

Data, Metrics, and Analytic Methods for Assessing Equity Impacts of Surface Transportation Investments: Phase 2 Study to Support State and Local Decision Making

Committee

Deb A. Niemeier

Chair

Deb Niemeier is the Clark Distinguished Chair in Energy and Sustainability at the University of Maryland, College Park; she serves as a professor in the Dept. of Civil and Environmental Engineering and an affiliate professor in the College of Information Studies and the Dept of Atmospheric and Oceanic Science. Her research focuses on the identification of vulnerable populations and environmental and health disparities in the built environment. She studies risks associated with outcomes in the intersection of social and demographic characteristics, housing and infrastructure with environmental hazards such as air quality, disasters, and more broadly climate change. Her international development work is aimed at agricultural sustainability and her current education research is focused on data science in engineering and the operational challenges of K-12 infrastructure. She is a Fellow of the American Association for the Advancement of Science (AAAS) for “distinguished contributions to energy and environmental science study and policy development;” a Guggenheim Fellow for foundational work on pro bono service in engineering and a member of the National Academy of Engineering. She was elected to the American Philosophical Society in 2020. She recently received the Perry L. McCarty Founders Award (2022) and 2023 Bower Award and Prize for Achievement in Science.

Elizabeth Alden

Member

Elizabeth (Beth) Alden, AICP, recently retired after 23 years with the metropolitan planning organization serving Tampa, Florida, where she served as Executive Director of an award-winning team of planners with a vision of a well-connected, prosperous, healthy, and equitable community. She spearheaded initiatives that empower residents to reshape their communities, including the first multijurisdictional Vision Zero Action Plan in the U.S., and the first multi-MPO growth scenarios visioning collaboration in the Tampa Bay region. As the architect of Tampa/Hillsborough's Imagine 2040 Transportation Plan, she combined performance metrics and creative public engagement to refocus attention on essential "bread & butter" infrastructure investments, establishing the structure for a successful local sales tax popular referendum in 2018. Her team's Nondiscrimination & Equity Plan was featured in the American Planning Association's 2022 State of Transportation Planning report as a best practice. In 2017 she was appointed as a member of the TRB/NCHRP 08-36 Panel on Research for the AASHTO Standing Committee on Planning. She was the founding chair of the Florida MPO Advisory Council's Noteworthy Practices Committee. She served as a best-practice presenter in several FHWA peer exchange programs and guidebook panels, and wrote portions of the American Institute of Certified Planners' first exam to certify transportation planning specialists. She has worked in the public and private sectors as a professional planner since 1994, and holds a Master's degree in Planning from the University of Minnesota and a Bachelor's degree in Environmental Design & Architecture from North Carolina State University.

Jesus M. Barajas

Member

Jesus M. Barajas is Assistant Professor in the Department of Environmental Science and Policy at the University of California, Davis. His research on transportation equity addresses how systems of inequities influence travel behavior and how planners and policymakers respond. He has led projects on topics that include the travel behavior of marginalized population groups, bicycling safety, and the use of equity data and metrics in transportation decision making. He serves as a member of the editorial board for Transportation Research Record. Dr. Barajas holds a Ph.D. in City and Regional Planning from the University of California, Berkeley.

Deanna Belden

Member

Deanna Belden is a Senior Research Scientist at the Texas A&M Transportation Institute (TTI) in the Mobility Division. She joined TTI in November 2024 to apply practitioner expertise to transportation research, analysis, and evaluation. Previously, she was with the Minnesota Department of Transportation (MnDOT) for 25 years, and served as Director of Performance, Risk and Investment Analysis for 13 years. In this role she led MnDOT's Performance Management Program, which includes the online performance dashboard, state and federal performance measure reporting, and new measure development. She and her team were responsible for the implementation of MnDOT's Enterprise Risk Management program to integrate risk assessments into MnDOT's processes, evaluate organization level risks, and for economic forecasts and analyses. She is a member of the Transportation Research Board's Standing Committee on Performance Management (AJE20). She has served on various panels convened by the National Cooperative Highway Research Program (NCHRP) on performance measurement and management topics. While at MnDOT, she was active in the American Association of State Highway and Transportation Officials (AASHTO) Committee on Performance Based Management, most recently as founding co-chair of the Task Force on Emerging Performance Areas. Her international contributions include serving as working group co-chair for the PIARC Technical Committee 1.1 Performance of Transport Administrations. She received an M.S. degree in Urban and Regional Planning and an M.A. degree in Economics from the University of Iowa, and a B.A. degree in Economics from the University of Oregon. She is a member of the American Institute of Certified Planners.

Ahmed El-Geneidy

Member

Ahmed El-Geneidy is a professor at the School of Urban Planning, McGill University. He is currently serving on the board of directors for the regional public transport planning authority in Montreal Autorité régionale de transport métropolitain (ARTM). In 2007 he established the Transportation Research at McGill (TRAM) research lab known for generating practice-ready land use and transport research that impacted communities in Canada and around the world. He is the co-editor in-chief of Transport Reviews and editor of Transportation. He has published more than 170 academic articles in peer reviewed academic journals through his collaborations with students trained in the TRAM lab in the areas of land use and transport planning, public transport operations and planning, travel behavior analysis concentrating on the use of motorized and non-motorized modes of transport and their impacts on health and well-being, and measurements of accessibility in urban contexts. He has a special interest in measuring and understanding the transport needs of disadvantaged populations. He received Bachelor and Masters degrees in Architectural Engineering from Alexandria University, Egypt, and Ph.D. in Urban Studies from Nohad A. Toulon School of Urban Studies and Planning, Portland State University, USA.

Ronald C. Hall

Member

Ron Hall is a transportation program manager at the Upper Great Plains Transportation Institute at North Dakota State University where he is also a co-director of the Northern Tribal Technical Assistance Program (NTTAP), Assistant Director for Tribal Transportation Programs, and Tribal Liaison for the University Transportation Center for Transformative Infrastructure Preservation and Sustainability (CTIPS). He is also President of Bubar & Hall Consulting, and served previously as the Principal Investigator and Director of the Tribal Technical Assistance Program at Colorado State University. His expertise is in understanding and supporting the needs of tribal transportation programs. He helped to create and chaired the TRB standing committee on Native American Transportation Issues. He has also received the Multiethnic Distinguished Service Award from Colorado State University and the Federal Highway Administrator's Service Award. He served as a member of the NASEM/TRB consensus study Committee on Data, Metrics, and Analytic Methods for Assessing Equity Impacts of Surface Transportation Funding Programs. He has a B.S. in criminal justice studies and sociology from Augustana College and a J.D. from William Mitchell College of Law.

Anna Roach

Member

Anna Roach is Executive Director & CEO of the Atlanta Regional Commission (ARC) whose vision is to create One Great Region through its mission to foster thriving communities for all within the Atlanta region through collaborative and data-informed planning and investments. As Executive Director & CEO, she manages the agency's \$125M operating budget and leads a talented team that works with local governments and community partners to improve quality of life in the Atlanta region. In addition to developing and maintaining long-range, comprehensive, regional plans in the areas of transportation, aging, workforce development, natural resources, and urban area security, ARC deploys nearly \$3 billion of investments across the Atlanta region on an annual basis. She is a member of the Atlanta Rotary Club, the International Women's Forum Georgia, and the Women's Transportation Seminar. She also serves on the Leadership Council of the Board for Drawdown Georgia, the Executive Committee of the Board for Learn4Life, the board of the Partnership for Inclusive Innovation, and the board of Council for Quality Growth. She has been named one of the 100 most influential Georgians by Georgia Trend, one of the 500 most powerful Atlanta leaders by Atlanta Magazine, one of 22 leaders to watch in 2022 by the Atlanta Business Chronicle and is one of Engineering Georgia's top 100 Most Influential Women in Georgia Engineering. Prior to joining ARC as its first female CEO in the 75-year history of the organization, she served as Chief Operating Officer for Fulton County Government. Her earlier career as an attorney included roles in both the private and public sectors. She a J.D. from St. John's University School of Law and a Bachelor of Arts in political science from the State University of New York, College at Cortland.

Kelly C. Rodgers

Member

Kelly Rodgers is a Senior Transportation Planner in the Climate Friendly and Equitable Communities program at the Oregon Department of Transportation. She is also Visiting Scholar at the Transportation Research and Education Center, Portland State University, and the owner and principal of Streetsmart Planning, LLC, a consultancy dedicated to integrating climate, health, and equity into transportation planning. She has 16 years of city planning experience working in transportation, green infrastructure, community design, and renewable energy. She is chair of the ITE Standing Committee on Health and Transportation and serves on the steering committee of Planning for Health Equity, Advocacy, and Leadership (PHEAL), leading its community of practice. She is also a member of the Transportation Research Board Committee on Transportation and Public Health (AME70) and is co-founder and a member of the American Planning Association's Health Equity and Planning Interest Group. She has a doctorate in urban studies from Portland State University where her research focused on the use and influence of municipal health-related transportation indicators. Additional research interests include transportation as a determinant of health; context-based transportation planning, design, and travel behavior; and the role, nature, and quality of evidence in transportation decision-making. She also holds a master's degree in landscape architecture, and a bachelor's degree in urban and regional planning.

Gregory Rowangould

Member

Greg Rowangould is an Associate Professor in the Department of Civil and Environmental Engineering at the University of Vermont and Director of the University of Vermont Transportation Research Center. He is an expert in modeling transportation systems and travel behavior, transportation policy evaluation and mobile source emission and air quality analysis. His research focuses on understanding how the design and operation of transportation systems and transportation policy affect the sustainability of communities, public health, and equity. Since moving to Vermont, he has focused greater attention on the transportation needs of smaller cities and rural communities where there are unique sustainability and equity challenges. He is currently a member of the TRB Transportation Energy Committee and Associate Editor of the journal Transportation Research Part D: Transport and Environment. He holds a Ph.D. in Civil and Environmental Engineering from the University of California, Davis, an M.S. degree in Resource Economics and Policy from the University of Maine, and a B.S. degree in Chemical Engineering from the University of Maine.