# Biographic Sketches
## Assuring Bridge Safety and Security Panel
(As of 31 December 2008)

**Susan Hida** *(AASHTO Co-Chair)* is the Assistant State Bridge Engineer for the California Department of Transportation (Caltrans) in Sacramento, CA. Ms. Hida is responsible for Caltrans' bridge design specifications, technical guidance material, and technical committees. She chairs the American Association of State Highway and Transportation Officials (AASHTO) T5 Loads Technical Committee and acts as a liaison to MCEER-FHWA multi-hazard research. Prior to her current position, Ms. Hida designed bridges and served as project engineer for a $24M seismic retrofit project. Ms. Hida is a graduate of Purdue and Princeton Universities and holds Masters Degrees from both schools in civil engineering. She also studied civil engineering for a year at the University of Hannover in (West) German under sponsorship of the German Academic Exchange Service. She is a licensed professional engineer in Oregon and California and serves on several research panels for the National Cooperative Highway Research Program (NCHRP).

**Dr. Firas Sheikh Ibrahim** *(FHWA Co-Chair)* is the program manager for bridge codes and specifications for the Federal Highway Administration (FHWA) in Washington, DC. He currently directs the FHWA's technology development and deployment teams in the areas of bridge analysis, design, evaluation, and extreme events. He serves as a bridge expert and has provided expert assistance on numerous complex projects. Prior to joining the FHWA, he served as Lead Engineer with Parsons Brinkerhoff, Project Engineer with HDR Engineering, and a Faculty member at Clarkson University in New York. Dr. Sheikh Ibrahim is a graduate of the University of Damascus, and holds a Masters degree in Structural Engineering from South Dakota State University and a Doctorate degree in Structural Engineering from the University of Texas at Austin. He is a licensed professional engineer in Pennsylvania and serves on several national executive, oversight, and technical committees including the American Association of State and Highway Transportation Officials (AASHTO) and the Transportation Research Board (TRB). Currently, he serves as an Officer, Assistance Secretary, and a Member of the Executive Committee of the AASHTO Subcommittee on Bridges and Structures.

**Harry A. Capers, Jr.** *(Report Facilitator)* is currently Vice President and Corporate Bridge Engineer for Arora and Associates, P.C., a regional transportation engineering firm in the northeastern region of the US. In this role he is responsible for oversight of all highway bridgework in the firm's six offices. He also manages several initiatives with various universities conducting research on bridge topics and is the Principal Investigator for the NCHRP 20-68A Project "U.S. Domestic Scan Program". He is also the firm's Quality Assurance Manager. He currently chairs the Transportation Research Board (TRB) Committee AFF10 on General Structures and also the TRB Subcommittee AHD35 (1) on Safety and Security of Bridges and Structures. He is a member of AFF50 Committee on Seismic Design and AHD35 Committee on Bridge Management. He chairs several National Co-operative Highway Research Program expert panels, and serves as an industry advisor to the Stevens Institute of Technology. Prior to his

retirement from public service in 2006, Mr. Capers served over 32 years with the New Jersey Department of Transportation as Chief Bridge Engineer and was responsible for all highway structures and geotechnical design work. Mr. Capers has served as a member of AASHTO's Subcommittee on Bridges and Structures, Chairman of its Technical Committee on Loads and Load Distribution, Committee on Tunnel Design, and was Vice-Chairman of the Technical Committee on Seismic Design from 1996 until his retirement. He remains active in many of these committees. He currently is serving on several professional committees locally and nationally including the ASCE/SEI Bridge Management, Inspection, and Rehabilitation Committee. He received Bachelors of Science and a Master of Science degree in Civil Engineering from Polytechnic University, Brooklyn, NY and a Master of Public Administration from Rutgers University, Newark, NJ. He has authored/co-authored over three dozen papers in national and international publications and has received many awards for professional and lifetime achievement from various organizations. Mr. Capers is a registered professional engineer in New Jersey and New York.

**Gregory L. Bailey** is the Director of Engineering Division for the West Virginia Division of Highways (DOH) in Charleston, West Virginia. He is responsible for developing and implementing statewide policies and procedures for bridge design and structural design issues used in DOH programs. He also has a consultative role in developing evaluation and rating policies and procedures. Mr. Bailey has served with the West Virginia DOH for more than 16 years and has more than 31 years of experience in structural and bridge engineering for state highway administrations, local government entities and private engineering firms. He is a graduate of West Virginia Institute of Technology where he holds a Bachelors of Science degree in Civil Engineering and Virginia Polytechnic Institute and State University where he holds a Master of Science degree in Civil Engineering (Structural Emphasis). He is a licensed professional engineer in West Virginia and serves as the voting representative for the DOH on the AASHTO Subcommittee on Bridges and Structures. He is currently the Chair of the T-16 Timber Structures Committee and Vice-Chair of the T-5 Loads and Load Distribution Committee.

**Jugesh Kapur** is the State Bridge Engineer for Washington State Department of Transportation (WSDOT) in Olympia, Washington. Mr. Kapur currently provides direction, guidance, and management for the agency's bridge engineering design and preservation programs, ensures agency's compliance with federal and state laws, and monitors bridge design, preservation, and safety for quality control and assurance. He has served with WSDOT for more than 17 years and has more than 25 years of experience in bridge engineering. He is a graduate of the University of Washington and holds a Bachelors of Science degree in Civil Engineering. He is a licensed professional engineer in civil and structural engineering in Washington and Oregon and serves on several technical committees for AASHTO.

**John M. Kulicki** is Chairman of the Board and CEO of Modjeski and Masters, Inc. a firm specializing in the design and rehabilitation of bridge projects. He has corporate duties and manages some of the Firm's complex and long span bridge projects, and most

of the Firm's research projects. Many of those research projects have dealt with the behavior, response, and service and strength related limit states. Dr. Kulicki's interests include the response of structures, the philosophy of safety, the deterioration and repair of structure. His relationship to the AASHTO LRFD Bridge Design Specifications, in particular, extends over 20 years starting with an initial project to determine feasibility of a new, probability-based design specification through the development of the specifications, and annual review of proposed revisions and updates. He directed some of the early large bridges projects implemented in AASHTO LRFD. He received his Bachelors of Science degree from Lafayette College and Masters of Science and Ph.D. degrees from Lehigh University. Professional memberships include the IABSE, ASCE, ACI, AREMA, and the PTI. He is a member of the National Academy of Engineering, a lifetime National Associate of the National Research Council and is a Registered Professional Engineer in 19 states.

**Dennis R. Mertz** is a Professor of Civil Engineering at the University of Delaware (UD). He is currently the Director of the UD's Center for Innovative Bridge Engineering (CIBrE). The study of bridge-design methodologies and particularly the strength and service limit states are prominent among Professor Mertz's current research activities. As co-principal investigator of the National Cooperative Highway Research Program (NCHRP) Project 12-33, he was one of the original authors of the 1st edition of the AASHTO LRFD Bridge Design Specifications. As a consultant to the bridge-design firm, Modjeski and Masters, (where he was an Associate before being appointed to his position at UD), he has continued to author annual interim changes to the LRFD Specification*s*. All three of Professor Mertz's civil-engineering degrees are from Lehigh University in Bethlehem, Pennsylvania. He is a registered professional engineer in the Commonwealth of Pennsylvania.

**Gregory R. Perfetti** is the State Bridge Design Engineer for the North Carolina Department of Transportation (DOT) in Raleigh, North Carolina. He is the director of the Highway Design Branch's Structure Design Unit, which serves as the central design office for all bridges released for contract in the state. He also is responsible for the development and issuance of statewide policy for all bridge design features used in the state's transportation programs. He also has a responsible role in load rating of bridges and the research and implementation of innovative technology in the highway structural field for the North Carolina DOT. Mr. Perfetti has served with the North Carolina DOT for 25 years with all of his experience in the structural engineering arena. He is a two-time graduate of North Carolina State University with a Bachelors of Science degree in Civil Engineering and Masters of Civil Engineering degree. He is a licensed professional engineer in North Carolina and serves on the Research, Joints and Bearings, and Steel technical committees of the AASHTO Subcommittee on Bridges and Structures.

**Anthony Rotondo** is the Federal Highway Administration (FHWA) Bridge Program Manager for the Rhode Island Division. He is responsible for oversight of the state's bridge program, bridge design and construction projects. He is also the engineering team leader for program and project delivery of transportation projects in Rhode Island. Mr.

Rotondo is a member of the FHWA Accelerated Bridge Construction Technologies Deployment Team and Innovative Design Codes and Specifications Team including LRFD and LRFR. He is currently serving on the National Bridge Inspection Standards team to develop guidelines for conformance. Mr. Rotondo has served with the FHWA for over 10 years as a bridge program manager. Prior to joining FHWA, he was employed at a design-consulting firm for 18 years. As vice president of the firm, he was in charge of the transportation division responsible for business development and project delivery for bridge, highway, rail, and marine infrastructure. He is a high honors graduate of the University of Rhode Island with a Bachelors of Science degree in Civil Engineering. He is a licensed professional engineer in Rhode Island, Massachusetts, Connecticut, Vermont and Florida.

**Thomas Saad** is a Structural Design Engineer with the U.S. Federal Highway Administration (FHWA) in the FHWA Resource Center in Chicago, Illinois. Mr. Saad is currently responsible for developing and delivering products and services to aid State Highway Agencies in the implementation of Load and Resistance Factor Design and Rating, nationwide. He is also responsible for delivering programs to assist States Highway Agencies with the implementation of High Performance Materials and Accelerated Bridge Construction Technologies. Prior to joining the FHWA Resource Center in 2000, he served as the Division Bridge Engineer in the State of Indiana and as a Bridge Engineer in the States of Georgia, Connecticut, Louisiana, and Missouri. Mr. Saad is a graduate of Michigan State University and holds a Master of Science in Civil Engineering degree from the Georgia Institute of Technology. He is a licensed professional engineer in the State of Indiana and serves on the AASHTO Technical Committee for Loads and Load Distribution and on the AASHTO BridgeWare Virtis-Opis Task Force.

**Bala Sivakumar, P.E**. is Vice President/ Director – Special Bridge Projects for HNTB Corporation, New York. Mr. Sivakumar's professional practice areas include weigh-in-motion studies and site-specific load modeling, finite element modeling and advanced structural analysis applied to fatigue and fractures investigations, forensic investigations, seismic analysis and retrofit, load rating and load testing. Mr. Sivakumar was the architect of the LRFR evaluation philosophy and was the primary author of the AASHTO LRFR Manual (2003) and the new AASHTO Manual for Bridge Evaluation (2008). He served as the Principal Investigator of NCHRP Project 12-63 that was initiated in 2003 to propose revisions to AASHTO's legal loads and loads for posting of bridges. Five new legal load models developed under this project were adopted by AASHTO as new national posting loads in 2005. He was the Principal Investigator for NCHRP 12-76 for the Transportation Research Board to develop protocols for collecting and using WIM Data for developing national design load models for AASHTO LRFD Bridge Design. He has provided training seminars on LRFR to 15 State DOT's in 2007/2008 and LRFR implementation assistance to several states under a FHWA contract. He served as the Principal Investigator for Wisconsin DOT for the forensic investigation of the Hoan Bridge failure in Milwaukee. Mr. Sivakumar served as one of the investigators for MNDOT for the forensic investigation of the I-35W bridge-collapse in Minneapolis, Minnesota. He conducts a two-day LRFD bridge design course for ASCE that is offered

nationally four times a year. He is frequently invited to make presentations to the AASHTO Technical Committees during their annual meetings. In 2007, Mr. Sivakumar served as Technical Consultant to AASHTO Committee T18 on Bridge Management, Evaluation & Rehabilitation.