CENTER FOR ADVANCING RESEARCH IN
Transportation Emissions, Energy, and Health
A USDOT University Transportation Center

Call for Problem Statements

Overview

The Center for Advancing Research in Transportation, Emissions, Energy, and Health University Transportation Center (CARTEEH) will be accepting problem statements for its competitive research program this fall.

Application template: CARTEEH Problem Statement Application

Deadline: Differs for each consortium member. Please check with your institutional contact(s) (see table below) for the deadline applicable to you. Submittals of the Problem Statement Form are also due to your institutional contact(s) via email.

Institution	Contact(s) for Problem Statement Submittal	Email
Texas A&M Transportation Institute	Tara Ramani Monica Ocon	t-ramani@tti.tamu.edu m-ocon@tti.tamu.edu
Georgia Tech	Randall Guensler	randall.guensler@ce.gatech.edu
University of California, Riverside	Kanok Boriboonsomin	Kanok.boriboonsomin@ucr.edu
Johns Hopkins University	Mary Fox	mfox9@jhu.edu
University of Texas at El Paso	Wen-Whai Li	wli@utep.edu
Morehouse School of Medicine	Robert Mayberry Pamela Daniels	rmayberry@msm.edu pdaniels@msm.edu
North Dakota State University	Jeremy Mattson	Jeremy.w.mattson@ndsu.edu

Research Program Priority Areas

CARTEEH seeks to advance research that is policy-relevant and supports education, workforce development, and technology transfer activities. We encourage proposers to review current and recently completed center activities on our website https://www.carteeh.org/and propose work that builds on or complements them. We also encourage proposers to familiarize themselves with CARTEEH's work on the pathways between transportation and health to contextualize the priorities of this RFP.

For this current call for proposals, CARTEEH seeks to fund research that aligns with at least one of the following thrust areas:

1. Integration of Disciplines – This research thrust focuses on interdisciplinary research in health and transportation, especially integration of science from multiple disciplines. This includes, but is not limited to, integrated modeling of transportation emissions and health impacts focusing on the "full chain", (i.e. emissions, dispersion, exposure, health impacts).
2. Technologies and Disruptors – Transportation continues to rapidly evolve, and technological advances ranging from transportation-specific ones (such as electrification or zero emissions technologies and automation) to broader tools and technologies like AI, advanced sensors, etc. could all impact this evolution. This research thrust focuses on addressing the role of these technologies and disruptors in the future of transportation and their implications on health equity, as well as using applicable technologies like AI as tools to advance our research and utilize emerging and large datasets.
3. Advancing Health Equity – This research thrust focuses on advancing the health benefits of transportation technologies and systems for all, while also mitigating potential harm(s). This research thrust will emphasize capturing and communicating the differential impacts on individuals and groups (characterized by geography, race/ethnicity, age, gender, sexual-orientation, income and social status) and communities (characterized as racially/ethnically hyper-segregated, underserved, disadvantaged, and health vulnerable) which are traditionally excluded and unengaged in efforts to study the impact of transportation on health.
4. Broader Impacts of Transportation – This research thrust considers the broader impacts of transportation given the highly interconnected nature of transportation and society. Research addressing multiple transportation-health pathways, instead of only focusing on emissions, is a priority including the integrated modeling of other pathways, their interactions and health impacts. Addressing transportation emissions in a holistic manner, for example, considering the full life cycle and non-exhaust emissions from vehicles, also align with this thrust area.