

Dedicated to Improving the Sustainability and Safety of Rural Transportation Systems and Infrastructure

K-State UTC Announces Slate of Conferences and Training Programs for 2009

Kansas Transportation Engineering Conference
2009: 91st Annual, Tuesday and Wednesday, April 14 & 15

Training Courses
Bridge Design Workshop
Superpave Field Lab Technician Certification Training
Traffic Assistance Services for Kansas (TASK)

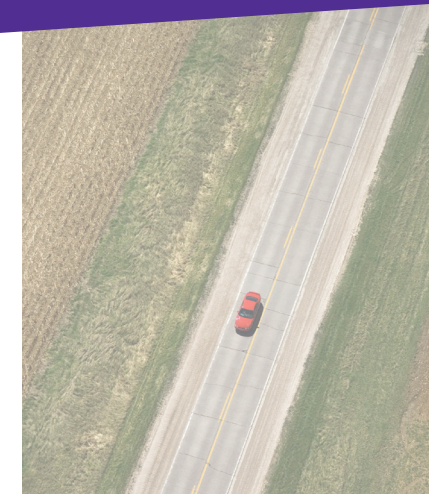
Visit our website at www.transport.k-state.edu for complete details on our conferences and training programs.

Our Website

Visit the K-State Transportation Center's website at www.transport.k-state.edu

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Newsletter - Fall 2008



K-State Professor Honored by CUTC

Eugene R. Russell Sr., professor of civil engineering at Kansas State University, has been selected to receive the 2008 Council of University Transportation Center Award for Distinguished Contribution to University Transportation Education and Research.



The award has been given annually since 1998 to identify individuals who have had a long history of significant and outstanding contribution to university transportation education and research resulting in a lasting contribution to transportation. Russell will receive the award Jan. 10, 2009 in Washington, D.C.

Russell has spent more than 40 years researching safety issues for all aspects of transportation. His research has included analyzing rail-highway grade crossing warning systems, hazardous materials transportation, highway illumination and auto headlights, traffic signs and roundabout design and operation, and the impact of railroad abandonment on rural communities.

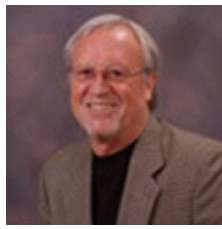
He received his bachelor's degree from the University of Missouri at Rolla, his master's degree from Iowa State University, and his doctorate in urban transportation planning from Purdue University. He joined the K-State faculty in 1974. Although retired from teaching, Russell continues to conduct transportation research through K-State and is active on several national committees.

"Dr. Russell's selection is a well-deserved tribute from his colleagues in honoring the body of his outstanding work in transportation education and the civil engineering profession," said Yacoub Najjar, interim head of the department of civil engineering at K-State.

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Dr. Robert W. Stokes

Director's Message

K-State's designation as a Tier II UTC has given us the opportunity to consolidate many existing programs under a single organizational umbrella and to initiate many new and exciting research, education and technology transfer programs. As we enter our second year of operation I am very excited about the Center's future. We have developed a diverse, multi-disciplinary research program that draws on expertise from across the university to address the transportation problems facing rural America. The UTC program has given us the resources to attract and retain top-notch undergraduate and graduate students to our transportation education and research programs. In addition, the UTC has given us a much needed framework for consolidating many of our existing technology transfer programs under a single "one-stop shopping" umbrella for transportation conferences and training programs. I extend my sincere appreciation to all our partners for the K-State UTC's successes and look forward to working with them in an exciting and challenging new year.

Robert W. "Bobb" Stokes
Director

Brian Geiger Named K-State UTC Student of the Year

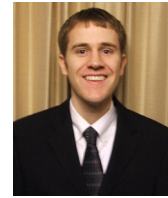


Brian Geiger was selected to receive the 2008 K-State UTC Student of the Year award for his desire to improve the community around him through his work in the transportation field. Brian has been active in numerous campus student groups and his demonstrated leadership skills should serve him well in his future endeavors. Congratulations Brian.

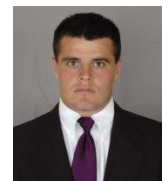
Title of Thesis: Improving the Usage of Demand Response Transit Services in Rural Kansas

UTC Awards Scholarships for Spring 2009

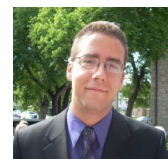
The K-State UTC is pleased to announce the following recipients of UTC Scholarships for Spring 2009.



Stephen Austin will receive a Bachelor of Science in Civil Engineering with honors from Kansas State University in May 2010 with either a concentration in structures or transportation. Stephen is considering continuing his studies and obtaining a Master of Science degree in Civil Engineering. He is very involved in a number of organizations on campus and looks forward to participating in research during the current and upcoming semesters.



Brandon Bortz will receive a Bachelor of Science in Civil Engineering in the construction option and a minor in Business from Kansas State University in December 2008. Brandon plans to continue his studies and obtain a Master of Science in Civil Engineering focusing on concrete construction. He plans to build a concrete durability test site at Kansas State University. The site will be used to test the sustainability of the new "greener" concretes for their durability and usefulness in the rural transportation system.



Brian Geiger is a graduate student in Civil Engineering from Overland Park, KS. Brian is working with Dr. Sunanda Dissanayake on a University Transportation Center project to "Improve the Usage of Demand Response Transit Services in Rural Kansas." This project will also be used as the basis of Brian's MSCE thesis.



Steven Hammerschmidt graduated from Kansas State University with a bachelor's degree in Civil Engineering in December 2008. He will be pursuing his MSCE under the supervision of Dr. Robert Peterman. His research will focus on precast concrete beams and with the monitoring of existing precast beams on aging bridges and structures. In addition to his research, Steven serves as the graduate student representative to the K-State student chapter of the American Society of Civil Engineers.



Trevor Heitman is a Junior in Mechanical and Nuclear Engineering (MNE) from Palmer, KS. He will be working with Dr. Terry Beck (MNE) on a project that involves the development of a non-contact Optical Strain Sensor. While still an undergraduate student, Trevor plans to take elective course work in Physics to increase his knowledge base in optics. He is also planning to attend graduate school at KSU and plans to hopefully further develop the non-contact Optical Strain Sensor technology in the future.



Brett Louk is a Senior in Civil Engineering from Garden City, KS. Brett has been working with Dr. Sunanda Dissanayake in the area of work zone safety. Dr. Dissanayake and Brett are analyzing data on work zone crashes from five different states to determine if the crashes have any common characteristics that might suggest remedial measures to improve work zone safety. Brett says his goal is to make the traffic flow interruptions associated with work zones as safe as possible for everybody involved.



Kyle Merklein is a sophomore in Civil Engineering from Phillipsburg, KS. Kyle is working with Dr. Kyle Riding in developing a database of environmental inputs for the Mechanistic Empirical Pavement Design Guide (MEPDG) software that will be especially beneficial for pavement design in the rural areas of Oklahoma and Kansas, as the currently available data in these states is concentrated in urban areas. Even though he is only a sophomore, Kyle wants to attend graduate school at K-State upon completion of his undergraduate degree.



Wilson Smith is a senior in Civil Engineering from Independence, Missouri. Wilson will be working with Dr. Dunja Peric in her research on computational modeling of soil-structure interaction in integral bridges.

UTC Awards Graduate Research Assistantships for Spring 2009

The K-State UTC is pleased to announce the following recipients of UTC GRA awards for Spring 2009.



Shahin Nayyeri Amiri received his B.S. degree in Civil Engineering from Tabriz University, Iran in 2000, and his Master of Science degree in Civil Engineering from Tabriz University in 2003, specializing in Structural Engineering. Shahin began his Ph.D. in August 2008 at Kansas State University where he is working on wireless damage detection in concrete bridges under the supervision of Dr. Rasheed, Dr. Esmaily and Dr. Melhem.



Mbaki Onyango is a doctoral candidate in the Department of Civil Engineering at Kansas State University. Her Ph.D. research focus is "Verification of Mechanistic Prediction Models for Permanent Deformation in Asphalt Mixtures, Using Accelerated Pavement Testing." In this research she is verifying three mechanistic prediction models for permanent deformation (rutting) using Abaqus finite element software and comparing predicted results with actual results measured in the Accelerated Pavement Testing facility at KSU. She is a Registered Professional Engineer in Tanzania and Engineer in Training in the US. She serves as a member of the KSU International Activities Council of the Graduate Students Council and as a Member of the Civil Engineering Graduate Council Committee.



Parangiri Rajaram, originally from India, is a graduate student in Industrial and Manufacturing Systems Engineering. He will be working with Dr. Margaret Rys in the development and testing of a model that predicts the amount of external noise produced by vehicles crossing over the center line on highways with centerline rumble strips (CLRS). This research should be helpful to transportation agencies in selecting the least intrusive design of CLRS and in improving the acceptance of the CLRS as a means to improve the safety of rural roadways.

K-State Graduate Students Attend 2009 TRB Meeting

The K-State UTC provided travel assistance for several K-State graduate students to attend the 2009 Annual Meeting of the Transportation Research Board in Washington DC.



K-State UTC Graduate Students at 2009 Annual TRB Meeting. Left to right: Litao Liu (PhD Candidate), Farhana Rahman (PhD candidate), Mbakisiya Onyango (PhD Candidate), Chandra Manandhar (PhD Candidate).

Litao Liu presented the results of a study titled "Examination of Factors Affecting Crash Severity on Gravel Roads" in a Poster session at the meeting. Litao's major professor is Dr. Sunanda Dissanayake.

Research Program Update

The following new research projects were funded by the K-State UTC during Fall 2008.

Project	Title	Primary Investigator
1	Kansas Pavement Preservation Initiative: Development of a Seal Coat Design and Construction Manual and Investigation of Design of Seal Coats with Light Weight Aggregates	Hossain
2	Impact of Kansas Ethanol Production on Kansas Transportation	Babcock
3	Implementation of Non-contact Strain Measurement Device for Bridges and Piers	Peterman
4	Kansas Pavement Preservation Initiative: Rehabilitation of Ultrathin Bonded Bituminous Surface	Hossain
5	Developing Safety Performance Functions for Kansas Safety Studies	Dissanayake

Please visit our website for a detailed description of our Research Program.
www.transport.k-state.edu