



Mineta Consortium for Equitable, Efficient, and Sustainable Transportation

Tier 1 UTC Grant Application

Research Priority: Improving the Mobility of People and Goods

Primary USDOT Strategic Goal: Equity

Secondary USDOT Strategic Goals: Climate and Sustainability, Economic Strength and Global Competitiveness



MCEEST

Mineta Consortium for
Equitable, Efficient, and
Sustainable Transportation

Lead Institution:

Mineta Transportation Institute
San José State University
San José, CA 95112

SJSU SAN JOSÉ STATE
UNIVERSITY

Howard University
Washington, DC 20059
MI: HBCU

Navajo Technical University
Crownpoint, NM 87313
MI: TCU

University of South Florida
Tampa, FL 33620



D. 2.2.2 RESEARCH ABSTRACT

The Mineta Consortium for Equitable, Efficient, and Sustainable Transportation (MCEEST), led by the Mineta Transportation Institute at San Jose State University, will conduct research, education, workforce development, and technology transfer activities to **improve mobility of people and goods**. MCEEST's work will advance equitable, efficient, and sustainable transportation so people in every community can *connect* to the people, places, and opportunities that make their lives meaningful.

At the core of these connections, MCEEST will unify and focus the efforts of four outstanding institutions—including two Minority Institutions and a minority-serving institution—that represent and support the geographical, cultural, racial, and socioeconomic diversity that makes our nation strong: Howard University (an HBCU); Navajo Technical University (a TCU); San José State University; and the University of South Florida. MCEEST partners serve as models for how to build pathways to transportation careers that serve underrepresented populations.

MCEEST's research agenda places equity, safety, and sustainability at the forefront and will proceed with a primary focus on advancing the USDOT Strategic Plan goals of **Equity**, with **Climate and Sustainability** and **Economic Strength and Global Competitiveness** as secondary strategic goals. To that end, this Consortium is designed to foster synergies between leaders in transportation planning, policy, and engineering, each with a long and distinguished track record of innovative, multimodal, and transformative solutions that meet our nation's mobility challenges and promote connections between local and national communities.

Many of the planned research projects focus on efforts to expand access and broaden participation in our nation's transportation systems and workforce by improving understanding and facilitating connections, especially with traditionally underserved communities. Projects will use data and public opinion to inform policy, infrastructure, and technology benefiting diverse communities, including bicyclists and pedestrians, urban and rural regions, women and gender-nonconforming people, and others, to **address equity and barriers to opportunity**. These projects explore some of the most pressing, and sometimes painful issues, in our communities—including mental health and human trafficking—to find solutions that will make transportation more accessible, effective, and safer, thereby increasing access to jobs, housing, and services for all.

MCEEST will also focus on reducing the impact of transportation on climate change and building a more resilient supply chain able to withstand negative effects of a shifting climate. Projects will quantify the impacts of transit and multimodal mobility on land use, VMT, and GHG emissions and identify strategies to reduce GHG emissions and alleviate other negative environmental and human health outcomes associated with goods movement. MCEEST's research will help develop options to build sustainable freight systems so that local and regional governmental agencies can meet ambitious climate, safety, and equity goals.

To ensure MCEEST's research results will have real-world impact, MCEEST will use a diverse array of dissemination methods and media to reach those responsible for implementing change. These methods will include publication, seminars, workshops,

websites, social media, webinars, and other technology transfer (T2) mechanisms and the development and implementation of programs such as a **visiting scholar series**, a **Startup Accelerator Program**, mentorship, **free or low-cost professional development programs**, and more.

Developing a transportation workforce that possesses the skills needed to plan, design, deploy, operate, and maintain transportation systems that may not even exist today presents a unique and exciting challenge, but carefully developed workforce development programs implemented by experts creates a pipeline of opportunities to educate the next generation and meet critical workforce needs. Our interdisciplinary degree programs and other learning experiences engage individuals from K-12 to mid-career through a well-developed workforce program that will empower students, faculty, other partners, and the transportation community to learn from each other, and reshape our workforce and our nation.

MCEEST projects will incorporate research findings into workforce development curricula and provide opportunities for students to move beyond theoretical (and often traditional) classroom instruction. MCEEST partners will **emphasize project-based, hands-on, experiential learning designed to engage students** and provide opportunities for educational and professional development.

It is not an overstatement to say that transportation of people and goods is the cornerstone of our economy, but it is also at the core of human existence when we consider that transportation—the movement of people and goods—is *connection*. Transportation connects people to their places of work and play, to their families, their food, their livelihoods. Indeed, the difference between having and lacking mobility is the difference between having and lacking opportunity, not only economic opportunities but also educational, social, and, ultimately, opportunities to experience life. MCEEST will develop and support projects led by industry experts that foster connections of all kinds—connections to urban and rural regions, to our vulnerable communities, and to our planet as we fight the negative impacts of global climate change. By improving our understanding of what it means *to be connected*, to goods and to other people, we can transform the lives of people today and in the future.

“ Our founder, Secretary Norman Y. Mineta, thought University Transportation Centers were a critical part of the Federal government's commitment to transportation. He encouraged MTI to perform ground-breaking research, champion equity in transportation, and—most of all—produce graduates who would go on to contribute to the transportation industry. This proposal intends to continue his legacy.

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