

**APTA Human Resources Committee  
Business Member Board of Governors-  
Workforce Development Subcommittee**



***APTA's July 2015 p-REES Seminar:  
Educating Engineer Faculty about the Transit Industry***

**Moderator**

**Lydia C. Grose**



Lydia C. Grose is the Director of Engineering and Design - Civil Engineering Department, within the Engineering, Maintenance, and Construction (EM&C) Division of the Southeastern Pennsylvania Transportation Authority (SEPTA). She serves as Project Liaison to outside government agencies with construction projects impacting SEPTA operations as well as Authority initiated projects requiring municipal review and support. With 25 years' experience in the engineering field, Lydia has established herself as an individual with diverse expertise and knowledge in the areas of civil engineering, project management, hands-on construction inspection, and field coordination with maintenance and technical staff.

Ms. Grose is a graduate of Temple University. She is a member of the Conference of Minority Transportation Officials (COMTO), Society of Women Engineers (SWE), National Society of Black Engineers (NSBE), a 2007 Leadership APTA Graduate, 2011 Whitehouse Champion of Change, 2013 -2016 APTA HR Committee Chair, and a member of APTA's Board of Directors.

**Speakers**

**Jeff Wharton**

Jeff Wharton is President for IMPulse NC LLC, the leading manufacturer of Catenary, overhead contact system, hardware in the North America Transit. He has over 35 years of experience in transit. IMPulse is a founding member of the APTA sustainability commitment program and has achieved Gold level recognition.

Mr. Wharton currently serves as a Board of Directors member for APTA, First Vice-Chair of the APTA Business Member Board of Governors, Board Member for APTF (American Public Transportation Foundation), Board Member for the Community Streetcar Coalition, and a member of IEEE. In 2013 he was a White House Champion of Change recipient for 21<sup>st</sup> Century Transportation Technology Solutions.



Jeff has authored and presented many technical presentations, as well as provided testimony before the U.S. Congress, House Committee on Transportation & Infrastructure.

## **Mike Pochop, P.E.**

---



Mike Pochop, P.E., is a vice president and project manager for Hanson Professional Services Inc.'s railway market. He has a B.S. in civil engineering from Iowa State University. During his career, he has managed studies, asset inventories, capacity projects, terminal improvements and new branch line extensions, and his projects have involved six of the seven Class 1 railways as well as regional and industrial railways.

Mike has extensive experience with projects involving railway design and programming. He enjoys customizing and leading multi-disciplinary teams for the benefit of private- and public-sector clientele on urban and rural projects. His projects have successfully addressed challenges in constructability, permitting, innovative materials, accelerated project delivery and international issues. Mike's responsibilities also have encompassed extensive public relations and public meeting involvement. He is comfortable working closely with various local, state and federal agencies.

## **Mike Loehr, P.E.**

---

Michael Loehr got a B.S. in Civil Engineering from Rensselaer Polytechnic Institute and is a Professional Engineer in 11 states.

Mike has over 37 years of transit experience. He is now the Practice Leader – Rail & Transit - Civil Engineering - Americas for CH2M Hill. Prior to joining CH2M Hill, Mike worked at Conrail on a variety of significant projects all over the US. He designed numerous land development, rail, and highway projects, including leading a consultant team seconded into the Virginia Department of Rail & Public Transportation. Mike was the Project Manager and Lead Rail engineer for Norfolk Southern's Heartland Corridor Project, which won AREMA's W. W. Hay Award for Excellence and a Brunel Award Commendation.



Mike serves on several APTA committees, and chairs the BMBG Workforce Development Committee. Mike is also a member of AREMA, where he is the Chairman of Committee 11 and serves on Committee 12. Mike also serves as Chairman of the TRB Commuter Rail Transportation Committee (AP070).

Mike has been part of the University of Wisconsin's Engineering Professional Development instructors team for over a decade, and delivers portions of UW's Modern Mass Transit and Introduction to Railroad Engineering courses.

## **Bill Thomsen, P.E.**

---



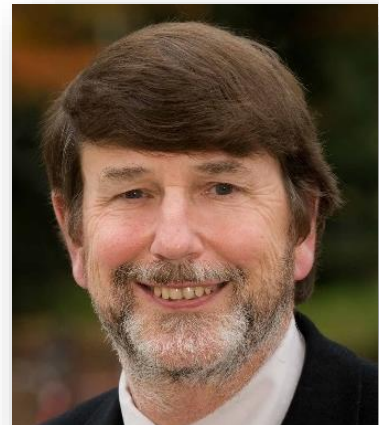
A Senior Vice President for National Services, William T. Thomsen oversees all of the firm's offices and geography nationwide, as well as serve as a principal-in-charge of all major transportation infrastructure programs. Mr. Thomsen has played a key role in the growth of the firm's Program Management Oversight practice and serves as a national leader in the management of mega projects, including New York City's high-profile One World Trade Center, East Side Access, and Second Avenue Subway.

Thomsen joined Urban Engineers in 1980. His extensive experience encompasses the management/engineering of major infrastructure projects. Thomsen earned his Bachelor's degree in civil/environmental engineering from Clarkson University and Master's degree in engineering management from Drexel University. He is a registered Professional Engineer in four states and he is a past President of ASCE in Philadelphia. He was also the "Transportation Engineer of the Year" in Philadelphia in 1993, and he is a past Chair of the APTA Capital Projects national committee. Thomsen serves as a national leader on a number of other societies, committees and boards, including the CMAA, TRB, SAME, NY Building Congress, and American Society of Civil Engineers. He is also a member of the Civil Engineering Advisory board and a former adjunct professor for Temple University.

## **Dr. Chris Barkan, Ph.D.**

---

Dr. Barkan is a Civil and Environmental Engineering professor at the University of Illinois at Urbana-Champaign (UIUC), where he also serves as Executive Director of the Rail Transportation and Engineering Center (RailTEC). Prior to joining the university in 1998, he was Director of Risk Engineering at the Association of American Railroads (AAR) in Washington, DC where he had principal responsibility for the rail industry's cooperative research programs in environment, hazardous materials and tank car safety. His current research interests are in railroad safety and risk and rail line capacity. He has supervised six Ph.D. students and 46 M.S. students, all of them in rail engineering and transportation subjects.



He is Director of the National University Rail (NURail) Center, a consortium of seven colleges and universities focused on rail research and education funded by the US DOT. He is Director of UIUC's AAR Affiliated Lab, as well as Deputy Director of the Railway Supply Institute - AAR Railroad Tank Car Safety Research and Test Project. He has led expansion of the rail curriculum and research programs at UIUC and encouraged their development at other colleges and universities in North America. He completed his B.A. at Goddard College, his M.S. and Ph.D. at the State University of New York at Albany, and held a Postdoctoral Research Fellowship at the Smithsonian Environmental Research Center before beginning his rail career at AAR.

## **Dr. Leslie McCarthy, Ph.D., P.E.**

---



Dr. Leslie McCarthy has been an Associate Professor in the Civil and Environmental Engineering Department at Villanova University since 2009 and teaches a number of courses at the undergraduate and graduate level related to transportation (including railway engineering). She conducts research on railroad infrastructure, rail-highway safety, and construction project delivery. She worked for several years at Federal Highway Administration and while there, administered the Local Public Agency program for Florida which interacted often with railway/highway-related projects. She is a licensed Professional Engineer in the states of New Jersey and Pennsylvania.

## **Natalie Cornell**

---

Natalie Cornell is the Director of Business Development for LTK Engineering Services, an engineering firm that specialized in the rail business. She manages all of LTK's external activities. Prior to joining LTK, she was a Vice President at LECIP Inc, where she managed all aspects of business for the railcar LED lighting division. In addition, she served as VP of Sales & Marketing where she was responsible for the sales of fare collection systems. Prior to LECIP, Ms. Cornell was VP of Marketing & Communications at Sg2; a Senior Manager at Accenture's Transportation practice; a Manager in AT Kearney's Transportation practice; and a Senior Trade Advisor at the Canadian Consulate General in Chicago.



She has a BA from Cornell University and an MBA from Northwestern University. She serves as Chair of APTA's Business Members Procurement Committee, the Procurement Steering Committee Co-Chair, a Board of Directors member, and Secretary of the Rolling Stock Equipment Technical Forum.

## **Dr. Candace Brakewood, Ph.D.**

---



Dr. Candace Brakewood is an Assistant Professor in the Department of Civil Engineering at the City College of New York. Her interests include transportation planning, public transportation, and intelligent transportation systems. Her research focuses on understanding how new information and communication technologies can be used to improve public transportation systems. Prior to working in the transportation field, Candace was a Patent Examiner at the United States Patent and Trademark Office in Alexandria, Virginia. She has a Ph.D. in Civil Engineering from Georgia Institute of Technology, dual Master of Science degrees in Transportation and Technology Policy from Massachusetts Institute of Technology, and a Bachelor of Science in Mechanical Engineering from Johns Hopkins University.

## **Dr. Xiang Liu, Ph.D.**

---

Xiang Liu is an Assistant Professor in the Department of Civil and Environmental Engineering (CEE) at Rutgers University. He is also affiliated with the Center for Advanced Infrastructure and Transportation (CAIT), which is a US DOT-designated National University Transportation Center (UTC).

Xiang's railroad research areas include statistical modeling of train accident risk, hazardous materials transportation risk management, and track infrastructure inspection/maintenance. His research on rail safety has received awards from the International Society for Risk Analysis (SRA) and the TRB Railroad Operational Safety Committee. In addition to research, he teaches railroad engineering courses at Rutgers University and advising Rutgers' first AREMA Student Chapter. Xiang received his M.S. and Ph.D. from the University of Illinois at Urbana-Champaign, and a B.S. from Shanghai Jiao Tong University in China.



## **Jess Guerra**

---



Jess Guerra is an Associate Professor of Diesel, Alternative Fuel & Hybrid Vehicle Technology and Chairman of the Transportation Technologies Department at Los Angeles Trade-Technical College, where he is also an alumnus.

Guerra spent the first several years of his career in the transportation industry working with large truck fleets where he honed his technical training and experience in running a heavy-duty vehicle maintenance facility. In addition, he gained six years of experience working for the Los Angeles County Metropolitan Transportation Authority (Metro), where he expanded his expertise in alternative fuels and transit bus shop supervision.

In 2008, Guerra was awarded the "Full Circle Award" by Green Technology, a non-profit initiative designed to inform government efforts toward sustainability. He was also named LATTC's CTE Faculty of the Year in 2011.

Guerra serves as the Chairman for the California Council on Diesel Education and Technology. He also serves on Southern California Regional Transit Training Consortium's Board of Directors.