

Truckers soon may replace mirrors with cameras and video screens

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Semi-trucks may soon be rolling down America's highways without the big rear-view mirrors that stick out from the sides of the cab like jug-handle ears.

The federal agency that oversees commercial truck and bus safety recently decided to allow replacement of the characteristic "west coast mirrors" with a computerized camera-and-monitor system that promises better visibility and lower fuel costs.

The technology has undergone at least 2 million miles of highway testing, and companies such as Schneider National Inc. now are planning the possible deployment of the system in their fleets. "It's already showing great promise," said Tom DiSalvi, vice president of safety and loss prevention at the Green Bay trucking firm, one of the country's largest.

Schneider and rival over-the-road carrier J.B. Hunt are among trucking companies that have been testing the camera system, fitting it on a small number of tractors along with the until-now-required mirrors.

Improved visibility

With the mirrors still in place and adding to wind drag, the firms haven't yet been able to verify fuel savings touted at up to 2.5 percent.

But in comments to the Federal Motor Carrier Safety Administration, both Schneider and Arkansas-based Hunt endorsed the reported safety features of the camera system.

Drivers at the wheel of the three Schneider trucks that have been using the system "have had an overwhelmingly positive experience," the company said in comments submitted by DiSalvi.

The technology improves visibility in low light and at night, and filters out glare that mirrors allow, Schneider said.

Hunt pointed to improved field of vision for drivers and elimination of blind spots.

The company offering the "MirrorEye" camera system, Novi, Michigan-based Stoneridge Inc., says it expands a truck driver's field of vision by 25 percent, a statement the FMCSA accepted.

The agency's decision allows MirrorEye to be placed on trucks by waiving the regulation requiring two rear-view mirrors on the sides of the cab.

The rule waiver is for five years, but if the system performs well, it is likely the FMCSA will allow it permanently as a substitute for the mirrors, trucking industry consultant Randy Mullett said.

Potential fuel savings are 'huge'

MirrorEye is "a really, really good system" that eliminates blind spots, provides enhanced digital images and has a panning feature that gives the driver a view of the back of the trailer at all times, Mullett said.

Then there are the fuel savings. Mullett pegged them at 1 percent — considerably less than the "up to 2.5 percent" Stoneridge cites but still, he said, significant.

"That doesn't sound like a lot until you multiply it by a million trucks," he said. "... It's a huge number."

Take Schneider, for example. With a fleet of 10,700 tractors, the company spent \$305 million on fuel and fuel taxes in 2017, according to its annual report.

One percent of that comes to a little more than \$3 million. Two and a half percent comes to \$7.6 million. And the savings would be ongoing.

Stephen Fox, vice president of business development for Stoneridge, wouldn't discuss pricing of MirrorEye. But he said the firm's analysis shows that between fuel savings and safety benefits the system will pay for itself in less than a year.

'Foundational' technology

Not everyone is a fan of the FMCSA decision. Among critics are Advocates for Highway and Auto Safety — an alliance of insurance companies and consumer, public health and safety groups.

In a comment to the agency, Advocates said it recognized the potential benefits of MirrorEye, but opposed a waiver of regulations that could allow the cameras and monitors to replace mirrors on literally every commercial truck and bus in the country. Instead, the group recommended, the FMCSA should further test the technology in a more-limited pilot program.

Such objections “would have carried a lot more weight” under the administration of former President Barack Obama, Mullett said. The less-restrictive regulatory approach endorsed by President Donald Trump probably helped prompt the FMCSA to issue its broad exemption to the rule on mirrors, Mullett said.

Ross Froat, director of engineering and information technology at the American Trucking Associations, a key industry lobbying group, said the FMCSA decision signaled a new willingness by the agency to embrace advanced safety systems.

Such systems — with features such as automatic emergency braking, pedestrian detection, lane-departure warnings and forward collision warnings — are increasingly gaining hold in the trucking industry.

The MirrorEye, with its use of cameras, is consistent with those emergency technologies, which are “becoming the foundational building blocks for automated vehicles,” DiSalvi said.

“So I do think that this has the potential for this to be very successful,” he said.

MirrorEye uses multiple cameras on each side of a truck, providing backup in case one camera is struck and disabled, Fox said. He said Stoneridge has contracted with another firm to provide roadside replacements if necessary.

Froat said the cameras are sturdy, can withstand more impact than a conventional mirror and are smaller and thus less likely to be struck. Drivers could carry spare mirrors to attach to the truck should a camera fail, he said.

Mullett, for one, foresees eventual widespread adoption of the technology.

“I think 10 years from now no new trucks will be sold with standard mirrors,” he said. “It’s that big of a game-changer.”

<https://www.jsonline.com/story/money/business/2019/01/15/truckers-now-can-replace-rear-view-mirrors-cameras-video-screens/2553460002/>