

UTC Project Information	
Project Title	MPC-514 – Impacts of Ridesourcing on VMT, Parking Demand, Transportation Equity, and Travel Behavior
University	University of Colorado Denver
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Project Duration	September 30, 2013 to September 30, 2018
Brief Description of Research Project	<p>The transportation sector is currently experiencing a monumental disruption with the introduction and evolution of transportation services such as bikesharing, carsharing, ridesharing, and on-demand ridesourcing (e.g. Lyft, Uber). Many factors – including social networks, real-time information, and mobile technology – allow passengers and drivers to connect through mobile smartphone applications (i.e. apps). In turn, this led to the creation and popularization of ridesourcing companies offering an app-based on-demand platform. As these new layers of technology-based transportation options begin to flourish, it is important to understand how they compete and interact with more traditional modes. Beyond travel behavior, these evolving transportation services can also significantly impact our transportation systems, society, and the environment. Yet, these outcomes have yet to be adequately studied in the academic literature. Accordingly, this research will investigate the travel modes replaced by these evolving services and why people shifted from a previous mode. More specifically, we will investigate new trips that may not have occurred before (i.e.</p>

	<p>induced travel) as well as multimodality (i.e. availability of several modes) and intermodality (i.e. combination of various modes for a single trip or mixed-modes) in order to analyze the impact of these services on the overall transportation system in terms of vehicle miles traveled (VMT), parking demand, transportation equity, and travel behavior.</p>
<p>Describe Implementation of Research Outcomes (or why not implemented)</p> <p>Place Any Photos Here</p>	<p>All of the following research objectives were implemented, but we did not write up results from #6 due to non-significant findings:</p> <ol style="list-style-type: none"> 1. Developing surveys for ridesourcing passengers and drivers and seeking IRB approval; 2. Collecting a unique dataset via a survey of ridesourcing passengers and drivers; 3. Assessing what travel modes are replaced by these evolving transportation services; 4. Measuring the VMT and parking demand impacts of ridesourcing services; 5. Investigating transportation equity variation across different geographical areas; 6. Evaluating the factors associated with why people shifted from their previous travel modes; and 7. Developing a framework for a mode choice model that would allow for integrating ridesourcing services into regional travel models.
<p>Impacts/Benefits of Implementation (actual, not anticipated)</p>	<p>This research starts to fill several gaps in the literature regarding ridesourcing services. The ultimate goal is to help cities and transportation organizations better account for the impacts of technology and evolving transportation services in their policies, planning, and engineering. We also hope to contribute to the conversation on how ridesourcing companies can help better achieve sustainable transportation goals including more VMT efficiency, better interconnectivity and integration with active modes of transportation, equity, and safety for both users and drivers. Although specific to the Denver region, this report provides insight into the potential benefits and disadvantages of ride-hailing.</p>
<p>Web Links</p> <ul style="list-style-type: none"> • Reports • Project Website 	<p>https://www.ugpti.org/resources/reports/details.php?id=938</p>