

Review of Federal Highway Administration Infrastructure R&D - Expert Task Group on Pavements

Committee

Bouzid Choubane

Chair

Dr. Choubane has been actively in pavements and materials related areas and technologies for more than 25 years. He is currently the State Pavement Materials Engineer for the Florida Department of Transportation (FDOT). In this role, he is responsible for providing leadership, strategic direction and oversight for pavement-related work and research programs as well as for building strategic partnerships with private entities and researchers to implement multi-million dollars work and research programs and for providing FDOT with the technical expertise for safe and durable pavement systems. He recently served as Interim Director of the FDOT Office of Materials. He is also a Courtesy Professor at the Department of Civil and Coastal Engineering of the University of Florida. Before joining FDOT, he was a Research Associate at the National Research Council of Canada directing externally-funded research projects in support of private and public-sector clients and agencies.

Dr. Choubane has also been involved in pavements and pavement materials issues at the national and international levels. He serves on a number of committees of the Transportation Research Board (TRB) of the National Academies, Expert Task Groups as well as on various technical advisory panels and editorial boards. He is the current chair of the TRB Section on Pavements overseeing 8 standing committees including Pavement Management Systems, Pavement Condition Evaluation, General and Emerging Pavement Design, Full-Scale Accelerated Pavement Testing, Design and Rehabilitation of Concrete Pavements, Design and Rehabilitation of Asphalt Pavements, Pavement Structural Modeling and Evaluation, and Pavement Surface Properties and Vehicle Interaction. He is past chair of the TRB Committee on Full-Scale Accelerated Pavement Testing and past chair of ASTM International Committee on Pavement Management. He has served on the University of North Florida College of Engineering Advisory Board and on the Information Technology Education Advisory Committee at Santa Fe College. Dr. Choubane is a recipient of recognition awards, including Outstanding Teaching and President's Recognition awards from the University of Florida, Meyer-Horne Outstanding Achievement Award from ASTM International, and FDOT Highway Engineer of the Year Award. He authored or co-authored over sixty peer-reviewed technical papers and served as the editor for 2 Special Technical Publications.

Dr. Choubane earned a Master of Science (M.S.) degree from the University of Pennsylvania and a doctoral (Ph.D.) degree from the University of Florida. He is a registered Professional Engineer in the State of Florida.

Sejal Barot

Member

Sejal Barot is the Director of the Maryland State Department of Transportation (MDOT), Office of Materials Technology (OMT). As the Director she oversees the overall operation of OMT, including material design and quality assurance program. She has worked for MDOT since 2006. Ms. Barot provides leadership and management of the OMT, consisting of approximately 250 state employees and consultant staff resources, and she serves as an operational and technical leader experienced in engineering and managing a large office of staff of various disciplines in materials, testing quality assurance, pavement and geotechnical engineering. She is responsible for all material design and quality assurance testing for the transportation projects in Maryland. Responsibilities also include development of a statewide pavement treatment and budget allocation plan for roadway system preservation. In addition to technical responsibilities to ensure material quality and federal funding, Ms. Barot provides management and administrative oversight over all staff as well as lab and field testing equipment. She serves on several local, regional and national committees working with material industry as well as other local agencies. This position serves as the State Material Engineer with AASHTO and ASTM. Ms. Barot received her Bachelor's Degree in Civil Engineering from the Sardar Patel University, V. V. Nagar, India in 1996.

Eshan Dave

Member

Eshan Dave is Assistant Professor in the Department of Civil and Environmental Engineering at the University of New Hampshire. Prior to this he was assistant and associate professor of civil engineering at the University of Minnesota Duluth from 2010 to 2015. Dr. Dave's research interests include performance evaluation of pavements and paving materials, development and implementation of performance based specifications, resilient design of transportation infrastructure, life cycle analysis, and cold climate pavement performance. He is actively involved in Transportation Research Board, he is member of the AFK50: Structural Requirements of Asphalt Mixtures, AHD20: Pavement Maintenance, AHD25: Sealants and Fillers for Joints and Cracks, and AFS20: Geotechnical Instrumentation and Modeling committees. He is Committee Research Coordinator for AHD20 and Chair of the Subcommittee on Advanced Models to Understand Behavior and Performance of Asphalt Mixtures (AFK50(1)). Dr. Dave is also member of ASTM International, Association of Asphalt Paving Technologists (AAPT) and American Society of Civil Engineers. He is member of the board of directors for International Society of Asphalt Pavements and chair of the Technical Committee on Pavement Field Evaluation (2014-present). Dr. Dave obtained his M.S. and Ph.D. degrees from University of Illinois at Urbana-Champaign in Civil Engineering in 2003 and 2009, respectively.

Dulce R. Feldman

Member

Dulce Rufino Feldman is Senior Transportation Engineer with the California Department of Transportation (Caltrans). In this capacity, she assists the Caltrans districts in designing concrete pavement structural sections. She has been active in the development and implementation of specifications and plans for continuously reinforced concrete pavement and precast concrete pavement, including new smoothness specifications. She was responsible for the implementation of a new pavement management system at Caltrans and for analyses of pavement condition data obtained from manual and automated surveys. She is chair of the Caltrans Pavement and Materials Partnering Committee Task Group on Concrete Pavements. She is a member of the AASHTO Pavement Mechanist-Empirical Design Task Force and chair of the AASHTO Technical Subcommittee 5d on Pavement Design. She is former chair of the TRB Committee on Rigid Pavement Design. She earned a B.S. degree in Civil Engineering from Federal University of Ceara, Brazil, M.S. degree in Civil Engineering from Federal University of Rio de Janeiro, and Ph.D. in Civil Engineering from the University of Illinois at Urbana-Champaign.

Mark E. Hallenbeck

Member

Mark Hallenbeck is the Director of the Washington State Transportation Center (TRAC) office located at the University of Washington. Hallenbeck has been with TRAC for 33 years. Much of his research at TRAC involves the collection, use, summarization, and reporting of data that describe roadway performance. One major aspect of that work has been the collection of truck volume and weight information, and the conversion of that data into the traffic inputs needed for pavement design. He is the author of the technical report that served as the basis for FHWA's Traffic Monitoring Guide (TMG), is the author of the 2001 revision to that guide, and is a contributing author to the latest revision of the TMG. He has been working with the collection, manipulation, and reporting of LTPP traffic data since 1991. Hallenbeck is currently working with USDOT to resolve issues associated collection, handling and sharing of data that are being generated by connected vehicle technologies and private transportation services such as Uber and Lyft.

Moussa Issa

Member

Moussa Issa is a Geotechnical Engineer with the Georgia Department of Transportation (GDOT). Dr. Issa previously held the positions of State Pavement Testing Engineer, Roadway Engineer, State Pavement Design Engineer, State Bituminous Control Engineer, and Research Engineer all with the GDOT. In his current position, he is responsible for geotechnical design reviews and investigations. Dr. Issa's previous position as a pavement testing engineer involved managing the HPMS data collection, smoothness, friction, and other testing, data analysis and reporting. Dr. Issa obtained his Doctor of Engineering degree from Louisiana Tech University in 1999, his MSCE from the University of Moncton in 1995, and his BSCE from University of Tunis in 1991. He is a registered engineer in the state of Georgia.

Zheng (Jenny) Li

Member

Zheng "Jenny" Li is the Pavement Preservation Branch Manager at the Texas Department of Transportation. She acts as a technical chairperson or panel member on pavement related research projects and coordinates with counterparts in other state departments regarding pavement issues. Dr. Li oversees and coordinates statewide network and project-level pavement management programs and development of statewide network and project level pavement research, management and design programs. She also oversees the statewide pavement data collection network and project level and data collection equipment development and operations. Dr. Li earned her Ph.D. in Civil Engineering from the University of Texas at Austin.

Tommy Nantung

Member

Tommy E. Nantung is Manager for Pavement, Materials, and Construction Research for the Indiana Department of Transportation's Division of Research and Development. Dr. Nantung is also on the graduate faculty at the School of Civil Engineering at Purdue University in West Lafayette, Indiana. He was previously with the Indiana Local Transportation Assistance Program. Dr. Nantung is a member of AASHTO's Research Advisory Committee, Standing Committee on Research, and Innovation Initiative of the Standing Committee on Highways. Dr. Nantung has a PhD in Civil Engineering from Purdue University, a MSCE in Construction Engineering from the University of Michigan Ann Arbor, and a BS in Civil Engineering for Parahyangan Catholic University in Indonesia. He is a licensed Professional Engineer in the state of Indiana.

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.

Julie M. Vandenbossche

Member

Julie M. Vandenbossche is a registered Professional Engineer and an Associate Professor in the Department of Civil and Environmental Engineering at the University of Pittsburgh. Before accepting a position in academia, she worked as a consultant and with the Minnesota Department of Transportation in the Office of Materials and Road Research. While with the Minnesota Department of Transportation, she accepted a loan-staff position with the Transportation Research Board (TRB) where she worked with the Research for Improved Concrete Pavements TRB Committee in developing a national research plan for concrete and concrete pavements. Her primary research interests are in the area of design, analysis and rehabilitation of concrete pavements. Dr. Vandenbossche obtained her Ph.D. in Civil Engineering from the University of Minnesota, and her B.S. and M.S. degrees in Civil Engineering from Michigan State University.

Benjamin J. 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.