

# ROADWAY SAFETY INSTITUTE

Advancing roadway safety with user-centered solutions

UTC Project Information	
Project Title	HumanFIRST Driving Simulation Educational Development
University	University of Minnesota
Principal Investigator	Nichole Morris
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Funding Source(s) and Amounts Provided (by each agency or organization)	Roadway Safety Institute-Office of the Vice President for Research: \$55,961
Total Project Cost	\$55,961
Agency ID or Contract Number	UTC Grant Number: DTRT13-G-UTC35 CTS Project Number: 2018058
Start and End Dates	02/26/2018 – 05/31/2019
Brief Description of Research Project	<p><i>Final report abstract:</i></p> <p>The HumanFIRST Laboratory was recently awarded a grant through the University of Minnesota Office of the Vice President for Research to match funds to completely overhaul the laboratory's driving simulators. This upgrade, which includes large touchscreen displays in the immersive simulators' cockpit, will allow the laboratory to conduct innovative research in the fields of connected vehicles, in-vehicle technologies, and automated vehicles. In addition, the visibility of the laboratory's increased capabilities is expected to boost an already frequent demand for educational and training partnerships (particularly around high-risk behaviors, such as distraction and speeding) from both government and private groups. In addition to the value in education and dissemination of knowledge regarding roadway safety to the greater community through demonstrations using the simulator, these partnerships often foster future opportunities for research partnerships and funding. Legacy driving scenarios will be updated to new simulator specifications. The creation of this new content is expected to allow new funding opportunities and will facilitate the research team to share its knowledge through educational and training opportunities within the regional community. This research leveraged the investment in the new simulator and propel the laboratory's capabilities through the creation of three distinct simulated demonstrations focused on controlled hand-offs with automated vehicles, distracted driving via non-driving-related in-vehicle technologies, and speeding in pedestrian populated areas. These topics are key research focus areas for the Roadway Safety Institute and are core focus areas for the HumanFIRST Laboratory and its funding stakeholders.</p>

Last updated (9/27/2019)



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<p>Describe Implementation of Research Outcomes (or why not implemented)</p> <p>Place Any Photos Here</p>	<p><i>Nothing to report.</i></p>
<p>Impacts/Benefits of Implementation (actual, not anticipated)</p>	<p>According to Nichole Morris, this work has had an impact on human factors education. Specifically, it has impacted the approach to related community education and outreach by investigating other avenues to reach driving populations that could benefit from the research team's expertise and the hands-on experience of the driving simulator.</p> <p>This project has supplemented institutional infrastructure investments at the University of Minnesota and improved the HumanFIRST Laboratory's equipment for future use.</p>
<p>Web Links</p> <ul style="list-style-type: none"><li>• Reports</li><li>• Project website</li></ul>	<p><a href="http://www.roadwaysafety.umn.edu/research/search/projectdetail.html?id=2018058">http://www.roadwaysafety.umn.edu/research/search/projectdetail.html?id=2018058</a></p> <p><a href="http://www.roadwaysafety.umn.edu/publications/researchreports/reportdetail.html?id=2786">http://www.roadwaysafety.umn.edu/publications/researchreports/reportdetail.html?id=2786</a></p>