## **Exhibit D**

## **Research Project Requirement Template**

## **Future Travel Foresight Catalyst**

Recipient/Grant (Contract) Number: The University of Texas at Austin/Grant # 69A3552344815 and

69A3552348320

**Center Name:** Center for Understanding Future Travel Behavior and Demand (TBD)

**Research Priority:** Improving Mobility of People and Goods

Principal Investigator(s): Andrew Maynard

**Project Partners:** N/A

**Research Project Funding:** \$150,000 (Federal + non-Federal funding)

**Project Start and End Date:** 6/1/2024 - 5/31/2025

**Project Description:** A growing number of advanced technologies -- including AI, automation, robotics, spatial computing, quantum technologies, and more -- have the potential to revolutionize future travel behavior and demand. However successfully navigating the intersection between travel, emerging technologies, and a changing society, will demand bold new ideas and insights. Building on and integrating with the work of the ASU Future of Being Human initiative, the Future Travel Foresight Catalyst project will utilize a blended model of research, engagement, thought leadership, and knowledge mobilization, to catalyze innovative and integrated thinking at scale around future travel behavior and demand. The project combines futures methodologies with cutting edge use of media platforms such as podcasts, articles, videos, and more, to engage across diverse communities and stimulate new and transformative thinking around future travel behavior and demand.

The Future Travel Foresight Catalyst project explicitly responds to a growing recognition that siloed approaches to research, development, dissemination, learning/education, and engagement, are inadequate to ensure ground-breaking and responsive advances within increasingly complex sociotechnical ecosystems. These form a landscape that is dominated by fast moving innovation, radical entrepreneurship at the interstices between ideas and capabilities, rapidly shifting social norms and expectations, and governance and regulatory tools and frameworks that are struggling to play catchup with reality. To better understand the future of travel behavior and demand there is an urgent need for initiatives that intentionally blur the lines between research, development, and knowledge mobilization, in order to catalyze new thinking and ideas while revealing novel and potentially transforming pathways forward. Such initiatives need to be unconstrained by conventional disciplines, while facilitating knowledge discovery and mobilization within areas of expertise that are substantially enhanced through exposure to ideas from other areas.

The urgency with which such initiatives are needed is underlined by the rapidity with which transformative technologies are emerging that defy conventional categorization, together with the growing complexity surrounding responsible and beneficial innovation and the erosion of public trust in a highly complex sociotechnical ecosystem. This rapidly changing landscape is being addressed directly through transdisciplinary approaches such as responsible innovation, risk innovation, principled innovation, participatory technology assessment, agile governance, and innovative approaches to public engagement. These and other transdisciplinary foundations and frameworks draw heavily on novel initiatives at the intersection between research and development, public engagement, and knowledge mobilization.

By partnering with initiatives that include the ASU Future of Being Human initiative and the ASU Risk Innovation Nexus, and by drawing on leading expertise at the forefront of responsive and innovative

knowledge mobilization, the Future Travel Foresight Catalyst project will uniquely extend understanding around the future of travel behavior and demand through exploring and expanding on emerging ideas across a number of public-facing platforms and modalities.

Phase one of this project started early in 2024 and focused on capacity building. The second phase of the project will focus on building and applying foresight catalyst approaches that will best serve TBD while integrating with parallel initiatives within the ASU Future of Being Human initiative and elsewhere. This will include developing strategies for foresight-based knowledge mobilization that include leveraging public articles, podcasts, and video, while also developing unique and impactful platforms. It will include developing networks within TBD and beyond that provide effective conduits for ideas and insights to flow between researchers and external stakeholders. Here, the nature of a foresight catalyst model will be further developed and tested within TBD. In this phase, articles and other media products will be produced in collaboration with the ASU Future of Being Human initiative that are integral to the project's role within TBD as a foresight catalyst. Deliverables from the project will include public facing outputs across multiple media platforms, including Substack, podcasts, and video.

**US DOT Priorities:** The Foresight Catalyst project brings an innovative approach to technology transfer and deployment that builds on a foundation of scholarship around socially responsible and successful innovation within a socially and technologically complex and evolving landscape, and that aligns closely with the DOT T2 program. It draws on scholarship that strongly indicates transdisciplinary approaches to knowledge mobilization are needed that account for public trust, societal value, agile governance, novel risks, and effective public engagement.

The project directly addresses the DOT T2 need to "ensure that ... R&D results are made widely available to other scientists, to the public to facilitate understanding and decisions, and to innovators and entrepreneurs who can translate them into the businesses and products that will improve all of our lives." Through its public facing model it "advances the deployment of people-centered technology solutions that make our transportation system safer, more efficient, more equitable, and more sustainable."

**Outputs:** The Future Travel Foresight Catalyst project is focused on producing public outputs that catalyze thinking and action around the future of travel behavior and demand. These will include:

- Web-based platforms
- Articles
- Blog posts
- Podcasts and podcast episodes
- Videos
- On-campus engagement with students and researchers

The precise number and nature of outputs will depend on iterations in the approaches taken based on continuous feedback and improvement. Outputs will be aligned with key outcomes.

**Outcomes/Impacts:** Anticipated outcomes include: elevated public awareness of emerging research and thinking around the future of travel behavior and demand, public dialogue around new and emerging research, concepts, and ideas, new and transformative thinking and ideas amongst researchers within TBD around knowledge production and mobilization, and new and transformative thinking and ideas amongst a broader research and practice community

The Future Travel Foresight Catalyst is focused on catalytically translating emerging research and ideas into impact. Anticipated impacts include thought leadership, novel ideas and futures-thinking informing and guiding research and knowledge mobilization, leading to greater research impact and informed decisions on the future of transportation. This extends to understanding the future of travel behavior and demand in ways that support evidence-based, socially responsive, and futures-focused decision making.

**Final Research Report:** A URL link to the final report will be provided upon completion of the project.