## University Transportation Centers



9th Annual Student of the Year Awards

Transportation
Research Board
79<sup>th</sup> Annual Meeting
Omni Shoreham
Washington, D.C.

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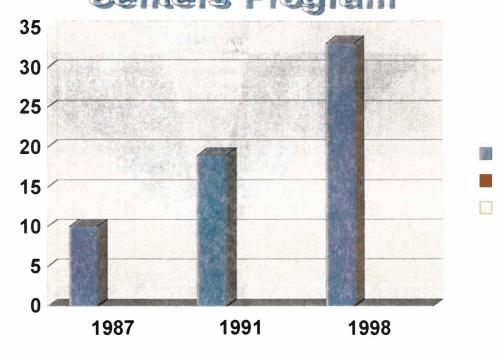
## U.S. Department of Transportation UNIVERSITY TRANSPORTATION CENTERS

At the Ninth Annual Student of the Year Awards ceremony, the U.S. Department of Transportation (DOT) honors the most outstanding student from participating University Transportation Centers for his or her achievements and promise for future contributions to the transportation field. Selection is based on accomplishments in such areas as technical merit and research, academic performance, professionalism, and leadership.

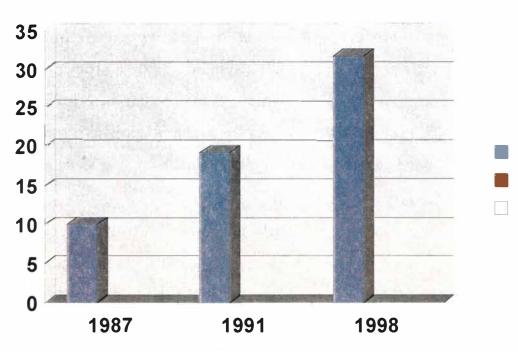
Traditionally, all awardees have been affiliated with the University Transportation Centers (UTC) program, administered by the Research and Special Programs Administration. This year, in the spirit of "One DOT," the Department for the second time will also honor an awardee from the Air Transportation Centers of Excellence (COE), sponsored by the Federal Aviation Administration (FAA).

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## Growth of the University Transportation Centers Program



Within the past twelve years, the program has added 23 new centers.



The funding has increased by \$21.65 million over the past eleven years.

#### The 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 this Nation, the U.S. Department of Transportation established the University Transportation Centers (UTC) program in 1987 (Title 49, U.S. Code Appendix 1607c), which provided for the establishment and operation of 10 transportation Centers, one for each of the 10 Federal regions.

Since that time, the UTC program has expanded to include 33 Centers, as authorized by the Transportation Equity Act of the 21<sup>st</sup> Century (TEA-21) enacted by Congress on June 9, 1998. TEA-21 authorizes 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 the many disciplines compromising transportation through the mechanisms of education, research and technology transfer.

TEA-21 also established education as one of the primary objectives of a university transportation center, 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, Research and Special Programs Administration, U.S. Department of Transportation.

#### AIR TRANSPORTATION CENTERS OF EXCELLENCE

Congress authorized the Air Transportation Centers of Excellence (COE) in 1990 to assist the Federal Aviation Administration (FAA) in conducting research on critical strategic issues pertinent to developing and maintaining a safe and efficient air transportation system.

Centers now serve as a network of national resources to advance U.S. technology and expertise in aviation related disciplines through education, training, basic and advanced research, information dissemination and technology transfer.

Funding for basic research at Centers is provided by the sponsoring organization through a cooperative agreement; these funds are matched dollar for dollar by non-federal sources. Joint funding initiatives solidify long-term partnerships that extend from 3 to 10 years. Thereafter, each COE is expected to be a self-supporting national resource.

Since 1992, Air Transportation Centers of Excellence partners have supported over 150 aviation related research projects reflecting a 35 million level of effort. The COEs are managed by the FAA.

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### University Transportation Centers Students of the Year

Brian Aldridge

University of Kentucky

Jason Bittner

University of Wisconsin, Madison

Patricia Walsh Burke

Montana State University, Bozeman

Daniel Finfer

**Purdue University** 

David Gibson

University of Alabama, Tuscaloosa

Curtis Hammond

University of Minnesota

**Hudson Jackson** 

Rutgers University

Adam Levine

Polytechnic University

Jeffrey A. Masten

North Carolina State University

Shaquita M. McConnell

Morgan State University

Terry Morgan

University of Denver

Brian M. Revels

University of Virginia

Damian Siebert

Northwestern University

Joan Walker

Massachusetts Institute of Technology

Rhonda Young

University of Washington

Jennifer Bailly

California State University, Long Beach

**Todd Brayton** 

University of Rhode Island

Jennifer Dill

University of California, Berkeley

Dan Gerbus

University of Idaho

William D. Hall

Massachusetts Institute of Technology

Blake G. Hansen

University of Utah

Mark A. Jensen

San Jose State University

Kimberley Mastako

Texas A&M University

Lida Mazaheri

New Jersey Institute of Technology

Eric Lamar Minter

North Carolina A&T State University

Mia K. Petre

University of Arkansas

Caroline Rodier

University of California, Davis

Wesley E. Tull, Jr.

University of Missouri, Rolla

David Joshua White

Iowa State University

#### Southeastern Transportation Center (Region IV)

#### University of Tennessee, Lead

Brian Aldridge is a lifelong resident of Kentucky and grew up on his family's farm in Bagdad, Kentucky, about an hour east of Louisville. He attended Shelby County High School and graduated in 1994. In the fall of 1994, Brian began his undergraduate work at The University of Kentucky in Civil Engineering. He graduated with a Bachelors of Science degree in Civil Engineering in 1998. During that time, the Kentucky Transportation Cabinet and the Kentucky Transportation Research Center employed him part-time. He spent two years working for the Division of Roadway Design and one summer with the Division of Environmental Analysis, both in Frankfort, Kentucky. In the fall of his junior year, Brian began working for Dr. Lisa Aultman-Hall at the University of Kentucky Transportation Research Center. The University of Kentucky is a consortium member of the Southeastern Transportation Center. Since that time, he has worked on numerous projects in the areas of freight access, driver safety and transportation planning. This fall, Brian will finish his M.S. in Civil Engineering while conducting research on basing traffic assignments on GPS-collected route data. He will begin his professional career with HNTB in Louisville, Kentucky in mid-January.

#### **Metropolitan Transportation Center**

University of Southern California California State University, Long Beach

Jennifer Bailly is a student at California State University Long Beach (CSULB) She graduated with a degree in Economics in August 1999 with an honors GPA of 3.93. In addition to her academic accomplishment, she was awarded the Wallace N. Atherton Memorial Award for Outstanding Graduating Senior during the 1998-1999 school year, by the Department of Economics. Jennifer was bestowed this honor for her discipline and hard work which led her to be the top Economics student.

Jennifer is currently in the Masters program in Economics at CSULB and is a research assistant on the port productivity Metrans/SCAG project. She also teaches the Supplemental Instruction course for Macroeconomic Principles at CSULB and tutors students through the Learning Assistance Center.

#### University Transportation Center at the University of Wisconsin

(Region V)

University of Wisconsin, Madison, Lead

Jason Bittner is a candidate for a M.A. in Public Administration from the La Follette Institute of Public Affairs at the University of Wisconsin, Madison (UW-Madison). He has concentrated his studies on Energy and Transportation Policy. As part of his course requirements, Jason has prepared analysis on the use of Light Emitting Diode technology for municipal traffic controls and other policy papers.

Jason earned his B.A. in Political Science with a minor in Public Administration from American University. As an undergraduate, Jason prepared an assessment of the Federal Aviation Administration's procedures for long term planning and budgetary allocations. In addition, Jason completed policy analysis projects on Amtrak's Northeast Corridor and on community economic development plans, specifically focusing on including public transit options in these plans.

Following this undergraduate work and prior to graduate school, Jason worked as an Assistant to the Municipal Manager in New Lebanon, Ohio. Jason has recently started working as a Project Assistant for the Transportation Research Center at UW-Madison. With the regional and multidisciplinary focus of the Transportation Research Center, Jason has also begun efforts to establish ties with other academic programs at UW-Madison and other universities and colleges throughout the region.

#### University of Rhode Island Transportation Center University of Rhode Island

**Todd Brayton** is a M.S. candidate in transportation at the University of Rhode Island (URI). Mr. Brayton received his B.S. degree in civil engineering from URI in 1996. He also is a member of the National Engineering Honor Society, Tau Beta Pi and the National Civil Engineering Honor Society, Chi Epsilon.

Mr. Brayton began his career in 1993 as a summer intern in the planning division of the Rhode Island Department of Transportation (RIDOT). Mr. Brayton is currently working as a research assistant on a project funded by the Federal Highway Administration (FHWA) to develop a performance based mix design for Cold In-Place Recycling (CIR) of bituminous pavements.

Mr. Brayton was the northeast regional winner of the DataPave contest using Long Term Pavement Performance (LTPP) data, which was sponsored by the ASCE and United States Department of Transportation. Through his active involvement in the outreach program of the University of Rhode Island Transportation Center (URITC), he has been responsible for demonstrating the use of pavement materials, including asphaltand concrete, to visiting students from the elementary level all the way up to the high school level. Upon completion of his M.S. degree, Mr. Brayton will work for Bryant Associates.

#### Western Transportation Institute

Montana State University, Bozeman

Patricia Walsh Burke, P.E., is a candidate for a MS, in Civil Engineering at Montana State University (MSU). She received her B.S. in Civil Engineering in 1993 from MSU and worked in the private sector for several years before returning to MSU. Her work in the private sector included several transportation and highway projects for both the Montana Department of Transportation and the City of Billings, Montana. Through these projects, Ms. Burke gained valuable transportation experience; however, she realized that further education in the transportation field was necessary to reach her career goal of being a project manager.

Ms. Burke is currently working for the Western Transportation Institute on an evaluation of a high-speed, rural weigh-in-motion system.

In addition to her studies, Ms. Burke is involved with the professional state chapters of the Institute of Transportation Engineers (ITE) and the American Society of Civil Engineers (ASCE). She is the

Secretary/Treasurer of the Montana Chapter of ITE and has been the Secretary/Treasurer of the Montana Section of ASCE for the past four years.

## University of California Transportation Center (Region IX) University of California

Jennifer Dill is a Ph.D. candidate in the Department of City and Regional Planning at the University of California, Berkeley. Her transportation studies focus on air quality and land use interactions. Her dissertation will evaluate the air quality and mobility impacts of older vehicle retirement programs. She has published articles on the incidence of vehicle license fees, regionalism in transportation and air quality planning, and employer-based trip reduction programs. Ms. Dill is an Eisenhower Fellow, an Eno Foundation Fellow, and received the National Womens' Transportation Seminar Helene Overly Scholarship in 1997.

Jennifer previously worked in the field of transportation and air quality. As an environmental planner for the Bay Area Air Quality Management District, she helped implement an employer trip reduction rule and a grant program for transportation projects reducing air pollution. She authored an Energy-Aware Planning Guide while working for the Local Government Commission. As an environmental protection specialist, she worked with regional, state, and federal agencies on transportation and air quality plans. She has a M.A. in Urban Planning from the University of California, Los Angeles and a B.S. in Environmental Policy Analysis and Planning from the University of California, Davis.

#### Institute for Safe, Quiet and Durable Highways

#### **Purdue University**

Daniel Finfer is a sophomore in Mechanical Engineering at Purdue University. He was one of the first summer interns for the Institute for Safe, Quiet, and Durable Highways. He spent his summer studying tire/road interaction noise.

The goal of the summer internship program was to introduce the students to transportation research while allowing them to take summer courses. Daniel has participated in activities such as leading tours of Herrick Laboratories (a Mechanical Engineering graduate research lab) for junior high students to expose them to transportation-related studies. He also participated in the Announcement Ceremony for the SQDH Institute. By participating in these additional activities, Daniel demonstrated a professionalism in promoting the education, research, and technology transfer goals of the SQDH Institute.

One of Daniel's more important research tasks was to make sound level measurements near the Indiana Toll Road in Portage, IN. This area of the toll road is very noisy and close to residential areas. Daniel also made predictions of the roadside sound level using the Traffic Noise Model and compared the predictions to the experimental measurements.

#### National Institute for Advanced Transportation Technology University of Idaho

**Dan Gerbus** received his B.S. in Mechanical Engineering at the University of Cincinnati and his M.S. at the University of Idaho, where he is currently pursuing a PhD in Mechanical Engineering. Dan's interests range from analytical modeling and experimental mechanics to design and CNC machining.

For the past two years, Dan has been a participant and leader in Idaho Engineering Works, an innovative model for capstone design classes that focus on human dynamics, communication, teamwork, personal reflection, and professionalism. As a teaching assistant for a Senior Capstone Design course, he trained and advised graduates and undergraduates in machine shop equipment operation, project management, solid modeling, team-based product design, and design for manufacturability. Dan worked on the development of composite structure design software and assisted fellow graduate students with other NIATT-funded research, especially genetic algorithms to optimize composite materials, equation decoupling software, and alcohol-water fuel igniter design.

This past spring, Dan presented his M.A. thesis on the analysis and design of traditional archery bows at the Regional ASME conference. Dan's dissertation topic involves optimized structural design and the complete fabrication of an electrically assisted bicycle sponsored by NIATT. The bike utilizes fuel cells and composite materials to optimize the system.

#### **University of Alabama Transportation Center**

University of Alabama

**David Gibson** is currently in a Ph.D. program in the Civil Engineering Department of The University of Alabama, Tuscaloosa. His specialty areas include geographic information sciences, boundary / cadastral mapping and information, route geometrics, geodesy, topographic photogrammetry, and the application of the mapping sciences to geographic information systems. His activities include memberships and participation in the Urban and Regional Information Systems Association (URISA), the American Congress on Surveying and Mapping (ASCM, Fellow Member), American Society for Photogrammetry and Remote Sensing (ASPRS),

Florida Surveying and Mapping Society (FSMS), and the Florida Association of Cadastral Mappers (FACM).

As founding Chair of Florida's Base Mapping Advisory Committee (BMAC) and founding member of Florida's Geographic Information Board (GIB), he has actively brought GIS interest groups together for consensus setting. He has held a gubernatorial appointment to the Florida Board of Professional Surveyors and Mappers since August 1994, recently completing two years as board chair. Professor Gibson is co-author of a nationwide text, Route Surveys and Design, 5th Ed., by Meyer and Gibson, published by Harper Row, author of numerous other publications, and teaches 10 to 15 professional development seminars per year.

#### Air Transportation Center of Excellence

Massachusetts Institute of Technology

William D. Hall grew up in western Michigan, where he developed a fascination for aviation from an early age. Bill began to experiment with model aircrafts by building and flying a succession of free gliders, propeller-driven go-carts, u-control and eventually radio-control aircrafts. He participated in math and science contests throughout junior high and high school, winning third place in the 1986 Westinghouse International Science Fair for his homebuilt image scanner.

As an undergraduate student at MIT, Bill studied aeronautical engineering and worked on autonomous robotic vehicles at the MIT Sea Grant Laboratory. In 1992 his autonomous vehicle research culminated in a Masters degree. Bill worked at the Draper Laboratory from 1992 until 1995 on topics ranging from autonomous intelligence, simulation, and transportation system optimization. In 1995, he enrolled in the Operations Research Center at MIT to pursue his PhD on Air Traffic Management. Today, Bill leads a small Air Traffic Management group at Draper Laboratory and experiences the air transportation system first-hand as an instrument-rated pilot.

#### **Institute for Intelligent Transportation Systems**

University of Minnesota

Curtis Hammond is a Ph.D. candidate in Kinesiology and Human Factors at the University of Minnesota (U of M). He received his M.S. and B.S. in Health and Sport Sciences from the University of Oklahoma (OU). While attending OU, he was involved in research on gait and posture assessment using piezoresistive accelerometry as well as research for the Easter Seals Weight Supported Rehabilitation Project for the department of Orthopedic Surgery Rehabilitation Sciences (OU Health Sciences Center). Curtis also served as a lab assistant for the Department of Zoology in both Human Anatomy and Human Physiology.

While attending the U of M, he has been involved in a variety of research in the field of human factors. This research has primarily been focused in the area of virtual environments, a.k.a. virtual reality, and human interaction. The most significant study completed thus far was a validation of human driving performance/behavior in the real world versus that in virtual environments. His current research is a continuation of validation of virtual reality systems and the development of a Labview-based low-end remote eye tracking system.

#### Mountain Plains Consortium (Region VIII)

North Dakota State University, Lead

**Blake G. Hansen** earned a B.S. in Civil Engineering at the University of Utah in 1998. He is scheduled to receive his M.S. in Civil Engineering at the university in spring 2000.

His education and research have focused on computer and communications technology as they apply to Transportation Engineering and ITS. His research efforts include work in Adaptive Traffic Control Systems, Road Weather Information Systems (RWIS), Freeway Incident Detection, Optimal Traffic Signal Phase Timing, Traffic Calming, and Pavement Markings. He has also been a part of the design and implementation of the University of Utah Traffic Lab, a research extension to Utah Department of Transportation's new Traffic Operations Center, located on the University of Utah campus.

He has received several scholarships, the most notable being from the Western Coal Transportation Association and the Institute of Transportation Engineers. He has six papers that have been either accepted for professional presentation, publication, or placement in student paper competitions.

#### Center for Advanced Infrastructure and Transportation

**Rutgers University** 

**Hudson Jackson** graduated from Fourah Bay College, University of Sierra Leone in 1986 with a B.S. in Civil Engineering. He pursued a M.S. in Geotechnical Engineering and Structural Design at the Technical University of Darmstadt, Germany.

Mr. Jackson has worked at the University of Sierra Leone as a Research/Teaching Assistant, and as an Engineer Trainee at the Techsult consulting firm in Freetown, Sierra Leone. These projects involved the geotechnical investigation, design & construction of highways and dams. He also lectured undergraduate courses in Civil Engineering Materials, Surveying, Building Technology, and Materials & Structures, at the University of Sierra Leone.

Presently, Mr. Jackson is a PhD. candidate in Geotechnical Engineering at the Department of Civil and Environmental Engineering at Rutgers University. His research involves the development of an improved data reduction procedure for the quality control and assessment of pavement systems using the Impulse Response method. He is a Teaching Assistant and also works at the Asphalt and Soils laboratories at Rutgers University.

#### Mineta Institute for Surface Transportation Policy Studies

San Jose State University

Mark A. Jensen is a Senior Engineer/Analyst for Science Applications International Corporation's (SAIC) Transportation Research Operation in San Diego, California. Over his career, he has led and participated in numerous technical studies encompassing advanced transportation, trade, aerospace, sensor and communications technologies. Mark holds a B.S. in Aerospace Engineering from the University of Maryland and an M.A. in National Security Studies from Georgetown University. He is currently pursuing an M.S. in Transportation Management from the Mineta Transportation Institute for Surface Transportation Policy Studies at San Jose State University.

Mark recently led a groundbreaking technology evaluation for the Mid America Regional Council (MARC) to investigate potential technologies for increasing and optimizing international truck and rail freight across the NAFTA Trade Corridor and through Kansas City. The focus of this vision is to provide a series of technology-based solutions which could potentially lead to the Kansas City Region functioning as an international port of entry for goods and services by allowing for significant increase in "In-Bond" freight to be transported to Kansas City Intermodal Facilities. User services assessed in this analysis are: International Border Electronically Expedited Clearance, Electronic Credentialing, Shipment and Vehicle Tracking, In-bond Shipment Security, Intermodal Facility Management, Electronic Payment, Corridor-Wide CVO Traveler Information, and Trade Services.

#### University Transportation Research Center (Region II)

City University of New York, Lead

Adam Levine received a B.S. in Engineering from Princeton University in 1988. In 1989, Adam became a junior engineer in the Long Island office of the New York State Department of Transportation. After working as a designer on projects including the first Long Island Expressway high occupancy vehicle lanes, Adam received his professional engineer's license in 1995. Since 1995, Adam has worked in the quality assurance section of the design group as the regional estimating engineer and value engineering coordinator, the design automation coordinator, and the supervisor of the quality assurance review and photogrammetry / project visualization units. In 1997, Adam was named employee of the month for his work in training the one thousand employees in the Long Island region in sexual harassment prevention.

In January of 1998, Adam began study for a M.S. in transportation planning and engineering at Polytech. He is a member of the New York State Association of Transportation Engineers.

#### Southwest Region University Transportation Center (Region VI)

Texas A&M University, Lead

**Kimberley Mastako** is a Civil Engineering Ph.D. student at Texas A&M University. She came to Texas A&M from the California Polytechnic State University (CPSU) in San Luis Obispo where she earned a B.S. in Civil Engineering, a M.B.A., and a M.S. in Engineering Management. Her background includes significant work in the area of advanced urban traffic management. She was project manager on a FHWA sponsored mobile surveillance and wireless communication field operational test and served as co-principal investigator on several Caltrans sponsored research projects.

At CPSU Kimberley served as a member of the engineering faculty where she taught undergraduate civil engineering and conducted training classes for Caltrans and FHWA transportation engineers. As part of this activity she developed the nation's first simulation-based training program for Transportation Management Center operators. Her contributions to this and other ITS projects helped earn her the Dwight David Eisenhower Fellowship.

At Texas A&M Kimberley has successfully completed graduate course work in the Civil Engineering, Economics, and Statistics departments. She helped launch the ITS America Student Chapter at Texas A&M and was selected for an Eno Fellowship in 1998. She is currently working on her dissertation, which involves modeling the effects of adding variable-toll lanes to existing freeway right-of-way.

#### **Center for Transportation and Environment**

North Carolina State University

Jeffrey A. Masten earned a B.S. in business administration from Northeastern University (Boston, MA), with concentrations in transportation logistics and finance. In the 1990s he spent two years in New Hampshire helping communities convert railroad beds into recreational paths. In addition, as a research intern for the Society for the Protection of New Hampshire Forests, Masten researched the contamination of municipal water supplies and their associated causes, mitigation efforts, and costs. Masten completed preparatory graduate work and received a certificate in environmental studies from Tufts University in Medford, MA.

He did his graduate studies at the UNC-Chapel Hill Department of City and Regional Planning, while working as a research assistant for the Division of Community Assistance, NC Department of Commerce. At the Commerce Department, Masten administered a survey of all NC municipal and county governments about land use and water quality planning, and reviewed and evaluated community comprehensive plans for overall quality and water quality provisions. While pursuing his master's in regional planning, Masten has also served as a teaching and research assistant to the department.

#### National Center for Transportation and Industrial Productivity

New Jersey Institute of Technology

**Lida Mazaheri**, currently a traffic engineer with the Port Authority of New York and New Jersey (PANYNJ), received an M.S. degree in Transportation Engineering from the New Jersey Institute of Technology in 1998, and has since been preparing for Ph.D. studies which she plans to pursue in 2000. She is a member of and has served on the Executive Board of Alpha Epsilon Lambda, NJIT's Graduate Honor Society.

Her many projects for PANYNJ have included roadway and bridge signage improvements, and projects for both John F. Kennedy International Airport and LaGuardia. During her graduate studies she was an active member of the Intelligent Transportation Society of America; Institute of Transportation Engineers and the Women's Transportation Seminar.

Ms. Mazaheri received her B.S. in electrical Engineering from the University of Texas at Austin. She will be presenting a paper, "Evaluation of Maintenance Approaches at Lincoln Tunnel," at the Transportation Research Board's 79<sup>th</sup> Annual Meeting. She is a resident of Wayne, New Jersey.

#### **National Transportation Center**

#### Morgan State University

**Shaquita M. McConnell** is a candidate for a M.S. in Transportation at Morgan State University (MSU). She is concentrating on passenger transportation with an emphasis in transportation planning. She received her B.S. in Civil Engineering from MSU in 1999.

Shaquita interned with Greenhorne & O'Mara, Inc. in the summer of 1997. At Greenhorne & O'Mara she worked closely with Senior Project Managers to complete highway design and improvements for the States of Maryland, Delaware and Virginia. She also performed and completed traffic studies for several counties in Maryland.

Ms.McConnell has received graduate research assistantships and has begun an internship with the Maryland State Highway Administration in the Office of Policy and Research. She has received several honors at MSU including, Engineering Achievement; The Dean's List; Ryder/Urban League Scholarship (1999); Goldseeker Fellowship (1999); and Senatorial Scholarship (1999). She is a member of the American Society of Civil Engineers.

#### **Urban Transit Institute**

#### North Carolina A&T State University

Eric Lamar Minter is a senior at North Carolina Agricultural and Technical State University pursuing an undergraduate degree in Transportation/Logistics. Mr. Minter is a member of Delta Nu Alpha, a nationally recognized transportation fraternity. He maintains a 3.7 GPA and has received various awards in recognition of his academic achievement, which include the Conference of Minority Transportation Officials Matching Scholarship and Southeastern Transportation Center Education Award.

Mr. Minter is currently participating in an internship with Novartis Crop Protection, the Supply Chain department, where he is responsible for developing carrier selection tools, processing and collecting freight claims, auditing freight bills, negotiating with carriers and ensuring data integrity in the freight payment system. Upon completion of an undergraduate degree, he plans to pursue a career in transportation planning or third party logistics.

#### National Center for Intermodal Transportation

University of Denver & Mississippi State University

**Terry Morgan** is currently a graduate student at the University of Denver's Intermodal Transportation Institute and is employed as a process manager for the network operations organization of US WEST Communication. As a certified member of the American Society of Transportation and Logistics (AST&L), she has led study groups to prepare candidates for certification exams through the AST&L in conjunction with Emily Griffith Opportunity School, the adult education program of the Denver Public School System.

Terry received her Bachelors in business administration with a major in transportation from the University of Oregon. Prior to her current position at US WEST, she held operations and strategic planning positions in the forest products and luggage manufacturing industries. She also was responsible for assisting in marketing functions with an entrepreneurial third-party logistics company. To promote the logistics profession as a career choice for young people, Terry has spoken at high school marketing classes and is currently involved in judging competitions for Distributive Education Clubs of America (DECA), an organization devoted to helping high school students develop the skills needed to succeed in careers in marketing, management, and entrepreneurship.

#### <u>Mack-Blackwell National Rural Transportation Study Center</u> University of Arkansas

Mia K. Petre is a candidate for a M.S. degree in industrial engineering at the University of Arkansas (U of A). She received a bachelors degree in industrial engineering from the U of A in May, 1999. During her undergraduate studies, Mia participated in the "Research Experience for Undergraduates Program" and worked on a Mack-Blackwell National Rural Transportation Study Center (MBTC) project. Ms. Petre is currently working on a MBTC project entitled "Finding Synergy in Intermodal Operations with Truck and Rail."

Mia is the Industrial Engineering Department mentor coordinator for the Women in Engineering (WIN) mentoring program. She is also an active member of the Institute of Industrial Engineers and Alpha Pi Mu, honors society for Industrial Engineers. She has held various leadership positions in these organizations, including her presidency of Alpha Pi Mu during the 1998-1999 academic year. Under her leadership, Alpha Pi Mu was awarded first place, nationally, for their annual report turned in during that academic year. In 1999, Mia was announced as the outstanding graduating senior for the Industrial Engineering Department and was also awarded the 1999 Eagle Award of Excellence for a design project.

#### Mid-Atlantic Universities Transportation Center (Region III)

#### Pennsylvania State University, Lead

**Brian M. Revels** is a M.S. candidate in civil engineering at the University of Virginia in Charlottesville. Brian received his Bachelor of Civil Engineering degree from the University of Delaware in May 1998. As a graduate research assistant, Brian has focused in transportation engineering with particular emphasis in ITS and GIS. His graduate research topic is development of a Web-based Interactive Trip Planner for the Peninsula Transportation District Commission using a systems design approach. The goal of the project is to investigate the integration of Internet and GIS technologies to improve user information for the transit industry.

He has recently completed the interactive trip planner project and is currently working with the transit provider for implementation of the project. The central theme of Brian's thesis research is the use of a systems engineering approach for the identification of the underlying transportation problem and completion of a viable communications improvement alternative. Past honors include recipient of the E. C. Davis Trust Scholarship for Civil Engineering at the University of Delaware and FE/EIT certification in November 1997. In addition, Brian is a member of the following engineering organizations: Chi Epsilon (Treasurer, 1998), Institute of Transportation Engineers (Vice-President, 1999), Tau Beta Pi, NSPE, ASCE, and ITS America.

## University of California Transportation Center (Region IX) University of California

Caroline Rodier is a Ph.D. candidate in Ecology at the University of California at Davis. She has a M.S. in Community Development from the U.C. Davis and a B.S. in U.S. History from Barnard College. The focus of Caroline's research during her graduate career has been urban modeling. She has used regional travel demand, integrated land use and transportation, and emissions models to evaluate the economic and environmental effects of a wide range of transportation and land use policies.

She has authored eight articles that have been published in the Transportation Research Journal of Mathematical and Computer Modeling, and the Transportation Research Record. Caroline has served on modeling advisory committees for the Sacramento Area Council of Governments, the Sierra Club, and the Environmental Law and Policy Center. She has chaired the annual event committee and co-chaired the scholarship committee for the Sacramento chapter of WTS. She has also been awarded the Eno Fellowship. Her area of emphasis is environmental policy analysis with a focus on transportation. Caroline's dissertation research addresses key issues of uncertainty in travel and emissions models in the context of the Clean Air Act. She has been awarded the Eisenhower Transportation Fellowship, the EPA STAR Fellowship (monetary award declined), and the UCTC Dissertation Fellowship in support of her dissertation.

#### Infrastructure Technology Institute

#### Northwestern University

**Damian Siebert**, a native of Santa Fe, New Mexico, is enrolled in the Master's program in the Department of Civil Engineering at Northwestern University. Damian earned his B.S. in Civil Engineering at Tufts University

Wanting to further his education, he applied to Northwestern University to pursue a Master's in Geotechnical Engineering. While attending Northwestern he chose to expand his knowledge through classroom studies, teaching, and research. His research has focused on transportation induced vibration in structures. Upon graduation he plans to expand and continue to use his knowledge in the "real world." He hopes to work for an engineering firm specializing in Geotechnical Engineering.

#### <u>Center for Advanced Materials and Non-Destructive Testing Technologies</u> University of Missouri-Rolla

Wesley E. Tull, Jr. is an undergraduate at the University of Missouri-Rolla. He maintains a 3.6 GPA, and will graduate in May 2000 with a B.S. degree in Civil Engineering. His upper-level studies focus on asphalt and concrete pavement design. He recently received an award for design of railing system for new Smart Structure scheduled to be built on campus.

Wesley was a four time Varsity Football letterman for the university and has been selected as an Academic All-Conference player 3 times in the MIAA. He in also active in various societies being a member of Mclub, ASCE, SME, ACI, XE, and the new CE Ambassador program.

#### New England University Transportation Center

(Region I)

Massachusetts Institute of Technology, Lead

Joan Walker is a doctoral candidate in MIT's civil and environmental engineering department with research interests in traveler behavior and the relationship between transportation and land use. Her doctoral research is in the area of long-term mobility models with an emphasis on measures of accessibility. She holds a bachelors degree in civil engineering from U.C. Berkeley and a masters degree in transportation from MIT.

Ms. Walker has obtained a broad array of experience in transportation covering research, teaching, consulting, and government. At MIT she has worked on the Tren Urbano research project, which is a multidisciplinary, multi-university research project organized around the rail transit system under development in San Juan, Puerto Rico. Before returning to school for her doctoral studies, she worked at Caliper Corporation, Parsons De Leuw and the Federal Highway Administration.

Ms. Walker's honors include a UPS Doctoral Fellowship, a National Science Foundation Graduate Fellowship, the Bechtel Achievement Award (the top undergraduate award granted by Berkeley's College of Engineering), and lifetime memberships in Chi Epsilon, The Eno Foundation, and Tau Beta Pi.

#### Midwest Transportation Consortium (Region VII)

Iowa State University, Lead

David Joshua White received a B.S. in Civil Engineering from the University of Missouri-Columbia in 1997 and the co-emphasis M.S. in Geotechnical Engineering and Civil Engineering Materials from Iowa State University in 1999. He has served as a Research Assistant, in the Department of Civil and Construction Engineering at Iowa State University, where he studied the quality of highway embankments constructed under the current Iowa Department of Transportation specifications. Along with embankment quality research, he has researched and developed a value-added concrete composite material from fly ash and recycled polyethylene terephthalate. Based on this work, two papers have been published, a provisional U.S. patent was filed by Iowa State University, and he was awarded the John H. Faber Scholarship administered by the American Coal Ash Association and the John and Mary Pappajohn Entrepreneurial Scholarship. In addition to research work, he has served as a Teaching Assistant for undergraduate soil mechanics laboratory and undergraduate materials laboratory.

Currently, he serves as a Research Assistant and Ph.D. student at Iowa State University. He recently presented a paper entitled "Rapid Soil Identification and Classification for Highway Embankment Construction" at the Midwest Transportation Consortium Transportation Scholars conference.

## Transportation Northwest (Region X) University of Washington, Lead

Rhonda Young is a current graduate student in the Civil and Environmental Engineering Department at the University of Washington and is working towards a doctorate degree in Transportation Planning with a particular emphasis on economics and decision-making. She obtained her bachelors degree in Civil Engineering from Oregon State University in 1992. After over four years of design work for consulting firms she continued her education at the University of Washington, completing her Masters degree in 1999. In January of 1999, Rhonda began a six-month foreign study program in Stockholm researching Swedish transportation planning methods.

She continues to work part-time for an engineering consulting firm and is a registered professional engineer with the State of Washington.

#### **Regional UTCs and Consortium Members**

#### Region I: Massachusetts Institute

of Technology, Cambridge, MA

Harvard University

University of Connecticut

University of Maine

University of Massachusetts

University of New Hampshire

University of Rhode Island

University of Vermont

#### Region II: City-University of New York, New York, NY

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

University of Virgin Islands

#### Region III: Pennsylvania State University

State College, PA

University of Pennsylvania

University of Virginia

Virginia Polytechnic

West Virginia University

#### Region IV: University-of Tennessee, Knoxville, TN

**Duke University** 

Georgia Institute of Technology

Georgia State University

North Carolina A&T State University

North Carolina State University

University of Florida

University of Kentucky

University of North Carolina (Chapel Hill)

University of South Florida

Vanderbilt University

#### Region V: University of Wisconsin, Madison, WI

Lac Courte Oreilles Ojibwa Community College

Marquette University

Northwestern University

Richard J. Daley College

University of Cincinnati

University of Chicago

University of Wisconsin (Milwaukee)

#### Region VI: Texas A&M University, College Station, TX

Texas Southern University

University of Texas (Austin)

#### Region VII: Iowa State University, Ames, IA

Lincoln University

University of Missouri (Columbia)

University of Missouri (Kansas City)

University of Missouri (St. Louis)

University of Northern Iowa

#### Region VIII: North Dakota State University, Fargo, ND

Colorado State University

University of Utah

University of Wyoming

#### Region IX: University of California, Berkeley, CA

University of California (Davis)

University of California (Irvine)

University of California (Los Angeles)

University of California (Riverside)

University of California (Santa Barbara)

University of California (San Francisco)

University of California (Santa Cruz)

University of California (San Diego)

Region X: University of Washington, Seattle, WA Oregon State University

Portland State University

University of Arkansas (Fairbanks)

University of Idaho

Washington State University



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# University Transportation Centers

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