

**TECHNICAL PROGRAM (August 1, 2006)**

**INTERNATIONAL CONFERENCE ON  
LONG-LIFE CONCRETE PAVEMENTS**

**October 25 to 27, 2006**  
**Donald E. Stephens Convention Center**  
**Rosemont, Illinois**  
**(near Chicago's O'Hare International Airport)**



**SPONSORED BY**

Federal Highway Administration  
and  
American Association of State Highway and Transportation Officials  
American Concrete Pavement Association  
Cement Association of Canada  
Concrete Reinforcing Steel Institute  
Illinois Department of Transportation  
International Society for Concrete Pavements  
National Concrete Pavement Technology Center  
Portland Cement Association  
Transportation Research Board



## BACKGROUND

In the past, concrete pavements were routinely designed and constructed to provide low-maintenance service lives of 20 to 25 years. In fact, the majority of pavements in the U.S. interstate and primary systems were designed on the basis of a 20- to 25-year initial service life. More recently, there has been a movement toward longer initial service life, particularly in high-volume, urban corridors where traffic disruptions and user delays can be especially acute because of frequent or extended lane closures.

It is becoming an established practice in the United States to require that concrete pavements provide low-maintenance service lives of 40 or more years. Long-life concrete pavements have been attainable for a long time (as evidenced by the fact that a number of very old pavements remain in service); however, recent advances in design, construction, and concrete materials technology give us the knowledge and technology needed to achieve consistently what we already know to be attainable. Many State highway agencies, in conjunction with industry, are implementing innovative features related to structural design, concrete mixtures, construction equipment, construction process management, and testing procedures. To achieve long life, pavements must not exhibit premature failures and must have a reduced potential for cracking, faulting, spalling, and materials-related distress.

This 2 1/2-day conference is being organized as a part of technology transfer activities for the national Concrete Pavement Technology Program that operates within the Federal Highway Administration. The conference will provide an international forum to address various aspects of concrete pavement design, construction, and materials technologies that result in long life for concrete pavements.

The conference will be held at the Donald E. Stephens Convention Center, Rosemont, Illinois, near O'Hare International Airport. The conference hotel is the Doubletree Hotel O'Hare-Rosemont, located next to the Convention Center.

## SCOPE

The Long-Life Concrete Pavements Conference is targeted at pavement, materials, and geotechnical engineering professionals who are involved in various aspects of concrete pavement design, construction, testing and evaluation, and rehabilitation. These professionals include Federal, State, and municipal engineers; consulting engineers; contractors; materials suppliers; industry associations; and academia. Implementable design, construction, maintenance, and rehabilitation techniques that result in long-lasting concrete pavements will be the focus of the conference.

## CONFERENCE PROGRAM

<b>Tuesday, October 24</b>	<b>Wednesday, October 25</b>	<b>Thursday, October 26</b>	<b>Friday, October 27</b>
	Plenary/International	U.S. Regional	Construction
	Break	Break	Break
	U.S. Regional I	Design	Rehabilitation
	<i>Lunch</i>	<i>Lunch</i>	<i>Noon—Conference End</i>
	International	Materials	
	Break	Break	
	U.S. Regional II	Forums	
<i>Reception— Doubletree Hotel</i>	<i>Conference Dinner— Doubletree Hotel</i>		

## CONFERENCE EVENT LOCATIONS

All technical sessions will be held in adjoining rooms 40-41-44-46 at the Conference Center. All breaks will be held in the lobby area outside the meeting rooms. All lunches will be served in adjoining rooms 48-50-51 at the Conference Center. The reception, group dinner, and breakfasts will take place in the Doubletree Hotel.

***Badges must be worn at all conference events.***

## TECHNICAL PROGRAM

SESSIONS	AUTHORS	PRIMARY AUTHOR'S ORGANIZATION
<b>TUESDAY, OCTOBER 24, 2006</b>		
<b>6:00 to 8:00 PM — Reception (Doubletree Hotel)</b>		
<b>WEDNESDAY, OCTOBER 25, 2006</b>		
<b>8:30 to 10:00 AM — Session 1: Plenary Session (Moderator: Shiraz Tayabji)</b>		
Keynote Presentations	To be announced	Federal Highway Administration
Setting the Stage – Defining Long-life Concrete Pavements	Shiraz Tayabji	CTLGroup
AASHTO/FHWA/NCHRP International Scan Findings	Danny Dawood	Pennsylvania Department of Transportation
AASHTO/FHWA/NCHRP International Scan Findings	Suneel Vanikar	Federal Highway Administration
AASHTO/FHWA/NCHRP International Scan Findings	Gerald Voigt	American Concrete Pavement Association
<b>10:00 to 10:30 AM — Break</b>		
<b>10:30 to Noon — Session 2: Regional Practices I (Moderator: Jerry Voigt)</b>		
Design and Construction of Extended Life Concrete Pavements in Illinois	Thomas Winkelman	Illinois Department of Transportation
The Evolution of Long-life Concrete Pavements in Washington State	Steve Muench, Linda Pierce, Jeff Uhlmeier, Keith Anderson	University of Washington
Implementation of Proven Portland Cement Concrete Pavement Practices in Colorado	Ahmad Ardani	Applied Research Associates, Inc.
Extended Service Life of Continuously Reinforced Concrete Pavement in California	Chetana Rao, Michael Darter, Tom Pyle	Applied Research Associates, Inc.
<b>NOON to 1:30 PM — Lunch</b>		
<b>1:30 to 3:00 PM — Session 3: International Practices (Moderator: Tom Kazmierowski)</b>		
Highlights From the 10th International PIARC Conference	Michael Darter, Shiraz Tayabji, Suneel Vanikar	Applied Research Associates, Inc.
Australia's Experience With Long-life Heavy Duty Concrete Pavements	George Vorobieff, Justin Moss	Head to Head International, Australia
The Motorway E40 (Formerly E5) From Brussels to Liège	Chris Caestecker	Ministry of the Flemish Community, Roads and Traffic Administration, Belgium
The Walloon Motorway: From One Millennium to Another	Vincent Helmus	Ministry of Equipment and Transport of the Walloon Region, Belgium
<b>3:00 to 3:30 PM — Break</b>		
<b>3:30 to 5:00 PM — Session 4: Regional Practices II (Moderator: David Huft)</b>		
U.S. Air Force Perspective on Long-life Concrete Airfield Pavements	Raymond Rollings, James Greene	USAF Civil Engineering Support Agency

SESSIONS	AUTHORS	PRIMARY AUTHOR'S ORGANIZATION
Defining the Attributes of Well-Performing, Long-lasting Jointed Portland Cement Concrete Pavements	Halil Ceylan, James Cable, K. Gopalakrishnan	Iowa State University
The Dan Ryan Expressway: A Look Back (and Forward) at the Continuously Reinforced Concrete Pavement That Works	Andrea Talley	Concrete Reinforcing Steel Institute
Long-life Concrete Pavements—Florida Perspective	Jamshid Armaghani, Roger Schmitt	Florida Concrete & Products Association
<b>5:30 PM — Reception (Doubletree Hotel)</b>		
<b>6:30 PM — Group Dinner (Doubletree Hotel)</b>		
<b>THURSDAY, OCTOBER 26, 2006</b>		
<b>8:30 to 10:00 AM — Session 5: Construction Practices (Moderator: David Lippert)</b>		
The Evolution of High Performance Concrete Pavement Design in Minnesota	Tom Burnham, Bernard Izevbekhai, Prasada Rangaraju	Minnesota Department of Transportation
Impact of Construction on the Life of a Jointed Plain Concrete Pavement in Virginia	Shabbir Hossain, Mohamed Elfino	Virginia Transportation Research Council
Long-term Performance of Continuously Reinforced Concrete Pavement in Texas	Moon Won, Dong-Ho Kim, Y. Cho, Cesar Medina-Chavez	University of Texas at Austin
Long-term Performance of Prestressed Concrete Pavement on IH-35 in Texas	Cesar Medina-Chavez, Moon Won	University of Texas at Austin
<b>10:00 to 10:30 AM — Break</b>		
<b>10:30 to Noon — Session 6: Design Practices (Moderator: Kurt Smith)</b>		
State in Transition: Empirical Designs to Long-life Designs Based on Mechanistic-Empirical Procedures in California	Venkata Kanekanti, William Farnbach, Arron Rambach, Erwin Kohler, John Harvey	University of California at Davis
Alternative Failure Modes for Long-life Jointed Plain Concrete Pavements	Jacob Hiller, Jeffery Roesler	University of Illinois
Integration of Advanced Material, Numerical, and Failure Models for Long-life Concrete Pavement	Jeffery Roesler, Lev Khazanovich, Derek Tompkins	University of Illinois
Use of Mechanistic-Empirical Procedures for Design of Long-life Concrete Pavements	Michael Darter, J. Mallela, G. E. Larson, C. Rao, L. Titus-Glover, L. Khazanovich	Applied Research Associates, Inc.
Structural Design Method of Precast Reinforced Concrete Pavement With Consideration of Concrete and Steel Fatigue	Tatsuo Nishizawa, Kazuo Mizukura, Kazuhiro Tamura	Ishikawa National College of Technology, Japan
<b>Noon to 1:30 PM — Group Lunch</b>		
<b>1:30 to 3:00 PM — Session 7: Concrete Materials Practices (Moderator: Sam Tyson)</b>		
Don't Let ASR Shorten the Life of Your Long-life Concrete Pavement	Gina Ahlstrom, Jon Mullarky	Federal Highway Administration
Getting It Right: Achieving Long-life Through Material Selection, Mix Design, and Construction	Thomas Van Dam, Lawrence Sutter, Karl Peterson	Michigan Technological University
Development of a Protocol to Detect Potential Uncontrolled Stiffening and Setting Due to Material Incompatibility	Peter Taylor	CTLGroup, Inc.
Laboratory Results of Fast-setting Concrete Mixes for Long-life Pavement Rehabilitation Strategies	Erwin Kohler, John Harvey, Jeffery Roesler	University of California at Davis
<b>3:00 to 3:15 PM — Break</b>		
<b>3:15 to 5:15 PM — Session 8A, Forum: Strategic Directions for Long-life Concrete Pavement Technology (Moderators: Suneel Vanikar and Jerry Voigt) (Panel membership, representing key segments, to be determined later)</b>		
Introductory remarks	Suneel Vanikar Gerald Voigt	Federal Highway Administration American Concrete Pavement Association

SESSIONS	AUTHORS	PRIMARY AUTHOR'S ORGANIZATION
Summary of International Scan Findings	Kathleen Hall	Consultant
Summary of International Scan Implementation Activities	Georgene Geary	Georgia Department of Transportation
The CP Roadmap—Framework for Long-Life Concrete Pavement Technology	Tom Cackler	National Center for Concrete Pavement Technology
Additional panel member remarks/presentations, followed by open discussion		
<b>5:30 to 7:00 PM — Session 8B, Forum: Theoretical Considerations for Long-life Concrete Pavements (Moderators: Jeffery Roesler and Lev Khazanovich)</b>		
Highlights From the 6th International DUT-Workshop, September 2006, Belgium	Mark Snyder	Consultant
Highlights From the Colorado Theoretical Workshop, August 2005	Jeffery Roesler, Lev Khazanovich	University of Illinois
Additional panel member remarks/presentations, followed by open discussion		

### FRIDAY, OCTOBER 27, 2006

<b>8:30 to 10:00 AM — Session 9: Construction Practices (Moderator: Jim Grove)</b>		
Considerations for Constructability of Long-life Concrete Pavements	Steve Waalkes, Rick Sniegowski, Jerry Voigt	American Concrete Pavement Association
Analysis of Total Effective Linear Temperature Difference From Concrete Pavement Field Measurements	Ya Wei, Will Hansen, D. Smiley, E. Jensen	University of Michigan
Use of MIT Scan Data for Improved Dowel Bar Tolerances	Becca Lane, Tom Kazmierowski	Ontario Ministry of Transportation, Canada
Construction of Long-life Concrete Pavement Using PRS Tools	Michael Darter, Lynn Evans, Brian Egan	Applied Research Associates, Inc.

### 10:00 to 10:30 AM — Break

<b>10:30 to Noon — Session 10: Repair and Rehabilitation Practices (Moderator: Jeff Uhlmeyer)</b>		
The Early-age Evaluation of Full-Depth Precast Panels: Canadian and Michigan Experiences	Neeraj Buch, Becca Lane, Tom Kazmierowski	Michigan State University
Precast Prestressed Concrete Pavement: A Long-life Approach for Rapid Repair and Rehabilitation	David Merritt, Sam Tyson	The Transtec Group, Inc.
Using Precast Pavement Slabs in Three Dimensions	Peter Smith	The Fort Miller Group, Inc.
Productivity Issues and Lessons Learned From Two Long-life Urban Freeway Concrete Pavement Rehabilitation Projects in California	Eul-Bum Lee, Kunhee Choi, John Harvey	University of California at Berkeley

### NOON — Conference End

## REGISTRATION DETAILS (all fees are in U.S. dollars)

	Late (after July 15, 2006)	Very Late (after September 30, 2006)
General registration	275	325
Government agencies (U.S. only)	225	275
Authors and academia	225	275
Students	175	225
Spouses	100	100
Exhibitors (one free registration)	1,500	NA

Potential exhibitors should contact Shiraz Tayabji at [stayabji@CTLGroup.com](mailto:stayabji@CTLGroup.com) or by phone at 410-997-0400 to reserve space.

**Updated information related to the conference and online registration is available at <http://www.fhwa.dot.gov/pavement/concrete/2006conf.cfm>**

## **CONFERENCE VENUE/HOTEL**

The conference will be held at the Donald E. Stephens Conference Center in Rosemont, Illinois, near Chicago's O'Hare International Airport. The conference hotel is the Doubletree Hotel O'Hare-Rosemont (adjacent to the conference center). The conference room rate is \$144.00, single or double, plus applicable taxes (currently about 13 percent). The group reservation code for the discounted hotel room rate is "2006 Concrete Conference."

## **DRESS**

Dress is business casual for all events. The weather can be cool at this time of year. A jacket is recommended.

## **CONFERENCE STEERING COMMITTEE**

Shiraz Tayabji (CTLGroup) (Chair), Mike Ayers (American Concrete Pavement Association), Angel Correa (Federal Highway Administration), Jim Grove (Iowa State University), David Lippert (Illinois Department of Transportation), Kurt Smith (Applied Pavement Technology, Inc.), Sam Tyson (Federal Highway Administration), and Jeff Uhlmeyer (Washington State Department of Transportation).

## **FOR ADDITIONAL INFORMATION, CONTACT:**

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