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**UNF, In Opposition, to**

**Senate Bill 0397 Maryland General Assembly**
**February 22, 2024**

**Statement of Janet Bahouth, D.Sc.**
**Injury Biomechanics and Transportation Safety Engineering, Impact Research**

My name is Dr. Janet Bahouth. I am a co-owner of Impact Research – a transportation safety research and engineering firm in Columbia, Maryland. Impact Research is crash data analysis and transportation safety research that informs decisions about motor vehicle safety, roadway and traffic safety, and occupant protection. I hold a Doctor of Science degree in Transportation Safety Engineering and I am clinically trained in injury biomechanics.

As background, please refer to 2021 Maryland Statutes Transportation Title 8 – Highways Subtitle 10 - Vision Zero Section 8-1003 designating Maryland as a "Vision Zero" state where a program must exist to plan and develop a state highway roadway system that has zero vehicle-related deaths and serious injuries by 2030. Repealing Maryland's helmet law would be inconsistent with the State's Vision Zero mandate.

In the U.S., motorcycle traffic fatalities continue to be overrepresented, accounting for 14 percent of all traffic-related fatalities, while representing only 3 percent of the entire registered motor vehicle fleet. Based on this data, and other state's experience, repealing this law that saves lives would cause unintended consequence of harm.

With the Maryland Department of Transportation's Highway Safety Office and the Maryland State Police Motor Unit, I've directed research of Maryland motorcycle crashes that were fatal or caused serious injury to the rider. This was a comprehensive look at the circumstances from pre-crash, during the crash itself, and post-crash. The goal of the research aligns with ABATE's principal that risks can be mitigated through rider and driver education. Our goal was to identify those motorcycle safety concepts that, as evidenced by these riders' fatal and serious injury outcomes, need more focus and attention in rider and driver education so that the outcome of these crashes could be different. As A.B.A.T.E's principal states, and as our team of experts proved, Maryland riders would certainly benefit from this kind of education. Understanding these concepts could protect a rider, however - none of them mean anything without the proper gear, including a helmet. We can all agree that when a crash occurs, knowledge isn't going to protect anything.

A typical crash lasts 350 milliseconds. That's 1/3 of a second and is faster than the blink of an eye. The forces sustained during only a fraction of a second either ends a life, drastically changes it, or isn't enough to compromise the body due to safeguards – like seat belts, airbags, or helmets.

These safe guards actually limit the force that is inflicted on a body. The more force absorbed by the safeguard, the better your chances of walking away. That's the physics we can't ignore.

I agree with some principals held by the supporters of this bill. I can understand the love of riding – the sense of freedom, relishing the fresh air, and the associated cool factor. But ask any rider, and if they're being honest, they'll tell you it's not a matter of IF they crash, but WHEN. The supporters of this bill have implied that no one but the rider gets hurt. But in truth, it's the taxpayers' economy and societal costs that are hurt when we foot the 12 million dollar bill for each death on our roads.

In conclusion, by changing the all-rider helmet law, you are knowingly facilitating a rise in deaths and are in contradiction with Maryland's Vision Zero law (2021 Maryland Statutes Transportation Title 8 – Highways Subtitle 10 - Vision Zero Section 8-1003). I urge you to oppose Senate Bill 503.

Thank you for the opportunity to share my perspective.

Kind Regards,

Dr. Janet Bahouth