# Sixteenth Annual Garrett Morgan Sustainable Transportation Symposium







MTI Report S-16-01







# MINETA TRANSPORTATION INSTITUTE

The Mineta Transportation Institute (MTI) was established by Congress in 1991 as part of the Intermodal Surface Transportation Equity Act (ISTEA) and was reauthorized under the Transportation Equity Act for the 21st century (TEA-21). MTI then successfully competed to be named a Tier 1 Center in 2002 and 2006 in the Safe, Accountable, Flexible, Efficient Transportation Equity Act: A Legacy for Users (SAFETEA-LU). Most recently, MTI successfully competed in the Surface Transportation Extension Act of 2011 to be named a Tier 1 Transit-Focused University Transportation Center. The Institute is funded by Congress through the United States Department of Transportation's Office of the Assistant Secretary for Research and Technology (OST-R), University Transportation Centers Program, the California Department of Transportation (Caltrans), and by private grants and donations.

The Institute receives oversight from an internationally respected Board of Trustees whose members represent all major surface transportation modes. MTI's focus on policy and management resulted from a Board assessment of the industry's unmet needs and led directly to the choice of the San José State University College of Business as the Institute's home. The Board provides policy direction, assists with needs assessment, and connects the Institute and its programs with the international transportation community.

MTI's transportation policy work is centered on three primary responsibilities:

#### Research

MTI works to provide policy-oriented research for all levels of government and the private sector to foster the development of optimum surface transportation systems. Research areas include: transportation security; planning and policy development; interrelationships among transportation, land use, and the environment; transportation finance; and collaborative labor-management relations. Certified Research Associates conduct the research. Certification requires an advanced degree, generally a Ph.D., a record of academic publications, and professional references. Research projects culminate in a peer-reviewed publication, available both in hardcopy and on TransWeb, the MTI website (http://transweb.sjsu.edu).

#### **Education**

The educational goal of the Institute is to provide graduate-level education to students seeking a career in the development and operation of surface transportation programs. MTI, through San José State University, offers an AACSB-accredited Master of Science in Transportation Management and a graduate Certificate in Transportation Management that serve to prepare the nation's transportation managers for the 21st century. The master's degree is the highest conferred by the California State University system. With the active assistance of the California

Department of Transportation, MTI delivers its classes over a state-of-the-art videoconference network throughout the state of California and via webcasting beyond, allowing working transportation professionals to pursue an advanced degree regardless of their location. To meet the needs of employers seeking a diverse workforce, MTI's education program promotes enrollment to under-represented groups.

# **Information and Technology Transfer**

MTI promotes the availability of completed research to professional organizations and journals and works to integrate the research findings into the graduate education program. In addition to publishing the studies, the Institute also sponsors symposia to disseminate research results to transportation professionals and encourages Research Associates to present their findings at conferences. The World in Motion, MTI's quarterly newsletter, covers innovation in the Institute's research and education programs. MTI's extensive collection of transportation-related publications is integrated into San José State University's world-class Martin Luther King, Jr. Library.

#### **DISCLAIMER**

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# **REPORT S-16-01**

# SIXTEENTH ANNUAL GARRETT MORGAN SUSTAINABLE TRANSPORTATION SYMPOSIUM

April 2016

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# **EXECUTIVE SUMMARY**

On April 7, 2016, the Mineta Transportation Institute (MTI) continued its support of the United States Department of Transportation's Garrett A. Morgan Technology and Transportation Futures Program by conducting the Sixteenth Annual National Garrett Morgan Symposium and Videoconference on Sustainable Transportation. The purpose of this national videoconference is to stimulate young people's minds and encourage them to pursue the academic programs that will prepare them for professional careers in transportation engineering, planning, administration, and technology.

The Garrett A. Morgan Technology and Transportation Futures Program was established in 1997 by former US Secretary of Transportation Rodney E. Slater. The program has three cornerstone components:

# **PURPOSE**

- To establish a partnership among the US Department of Transportation, state departments of transportation, public and private transportation providers and local communities to ensure that today's students are prepared to become the next generation of transportation leaders
- To develop a curriculum that can interest younger students in transportation and provide learning tools that can guide them to advanced academic and professional levels
- To provide the technologies that will enable students to develop skills that they can apply to future careers in transportation

## PARTICIPATING SCHOOLS

This year's participants included:

- · Frick Middle School, Oakland CA
- Gaithersburg Middle School, Washington DC (7th grade)
- Gaithersburg Middle School, Washington DC (8th grade)
- Morada Middle School, Stockton CA
- Sheppard Middle School, San Jose CA
- Toddy Thomas Middle School, Fortuna CA (two teams)
- Urban Promise Academy, Oakland CA.

# **EVENT HIGHLIGHTS**

The students were welcomed by United States Secretary of Transportation Anthony Foxx,

American Association of State Highway and Transportation Officials Executive Director Bud Wright, American Public Transportation Association Vice President: Workforce Development and Educational Services Pamela Boswell and Caltrans Director Malcolm Dougherty. MTI's Executive Director Karen Philbrick moderated the program.

Dr. Philbrick reminded the students that the day's activities are to encourage middleschool students to take technical classes in math and science in high school and direct their interests toward transportation. By doing so, they may qualify for the technical courses in college that can allow them to become transportation professionals, building US transportation systems in the future.

A lively question and answer period followed the presentations, with classes asking questions of each other. Extra points were awarded to schools for each answer that was managed well.

The winning team from Morada Middle School was announced a week later. Teacher Michael Hurst and student team members Peter Lau and Tristan Bustillos-Hawk traveled to San Jose CA in June to attend MTI's annual scholarship banquet and to accept the grand prize cash award and a plaque.

## Hon. Norman Y. Mineta

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