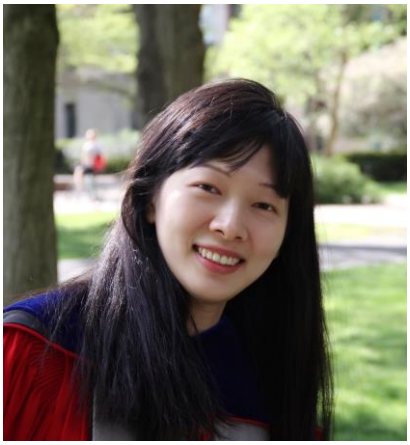
Transportation Data Science Seminar Series

Transportation Network Companies and the Future of Urban Mobility

Seminar summary

The role of Transportation Network Companies (TNCs) in the urban transport system is under intense debate. There could be multiple channels through which TNCs affect individual mobility choices and transportation network performance, leading to different consequences for urban efficiency and sustainability. On the one hand, TNCs may serve as a flexible supplemental mobility option for public transit, reduce the reliance on private vehicles, and release road congestion. On the other hand, TNCs may squeeze out public transit, and lead to more congestion by inducing travel and staying at a low passenger occupancy rate while on the road. This talk will introduce our recent efforts in examining and quantifying the impacts of TNCs on urban mobility. Three case studies will be discussed to exemplify 1) the net impacts of TNCs on urban mobility; 2) the substitution of TNCs for public transit; 3) the impacts of Information and Communication Technology (ICT) on the use of TNCs and individual travel. Three types of transportation big data are used for analysis in each of the case studies, including the panel data, the TNC trip OD data, and the National Household Travel Survey (NHTS) data. This seminar series is co-organized by Department of Landscape Architecture and Urban Planning, Transportation Institute, and Institute of Data Science at Texas A&M University.

Speaker's information



Dr. Hui Kong is an Assistant Professor of Urban and Regional Planning at the Humphrey School of Public Affairs, University of Minnesota. She received B.S. degree from Peking University in 2013, and Ph.D. from The Ohio State University in 2018. She worked as a Postdoctoral Associate at Massachusetts Institute of Technology from 2018 to 2020. Being a broadly trained researcher in urban planning, geography, and transportation, she leverages GIS, spatial big data analytics, and statistical models to advance the efficiency and equity of shared mobility and multimodal urban transportation. Her recent work explores the impacts of emerging transportation technologies, such as ride-hailing, micro-mobility, ICT, and electric vehicles, on the traditional transportation system and urban development. Her work has been published in leading academic journals including *Nature Sustainability*, *Transportation Research Part A & Part D*, *Journal of Transport Geography*, etc.

Time: 4:00-5:00 p.m. US Central Time (Thursday, April 29, 2021)
Zoom Meeting ID: 732 641 0814 Passcode: 575829
Direct Link: https://tamu.zoom.us/j/7326410814?pwd=cGZKY045dmVkdzVRLy9MYWhocWorQT09

Faculty Host: Xinyue Ye, LAUP & Urban Data Science Lab

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