Soft Lights Foundation

Light should guide us, not blind us.

June 25, 2026

Kellie Murphy, General Counsel
Yolo County Public Agency Risk Management Insurance Authority (YCPARMIA)
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Re: Formal Risk Pool Notice — Gross Negligence and ADA Title II Exposure Arising from Member Agency Use of High-Intensity Flashing LED Lights, Including Federally Prohibited Auxiliary Vehicle Lamp Configurations

Dear Ms. Murphy:

I write in two capacities: as an individual Yolo County resident with a photosensitive disability who is personally harmed by high-intensity flashing LED lights operated by YCPARMIA member agencies in public rights-of-way, and as President of the Soft Lights Foundation, a nonprofit organization advocating for equitable public access for photosensitive individuals. This letter provides formal notice to YCPARMIA of specific, documented, and legally significant risk exposures affecting your member pool arising from (1) the operation of flashing LED Rectangular Rapid Flashing Beacons (RRFBs) at pedestrian crossings and (2) the continued use of flashing auxiliary vehicle lamps on law enforcement, fire, emergency-management, and utility vehicles — which federal law prohibits. I am simultaneously serving compliance demand letters on each of your member agencies: the Cities of Davis, Woodland, West Sacramento, and Winters, and the County of Yolo. This letter is provided to YCPARMIA independently because the risk pool has an independent interest in the aggregate exposure described below.

I. The Federal Law Prohibition: FMVSS 108 and the Steady-Burning Requirement

Federal Motor Vehicle Safety Standard 108, codified at 49 C.F.R. § 571.108, is a preemptive federal standard governing all lamps and associated equipment on motor vehicles operated on public roads. Section S6.2.1 of FMVSS 108 prohibits any auxiliary lamp from impairing the effectiveness of a federally required lamp. This provision has long been interpreted by the National Highway Traffic Safety Administration (NHTSA) as requiring auxiliary vehicle lamps to operate in steady-burning mode — not in a flashing, strobing, or pulsing mode that competes with, overrides, or displaces required signal lamps.

NHTSA's Chief Counsel issued interpretive letters on June 27, 2024, and December 13, 2024, reaffirming this as NHTSA's authoritative and long-held position. On May 18, 2026,

the United States Court of Appeals for the Eighth Circuit held, in a 2-1 decision in the Brake Plus litigation, that NHTSA interpretive letters issued after a multi-year investigation by an official with delegated authority constitute final agency action reviewable under the Administrative Procedure Act, applying the two-prong test of *Bennett v. Spear*, 520 U.S. 154 (1997). The result is unambiguous: any public agency — and any risk pool covering a public agency — that continues to operate auxiliary vehicle lamps in flashing, strobing, or pulsing mode after receiving actual notice of these letters and this ruling does so in knowing violation of federal law. That is the definition of **gross negligence**. This letter, served on YCPARMIA simultaneously with the member agency compliance demands, constitutes actual notice to the pool.

II. Peer-Reviewed Evidence: Flashing LED Devices Cause "Unbearable" Glare to a Statistically Documented Segment of the Public

Robertson and Fitzpatrick (Texas A&M Transportation Institute, 2013), an FHWA-sponsored study prepared for the Transportation Research Board, tested 71 participants and measured the discomfort glare of rapid flashing LED beacons — the same technology used in RRFBs and in auxiliary vehicle warning lamps. Participants rated the devices as "comfortable," "irritating," or "unbearable," where unbearable was defined as glare so intense the participant wants to avoid looking at the source. The findings with direct risk implications for YCPARMIA are:

(a) At the minimum intensity setting, approximately one percent of participants rated the device as unbearable. This is not an outlier finding — it is a baseline from a controlled, peer-reviewed study with a statistically adequate sample. It means that in any crowd of 100 people exposed to a flashing LED device at minimum legal intensity, approximately one person experiences unbearable glare. In a jurisdiction the size of any YCPARMIA member city or county, the affected population is substantial.

(b) At maximum intensity, nearly 50 percent of all participants rated the device as unbearable. The probability of an unbearable rating was approximately 13 times greater at night than during daytime conditions. Many emergency vehicle deployments — the precise context in which auxiliary vehicle lamps are most heavily used — occur at night, dramatically amplifying the injury risk to persons with photosensitive disabilities.

(c) The study authors noted that as discomfort glare increases, observers are more likely to look away from the source. For a driver approaching a pedestrian crossing or an emergency scene, looking away from an unbearably bright flashing light is not a preference — it is a physiological reflex. That reflex creates a crash hazard independent of the disability discrimination issue. A driver who cannot look toward an intersection because the auxiliary lights there cause unbearable glare is a driver who may not see a pedestrian, a cyclist, or an officer directing traffic. YCPARMIA's exposure therefore includes not only ADA discrimination claims but also tort liability for vehicle accidents proximately caused by glare from member agency lighting.

(d) The Robertson findings apply directly to auxiliary vehicle lamps. Police light bars, fire apparatus warning lights, and utility vehicle strobe systems use the same rapid-flash LED technology as RRFBs, and they are typically encountered at closer range, at higher aggregate intensity, and in more acute emergency contexts. The study's probability curves for unbearable glare therefore represent a conservative lower bound for the hazard posed by auxiliary vehicle lamps — the actual exposure is likely greater.

III. Categories of Risk Pool Exposure

Based on the foregoing, YCPARMIA faces the following distinct and cumulative categories of exposure arising from member agency lighting practices:

A. Gross Negligence — Federal Regulatory Violation With Actual Notice. Member agencies that continue to operate auxiliary vehicle lamps in flashing mode after receiving actual notice of NHTSA's June 27, 2024, and December 13, 2024 letters — which the Eighth Circuit confirmed on May 18, 2026, constitute final agency action — are knowingly operating in violation of federal law. A practice known to violate a binding federal standard does not qualify as a reasonable exercise of government discretion; it is gross negligence. Governmental immunity defenses generally do not extend to gross negligence or willful disregard of law. YCPARMIA should assess whether its coverage terms or applicable statutes limit indemnification for losses arising from gross negligence, and should advise member agencies accordingly.

B. ADA Title II Civil Rights Liability — Discrimination and Failure to Accommodate. Member agencies that have not conducted a self-evaluation under 28 C.F.R. § 35.105 addressing light-based signaling systems, or that have refused to engage in a good-faith interactive process on individualized accommodation requests from persons with photosensitive disabilities, face ADA Title II claims. The peer-reviewed evidence in the Robertson study establishes that flashing LED devices cause unbearable glare to a statistically documented segment of the population. That evidence, now in your pool's possession, precludes any claim that the member agencies lacked notice that their practices exclude persons with disabilities from equal access to public sidewalks, crosswalks, and rights-of-way.

C. Tort Liability — Crash Causation by Glare-Induced Vision Impairment. The Robertson study documents that unbearable glare causes observers to look away from the light source. Applied to roadway contexts, this means a driver approaching an intersection or emergency scene illuminated by high-intensity flashing LED auxiliary lamps may be physiologically compelled to avert their gaze — precisely when sustained attention is most critical. Any crash occurring in proximity to member agency flashing lights, where a contributing factor may be glare-induced vision impairment, represents a potential tort claim against the agency and a pool indemnification obligation. Receipt of this letter, with the Robertson study attached, establishes that YCPARMIA had actual notice that the technology creates this hazard.

D. Effective Communication and Path-of-Travel Violations. The ADA requires public entities to ensure that communications with individuals with disabilities are as effective as communications with others, 28 C.F.R. § 35.160, and that the pedestrian path of travel is accessible, 28 C.F.R. §§ 35.150, 35.151. Flashing LED devices that create unbearable glare for persons with photosensitive disabilities impair both the effective communication of the crossing signal and the physical usability of the crosswalk itself. Each RRFB installation and each vehicle deployment in a public right-of-way where pedestrians are present is a potential source of these claims.

IV. A Low-Cost Remedy Is Available and Has Been Proposed

My compliance demand letters to each member agency propose a straightforward two-step

solution for auxiliary vehicle lamps: (1) reprogram light modules to steady-burning mode only, eliminating all flashing, strobing, and pulsing — which simultaneously brings the fleet into compliance with FMVSS 108 § S6.2.1 as confirmed by NHTSA's final agency action; and (2) calibrate auxiliary lamp intensity to no greater than standard incandescent brake light levels, ensuring auxiliary lamps cannot impair the effectiveness of federally required lamps under 49 C.F.R. § 571.108(S6.2.1) and substantially reducing the photobiological hazard to persons with photosensitive disabilities. Both steps are achievable through software or firmware updates to existing light-bar controllers at nominal cost, without hardware replacement.

For RRFBs, the demand letters request either discontinuation or reduction to minimum SAE J595 Class 1 intensity — the level at which the Robertson study found unbearable ratings drop to approximately one percent. These are not extraordinary burdens. YCPARMIA is well-positioned to encourage or require member agencies to implement this remedy as a condition of pool coverage for lighting-related claims, and to document that encouragement as evidence of pool-level risk management due diligence.

V. Requested Actions by YCPARMIA

I request that YCPARMIA take the following steps within thirty (30) days of receipt of this letter:

1. Acknowledge receipt of this notice in writing and confirm that it has been routed to YCPARMIA's legal counsel and risk management committee;

2. Advise each member agency of the risk exposures described in this letter and direct them to respond to the compliance demands served simultaneously, with particular urgency regarding the FMVSS 108 steady-burning requirement given that continued noncompliance after actual notice constitutes gross negligence;

3. Review your pool's coverage terms to assess whether indemnification applies to claims arising from gross negligence or knowing violation of a federal regulatory standard, and communicate that assessment to member agencies; and

4. Consider incorporating the two-step auxiliary lamp programming solution described above as a pool-level risk management requirement or best-practice recommendation, and document that step as evidence of due diligence in the event of future litigation.

I am committed to a cooperative resolution. I am available to speak with YCPARMIA's legal counsel or risk managers at any time and welcome the opportunity to discuss the evidence and the proposed remedies in more detail.

Enclosure: Compliance Demand Letter to Cities of Davis, Woodland, West Sacramento, Winters, and County of Yolo (dated June 25, 2026)

Respectfully submitted,

/s/ Mark Baker
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