Three revolutions are underway in urban transportation around the world: vehicle electrification, automation, and shared (on-demand) mobility. How each of these unfolds, and how they interact, will have major implications for transportation patterns, energy use, and CO₂ emissions over the coming decades. Recent trends and potential future directions suggest a wide range of possible impacts and a strong need to pursue policies that move these revolutions in societally optimal directions. This presentation covers a range of issues, trends and recent research in this area.

Fulton has worked internationally in the field of transport/energy/environment analysis and policy development for thirty years. He is director of the Sustainable Transportation Energy Pathways (STEPS+) program within the Institute of Transportation Studies at the University of California, Davis. There he leads a range of research activities around new vehicle technologies and new fuels. He was a lead author on the recent IPCC 5th Assessment Report, Mitigation (“Climate Change 2014: Mitigation of Climate Change”, transport chapter). Current projects include analyses of electric vehicles, shared mobility, automation, and other drivers of transportation futures.