

Concrete Pavement Innovation & Technology Transfer Workshop

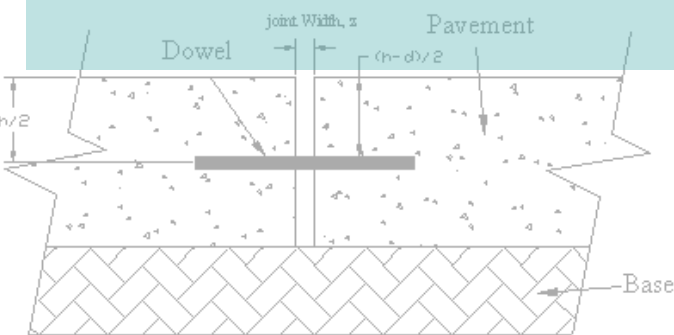
sponsored by: Illinois Department of Transportation
Illinois Center for Transportation
International Society for Concrete Pavements, and
ACPA-Illinois Chapter

Thursday, June 25, 2015
8:30 am - 5:00 pm

Illinois Department of Transportation District 1 office
201 West Center Court
Schaumburg, IL 60196

workshop objective

The objective of this technology transfer workshop is to bring together engineers from IDOT, county and city engineers, contractors, and consultants to be trained by leading experts on the latest design, material, and construction technology innovations related to concrete pavement from research findings developed in Illinois and other states. Relevant research developments in Illinois that have been implemented into the IDOT's manual and policies will be presented in each of the theme areas.



speakers

Professor Neeraj Buch

Professor Jeffery Roesler

Dr. Mark Snyder

Professor Jake Hiller

Mr. Robert Rodden

Professor Lev Khazanovich

Mr. Corey Zollinger

Department Chair of CEE at Michigan State University and President of ISCP

University of Illinois and Vice-President of ISCP

Consultant and Past-President of ISCP

Michigan Tech University and Secretary/Treasurer of ISCP

Executive Director ISCP

University of Minnesota and ISCP Director

Pavement Engineer at CEMEX and ISCP Director



program

8:30 – 10:30

CONCRETE OVERLAYS & GENERAL PCCP CONSTRUCTION

The following topics will be covered: Technical resources on overlays; Overlay types and options; Evaluating existing pavement for feasible options; Overlay design methods—specifically on bonded concrete overlay of asphalt (BCOA); Design and construction features; Performance of BCOA especially in Illinois; and PCC pavement construction innovation:

Design, Materials, and Performance of Concrete Overlays
Emerging Technologies for Concrete Pavement

10:30 – 11:00 BREAK

11:00 – 12:00

RAPID REPAIR OF CONCRETE PAVEMENT

The session will present the latest innovations in rapid repair of distressed concrete slabs under short construction window closures using precast concrete slab technology.

Rapid Repair of Concrete Pavement with Precast Slabs

12:00 – 1:00 BOX LUNCHES

1:00 – 2:30

CONSTRUCTION QUALITY CONTROL & ASSURANCE

The session will present the findings from recent studies on locating misaligned dowels; effect on pavement performance; and

dowel misalignment measurements and specifications. Slab thickness verification using nondestructive techniques such as ultrasonic shear wave tomography (MIRA) and MIT-SCAN-T2 will also be discussed. An overview of recycled, co-product and waste materials (e.g., crushed concrete, RAP, slag, and fly ash) used to construct cost-effective concrete pavement systems will be presented in part 2 of this session.

Dowel Bars and Misalignment tolerances
Recycle, Co-Product, and Waste Materials for Concrete Pavement Structures

2:30 – 3:00 BREAK

3:00 – 5:00

COMPOSITE PAVEMENTS

Research findings on the materials, design, and performance of composite pavements will be presented—and focus primarily on use of composite pavement design and performance consisting of an asphalt concrete surface over a roller-compacted concrete base layer. Details will be presented on the basics of roller-compacted concrete for pavements in terms of mixture design, mechanical properties, construction, and performance.

Design and Performance of Composite Pavements
Modern Roller-Compacted Concrete Pavement

Professional Development Hours (PDHs):
6.5 PDHs will be given, at the end of the day, to those who register and attend the workshop.



photos: page 1: Randell C. Riley, P.E. IL Chapter, Inc. - ACPA
page 2: slabs: NCPA: <http://precast.org/2014/03/beaten-path/>
page 2: Parking lot demonstration of RCC at World of Concrete 2013: <http://www.equipmentworld.com/rcc-demos/#sthash.VURXJDJU.dpuf>

registration

Please signup/register online at: <https://www.concretepavements.org/workshops/>.

Workshop is **FREE** but **must be Member of ISCP**. ISCP membership for all Government employees and students is **FREE**.

Membership for consultants, currently, is **50% discount** (\$75). **LUNCH** will be provided (please see program above).