

## **DID YOU KNOW???**

### **HEADLIGHTS WITH ADAPTIVE-DRIVING BEAM COMING**

A potential change to the Federal Motor Vehicle Safety Standard (FMVSS) for headlights would allow auto manufacturers to begin incorporating adaptive-driving-beam headlights in the vehicles they sell in the U.S., according to an article in a recent issue of “Status Report” from the Insurance Institute for Highway Safety (IIHS). Headlights with an adaptive-driving beam are similar to high-beam assist. However, instead of switching the high beams on and off, they continuously adjust the high-beam pattern to create a shadow around other vehicles, based on input from a forward-looking camera. The result is high-beam visibility without the glare for oncoming or lead drivers.

Adaptive-driving beams are used in Europe, Japan and other markets but are prohibited in the U.S. because federal rules require distinct high and low-beam patterns. As currently written, FMVSS 108 doesn't allow for a headlight system that dynamically adjusts to simultaneously meet portions of the low-beam and high-beam requirements. To me this is just another example of how the U.S. is behind the rest of the world in many safety aspects, including not requiring all vehicles to have at least daytime running lights.

"The Institute welcomes rulemaking that would allow more advanced headlights," says Matthew Brumbelow, a senior research engineer at IIHS. "Adaptive-driving-beam headlights in general provide better illumination of dark roads than traditional headlights and shield oncoming drivers from bothersome glare." The move comes amid concern about an increase in pedestrian deaths and injuries in crashes. In announcing the proposed rulemaking, NHTSA noted findings of a recent IIHS study indicating a 56 percent rise in pedestrian deaths in the dark from 2009 to 2016, according to the IIHS article.

In 2013, Toyota petitioned the National Highway Traffic Safety Administration (NHTSA) to amend the federal safety standard for lighting to allow manufacturers to equip vehicles with the systems. The agency in October granted Toyota's request and issued a notice of proposed rulemaking to modify FMVSS 108 to set performance standards and compliance tests for adaptive-driving-beam headlights. Automakers that already provide adaptive-driving-beam headlights on vehicles they sell in other countries would have to modify them for the U.S. market to meet NHTSA's proposed test criteria.

The National Transportation Safety Board in September urged NHTSA to revise FMVSS 108 to allow adaptive headlight systems that automatically adjust their intensity as one way to improve pedestrian safety by helping drivers see them sooner and slow down.

This is all good news. According to the IIHS, just over half of 2018 model vehicles that they evaluated are available with headlights that do an adequate job of lighting the road at night and limiting glare for oncoming drivers, but most good-rated headlights are optional or bundled with features that can raise the price of the vehicle. Since most car buyers don't test-drive vehicles at night, IIHS ratings can help consumers find ones with the best headlights.

For more information, go to [iihs.org](http://iihs.org) and read about their headlight findings in the November 29, 2018 issue of “Status Report”.