Integrated and Sustainable Transportation Solutions: From Concepts to Deployment Regional University Transportation Center

INITIATIVE
The NEXTRANS Center, an interdisciplinary multi-university consortium, seeks innovative, integrated and sustainable solutions to transportation-related problems that further leverage technology when appropriate. It explores the linkage of transportation to energy security, environmental sustainability and climate change. The center also examines the role of transportation in fostering economic revitalization and global economic competitiveness. For a second time, the NEXTRANS Center, headquartered at Purdue University, was awarded a grant for research and education in January 2012 from the United States Department of Transportation (USDOT) following a competitive selection process. The NEXTRANS Center opened in 2007 under USDOT’s university transportation program; total funding to date is $20 million.

IMPACT

- NEXTRANS seeks integrated and sustainable transportation solutions across multiple stakeholders, and addresses them in the context of research, education, workforce development and technology goals of the center.
- In addition to seeking holistic solutions across various transportation goals (such as mobility, safety and infrastructure renewal) and modes (highway, transit, rail, air, maritime, etc.), the center also seeks sustainable transportation solutions that additionally address energy security, environmental/ecological concerns and climate change impacts.
- A new emphasis of the center is to provide an ability to aid policymakers in understanding the impacts of alternative solutions so that policy decisions can be more informed.
- The main research areas addressed by the center include: (i) technology-enabled solutions, (ii) asset management and resource allocation, (iii) data-driven analysis, (iv) transportation linkage to energy security, environment and climate change, (v) policy and institutions, and (vi) economic revitalization and global competitiveness.
- NEXTRANS will continue and expand several activities related to transportation workforce development, including education programs for P-12, undergraduate and graduate students, education programs for current transportation professionals, and regional and national workforce development initiatives.
- NEXTRANS matches every dollar of federal funding with cost share from non-federal sources, increasing the value of the investment made by the federal government in transportation research and education.
- Research, education and outreach activities claimed 85 percent of total expenditures in 2010-2011, reinforcing NEXTRANS’ strong commitment as a university transportation research center.

PARTNERS: Purdue University, Ohio State University, Central State University, Chicago State University, Illinois Institute of Technology, Martin University, Trine University, University of Michigan, University of Wisconsin