

Mirrorless trucks gain heavy favor in NHTSA proposal

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Credit: Jim Allen/FreightWaves (in Stoneridge MirrorEye truck)

Revising rules that would allow truck and automobile manufacturers to install cameras in place of side and rearview mirrors has wide support based on comments received by federal safety officials.

An Advanced Notice of Proposed Rulemaking (ANPR) [issued by the National Highway Traffic Safety Administration](#) (NHTSA) in October generated close to 600 comments, most of which were in favor of the plan. The ANPR was issued in response to a 2014 petition filed jointly by the Alliance of Automobile Manufacturers and Tesla to allow camera monitor systems (CMS) to replace outside rearview mirrors on cars and a similar petition filed in 2015 by Daimler Trucks North America for heavy trucks.

In addition to improved safety that video cameras provide by reducing or eliminating blind spots, several comments also pointed out economic benefits. “Allowing truck manufacturers to install CMS in lieu of rearview mirrors would unlock a unique opportunity to make a consequential step forward in the aerodynamic performance of heavy-duty tractors,” the Truck and Engine Manufacturers Association (EMA) stated in comments filed in December.

EMA claimed that an estimated 0.8% to 2% improvement in fuel efficiency (from reduced aerodynamic drag caused by eliminating side mirrors) could save a trucking company 160 to 400 gallons of fuel on a single tractor in one year, based on annual consumption of 20,000 gallons of fuel.

“Multiplying that improvement over many trucks in year-over-year operation, the fuel efficiency benefits of CMS would provide enormous financial returns to trucking fleets, not to mention the significant corresponding environmental benefits of reduced criteria pollutant and greenhouse gas emissions.”

The American Trucking Associations, which also supports allowing mirrors to be replaced by cameras, pointed out savings in mirror maintenance costs. “At the current average, shop repair costs are \$100-\$150 per hour,” ATA commented. “Using these figures, a [commercial motor vehicle] owner may spend \$100-\$200 twice per year repairing mirror issues (not including the price of parts).”

While it didn’t oppose modifying current regulations to allow for cameras, the American Association of Motor Vehicle Administrators (AAMVA) asked NHTSA to consider the effects that a rule change could have on pre-trip, safety and roadside inspection procedures.

“Each of these functions ensure a vehicle is maintained and operated as intended and ensure appropriate visibility for a human driver,” AAMVA pointed out. “But the existence of a CMS may not be visibly apparent to vehicle inspectors and evaluating the functionality of the system may be much more difficult to assess without direct, firsthand knowledge of CMS systems that may be widely disparate in application.”

The Commercial Vehicle Safety Alliance (CVSA) was also concerned about roadside inspections on trucks with cameras instead of mirrors, pointing out that inspectors regularly use a truck’s side mirrors to communicate visually with drivers during their inspections.

“For example, inspectors need to communicate with a driver while checking lighting requirements and make sure that a driver knows when the inspector begins to crawl under a truck as part of a roadside inspection,” CVSA commented. “In addition, the inspector can see whether the driver has remained in the driver’s seat during an inspection, a safety concern for inspectors.”

While NHTSA moves through the rule-change process, two companies that manufacture CMS have been granted temporary exemptions from the current rules by the Federal Motor Carrier Safety Administration (FMCSA).

In 2018, FMCSA [granted Stoneridge Inc. a five-year exemption](#) that allows the company to install its MirrorEye camera system on trucks in lieu of rearview mirrors. Earlier this week the agency [granted a similar exemption](#) to Vision Systems North America Inc. to replace rearview mirrors on trucks with its SmartVision high-definition CMS.

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