To solve tomorrow’s transportation problems, we need to prepare future researchers and other professionals. Our education efforts aim to develop a critical transportation knowledge base and a transportation workforce that is prepared to design, deploy, operate, and maintain the complex transportation systems of the future. Activities in this area consist of a multidisciplinary program of coursework and experiential learning that supports the Institute’s theme. The educational program includes the disciplines of computer science and engineering, electrical and computer engineering, civil engineering, mechanical engineering, human factors, public policy, and others.

We’re aided by strong connections—to educators at high schools focused on science, technology, engineering, and mathematics (STEM); transportation faculty at established degree-granting transportation programs; transportation agencies; and professional organizations—in delivering a relevant, well-rounded education program.

By supporting and sponsoring a variety of educational initiatives for students, we are generating interest in core ITS science and technologies. These initiatives include developing new curriculum and courses, involving undergraduate and graduate students in research projects, sponsoring students to attend national conferences, giving awards that recognize outstanding students, and offering research assistantships to help attract more students to the study of transportation.

Through the program, the students gained practical knowledge about MnDOT, learned about its operations, and worked on transportation-focused projects.

Out of 34 applicants, four students were selected: Lamichhane, majoring in structural and transportation engineering at Howard University; Chelsey Palmateer, majoring in civil engineering at the U of M; Autumn McDowell, majoring in urban studies at the U of M; and Yusuf Abdi, majoring in electrical engineering at the U of M.

“The internship involved a lot of learning experience and exposure to the real-world environment,” Lamichhane says. “I have learned that on-the-job learning, with college education as a background, is the way to success.”

During his internship, Lamichhane worked with Bernard Izevbekhai, MnDOT research operations engineer, at the MnROAD pavement research facility. They submitted a paper...
about their work—“2011 Low-Volume Road Construction Cell 28 Stabilized Partial Depth Reclamation Construction Quality Assurance Testing”—to the Transportation Research Board, and Lamichhane presented the paper in August to MnDOT staff.

### Institute promotes transportation careers at summer camp

About 50 high school students learned about transportation-related degrees and careers during the CSE Exploring Careers in Engineering and Physical Science Summer Camp, hosted by the University’s College of Science and Engineering. The annual day camp is designed to introduce students to careers in science, engineering, and math.

The students toured the HumanFIRST Program’s human factors research laboratory and the Minnesota Traffic Observatory. They also had time to play Gridlock Buster, an online educational game created by the ITS Institute. The game incorporates tools and ideas that traffic control engineers use in their everyday work to give players an idea of what it’s like to manage traffic flow. Students also listened to a presentation by HumanFIRST researchers about the dangers of distracted driving.

More about the labs and Gridlock Buster is at its.umn.edu.

### State Farm-funded project to help Institute educate teen drivers

Distracted driving is dangerous for everyone—especially for teens and other new drivers.

Under a grant from auto insurance provider State Farm, the Institute and the Center for Transportation Studies (CTS) are working with several partners to increase awareness about the risks of distracted driving with preteens, teens learning to drive, and newly licensed drivers. The goal is to change teen driver behavior and reduce serious and fatal crashes due to distractions.

In the year-long project, the Institute and CTS are creating and disseminating educational materials and expanding the marketing of the online game Distraction Dodger (www.its.umn.edu/DistractionDodger). The award-winning game, developed with guidance from Institute researchers, is designed to help teens and young adults understand the importance of concentrating on driving.

The first activity under the grant was an exhibit at the “Celebrate My Drive” event at a metro-area mall in September. State Farm joined with the Institute, CTS, the Minnesota State Patrol, Hennepin County Medical Center, and others to host the event—one of 13 similar national events sponsored by the insurance company. Eighteen local high schools participated, and many teens tried Distraction Dodger and other activities to help experience the danger of distracted driving. Local media covered the event.

“Engaging outreach activities such as the ‘Driver Distraction’ game...support our efforts to interest high school students in STEM at a critical time in their decision-making process about their future careers.”

—Dorothy Cheng, College of Science and Engineering outreach coordinator

Brian Davis, a master’s degree candidate in mechanical engineering, was named the 2012 ITS outstanding student of the year—an award sponsored by the USDOT’s Research and Innovative Technology Administration.