Civil and Environmental Engineering



NURAIL CENTER RECEIVES \$1.4 MILLION US DOT GRANT

Sep 24, 2013

The U.S. Department of Transportation (U.S. DOT) has awarded a grant of \$1.4 million to the National University Rail (NURail) Center, a multi-university rail transportation and engineering research center led by the University of Illinois at Urbana-Champaign.

"The nation is experiencing rapid growth in passenger and freight rail, and NURail's research will help DOT transfer research and technology that will meet this increased growth from the lab to the transportation community," wrote U.S. senators Dick Durbin and Mark Kirk in a letter of support for the grant proposal.

Headquartered within the Department of Civil and Environmental Engineering, the NURail Center was established in 2012 with funding from the U.S. DOT. It was the nation's first University Transportation Center (UTC) to focus on rail transportation and engineering with the objective of improving and expanding rail research, education, workforce development and technology transfer. Since that time, research by the consortium's seven university partners has focused on challenges associated with rail corridors in which higher-speed passenger trains share infrastructure with freight trains.

This new grant emphasizes work toward the U.S. DOT's strategic goal of economic competitiveness and will address rail issues related to infrastructure and vehicle engineering, capacity planning and optimization, operational safety and risk mitigation, systems integration, and finance and policy. "Both freight and passenger rail have been experiencing a renaissance over the past several decades with major private and public sector investments in new infrastructure, rolling stock and advanced technologies," said NURail Director <u>Christopher P.L. Barkan</u>, professor of civil and environmental engineering. "But while rail transport has been on the ascendency, the academic programs needed to engage faculty and educate students in the principles of railway transport, engineering and planning have nearly disappeared. The importance of transportation education and research is well recognized and is supported by the U.S. DOT. Their funding of the NURail Center reflects their commitment to a multimodal program that recognizes the importance of a transportation systems approach.

"We've worked very hard over the past year first planning and then launching a variety of NURail Center initiatives, including implemention of several new courses and educational programs, engaging new faculty and students on rail research projects, organizing several workshops and conferences, and reaching out to hundreds of students and faculty to get them involved with rail research and education."

The University of Illinois at Urbana-Champaign has been a leader in rail education and research for more than a century. The railroad engineering program at Illinois has the most extensive curriculum in railroad engineering of any university in North America, complemented by an extensive research program in the Illinois Rail Transportation and Engineering Center (RailTEC).

The consortium led by the University of Illinois includes the following partner schools: the University of Illinois at Chicago; Massachusetts Institute of Technology; Michigan Technological University; Rose-Hulman Institute of Technology; the University of Kentucky; and the University of Tennessee, Knoxville.