## SMARTORIVE

# **SMARTSENSE FOR ADAS** Avoid Collisions in Real-Time and Realize Immediate ROI

Following too closely is one of the main causes of rear-end collision. In fact, 23% of all motor vehicle crashes are rear-end accidents (NHTSA). And 60% of road fatalities are due to unintentional lane departure.\* That's why it's more important than ever to solve these problems – and others – before they occur.

Designed to identify and combat some of the most dangerous driving risks, and intervene with drivers before a collision occurs, SmartSense<sup>™</sup> for ADAS uses a computer vision-enhanced camera to enable real-time driver risk mitigation for short following, forward collision, lane departure and speeding.

# Helping your Drivers Avoid Collisions in Real-Time

SmartSense for ADAS provides in-cab alerts triggered by our CV-enhanced camera to help drivers avoid collisions in real-time. And, because of these progressive audio and visual alerts – delivered based on moderate and severe identified risk – drivers can engage in self-coaching and, ultimately, experience a reduction in collisions.

## **Extending the Power of Computer Vision**

Combining CV-enabled in-cab audio and visual alerts – with human review of event video and a proven coaching workflow – ensures your drivers aren't just tuning out beeps or potentially over relying on your existing ADAS system.

With the added power of our managed service, event video is off-loaded in near real-time, analyzed and prioritized by our team of experts so fleet managers can easily see the cause of ADAS alerts and address them in targeted coaching sessions. This combination of computer vision, real-time video and managed service – built on 15 years of analyzing risky driving behavior – reduces false positive alerts and improves driver performance.

In fact, SmartDrive customers using ADAS with our managed service experience **nearly 3x greater reduction** in collision frequency compared to customers using ADAS without our video safety program.



ADAS-Capable Sensor Camera



CV-Based Vehicle & Lane Detection



Real-Time Driver Feedback + Self-Coaching



Insight into Root Causes of In-cab Alerts

\* https://cms8.fmcsa.dot.gov/safety/data-and-statistics/large-truck-and-bus-crash-facts-2017#A2



### **Empowering Your Drivers Through Self-Coaching**

At the center of SmartSense for ADAS is the purpose-built Driver Feedback Device. Mounted on the dash, this small, inobtrusive tool provides progressive audio and visual alerts delivered based on moderate and severe identified risk. Drivers can engage in self-coaching and, ultimately, experience a reduction in collisions. In addition, information is also provided to the driver's supervisor so the root cause of the risky maneuver can be identified and one-to-one coaching can help ensure safe driving remains an immediate priority throughout the fleet.

#### FORWARD COLLISION ALERT

Rear-end crashes are one of the most common types of collisions. SmartSense for ADAS sends a visual and audio alert when it detects an imminent collision with a vehicle or motorcycle ahead, reducing rear-end collisions throughout your fleet.

#### SHORT FOLLOWING ALERT

Because SmartSense for ADAS monitors the distance (measured in seconds) from the vehicle ahead, it will notify your drivers with audio and visual alerts so they immediately reduce their following distance and the likelihood of a rear-end collision.

#### LANE DEPARTURE ALERT

Accidents caused by inadvertent lane departures are generally very serious because they often result in collisions with oncoming traffic or roadside obstacles at very high speeds. Get peace of mind with visual and audio alerts that remind your drivers to stay in their lane.



#### **SPEEDING ALERT**

Get real-time visual and audio alerts when your vehicle's speed exceeds the posted speed limit or fleet-specified threshold. When paired with the SmartDrive safety program, speeding video events are offloaded and queued for coaching to ensure that performance improves over time.

SmartDrive's open platform also integrates with the industry's leading, and proven, providers of active safety systems. Fleets can operate existing ADAS investments, as well as SmartSense for ADAS, from a single platform and pair them with a video-based safety program to get deeper insights into root cause of risk.

### **The SmartDrive Difference**

Only SmartDrive delivers a complete multi-layered approach to detecting and mitigating risk. SmartDrive's computer vision triggers, human-reviewed driving performance observation data plus extended recording, can help fleet managers uncover previously undetected risky driving behaviors, combat the most dangerous driving risks and intervene with drivers before a catastrophic event occurs.

To learn more about the SmartDrive SmartSense suite, visit www.smartdrive.net

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