University Transportation Centers Program

Sixth Annual Student of the Year Awards

January 13, 1997

Transportation Research Board 76th Annual Meeting
Omni Shoreham Hotel
Washington, D.C.

Sponsored by the U.S. Department of Transportation

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 has a 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 Program (UTCP) – Title 49, U.S. Code Appendix 1607c – in 1987. The Program originally established and operated transportation Centers in 10 Federal regions. The Intermodal Surface Transportation Efficiency Act of 1991 (ISTEA) reauthorized UTCP for an additional six years and added four Centers. The 14 Centers have become focal points for addressing transportation issues and for attracting talent, resources, and facilities for promoting individual initiatives and scientific innovation in a variety of transportation modes and disciplines.

At the Sixth Annual Student-of-the-Year Awards ceremony, the U.S. Department of Transportation, through UTCP, honors the most outstanding student from each of the participating Centers for his or her achievements and promise for future contributions to the transportation field.

This year's selections were based on student candidates who have been enrolled at a UTC university and received UTC support for at least two semesters since the beginning of the program. Evidence of accomplishments in the areas of technical merit and research, academic performance, professionalism, and leadership were required.

The University Transportation Centers is proud to announce the following winners of the 1996 Student-of-the-Year Awards.

University Transportation Centers Program

Students of the Year

Lisa A. Klein
Region I
New England

Beth Wilson-Jordan
Region II
New York/New Jersey

Beverly Thompson Kuhn
Region III
Mid-Atlantic

James P. Dobbins
Region IV
Southeast

Ryan R. Strathearn
Region V
Great Lakes

David A. Noyce
Region VI
Southwest

John C. Bocox
Region VII
Mid-America

Lance A. Schulz
Region VIII
Mountain-Plains

Lewison Lee Lem
Region IX
California

Catherine T. Lawson
Region X
Northwest

Timothy S. Meinert
Mack-Blackwell National Rural Transportation Center
University of Arkansas

Stuart Lee
National Center for Transportation and Industrial Productivity, New Jersey Institute of Technology

Daniel Grate, Jr.
National Center for Transportation Management, Research, and Development, Morgan State University

Matthew Zoll
National Center for Advanced Transportation Technology, University of Idaho

Region I

The Massachusetts Institute of Technology (Lead)
Harvard University
University of Connecticut
University of Maine
University of Massachusetts
University of New Hampshire
University of Rhode Island
University of Vermont

Lisa A. Klein is a second-year candidate for the master of science degree at the Massachusetts Institute of Technology's (MIT) Center for Transportation Studies. In 1992, she graduated phi beta kappa, magna cum laude with a bachelor of arts degree in mathematics from Williams College, Massachusetts. Before coming to MIT, Ms. Klein worked for two years in the Travel Demand Forecasting section of the Metropolitan Transportation Commission, which is the metropolitan planning organization for the San Francisco Bay Area. During this period, she also worked part time for Pittman and Hames Associates, a transportation consulting firm in San Francisco.

Ms. Klein's primary research interests are in the area of Federal transportation policy as it relates to urban and regional transportation planning practice and policy. While at MIT she has worked with the Volpe National Transportation Systems Center to assist the U.S. Department of Transportation with a series of enhanced planning reviews that examine metropolitan transportation practice following the new direction set by the Intermodal Surface Transportation Efficiency Act. She is currently examining major investment studies and corridor planning tools with applications to a new, planned rail system in San Juan, Puerto Rico.

Since coming to MIT, Ms. Klein has assumed several active leadership roles including coordinating the Transportation Student Group for one semester, serving on a faculty search committee, and helping to plan a speaker seminar series. This fall she explored academics from another perspective by serving as a teaching assistant for one of the core courses in the master of science curriculum at MIT.

Region II

City University of New York (Lead)
Cornell University
New Jersey Institute of Technology
New York University
Polytechnic University
Princeton University
Rensselaer Polytechnic Institute
Rutgers University
State University of New York
Stevens Institute of Technology
University of Puerto Rico
University of Virgin Islands

Beth Wilson-Jordan is completing her master of science degree in transportation management at the State University of New York, Maritime College. She received her bachelor of science degree in marine transportation from the United States Merchant Marine Academy at Kings Point, where she also earned a U.S. Coast Guard Third Mate's (Unlimited Tonnage) license to navigate ships of any size on all oceans and received a commission as an officer in the U.S. Navy Reserve.

She is currently working for Trans-Tec Services, an international fuel and lubricant brokerage and trading firm specializing in the sale, supply and transportation of fuel oil to the marine and aviation industries. Over her four years with the firm, she has held the positions of operations manager, pricing analyst, and lubricants manager, and was recently promoted to assistant vice president of sales and supply. Prior to Trans-Tec, Ms. Wilson-Jordan gained firsthand experience in barge, truck and rail operations as a shipping supervisor at Allied-Signal's manufacturing plant in Philadelphia. She also worked as a consultant for Booz, Allen & Hamilton's International Trade practice, where she contributed to marketing, strategic planning and economic impact studies for many port authorities. Prior to Booz, Allen & Hamilton, she was a research analyst with a defense contracting firm in Virginia.

Ms. Wilson-Jordan lives in New York City with her husband, Lawrence, and 18-month-old daughter, Alexandra.

Region III

The Pennsylvania State University (Lead)
University of Pennsylvania
University of Virginia
Virginia Polytechnic Institute
and State University
West Virginia University

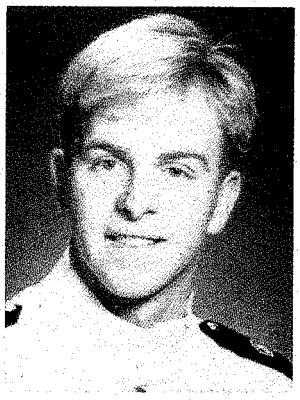
Beverly Thompson Kuhn is a candidate for the doctoral degree in civil engineering at The Pennsylvania State University. Her dissertation research focuses on determining the impact of illumination and color on the legibility of typical on-premise sign fonts. The findings of the research will be used to evaluate the adequacy of current and potential future sign lettering, color combinations, and lighting technologies. The results could be used to design on-premise commercial signs that are more visible, which in turn may lead to highways that are safer, more comfortable, and more usable by the full range of the driving public.

As a research assistant with the Pennsylvania Transportation Institute, Ms. Kuhn has participated in a variety of projects investigating human factors, sign visibility, safety, and engineering education. She assisted in the safety management system review of policies and procedures and helped develop a safety audit process for the Pennsylvania Department of Transportation (PennDOT). She has assisted in developing a traffic engineering education program for PennDOT, and has organized a statewide conference on traffic engineering and safety, both of which are designed to meet the changing education and training needs of transportation professionals.

In addition to the above academic and professional achievements, Ms. Kuhn was awarded a National Science Foundation Graduate Engineering Education Fellowship for Women and Minorities, received a Penn State College of Engineering Dean's Education Fellowship, received the Intelligent Transportation Systems (ITS) America Rockwell Scholarship, and participated as an Eno Fellow in the Eno Transportation Policy Education Conference. She is also a member of the Transportation Research Board Committee on User Information Systems and is a registered professional engineer in Texas.

Region IV

University of Tennessee (Lead)
Duke University
Georgia State University
North Carolina A&T University
North Carolina State University
University of Florida
University of Kentucky
University of North Carolina, Chapel Hill
University of North Carolina, Charlotte
University of South Florida
Vanderbilt University



James P. Dobbins, IV, entered Vanderbilt University as an STC Fellow in the fall of 1995, pursuing a master's degree in civil engineering. He is a graduate of the U.S. Merchant Marine Academy. His main area of interest deals with waterways and intermodal systems. He is currently a research assistant on the National Waterways Geographic Information Systems (GIS) project, having experience with GIS software including TransCAD, Maptitude, and Intergraph's Modular GIS Environment. Mr. Dobbins was selected as one of twenty national Eno Transportation Foundation Transportation Leadership Development Fellows and attended the Fellows Conference in Washington, D.C. in May 1996. He also served as an instructor at the U.S. Naval Academy for part of the summer of 1996. He is currently chair of the Vanderbilt University Graduate Honors Council.

Region V

University of Michigan (Lead)
Central State University
Michigan State University
Michigan Technological University
Northwestern University
Wayne State University

Ryan R. Strathearn is a candidate for the master of science degree in mechanical engineering at the University of Michigan. He received a bachelor of science degree in mechanical engineering from the University of California, San Diego, in 1995. His area of interest in the master's program is vehicle dynamics and control systems.

Mr. Strathearn's research has focused on the instrumentation and modeling/control design of an active suspension test rig. He designed the hydraulic actuator system, real-time control system and sensors for the experimental test rig. He developed a six-state active suspension model, performed system identification testing, and validated the model from which to develop active control algorithms and observer schemes for both cars and trucks. His research will result in a master's thesis titled "*Active Suspension Design and Evaluation Using a Quarter-Car Test Rig*."

Prior to coming to the University of Michigan, Mr. Strathearn was employed at Scripps Institution of Oceanography, Center for Coastal Studies, where he assisted in the preparation, calibration and deployment of sensors in the Pacific Ocean to monitor ocean conditions and currents in the Santa Barbara Channel.

Mr. Strathearn plans to pursue a career in the automotive industry in chassis development, design and testing. He is a member of the Society of Automotive Engineers and has personal interest in motorsports.

Region VI

Texas A & M University System (Lead)
Texas Southern University
University of Texas, Austin

David A. Noyce received his bachelor and master of science degrees in civil and environmental engineering from the University of Wisconsin-Madison in 1984 and 1995, respectively. As a licensed professional engineer in the State of Wisconsin, he has spent ten years working in the transportation industry. Mr. Noyce is currently a doctoral candidate in civil engineering at Texas A&M University while working as a graduate research assistant in the Design and Operations Program. His interests include traffic operations, geometric design, transportation safety, and construction operations of transportation facilities. Mr. Noyce is a Texas A&M University Advanced Institute Transportation Systems Operations and Management Fellow and is a past winner of the Wilson Management Associates Graduate Student Paper Competition and the Wisconsin Society of Professional Engineers' Young Engineer of the Year Award.

In addition to his research activities, Mr. Noyce is president of the Institute of Transportation Engineers Student Chapter at Texas A&M University. He is also active in the American Society of Civil Engineers and has held offices in the Society of Professional Engineers. Mr. Noyce is currently a teaching assistant in the Civil Engineering Department and guest lectures in the construction and transportation engineering programs.

Region VII

University of Nebraska, Lincoln (Lead)
Kansas State University
Kansas University
University of Missouri, Columbia
University of Missouri, Lincoln
University of Missouri, Rolla

John C. Bocox received his master of science degree in civil engineering from the University of Kansas in July 1996 and his bachelor's degree (with distinction) in civil engineering from Kansas University in May 1994. His graduate research addressed the development of a case-based expert system for steel bridge fabrication errors. The project was supported by the Kansas Department of Transportation (KDOT) and a 1995 Graduate School Summer Honors Fellowship. In addition, he served as a graduate teaching assistant in civil engineering and taught an undergraduate steel design course. He also interned with KDOT, where he was engaged in road construction inspection and design work.

Mr. Bocox currently works as a structural engineer for Zahl-Ford, Inc. in Oklahoma City, Oklahoma.

Region VIII

North Dakota State University (Lead)
Colorado State University
University of Wyoming
Utah State University

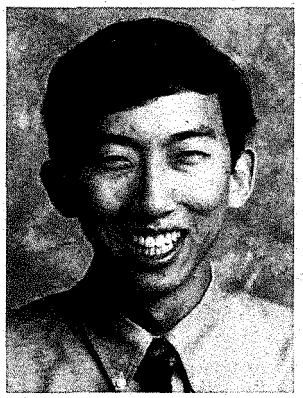
Lance Schulz is a candidate for the master of science degree in the transportation program at North Dakota State University (NDSU). Mr. Schulz received a bachelor's degree in civil engineering from North Dakota State University in May 1996. He is an active member of the Institute of Transportation Engineers (ITE) and has served as vice president of the student chapter at NDSU for the past two years. He is also a national and student chapter member of the American Society of Civil Engineers (ASCE).

Currently, Mr. Schulz works for the Upper Great Plains Transportation Institute as a graduate research assistant. As a graduate research assistant, he has worked on several projects in the low-volume roads program of research and service. While working at the Institute, he has worked with Global Positioning Systems (GPS) and Geographical Information Systems (GIS). His research interests also include Intelligent Transportation Systems (ITS) applications in rural areas.

In addition to collecting and analyzing data, he participated in documenting research findings. Recently, Mr. Schulz participated in a presentation on Gravel Shortage Issues and Options in Rapid City, South Dakota, at the Federal Highway Administration (FHWA) Region 8 County Road Advisor's Conference.

Region IX

University of California, Berkeley (Lead)
University of California, Davis
University of California, Irvine
University of California, Los Angeles



Lewison Lee Lem is currently the associate director of transportation research at the University of Iowa Public Policy Center. In 1996, he received his doctoral degree in urban planning from the University of California, Los Angeles. He also holds a bachelor's degree in government from Harvard University and a master's degree in public administration from Columbia University.

While completing his dissertation, Dr. Lem was a graduate fellow at the Center for American Politics and Public Policy in Washington, D.C. His doctoral research analyzed the geographic distribution of federal and state funding for highways and public transit and was funded by a dissertation grant from the University of California Transportation Center.

He has been a past recipient of an Alfred P. Sloan Foundation Public Policy Fellowship, a Jacob K. Javits Senate Fellowship, a University of California Chancellor's Fellowship, and a William Phelps Eno Foundation Transportation Leadership Development Fellowship.

His recent research has examined decision making in transportation planning, the nationwide prevalence of employer-paid parking, the measurement of public transit performance, and the role of transportation management associations in transportation demand management.

Region X

University of Washington (Lead)
Oregon State University
Portland State University
University of Alaska-Fairbanks
University of Idaho
Washington State University

Catherine T. Lawson is a research associate with the Center for Urban Studies at Portland State University and works as the liaison planner for the university district on behalf of the university. Ms. Lawson holds a bachelor of arts degree in accounting and economics from Western Washington University. She has completed the master's in economics, which included six quarters of econometrics, and is in the process of completing the master's in urban and regional planning and a doctoral degree in urban studies/regional science at Portland State University.

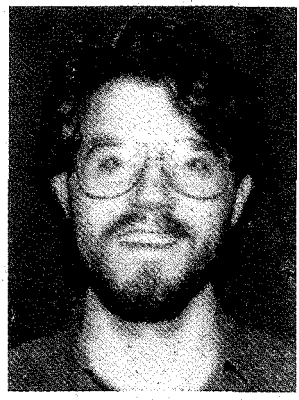
Ms. Lawson has specialized in data analysis and taught statistical computer applications to Ph.D. students in urban studies. She has attended two stated preference (SP) short courses and has modeled the 1994 Portland area SP data. Ms. Lawson is using the Portland 1994 activity data in her dissertation proposal. She is involved in the Transit Cooperative Research Program with her research on university campus transit and parking programs.

Ms. Lawson has received three TRANSNOW research grants and was the graduate co-director of the Oregon Department of Transportation Corridor Study. She is also conducting a variety of transportation-related studies in conjunction with the City of Portland Bureau of Planning, the Portland Department of Transportation and the regional transit agency, including a mode choice survey, parking occupancy and turnover studies, a feasibility study for an urban elementary school and an urban housing component within the district.

Ms. Lawson is presenting her paper, "*Trip-Chaining, Childcare, and Personal Safety: Critical Issues in Women's Travel Behavior*," at the Second National Conference on Women's Travel Issues, October 24-26, 1996, in Baltimore, Maryland. Catherine received an Eno Fellowship Award and the President's Award for University Service at Portland State University for 1996.

Mack-Blackwell National Rural Transportation Study Center

University of Arkansas

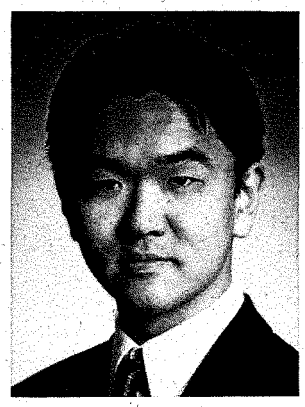


Timothy S. Meinert is a doctoral candidate in industrial engineering at the University of Arkansas. He also holds master's and bachelor's degrees from the University of Arkansas. Mr. Meinert has written seven significant publications as co-author with Dr. Don Taylor, one of our brightest stars in transportation research, of the Industrial Engineering Department at the University of Arkansas. Dr. Taylor refers to Mr. Meinert as the finest student he has ever known, a mature professional, a dedicated family man, and a good citizen. Dr. Taylor ranks him as first in capability and drive over the many students with which he has been associated.

Mr. Meinert's publications, exceptional grade point average, demonstrated leadership as president of the Industrial Engineering Graduate Student Organization, numerous certificates of achievement and merit, an Outstanding Graduate Teaching Assistant Award as selected by undergraduate students, various scholarships, membership in a number of honor organizations, and several part-time jobs to pay his way through college all support his selection as the Mack-Blackwell National Rural Transportation Study Center's "Outstanding Student of the Year" award.

National Center for Transportation and Industrial Productivity

New Jersey Institute of Technology



Stuart Lee is a candidate for the master of science at the Institute for Transportation at New Jersey Institute of Technology (NJIT). His expected graduation date is December 1996, after which he hopes to pursue a career in a transportation consulting firm or agency that specializes in Intelligent Transportation Systems (ITS). He holds a bachelor's degree in civil engineering from Syracuse University, New York.

Mr. Lee has been a graduate research assistant at the Institute for Transportation since September 1995. He was responsible for data collection and analysis of the evaluation of TRANSCOM's System for Managing Incident and Traffic (TRANSMIT), which is a major operational test in the New York/New Jersey/Connecticut metropolitan area. The TRANSMIT system utilizes vehicles equipped with the E-Z pass electronic tags as traffic probes for incident detection, link travel time and speed estimation in sections of the New York Thruway and Garden State Parkway in New York and New Jersey, respectively. Under the guidance of Dr. Kyriacos C. Mouskos and Dr. Edip Niver, he has produced four draft reports (the final is expected in December 1996) of the evaluation of TRANSMIT system.

He is co-author of a presentation at the 8th International IFAC/IFIP/ IFOPS Congress on Transportation Systems, Chania, Crete, Greece, June 16-18, 1997, with K. Mouskos, E. Niver, T. Batz and P. Dwyer.

Mr. Lee has shown leadership throughout his academic career both as a graduate student at NJIT and as an undergraduate student at Syracuse University. He served as treasurer of the Institute of Transportation Engineering student chapter at NJIT, and is a member of the Intelligent Transportation System America Alpha student chapter at NJIT. He has served as president of the Mu Beta Chapter of Kappa Delta Rho Fraternity at Syracuse University, where he served as chairman of the Philanthropy Committee.

National Center for Transportation Management, Research, and Development

Morgan State University

Daniel Grate, Jr., received his bachelor of science degree in civil engineering at South Carolina State University in May 1994. Currently, he is a candidate for the master of science degree in transportation at Morgan State University.

Mr. Grate was honored by the Rockwell Corporation for academic excellence at the Intelligent Transportation Society (ITS) sixth annual meeting in the spring of 1996. In the summer of 1996, he was presented the Thomas Neusome Scholarship at the Conference of Minority Officials (COMTO) twenty-fifth annual meeting.

Currently, Mr. Grate is interning at the Maryland State Highway Administration in their office of traffic and safety, Intelligent Transportation Systems Division (ITSD). He is actively involved in the Chesapeake Highway Advisories Routing Traffic (CHART) planning and development program.

National Center for Advanced Transportation Technology

University of Idaho

Matthew Zoll is a candidate for the master of science degree in civil engineering at the University of Idaho. He is currently a TransNow Fellow, funded jointly by the University of Washington's Transportation Northwest (TransNow) and the University of Idaho's National Center for Advanced Transportation Technology (NCATT). As an undergraduate at the University of Idaho, Mr. Zoll participated in the NCATT Internship Program, a competitive program that provides transportation-related research opportunities to outstanding undergraduates.

As part of his graduate studies, Mr. Zoll worked with the Idaho Transportation Department during the past two years on testing and expanding the capabilities of the Autoscope Video Detection System and the Peek Video Tracker System. He designed the detector layouts for the video detection systems that are now installed at several intersections in the City of Moscow, Idaho. He also developed a methodology for field testing the accuracy of the video detection systems under a variety of weather, lighting, and visibility conditions. Mr. Zoll will receive his master of science degree in May 1997.