

Transportation Data Science Seminar Series

Insights from a Multi-Pronged Exploration of Pedestrian Fatalities

Seminar summary

Pedestrian fatalities have increased dramatically since a near 30-year low in 2009, alarming researchers and practitioners working to improve multimodal safety and increase transportation equity. Two sub-trends deserve increased scrutiny: first, nearly 75% of the fatalities occurred in darkness, including nearly 90% of the increase from 2009; second, fatalities are inequitably distributed throughout the population on both a per-capita and per-walking-trip basis, with Black and Native Americans being disproportionately killed compared to other races. This presentation covers findings from ongoing research into these trends in pedestrian fatalities, including binary and multinomial logit explorations of how various crash correlates are associated with fatalities in darkness versus in daylight and how those findings differ under varying lighting conditions and on various roadway types. The presentation also explores how trends in pedestrian fatalities differ by race, both specifically related to darkness and overall. The findings urge an explicit consideration of pedestrian safety in darkness in all future design and retrofit decisions, and underscore the importance of examining crash data separately and in conjunction with contextual data in order to both understand crash trends and dig deeper into important built environment and population correlates with crashes. The presentation will conclude with a discussion of future research to further understand and address pedestrian fatalities in the U.S. 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



Rebecca Sanders, PhD, RSP_{2B} is the Founder and Principal Investigator of Safe Streets Research & Consulting, LLC, a certified DBE specializing in rigorous crash and survey data analysis to provide insights into pedestrian, bicycle, e-scooter, and driver safety, behavior, and mobility. She has 15 years of experience spanning both the academic and private sectors, including research on bicyclist and driver design preferences, national pedestrian safety trends, and e-scooter user behavior. She has contributed to national guidance for improving pedestrian and bicyclist intersection safety, bicycle facility design, roadway reallocation, and systemic safety analysis, and has helped cities and counties across the country understand and address multi-modal safety through Vision Zero and systemic safety efforts.

Dr. Sanders chairs TRB's Bicycle Transportation Committee and serves on the City of Portland's Pedestrian Advisory Committee.

Time: 8:00-9:00 p.m. US Central Time (Thursday, December 2, 2021)

Zoom Meeting ID: 732 641 0814 Passcode: 575829

Direct Link: https://tamu.zoom.us/j/7326410814?pwd=cGZKY045dmVkdzVRLy9MYWhocWorQT09

Faculty Hosts: Xinyue Ye, Department of Landscape Architecture and Urban Planning & Urban Data Science Lab; Bahar Dadashova, Texas A&M Transportation Institute





