysis of driver perception-braketimes.). Reaction time is the amount of time available when deducting human time to process from the warning time for a rear-end collision.
6. Estimate based on the frequency of rear-end collisions that involve distracted driving (Oliver Wyman (2020). The Road to Managing Risky Behaviors.)

Experience the features nauto.com/product/predictive-collision-alerts

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 650 million 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 25,000 collisions, resulting in nearly \$180 million in savings.

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

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