

Public Perceptions of Vehicle Headlamps

Vehicle headlamps have gone through a great deal of transformation in the marketplace, from the advent of high-intensity discharge (HID) lamps to the passing of headlamp legislation, such as “wipers on, lights on” laws that are now common in many states. Researchers examined five years of newspaper articles to determine what the common perceptions and misperceptions are of vehicle headlamps among the driving public. These articles point out areas needed for future study.



Headlamp Glare

According to the articles reviewed, drivers claim that the blue color of HID headlamps is “harsh” on the eyes, and is “unnecessary.” While most writers recognize that headlamps should be aimed slightly downward, the height difference between trucks/sports-utility vehicles and traditional sedans mean that intense light can still shine directly into rearview and side mirrors, even when headlamps are properly aimed. “There should be a standard height for all headlights on all vehicles,” stated one article published in *The Oregonian*.

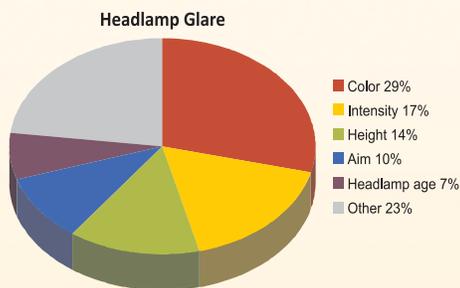


Chart demonstrating primary concerns over headlamp glare

Visibility Concerns

The public was overwhelmingly in favor of new legislation requiring headlamps to be on during low-visibility weather, although there was much confusion over what type of light should be required — low-beam headlights, daytime running lights (DRLs), or fog lights — and whether HID headlamps created more glare during inclement weather. The public also lauded the modulating DRLs technology on motorcycles and suggested that this be required on all motorcycles.

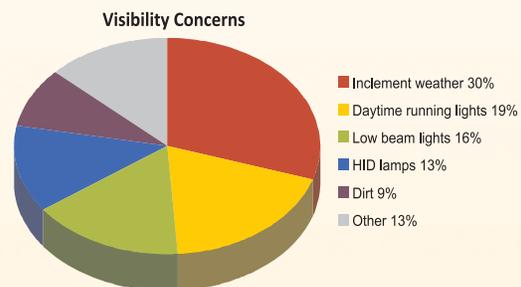


Chart demonstrating the public's primary concerns over visibility while driving.

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Implications

The findings from this study, which has been published by the TLA, are being incorporated into ongoing research conducted through the TLA.

Access the published report at: www.lrc.rpi.edu/programs/transportation/TLA/pdf/TLA-2010-01.pdf