





Sloan Foundation Workshop on Envisioning Equitable Transitions to Sustainable Transportation Systems

May 16-17, 2024

Student Center East, University of Illinois Chicago

Agenda

Thursday, May 16 (Day 1)

4-5 p.m. – Check-in and Refreshments

5-5:30 p.m. – Opening Remarks

- Susan Martinis, Vice Chancellor for Research & Innovation, University of Illinois Urbana-Champaign
- Stacey Swearingen White, Dean, College of Urban Planning and Public Affairs, University of Illinois Chicago
- Ali Tafti, Head, Department of Information and Decision Sciences, University of Illinois Chicago

5:30-6:30 p.m. – Keynote Address

 Susan Handy, Distinguished Professor of Environmental Science and Policy, University of California Davis

6:30 p.m. – Reception

Friday, May 17 (Day 2)

8:15-9 a.m. - Check-in and Refreshments

9-9:30 a.m. – Welcome and Introductions

- Nicholas Jones, Executive Vice President, University of Illinois System
- Marie Lynn Miranda, Chancellor, University of Illinois Chicago
- Madhu Khanna, Alvin H. Baum Family Fund Chair and Director, iSEE
- Eleftheria Kontou, Assistant Professor of Civil Engineering, University of Illinois Urbana-Champaign

9:30-10:30 a.m. - Plenary Address

 Jessika Trancik, Professor, Institute for Data, Systems, and Society, Massachusetts Institute of Technology

10:30-10:45 a.m. – Break







10:45 a.m.-12:15 p.m. – Parallel Morning Sessions

Session 1A: Equity Bottlenecks in Sustainable Transportation Systems

- **Focus:** How can we achieve equity in today's transportation systems? How do different users and developers of transportation systems justify costs and benefits associated with transportation in their sectors, and how do these facilitate or create obstacles in equitable transportation systems? How are diverse voices and perspectives engaged in decision-making at the community, state, and national levels?
- **Panelist Remarks:** 10:45-11:45 a.m.
 - o Nina Idemudia, CEO, Center for Neighborhood Technology
 - Jane Lin, Professor, Civil, Materials, and Environmental Engineering, University of Illinois Chicago
 - Sophie Young, Manager, Environmental Justice and Equity, Electric School Bus Initiative, World Resources Institute
 - Yan (Joann) Zhou, Group Manager, Vehicle and Energy Technology & Mobility Analysis, Argonne National Laboratory
- **Group Discussion:** 11:45 a.m.-12:15 p.m.

Session 1B: What Sustainable Transportation Opportunities Contribute to Increasing Equity?

- Focus: Can the transition to sustainable transportation be an opportunity to introduce more equity into society? Are these opportunities specific to certain types of communities? How do such opportunities vary across urban vs. rural regions? Do sustainable transportation options potentially impose higher barriers for socially disadvantaged groups? Can the lessons learned at the local level be scaled regionally or nationally? Would economies of scale help us achieve these opportunities?
- **Panelist Remarks:** 10:45-11:45 a.m.
 - José Acosta-Córdova, Transportation Justice Program Manager, Little Village Environmental Justice Organization
 - Sergio Castellanos, Assistant Professor, Civil, Architectural, and Environmental Engineering, University of Texas Austin
 - Jason Osborn, Director, Office of Intermodal Project Implementation, Illinois Department of Transportation
 - o Olatunji Oboi Reed, President and CEO, The Equiticity Racial Equity Movement
- **Group Discussion:** 11:45 a.m.-12:15 p.m.

12:15-1:30 p.m. – Lunch Break and Exhibits from Community Groups, Non-Governmental Groups, and Industry Representatives







1:30-3 p.m. – Parallel Afternoon Sessions

Session 2A: Putting Potential Solutions into Operation: Startups and Local Initiatives

- **Focus:** What is the role of startups and social entrepreneurship in the transition toward sustainable transportation systems? What are important equity and accessibility considerations for startups implementing transportation solutions in disadvantaged communities? How can sustainable transportation startups partner with private and public investors that have sustainable financing targets? What are key obstacles startups face when addressing community needs in sustainable transportation? Are there innovations on the horizon that would address these barriers?
- **Panelist Remarks:** 1:30-2:30 p.m.
 - o Robert Blake, Executive Director, Native Sun Community Power Development
 - o Shelley Francis, Co-Founder and Managing Partner, EVNoire
 - o Edith Makra, Director of Environmental Initiatives, Metropolitan Mayors Caucus
 - Madeline Zhu, Policy Advisor, SMART Grants Program, U.S. Department of Transportation
- **Group Discussion:** 2:30-3 p.m.

Session 2B: Catalyzing New Solutions

- Focus: Where should communities look for funding or government partnerships to implement innovative and sustainable transportation infrastructure? How do we make sure that funding is available to historically disadvantaged communities and that funded projects represent community needs? Shifting gears, is the workforce ready to support the deployment of sustainable transportation infrastructure? What type of initiatives are needed to tackle labor shortages or skill gaps? How do we increase diversity in the transportation workforce?
- **Panelist Remarks:** 1:30-2:30 p.m.
 - Can Chen, Associate Professor, Andrew Young School of Policy Studies, Georgia State University
 - Celeste Chavis, Interim Chair & Professor, Transportation and Urban Infrastructure Studies, Morgan State University
 - Kate Lowe, Associate Professor, Urban Planning and Policy, University of Illinois Chicago
 - Courtney Carson, Associate Vice President of External Affairs, Richland Community College
- **Group Discussion:** 2:30-3 p.m.

3-3:15 p.m. – Break







3:15-4:45 p.m. – Wrap Up and Visioning

• Goal: Outcomes and lessons from each panel are introduced and discussed in turn, including displaying the visualization of the session notes. Research gaps and open questions from the four panels will be discussed, and participants will be asked to suggest directions for future research.

4:45-5 p.m. - Closing







Our Keynote Speaker

Keynote Address — 5:30-6:30 p.m., Thursday, May 16

Susan Handy

Distinguished Professor of Environmental Science and Policy, University of California Davis



Presentation Title: Shifting Gears: Toward a New Way of Thinking About Transportation

Abstract: The transportation system in the U.S. has been shaped by a core set of ideas that are embedded in professional practice. These ideas — freedom, speed, mobility, vehicles, capacity, hierarchy, separation, control, and technology — have produced a system in which most people are dependent on driving, with all the negative consequences that entails. Shifting to a system that is both equitable

and sustainable requires a shift in thinking on the part of the transportation profession. In this talk, Handy takes a critical look at the way of thinking that, for the last century, has shaped our transportation system and consider the ways in which that thinking is — and is not — shifting.

Bio: Handy is Director of the National Center for Sustainable Transportation at the UC Davis, where she also chairs the graduate program in Transportation Technology and Policy. Her research focuses on strategies for reducing automobile dependence, including bicycling as a mode of transportation. She is the author of Shifting Gears, published by MIT Press. More about Handy at this link.







Our Plenary Speaker

Plenary Address — 9:30-10:30 a.m., Friday, May 17

Jessika Trancik

Professor, Institute for Data, Systems, and Society, Massachusetts Institute of Technology

Presentation Title: Who will Benefit from the Decarbonization of Transportation? Examples from Research on Vehicle Electrification

Abstract: How can transportation system inequities be addressed — and what are the risks if we do not address them? There are plenty of lessons to be learned from MIT research that has examined (and quantified) the adoption potential of electric vehicles.



Bio: Trancik's research examines the dynamic costs, performance, and environmental impacts of energy systems to inform climate policy and accelerate beneficial and equitable technology innovation. Her projects focus on all energy services including electricity, transportation, heating, and industrial processes. This work spans solar energy, wind energy, energy storage, low-carbon fuels, electric vehicles, and nuclear fission among other technologies. More about Trancik at this link.







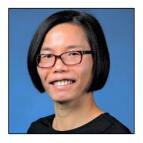
Session 1A — Equity Bottlenecks in Sustainable Transportation Systems

Nina Idemudia

Bio: A native Detroiter, Idemudia understands firsthand how the built environment shapes the lives of society's most vulnerable. This fuels her passion for empowering people to be change agents through urban planning. Previously, she was Chicago Recovery Plan Director for the city's Department of Planning and Development, where her primary focus was to ensure equitable grant distribution across 11 critical program initiatives supporting economic revival. More about Idemudia at this link.



Jane Lin



Bio: Lin's research interest lies in sustainable transportation with a focus on environmental sustainability analysis and design of transportation systems via advanced data analytics and systems modeling. She focuses on mobile source emissions and air quality modeling and health exposure analysis, green freight transportation and logistics, and sustainable emerging mobility enabled by information technology. She is the Editor of Transport Policy. More about Lin at this link.

Sophie Young

Bio: Young is an environmental and community planner. She works on advancing a just transition for school bus electrification, advising teams on equitable research methods, stakeholder engagement, and program design. She previously led a climate and environmental justice grant program, Transformative Climate Communities, at the California Strategic Growth Council. She also was an environmental planner on transportation and land use projects. More about Young at this link.



Yan (Joann) Zhou



Bio: Zhou assesses energy and emission impacts of advanced vehicle, fuel, and mobility technologies. She also analyzes market and technology trends for transportation electrification in the U.S. and China. Her research interests include vehicle technologies, alternative fuels, freight modes, energy systems/technologies, mobility trends, and behaviors (e.g., travel and refueling from local, regional, and national system perspectives.) More about Zhou at thislink.







Session 1B — What Sustainable Transportation Opportunities Contribute to Increasing Equity?

José Acosta-Córdova

Bio: Acosta-Córdova leads the Transportation & Mobility Justice program at LVEJO, which works on issues related to freight, EJ, and mobility justice at the local, state, and national levels. He is also the co-chair of the Transportation Equity Network (TEN) in Chicago. He is currently a Ph.D. candidate in Geography & GIS at the University of Illinois. He was raised by social justice activists, and has been around the EJ movement since he was 3 years old. More about Acosta-Córdova at this link.



Sergio Castellanos



Bio: Castellanos leads the RESET (Rapid, Equitable & Sustainable Energy Transitions) Lab, analyzing just decarbonization pathways for emerging economies, data-driven sustainable transportation approaches, and equitable local energy transitions. His interdisciplinary projects have received international recognition, and recently he received the 2023 Cesar Chavez "Si Se Puede" Award for his transformative work to help better communities in Austin. More about Castellanos at this link.

Jason Osborn

Bio: Osborn was named to his current position in 2022 after more than 20 years in the transportation field. Prior to joining IDOT, he worked at Metra, leading system and performance analytics, Title VI conformity and GIS development. His areas of expertise include long-range planning, project management, transportation policy, economic development, and public administration. More about Osborn at <a href="https://doi.org/10.1007/jhis.2007/jh



Olatunji Oboi Reed



Bio: Reed works globally as a racial equity tactician, increased mobility advocate, and racial justice activist. His passion lies at the intersection of community, culture, and health. With an extensive background in both nonprofit management and corporate social responsibility, he is most proud of his work to create a diverse coalition of people, organizations, and businesses all working together to achieve racial equity and mobility justice across the City of Chicago. More about Reed at this link.







Session 2A — Putting Potential Solutions into Operation: Startups and Local Initiatives

Robert Blake

Bio: Blake is the owner of Solar Bear, pronounced Gizis-o-makwa in Ojibwe, a solar development company located in Minneapolis, and the Executive Director of Native Sun, a Minneapolis nonprofit. He is a tribal citizen of the Red Lake Nation. His passion is spreading the word about renewable energy through communication, cooperation, and collaboration. More about Blake at this link.



Shelley Francis



Bio: With EVNoire, an award-winning, tech consultancy working on electric, connected, shared, and autonomous vehicle solutions, Francis uses her expertise to integrate emobility best practices, diversity, equity, inclusion, and public health into the transportation sector. She founded EVHybridNoire, the nation's largest network of diverse EV drivers and enthusiasts, focused on increasing EV adoption and awareness in under-represented communities. More about Francis at this link.

Edith Makra

Bio: Makra directs sustainability initiatives for the Caucus, a coalition of 275 mayors in the greater Chicago region. She developed the Greenest Region Compact, a consensus sustainability pledge now adopted by 159 Chicago-area communities — the largest regional municipal sustainability collaborative in the U.S. She led creation of the Chicago region's first climate action plan and is now leading municipalities to prepare for transportation electrification. More about Makra at this link.



Madeline Zhu



Bio: Zhu leads the programmatic work for the Strengthening Mobility and Revolutionizing Transportation (SMART) Grants Program, a \$500 million discretionary grant program investing in transportation technology demonstrations, which is operated out of the Office of the Secretary of Transportation, Research. SMART was created in the Bipartisan Infrastructure Law and is the nation's largest investment in smart cities and communities. More about Zhu at this link.



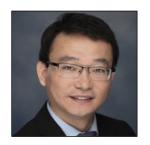




Session 2B — Catalyzing New Solutions

Can Chen

Bio: Chen founded and leads GSU's Infrastructure Finance & Policy Lab, and his research expertise is in transportation finance and policy. He has published a <u>book on innovative infrastructure finance</u> and over 40 peer-reviewed articles and chapters. Chen serves on the standing committee of the Transportation Economic and Finance of Transportation Research Board and on the executive board for the Association of Budgeting and Financial Management. More about Chen at <u>this link</u>.



Celeste Chavis



Bio: Chavis, a licensed Professional Engineer, does research focused on transportation operations, safety, and performance metrics for multimodal transportation systems through an equity lens. Her recent work includes topics on food access, public transit operations, pedestrian and bicycle safety, and travel behavioral modeling. She also recently co-chaired Baltimore Mayor Brandon Scott's Transportation and Infrastructure Transition Committee. More about Chavis at this link.

Kate Lowe

Bio: Lowe studies transportation at the intersection of policy, funding, and mobility justice. Her work examines how varied stakeholders and transportation policies interact across different levels of government and how this impacts transportation investments and racial inequities. She also conducts qualitative research on lived experiences of mobility and accessibility for low-income populations and Black and Brown communities. More about Lowe at this link.



Courtney Carson



Bio: The Rev. Carson also serves as an ordained Minister at Love Fellowship Christian Church, State Spokesperson for the Rainbow Push Coalition, President of the Southside Improvement Association, Political Strategist, and the creator of the award-winning trauma-sensitive workforce training program known as EnRich, which has helped more than 3,000 adults in the Decatur community earn at least 30% higher than the average living wage. More about Rev. Carson at this link.