

Request for Research Funding for FY 2019-2020

Requesting Office	District 7 Modal Development and CO Transit	Priority	
Proposed Title	Evaluating the connection between transit and TNCs (Transportation Network Companies) in Pinellas County for statewide application		
Justification	<p>Recent years have seen an explosive growth in use of ridesourcing/TNC services. For example, operated in 600 cities globally, Uber’s total trip has reached 5 billion in 2017 (2017). Another transportation network companies (TNC) giant, Lyft, has reached 1 million trips per day milestone in 2017 (2017). However, the growth does not come without creating controversies. It has sparked heated debate on the potential impacts of ridesourcing on cities (McCoy et al., 2018; Rayle et al., 2016). Supporters found it a sustainable travel mode, which will reduce auto dependence and increase travel mobility options. Critics weighed in and suggested that the significant growth of ridesourcing leads to more congestion in cities. For example, a report suggested that ridesourcing added billions of vehicle miles travelled (VMT) in major American cities while private car ownership still increases. A report from McCoy et al. (2018) conducted a nationwide survey on MPOs, DOTs, and transit agencies, and the report raised major concerns about the impacts of ridesourcing on congestion and transit ridership, as well as security and impacts on special group of population like the poor and the elderly.</p> <p>One of the major concerns is how to integrate transit use with TNC service. Research has been conducted to understand the potential connections between these two modes but found different results. For example, Wang and Ross (2017) found TNC could complement, compete, and substitute rail transit. These different relationships happen at different locations. Some projects like SocialCar are seeking to incorporate ride-sharing into existing mobility systems.</p> <p>In Florida, Pinellas Suncoast Transit Authority (PSTA) became the first transit agency in the United State to subsidize Uber trips since 2016. In its Direct Connect program, PSTA subsidizes \$5 dollars for Uber and local taxi trips to and from 24 selected bus stops, and this program serves as many as 1,000 riders every month. Other cities in the United States are also testing the water on the cooperation between transit and ridesourcing service. For example, Boulder, CO paid each rider \$5 to go to downtown when there is a parking shortage.</p> <p>However, the current research on ridesourcing is lacking, and relevant data is difficult to acquire for researchers (Standing et al., 2018). In terms of the partnership between transit agencies and TNCs, there is a lack of analysis of the performance of the partnership and the effectiveness of the program. Such limitation does not provide guidance for the development of new partnerships. In addition, policy makers and urban planners have little evidence to understand whether the programs have been successful and have achieved the expected goals.</p>		
Impact	The study would help FDOT to better understand the multimodal benefits, issues and effectiveness of integrating TNC and transit services, and thus provide guidance for FDOT to other transit agencies in Florida and other cities in the nation.		
Affected Offices	District 7 Modal Development, All District Modal Offices, CO Transit, Policy Planning		
Existing Work	There is essentially no existing study evaluating the effectiveness of the partnership between transit agencies and TNCs because there are so few transit agencies that have tried this partnership, and Pinellas Suncoast Transit Authority is one of the very few transit agencies that has actually implemented the system. Therefore, this research, if funded, would be the first such study to provide an objective evaluation.		
Keywords Used In Existing Work Search (Cannot leave blank)	Public transportation, Multimodal connection; ridesourcing; transit; on-demand ridesharing		
Related Contracts (Give contract numbers)	None		
Funding Request	\$200,000	Anticipated Duration	15 months

Project Manager	UF PI-Zhong-Ren Peng FDOT PM-Ming Gao	Contracting Method	University Master Contract Task Work Order
Urgency	5		
Implementability	5		
Project Benefits (Succinct, complete explanation)			
<p>Departments of Transportation and Metropolitan Planning Organizations (MPOs) in the nation are interested in knowing how to avoid the negative impacts of TNCs on public transportation and take advantage of TNCs to enhance transit services by integrating transit with ridesharing services. However, currently, there is no study that explores such connection. This research aims to evaluate the performance of the partnership between transit and ridesourcing and whether such partnership is financially effective, using data from Pinellas County as a case study. In addition, the research will investigate the challenges of implementing such partnership and provide policy recommendations for Florida DOT and other transit agencies in the nation.</p>			
Project Benefits (Select all that apply and explain)	Quantifiable Benefits (units, dollars, etc...if applicable)	Methodology or Data Sources Used to Determine Quantifiable Benefits. If not applicable, please give justification of project benefits	
<input type="checkbox"/> Materials Enhancement			
<input type="checkbox"/> Materials Savings			
<input type="checkbox"/> Time Savings			
<input type="checkbox"/> Lives Saved/Injuries Prevented			
<input type="checkbox"/> Other (Explain)	Ridership, transit agency operating and capital costs	Increase transit ridership, time saving for passengers, cost reduction for transit agencies, enhanced customer services.	

*Comments should explain and support urgency, financial benefit, and implementability scores