

UTC Project Information	
Project Title	MPC-624 – Evaluating the Impacts of Deploying Automated Roads for Infrastructure-Enabled Autonomous Vehicles
University	Utah State University
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Funding Source(s) and Amounts Provided (by each agency or organization)	USDOT, Office of the Assistant Secretary for Research and Technology \$50,000 Utah LTAP \$50,000
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Start and End Dates	February 18, 2020 to July 31, 2022
Brief Description of Research Project	Autonomous driving technology is expected to bring dramatic societal, environmental, and economic benefits due to its potential for improving traffic safety, vehicle fuel economy, road capacity, travel speed, and driver productivity. However, focusing on AV technology alone may potentially slow the penetration of AVs and consequently slow the realization of societal benefits from AVs. In order to safely drive itself in various road environments, an AV needs to be equipped with expensive sensor systems and additional hardware and software. The high cost of AVs can be a significant barrier to their broad adoption. Integrating transportation infrastructure enhancement into the realization of autonomous driving can potentially promote the development and adoption of AVs. This project proposes a modeling framework for the planning and evaluation of an infrastructure-enabled autonomous driving system. The proposed project will accomplish the following two objectives: 1) Develop a new network equilibrium model to describe road users' vehicle type and route choice behaviors in a transportation network with automated roads; 2) Investigate the strategic planning of automated roads in a general transportation network.
Describe Implementation of Research Outcomes (or why not implemented)	
Place Any Photos Here	
Impacts/Benefits of Implementation	

(actual, not anticipated)	
Web Links <ul style="list-style-type: none">• Reports• Project Website	