RESEARCH SEMINAR IN SPRING '23

Lessons learned in my desperate attempt to make it safe to cycle on American roads

Presented by Dr. Kari Watkins, Ph.D. in Civil Engineering

Wednesday, March 1st, 2023
from 12PM - 1 PM PST, RGL 215

Zoom Link:
https://usc.zoom.us/j/95292009142

RVSP via Google Form Link:
https://forms.gle/wLFwiaNMRXyYWoJQ6

Kari Watkins

Dr. Kari Edison Watkins is an Associate Professor in Civil & Environmental Engineering at the University of California at Davis. Her research and teaching center in multi-modal transportation design and planning and the use of technology in transportation. Dr. Watkins worked for a decade as a senior transportation engineer designing dedicated transit facilities in communities across New England, then relocated to the very transit and bike-friendly Seattle to complete a PhD at the University of Washington. After spending a decade as faculty at Georgia Tech, she recently relocated to Davis, the best college town and most bikeable city in America. She currently serves as the Director of the Transit-SCORE USDOT university transportation center and conducts research on improving transit operations and the perception and actual safety of cyclists.

Abstract

The United States is turning to bicycle infrastructure to encourage this more sustainable mode of travel. However, to date the percentage of trips taken by bicycle in the United States is very low, mostly due to the perception of stress on roadways. This presentation first describes a large survey-based effort designed to understand how both current and potential cyclists respond to different types of cycling infrastructure. Paired with this, my group has been working on several studies that obtain data about cyclists and the environment around them and provide information back to them to enable a safer cycling trip. Our Seeing Like a Bike project used an instrumented bicycle equipped to sense the environment around a cyclist in terms of vehicle proximity, air quality, and pavement condition, paired with eye-trackers to understand the cyclist's reaction and perception. This is now feeding into ongoing work to inform cyclists about potential risks and understand their perceptions.