

April 10, 2025

BY EMAIL

Rob Bonta, Attorney General
California Department of Justice
Rob.bonta@doj.ca.gov

Re: Illegal LED Flashing Lights on Vehicles

Dear Rob Bonta,

Federal law prohibits the use of auxiliary flashing lights on vehicles. Despite this prohibition, state agencies such as the California Department of Transportation (“Caltrans”) and local agencies such as the city of Sacramento, have installed auxiliary flashing lights on their vehicles using Light Emitting Diode (“LED”) technology which impairs vision and puts public health, safety, and civil rights at risk.

On December 13, 2024, the National Highway Traffic Safety Administration (“NHTSA”), wrote a Letter of Interpretation stating, “Therefore, because the “emergency warning lights” are not steady burning, they would not comply with FMVSS No. 108 and would impair required lighting.”¹ Previous Letters of Interpretation from NHTSA contain similar quotes:

"NHTSA interprets the impairment provision to prohibit auxiliary lamps that are so bright as to obscure or distract from a vehicle’s required lamps."²

"Moreover, NHTSA continues to believe that flashing auxiliary lamps would impair the effectiveness of required lamps by distracting or confusing other road users."³

A Light Emitting Diode (“LED”) is a device that emits Visible Light radiation from a flat surface instead of from the curved surface of traditional light sources. The US Department of Energy states that LEDs are a “radically new technology” that emit a “directional” light with “unique characteristics.” It is the directional, focused, and digital nature of LEDs and other unique characteristics that make LED devices hazardous and unsafe, and in the case of certain individuals with disabilities, discriminatory.

The US Food and Drug Administration is the responsible agency for regulating LED products as per 21 U.S.C. Part C. However, the FDA has failed to comply with the requirements of 21 U.S.C. Part C and thus there are no performance standards for LED products. The FDA has not tested or evaluated LED products, and the FDA has not published any limits on luminance, radiance, spectral power distribution, spatial

¹ <https://www.nhtsa.gov/interpretations/ncc-241023-001tsei-tima-letter-interpretation-571108-flashing-amber-lights-12-13>

² <https://www.nhtsa.gov/interpretations/571108-ama-schaye-front-color-changing-light>

³ <https://www.nhtsa.gov/interpretations/ncc-231121-001-autoliv-veoneer-spotlight-interpretation-1>

distribution, square wave flicker, or digital flashing characteristics to ensure that LED light is safe for humans and the environment.

Figure 1 shows an example of intense auxiliary LED flashing lights on a CalTrans vehicle. The light that shines directly into a person's eyes is called glare, which is light that impairs vision. LED flashing lights are so intense that they obscure and distract from a vehicle's required lamps and the surroundings, creating unsafe conditions.



Figure 1 – CalTrans LED Flashing Lights⁴

California Vehicle Code (“CVC”) § 25250 states, “Flashing lights are prohibited on vehicles except as otherwise permitted.” Thus, California law is aligned with federal law.

While California has additional statutes regarding flashing lights on vehicles, those additional statutes cannot supersede 49 U.S. Code § 30122 which prohibits the use of auxiliary flashing lights on vehicles. NHTSA’s Letters of Interpretation on this matter confirm NHTSA’s position that auxiliary flashing lights are illegal.

The California Highway Patrol is required to enforce the prohibition of auxiliary LED flashing lights on vehicles but has failed to do so. CVC § 2400 states, “The [CHP] commissioner shall enforce all laws regulating the operation of vehicles and the use of the highways.” Neither the California Legislature nor the CHP have authorized the use of LED flashing light technology. Despite the prohibition of auxiliary flashing lights on vehicles, the use of LED flashing light technology has exploded over the past 5 years due to the lack of enforcement by the CHP and local law enforcement.

⁴ <https://www.youtube.com/watch?v=JCUlSeTmAF4>

LED flashing lights pose a serious health and safety risk. The unregulated intensity of LED flashing lights may lead to permanent eye damage. The digital pulsing and extreme radiance cause adverse neurological and psychological reactions such as seizure, migraine, and panic attack. Injury reports from exposure to LED flashing lights have been submitted to the US Food and Drug Administration via the Soft Lights Foundation:⁵

“Also, the flashing LED lights for ambulances/police cars at intersections make me feel nauseous and like I am going to get a migraine.”

“As I reached the LED flashing lights, the intensity and digital pulsing was unbearable. There were multiple vehicles. The panic started to set in. I covered my eyes with my hands and slowed to less than 20mph, basically trapped by the LED lights.”

“After a TBI years ago, I am now a migraine sufferer. I cannot look at the flashing or strobe lights without instant pain. It has been so hard to safely pass by emergency vehicles as flashing and LEDs both blind and cause instant splitting pain.”

“My brain interprets the rapid flashing light as if there’s something attacking my body, resulting in what we call a ‘histamine dump.’”

Many individuals who report these adverse neurological reactions have a qualified Americans with Disabilities Act (“ADA”) disability such as autism, epilepsy, migraine, Traumatic Brain Injury, or PTSD. The use of LED flashing light technology interferes with path-of-travel and thus creates illegal discriminatory barriers, in violation of the ADA and California Unruh Civil Rights Act.

Therefore, due to the clear findings by NHTSA that auxiliary flashing lights on vehicles are prohibited by federal law, and due to the dangers and discriminatory barriers posed by the use of LED flashing light technology on vehicles, and due to the lack of enforcement by the California Highway Patrol, the Soft Lights Foundation requests that the California Attorney General send notices to state agencies such as Caltrans, and local agencies such as the city of Sacramento, notifying them that auxiliary LED flashing lights must be removed within 6 months and that failure to remove the illegal auxiliary flashing lights will result in legal action by the Attorney General’s office.

Sincerely,

/s/ Mark Baker

President

Soft Lights Foundation

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cc:

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⁵ <https://www.softlights.org/led-incident-reports/>