

RPUG 2011 Speakers

Session 1-0: George Chang (Transtec Group) - Session moderator

SESSION 1-1:

WILLIAM HOFFMAN (NVDOT) - KEYNOTE SPEECH - 1

Bill Hoffman

Assistant Director, Engineering

Nevada Department of Transportation – Carson City, Nevada

Bill Hoffman is the Assistant Director of Engineering and in charge of NDOT's pre-construction engineering divisions including Project Management, Roadway Design, Structural Design, Environmental Services, Location, and Right-of-Way.

His focus is on project delivery and ensuring that NDOT's projects are of the highest quality and delivered on time and within budget. In this role, Bill supervises more than 300 engineering and right-of-way professionals responsible for developing all engineering work necessary in producing design plans and specifications used in the construction of NDOT projects. Mr. Hoffman is quickly becoming more involved with the implementation of NDOT's Pioneer Program, focusing on innovative project delivery methods including Public-Private Partnerships, Construction Manager At-Risk and Design-Build contracts.

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SESSION 1-2:

PAUL SCHNEIDER (FHWA-NV) - KEYNOTE SPEECH - 2

Paul Schneider

Paul is the Federal Highway Administration's Assistant Division Administrator for the Nevada Division Office. Paul works with the Nevada Department of Transportation, the four metropolitan planning organizations and other local public agencies in implementing transportation programs and projects throughout the state of Nevada.

Prior to his current position, Paul served in various positions within the FHWA with primary emphasis in roadway data collection and analysis, planning, environmental clearance, and engineering design.

Paul has over 26 years of experience with the FHWA and is a registered Professional Engineer in Tennessee.

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Session 2-0: LaDonna Rowden (Illinois DOT) - Session moderator

SESSION 2-1:

BOB ORTHERMEYER (FHWA-RC) - FHWA PAVEMENT SURFACE CHARACTERISTICS (PSC) PROGRAM

Bob Orthmeyer FHWA

Experience:

Began working in field in 1978

Nine years with North Dakota State Highway Department

Consultant in the private sector for 14 years

Joined FHWA in 2001

Education:

B.S.C.E., North Dakota State University

Licenses and Registrations:

P.E., North Dakota

P.E., Minnesota

Areas of Expertise:

Construction

Pavements

Pavement management

Asset management

Examples of recent projects done in support of the Division Offices

Established and administering a \$1.9 million pooled fund study, "Improving the Quality of Pavement Profile Measurement," with support from 21 State agencies, the Office of Pavement Technology, Federal Lands and Division offices that will assist in building smooth roads; the study will provide a definition for a reference profile, build a reference profile device, supply a localized roughness module for ProVAL, and assist with strategies for verification sites.

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SESSION 2-2:

ROBERT B. ROZYCKI (FHWA) - STATUS AND BRIEF TOUR OF THE NEW HPMS 8.0 SOFTWARE

ROBERT B. ROZYCKI

Robert is native and current resident of Virginia.

His academic background includes: in Civil Engineering and Planning from Villanova University and the University of Virginia, respectively.

He is currently serving over 21 years for the FHWA, mostly in the Highway System Performance Monitoring (HPMS) Division of the Office of Highway Policy Information as a Transportation Specialist with primary responsibilities relating to data quality review and data product development. Corollary duties include a specialized knowledge of HPMS-reported pavement data and coordination with internal and external customers and providers.

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SESSION 2-3:

EDGAR DAVID DE LEÓN IZEPPI (VIRGINIA TECH) - OVERVIEW OF THE FHWA PAVEMENT FRICTION MANAGEMENT PROGRAM

Dr. de León has worked in the areas of pavement management and transportation engineering for over 20 years. He is currently a Senior Research Associate at the Center for Sustainable Transportation Infrastructure at VTTI working for the Pavement Surfaces Consortium and other multidisciplinary research projects that address end-result and performance oriented specifications for hot-mix asphalt (HMA).

He completed doctoral research using non-contact methods to identify non-uniformities in HMA. He has performed extensive data collection for pavement structural and functional performance, as well as pavement life cycle cost analysis, pavement design and geometric design. He is a member of the Management of Quality Assurance (AFH20) TRB Committee since 2009.

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SESSION 2-4:

MAGDY MIKHAIL AND KEVIN MCGHEE (TXDOT AND VCTIR) - AASHTO PAVESUITE - PAVEMENT EVALUATION TOOLS

Magdy Mikhail graduated with a Bachelor degree in Civil engineering from Ain Shams University, Cairo, Egypt in 1985, a Master's Degree in Materials Engineering from the American University in Cairo Egypt in 1990 and a Ph.D. in Civil Engineering from Arizona State University with a specialty in pavements and highway materials in 1996.

He has been working in the field of pavements and highway materials for the last 22 years. He worked with consulting firms in the United States and overseas. He also worked with the Superpave center with the University of Nevada Reno. He has been working with TXDOT for the last twelve years. He started his career with TXDOT as an Engineer with the bituminous section in May 1999. He was the pavement engineer for the Houston District from July 2000 to September 2003 and was the assistant director of the flexible pavement branch with the construction division from September 2003 to June 2007. He became the Technical Operations Manager for the Materials & Pavements section in July 2007. He is currently the director of the Pavement Systems Branch overseeing pavement design, pavement management, and equipment development.

Magdy Mikhail is a registered professional engineer in the state of Texas.

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Session 4-0: David J. Kilpatrick (CTDOT) - Session moderator

SESSION 4-1

GARY HIGGINS (EARTH ENGINEERING) - CONSULTANTS PROFILER EXPERIENCE

Gary J. Higgins

Mr. Higgins obtained a Bachelor of Science degree in Geology from Colorado State University in 1996. Mr. Higgins has worked for private geotechnical and material testing firms for the past 15 years as an engineering geologist.

Prior to 2007, his experience with roadway construction had been isolated below the riding surface and focused on support characteristics of the underlying subgrade soil. Since 2007 and in addition to his geologist duties, Mr. Higgins has been manager and operator of Earth Engineering Consultants, Inc. high speed profiling department. His quest for knowledge and understanding of the physical world paired with his interest in the inertial profiler system lends a scientific approach to the high speed inertial profiler operation.

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SESSION 4-2

RICHARD WIX (ARRB) - USING PROFILES TO MONITOR SUBSIDENCE CAUSED BY LONG WALL MINING

RICHARD WIX

Richard joined the ARRB Group (formerly known as the Australian Road Research Board) in 1990 and since then has been involved in automated pavement data measurement, both as an equipment developer and in the collection of pavement condition data.

During this time, Richard has contributed to the development of Australian standards for automated pavement data collection and has had a keen interest in the verification of automated systems used to collect pavement condition data in Australia and overseas. Additionally, he has overseen many large scale automated data collection projects for each of the Australian State Road Authorities and a variety of international projects too, most recently in Malaysia and Vietnam.

He is presently a member of the ARRB's technical advisory group which is responsible for future developments in pavement data collection.

Richard is a frequent visitor to the RPUG and once again looks forward to being part of this year's meeting.

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SESSION 4-3

VADIM PERETROUKHINE AND MICHAEL NIEMINEN (FUGRO ROADWARE) - ON LOW SPEED PROBLEM IN ROAD SMOOTHNESS PROFILING

Vadim Peretroukhine

Vadim Peretroukhine has been employed with Fugro Roadware since January 2011. He obtained his Master's degree with Honours in Math and Computer Science from the Moscow State University, with majors in discrete mathematics and AI. He worked as a researcher in the Moscow University and also participated in various projects for the Soviet Space Agency. In Canada he worked as a researcher and software developer mostly in the field of medical imaging, in such companies as Cedara Software and McKesson Imaging Group. Vadim Peretroukhine has publications and patents related to AI and medical imaging algorithms.

Michael Nieminen

Michael Nieminen is Director of Technology Development for Fugro Roadware and has been with the company since 2004. An established leader within the company, he endeavors to foster a collaborative and innovative culture within the engineering team. In the last two years the team has released a new ARAN platform, the Vision processing software, and the iVision viewing software.

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SESSION 4-4

RAY MANDLI (MANDLI) - MULTI-STATE COMPREHENSIVE PAVEMENT ANALYSIS - AUTOMATED PAVEMENT CONDITION SURVEY

RAY MANDLI

Ray Mandli founded Mandli Communications, Inc. in 1983, and over the last 28 years his company has grown to be one of the most innovative technology integrators in the transportation industry. During this time Mandli has developed such technologies as high-resolution right-of-way imaging, transverse and longitudinal pavement profiling, pavement distress analysis, and 360° intersection imaging.

Always at the forefront of the industry, Mandli has worked with over 30 states across the nation, and has brought technology solutions to several nations outside of the United States. Ray Mandli's latest innovations include a mobile LiDAR data collection system, and RetroView, which collects sign retroreflectivity data from a moving vehicle.

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SESSION 4-5

CAMERON RAINEY AND STEPHEN CHAPPELL (VIRGINIA TECH) - TIMING IS EVERYTHING: A SOFTWARE APPROACH FOR A GENERALIZED PROFILOMETER

Cameron Rainey

Cameron Rainey has been a member of the VTPL since June 2010. He is currently pursuing his Masters degree by researching terrain mapping and road surface obstacle detection. While at the VTPL he has worked on software integration of LIDAR and INS systems. He completed his undergraduate studies at Francis Marion University where he received his Bachelor's Degree in Computational Physics in 2009.

Stephen Chappell

Stephen Chappell has been a member of the VTPL since June 2010. He is currently pursuing his Master's Degree by researching terrain mapping, instrumentation, and sensor fusion. While at VTPL, he has designed and incorporated instrumentation in the construction of a laser profilometer on a military vehicle. Stephen completed his undergraduate studies at Virginia Tech where he received his Bachelor's Degree in Mechanical Engineering in 2009.

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Session 5-0: Kyle Evert (NDDOT) - Session moderator

SESSION 5-1

**JEAN-FRANCOIS HEBERT AND JOHN LAURANT
(PAVEMETRICS SYSTEMS, CANADA) - 3D SENSORS FOR HIGH
SPEED NETWORK LEVEL DETECTION OF RAVELING
CONDITIONS AND TEXTURE EVALUATION USING SIMULATED
DIGITAL SAND PATCH MEASUREMENTS**

Jean-François (Jeff) Hébert

Jean-François Hébert has a Ph.D. from Laval University (Canada) in computer engineering, applied to machine vision. He worked 10 years at INO (National Optic Institute) in Quebec City, as a researcher and a system engineer. He has contributed greatly to the development of the various road inspection systems developed by INO over the last decade. In November 2009, he co-founded Pavemetrics Systems with two colleagues.

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SESSION 5-2

KELVIN WANG (OSU AND WAYLINK SYSTEM) - POTENTIAL FOR COMPREHENSIVE EVALUATION OF PAVEMENT SURFACE WITH 3D LASER IMAGING

KELVIN WANG

(Bio Missing)

RPUG 2011 Speakers

SESSION 5-3

ABBY CHIN AND MICHAEL OLSEN (OREGON STATE UNIVERSITY) - COMPARISON OF INERTIAL PROFILER MEASUREMENTS WITH LEVELING AND 3D LASER SCANNING RESULTS FOR PAVEMENT PROFILES

ABBY CHIN

Abby graduated with a Bachelor of Science in Civil Engineering from Syracuse University in 2010. She is currently pursuing a Master of Science in Civil Engineering focusing on Geomatics and Geotechnical Engineering from Oregon State University. Abby is currently Vice President of the Geo-Institute Graduate Student Organization at Oregon State. In her spare time she enjoys playing soccer and watching football.

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Session 6-0: Affan Habib (VDOT) - Session moderator

SESSION 6-1

**BO SODERLING (LMI 3D) - WORKING TOWARDS A REVISED
MPD STANDARD (ISO 13473-1): A SNEAK-PEEK ON THE
CURRENT MIND SET**

BO SODERLING

(bio missing)

RPUG 2011 Speakers

SESSION 6-2

RICHARD SOHANEY (TRANSTEC GROUP) - EXPERIENCES WITH CDOT'S QUIET PAVEMENT RESEARCH PROGRAM

RICHARD SOHANEY

(bio missing)

RPUG 2011 Speakers

SESSION 6-3

THOMAS LUNDBERG, MIKA GUSTAFSSON AND LEIF SJÖGREN (VTI, SWEDEN) - THE USE OF TEXTURE IN THE SWEDISH ROAD MANAGEMENT

THOMAS LUNDBERG

(bio missing)

RPUG 2011 Speakers

SESSION 6-4

JOHN HARVEY (UC DAVIS) - SUSTAINABILITY OF PAVEMENT SURFACE CHARACTERISTICS

JOHN HARVEY

John Harvey is a Professor of Civil and Environmental Engineering at the University of California, Davis and Director of the UC Pavement Research Center (UCPRC). He attended university at Oregon State University and UC Berkeley. He is a professional civil engineer in California. He is Principal Investigator for the California Department of Transportation sponsored Partnered Pavement Research Center seeking solutions to a wide range of pavement problems.

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Session 7-0: Chad Shive (NDDOT) - Session moderator

SESSION 7-1

LI NINGYUAN (MTO, CANADA) - QUALITY ASSURANCE OF PAVEMENT PROFILE MEASUREMENTS IN MANAGING ONTARIO PROVINCIAL HIGHWAY NETWORK

LI NINGYUAN

Dr. Li Ningyuan is Senior Pavement Management Engineer at the Ministry of Transportation of Ontario, and Adjunct Professor in the Department of Civil Engineering at University of Waterloo, from which he received his Ph.D. degree in civil engineering in May 1996.

Dr. Li has 29 years of experience in pavement performance evaluation and infrastructure asset management. He is currently a board member of Road Profiler User Group (RPUG), a member of many professional groups including TRB and American Society of Civil Engineers (ASCE). Currently, he is working on strategic long-term investment plans for preservation of the Ontario provincial highway networks by using the ministry's pavement management system tools.

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SESSION 7-2

**TERRY TREUTEL (FORMERLY WISDOT) - VERIFYING
CONTRACTOR PROFILE RESULTS**

TERRY TREUTEL

(Bio missing)

RPUG 2011 Speakers

SESSION 7-3

**STEVE KARAMIHAS (U OF MICHIGAN) - SMOOTHNESS
INCENTIVE LIMITS - IN LIGHT OF TIRE IMBALANCE,
SUSPENSION FRICTION, AND THE LIMITS OF HUMAN
PERCEPTION**

STEVE KARAMIHAS

(Bio missing)

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SESSION 7-4

STEVE KARAMIHAS (U OF MICHIGAN) - JCP SLAB CURL STUDY ON THE ARIZONA SPS-2 SITES

STEVE KARAMIHAS

(Bio missing)

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Session 8-0: Eric Prieve (CDOT) - Session moderator

SESSION 8-1

ROHAN PERERA (SME) - PROFILER CERTIFICATION USING THE AASHTO R56 PROCEDURE

ROHAN PERERA

Dr. Perera is a Senior Project Engineer with Soil and Materials Engineers in Michigan. He has been working in the pavements field for 27 years. His experiences include: pavement roughness and profile data analysis, pavement design, pavement evaluation, pavement management, and non-destructive testing of pavements. He has worked on numerous research projects dealing with pavement smoothness.

He has also provided technical assistance to the LTPP program on profile related activities, including acceptance testing of new profilers and organizing and analyzing data from profiler comparison studies. He has also provided technical assistance to several state highway agencies who are implementing AASHTO standards on profiling.

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SESSION 8-2

EMMANUEL FERNANDO (TTI) - PROFILER CERTIFICATION PROGRAM AND NEW TEST TRACKS AT TXDOT

EMMANUEL FERNANDO

(Bio missing)

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SESSION 8-3

GARY LYNCH (ATWOOD SYSTEM) - IMPLEMENTING A PAVEMENT DATA MANAGEMENT SYSTEM

GARY LYNCH

(Bio missing)

RPUG 2011 Speakers

SESSION 8-4

BRIAN SCHLEPPI (OHIO DOT) - DEVELOPMENT OF A BRIDGE RIDEABILITY SPECIFICATION

BRIAN SCHLEPPI

(Bio missing)

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Session 9-0: John Andrews (MD SHA) - Session moderator

SESSION 9-1

TOM NORDSTROM (MNDOT) - PANEL MEMBER DISCUSSION #1

TOM NORDSTROM

Tom possesses a Bachelor's degree from the University of Minnesota and a Master's degree from the University of Michigan. He works for the Minnesota Department of Transportation as a Senior Research Analysis Specialist. Tom has been involved with MnDOT's Profiler Certification Program since its inception in 2002, and has overseen the development of the agency's new Pavement Surface Smoothness Specification, which was implemented this past spring.

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SESSION 9-2

PETER VACURA (CALTRANS) - PANEL MEMBER DISCUSSION #2

PETER VACURA

(bio missing)

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SESSION 9-3

JAMES WATKINS (MSDOT) - PANEL MEMBER DISCUSSION #3

JAMES WATKINS

James C. Watkins is longtime resident of Jackson and an employee of the Mississippi Department of Transportation (MDOT). He is currently serving as the State Research Engineer for MDOT.

He is the RAC (Research Advisory Committee and Transportation Research (TRB) Board representative for the Department. Mr. Watkins graduated from the University of Mississippi with a Bachelor of Science in Civil Engineering in 1989. He has been a registered Professional Engineer in Mississippi since 1997 and has been a member of the Chi Epsilon National Engineering Society since 1989.

He completed MDOT's Leadership Enhancement Assessment Development (LEAD), a succession-planning program, in 2004, as well as Basic Supervisory and Certificate in Supervisory Management (CSM) training through the Mississippi State Personnel Board. In 2005, he was chosen to serve on the TRB Committee on Vehicle Interaction and Surface Properties (AFD90).

Currently, his job includes oversight of the department's research program, library, pavement management and warranty, overlay recommendation, smoothness assurance program, and non-destructive testing equipment, which includes skid tester, Falling Weight Deflectometer (FWD), profilers, Dynamic Cone Penetrometer (DCP), and profilograph.

During his career, he developed and implemented the Pavement Management System for MDOT, which processes the construction

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history and condition information for 13,000 center-lane highway miles. As a contract analyst, he designed and developed an Environmental System in FoxPro for ARCO Chemical Company that calculates, tracks, reports, and graphs emissions in tanks, boilers, and flares. Recently he designed and developed a software program to calculate the faulting on jointed concrete pavements using laser data collected at highway speeds. His interests are in pavement management, preservation, and technology.

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SESSION 9-5

NILESH SURTI (NCDOT) - PANEL MEMBER DISCUSSION #5

NILESH SURTI

(bio missing)

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SESSION 9-6

JOE WILSON (WISDOT) - PANEL MEMBER DISCUSSION #6

JOE WILSON

Joe Wilson is a lifelong River Rat, having grown up on the Wisconsin River near Lodi, Wisconsin. He is currently working for the Wisconsin DOT running the Department's Profiler Certification and Verification Program after having taken over the job duties of recently-retired Terry Treutel whom Joe would like to acknowledge deserves credit for getting the program up and running and graciously helping with Joe's transition to the position. In addition to the profiler work, Joe continues to provide the Department with non-destructive testing services such as the MIT Scan-2 device while also assisting in various pavement forensic investigations of early distress.

Joe graduated from the University of Wisconsin with a Bachelor's of Science Degree in Cartography in 1989. Among his previous work with the Department, Joe developed a statewide GIS Highway Crash Analysis System, worked for a time as WisDOT's Aerial Photographer for the Surveying and Mapping Unit, operated the Department's Photolog van that was originally equipped with a 35mm motion picture camera and helped oversee that program's transition to digital data collection including gps. Joe then worked as a Research Analyst conducting various pavement related studies. Thus he has worked in a number of diverse positions within the Department over the past 21 years. Joe is determined to carry on and augment the foundation Mr. Treutel has laid with WisDOT's Profiler Program and is looking forward to making new acquaintances in the field of pavement profiling. His interests include hunting, fishing, camping and supporting his Wisconsin Badgers and World Champion Green Bay Packers.