Activity Summary

Outreach Publication



Program

National Summer Transportation Institute (NSTI)

Sponsor

Federal Highway Administration (FHWA)

Michigan Tech Precollege Outreach-Youth Programs

University Transportation Center for Materials in Sustainable Transportation Infrastructure (UTC-MiSTI)

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Summer Bursts with Opportunities

How did you decide to pursue the career path you're currently on? For fifty – seven youth who've participated in Michigan's National Summer Transportation Institute program, that answer might someday be a two-week exploration at Michigan Technological University looking at transportation.

National Program Objectives

The objectives of the National Summer Transportation Institute (NSTI) program are to provide educational experiences and transportation career awareness for high school students motivating them to consider a career supporting the transportation industry.

NSTI was developed by the Federal Highway Administration (FHWA) with program administration provided by the Office of Civil Rights. There are currently 31 states hosting NSTI programs. In addition, the District of Columbia and Puerto Rico also host programs. In 2009 there were 59 host sites conducting one to two week explorations delivered through residential and non-residential formats. Programs and sites are selected annually through a competitive proposal process. State departments of transportation receive federal funds for awarded programs and distribute (federal pass-through) to site recipients within their jurisdiction. The program encourages in-kind and additional state, institution and industry cost sharing to meet programming needs.

The national program requires an introduction to the transportation industry and exposure to career opportunities. Topics include all modes of transportation and safety. In addition, enhancement activities promote individual academic success and self-awareness while encouraging good sportsmanship. The program also promotes an awareness of continued education in STEM fields (science, technology, engineering and math) supporting the needs of our growing transportation system.





University Facts (2009-2010)
Total Enrollment 7148
Civil Engineering 546
Graduate Enrollment 1206
Number of Faculty 464
Placement Rate 87.5%

Michigan Tech ranks in the top 25% of public research institutions by the National Science Foundation and has annual research expenditures exceeding \$57 million. More than 56% of Michigan Tech's student population is enrolled in science and engineering degree fields with a campuswide graduation placement rate of 87%.

Michigan Tech houses a wide complement of transportation -related programs partnering in research, technology transfer, education, and workforce development. Under the umbrella of the Michigan Tech Transportation Institute, federally funded centers collaborate with state and internally funded centers and programs. Federally funded programs include the UTC-MiSTI, Michigan's Local Technical Assistance Program, and the Region 2 Tribal Technical Assistance Program. State funded research centers and laboratories include the Michigan Department of Transportation funded Transportation Materials Research Center and the Center for Structural Durability. Internal programs include the Center for Technology and Training, and the Rail Transportation Program.

For more information, visit the University's website. www.mtu.edu

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NSTI at Michigan Tech

In 2009, the state of Michigan secured its first NSTI program, awarded to Michigan Technological University (Michigan Tech). At Michigan Tech, program logistics are administered by the Precollege Outreach-Youth Programs Office with curriculum delivery supported by the University Transportation Center for Materials in Sustainable Transportation Infrastructure (UTC-MiSTI). Michigan Tech works closely with the regional Federal Highway Administration Office and the Michigan Department of Transportation to develop a program that meets state and regional needs and highlights Michigan's unique transportation challenges and opportunities.

Michigan Tech Program Highlights

Given Michigan Tech's remote location, the NSTI scholarship includes charter bus transportation from designated sites throughout the state to ensure that an opportunity to participate isn't restricted due to an individuals geographic location to the University.

Michigan Tech's program is structured as a two week on campus residency experience. Students participating in the NSTI program attend-classroom, field and laboratory sessions throughout the day. In the evenings and for meals, NSTI participants are immersed with other on-campus youth attending one of many Summer Youth Explorations held concurrently. This provides additional cultural exposure including international connections.

The NSTI curriculum used at Michigan Tech is based on the American Association of State Highway Transportation Official's (AASHTO) TRAC modules. Field trips, guest speakers, site visits and laboratory activities augment the classroom learning experience.

Program Outcomes

Photos and comments by the 2009 and 2010 NSTI participants are available on the UTC-MiSTI website at www.misti.mtu.edu.

For More Information

Visit the FHWA Office of Civil Rights website for more information on the NSTI program http://www.fhwa.dot.gov/civilrights/programs/nsti.htm.

For more information on the TRAC learning modules, visit the AASHTO website http://www.transportation.org/?siteid=32.

Visit the Youth Programs website to learn about other great Explorations offered by Michigan Tech http://youthprograms.mtu.edu/.

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