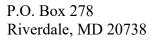
HB305_MDSierraClub_fav 14Feb2024 final_.pdf Uploaded by: Al Carr





Committee:Environment and TransportationTestimony on:HB305 "Outdoor Lighting - Standards and Use of State Funds"Position:FavorableHearing Date:February 14, 2024

The Maryland Chapter of the Sierra Club urges a favorable report on HB305. The bill expands the scope of a 2011 law requiring state-funded outdoor lighting fixtures that maximize energy conservation and minimize light pollution at state buildings and state facilities. It expands the existing provisions to state-funded outdoor lighting at parks, trails, and highways.

The bill also limits the color temperature of state-funded outdoor lighting to 3,000 Kelvin, consistent with 2016 American Medical Association (AMA) guidance.¹ 3,000K is considered "warm white" and is less disruptive to the health and behaviors of nocturnal wildlife, including fireflies, and night pollinators. A study by Hood College in Frederick County found that fireflies drastically reduced their light-blinking behavior when exposed to just one tenth the light of a streetlamp using cooler colors, threatening their ability to mate, control mosquitoes, and pollinate flowers.² The Bethany Beach Firefly is now rated "highly state rare" by the Department of Natural Resources and is found only in Wicomico County, partly due to light pollution.³ The bill also requires the Department of the Environment (MDE), in consultation with other agencies, to develop outdoor lighting standards that consider energy consumption, the environment, and public health and safety.

The benefit of this legislation is that it expands efforts to address the harmful effects of artificial lighting at night. As discussed in a January 2023 article in the journal *Science*,⁴ excessive artificial lighting at night can have a detrimental impact on the welfare of animals and humans alike.

For over two decades, our state has recognized the need to address light pollution. In 2001, former Treasurer Nancy Kopp championed a joint resolution to establish the Task Force to Study Lighting Efficiency and Light Pollution in Maryland which issued an important report in 2002.⁵ Chapter 353 of 2011 established the current policy of requiring efficient/shielded fixtures for new/replacement outdoor lighting at state buildings and state facilities. In 2014 the Maryland Department of General Services and the Green Purchasing Committee (established by Chapter 594 of 2010) published specifications for the purchase of environmentally friendly

¹ <u>2016</u> "American Medical Association adopts guidance to reduce harm from high intensity street lights," https://www.ama-assn.org/press-center/press-releases/ama-adopts-guidance-reduce-harm-high-intensity-street-lights

² Costin, K.J., and Boulton, A.M., "A Field Experiment on the Effect of Introduced Light Pollution on Fireflies (Coleoptera: Lampyridae) in the Piedmont Region of Maryland," *The Coleopterists Bulletin*, vol. 70, no.1, (2016), http://www.bioone.org/doi/10.1649/072.070.0110.

³ Ocean City Today, 7-14-2023, Where are all of Maryland's fireflies? | Lifestyle | oceancitytoday.com

⁴ Science, January 19, 2023, vol. 379, no. 6629, "Light Pollution is Skyrocketing," https://www.science.org/doi/10.1126/science.adf4952

⁵ March 2002 Report of the Task Force to Study Lighting Efficiency & Light Pollution in Maryland, https://msa.maryland.gov/megafile/msa/speccol/sc5300/sc5339/000113/000000/000008/unrestricted/20030006e.pdf

Founded in 1892, the Sierra Club is America's oldest and largest grassroots environmental organization. The Maryland Chapter has over 70,000 members and supporters, and the Sierra Club nationwide has over 800,000 members and nearly four million supporters.

lighting.⁶,⁷

By regulating outdoor lighting to modern scientific environmental, safety and efficiency standards, HB305 helps our state government to continue to lead by example in efforts to address harms caused by light pollution.

For these reasons, we urge a favorable report on HB305.

The committee may wish to consider an amendment that would (1) direct the Maryland Green Building Council or the Maryland Green Purchasing Committee to update its current standards after reviewing the latest information on light pollution and on color temperature (such as the AMA's 2016 guidance) and (2) delete the language requiring MDE to develop related standards. This approach is likely to be less costly than developing this expertise at MDE and could implement proven solutions efficiently and prudently.

Al Carr Member, Executive Committee of the Montgomery County Group alfred.carr@gmail.com Josh Tulkin Chapter Director Josh.Tulkin@MDSierra.org

 ⁶ Maryland Green Purchasing Committee Approved Specification – Lighting Products <u>https://dgs.maryland.gov/Documents/GreenPurchasing/Specs/LightingProductsSpecification.pdf</u>
 ⁷ Maryland Department of General Services lighting resource page on Green Purchasing <u>https://dgs.maryland.gov/Pages/GreenPurchasing/Resources/Lighting.aspx</u>

HB305 - IndivisibleHoCoMd_FAV_E.Fixsen.pdf Uploaded by: Elizabeth Fixsen



HB305

Outdoor Lighting - Standards and Use of State Funds Testimony before Environment and Transportation Committee Hearing Feb. 14, 2024, 1:00 p.m. Position: FAVORABLE

Dear Chair Del. Korman, Vice-Chair Del. Boyce, sponsors Dels. Wilkins and Charkoudian and members of the committee, my name is Elizabeth Fixsen, and I represent the 700+ members of Indivisible Howard County. Indivisible Howard County is an active member of the Maryland Legislative Coalition (with 30,000+ members). We are providing written testimony today in *support of HB305*, requiring the Department of the Environment to develop standards for outdoor lighting that take into account not only public health and safety but also energy consumption and impacts on the environment.

According to Energy.gov, while nighttime outdoor lighting provides for safe navigation, a sense of reassurance, detection of hazards, and enjoyment of spaces, the proliferation of unnecessary, excess, misdirected, and mistimed light at night wastes significant energy while also creating ecological disruptions including increased sky brightness and impacts on specific at-risk animal species. As cited by DarkSky International, in an average year in the U.S. alone, outdoor lighting uses about 120 terawatt-hours of energy, mostly to illuminate streets and parking lots. According to the U.S. Department o Energy, outdoor lighting consumes a significant amount of energy—about 1.3 quadrillion BTUs annually—costing about \$10 billion per year. According to Utilities One, by switching to LED (Light Emitting Diode) lights, cities can not only save energy but also reduce their carbon footprint. Energy-efficient street lighting can provide substantial cost savings for municipalities and local governments.

Given these facts, it is clear that standards are needed on public outdoor lighting to protect atrisk animal species, minimize sky brightness, and conserve energy. This last factor may be the most important, as our planet is facing catastrophic effects from climate change.

Thank you for your consideration of this important legislation.

We respectfully urge a favorable report.

Elizabeth Fixsen Savage, MD

Sources Cited: Energy.gov. Outdoor lighting: state and local solution center. <u>https://www.energy.gov/scep/slsc/outdoor-lighting</u> Energy.gov. Light at night. <u>https://www.energy.gov/eere/ssl/light-night</u> Dark Sky International. Light pollution wastes energy and money and damages the climate <u>https://darksky.org/resources/what-is-light-pollution/effects/energy-climate</u>

HB305 Outdoor Lighting Written Testimony.pdf Uploaded by: Jheanelle Wilkins

JHEANELLE WILKINS Legislative District 20 Montgomery County

Vice Chair, Ways and Means Committee

Rules and Executive Nominations Committee

Chair

Legislative Black Caucus of Maryland



The Maryland House of Delegates 6 Bladen Street, Room 131 Annapolis, Maryland 21401 410-841-3493 · 301-858-3493 800-492-7122 Ext. 3493 Fax 410-841-3445 · 301-858-3445 Jheanelle, Wilkins@house.state.md.us

THE MARYLAND HOUSE OF DELEGATES Annapolis, Maryland 21401

February 14, 2024

House Bill 305 - Outdoor Lighting - Standards and Use of State Funds

Dear Colleagues,

I am pleased to present **House Bill 305 - Outdoor Lighting - Standards and Use of State Funds**, which would require the Maryland Green Building Council to develop standards and update their specifications for outdoor lighting with consideration of the latest information on light pollution including color temperature recommendations of the American Medical Association.

With this legislation, state funds would not be allowed to be used to install or replace permanent outdoor luminaires for the lighting of any state building, facility, park, trail, or highway unless the luminaire is designed to maximize energy conservation, and minimize light pollution, glare, and light trespass. The luminaire installed must have a correlated light temperature that is less than or equal to 3,000 kelvin, which is the global recommendation from Dark Sky International. House Bill 627 addresses light pollution in the state of Maryland and its contribution to higher energy consumption, disruption of sleep patterns in humans, wildlife disruption, and limitations on nighttime military training.

Outdoor lighting can have detrimental effects on wildlife, human sleeping patterns, and energy consumption in Maryland. House Bill 305 is consistent with the goals of Maryalnd's Climate Pollution Reduction Plan by reducing the electricity consumption of lighting fixtures across Maryland.

I urge the committee to give a favorable report for House Bill 305 - Outdoor Lighting - Standards and Use of State Funds.

Sincerely,

Gheanefle Wilkins

Delegate Jheanelle Wilkins

HB305_Amendment_Wilkins Uploaded by: Jheanelle Wilkins



HB0305/273422/1

BY: Delegate Wilkins

(To be offered in the Environment and Transportation Committee)

AMENDMENTS TO HOUSE BILL 305 (First Reading File Bill)

AMENDMENT NO. 1

On page 1, in line 2, strike "**Standards**" and substitute "<u>Guidance</u>"; and strike beginning with "Department" in line 3 down through "standards" in line 7 and substitute "<u>Maryland Green Building Council, on or before a certain date, to update or develop certain guidance relating to outdoor lighting fixtures in consideration of certain <u>recommendations</u>".</u>

AMENDMENT NO. 2

On page 2, after line 2, insert:

"ON OR BEFORE OCTOBER 1, 2025, THE MARYLAND GREEN BUILDING COUNCIL SHALL UPDATE OR DEVELOP GUIDANCE FOR THE PURCHASE OF OUTDOOR LIGHTING FIXTURES IN CONSIDERATION OF RECOMMENDATIONS REGARDING LIGHT POLLUTION AND COLOR TEMPERATURE PUBLISHED BY THE AMERICAN MEDICAL ASSOCIATION.";

and strike in their entirety lines 3 through 19, inclusive.

AMENDMENTS PREPARED BY THE DEPT. OF LEGISLATIVE SERVICES

> 12 FEB 24 14:44:55

Testimony HB0305.pdf Uploaded by: Lisa Caprioglio Position: FAV

My name is Lisa Caprioglio. I am a resident of District 20. I am submitting this testimony in support of House Bill 305, Department of the Environment--Development of Outdoor Lighting Standards.

Thank you, Delegate Wilkins, for listening to my concerns and sponsoring this bill. Excessively bright white lights on Long Branch Trail have negatively impacted my life every night since they were installed in January 2022.

I am fortunate to live less than 100 feet from Long Branch Trail in Takoma Park, with beautiful park views. Through my open windows, I hear a variety of birds, including, some nights, an owl.

In January 2022, Montgomery Parks replaced nine light fixtures along the trail near my home. The new LED lights were ten times brighter than recommended by the Illuminating Engineering Society of North America and the color temperature was significantly whiter than the recommended 2200 Kelvin.

I could not sleep. The lights disrupt my body's circadian rhythms. There have been news articles about the effect of the blue light of phones on sleep. The park lights are an order of magnitude brighter than phones.

I contacted Montgomery Parks requesting a change and they emailed this response: "The recent upgrades of the lights are part of our routine maintenance efforts, and the lighting is a type used throughout our park system. The lighting is directed towards the trail in accordance with Parks' installation practices, and our staff has determined the lighting is appropriate for the need it serves. With these considerations in mind, the lights will not be altered."

This is not limited to Montgomery Parks. New lights on the Carroll Avenue Bridge over Sligo Creek are bright white. Residents were simply told not to look at the lights. New lights on Park Valley Bridge over Sligo Creek are bright white.

This underscores the need for HB 305. Existing rules on outdoor lighting do not take current scientific standards into account. Staff with no special training make decisions regarding public health. Science must take precedence over intuition.

2024-HB0305-T4BL-FAV.pdf Uploaded by: Nicholas Marks Position: FAV



HB 305: Outdoor Lighting - Standards and Use of State Funds House Environment and Transportation Committee Terps For Bike Lanes – FAVORABLE

February 12, 2024

Chair Korman and Committee Members,

I am writing to express Terps for Bike Lanes' enthusiastic support for HB0305, which aims to develop outdoor lighting standards that consider energy consumption, the environment, and public health and safety. As the President of Terps for Bike Lanes, a club dedicated to enhancing bicycle infrastructure in and around our campus to create a safe and inclusive environment, I believe that this legislation aligns perfectly with our mission and values.

Our advocacy efforts are grounded in research from esteemed universities, including a study conducted by the University of California, Irvine, titled "The Biological Impacts of Artificial Light at Night: The Research Challenges – An Expert Review." This study highlights the significant negative effects of light pollution on ecosystems, wildlife behavior, and human health. It underscores the urgency of implementing sustainable outdoor lighting practices to mitigate these impacts and safeguard our environment. By requiring the Department of the Environment to develop comprehensive outdoor lighting standards in consultation with relevant stakeholders, including the Maryland Department of Health, the Maryland Energy Administration, and the State Highway Administration, HB0305 represents a critical step towards addressing the detrimental effects of light pollution while promoting energy efficiency and public safety.

Moreover, as an organization dedicated to promoting sustainable transportation options, we recognize the importance of reducing light pollution in creating safe and accessible environments for cyclists and pedestrians. Well-designed outdoor lighting not only enhances visibility for cyclists but also contributes to a more welcoming and secure atmosphere, encouraging more people to choose active modes of transportation.

In addition to its environmental and safety benefits, HB0305 has the potential to address economic disparities and promote social equity. By prohibiting the use of State funds for certain outdoor luminaires in specific areas, the legislation can help prioritize investments in communities that are disproportionately affected by light pollution and lack access to safe outdoor spaces. In conclusion,

Terps for Bike Lanes wholeheartedly supports HB0305 and urges you to consider the positive impact this legislation can have on our environment, public health, and transportation infrastructure.

Sincerely,

Nicholas Marks

President, Terps for Bike Lanes

terps4bikelanes@gmail.com

Maryland LCV Support Testimony HB305.pdf Uploaded by: Rebecca Rehr



Kim Coble Executive Director

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February 14, 2024

SUPPORT: HB305 - Outdoor Lighting - Standards and Use of State Funds

Chair Korman and Members of the Committee:

Maryland LCV supports HB305 - Outdoor Lighting - Standards and Use of State **Funds**, and we thank Delegate Wilkens for her leadership on this issue.

This bill is consistent with the goals of Maryland's Climate Pollution Reduction Plan, which presents a plan to reduce greenhouse gas emissions 60% by 2031, and to achieve net zero emissions by 2045. In this plan, MDE calls for an all of society approach, where each sector of our economy will be called on to use best practices to reduce emissions. HB305 will reduce the electricity consumption of tens of thousands of lighting fixtures across the state, helping to contribute to these critical goals.

Further, according to a 2023 <u>report</u> from the National Wildlife Federation, outdoor lighting can have numerous detrimental effects on wildlife. Habitats are fragmented by overlit areas that create boundaries within limited territories of keystone species such as cougars. Songbirds are negatively impacted by artificial lighting, which interferes with the functioning of their internal compass during migration. Sea turtle hatchlings can turn towards the light upon emerging, instead of the critical pathway to reach the sea. These are just a few examples of how the improper deployment of outdoor lighting can have serious consequences for mammals, insects, birds, and even sealife.

HB305 will strengthen existing state law, by expanding the scope from the current focus on state buildings, to include our state highways, parks and trails. It requires that outdoor lighting procurement decisions include consideration of energy conservation, environment, public health and safety. The bill calls on the Maryland Department of the Environment to develop standards, based upon these requirements. It also includes a requirement that limits the light temperature of each fixture to 3,000 degrees Kelvin, in keeping with global recommendations from Dark Sky International.

Maryland LCV urges a favorable report on this important bill, which will have positive impacts on wildlife habitat, reducing light pollution and helping to achieve our climate goals.

HB305_FAV_Xerces_Society.pdf Uploaded by: Richard Joyce



February 14, 2024 The Honorable Marc Korman Chair, House Environment and Transportation Committee Room 250, House Office Building Annapolis, Maryland 21401

Re: Letter of Support—House Bill 305—Outdoor Lighting – Standards and Use of State Funds

Dear Chair Korman and Committee Members:

My name is Richard Joyce, and I write on behalf of the Xerces Society for Invertebrate Conservation to express **support for House Bill 0305**, **Outdoor Lighting**—**Standards and Use of State Funds**.

The Xerces Society is a science-based non-profit that protects wildlife through the conservation of invertebrates and their habitats. Insects are crucial parts of healthy ecosystems, with important roles in pollination, nutrient cycling, and the food chain. Light pollution has historically been overlooked as a driver of declines in insect populations, but a growing body of research tells us that the rapid increase of artificial light at night is a cause for concern and action.

Maryland has over 30 species of fireflies, including five that are categorized as critically endangered, endangered, or vulnerable on the International Union for Conservation of Nature's (IUCN) Red List of Threatened Species. As nocturnal animals whose reproduction depends on dark nights, fireflies are emblematic of the many insects we stand to lose if we fail to address light pollution.

The advent of LED lighting has been a boon for energy efficiency, but it has also allowed for the proliferation of outdoor lighting that does not comply with the International Dark Sky Association's five criteria for responsible outdoor lighting: useful, targeted, low-level, controlled, and warm-colored.

Thankfully, light pollution is a problem that can be rapidly reversed. By requiring the development of outdoor lighting standards for Maryland and ensuring that state-funded outdoor lighting complies with these standards, we can provide safe and responsible outdoor lighting while minimizing harms to insects and other wildlife.

Respectfully submitted,

Richard Joyce Endangered Species Conservation Biologist Xerces Society for Invertebrate Conservation

HB305 - National Aquarium - Support.pdf Uploaded by: Ryan Fredriksson



Date: February 14, 2024

Bill: HB 305 - Outdoor Lighting - Standards and use of state funds

Position: Support

Dear Chair Korman and Members of the Committee:

The National Aquarium respectfully requests a favorable report for **House Bill 305 Outdoor Lighting – Standards and use of state funds,** which would expand existing law regarding statefunded outdoor lighting fixtures to also require that state-funded outdoor lighting for parks, trails and highways maximize energy conservation and minimize light pollution.

Combatting climate change and saving wildlife and habitats are two of the National Aquarium's three strategic conservation goals. We applaud this legislation that would both increase energy efficiency of outdoor lighting while also improve upon the state's ability to address harmful impacts of artificial light at night.

The impacts of light pollution are significant for thousands of species worldwide. Light pollution can be particularly harmful to nocturnal wildlife that rely on natural lighting patterns for navigation, nesting, mating and other behaviors key to survival. Outdoor lighting has been shown to lead to habitat loss and fragmentation in the ecosystems that wildlife depend upon.¹

The committee may want to consider additional language to ensure wildlife impacts are incorporated into the proposed lighting standards. As drafted, it is unclear whether wildlife impacts must be considered when developing outdoor lighting standards. We encourage "wildlife" be added to the list of considerations under \$12-1301(A).

We appreciate your work on this important issue. We urge the Committee to issue a favorable report.

<u>Contact</u>: **Ryan Fredriksson** Vice President, Government Affairs 410-385-8276 <u>rfredriksson@aqua.org</u>

Maggie Ostdahl Sr. Conservation Policy Manager 410-385-8275 mostdahl@aqua.org

¹ Sordello, R. et. al. 2022. A plea for a worldwide development of dark infrastructure for biodiversity – Practical examples and ways to go forward. *Landscape and Urban Planning* (219). <u>https://doi.org/10.1016/j.landurbplan.2021.104332</u>

HB_305_UNF_LateTestimony_MDE_LesKnapp Uploaded by: Les Knapp

Position: UNF



The Maryland Department of the Environment Secretary Serena McIlwain

House Bill 305 Outdoor Lighting - Standards and Use of State Funds

Position: Oppose **Committee**: Environment and Transportation **Date:** February 14, 2024 **From:** Gabrielle Leach

The Maryland Department of the Environment (MDE) OPPOSES HB 305.

Bill Summary

House Bill 305 adds § 12-301 to Title 12, Subtitle 13 of the Public Safety Article requiring MDE to develop outdoor lighting standards ("Standards") on or before October 1, 2025. In establishing the Standards, MDE must consider certain factors, including energy consumption, the environment, public health, and public safety. MDE would be required to consult with the Maryland Department of Health, the Maryland Energy Administration (MEA), and the State Highway Administration. MDE may also consult with lighting industry experts, community and advocacy organizations, and any other interested stakeholders.

Position Rationale

While MDE agrees that energy conservation can have public health and environmental benefits, MDE does not currently have staff expertise in this area. In order to set these standards, MDE would need to obtain contractual assistance to study this further and develop outdoor lighting standards. There are a lot of unknown variables that would need to be considered, including but not limited to, statewide distribution of leased vs. owned systems, existing maintenance needs across local jurisdictions, implementable enforcement strategies for outdoor lighting standards, identifying and managing the existing funding sources for outdoor lighting, and the potential for operational cost savings that would impact either the State or a local government.

For the reasons detailed above, MDE urges a UNFAVORABLE report for HB 305.

HB0305-ET_MACo_LOI.pdf Uploaded by: Dominic Butchko Position: INFO



House Bill 305

Outdoor Lighting - Standards and Use of State Funds

MACo Position: LETTER OF INFORMATION

To: Environment & Transportation Committee

Date: February 14, 2024

From: Dominic J. Butchko

The Maryland Association of Counties (MACo) offers the following **Letter of Information** regarding HB 305. As drafted, this bill would place certain limitations on the types of lights that can be used at state facilities and directs the Maryland Department of the Environment (MDE) to establish certain lighting standards.

While initially limited to state facilities and buildings, HB 305 may affect county projects as a result of the lighting standards developed by MDE. Counties recognize the bill's intent of ensuring certain lighting does not interfere with animal populations. In this era of climate change, it is important to better harmonize infrastructure with broader environmental forces, but it is also worth noting that the proposed 3000-Kelvin standard would have significant public safety implications.

Simply put, the higher the Kelvin-rating, the clearer road obstructions, hazards, other vehicles, and pedestrians appear. At athletic fields and in other circumstances, 4000-7500 Kelvin or more may be necessary for visibility and safety. By mandating a standard lower than what is typically used in certain cases, the state could potentially be putting our mutual constituents' safety at risk.

Counties ask that if the Committee does move forward with HB 305, that they give due consideration to the broader public safety and infrastructure considerations - especially those regarding transportation and recreation.

HB0305 - SHA - Outdoor Lighting_LOC_FINAL.pdf Uploaded by: Patricia Westervelt

Position: INFO



Wes Moore Governor

Aruna Miller Lieutenant Governor

Paul J. Wiedefeld Secretary

William Pines, P.E. Administrator

February 14, 2024

The Honorable Marc Korman Chair, House Environment and Transportation Committee 251 House Office Building Annapolis MD 21401

RE: Letter of Concern – HB 305 – Outdoor Lighting – Standards and Use of State Funds

Dear Chair Korman and Committee Members:

The Maryland Department of Transportation (MDOT) offers the following letter of concern for the Committee's consideration on House Bill 305.

House Bill 305 requires the Maryland Department of the Environment to collaborate with several State agencies, including the State Highway Administration (SHA), to develop outdoor lighting standards that consider the impact of energy consumption, the environment, public health, and public safety. Additionally, House Bill 305 amends and applies an existing prohibition in State law against using State funds to install or replace a permanent outdoor luminaire to installations in parks and on trails and highways without considering several factors such as energy conservation, light temperature, illumination production, and lumen output.

Appropriate lighting is necessary to ensure a safe road network for all users. According to the Federal Highway Administration (FHWA), the nighttime fatality rate on the Nation's roadways is three times higher than the daytime rate, and 76% of pedestrian fatalities occur at night. FHWA specifically highlights the benefits of effective roadway lighting, stating that "lighting can reduce crashes up to 42% for nighttime injury pedestrian crashes at intersections, 33-38% for nighttime crashes at rural and urban intersections, and 28% for nighttime injury crashes on rural and urban highways." SHA is committed to maintaining an appropriate level of roadway lighting in areas with high volumes of pedestrian and bicycle traffic in support of the State's mission to achieve Vision Zero. Similarly, other roadway features, such as bridges and underpasses, require proper lighting infrastructure to provide a safe level of visibility and for security of the infrastructure. To ensure this, SHA follows its Lighting Design Guide when planning the location and installation of highway lighting infrastructure. The Lighting Design Guide considers safety, light pollution, energy conservation, and maintenance requirements in its recommendations.

SHA is concerned by the provisions of this bill that limit its ability to select and implement luminaires that most appropriately address road safety needs on the State system. For example, the requirement that the light temperature of a luminaire not exceed 3,000 Kelvin will impact SHA's ability to deliver safe and effective lighting along its road system. According to research from the National Academies of Sciences, Engineering, and Medicine, 4000K LED lighting provides advantages over other lighting levels for driver detection of objects in the roadway, including pedestrians and hazards. This effect is maximized in conditions where lighting solutions result in a high surround ratio.

SHA understands and appreciates the importance of appropriately designed lighting for the environment, human health, and light pollution. For this reason, it is critical for decisions around lighting applications to be based on appropriate illumination engineering calculations and the context in which the application is

The Honorable Marc Korman Page Two

used. The FHWA maintains that the balance between the needs of the road user and mitigation of potential impacts of a lighting system must be approached holistically.

In addition, current law creates an exception to the general rule prohibiting procurement of certain luminaires if the luminaire is required for storm operations. House Bill 305 modifies this exception and restricts its application to luminaires required for temporary storm operations. Given that all storm operations are temporary conditions, MDOT requests clarification on how the exception would be applied if the bill were to pass as drafted.

Given the clear impact of lighting design and implementation on public safety, it is imperative that SHA maintain the ability to ensure the engineering of lighting solutions is based on accepted best practices to maximize public safety while working to address the overall intent of this legislation.

MDOT respectfully requests the Committee consider this information when deliberating House Bill 305.

Sincerely,

Matthew Mickler Deputy Director (Acting) Office of Policy and Research Maryland State Highway Administration Pilar Helm Director Office of Government Affairs Maryland Department of Transportation