



Meeting of the
President's Council of Advisors on Science and Technology (PCAST)
September 12, 2024

Invited Speaker Biographies, in order of Presentation

Session: The Future of Transportation

Kara Kockelman, Dewitt Greer Centennial Professor in Transportation Engineering, Fairborz Maseeh Department of Civil, Architectural & Environmental Engineering, The University of Texas at Austin

Kara Kockelman is a registered professional engineer and holds a PhD, MS, and BS in civil engineering, a master's in city planning, and a minor in economics from the University of California at Berkeley. She has been a professor of transportation engineering at the University of Texas at Austin for 26 years, and is Associate Site Director of the NSF Industry-University Cooperative Research Center for Efficient Vehicles and Sustainable Transportation Systems. She has received an NSF CAREER Award, Google Research Award, MIT Technology Review Top 100 Innovators Award, Vulog's Top 20 of 2020 Influential Women in Mobility, and various ASCE, NARSC, TRF, and WTS awards. She recently served as President of the North American Regional Science Association and sits on various editorial boards, as well as the Eno Center for Transportation's Advisory Board, TRB's Autonomous Vehicles Committee, and the International Association of Travel Behavior Research's Board. She has authored over 230 journal articles (and two books), and her primary research interests include planning for shared and autonomous vehicle systems, the statistical modeling of urban systems, energy and climate issues, the economic impacts of transport policy, and crash occurrence and consequences. Pre-prints of these articles (and book contents) can be found at www.cae.utexas.edu/prof/kockelman.

Ben Levine, Deputy Assistant Secretary for Research and Technology, Department of Transportation

Ben Levine serves as the Deputy Assistant Secretary for Research and Technology at the U.S. Department of Transportation. Prior to joining the U.S. DOT in 2021, he served as the founding

Executive Director of MetroLab Network, a non-profit focused on leveraging research to address policy priorities in cities. Ben previously worked in infrastructure finance, in roles at the U.S. Department of the Treasury and at Morgan Stanley. Ben holds a Bachelor of Science from the Wharton School at the University of Pennsylvania.

Steve Armato, Vice President, Amazon Transportation Services (ATS) Product & Technology, Amazon

Steve Armato is Vice President, Amazon Transportation Services (ATS) Product & Tech. These teams encompass three aspects of Amazon's Transportation network: 1) Core Transportation systems and products that drive the Middle Mile including Line Haul, Cross Docks, Sort Centers and Air; 2) Service Provider products enabling Amazon to work with third party service providers at scale through programs such as Amazon Freight Partners and Relay; and 3) Transportation Services for shippers and sellers to leverage Amazon's transportation capabilities for their own logistics needs.

We work with over 50,000 service partners – many of whom are small- and- medium sized businesses – enabling them to grow their businesses by transporting items on behalf of Amazon. You can learn more about some of our transportation product offerings here: Relay (relay.amazon.com), Amazon Freight Partner (freightpartner.amazon.com), Amazon Shipping (shipping.amazon.co.uk), Amazon Freight (freight.amazon.com) and Veeqo (veeqo.com).

With over two decades experience at Amazon, Steve has a passion for innovating on behalf of customers particularly at the intersection of technology, science, and operations. Prior to his current role he spent a decade in Amazon's Fulfillment and Supply Chain Optimization group, building large-scale predictive systems and optimization algorithms to optimize Amazon's inventory supply chain including predictive inventory placement, customer order assignment, capacity planning, and topology. Steve holds a B.S. in Computer Science from Duke University.

Session: Infrastructure, Planning and Implementation

Rachael Nealer, Deputy Director, Joint Office of Energy and Transportation

Dr. Rachael Nealer is the deputy director for the Joint Office of Energy and Transportation. She also chairs the Transportation Research Board's Alternative Fuels and Technologies Committee. Throughout her career, she has focused on researching transportation as a system of systems and developing strategies around how to decarbonize transportation through technology development in concert with supporting policies.

Previously, she held various positions, including deputy director of transportation technology and policy for the White House Council on Environmental Quality and senior advisor and chief of staff for the U.S. Department of Energy's Bioenergy, Hydrogen and Fuel Cell, and Vehicle Technologies Offices. She has also worked in the nonprofit sector, at the Union of Concerned Scientists, researching the

lifetime environmental impacts of electric vehicles compared to gasoline vehicles. Before that, she worked at the U.S. Environmental Protection Agency's Renewable Fuels Standard Office.

She received her joint doctorate in civil and environmental engineering and engineering and public policy from Carnegie Mellon University, where she specialized in the lifecycle environmental impacts of transportation.

Zachary Kolodin, Chief Infrastructure Officer & Director of the Michigan Infrastructure Office

Zachary Kolodin is the Chief Infrastructure Officer for the State of Michigan and Director of the Michigan Infrastructure Office (MIO), leading efforts to secure federal infrastructure dollars in Michigan and coordinate and deploy infrastructure strategies. Under his leadership, the MIO developed a Technical Assistance Center to help local stakeholders access infrastructure dollars.

Previously, Kolodin served as deputy legal counsel and public policy counsel for Gov. Whitmer, managing a broad portfolio of legal issues, including public health, labor, tax, and insurance. In this role, Kolodin led the OLC relationship with the legislature during the Whitmer Administration's first term and coordinated the drafting of emergency orders to save lives during the COVID-19 pandemic.

Before joining the Executive Office, Kolodin served in a variety of roles and organizations including a private legal practice in New York City, a law clerk for a federal judge, AmeriCorps, Living Cities and Echoing Green. Kolodin also served as a program administrator at the Roosevelt Institute, a New York City-based think tank, to develop the Budget for the Millennial in America and co-author the Blueprint for Millennial America.

While in law school, Kolodin worked on a team to develop climate finance tools to raise the financial capital necessary to mitigate and adapt to climate change and assisted with research on victim compensation due to environmental disasters.

Nathaniel Ford, CEO, Jacksonville Transportation Authority

Nathaniel P. Ford Sr. is an award-winning transportation expert and leading advocate for how autonomous vehicles (AV) and other advances can be used to improve the quality of life for travelers throughout the nation. His proven track record as a change-agent and visionary who embraces state-of-the-art technology and innovations has made him a highly sought after advisor, consultant, and executive coach.

Ford began his stellar career at the Metropolitan Transportation Authority (MTA) in New York, where he learned every facet of the industry before he went on to become CEO of two of the 10 largest transportation authorities in the US - the San Francisco Municipal Transportation Agency (SFMTA) in California, and the Metropolitan Atlanta Rapid Transit Authority (MARTA) in Georgia.

One of Ford administration's crowning achievements is developing an autonomous vehicle program centered on the JTA's Ultimate Urban Circulator (U2C). The cutting-edge innovation was in the world

spotlight during the COVID pandemic when the JTA partnered with autonomous vehicle providers to transport COVID-19 tests for Florida's esteemed Mayo Clinic. Phase I of the U²C, the Bay Street Innovation Corridor, is under construction, with full deployment of the autonomous vehicles scheduled for Summer 2025.

Ford served as the 2022 Chair of the prestigious Transportation Research Board (TRB), a division of the National Academies of Sciences, Engineering, and Medicine. He is a former chair of the influential American Public Transportation Association (APTA). This year, he began serving as National Ambassador, USA, for the Union Internationale des Transports Publics (UITP) Policy Board for 2023-25. The global organization advocates for sustainable mobility. In addition, this year he was appointed to serve on the Board of Directors of ITS America, and to the Board of Advisors for UC Davis, Institute of Transportation Studies.

Earlier this year Ford received the 2023 Sharon Banks Award for Humanitarian Leadership in Transportation. Other notable awards include: the Honorable Ray LaHood Award from the Women's Transportation Seminar of Northeast Florida in 2022, and the "2020 Outstanding Public Transportation Manager" by APTA. In 2019, he was inducted as a "Thought Leader" by the Eno Center for Transportation, and in 2016, Ford was named a "White House Champion of Change in Transportation" by the US Department of Transportation for embracing innovations and improving the quality of all modes of transit, same year that under his leadership the JTA received the "Outstanding Public Transportation System Achievement Award" by APTA.

Ford has an MBA from Jacksonville University's Davis School of Business. He also has a Bachelor's degree in Applied Science in organizational leadership from Mercer University, and is a certified Master Executive Coach. He is a graduate of the Executive Development Consortium Program at Emory University and has completed executive training at the John F. Kennedy School of Government at Harvard University.

Session: Innovation Leading to Opportunities

Edwin Olson, Co-founder & CEO, May Mobility

Edwin Olson is co-founder and CEO of May Mobility, Inc. He has focused on the development of autonomous vehicles for more than two decades, co-leading autonomous vehicle development at Toyota Research Institute and helping to develop Ford Motor Company's autonomous vehicles. He has a doctorate in electrical engineering and computer science from MIT and is a professor of computer science at the University of Michigan. Olson got his start in autonomous technology participating in the DARPA Urban Challenge in 2007 as part of the MIT team. He was named New Enterprise Forum's 2024 Entrepreneur of the Year and was one of Crain's Detroit Business' Notable Leaders in Energy in 2023.

Dr. Paul E. Krajewski, Director, Connected Vehicle Experience Research at the General Motors Global Research and Development Center

Dr. Paul E. Krajewski is the Director of Connected Vehicle Experience Research at the General Motors Global Research and Development Center. His laboratory is responsible for R&D in a variety of areas including Interior and Safety Systems, Connectivity, User Experience, Cybersecurity, Displays, Biosensing, and Accessibility. Paul also represents GM as the USCAR Leadership Group Director, as a JOG member for USDRIVE, and as the Technical Director for HRL Laboratories. Dr. Krajewski received his Bachelors and Doctorate in Materials Science and Engineering from the University of Michigan and has led production implementations with aluminum, magnesium, and carbon fiber composites including body panels on the 2014 Corvette Stingray. Dr. Krajewski has 77 publications and has been awarded 79 US Patents. He has been recognized by Fortune Magazine (40 under 40) and MIT's Technology Review (TR100) as a leading innovator, is a Fellow of ASM International, and has won numerous automotive industry innovation awards. He was inducted into the National Academy of Engineering in 2020. Paul has also published three children's STEM / STEAM books entitled "What's In Your Car" and " What's In Your Body" and "What's In Your Plane".

Luke Polcyn, Senior Executive for Development & Economic Transformation with the City of Detroit Mayor's Office

Luke Polcyn is the Senior Executive for Development & Economic Transformation with the City of Detroit Mayor's Office. Under the leadership of Mayor Duggan, Luke is tasked with building the strategic partnerships, systems, innovation districts, and infrastructure that make it possible for high-growth, tech-enabled companies and their talent to thrive in Detroit. His past and present work in Detroit also centers on public-private partnerships, land reuse, brownfield redevelopment, land assembly, public finance, development authorities, and land banks. He is a graduate of the University of Michigan and Georgetown Law.