SAFETY:
Our researchers are leading major efforts to manage and analyze safety data that will allow for policy and design improvements that reduce fatalities and injuries on our transportation system. Over 35,000 people die on U.S. Highways each year, with recent years representing the largest annual increase in fatalities in nearly 50 years. Many of these deaths could have been avoided through technology or engineering. That’s why we’re working with the National Cooperative Highway Research Program to develop crash prediction models that will help make our nation’s roadways safer. We have also partnered with the CTDOT to create a comprehensive safety analysis software system to assist in the identification of locations where safety could be improved, and technology can be used to save lives.

PUBLIC TRANSIT:
Communities depend on reliable and efficient public transportation to stay vibrant and sustainable. With more than $500,000 in funding from state and federal agencies, our researchers have developed t-HUB. This online mapping and analysis application uses big data to improve communication between the users and providers of public transit, and enhance the transportation planning process. Other researchers are working to develop algorithms to determine levels of congestion and traffic speed from real-time bus tracking information.

URBAN PLANNING:
Urban planning is the design, planning and development of communities. Transportation is an essential component of urban planning and plays a key role in determining the sustainability of our towns. With over $100,000 from the U.S. Department of Transportation, our researchers are heading up a project that explores all the costs that parking has on cities. Another project looks at the health impacts that a city’s community and street design can have on its residents. With collaborators that include the Connecticut Department of Transportation, the U.S. Department of Transportation and the Federal Highway Administration, we’re making transportation better, more efficient and safer.

www.engr.uconn.edu
THE TRANSPORTATION AND URBAN ENGINEERING TEAM

NORMAN GARRICK  
PROFESSOR  
Ph.D. PURDUE UNIVERSITY, 1986  
Sustainable Transportation and Urban Planning  
Urban Street Networks, Urban Streets and Shared Spaces Bicyclist and Pedestrian Facility Design and Planning  
Transit Planning  
Phone: 860-486-2990  
norman.garrick@uconn.edu

JOHN IVAN  
PROFESSOR  
Ph.D. NORTHWESTERN UNIVERSITY, 1994  
Highway Crash Prediction, Highway Link Traffic Forecasting, Representing Exposure to Highway Crashes, Statistical Modeling of Transportation Systems  
Phone: 860-486-0352  
john.ivan@uconn.edu

ERIC JACKSON  
ASSOCIATE RESEARCH PROFESSOR  
Ph.D. UNIVERSITY OF CONNECTICUT, 2008  
Transportation Data Systems, Web-based Data Collection, Distribution and Analysis, Safety Data Integration and Analysis, Remote Sensing and Geographic Information Systems  
Phone: 860-486-8426  
eric.d.jackson@uconn.edu

KARTHIK C. KONDURI  
ASSISTANT PROFESSOR  
Ph.D. ARIZONA STATE UNIVERSITY, 2012  
Activity-based Travel Behavior and Time Use Analysis, Travel Demand Modeling and Forecasting, Transportation Planning and Policy Analysis, Integrated Models of Land Use and Transportation, Econometric and Statistical Modeling Methodologies, Planning Software Development and Implementation  
Phone: 860-486-2733  
karthi.konduri@uconn.edu

NICHOLAS LOWNES  
ASSOCIATE PROFESSOR  
Ph.D. THE UNIVERSITY OF TEXAS AT AUSTIN, 2007  
Public Transportation Systems, Network Modeling, Traffic Microsimulation, Public Transportation Economics  
Phone: 860-486-2717  
nicholas.lownes@uconn.edu

JAMES MAHONEY  
EXECUTIVE PROGRAM DIRECTOR OF CONNECTICUT TRANSPORTATION INSTITUTE  
M.S. GEOTECHNICAL ENGINEERING, UNIVERSITY OF CONNECTICUT, 1995  
Phone: 860-486-9299  
james.mahoney@uconn.edu

DONNA SHEA  
PROGRAM DIRECTOR, TECHNOLOGY TRANSFER CENTER  
M.A., UNIVERSITY OF CONNECTICUT, 2011  
Influences on Adult Learning, Organizational Learning, Communities of Practice, Transfer of Learning  
Phone: 860-486-0377  
donna.shea@uconn.edu

JIN ZHU  
ASSISTANT PROFESSOR  
Ph.D. M.P.A. FLORIDA INTERNATIONAL UNIVERSITY, 2016  
Complex Construction Projects, Interdependent Infrastructure Systems, Resilient Communities, Smart Cities, Disaster Response and Recovery  
Phone: 860-486-0489  
jzhu@uconn.edu

MAJOR RECENT PROJECTS

TRANSPORTATION AND URBAN ENGINEERING FACULTY

• With the Connecticut Department of Transportation, the New England University Transportation Center and the Federal Highway Administration, UConn’s Transportation Systems Research Cluster has developed t-HUB, an online mapping and analysis application. PI is Nicholas Lownes. Funding: more than $500,000 to date.

• With the US Dept. of Transportation, UConn is partnering with universities around the US in the Center for Advanced Multimodal Mobility Solutions and Education (CAMMSE). Funding: $1 million, PI is Nicholas Lownes.

• The U.S. Department of Transportation is sponsoring the research project, “Assessing the Full Cost of Parking from the Perspective of the Municipality.” Funding: $111,000. PI is Norman Garrick.

• The National Cooperative Highway Research Program is sponsoring the development of crash prediction models aimed at making safer roads. Funding: $800,000. PI is John Ivan.

• The National Research Council funded the project “Methodology to Predict the Safety Performance of Rural Multilane Highways.” Funding: $750,000. PI on the UConn team was John Ivan.

• With the Connecticut Department of Transportation, “Development and Execution of the Statewide Household Travel Survey.” Funding: $1.5 million. PI is Karthik C. Konduri, Co-PI is Nicholas Lownes.

• Development of the Advanced Driving Simulator and Pedestrian Safety study via funding from UConn CEE, OVPR and the CTDOT. Funding: $660,000.

• With the Connecticut Department of Transportation, “Implementation of a 3-D Sensing Technology for Automated Pavement Data Collection in Connecticut”. Funding: $183,000. PI is James Mahoney.

• Expansion of the CT Crash Data Repository and creation of the CT Safety Management System through funding from CTDOT at $3 million annually. PI is Eric Jackson.

• With the Connecticut Department of Transportation, “Connecticut’s Safety Circuit Rider Program” and “Connecticut’s Traffic Signal Systems Circuit Rider”, Funding is $1,900,000. PI is Donna Shea.