

UTC Project Information	
Project Title	MPC-686 – Developing a Collision Warning and Collision Avoidance System for WYDOT Snowplows
University	University of Wyoming
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Funding Source(s) and Amounts Provided (by each agency or organization)	<p>USDOT, Office of the Assistant Secretary for Research and Technology \$106,903</p> <p>Wyoming Department of Transportation \$170,046</p>
Total Project Cost	\$276,949
Agency ID or Contract Number	69A3551747108
Start and End Dates	February 10, 2022 to July 31, 2023
Brief Description of Research Project	This study aims at developing a rear-end collision warning and collision avoidance system for snowplow trucks and other maintenance vehicles to maximize the capability of preventing crashes and minimize the severity of crashes. To develop the system, the required number and type of sensors (e.g., rear-facing Lidar or Radar) will be developed and tested on the maintenance vehicles. The potential idea is to have technology that will activate if a vehicle enters within a designated

	<p>distance behind the maintenance vehicle. Once a vehicle is within this designated area, the LED lights would become larger and brighter than the normal lights on the back. If this did not alert the trailing vehicle behind the maintenance vehicle and it continued to get closer, a warning light with a rear-facing air horn would sound to alert both vehicles. While receiving the warning signal, the plow operator could raise the plow to reduce the disturbance of the snow cloud. This action would allow the oncoming vehicle to see the plow and avoid a collision. In summary, the study seeks to provide a comprehensive information of benefits of using the proposed collision warning and collision avoidance system.</p>
<p>Describe Implementation of Research Outcomes (or why not implemented)</p> <p>Place Any Photos Here</p>	
<p>Impacts/Benefits of Implementation (actual, not anticipated)</p>	
<p>Web Links</p> <ul style="list-style-type: none"> • Reports • Project Website 	