2018 Research Project Abstract

**Project Title**: Enabling the Shared Transportation Revolution (Project Q2)

**Principal Investigator**: Kari Watkins, Ph.D., Civil & Environmental Engineering, Georgia Institute of Technology
   Email: kari.watkins@ce.gatech.edu

**Research Team**: Michael Hunter, Ph.D., Civil and Environmental Engineering, GaTech; Pascal Van Hentenryck, Ph.D., (GaTech)

**ABSTRACT**: The transportation industry is rapidly forming an image of the future that is autonomous, connected, electric and shared. Although electric vehicles may help us make great strides in the area of point-source emissions, and autonomous vehicles may further efforts to improve safety, the congestion impacts of these technologies will be limited and may actually worsen conditions in urban areas. Although TNCs offer shared ride services, including LyftLine and UberPool, the number of carpool trips is far less than their typical non-shared services. Shared ownership of vehicles is not enough to mitigate most issues in the transportation system (congestion, inefficiencies, emissions, etc). Pushing toward shared usage is critical in urban areas, however shared usage is dependent on the ability to link travelers to one another and their willingness to share the ride. This research will assess people’s willingness to share space with strangers and those with a social connection and how design of the system and the physical infrastructure can better facilitate this sharing dynamic.