Our research topic, “Optimized Tactical Pathing for Unmanned Ground Vehicles” is an optimization and modeling tool to determine the safest path for an unmanned ground vehicle. The primary stakeholder for this project is the Army Research Laboratory. The benefit of this tool is its novel approach to energy optimization while considering the location of multiple enemies. The potential harm of this tool to the stakeholder is using it without proper testing in a combat environment. Within the simulation we are making several assumptions that may not be representative of the real world for a variety of reasons. Our enemy detection code provides a theoretical detection map that has not been tested against what an actual enemy can see or hear due to the difficulty of quantifying detection. Our battery code does not consider the true weight of the vehicle due to the exact specifications being a trade secret. The nodes for the path are spaced 10 meters apart from each other, ignoring what may be between nodes due to the discretization of the map surface. These three assumptions are just a few out of the several listed in the paper. The deploying this model without testing could mean losing equipment and men due to the model. To mitigate risks, extensive testing and validation are necessary before deployment in real-world combat scenarios. Before turning over our model, it is our responsibility to inform the primary stakeholder on the limitations of this model.