

Micromobility Policy Insights Drawn From Emerging Data Sources

Chris Cherry, PhD

Professor of Civil Engineering, the University of Tennessee

Thursday, April 27, 2023 • 11:00 am–12:15 pm (US Arizona)

Hybrid Attendance Options:

Register for Virtual Attendance: <https://bit.ly/403vmb9>

In-person: College Avenue Commons (CAVC) • Room 301 ([map](#))

*A light lunch will be served during the seminar for all in-person attendees.



About the Talk

Micromobility vehicles are widespread globally and have become popular in North American and European cities in the last 5-10 years in the form of e-bikes and e-scooters. E-bike sales have reached one million vehicles per year in the past two years, more than e-car sales. Shared e-scooters quickly eclipsed other forms of shared micromobility in terms of ridership and reach. These vehicles have presented opportunities to provide mobility that is energy efficient, low emitting, affordable, and equitable – exceeding the market capabilities of “legacy micromobility” vehicles, i.e., bicycles. They also present opportunities to improve travel behavior understanding through novel data streams that support higher-order transportation policy making. This presentation will focus on how emerging data sets and methods have enabled behavioral analysis that has not been present in other non-motorized forms of transportation. The first part of the presentation will cover shared e-scooter travel patterns and the implications for policy – specifically safety policy, aiming to understand how riders use e-scooters and whether we can draw insights from ubiquitous ride data coupled with crash data. The second part will focus on a longitudinal assessment of personally owned e-bike rider behavior and implications for sustainability. This study also informs ongoing studies on the effect of emerging e-bike incentives on reducing emissions (among other objectives) through e-bike purchase. Finally, the presentation will cover ways forward as the micromobility industry and market matures and how emerging data can help us develop policies that elicit travel behavior shifts to achieve safety and sustainability gains from these emerging technologies.

About the Speaker

Dr. Chris Cherry is a Professor in Civil Engineering at the University of Tennessee. His research is centered on the intersection of policy, technology, travel behavior, safety and sustainability in the transportation sector. His past and current work spans the globe, with most work in Asia and the US. Focusing on low-impact transportation modes. Much of the work of his career has aimed to understand the role of lightweight electric vehicles (micromobility) in the transportation space, starting with his PhD dissertation on e-bikes in China from UC Berkeley in 2007. He is the PI on several ongoing projects focused on safety of vulnerable road users funded by USDOT, TRB, and TDOT. He won an NSF CAREER award in 2012 on emerging transportation technologies in China. He directs the Light Electric Vehicle Education and Research Initiative. He also chairs the SAE Powered Micromobility Subcommittee and led the TRB Joint Subcommittee on Powered Micromobility Vehicles until 2022. He’s a member of TRB’s Developing Country Committee. He is on the editorial advisory board of several journals, most notably, the new Journal of Cycling and Micromobility Research.

This seminar will be presented in-person and webcast live to a worldwide audience using Zoom.

To register for the webinar, please visit: <https://bit.ly/403vmb9>

Recordings of all sem(web)inars may be accessed by semester at <https://tomnet-utc.engineering.asu.edu/seminars/>.
For any assistance, please contact Irfan Batur at ibatour@asu.edu