FleetSafe^AI

! 2.8 SECS EYES OFF ROAD

! 2.2 SECS EYES CLOSED

Active Fatigue & Distraction Detection (AFDD)

Prevent Crashes Before They Happen with FleetSafe's **AI-Powered** Safety Technology

Every second counts behind the wheel.

Driver fatigue and distraction are two of the leading causes of commercial vehicle crashes, putting drivers, fleets and the public at risk.

Hundreds of thousands of lives and billions in damages are lost by businesses every year due to incidents that could have been prevented with alert or focused driving.

▶▶ **What if you could stop these incidents before they happen?**
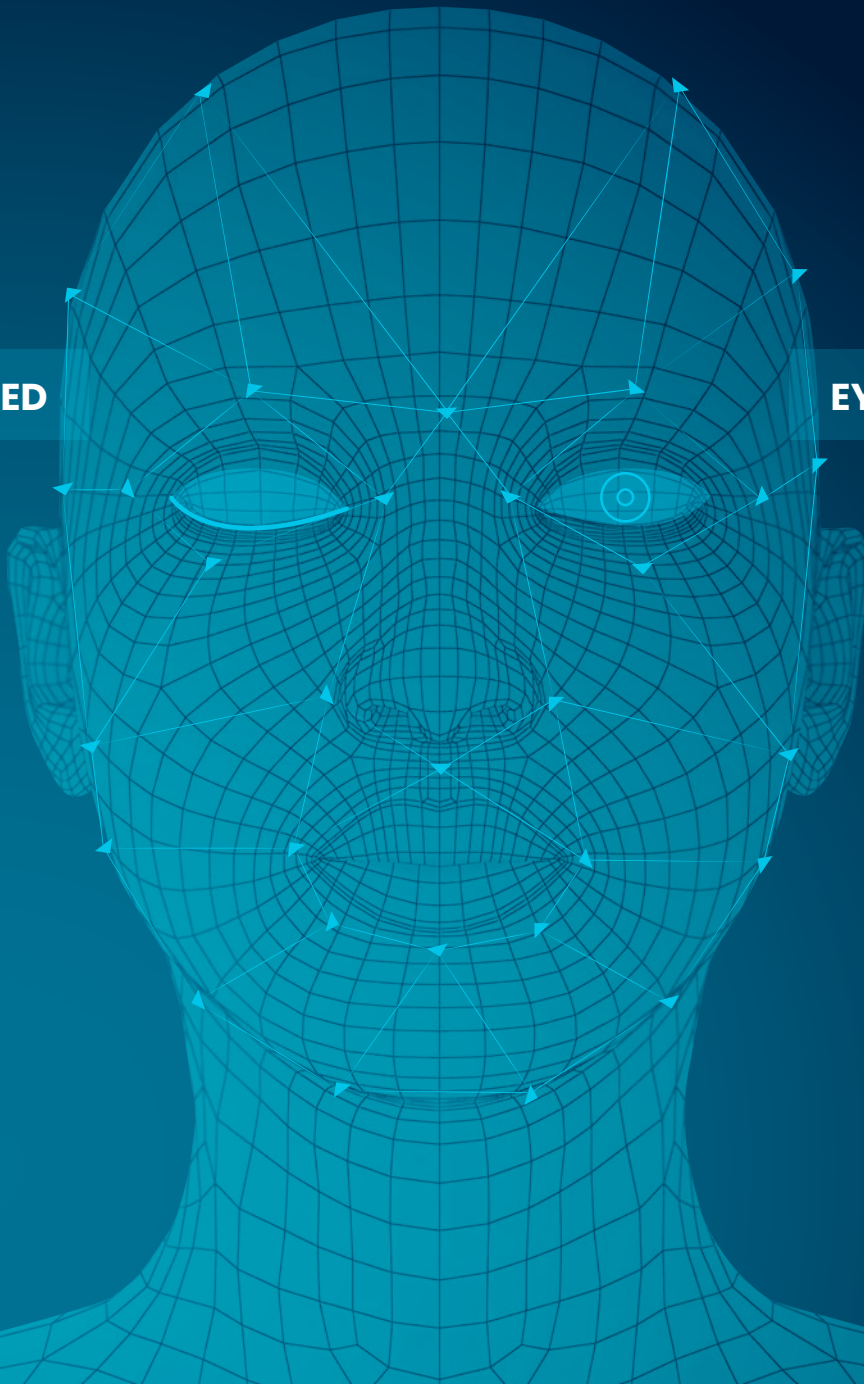
AI

FleetSafe's AI-Driven
Driver Safety Technology

FleetSafe's AFDD leverages the latest AI, PERCLOS, drowsiness detection, gaze tracking and real-time analytics to detect fatigue and distraction before they lead to an incident.
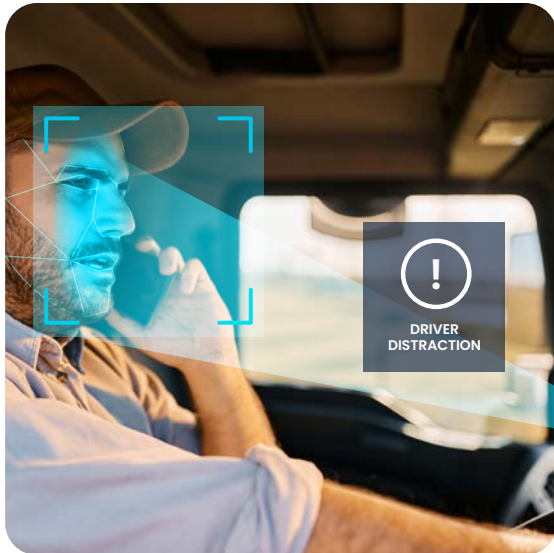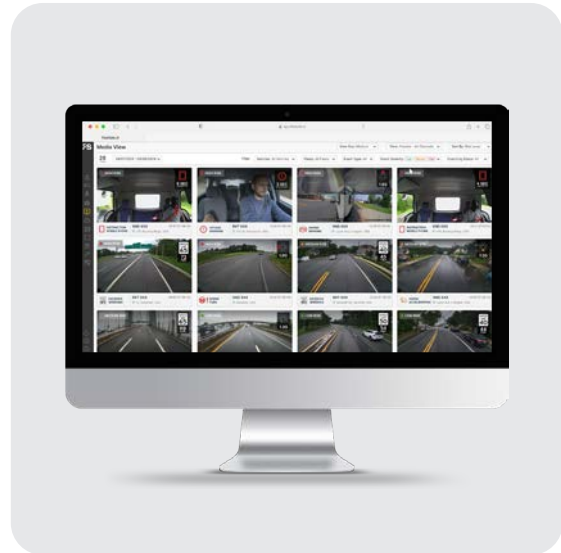
EYES CLOSED

EYES ON ROAD

How FleetSafe Helps
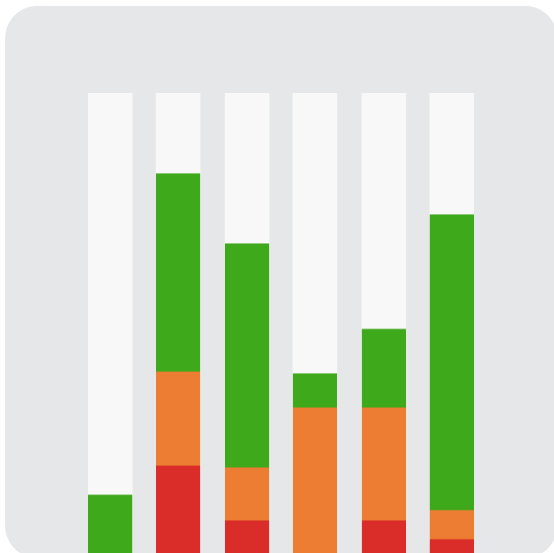# Prevent Incidents

Real-time driver alerts
(audio, visual and haptic)
to refocus attention

Seamless integration
with fleet management platforms
and cameras

AI-driven risk analysis
to identify fatigue and distraction trends

Live event monitoring
for fleet-wide safety oversight

The Numbers **Don't Lie**

1.3 MILLION
traffic deaths globally

42,000+
U.S. traffic deaths in 2022

30%
of all crashes globally
are rear-end collisions

87%
of these incidents are
caused by driver
distraction*

6,000+
deaths annually
are caused by
fatigue-related
incidents in the U.S

Safety risks are mounting, and with that, the legal liability;
now is a good time to protect your fleet with FleetSafe's
AI-enabled driver safety solutions.

The Hidden Dangers
of Fatigue & Distraction

Driving requires constant focus. Even a **two-second lapse in attention** can be catastrophic. However, traditional safety systems only react after an incident occurs.

Why Fatigue & Distraction
is so Dangerous

- **2 second microsleeps at 65mph** are equivalent to driving the length of a football field unconsciously

- **Fatigued drivers are 3X more likely** to crash than alert drivers

- **Drowsiness accounts for 46%** of truck-involved fatality crashes linked to driver impairment

- **Mobile phone use leads to "lizard glances",** where drivers look away without moving their heads, making distractions harder to detect

The Cost of
Doing Nothing

⚠ **Higher crash rates**

⚠ **Increased insurance costs**

⚠ **Unexpected fleet downtime**

⚠ **Legal risks** including multi-million-dollar lawsuits

⚠ **Increased driver turnover** due to unsafe working conditions

The FleetSafe Solution
AI-Driven, Predictive And Proactive

Unlike traditional safety systems that only record incidents, **FleetSafe's AI-powered video telematics actively prevents incidents** before they happen.

How FleetSafe's AI-Based Monitoring Works

Tracks eye movement and head position to detect inattention

Uses AI-driven algorithms to spot distraction, drowsiness and risky behaviours

Delivers instant in-cab alerts (audio, visual, and haptic seat vibrations) to keep drivers engaged

Notifies fleet managers in real-time for proactive intervention

With **PERCLOS-based fatigue detection, gaze tracking, and predictive AI analytics,** FleetSafe helps fleets eliminate risky driving behaviours before they lead to crashes.
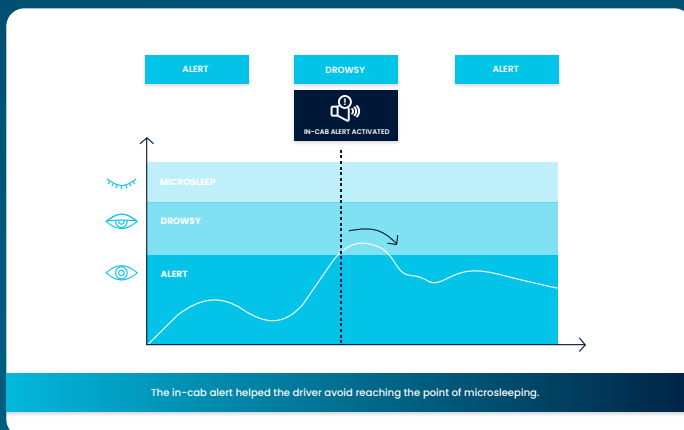
How It Works
Advanced Fatigue & Distraction Detection

Not all **Driver Monitoring Systems (DMS)** are created equal. Many **miss key fatigue and distraction cues** by relying solely on head tracking.

FleetSafe takes a multi-layered approach, combining AI-powered analytics with real-time driver alerts for **maximum safety impact**.

| ALERT | DROWSY | ALERT |

🔊 IN-CAB ALERT ACTIVATED

MICROSLEEP
DROWSY
ALERT

The in-cab alert helped the driver avoid reaching the point of microsleeping.

DSM FUNCTIONS

| Driver Fatigue | Mobile Phone Usage | Smoking |
| Driver Distraction | No Driver Present | No Seat Belt Detection |

ADAS FUNCTIONS

| Lane Departure | Tailgating Detection |
| Forward Collision | Pedestrian Collision |

The 4 Pillars of FleetSafe's AI-Powered Fleet Safety

1 PERCLOS-Based Drowsiness Detection

What It Does: Measures the percentage of time a driver's eyelids are 80% closed over a short period.

Why It Matters: PERCLOS is a scientifically proven fatigue indicator.

System Response: Instant visual and audio alerts prompt drivers to take a break before they become impaired.

2 Gaze-Based Distraction Monitoring

What It Does: Tracks eye movement, fixation points, and gaze direction to detect distractions.

Why It Matters: Identifies mobile phone use, cognitive inattention and system-related distractions.

System Response: Real-time alerts refocus drivers before an incident occurs.

3 AI-Powered Pre-Fatigue Detection

What It Does: Analyses driver behaviour trends to predict fatigue risks.

Why It Matters: Allows fleets to intervene early and prevent crashes before impairment happens.

System Response: Issues adaptive fatigue warnings based on Karolinska Sleepiness Scale (KSS) scoring.

Score	Description
1	Extremely alert
2	
3	Alert
4	
5	Signs of sleepiness
6	
7	Sleepy
8	
9	Extremely sleepy

4 Real-Time Alerts & Fleet Manager Oversight

What It Does: Notifies drivers and fleet managers the moment risky behaviour is detected.

Why It Matters: Provides real-time, fleet-wide safety intervention to stop crashes before they happen.

System Response: Uses audio, visual and haptic seat vibrations to snap drivers back to attention. Studies show real-time fatigue alerts reduce incidents by 66%, and fleet manager intervention boosts risk reduction to 94.4%!

Why Fleets Choose FleetSafe's
AI-Powered Telematics

66% ▼

reduction in
fatigue-related crashes
with in-cab alerts

94% ▼

risk reduction when
alerts are also sent
to fleet managers

Lower Insurance Costs
by preventing high-risk incidents

Regulatory Compliance
Stay Ahead of Safety Laws

EU General Safety Regulation (GSR) 2019/2144

- Mandates real-time fatigue and distraction monitoring in all new vehicles (2024)
- Requires in-cab alerts that do not interfere with driving operations
- From 2026 regulation mandates motor vehicle to be equipped with an ADDW system for all new vehicle registrations which must monitor the direction of the driver's gaze

U.S. NHTSA & IIHS Safety Recommendations

- Advocating AI-based fatigue detection to reduce crashes
- Supporting real-time driver intervention over passive monitoring

FleetSafe's AI-driven monitoring future-proofs your fleet against evolving safety regulations.

Why FleetSafe
is the Smart Choice

- ✓ **Reduce fleet downtime** & improve efficiency
- ✓ **Lower insurance claims** & liability risks
- ✓ **Retain drivers** by improving safety conditions
- ✓ **Strengthen your brand reputation** by prioritising road safety