

# ROADWAY SAFETY INSTITUTE

Advancing roadway safety with user-centered solutions

UTC Project Information	
Project Title	Scenarios and Justification for Automated Vehicle Demonstration in Rural Minnesota
University	University of Minnesota
Principal Investigator	Frank Douma
PI Contact Information	<a href="mailto:Douma002@umn.edu">Douma002@umn.edu</a> 612-626-9946
Funding Source(s) and Amounts Provided (by each agency or organization)	Roadway Safety Institute-Office of the Vice President for Research: \$44,909
Total Project Cost	\$44,909
Agency ID or Contract Number	UTC Grant Number: DTRT13-G-UTC35 CTS# 2018068
Start and End Dates	4/1/2018 – 6/30/2019
Brief Description of Research Project	<i>Final report abstract:</i> Automated vehicles (AVs) have the potential to disrupt the current transportation system and culture. While experts debate the exact timeline, the question is likely a matter of when, not if. Therefore, communities of all kinds need to prepare for this future. Small urban and rural communities, in particular, could benefit from the development of the technology, as many of their residents are unable to drive due to age and/or disability. Automated technology could provide a cost-effective and efficient solution for these communities, but so far, most of the AV testing has been conducted in densely populated urban areas. This project provides justification for why rural and small urban communities should host AV demonstrations and how these communities can create a plan to do so. We accomplish this task by providing information about rural and small urban communities and by reviewing the current state of AV technology, the legal environment for AVs, and best practices from past and current AV demonstrations. We also engage with two small urban communities in Minnesota to gather information about real community needs, desires, and limitations.
Describe Implementation of Research Outcomes (or why not implemented)	The cities of White Bear Lake, MN, and Fergus Falls, MN, now have detailed plans for automated vehicle demonstrations as a result of their collaboration with Douma and his research team.

Last updated (9/27/2019)



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Place Any Photos Here	
Impacts/Benefits of Implementation (actual, not anticipated)	<p>Douma's work led to an impact on public affairs and planning; he created a guide that describes the necessary elements for an automated vehicle demonstration in small towns and rural communities.</p> <p>Douma also reports that his work has led to an increased understanding of the number of different entities that can be involved in supporting an automated vehicle demonstration plan.</p>
Web Links <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=2018068">http://www.roadwaysafety.umn.edu/research/search/projectdetail.html?id=2018068</a></p> <p><a href="http://www.roadwaysafety.umn.edu/publications/researchreports/reportdetail.html?id=2830">http://www.roadwaysafety.umn.edu/publications/researchreports/reportdetail.html?id=2830</a></p>

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