The Governance of Emerging Technologies and Science (GETS) ASU/Sandra Day O'Connor College of Law

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Authors: Farah Najar Arevalo (presenter), Thaddeus Miller, Devon McAslan, David King

Title: Emerging Technologies in Urban Mobility: A Qualitative Analysis of Regional Planning in

the USA

Author email: fnajarar@asu.edu

Abstract

Metropolitan Planning Organizations (MPOs) are the regional agencies mandated to undertake long range transportation planning. This requires forecasting and anticipating transportation behavior changes, social and demographic changes, and technological advancements. In the last ten years, MPOs have also faced emerging technologies in urban mobility such as: ride-hailing, mobility on demand, micromobility, electrification, and increasingly, new technologies like connected and autonomous vehicles (CAVs) or new services like mobility-as-a-service (MaaS). These rapid changes challenge an MPO's capability to plan and the jurisdictional boundaries where these technologies start to operate. This research explores how different regions in the USA are currently planning for emerging technologies in transportation. In our analysis of MPOs, we look to two main sources of information within a sample of 35 MPOs: (1) regional transportation plans and supplemental plans focusing on emerging technologies and smart region planning and (2) semi structured interviews with planners at MPOs engaged in planning for emerging technologies. We identify key actions and planning approaches to understand how regions are navigating their governance task within the context of rapid technological change. We identify capacities, policy approaches, and new roles that MPOs are taking on regarding their interactions with state departments of transportation and cities and towns within their planning jurisdictions.