

How To Improve Utility Fleet Safety On The Road & On The Job

Utility fleets face unique safety challenges both on the road and at the job. A combination of ADAS and fleet management solutions can help minimize crashes and keep drivers safe.



There is a truism in fleet management: Every fleet is unique. This is particularly the case with utility fleets. Drivers are specialized technicians who operate complex and specially upfitted vehicles, often in out-of-the-way locations and working alone. While they need special skills, equipment, and, yes, vehicles to do their job — these technicians also need more training and need to take more care when driving their vehicles.

This can complicate a fleet or driver manager's ability to keep vehicles and technicians safe whether it's on the road or at a job site.

The combination of two well-established vehicle technologies — advanced driver assistance systems (ADAS) and a fleet management solution — can be critical in making the utility fleet operation safer across the board. The benefits are clear:

- Drivers should experience more uptime and be more productive — contributing directly to the organization's bottom line.
- There should be fewer crashes, and, as a consequence, less non-productive downtime.
- The threat of ruinous liability payments should, at the very least, be minimized both by having fewer crashes (because of the ADAS) and having better insight into the circumstances of the crash (because of the FMS).
- All of which should help the fleet and the company's image as safe and productive, which should in turn help it attract and retain top talent and build confidence among its customers and stakeholders.



What is ADAS & Why Does it Matter?

ADAS systems are becoming ever more essential in keeping both commercial and non-commercial drivers safe on the road. These systems may include reversing cameras, lane-keeping systems, forward collision warning systems, and, even, automatic braking solutions. While ADAS doesn't in any way take the responsibility of driving safely off the driver, these systems are, for lack of a better term, a sort of virtual co-pilot, always monitoring the road in case driver error or distraction creates a hazardous situation. Powered by artificial intelligence (AI), ADAS systems are constantly improving, and with over-the-air (OTA) updates they can be updated with improved technology.

For utility fleets, having ADAS in a truck — either as a factory feature or as an aftermarket add-on — can be a key way to proactively avoid crashes. The driver receives alerts in the cab, allowing them to make a correction and avoid a collision.

While there is value in having the ability to provide retrospective analysis and coaching, avoiding the crash in the first place is of course the optimal solution.

Driver Management & Fleet Safety

Managing drivers when they are behind the wheel wasn't possible until about a decade ago with the development of reliable connected fleet management solutions, such as telematics. Particularly for utility fleets with remote workers, location monitoring wasn't possible — and contact was limited to communication with either radios or cell phones, which required the driver to either be in close proximity to the radio or to have the cell phone on them (and be within range of a cell tower).

With telematics, fleet managers are able to get the kind of visibility that they had always needed on and off the road.

With vehicle tracking technology, fleet managers can not only receive alerts about poor driving behavior, but can know, in near-real time, where a vehicle is located down to a few hundred feet, and can set geofences to make sure a driver stays within a set area. This type of tracking is far less obtrusive than the inward facing cameras that drivers might potentially find objectionable.

For utility technicians, in particular, having the visibility that FMS can provide is doubly important. Often working alone or in rural areas, utility technicians are susceptible to serious injury. Having the ability to pinpoint exactly where a vehicle is located could be critical in helping an injured or lost employee.

For example, if an employee is overdue back at the headquarters or has missed a scheduled check in and can't be reached by cell phone or radio, the fleet or technician manager can check to see where the vehicle is or if it has moved at any time in the past few hours, helping to determine whether the technician may need help.

Putting the Technology Together

ADAS and driver tracking technology are powerful, proactive ways to keep drivers safe and on the road. But tying the two technologies together will give fleet managers — particularly those who oversee utility vehicles — the ability to have insights on their fleet and a means to proactively avoid crashes.

For example, the Mobileye Connect Platform and Mobileye 8 Connect™ solutions provide the power and the protection to keep drivers safer and to keep vehicles on the road. The AI-powered Mobileye 8 Connect can alert drivers to a variety of dangerous situations, with features including:

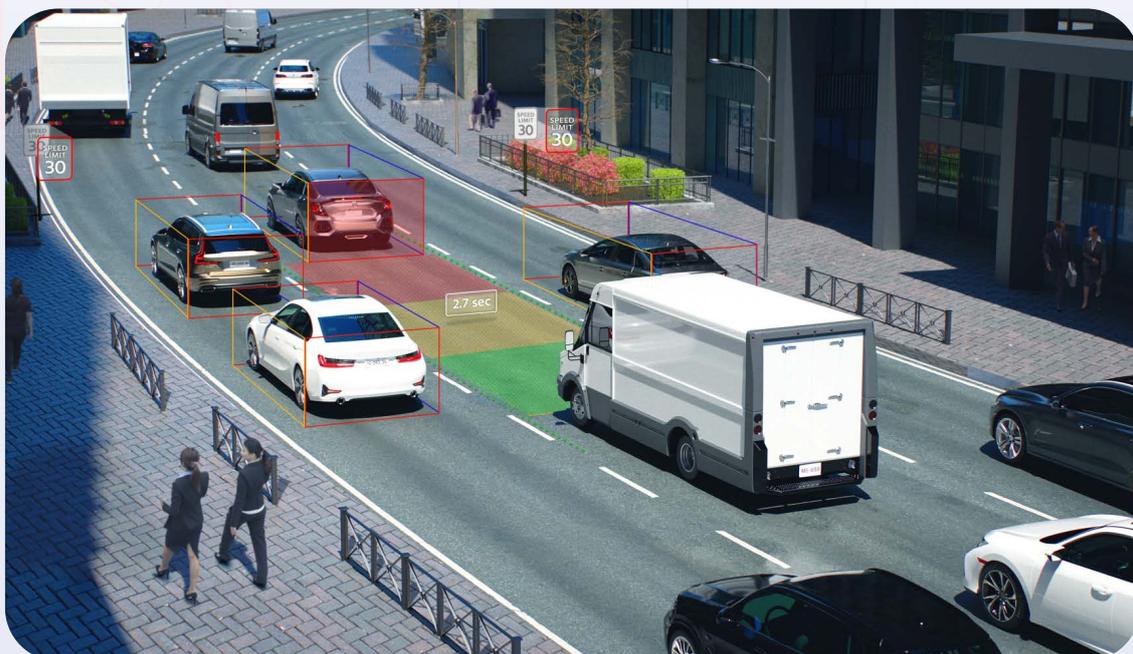
- Forward Collision Warning
- Headway Monitoring & Warning
- Lane Departure Warning
- Pedestrian and Cyclist Collision Warning
- Speed Limit Indication

These alerts give drivers the necessary time to react and avoid a collision. The technology can identify and signal alerts related to vehicles, motorcycles, and pedestrians.

The Mobileye Connect Platform works in concert with Mobileye 8 Connect, allowing fleet managers to access data about the vehicle — such as location, utilization, trip reports, and driver scorecards. It also logs and reports safety alerts, including when, where, and for what an alert was triggered. This means that Mobileye 8 Connect not only helps drivers avoid collisions at the moment, but through this reporting can help fleet managers arrange additional coaching to help correct and improve their drivers' driving behavior, instead of relying on the virtual co-pilot to alert them. Avoiding warnings due to poor driving behavior should be the goal.

And the ADAS technology works. A recent study by Missouri Employers Mutual and the MU College of Engineering found that three out of four drivers' driving improves with collision avoidance technology. Specifically, there was a 43% reduction in involuntary lane departures, a 71% reduction in following too closely, and a 57% reduction in forward collisions!

Fleets of all types around the world are using the Mobileye Connect Platform and Mobileye 8 Connect to lessen their



The Win-Win Benefits of ADAS & Driver Tracking

Crashes can and will happen in almost any conditions. Consider that even with significantly lower traffic volumes, crash deaths across all categories in 2020 reached a 13-year high of more than 42,000, the most since 2007². Using ADAS and driver tracking can help fleets lower the odds that they'll be contributing to these crash statistics.

For fleets operating Class 3-8 trucks (the range of most utility fleet vehicles), the number of fatalities from crashes, including the truck's driver, passenger vehicle drivers/passengers, pedestrians, and bicyclists, was 4,102 in 2017 (the latest year for which there are statistics). To put this in perspective, the overall crash rate on the industry standard of per million miles driven was 0.5 in 2019, which had significantly decreased from 0.9 in 2016³. With the overall increase in fatalities, it would not be surprising if these numbers see an uptick when more recent statistics are released in the future.



But there are other benefits to avoiding crashes and monitoring driver behavior, including:

Improving Driver Retention

Drivers may not like being monitored, at first, but they'll come to appreciate that the fleet operation is safe and well run; they'll see that the company cares about their well-being in and out of the vehicle. And with driver turnover at over 90%⁴ in some industries, running a demonstrably safer fleet may give you an edge in holding onto high-value employees.

Downtime is lessened

Having better visibility into the fleet's vehicles can help fleet managers better address emerging maintenance issues.

The Fleets Profile Is (Positively) Raised

Utility fleets are often highly visible presences in the communities they serve due both to their specialized vehicles and the branding on them; having drivers who are safe and not in crashes will help to create goodwill among customers and non-customers alike, identifying the operation, on the whole, as safe and reliable.

Ruinous Liability Could Be Avoided

Particularly for utility and other heavy-duty fleets, so-called "nuclear verdicts," that is liability judgments in the \$10s of millions, are outcomes that anti-collision technology could be a factor in helping to avoid.

Combining ADAS and driver tracking can supercharge your fleet safety program and help keep your drivers safe, on the road, and productive.

To learn more about how Mobileye can help your utility fleet add ADAS and driver tracking to your vehicles [Visit our website!](#)

About Mobileye



Mobileye, an Intel Company, is a global leader in the development of computer vision and machine learning, data analysis, localisation and mapping technologies for Advanced Driver Assistance Systems and autonomous driving solutions.

Our safety technology is integrated into hundreds of new car models from the world's major automakers: BMW, Audi, Volkswagen, Nissan, Ford, Honda, General Motors and more.

The Mobileye collision avoidance system is available with a single, forward-facing vision sensor suitable for almost any vehicle.

www.mobileye.com