

<b>UTC Project Information</b>	
Project Title	MPC-697 – A Microscopic Approach for Electric Vehicle Demand Estimation
University	University of Utah
Principal Investigator	Xiaoyue “Cathy” Liu, Ph.D., P.E.
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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 \$60,000  GEIRINA (Global Energy Interconnection Research Institute North America) \$75,000
Total Project Cost	\$135,000
Agency ID or Contract Number	69A3551747108
Start and End Dates	October 13, 2022 to July 31, 2023
Brief Description of Research Project	This study aims to produce a realistic and high-resolution public charging simulation environment and provide practical guidance for future charging station deployment. There are three specific objectives to achieve this goal: <ol style="list-style-type: none"> <li>1. We will build an agent-based model to model the daily activities of all drivers within a study region;</li> <li>2. We will estimate EV user distributions and charging demand based on socioeconomic attributes and public charging decision rules; and</li> <li>3. We will develop an optimization framework based on the estimated public charging demand to efficiently solve the EVSE allocation problem, in an effort to maximize the coverage of total charging demands under investment costs and load capacity constraints.</li> </ol>
Describe Implementation of Research Outcomes (or why not implemented)	
Place Any Photos Here	
Impacts/Benefits of Implementation (actual, not anticipated)	

Web Links

- Reports
- Project Website