University Transportation Centers

14th Annual Outstanding Student of the Year Awards

Transportation Research Board
84rd Annual Meeting

Omni Shoreham Hotel,
Washington, DC

January 8, 2005
Welcome to the 14th Annual Student of the Year Awards ceremony, sponsored by the U.S. Department of Transportation.

Each year at the annual winter meeting of the Transportation Research Board the Department honors the most outstanding student from each participating University Transportation Center for her/his achievements and promise for future contributions to the transportation field. Students of the Year are selected based on their accomplishments in such areas as technical merit and research, academic performance, professionalism, and leadership.

The University Transportation Centers program is administered by the Research and Special Programs Administration (RSPA) with funding from the Federal Highway Administration and the Federal Transit Administration. This year, continuing the tradition of One DOT, the Department will also honor an awardee from the Air Transportation Centers of Excellence, sponsored by the Federal Aviation Administration.
University Transportation Centers Program

Developments in transportation technology over the decades have caused the world to expand, not in dimension, but in terms of accessibility. Transportation has always played a major role in society. The degree of efficiency in getting people or goods from one point to another plays a pivotal role in determining the health of an economy and the general well being of a nation.

Recognizing the need to encourage efficient movement in all transportation sectors of the country, the U.S. Department of Transportation established the University Transportation Centers (UTC) Program in 1987 (Title 49, U.S. Code Appendix 1607 c), to establish and operate 10 transportation centers, one for each of the Federal regions.

Since that time the UTC Program expanded to include 33 centers, as authorized by the Transportation Equity Act for the 21st Century (TEA-21), enacted by Congress on June 9, 1998. TEA-21 authorized up to $194.8 million for grants to establish and operate up to 33 UTCs throughout the U.S. in FY 1998-2003.

The mission of the UTCs is to advance U.S. technology and expertise in transportation through education, research, and technology transfer.

TEA-21 also established education as one of the primary objectives of a UTC, institutionalized the use of strategic planning in university grant management, and reinforced the program’s focus on multi-modal transportation. All UTCs are required to match federal funds dollar-for-dollar.

The UTC program is managed by the Office of Innovation, Research, and Education of the Research and Special Programs Administration, U.S. Department of Transportation.
Air Transportation Centers of Excellence

Under the authority provided in Public Law 101-508, the Federal Aviation Administration (FAA) establishes Air Transportation Centers of Excellence (COE) to create cost-sharing partnerships with academia, industry, and government, focusing on long-term critical aviation related topics. The purpose is to forge a union of public sector (FAA, airport authorities, state/local governments, etc.), private sector (airlines, manufacturers, etc.), and academic institutions to create world-class consortia focused on identifying solutions for existing and anticipated aviation problems. Supporting FAA and the requirements of the aviation community, COEs perform various types of research, i.e., basic research through engineering development and prototyping, education and training.

Since 1992, the FAA has established eight Centers of Excellence partnerships with 60 universities throughout the U.S, supported over 400 research projects and 850 students, resulting in critical research outcomes as documented in over 2,000 publications, reports and doctoral theses. FAA COEs now reflect well over $185M in contracts, grants and matching funds.
University Transportation Centers

Students of the Year

James Barrett Sorensen
Massachusetts Institute of Technology

Joseph Davis
Rutgers, The State University of New Jersey

Francis A. Gross
Pennsylvania State University

Kimberley Seager
University of Florida

Tim J. Gates
University of Wisconsin

Zachary T. Piepmeyer
University of Texas - Austin

Justin Doornink
Iowa State University

Steven D. Carter
University of Wyoming

Noreen McDonald
University of California - Berkeley

Steven Peterson
Washington State University

James Brett Wood
University of Alabama

Julia Foreman
University of Arkansas

Joanne Keller
University of Central Florida

Andrew George Beacher
University of Virginia

Yuri S. Mereszczak
University of Idaho

Errin Jewel
Marshall University

Nathaniel Bird
University of Minnesota

Brandy Sularz
Montana State University

Crandall Gerard Watson
Morgan State University

Bastian Jonathan Schroeder
North Carolina State University

Tivona Curtis
North Carolina A&T University
Keir Opie
New Jersey Institute of Technology

Tanner Blackburn
Northwestern University

Aaron Bradshaw
University of Rhode Island

Parisa Shokouhi
Rutgers, The State University of New Jersey

Nicholas Deal
San Jose State University

Antoine A. White
South Carolina State University

Melissa A. Salzler
University of South Florida

Sara Hayden
University of Southern California

Stephen P. Lukachko
Massachusetts Institute of Technology

Ryan D. McDaniel
University of Missouri - Rolla
JAMES BARRETT SORENSEN is pursuing a Master of Science in Transportation degree from the Massachusetts Institute of Technology, Department of Civil and Environmental Engineering, in Cambridge, Massachusetts. He is a member of MIT Transit Research Program — a collaborative research effort between MIT, local universities and the public sector. His research focus is on development of a drive-access transit model for the Boston Metropolitan region. The model is being applied toward development of policy recommendations concerning park-and-ride, kiss-and-ride, and bus-access-to-transit facilities. James spent the past summer with IBI Group as a transportation intern, participating in such projects as the development of the Southeast, Central and Western Massachusetts’ Regional ITS Architectures and the Long-Range Transportation Plan for Chemung County, New York.

James graduated with honors from the University of California – Davis with a Bachelor of Science degree in Civil Engineering. His interest in transportation was shaped by internships with the City of Davis, California and Y&C Transportation Consultants, a Sacramento-based consulting firm. His work for The City of Davis included a wide range of traffic studies and community transportation issues. His consulting internship included work on intersection and corridor analyses, transportation facilities construction, and light-rail transit station modification. James’ other interests include travel, cinema, athletics, and spending time with his lovely wife Amelia.

His excellent academic record, his intern experience, and the clear promise of future leadership and contribution to the transportation profession provided the basis for his selection.

The New England Region Transportation Center is proud to have James Barrett Sorensen as its 2004 Outstanding Student of the Year.
JOSEPH DAVIS was raised in Colonia, NJ. He graduated from the School of Engineering at Rutgers, The State University of New Jersey in 2001 with a Bachelors Degree in Civil and Environmental Engineering. Joseph opted to continue his education at Rutgers thereafter receiving his Masters in Structural Engineering in May 2003. Presently Joseph is a Teaching Assistant for the Reinforced Concrete Lab in addition to being a PhD candidate.

Joseph is currently working with Dr. Hani Nassif on the instrumentation of the newly constructed Doremus Avenue Bridge in Newark, NJ. This crossing located in the Port of Newark is a vital link for truck traffic between the Port and intermodal facilities. Additionally, this bridge was the first in NJ to be designed using the newly adopted LRFD design approach. Since June 2001, Joseph has been part of a team involved in the planning, installation, and testing of the bridge to verify the code limits

Joseph is also involved with other research at the Doremus Avenue Bridge, including the approach slabs. Several new designs are being implemented to reduce cracking from settlement and early age overloading. Strain sensors are placed at key points in the slab and live load testing is conducted to verify finite element models of the new designs.

During his research at Rutgers, Joseph has worked under the direction of the Rutgers Center for Advanced Infrastructure and Transportation on projects for the New Jersey Department of Transportation. Joseph was a CAIT fellow for the academic year 2002-2003 and a UTRC fellow for the 2001-2002 academic year.

The University Transportation Research Center (Region 2) is proud to select Joseph Davis as its 2004 Outstanding Student of the Year.
FRANCIS GROSS attended Clarkson University developing the fundamental skills and knowledge necessary to become a Civil Engineer. His interest in Transportation Engineering was initiated while interning for Fisher Associates from December 1998 to August 2002 during winter and summer breaks. Francis then completed courses in transportation design and operations at Clarkson University as well as a senior design project related to highway design. He successfully completed the Fundamentals of Engineering exam and graduated in May 2002 achieving an overall grade point average 3.88.

Knowledge in the area of transportation has lead Francis to further his education. He attended The Pennsylvania State University for a Master of Science degree with a focus in Transportation Engineering. Francis received the MAUTC graduate assistantship and completed a thesis in just a year and a half. He graduated in December 2003 maintaining a 4.00 grade point average. Francis worked as a research assistant, teaching assistant, and completed a number of papers including his thesis, “Estimated Demand for ITS-Enhanced Services by Disabled and Elderly”.

Currently, Francis is working as a teaching and research assistant at The Pennsylvania State University. As a member of the Transportation Research Board Joint Subcommittee on Highway Safety Workforce Development, he is helping to develop core competencies for transportation safety professionals. He plans to complete a doctoral degree and further his research experience in the area of transportation safety.

It is for his outstanding academic performance, technical merit, and service to both the University and the surrounding community that the Mid-Atlantic Transportation Center is pleased to select Francis Gross as its 2004 Outstanding Student of the Year.
KIMBERLY SEAGER was born in Pittsburgh, PA, but grew up in south Florida. During her teens, two things dominated her world – swimming and academics. Swimming taught her endurance and discipline; academics challenged her mental ability and prepared her for the future. These characteristics and a strong desire to the College of Engineering at the University of Florida.

While pursuing an undergraduate degree at UF, Kimberly was active in education and charitable endeavors. In addition she participated in sports and scholastic fellowship activities. Kimberly’s coaching work with Nike and summers working as a lifeguard in Belle Glade allowed her the opportunity to teach disadvantaged children the discipline, skill, and fun of swimming and how those activities can provide the confidence to help them achieve their goals.

As an undergraduate student, Kimberly made the Dean’s List and graduated with honors in May of 2002. During this time, she had a great opportunity to work part-time at the professional consulting firm of Lochrane Engineering. Working on several roadway projects while at Lochrane helped Ms. Seager to decide to pursue her Masters degree at the University of Florida. Her research is focusing on traffic operations and facility design. Her Masters thesis project is on level of service evaluation for rural freeways. Kimberly completed her Masters degree in May 2004.

The Southeast Transportation Center is proud to select Kimberley Seager as its 2004 Outstanding Student of the Year.
TIMOTHY J. GATES is a graduate student and research/teaching assistant at the University of Wisconsin-Madison pursuing a Ph.D. in Civil Engineering with an emphasis in transportation operations and safety. Prior to enrolling at UW-Madison, Tim was an Associate Transportation Researcher at the Texas Transportation Institute for three years where he researched the effectiveness of various pavement marking and traffic sign treatments. He received his BSCE and MSCE degrees from Michigan State University in 1999 and 2000, respectively. Tim has maintained a 4.0 grade point average throughout his graduate and undergraduate courses.

Tim is active in the Institute of Transportation Engineers (ITE) and the Transportation Research Board (TRB), and is a member of TRB's Traffic Control Devices Committee. Tim also currently serves as president of UW-Madison's Transportation Society and student chapter of ITE. During his tenure as president, the organization has grown dramatically. He is a two-time recipient of the Federal Highway Administration's (FHWA) Dwight D. Eisenhower Graduate Fellowship and is a 2004 Eno Transportation Fellow.

When not in class or at the office, Tim enjoys playing tennis, jogging, watching sports, listening to music, spending time with friends and family, and traveling.

Tim has a presentation in Session 517 of TRB’s 84th Annual Meeting, Papers from Statistical Methodology and Statistical Computer Software in Transportation Research Committee entitled, “Post-Hoc Quantile Test for One-way ANOVA Using Double Bootstrap Method”.

The Midwest Regional University Transportation Center is proud to select Timothy J. Gates as its 2004 Outstanding Student of the Year.
ZACHARY T. PIEPMEYER is enrolled in a Master of Science program at The University of Texas at Austin under the supervision of Assistant Professor, Dr. Zhanmin Zhang, and a Graduate Research Assistant for the Center for Transportation Research. During his one-year experience at The University of Texas at Austin in the Transportation Engineering program, Zach has maintained a 4.0 GPA, conducted research in diverse fields, demonstrated strong leadership as the president of the Intelligent Transportation Society of America (ITS-A), UT-Austin Chapter, and provided various services to the communities in Austin.

The focus of Zach's research efforts is Infrastructure Management with an emphasis on pavement preservation. He has been involved with multiple research projects dealing with local and regional transportation issues, such as pedestrian mobility, pavement maintenance, pavement management, and right-of-way appraisal. His efforts have been recognized by the acceptance of a technical paper he co-authored with his advisor on optimal maintenance scheduling for presentation at the Transportation Research Board's 84th Annual Conference in Washington, D.C., January 2005.

Zach's responsibilities with ITS-A include organizing guest lecturers from both academic and engineering backgrounds to speak to both undergraduate and graduate students interested in transportation, arranging tours of local transportation facilities, hosting social events to provide new and returning students an opportunity to interact outside of the classroom setting, and helping the transportation faculty and staff with new graduate student recruiting and orientation activities.

The Southwest Region University Transportation Center (Region 6) is proud to select Zachary T. Piepmeyer as its 2004 Outstanding Student of the Year.
JUSTIN DOORNINK has focused on Structural Engineering research with real world application during his graduate education in Structural Engineering at Iowa State University. Justin Doornink. As part of his Ph.D. research, Justin has developed a fiber optic structural health-monitoring system to monitor the performance of Iowa’s first high-performance steel bridge. Mr. Doornink is currently developing a structural health-monitoring system to identify developing fatigue cracks in fracture-critical bridges.

Justin received a Master’s Degree in Structural Engineering in May of 2003, and a Bachelor’s Degree in Civil Engineering in May of 2001 from Iowa State University. For his M.S. research, Mr. Doornink investigated the use of decommissioned railroad flatcars in low-volume road bridges, which has provided a much need cost effective bridge replacement alternative for Iowa county bridges. Justin has several national and international publications and presentations including his most recent at the Second International Conference on Bridge Maintenance and Safety in Kyoto, Japan and publication at the 2004 International Symposium on Advancements and Trends in Fiber Optics in Chongqing, China.

In addition to being a Research Assistant, Justin was also an instructor for an introductory structural analysis class at Iowa State University during the 2004 spring semester. In addition Justin has worked for the Iowa Department of Transportation and Modjeski and Masters Consulting Engineers, Inc.

Justin is a two-time Dwight David Eisenhower Transportation Fellowship winner (2003 & 2004).

For his academic accomplishments, his professionalism and contributions to his university, the Midwestern Transportation Consortium is proud to select Justin Doonik as its 2004 Outstanding Student of the Year.
STEVEN D. CARTER was born and raised in Merritt Island, Florida. As a young adult he left for a new beginning with the United States Air Force. Soon after he met his wife, Tamra and started a family.

He proudly served for 11 years in the Air Force before making a career change. He moved his family to Laramie, Wyoming where he entered the University of Wyoming in 2000. Steven received a Bachelor of Science degree in civil engineering in 2003, and a Masters of Science in civil engineering in 2004. As a graduate research assistant, he conducted research on the topic of asphalt pavement preservation, specifically the sealing of asphaltic cracks with specially formulated materials. In agreement with his advisor, Professor Khaled Ksaibati, they submitted a research based article to the Transportation Research Board (TRB), and were selected to present the article at the TRB 84th Annual Meeting.

These accomplishments prompted his selection as the 2004 Mountain-Plains Consortium “Outstanding Student of the Year”. His submittal and selection of the research paper; a graduate grade point average of 3.889; professionalism in the presentation of the research findings to federal and state officials; and leadership in the direction of activities and accomplishment of objectives evidenced this achievement. In addition, Steven was an active member of the American Society of Civil Engineers and Institute of Transportation Engineers.

With these achievements, Steven brings to the transportation engineering profession enthusiasm and dedication. His knowledge and experience will significantly contribute to the many aspects of transportation engineering.

The Mountain Plains Consortium is proud to select Steven D. Carter as its 2004 Outstanding Student of the Year.
NOREEN MCDONALD is University Transportation Center’s (Region 9) Outstanding Student of the Year. Noreen holds a Bachelor's degree in Chemical Engineering from Harvard University and Masters degrees in both Transportation Engineering and City and Regional Planning from the University of California - Berkeley. She is currently completing her dissertation on children's travel in the City and Regional Planning at U.C. Berkeley. Noreen’s work will be of interest to state and local transportation departments throughout the country and offer international application as well. Professor Betty Deakin, Region 9 Director, is her chair. Committee members for her dissertation defense are Professor Martin Wachs and Professor John Quigley are committee members.

Noreen is an enthusiastic participant in both academic and professional organizations. She is an indefatigable worker who always has a smile and good word for everyone. She will be a great asset to the transportation community.

The University of California Transportation Center is proud to have Noreen McDonald as its 2004 Outstanding Student of the Year.
STEVEN PETERSON is from Arlington, Texas, where he received a Bachelors degree in History and Masters degree in Economics at the University of Texas, Arlington. He is currently working towards a Ph.D. in the School of Economic Sciences at Washington State University. He has extensive professional experience, including working as an Assistant Forecast Analyst for McKesson Drug Co., Forecast Analyst for PCS Healthcare, Inc., Distribution Analyst for Solvay Engineered Polymers, and a Financial Planning Analyst for Coldwater Creek, Inc. Steven seeks to teach and conduct research at an academic institution with the opportunity to consult in the private sector. His research interests include transportation capital and infrastructure, geographic information systems in transportation, and the interaction between transportation networks and the development of trade.

Steven is currently working with Eric Jessup and Kenneth Casavant on a project researching an empirical model of the determinants of intermodal facility location and viability. He is also a member of the Strategic Freight Transportation Analysis team at Washington State, where he has completed an overview of freight truck transportation in Washington. He has also contributed several specific analyses during 2004 of freight transportation in Washington that have aided in the formulation of the Washington State Transportation Plan.

TransNow is proud to select Steven Peterson as its 2004 Outstanding Student of the Year.
MR. JAMES BRETT WOOD is from Lincoln, Alabama. James graduated as valedictorian from Lincoln High School in 1997, was student body president for two years, and was involved in many extracurricular activities from sports to theater.

Mr. Wood received a BSCE from the University of Alabama, where he took transportation electives. He was a four year scholarship recipient as an undergraduate and was a member of the ASCE Student Chapter. As a MSCE student in transportation, his graduate GPA was 4.0 and he graduated Magna Cum Laude in December 2004. He was the Graduate Teaching Assistant for the computer-aided design lab portion of CE 450 – Highway Design and Construction, and was elected by students as the Outstanding Teaching Assistant in the department.

James served as a Graduate Research Assistant on a project for the Alabama Department of Transportation to develop a Comprehensive Highway Safety Plan, working with 100 safety volunteers from 30 organizations and agencies. Brett’s primary duties were to prepare background materials for work sessions, to make presentations to the session attendees, to help develop strategies, and to prepare the first draft of the final report. The draft was completed, presented to the Governor, and published with Brett as the lead author. He also completed three other research reports as part of this project, involving various types of run-off-road crashes, and conducted a pilot study to investigate school bus crashes in Alabama for an article for a refereed publication.

The University Transportation Center for Alabama is proud to select James Brett Wood as its 2004 Outstanding Student of the Year.
JULIA FOREMAN is currently a graduate research assistant of Civil Engineering at the University of Arkansas. Her research interests include transportation and materials, specifically focusing on the performance of asphalt pavements. The primary goal of her thesis project is to examine the effects of various hot mix asphalt material properties, such as voids in the mineral aggregate and aggregate gradation, on the rutting performance of asphalt pavements. The results of this project will make potentially significant contributions to asphalt mix designers by further identifying key parameters that can be controlled during design in order to produce quality asphalt pavements.

Julia enrolled at the University of Arkansas in 1998 upon receiving a Chancellor’s Scholarship. As an undergraduate, she began working part time in the U of A materials research laboratory on a project involving concrete admixtures. Since that time, she has also served as a teaching assistant in undergraduate Structural Materials and Soil Mechanics classes.

Julia is a member of Chi Epsilon, Tau Beta Pi, Gamma Beta Phi, Golden Key National Honor Society, National Society of Collegiate Scholars, Women in Engineering (WIN), and the American Society of Civil Engineers (ASCE). She has been very involved in the ASCE Concrete Canoe Competition and served as the Chairman of the Concrete Mix Design team. In addition, she was the Chairman of the ASCE Community Service and Outreach Committee.

Julia enjoys nutrition, fitness, cooking, politics, camping, fishing, canoeing, and knitting.

It is for her academic excellence, professionalism, accomplishments and potential that the Mack-Blackwell Rural Transportation Center at the University of Arkansas is proud to select Julia Foreman as its 2004 Outstanding Student of the Year.
JOANNE KELLER, daughter of Mr. and Mrs. Gregory Keller, was born and raised in South Florida. In 1999 Joanne enrolled as an undergraduate student in civil engineering at the University of Central Florida. During her senior year, Joanne was offered the opportunity to become a research assistant for a project headed by Dr. Mohammed Abdel-Aty and funded by the Florida Department of Transportation. This project dealt with the possibility that vehicle crashes at signalized intersections could be related to the geometric design of such locations. After working on the project for five months, Joanne became passionate about her research and decided to enroll in graduate school as well as write a thesis based on the data she had collected. Joanne completed the graduate requirements including the written thesis in fourteen months. And graduated with a Master of Science in Civil Engineering with a focus in Transportation Systems in July 2004. From her thesis, entitled “Analysis of Type and Severity of Traffic Crashes at Signalized Intersections Using Tree-Based Regression and Ordered Probit Models,” Joanne wrote three papers that are currently being considered for publication. She will be presenting a paper related to her research during the TRB meeting this week.

After graduation, Joanne began working for Miller Sellen Conner Walsh, a civil engineering firm based in Florida where she is currently involved in community planning for multi-phase subdivisions. Joanne’s long-term goals include continuing education and she hopes she will have the opportunity to conduct more research in the field of transportation.

The Center for Advanced Transportation Simulations at the University of Central Florida is proud to select Joanne Keller as its 2004 Outstanding Student of the Year.
ANDREW G. BEACHER obtained the Bachelor of Science degree in Civil Engineering from Clarkson University in May 1998 and the Master of Science in Civil Engineering from the University of Virginia in May 2004. While at Clarkson University he was in the Air Force ROTC Program and was the recipient of a Clarkson Merit Scholarship. After he graduated from Clarkson University in 1998 he joined the United States Air Force as a civil Engineer Officer. While in the US Air Force he served as the Base Community Planner, and the Chief, Simplified Acquisition of Base Engineer Requirements, at Andrews Air Force Base in Maryland and the Chief, Environmental Flight, at Prince Sultan Air Base in Saudi Arabia. His exemplary service in the United States Air Force earned him several awards, including the Air Force Commendation Medal, the Air force Achievement Medal, the Armed Forces Expeditionary Medal and the 1999 89th Civil Engineer Squadron Company Grade Officer of the year. Andrew is currently employed as a Civil Engineer Analyst by Kimley - Horn and Associates.

Andrew is selected as the recipient of the 2004 Outstanding Student of the Year for his exemplary academic and leadership performance during his tenure as a graduate student at the University of Virginia. He graduated with a GPA of 3.413. Although he left the academic arena for two years before returning to graduate school, his hard work and dedication made it possible for him to successfully compete with other younger students who have not had a break from academia. He demonstrated his strong leadership ability in the way he managed the collection of field data for the research project for his master’s thesis. He will be presenting two papers on this project at the January 2005 TRB meeting.

The National ITS Implementation Research Center is proud to select Andrew G. Beacher as its 2004 Outstanding Student of the Year.
YURI MERESZCZAK identified civil engineering as the exciting and challenging field in which he would make a career in 2000. He received his B.S. in May 2003 from the University of Idaho and is continuing to pursue an M.S.C.E.

The University of Idaho was part of a national team funded through the National Cooperative Highway Research Program to study roundabouts in the U.S. A member of the field data collection team, Yuri spent two months traveling to over thirty roundabout sites around the U.S. during the summer of 2003. During the following months, he was also part of the student team that extracted data from over 131 DVDs that were recorded in the field.

Yuri had an opportunity to work in the Baltimore office of Kittelson & Associates, a private transportation planning and engineering firm. During the summer and fall of 2004, he has gained “real world” experience. At Kittelson’s, he is assisting with data analysis of the roundabout field data. He has also worked on H-Signal timing along Maryland State Highway 97, a roundabout feasibility study in Grants Pass, OR, research for the Insurance Institute Highway for Safety comparing signalized intersections for roundabouts, and several access management and traffic impact studies for different developers in both Washington and Oregon.

The paper Yuri wrote concerning his roundabouts research, “Incorporating the Effect of Exiting Vehicles in Critical Gap Estimation at U.S. Roundabouts,” has been accepted for presentation at the TRB National Roundabout Conference to be held in Colorado in May 2005.

The National Institute for Advanced Transportation Technology is proud to select as its 2004 Outstanding Student of the Year.
ERRIN JEWELL, of Barboursville, W.Va., began working for RTI after completing a bachelor’s degree at Marshall University as a student instructor for a K-12 summer outreach program. She instructed middle and high school students about the six technologies needed to design and construct vehicles and created online lesson plans and hands-on activities that teachers may access from RTI’s Transportation Outreach on the Web (TOW) website.

While completing graduate courses Errin designed the formats for most of the RTI technology transfer promotional materials that are still in use today. In addition, she helped prepare many of high quality research reports for RTI principal investigators using her excellent desk top publishing and technical publications skills. This also included a summary of all of the research papers and the CD-ROM for the first National conference on Transportation and Economic Development co-sponsored by the Transportation Research Board. Ms. Jewel also developed and helped produce a 12 minute promotional video about the RTI Lego robotic outreach program which is now being deployed in many elementary schools. Her efforts helped establish a very effective outreach program for the RTI Transportation Professional Development Program resulting in attendees from nearly 40 States in RTI sponsored events. After earning a Master of Arts in Journalism, Errin was recently hired as the Public affairs specialist for RTI.

For her excellence in academic achievement as well as her contributions to both her university and the community, the Nick J. Rahall II Appalachian Transportation Institute is pleased to select Errin Jewel as its 2004 Outstanding Student of the Year.
Mr. Nathaniel Bird is a current student at the University of Minnesota working to obtain his Masters of Science in Computer Science. He received his Bachelor of Science in Computer Engineering with high honors from Ohio Northern University. He is also a registered Engineer in Training in the State of Ohio.

Mr. Bird’s current research involves creating automated intelligent vision-based traffic monitoring systems that can aid a human user in the process of risk detection and analysis. His work was applied to the problem of detecting drug-related activities at bus stops and received great reviews from the community.

Nathaniel was selected as Student of the Year for many reasons. He has a 4.0 GPA in his graduate studies. He also has an extensive list of published materials. Mr. Bird is taking great steps in helping this country maintain the safety of its citizens and we’d like to thank him for his efforts.

The ITS Institute 2004 Outstanding Student of the Year Award serves as a valued recognition of Nathaniel’s accomplishments to date and the contributions we expect he will make in the future.
BRANDY SULARZ received her Master’s of Science Degree in Civil Engineering in December 2004 from Montana State University, where she also received her B.S. in Civil Engineering. Her graduate work at MSU was supported by a Graduate Fellowship from the Western Transportation Institute (WTI). As a fellowship student, Brandy researched measures of effectiveness for evaluating Intelligent Transportation Systems (ITS) in California National Parks. From a previous study conducted at WTI, ITS components were selected to be implemented in two California National Parks, Sequoia Kings and Golden Gate National Recreation Area, on a case study basis. Phase two of the project involves the evaluation of the ITS components after a specific time period. Brandy’s professional paper focused on the development of specific measures of effectiveness that could be used as part of the evaluation plan. Her research was submitted and accepted to the 2005 Transportation Research Board annual meeting, where she will be presenting her work.

During her final semester, Brandy was also a teaching assistant for two transportation courses. She is a member of Chi Epsilon, the National Civil Engineering Honor Society, and the Institute of Transportation Engineers (ITE), and a participant in WTI’s K-6 engineering outreach program. Brandy will be starting work in January 2005 with DKS Associates in Portland, Oregon. DKS Associates is a private consulting firm specializing in all aspects of transportation; including ITS, signal management and operations, and transit and transportation planning. She attributes much of her success to ITE and plans on remaining active in the Oregon Chapter.

The Western Transportation Institute is proud to have Brandy Sularz as its 2004 Outstanding Student of the Year.
CRANDALL GERARD WATSON was born in Fort Hood, Texas on October 12, 1976. In 1998, he received his Bachelor’s Degree in Business Management at Morehouse College in Atlanta, Georgia. From 1998 through 2002, Crandall served as a Logistics Officer in the U.S. Army at Fort Lee, Virginia and deployed to Taszar, Hungary in support of NATO’s Operation Joint Forge. In 2002, he began pursuing a Master of Science in Transportation Planning at Morgan State University in Baltimore, Maryland.

Thus far in his matriculation, Crandall has researched various factors involved in the transportation planning process, particularly in urban settings. He is intrigued by the delicate land use and transportation planning relationship, which serves as a springboard for a substantial segment of his research at Morgan State. In an effort to understand better transportation quality of life issues, Crandall has surveyed trip generation and trip distribution in the Baltimore metropolitan area and analyzed vehicle miles traveled data. Additionally, he has researched smart growth initiatives, such as the growth of mixed-use communities in Baltimore. He has analyzed levels of service of various subway and light rail transit systems to gain insight into transit mode share changes.

In 2003, Crandall served as Treasurer for Morgan State’s student chapter of Institute of Transportation Engineers. In February, 2004, he received an award from the Maryland State Highway Administration’s (SHA) Frank Francois Scholarship program. The SHA award resulted from his research on methods to promote efficiency, accessibility, safety, and environmental stewardship in Maryland’s complex transportation system over the next twenty years. Crandall is currently a Dwight David Eisenhower Transportation Fellow.

The National Center for Transportation Management, Research, and Development is pleased to select Crandall Gerard Watson as its 2004 Outstanding Student of the Year.
CENTER FOR TRANSPORTATION AND THE ENVIRONMENT  
NORTH CAROLINA STATE UNIVERSITY  

BASTIAN JONATHAN SCHROEDER is currently pursuing his M.S. in civil engineering at NC State University. His research addresses the simulation modeling of vehicles and pedestrians at roundabouts, with special emphasis on visually impaired pedestrians.

Mr. Schroeder was selected as Student of the Year for the Center for Transportation and the Environment not only for his exceptional academic achievements, but also for his excellence in research, which is underscored by a commitment to multimodal and sustainable transportation as evidenced by his work on traffic impacts of neotraditional neighborhoods. He has demonstrated a capacity for leadership that is extraordinary for a student of his experience. Bastian was valedictorian of North Carolina State University’s Class of 2004, where he achieved a 4.0 grade point average and received two degrees in Civil Engineering (Transportation) as well as Multidisciplinary Studies.

Bastian is currently serving as president of the student chapter of the North Carolina Section of the Institute of Transportation Engineers and works proactively with fellow students to promote the field of transportation engineering. He is a past recipient of NCSITE’s C.R. Bramer Endowed Scholarship, and was also a Benjamin Franklin Scholar throughout the course of his undergraduate work. Mr. Schroeder is fluent in English, German, and French.

The Center for Transportation and the Environment is honored to select Bastian Jonathan Schroeder as its 2004 Outstanding Student of the Year.
TIVONA CURTIS, a junior transportation and logistics major from Burlington, North Carolina, has been selected North Carolina A&T State University’s (NCA&TSU) University Transportation Center Outstanding Student of the Year. She has been exceptional as a student, as a member of the University family, and of her community. She is Vice President of Delta Nu Alpha, Student Government Association Senator and a member of the Honors Program. Tivona also displays her school spirit (Aggie Pride) as a member of the Aggie Live Wire Pep Club.

In 2000, Tivona participated in the Summer High School Transportation Institute (STI). This was her initial exposure to the field of transportation. In the fall of 2002, she accepted a scholarship to major in Transportation and Logistics at NCA&TSU. Since her arrival, she has been a leader. Tivona participates as a mentor in the Honors Program and the Peer Advising Leadership Program. She was named Boeing Scholar as well as a recipient of the Southeastern Transportation Center Education Award. In addition, she volunteers at the Alamance Regional Medical Center on weekends. On several occasions, she has spoken to STI participants regarding her experiences and career as a transportation major.

Tivona has received invaluable experience in transportation and logistics as an intern with Syngenta Crop Protection in Greensboro since June 2003. Because of her outstanding ability, she was the first sophomore selected by Syngenta in our seventeen-year relationship with them. As an intern, her duties include product tracking and reverse supply analysis. She schedules product pickups and selects less than truckload (LTL) carriers to complete returns. To date, she has had an exceptional internship experience. Tivona has excellent communication skills and is often called on to speak to youth groups. She is committed to her community. This, too, is demonstrated through her dedication to volunteerism and the work she has achieved at the abovementioned medical center. She readily seeks responsibility and is destined to be an outstanding transportation and logistics professional.

The Transportation Institute at North Carolina A&T State University is proud to have Tivona Curtis as its 2004 Outstanding Student of the Year.
KEIR OPIE is completing a Masters in Transportation at the New Jersey Institute of Technology (NJIT). He began his graduate studies while working full-time with the International Intermodal Transportation Center (IITC) and the National Center for Transportation and Industrial Productivity (NCTIP), both research efforts housed on the campus of NJIT in Newark, NJ. In his current position of Principal Transportation Engineer, he is responsible for the technical aspects of the centers’ traffic simulation, regional demand modeling, and traffic analysis research projects.

Keir earned a Bachelors of Applied Science in Civil Engineering from the University of Waterloo, in Waterloo, Ontario, Canada. He began his career as a student traffic and transportation engineer for regional transportation authorities in Brampton and Ottawa, Ontario, Canada, and for Transport Canada at Toronto Pearson International Airport. After completing his undergraduate studies, he moved to the United States and worked for several years as a transportation engineer with a consulting firm in northern New Jersey before joining NJIT’s research centers.

Mr. Opie’s research interests are traffic simulation and regional demand modeling. He is currently involved in research efforts to develop a TRANSIMS prototype in New Jersey for USDOT and to develop multiple simulation models for the New Jersey Department of Transportation. Recently, he provided critical components of NJIT’s freight planning study for the northern New Jersey MPO, the North Jersey Transportation Planning Authority. He has also taught several training courses for departments of transportation and private consulting firms in the traffic simulation software package Paramics.

The National Center for Transportation and Industrial Productivity is proud to have Keir Opie as its 2004 Outstanding Student of the Year.
TANNER BLACKBURN received his Bachelor of Arts degree in Physics, magna cum laude with high departmental honors from Middlebury College, Vermont, in May of 1998. Tanner received his Master of Science in Civil Engineering degree from Northwestern University in April, 2002. His master’s thesis, *3D Finite Element Analysis of TDR Cable-Grout-Soil Mass Interaction During Localized Shearing*, employed a commercially available, finite element software package to determine optimal cable and grout design for deploying Time Domain Reflectometry technology in soft soils.

Tanner is currently completing his Ph.D. in Geotechnical Engineering at Northwestern University. His dissertation research, conducted with the assistance of ITI, concentrates on developing advanced instrumentation for performance monitoring of deep excavations and analyzing three-dimensional soil response to deep excavations in soft clays. This project required extensive monitoring of the excavation for the Ford Engineering Design Center, constructed on the Northwestern University campus, which will be the future home of the Infrastructure Technology Institute. Tanner worked closely with ITI research engineers to successfully monitor the performance of the internally braced support system and the response of the soil and adjacent structure.

Prior to pursuing his MS and PhD degrees Tanner worked as a designer for Project Design Consultants, a land development site design company in San Diego, and as an engineer-intern for Hayward Baker in the Chicago area. Tanner was the recipient of the 2003 ASCE Illinois Section Geotechnical Group graduate student scholarship and the Walter P. Murphy fellowship in 2000-2001.

The Infrastructure Technology Institute at Northwestern University is proud to select Tanner Blackburn as its 2004 Outstanding Student of the Year.
AARON BRADSHAW is currently working towards his Ph.D. in Ocean Engineering. He earned his Master’s degree in Ocean Engineering in 1999 from the University of Rhode Island and his Bachelor’s in Civil Engineering in 1996 from Tufts University. Prior to his return to the University of Rhode Island for his Ph.D. in 2003, he worked for Hart Crowser, Inc. in Seattle Washington as a geotechnical engineer. He was involved with very interesting projects involving the capping and remediation of contaminated dredged sediments and seismic retrofitting of marine port facilities.

Since his return to URI, he has worked on a variety of transportation related research projects. He has worked on a FHWA sponsored study on the performance of driven piles for the Central Artery Project in Boston and will be presenting the study results at the ASCE Geofrontiers geotechnical engineering conference this January. He is currently working on a URITC and Rhode Island Department of Transportation sponsored project on the liquefaction potential of the silts commonly found in Rhode Island.

Mr. Bradshaw was selected for the 2004 URITC Outstanding Student of the Year award because of his excellent and varied research achievements and his professional background. Mr. Bradshaw will have a highly successful career in academia or as a practicing engineer.

It is with great pride that the University of Rhode Island Transportation Center selects Aaron Bradshaw as its 2004 Outstanding Student of the Year.
PARISA SHOKOUHI was born and raised in Tehran, Iran. She entered Sharif University of Technology in 1995, at the age of seventeen. She received a Bachelors Degree with honor in Civil and Environmental Engineering in 2000. Ms. Shokouhi joined the graduate program in Civil and Environmental Engineering at Rutgers University in 2001. She received her Masters Degree in the spring of 2003, and is expected to receive her Ph.D. in 2006.

For her Master’s research project, Ms. Shokouhi developed a new nondestructive seismic technique for detection and characterization of cavities and anomalies under pavements. A part of her findings was published in a paper “Application of Wavelets in Detection of Cavities under Pavements by Surface Waves,” in the Transportation Research Record No. 1860 in 2003, and presented at a number of conferences in the United States and overseas.

Ms. Shokouhi was involved in several transportation related research projects, sponsored by NJDOT including a, Material Characterization and Seasonal Variations in Material Properties, investigates seasonal variations in pavement layer properties, with the objective of developing temperature and seasonal adjustment models for the new NJDOT pavement design guide, and as a part of a team that carried out Ground Penetrating Radar (GPR) survey of 1900 miles of New Jersey interstate and state highways for the purpose of pavement layer thickness evaluation.

During the past two years, Ms. Shokouhi has been working on a NJDOT project, Ride Quality Follow-Up. Her paper, “Wavelet-Based Multiresolutional Analysis of Pavement Profiles as A Diagnostic Tool,” will be presented at the TRB 2005 Annual Meeting.

The Center for Advanced Infrastructure and Transportation at Rutgers, The State University of New Jersey, is pleased to have Parisa Shokouhi as its 2004 Outstanding Student of the Year.
Nicholas Deal earned two undergraduate degrees – a Bachelors degree in Geography from California State University in Sacramento and a Bachelors degree in Geography from California State University in Davis. While an undergraduate student, Nicholas worked for a number of organizations including an environmental consulting firm, the California Energy Commission, and the Sacramento Area Council of Governments. These experiences led him to pursue a career as a transportation planner.

Nicholas combines his expertise in environmental issues with transportation planning by participating in processes that make communities more livable and gives people mobility choices for getting to work, school, medical appointments and other activities. In his work with the California Department of Transportation (CALTRANS), he tries to find the best combination of transportation modes that will best serve the needs of specific communities as well as serving as an integral part of a framework of much larger regional or interstate transportation requirements. Mr. Deal goal is to minimize conflicting interest to deliver effective transportation solutions that meet community needs. Nick participates in all aspects of transportation planning from attendance at hearings, to the administration of State and Federal grant programs.

Mr. Deal will receive a Master of Science degree in Transportation Management from the Mineta Institute in June of 2005. Nicholas is a dedicated student and is fascinated by the interaction between the general public and local government.

For his excellent academic and professional achievements, the Mineta Institute is proud to select Nicholas Deal as its 2004 Outstanding Student of the Year.
ANTOINE A. WHITE is the younger of two siblings of Mr. & Mrs. William White from Charleston, South Carolina. He has one brother, William White, II. He is currently in the Master of Science in Transportation at South Carolina State University, Orangeburg, South Carolina. Antoine White is currently a James E. Clyburn Scholar, he earned a B. S. Civil Engineering Technology and Science and graduated Magna Cum Laude, and he is also a member of Alpha Kappa Mu Honor Society.

Antoine is currently conducting research with a project entitled “Unpaved Road Techniques in South Carolina” with Dr. Ali Eliahdorani at South Carolina State University.

Mr. White’s academic performance coupled with his zealous work ethic made him a well-qualified candidate for the award. Mr. White was selected based upon his accomplishments in his research internship, and his leadership and professionalism shown both in academic and social settings. In the year 2003 he graduated Manger Cum Laude.

The University Transportation Center at South Carolina State University is proud to select Antoine A. White as its 2004 Outstanding Student of the Year.
MELISSA A. SALZLER earned a bachelors degree and a 3.36 GPA in Advertising at the College of Mass Communications at the University of South Florida (USF) in May of 2004. In January she will begin the rigorous MBA program at USF. As a freshman, Melissa began an undergraduate research assistant career at the Center for Urban Transportation Research (CUTR). Her work includes various projects for the National Center for Transit Research (NCTR), the Florida DOT, and city funded research. Melissa is skilled in the creation of training manuals, National Transit Database reports, database development and maintenance, surveying, and Transportation Development Plan (TDP) inventories. She has also managed research surveys for the university shuttle system.

In July 2004, Melissa combined her knowledge in transportation and mass communications background to become an Outreach Coordinator for the New North Transportation Alliance (NNTA) at CUTR. Her goal is to strengthen the relationship between alternative transportation and the working community in the north Tampa region.

The University of South Florida is pleased to have Melissa A. Salzler as its 2004 Outstanding Student of the Year.
SARA HAYDEN is a second year Master of Planning student at the School of Policy, Planning, and Development at the University of Southern California, where she was named a Dean’s Merit Scholar upon admission. Working as research assistant to Professor Genevieve Giuliano, Sara’s research projects have included co-authoring a book chapter on transit marketing and an ongoing project assessing the effectiveness of the state-mandated terminal gate appointment system at the Ports of Los Angeles and Long Beach.

Sara took a circuitous route to transportation planning which has given her broad and rich experiences. A native of Seattle, Sara received her BA in History from Macalester College (St. Paul, MN) in 1993. Sara studied in both Germany and China, attaining fluency in both German and Mandarin Chinese. Upon graduating Magna Cum Laude, Sara was admitted to membership in Phi Beta Kappa and received the Yahyah Armajani Prize in non-western history. She worked for the University of Washington Medical School, and Western China, where she spent more than four years working for non-profit organizations. Experiencing the congestion and controversy that accompanied Seattle’s rapid growth in the 1990s was what first sparked Sara’s interest in transportation; the flame was fanned as she watched Chinese cities cope with the steep rise in travel and automobile ownership among their population.

Sara is dedicated to leadership through public service. Her work in China facilitated bringing medical care and educational opportunities to isolated rural communities and underserved urban populations, for which she was named Model Foreign Teacher by Shaanxi Province. Her commitment to involvement in her community has led her to volunteer in an after-school tutoring program near USC. Sara views the profession of transportation planning as an outgrowth of this service orientation, and looks forward to using her skills to benefit the community of which she finds herself a member.

The National Center for Metropolitan Transportation Research (METRANS) is proud to select Sara Hayden as Outstanding Student of the Year for 2004.
STEPHEN LUKACHKO is a Doctoral Candidate and Sir Frank Whittle Fellow at Massachusetts Institute of Technology (MIT), Department of Aeronautics and Astronautics. Since earning his bachelor’s degree in 1992, Stephen has worked for NASA Langley Research Center, the National Research Council, and MIT’s Gas Turbine Laboratory. His research interests include thermo-fluid-chemical systems (energy conversion, combustion, and emissions), strategic decision-making (design for social value; value definition, risk and uncertainty), and environmental policy (noise and emissions impact, mitigation, and policy design).

Stephen has been selected as Outstanding Student of the Year specifically for his work under The FAA Center of Excellence for Aircraft Noise and Aviation Admissions (PARTNER) to develop a methodology for probabilistic estimation of environmental costs associated with air transportation. Establishing national environmental goals for commercial air transport is a challenge with significant importance to the prosperity of the United States.

Stephen developed a multi-attribute impact pathway analysis to probabilistically estimate emissions and noise inventories, health and welfare risks to people and ecosystems, and a damage function for environmental costs from air transport operations. The FAA will use this methodology to identify environmental risks, clarify interdependencies, and determine economic consequences. The FAA expects to make use of this important research to inform policy decisions considered by the International Civil Aviation Organization.

Stephen has authored fourteen peer reviewed publications as well as numerous reports. He has consulted for the United Nation’s Intergovernmental Panel on Climate Change and the National Research Council. He is recognized by his professors and his peers as an outstanding researcher. His work is critical to the FAA’s missions to provide aviation capacity in an environmentally sound manner and he is most deserving of this award.

The FAA Centers of Excellence are proud to have Stephen Lukachko as Outstanding Student of the Year for 2004.
RYAN D. MCDANIEL obtained a B.S. degree in Engineering with Magna Cum Laude honors in May 2003 from the University of Tennessee at Martin and is expected to graduate with a M.S. degree in Civil Engineering at the University of Missouri-Rolla on December 18, 2004. During his collegiate career, Ryan has been involved in the American Society of Civil Engineers, for which he served as Vice President for the student organization at the University of Tennessee at Martin, Earthquake Engineering Research Institute, and Gamma Sigma Alpha, a Greek Honor Society. He also served as Secretary of Pi Kappa Alpha (Epsilon Sigma Chapter) and as a Peer Enabling Program Leader.

While an undergraduate, Ryan was chosen as a University Scholar which is the highest scholarship program offered at the University of Tennessee at Martin. Ryan has been and continues to be involved in the research and development of two semi-active energy dissipation systems with Dr. Richard Helgeson of UTM. As a M.S. candidate, Ryan was involved in the research, development, and characterization of distributed coaxial strain and crack sensors which can be embedded in reinforced concrete structures. The crack sensors exhibit the ability not only to detect the location and size of cracks in a concrete member, but also the ability to “memorize” the damage incurred in the concrete member during extreme loading such as earthquake or blast. During his graduate work, Mr. McDaniel has been advised by Dr. Genda Chen at the University of Missouri-Rolla.

The Center for Advanced and Non-Destructive Testing Technologies at the University of Missouri-Rolla is honored to Ryan McDaniel as its 2004 Outstanding Student of the Year.
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REGION I: Massachusetts Institute of Technology
Cambridge, MA
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REGION II: City University of New York,
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Cornell University, New Jersey Institute of Technology, New York University, Polytechnic University, Princeton University, Rensselaer Polytechnic Institute, Rutgers University, SUNY, Stevens Institute of Technology, University of Puerto Rico

REGION III: Pennsylvania State University,
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City University of New York
George Mason University
Iowa State University
Marshall University
Massachusetts Institute of Technology
Montana State University
Morgan State University
New Jersey Institute of Technology
North Carolina A&T State University
North Carolina State University
North Dakota State University
Northwestern University
Pennsylvania State University
Purdue University
Rutgers University
San Jose State University
South Carolina State University
Texas A&M University
University of Alabama
University of Arkansas
University of California
University of Central Florida
University of Denver and Mississippi State University
University of Idaho
University of Minnesota
University of Missouri, Rolla
University of Rhode Island
University of Southern California and California State University, Long Beach
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