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# The Case For Driving Down Risk Among Staff Drivers

Fleets employing technicians, managers and delivery experts face unique safety challenges on the road and on the job. Adding collision avoidance technology can minimize crashes, reduce liability and keep drivers safe.

Workers bring essential products and services to people's homes and businesses every day. These essential workers are all professionals in their fields, but what they aren't are professional drivers. In order for them to do their jobs, they are required to drive.

Fleet managers refer to professionals who are expected to drive as part of their duties as staff drivers. They are not certified or professional drivers, they are sales reps driving from city to city and town to town meeting with clients to sell assorted goods and services. They are linemen working for a utility, Internet or phone company or they are the local delivery person dropping off another package at your home. According to the U.S. Department of Transportation Federal Highway Administration, these drivers collectively drive millions of miles per year as they perform their jobs. But though they travel in company vehicles, these employees are focused on other tasks. While driving is part of their day-to-day responsibility, it is not their main responsibility. This fact complicates fleet managers' ability to keep employees safe and protect company assets from damage.

Relying on collision avoidance systems can improve fleet safety among staff drivers. The benefits of this technology are clear. The systems:

Reduce crashes and therefore lower non productive downtime

Minimize the threat of devastating liability payments



Improve uptime and productivity



Protect a fleet's reputation for safety

Enhance customer satisfaction with Ens reliable service arriv

Ensure staff arrive on-time

In addition to the above, when the public views a fleet as safe and productive, the company will attract and retain top talent and build confidence among customers and stakeholders.

#### Hazards of the Road

A fleet manager's goal is to help workers get the job done and get home safe at the end of their shift. Their concerns multiply when driving is a secondary part of a worker's job, and these fleets more frequently travel in urban environments where traffic is heavier, and accidents are more common.

The statistics show there's reasonable cause for concern. The National Safety Council reports that the most dangerous part of an employee's workday is when they are on the road.

Motor vehicle crashes are the leading cause of work-related deaths in the United States. Over 1,276 U.S. workers die annually in work-related motor vehicle crashes <sup>1</sup>, and 29,000 workers lost their lives in motor vehicle crashes from 2003 to 2018. In total, work-related crashes represent 24% of work-related deaths.<sup>2</sup>

Further, work-related crashes cost employers billions a year. In 2013 alone, work-related motor vehicle crashes cost employers \$25 billion, an average of \$65,000 per nonfatal injury and \$671,000 per death.<sup>3</sup> The risk of crashes is real. Up to 20% of a fleet will crash annually, with the average crash costing \$20,000 in lost wages and downtime.<sup>4</sup> And, this figure does not include lawsuits!

Universal Tyre & Autocentres knows well the havoc collisions can wreak. Its staff drivers had 10 collisions in 2016, costing \$71,000 in claims.<sup>5</sup> Ambu-Trans Ambulette of Mount Vernon, New York, shares a similar tale. Before adding collision avoidance systems, the non-emergency medical transportation services provider experienced 30-50 crashes annually, with estimated losses of \$1 million per year in liability claims.<sup>6</sup>

Adding collision avoidance systems to company vehicles can help staff drivers proactively avoid crashes. Drivers receive alerts as they drive, allowing them to make corrections and avoid collisions.



## What is a Collision Avoidance System and How Can It Help?

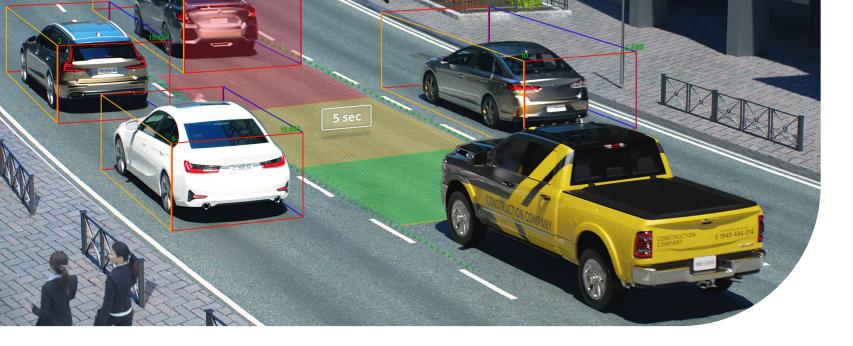
Many large cargo fleets and heavy-duty trucking firms already rely on collision avoidance systems to improve safety. But adoption of this technology among fleets using staff drivers is much lower.

Fleet managers with staff drivers sometimes view collision avoidance technology as more than they need or believe they must invest in new vehicles to use it. But the systems are easier than ever to implement and make a tremendous impact by improving driver behaviors <sup>7</sup> and reducing crashes, making them a perfect fit for fleets of all types and sizes.

The best approach to fleet safety for all fleets is to avoid collisions rather than review them after the fact. A collision avoidance system can provide a proactive solution to a real problem and helps train drivers to avoid dangerous situations.

Collision avoidance systems are powered by artificial intelligence that comprises IoT sensors, advanced processors and sophisticated algorithms to alert drivers to road hazards. The innovative systems warn drivers of potential hazards in real time with audio and/or visual warnings, giving drivers more time to react and prevent or mitigate a collision. A collision avoidance system might warn a driver if they are following another vehicle too closely, if they are in danger of colliding with a vehicle ahead or colliding with a pedestrian or cyclist, or of unintentional lane changes.

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#### The Benefits of Collision Avoidance Systems

It's a known fact that fleets using collision avoidance systems see fewer collisions.

After monitoring 150 trucks and 168 drivers for a year, the National Highway Traffic Safety Administration (NHTSA) reported the results of a field study involving collision avoidance systems. The NHTSA found that after driving over 3 million miles and logging over 110,000 miles of driving information, trucks equipped with collision avoidance systems had zero accidents over a 12-month period.<sup>8</sup>

Other fleets comprising staff drivers see similar results. Universal Tyre & Autocentres, for example, reduced fleet collisions and realized a 50% drop in insurance claims after adding a Mobileye collision avoidance system<sup>9</sup> And Ambu-Trans Ambulette reduced collisions by 45% and collision-related losses by 91% after equipping their vehicles with Mobileye technology.<sup>10</sup> One reason for these improvements may well be that these systems also seem to contribute to better driver behavior. A Missouri Employers Mutual study revealed a 43% reduction in lane- departure warnings, a 71% reduction in headway monitoring warnings (following a vehicle too close), and a 57% reduction in forward collision warnings when fleets supplied collision avoidance systems."

In 2016, Dish Network, a premier provider of Satellite TV and Internet Services, conducted a pilot program, equipping 12 vehicles with Mobileye collision avoidance systems.<sup>12</sup> The service providers drivers saw a 40% to 60% reduction in alerts from the Mobileye technology.<sup>13</sup> In addition, Dish Network saw a 3% fuel savings with its pilot.<sup>14</sup> These savings indicate that collision avoidance systems may well help prevent sudden braking, leading to lower fuel consumption.

Improved driver behavior and fuel savings made the collision avoidance technology case for the Satellite and Internet service provider. Dish Network continues to install Mobileye on its vehicles.

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#### COLLISION AVOIDANCE SYSTEM PIONEERS

Mobileye pioneered the collision avoidance systems designed to provide alerts that help staff drivers avoid crashes, while improving their driving behavior for the future. Historically, the company first envisioned using technology to help drivers avoid collisions in 1999. Since that time, fleets worldwide have used Mobileyecollision avoidance technology with impressive results, including fewer crashes, lower liability, and drivers who go home safely each night.

The latest version of this technology, Mobileye 8 Connect, warns drivers of potential hazards in real time with audio and/or visual warnings. The innovative system even detects hazards, such as pedestrians and cyclists, at night.\* When fleets retrofit the system to their vehicles, the technology encourages safe driving and increases the bottom line. The Al-powered system alerts drivers to dangerous situations including:



The alerts give staff drivers time to react and avoid a collision. The system helps drivers avoid collisions in the moment and, correct and improve their driving behavior to avoid warnings altogether.

Fleets across the globe use Mobileye technology to lessen collision rates. According to Dish Network, headway monitoring provided some of the most noticeable benefits. Abe Stephenson, Fleet and Administration Manager for Dish Network, sees headway monitoring as an "everyday benefit that alone could provide companies with the ROI they are looking for, through reduced fuel consumption from more conservative driving.<sup>15</sup>"

Mobileye collision avoidance technology also benefits fleets through reduced downtime, liability, and fuel use. And it protects company reputations. Fleets with staff drivers often brand their specialized vehicles with the company name, logo, phone number and web URL, making the vehicles a highly visible presences in communities. Fewer accidents and safer drivers positively impact how consumers see these light trucks, passenger vehicles, delivery and work vans. They begin to identify the operation as safe, and the work the company provides as dependable.

Workers delivering needed services and products are good at what they do, whether they deliver food or other products, provide emergency medical care, services or repairs. But their focus is the task at hand, not driving. Implementing collision avoidance technology and tracking driver behaviors not only keeps employees safe but can be a valuable investment of time and resources for employers helping them control costs, protect company assets from damage, reducing downtime and making roads safer for everyone.

Learn more about how Mobileye 8 Connect can help staff drivers avoid collisions, improve safety and reduce costs. www.ims.mobileye.com

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Mobileye, is leading the mobility revolution with its autonomous-driving and driver-assist technologies, harnessing world-renowned expertise in computer vision, machine learning, mapping, and data analysis.

Our safety technology is integrated into hundreds of new car models from over 25 of the world's major automakers and can also be installed as a retrofit collision avoidance system, with five real-time alerts, into already existing vehicles. There are currently more than 65 million vehicles that have Mobileye technology installed. With the introduction of the Mobileye 8 Connect<sup>™</sup>, we incorporated low-light detection of cyclists and pedestrians and over-the-air updates to ensure our systems can improve existing features or introduce new ones in Mobileye collision avoidance technology.

The Mobileye collision avoidance system is available with a single, forward-facing vision sensor suitable for almost any vehicle, or in a multisensor solution designed specifically for large commercial vehicles with hazardous blind spots

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