Using Telematics, AI, and Video to Identify Both High Risk and Safe Drivers

motive

Presenter

Gary Johnson
Head of Safety and
Compliance Strategy at
Motive

With four decades of safety
leadership experience, Gary
has spent the past nine years
consulting on innovative
program solutions to fit the
risk and needs of clients.
Today he works with Motive's
clients to structure enterprise
risk management programs
and develop alternative risk
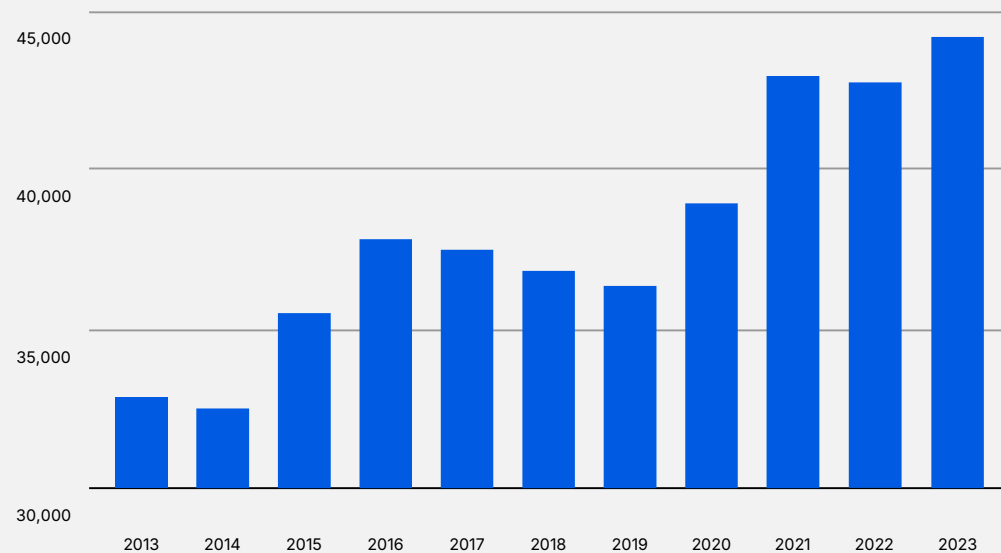solutions to benefit the
industry.

COMMERCIAL VEHICLE SAFETY
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State of safety

Current state of safety

- **44,450 people died** in traffic crashes in 2023.

- This is a **13.6% increase** compared to pre-pandemic 2019.

- A work related injury occurs every **96 minutes** in the U.S.

- Transportation incidents account for **38%** of all occupational fatalities.

- More pedestrians died last year than at any other point in the last 40 years.

Fatalities from vehicle-related accidents

NHTSA / NSC

The costly risk of visibility gaps on the road

Distracted driving (phone call, texting)

9 people

die everyday from accidents caused by distracted driving (NHTSA)

Close following

2.2M

or 33% all crashes are from rear-end collisions (NHTSA)

Rolling through stop signs

2.6M

or over 50% of crashes occur at or near intersections (FHWA)

Failure to wear a seatbelt

$11B

in total U.S injury-related crash costs from not wearing a seat belt (NHTSA)

All unsafe driving behavior

$3.6M

average cost of a fatal collision involving a large commercial vehicle (FMCSA)

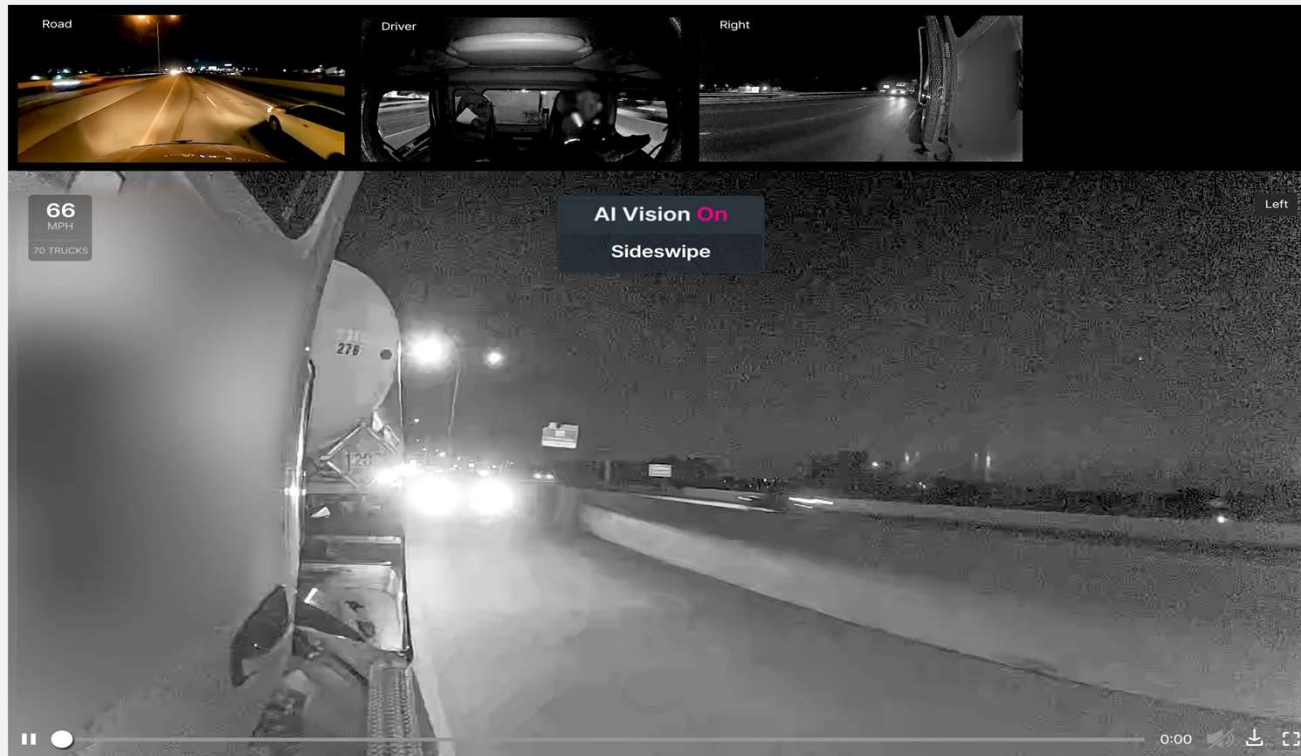**All unsafe driving behavior**

94%

of primary contributing factors to crashes were due to the driver (NHTSA)

Driver environment is vast

Public interaction is challenging

Current state of safety

Hard Brake, Collision

Identifying High Risk and Safe Drivers

Shifting to proactive/ preventative safety model

Reactive vs Proactive

Reactive

- Waiting until an accident to happen to address safety training seriously

- Responding to an accident and handling the damages after the fact

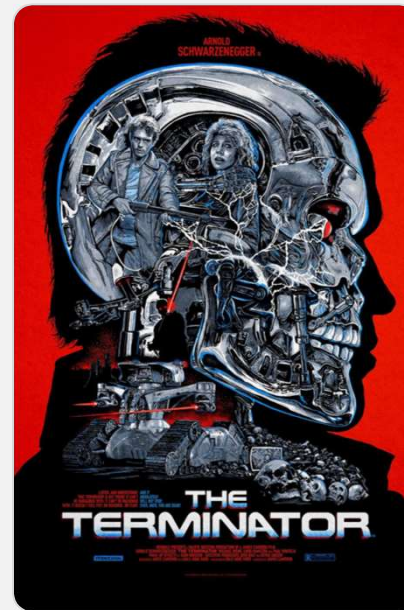- Not understanding what your risk is across drivers, vehicles, and program.

Proactive

- Anticipating problems before they happen using predictive data.

- Proactive driver coaching is timely coaching.

- Similar to sports, capture video and driver data to identify unsafe driving habits and alert drivers to them in real time..

AI Technologies
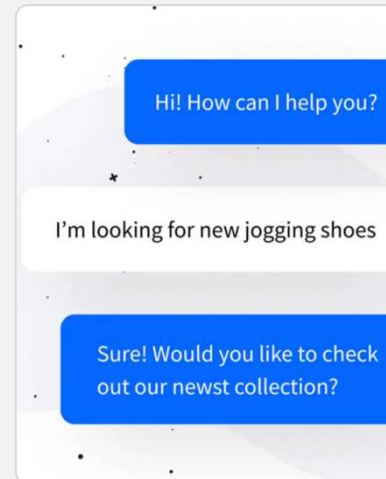
What is AI?

Reality
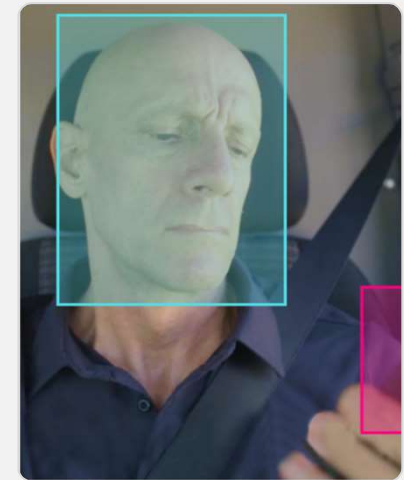
AI in the physical economy

Preventive Maintenance

Scheduling & Route Optimization

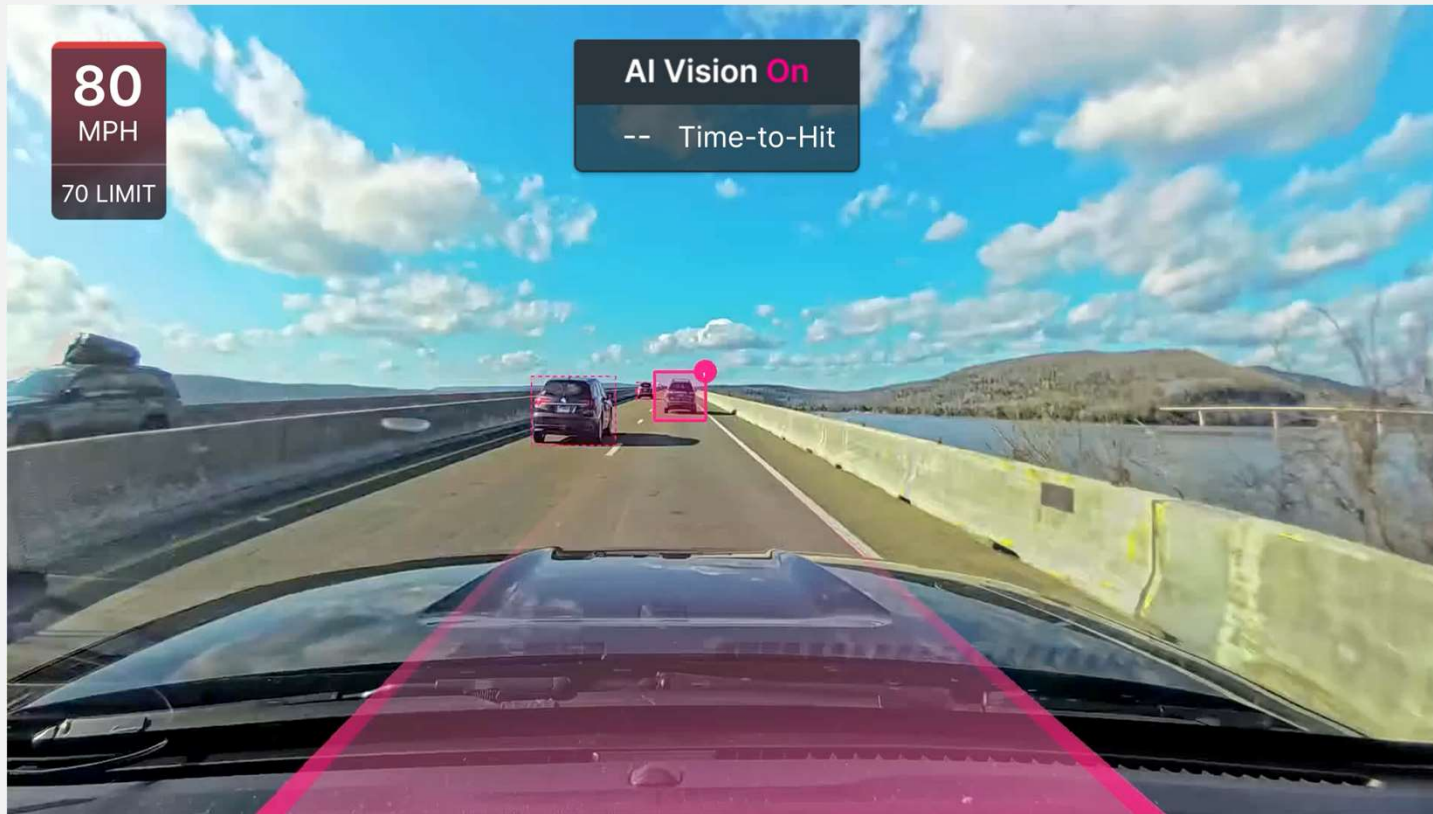Customer Support

Driver Safety

What does a computer see?
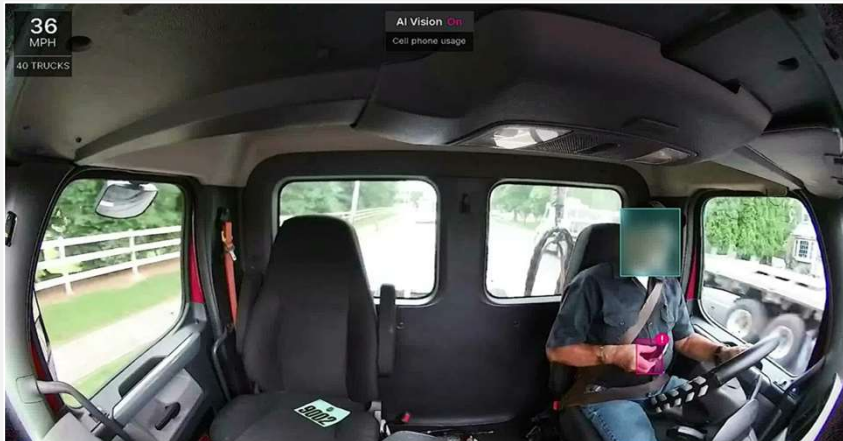

Object detection and classification

Background and foreground detection

Incremental improvements, real results:
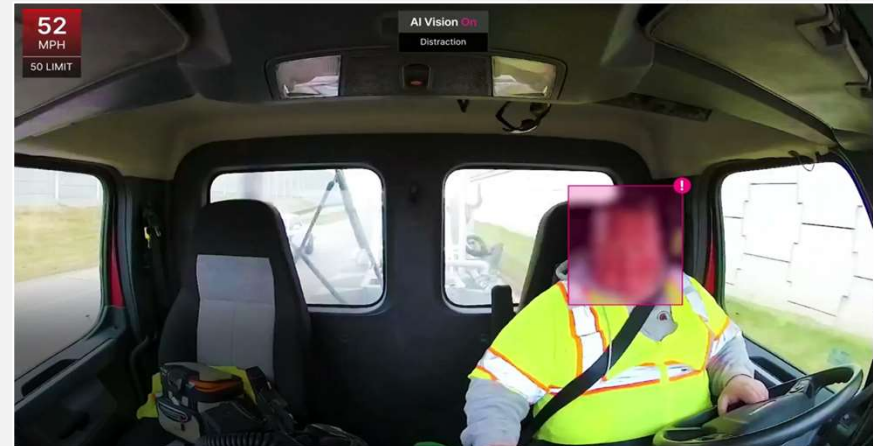# The bottom-line impact of fleet safety

Once drivers are used to in-cab alerts, gradually turn on driver-facing behaviors if they're off.
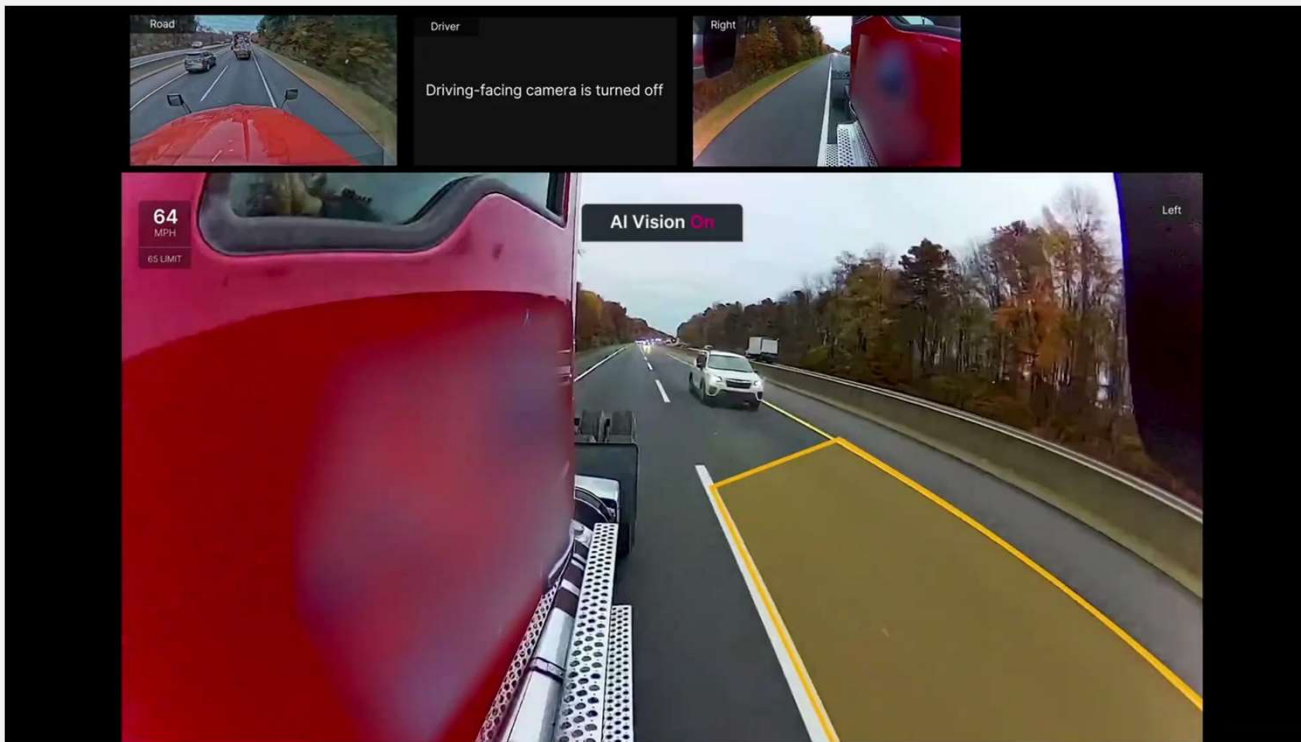
Cell phone usage

Distraction

Prevent collisions with blind spot monitoring AI.

Driver safety

AI Dashcam customers prevent accidents through active coaching, reduce accident-related expenses, and reduce insurance costs.

57%
Reduction in accidents within 4 months of deployment

30%
Reduction in accident-related costs

21%
Reduction in insurance costs

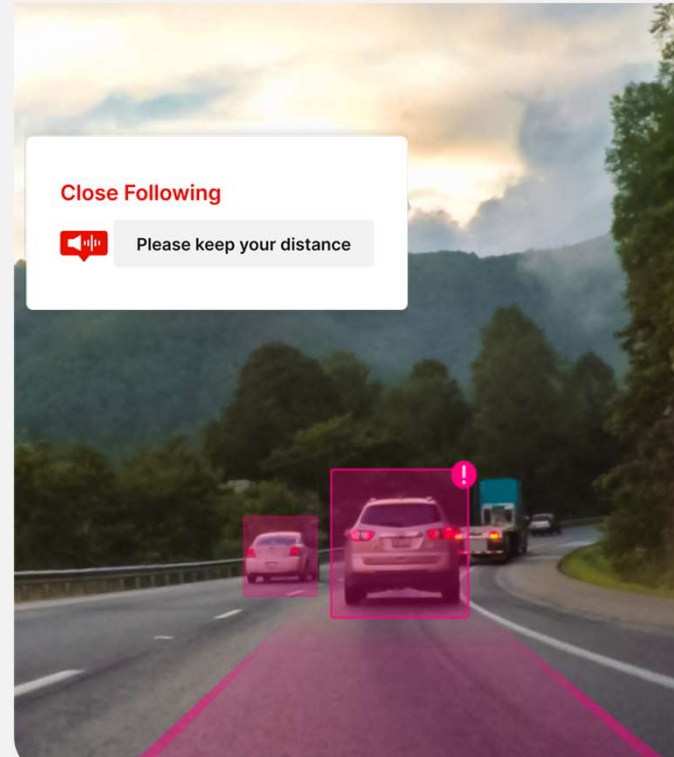2023 Motive ROI Report

AI saves lives.

75%

Reduction in accidents within months of deployment with in-cab alerts and regular coaching.

↓87%   Cell Phone Usage
↓79%   Distraction
↓79%   Seat Belt Violation
↓73%   Drowsiness
↓60%   Close Following / Tailgating

Safety ROI Report

Crashes can happen in a split second

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Thank you!

Questions?

Gary Johnson, gary.johnson@gomotive.com