Seminar Agenda

Presented by Feng Mu, Ph.D., James W. Mack, P.E. and Les H. White, P.E.

Principles of Pavement Design
Functions and design criteria of pavements
Considerations in pavement design
• Traffic
• Subgrade soil
• Environment
• Construction material
• Pavement type selection
• Use of base/soil improvement
• Drainage
• Life cycle cost analysis (LCCA)

New Flexible Pavement Structural Design
AASHTO 93 and AASHTO Pavement ME design method
How to collect/determine design inputs
Reclamation and recycling

New Rigid Pavement Design
AASHTO 93, AASHTO Pavement ME, ACI and ACPA design methods
How to collect/determine design inputs
Optimizing the design

Pavement Preservation, Maintenance and Rehabilitation
Determining the cause of pavement deterioration (common distresses)
Intro to pavement preservation and maintenance techniques
Pavement rehabilitation (overlays)

Sustainability of Pavements
Intro to pavement asset management
Life cycle assessment (LCA)/carbon footprint analysis
• Pavement-vehicle interaction
• Carbon footprint: production of raw material, construction
  and user phase
• Albedo

Extreme weather conditions
• Flood and pavement design

Environment and LEED credits
• Recycled materials
• Pervious pavements

Pavement Design
Atlanta, GA - Friday, February 17, 2017

Learning Objectives

You'll be able to:

Review important considerations in pavement design, including traffic, soils, environment and drainage.
Understand AASHTO 93 and AASHTO Pavement ME design methods for flexible pavement.
Discuss how to optimize rigid pavement design.
Determine the causes of pavement deterioration and learn about pavement preservation and maintenance techniques.
Evaluate the life cycle of pavements and explore pavement-vehicle interaction.

Continuing Education Credits
Architects
6.5 HSW Contact Hours
6.5 AIA HSW Learning Units

Professional Engineers
6.5 PDHs

Contractors
Non-Credit Continuing Ed.

Understanding the impact of traffic, soils, materials, environment and drainage on pavement design
Review AASHTO 93 and AASHTO Pavement ME design methods
Examine flexible and rigid pavement structural design
Learn about pavement preservation, maintenance, and rehabilitation
Explore the sustainability of pavements
Feng Mu, Ph.D., Paving Solution Engineer, CEMEX

Dr. Mu is a paving solution engineer for CEMEX. He has developed new jointed plain concrete pavement and roller-compactcd concrete as well as overlay solutions for highways, city streets, industrial yards and parking lots. He has also evaluated many aspects of the new AASHTO Paving ME Design Guide (aka MEPDG) based on various modeling techniques and field observations. Dr. Mu has authored many peer-reviewed technical papers and currently serves on the Pavement Maintenance Committee of the Transportation Research Board of National Academy of Sciences. He earned his Ph.D. degree in Civil and Environmental Engineering from the University of Pittsburgh.

James W. Mack, P.E., Director, Market Development, CEMEX

Mr. Mack has 25 years of pavement engineering experience with expertise in concrete pavement design, rehabilitation, construction, forensic evaluation, management, materials specification and evaluation. He also has experience in life cycle cost analysis and life cycle assessment (environmental impact). He has a Master of Business Administration degree from the University of Chicago’s Graduate School of Business with a specialization in Finance, and a Bachelor of Science degree in Civil/Environmental Engineering from the University of Pittsburgh.

Les H. White, Paving Solution Engineer, CEMEX

Mr. White joined Cemex in April 2014 as a paving solutions engineer covering the Atlanta and East Tennessee divisions. In this position, he works with engineers, architects, developers and contractors, as well as with cities and counties, to identify and develop cement and concrete opportunities and improve concrete pavement designs for parking lots, streets, and other applications. He has over 20 years of civil site design experience with expertise in pavement rehabilitation and maintenance, concrete pavement design, and construction administration project oversight. Mr. White has a Bachelor of Science degree in Civil Engineering from the Georgia Institute of Technology and is a licensed professional engineer in the state of Georgia. He sits on the Paving Committee of the American Society of Concrete Contractors and is a member of the American Society of Civil Engineers and the American Council of Engineering Companies.

Continuing Education Credit Information

This seminar is open to the public and offers 6.5 HSWS (Public Protection) continuing education hours to architects and 6.5 PDHs to professional engineers in all states. Educators and courses are not subject to preapproval in Georgia.

This seminar is approved by the American Institute of Architects for 6.5 HSWS Learning Units (Provider No. J885). HalfMoon Education is an approved continuing education sponsor for architects in Florida (Provider No. 0001388) and is deemed an approved sponsor in New York. HalfMoon Education is an approved continuing education sponsor for engineers in Florida (Area of Practice; Provider No. 0004647), Indiana, Louisiana, Maryland, New Jersey, New York (NYSED Provider No. 35), North Carolina, and North Dakota.

This seminar also offers a non-credit continuing education opportunity to contractors. It has not been reviewed by any state contractor licensing authorities. A certificate is provided to contractors, as well as with cities and counties, to identify and develop cement and concrete opportunities and improve concrete pavement designs for parking lots, streets, and other applications. He has over 20 years of civil site design experience with expertise in pavement rehabilitation and maintenance, concrete pavement design, and construction administration project oversight. Mr. White has a Bachelor of Science degree in Civil Engineering from the Georgia Institute of Technology and is a licensed professional engineer in the State of Georgia. He sits on the Paving Committee of the American Society of Concrete Contractors and is a member of the American Society of Civil Engineers and the American Council of Engineering Companies.

Mr. Mack is a registered professional engineer in the states of Illinois and Texas. He is active and holds leadership roles in numerous industry associations and national/state organizations across the US.

Mr. White has a B.S. degree in Civil Engineering from the Georgia Institute of Technology and is a licensed professional engineer in the State of Georgia. He sits on the Paving Committee of the American Society of Concrete Contractors and is a member of the American Society of Civil Engineers and the American Council of Engineering Companies.

Mr. White has a B.S. degree in Civil Engineering from the Georgia Institute of Technology and is a licensed professional engineer in the State of Georgia. He sits on the Paving Committee of the American Society of Concrete Contractors and is a member of the American Society of Civil Engineers and the American Council of Engineering Companies.

Mr. White has a B.S. degree in Civil Engineering from the Georgia Institute of Technology and is a licensed professional engineer in the State of Georgia. He sits on the Paving Committee of the American Society of Concrete Contractors and is a member of the American Society of Civil Engineers and the American Council of Engineering Companies.

Mr. White has a B.S. degree in Civil Engineering from the Georgia Institute of Technology and is a licensed professional engineer in the State of Georgia. He sits on the Paving Committee of the American Society of Concrete Contractors and is a member of the American Society of Civil Engineers and the American Council of Engineering Companies.

Mr. White has a B.S. degree in Civil Engineering from the Georgia Institute of Technology and is a licensed professional engineer in the State of Georgia. He sits on the Paving Committee of the American Society of Concrete Contractors and is a member of the American Society of Civil Engineers and the American Council of Engineering Companies.

Mr. White has a B.S. degree in Civil Engineering from the Georgia Institute of Technology and is a licensed professional engineer in the State of Georgia. He sits on the Paving Committee of the American Society of Concrete Contractors and is a member of the American Society of Civil Engineers and the American Council of Engineering Companies.

Mr. White has a B.S. degree in Civil Engineering from the Georgia Institute of Technology and is a licensed professional engineer in the State of Georgia. He sits on the Paving Committee of the American Society of Concrete Contractors and is a member of the American Society of Civil Engineers and the American Council of Engineering Companies.

Mr. White has a B.S. degree in Civil Engineering from the Georgia Institute of Technology and is a licensed professional engineer in the State of Georgia. He sits on the Paving Committee of the American Society of Concrete Contractors and is a member of the American Society of Civil Engineers and the American Council of Engineering Companies.

Mr. White has a B.S. degree in Civil Engineering from the Georgia Institute of Technology and is a licensed professional engineer in the State of Georgia. He sits on the Paving Committee of the American Society of Concrete Contractors and is a member of the American Society of Civil Engineers and the American Council of Engineering Companies.

Mr. White has a B.S. degree in Civil Engineering from the Georgia Institute of Technology and is a licensed professional engineer in the State of Georgia. He sits on the Paving Committee of the American Society of Concrete Contractors and is a member of the American Society of Civil Engineers and the American Council of Engineering Companies.

Mr. White has a B.S. degree in Civil Engineering from the Georgia Institute of Technology and is a licensed professional engineer in the State of Georgia. He sits on the Paving Committee of the American Society of Concrete Contractors and is a member of the American Society of Civil Engineers and the American Council of Engineering Companies.

Mr. White has a B.S. degree in Civil Engineering from the Georgia Institute of Technology and is a licensed professional engineer in the State of Georgia. He sits on the Paving Committee of the American Society of Concrete Contractors and is a member of the American Society of Civil Engineers and the American Council of Engineering Companies.

Mr. White has a B.S. degree in Civil Engineering from the Georgia Institute of Technology and is a licensed professional engineer in the State of Georgia. He sits on the Paving Committee of the American Society of Concrete Contractors and is a member of the American Society of Civil Engineers and the American Council of Engineering Companies.

Mr. White has a B.S. degree in Civil Engineering from the Georgia Institute of Technology and is a licensed professional engineer in the State of Georgia. He sits on the Paving Committee of the American Society of Concrete Contractors and is a member of the American Society of Civil Engineers and the American Council of Engineering Companies.

Mr. White has a B.S. degree in Civil Engineering from the Georgia Institute of Technology and is a licensed professional engineer in the State of Georgia. He sits on the Paving Committee of the American Society of Concrete Contractors and is a member of the American Society of Civil Engineers and the American Council of Engineering Companies.

Mr. White has a B.S. degree in Civil Engineering from the Georgia Institute of Technology and is a licensed professional engineer in the State of Georgia. He sits on the Paving Committee of the American Society of Concrete Contractors and is a member of the American Society of Civil Engineers and the American Council of Engineering Companies.

Mr. White has a B.S. degree in Civil Engineering from the Georgia Institute of Technology and is a licensed professional engineer in the State of Georgia. He sits on the Paving Committee of the American Society of Concrete Contractors and is a member of the American Society of Civil Engineers and the American Council of Engineering Companies.

Mr. White has a B.S. degree in Civil Engineering from the Georgia Institute of Technology and is a licensed professional engineer in the State of Georgia. He sits on the Paving Committee of the American Society of Concrete Contractors and is a member of the American Society of Civil Engineers and the American Council of Engineering Companies.

Mr. White has a B.S. degree in Civil Engineering from the Georgia Institute of Technology and is a licensed professional engineer in the State of Georgia. He sits on the Paving Committee of the American Society of Concrete Contractors and is a member of the American Society of Civil Engineers and the American Council of Engineering Companies.

Mr. White has a B.S. degree in Civil Engineering from the Georgia Institute of Technology and is a licensed professional engineer in the State of Georgia. He sits on the Paving Committee of the American Society of Concrete Contractors and is a member of the American Society of Civil Engineers and the American Council of Engineering Companies.