



THE SENATE OF MARYLAND
ANNAPOLIS, MARYLAND 21401

The Honorable Senator Feldman, Chair
The Honorable Senator Kagan, Vice Chair
Education, Energy, and Environment Committee
Maryland Senate
Annapolis, MD

February 27th, 2024

Testimony in Support of SB902: Wildlife – Protections and Highway Crossings

Chair Feldman, Vice Chair Kagan, and esteemed members of this committee,

SB902 addresses the high rate of animal-vehicle collisions (AVC) by increasing safety for people and wildlife alike. Specifically, this bill would:

1. Compel the State Department of Transportation and the Department of Natural Resources to work together and identify optimal locations for the integration of wildlife passage components into new and maintenance transportation projects.
2. Require the State Highway Administration to coordinate with the Department of Natural Resources and apply for relevant federal funding opportunities for highway crossings.
3. Create a Wildlife Highway Crossing Fund to support wildlife crossing projects and the research necessary to identify the most strategic locations for crossings.

Wildlife crossings encompass a variety of structures that are designed or retrofitted to provide safe passage for wildlife above or below a highway. Although wildlife crossing structures do not have standardized designs, they can be categorized as two major types: overpasses and underpasses. Overpasses are traffic-spanning bridges that link habitats by allowing for the movement of a wide range of wildlife, including large mammals, reptiles, mice, and insects. A wildlife underpass is a passage below a roadway in the form of either a bridge or a culvert. Existing bridges and culverts can be replaced or retrofitted to enhance passage by terrestrial or semiaquatic species.

Animal-vehicle collisions, or AVC, are enormously expensive. In Maryland, there are approximately 33,000 AVC each year. The average insurance cost for each claim is \$6,343¹, for a collective annual cost of about \$198,000,000. There are also costs directly to the state, such as accident attendance by emergency personnel, investigation, and carcass removal and disposal — about \$260² per AVC, or \$8,580,000 annually. There are also the long-lasting emotional and

¹ Hubbard, Lucy. “Fall Deer Season Increases Drivers’ Risk of Animal Collisions.” *CNS Maryland*, CNS Maryland, 20 Oct. 2023, cnsmaryland.org/2023/10/18/fall-deer-season-increases-drivers-risk-of-animal-collisions/.

² Huijser, M.P.; Duffield, J. W.; Clevenger, A.P.; Ament, R.J.; McGowen, P.T. 2009. “Cost-benefit analyses of mitigation measures aimed at reducing collisions with large ungulates in North America: a decision support tool.” *Ecology and Society*. 14(2): 15. www.ecologyandsociety.org/vol14/iss2/art15/ ES-2009-3000.pdf. Price adjusted for inflation.

physical costs of being involved in an AVC, or the 200³ preventable deaths AVC causes annually.

AVC are also extremely detrimental to wildlife species. Highways fragment the total amount of contiguous habitat available and negatively impact biodiversity. The ability for animals to migrate is fundamental to ecosystem resilience, and helps to ensure not only one species' survival but the broader balance of a healthy habitat.

Wildlife crossings are exceptionally effective at preventing these issues. When properly utilized, wildlife crossings reduce wildlife-vehicle collisions by up to 90 percent⁴. Crossing structures in Canada's Banff National Park reduced wildlife-vehicle collisions involving all large mammals by more than 80 percent. For those involving ungulates, there was a 94 percent reduction when comparing a two-year pre-construction period to a two-year post-construction period⁵. This AVC mitigation resulted in saving about \$22,940 per mile per year⁶.

In 2020, Virginia passed legislation to create a Wildlife Corridor Action Plan. In 2021, they passed additional legislation creating a comprehensive program to identify wildlife corridors, protect motorists from collisions with animals, and address barriers to wildlife movement. The bill passed with strong bipartisan support.

We know this can work in Maryland. A wildlife passage project for Maryland's Inter-county Connector (connecting Montgomery and Prince George's Counties) includes "bottomless arches" that span streams and natural passages⁷. Post-construction monitoring of the bottomless arches indicates that efforts to support fish populations and passage have been successful. Heavy use by deer, raccoons, opossums, squirrels, turtles, and foxes has been documented.

Maryland has the third highest deer population in the country. A study by the Insurance Institute for Highway Safety found that Frederick and Howard Counties ranked sixth and tenth nationwide in animal-related collisions between 2006 and 2018. The cost of AVC is growing. The average cost of a claim for an animal-vehicle collision was \$3,972 in 2018, increasing to \$6,343 in 2022 — about a 60 percent increase in just four years⁸.

Wildlife highway crossings are a proven solution that not only reduces wildlife mortality, but also improves driver safety, avoids costly accidents, and keeps traffic flowing. Wildlife crossings can reduce habitat fragmentation and improve landscape connectivity to support

³ Ament, R.; Jacobson, S; Callahan, R.; Brocki, M., eds. 2021. "Highway crossing structures for wildlife: opportunities for improving driver and animal safety." Gen. Tech. Rep. PSW-GTR-271. Albany, CA: U.S. Department of Agriculture, Forest Service, Pacific Southwest Research Station. 51 p.

https://www.fs.usda.gov/psw/publications/documents/psw_gtr271/psw_gtr271_007.pdf

⁴ "Joint Statement Regarding Climate-Informed Wildlife Crossings." *ARC Partnership*, 2023, <https://arc-solutions.org/wp-content/uploads/2023/02/Climate-and-Crossings-Consensus-Statement-232023-1.pdf>.

⁵ Ament et al. 2021

⁶ Ament et al. 2021

⁷ Karen Russell, "Wildlife Corridors in Frederick County: Conserving Nature in Maryland's Appalachian Heart." *Climate Change Working Group of Frederick County*, 2023.

<https://catocinlandtrust.org/wildlife-corridors-in-frederick-county/>

⁸ Hubbard 2023

animal movements and the ecological processes and services that humans rely upon. These include pollination, free-flowing water, and recreational opportunities like hunting, fishing, and wildlife watching. To save lives and money, I urge a favorable report.

Sincerely,

A handwritten signature in blue ink that reads "Karen Lewis Young". The signature is written in a cursive style with a large, stylized initial 'K'.

Senator Karen Lewis Young