Expert Task Group on LTPP Special Activities

Committee

Rebecca S. McDaniel

Chair

Rebecca S. McDaniel is Technical Director of the North Central Superpave Center at Purdue University, a position she has held since 1995. Prior to that appointment, she served for ten years as a research engineer and manager with the Indiana Department of Transportation (INDOT), Division of Research, specializing in pavements and materials. During that time, she was active in site selection, data collection and reporting, and site maintenance for LTPP from the state side. Dr. McDaniel holds bachelor's, master's, and Ph.D. degrees in civil engineering from Purdue University and a bachelor's degree in English from Indiana University. She is a registered professional engineer in Indiana. Dr. McDaniel is chair of the TRB Committee on General Issues in Asphalt Technology and a member of several other TRB committees. She is second vice president of the Association of Asphalt Paving Technologists and a vice-chair of ASTM Committee on Road and Paving Materials. She has also chaired or served on numerous National Cooperative Highway Research Program (NCHRP) project and synthesis panels and the former Federal Highway Administration (FHWA) Asphalt Mixture Expert Task Group. While with INDOT, she served as loaned staff to the Strategic Highway Research Program (SHRP).

Tahar El-Korchi

Member

Tahar El-Korchi is a Professor of Civil Engineering at Worcester Polytechnic Institute. He has been a professor since 1987. Dr El-Korchi teaches and conducts research in pavement engineering, construction materials, and structures. He has conducted funded research for the Federal Highway Administration (FHWA), NCHRP, National Science Foundation, U.S. Army, the Massachusetts Highway Department, and industry. He was the recipient of the prestigious NSF Presidential Young Investigator Award (1991). Dr El-Korchi was an invited scientist at the FHWA Turner Fairbank Highway Research Center conducting research on concrete pavement durability. He is a member of the TRB Committee on Pavement Monitoring Evaluation and Data Storage. He has published more than 60 publications. Dr El-Korchi holds B.S., M.S. and Ph.D. degrees in civil engineering from the University of New Hampshire.

Michael A. Heitzman

Member

Michael A. Heitzman started his career with the National Center for Asphalt Technology in October 2007. He is an Assistant Director and spends his time with research, training and program management. In the previous nine years, he served as the State Bituminous Materials Engineer for the Iowa Department of Transportation. Prior to October 1998, he worked 18 years for the FHWA and specialized as an asphalt paving technical specialist in the Pavement Division in Washington, D.C., from 1990 through 1993. He currently serves as the panel chair for the NCHRP 09-45, Development of Specification Criteria for Mineral Fines Used in Hot Mix Asphalt. He has published several reports in the area of asphalt paving materials, particularly on the subject of modified binders, asphalt recycling and HMA film thickness. He is a registered Professional Engineer in Washington and Iowa. He received a B.S. degree in civil engineering and an M.S. degree in engineering management from the University of Missouri–Rolla and a Ph.D. in civil engineering from Iowa State University.

Catherine T. Lawson

Member

Catherine T. Lawson (new menber) has been the Director of the Master’s in Regional Planning Program and an Associate Professor in the Geography and Planning Department at the University at Albany, in Albany, New York since 2000. She received a Ph. D. in urban studies/regional science at Portland State University (PSU), Portland, Oregon in 1998. Dr. Lawson is a member of the faculty of the Information Sciences Ph.D. Program and the Rockefeller Public Policy Program. She has been active in the area of trucks and freight data research since the mid-1990s. She participated in the TRB-NRC study on the development of a national framework for freight data and helped develop the first description of the use of archived Intelligent Transportation Systems data in the form of “passive data” for freight applications. She has continued her research in the development of computerized methods for “harvesting” passive data and using various software packages, including Geographic Information Systems, to aid in the mapping of actual truck flows and adjacent economic activities. She has been involved in numerous TRB activities, including service as a member of the Urban Transportation Data and Information Systems Committee for nine years (three years as Secretary) and now as the current Chair; member of the Military Transportation Committee for nine years; and Chair of the National Cooperative Freight Research Program project panel on Specifications for Freight Transportation Data Architecture.

David P. Orr

Member

David P. Orr is the Senior Engineer for Cornell University Local Roads Program. Before joining the Local Roads Program, he worked for eight years at the Yates County Highway Department (New York) as the engineering staff. He has a broad range of expertise and experience in highway engineering and construction, including design, inspection, project management, purchasing, budgeting and supervision. He is responsible for the management and operation of the Cornell Local Roads Program's Falling Weight Deflectometer (FWD) and performs research using the device. The Local Roads Program is the prime developer of the SHRP and the new 2007 FWD calibration protocol. The Local Roads Program is also the prime contractor for the Relationships Between Laboratory-Measured and Field-Derived Properties of Pavement Layers study being done for FHWA. Cornell is responsible for the unbound portion of the project. Dr. Orr has developed many training sessions for highway officials including the Cornell Local Roads Program workshops Roadway and Roadside Drainage and Pavement Maintenance. He is a member of TRB's Strength and Deformation of Pavement Materials, and Seasonal Climatic Effects on Transportation Infrastructure (chair) Committees. He is a licensed professional engineer in New York State. He holds a Ph.D. in seasonal pavement analysis from Cornell University.

Richard L. Reel, Jr.

Member

Richard L. Reel, Jr. (new member) is Traffic Data Manager with the Transportation Statistics Office of the Florida Department of Transportation. He has been working with the installation of permanent and portable vehicle classifiers and weigh-in-motion equipment and the development of automated quality control procedures for traffic data since 1986. He directs and manages the polling, processing, editing, and reporting of telemetered monitoring sites that provide volume counts, vehicle classification, and truck weight data for the State of Florida, including the Strategic Highway Research Program. Mr. Reel has co-authored several studies on design traffic techniques and truck weight data variability, and has made presentations on traffic data collection and analysis at several national traffic data conferences. He is currently a member of the technical advisory panel for National Cooperative Highway Research Program Project, Recommended Revisions to the AASHTO Guidelines for Traffic Data Programs. Mr. Reel holds a B.S. degree in civil engineering from the University of Florida.

John F. Staton

Member

John F. Staton is currently the supervising engineer of the Materials Section located in the Construction Field Services Division of the Michigan Department of Transportation (MDOT). As part of the duties as the Materials Engineer, Mr. Staton is recognized as holding the Department's expertise in concrete operations, which includes all aspects of field services for concrete pavement construction and rehabilitation. He currently leads a team of 22 engineers and technical staff proficient in transportation construction materials, including forensic studies. Mr. Staton joined MDOT in 1987, taking on several roles, including road and bridge design, technical field services, and materials testing and research. Prior to joining MDOT, Mr. Staton spent the first 4-1/2 years as a bridge construction engineer with the California Department of Transportation (Caltrans; 1983- 1987). Mr. Staton has either served, or is currently serving, on several committees and expert task groups, including the Concrete Pavement Technology Program (CPTP) Task 65; Advanced Concrete Pavement Technology Program (ACPT); CP Roadmap Oversight Committee; TRB Committee AFD70, "Pavement Rehabilitation"; AASHTO Subcommittee on Materials (SOM); FHWA Sponsored "Performance Engineered Mixtures" ETG; National Concrete Consortium (NCC – Charter member since 1996, Chair 2004-2009); American Concrete Institute (ACI); and others. Mr. Staton holds an Associates in Applied Science in Concrete Technology from Alpena Community College (1978) and a Bachelor of Science in Civil Engineering from Michigan State University (1982). He is a registered Professional Engineer in California and Michigan.

Shelley M. Stoffels

Member

Shelley M. Stoffels has more than 17 years of pavement engineering experience. She is currently an Associate Professor in the Department of Civil and Environmental Engineering at the Pennsylvania State University and a research associate at the Pennsylvania Transportation Institute. Since joining the University in 1988, she has served as principal or co-principal investigator on projects in the areas of pavement design, materials, and management, and also teaches upper-division courses in those areas. Dr. Stoffels has continued interests in the performance and design of both rigid and flexible pavements, with emphasis on optimizing the cost effectiveness of materials and construction methods. She is currently co-principal investigator of a 5-year project for the Pennsylvania Department of Transportation involving the in-situ instrumentation of as-constructed flexible pavement cross-sections utilizing Superpave, and the subsequent analysis and use of the data for calibration validation of Superpave performance and pavement structural designs. Dr. Stoffels has recently supervised research on the lateral movement of transverse joints in rigid pavements, making extensive use of the LTPP seasonal monitoring program data. Dr. Stoffels has served on the TRB Committees on Pavement Maintenance, Flexible Pavement Construction and Rehabilitation, and Rigid Pavement Design, and is a member of the Committee on Strength and Deformation Characteristics of Pavement Sections.

Gary D. Taylor

Member

Gary D. Taylor is a retired transportation professional with experience in the public and private sectors. His experience includes CTE/AECOM in Lansing, Michigan, where he was vice-president and managed the operation of the transportation consulting office from 2003 to January 2008. His responsibilities included overseeing all technical activities, marketing and project development, special projects, and personnel activities. Prior to working for CTE, he was the Chief Engineer and Deputy Director for the Bureau of Highway Technical Services for the Michigan Department of Transportation (MDOT). As Chief Engineer, he was responsible for more than 800 employees in five MDOT divisions including Design, Construction,Traffic and Safety, Real Estate, and Maintenance. Previously, Mr. Taylor was the Assistant Deputy Director of Highway Technical Services. Other experiences as an MDOT engineer include the direction of activities in both the construction and engineering services divisions, and supervision of the bituminous testing and research unit. He is currently a member of the TRB ETG on LTPP Special Activities (LSPEC). He has served as Chairman of the Expert Task Group on LTPP Product Development and Delivery, Chairman of NCHRP Committee on Project 20-5 (Synthesis), member of LTPP Committee, member of AASHTO Standing Committee on Highways and Standing Committee on Research, and many other transportation related committees throughout his career. He received bachelor's and master's degree in civil engineering from the University of Michigan, and began working for MDOT in 1971.

Susan L. Tighe

Member

Susan L. Tighe is a Canada Research Chair in Pavement and Infrastructure Management, a founding principal of Centre for Pavement and Transportation Technology (CPATT), and a Professor of Civil Engineering at the University of Waterloo. In 2007, she was named one of Canada’s Top 40 Under 40 for her leadership and vision with respect to the Canadian Transportation Community. Dr. Tighe is an author of more than 150 technical publications in pavements and infrastructure and is involved in a number of research projects. She is a member of various professional groups including the Transportation Research Board and Transportation Association of Canada committees. She has been involved with projects in Africa, India, China, Australia, New Zealand, and throughout North America. Dr. Tighe worked four years for the Ministry of Transportation of Ontario, she spent six months in Australia working for a contractor as a senior technical advisor in 2005/2006 and most recently spent time in New Zealand as a Erskine Fellow at the University of Canterbury.

Benjamin Worel

Member

Benjamin Worel received a bachelor's degree in civil engineering from the University of Minnesota in 1989 and his professional license from the State of Minnesota in 1995. From 1989-1996, he worked for Braun Intertec, located in Minneapolis. At Braun he primarily worked on SHRP and LTPP in the area of pavement research. His duties included aiding the FHWA in the day-to-day operation of the North Central Region, which included 13 states and 2 provinces. During this 7-year period he worked at both collecting data and entering/filtering the data into a regional LTPP database. His field experience includes FWD testing, seasonal monitoring installation and data collection, distress surveys and the efforts to collect data from the agencies when LTPP test sections required this related data. He also helped develop the regional database and the LTPP distress manual. In 1996, Mr. Worel joined the Minnesota Department of Transportation staff working for the Office of Minnesota Materials and Road Research. Currently he is responsible for the day-to-day operations for the MnROAD site and assisting in the overall direction of the pavement research being done in Minnesota. His duties include supervision of research staff who conduct pavement monitoring, forensics, maintenance/rehabilitation, and the collection of electronic sensor data from the MnROAD test cells.

Wei-Shih Yang

Member

Wei-Shih Yang is a registered engineer and the manager of Materials/Pavements Section for the Transportation Research and Development Bureau, New York State Department of Transportation. He is responsible for in-house and contract research projects in the materials/pavements-related areas for the Department. He is the Project Manager for the FHWA National Pooled Fund "Pavement Subgrade Performance Study." Dr. Yang is the LTPP Contact Engineer and LTPP Coordinator for the New York State Department of Transportation and is responsible for all LTPP-related activities in New York. He is a member of the American Association of State Highway and Transportation Officials (AASHTO) Joint Technical Committee on Pavements. His research interests are in materials characterization, pavement evaluation, design, and pavement management systems.