

98th ANNUAL ILLINOIS TRANSPORTATION AND HIGHWAY ENGINEERING CONFERENCE



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UNIVERSITY OF ILLINOIS
at URBANA - CHAMPAIGN

DIRECTOR'S WELCOME

*On behalf of the program planning committee and my colleagues at the University of Illinois and the Illinois Center for Transportation, I'd like to welcome you to the **98th Annual Transportation and Highway Engineering Conference!***

For nearly a century, this conference has been a place where transportation professionals from the public and private sector have met annually to present key accomplishments, to discuss new trends and new specifications, and to renew old friendships. I trust that you will enjoy the diverse array of technical presentations, agency and industry updates, interactive exhibits, awards presentations, and social events at this year's conference. As always, the program committee welcomes your comments and suggestions.



- William G Buttlar, Director



The Historic Illini Union Building

THE CONFERENCE VENUE

The Tradition: Each year (and for as long as we can remember) we have gathered at the Illini Union Building on the University of Illinois' Urbana-Champaign campus. Built in 1939, and dedicated by First Lady Eleanor Roosevelt in 1941, The Illini Union is an establishment rich in history. Modeled after colonial Virginia, most of the interior woodwork was carved by hand including an ornate lettering above the Pine Lounge fireplace that spells 'Illini.' Not only does the interior reflect the colonial tradition but special details highlight the exterior as well. The two clock towers are topped by an 11-foot bronze weather vane that supports an 8-foot bronze arrow.

Configuration of Conference within the Illini Union: Conference registration is located in the North Lounge of the ground level of the Illini Union Building. Exhibits and conference breaks will take place in the South Lounge, and will overflow into the West Entrance. General sessions will be held in Illini Rooms A, B, and C, which are located adjacent to the registration and exhibit areas. A Tuesday exhibit/luncheon, compliments of the THE sponsors and exhibitors, will be held in the South Lounge. Breakout sessions will be held in Illini Rooms A, B, and C, and on the third floor in room 314 (you must use the elevator or stairway in the north-west corner of the building to access this room). The Tuesday Social Mixer/Exhibit/Dinner event will be held in the magnificent Illini Ballroom, which is located on the north-east corner of the second floor of the Illini Union Building. The Wednesday Annual Luncheon event will be held this year in Illini Room C.

Parking near the Illini Union Building is very limited, so we recommend that you plan ahead. Travel, parking, public transportation, and hotel shuttle information can be found on our website (www.THEconf.com) and on page 11.

GENERAL SESSION

UNIVERSITY OF ILLINOIS, ILLINI UNION, ILLINI ROOM, URBANA, IL

*Chairperson: William Buttlar, Professor of Civil and Environmental Engineering
University of Illinois, Urbana, IL*

7:30 REGISTRATION, North Lounge

EXHIBIT & Continental Breakfast, South Lounge
ILLINI UNION BUILDING

9:00 Hoover Dam Bypass & The Colorado River Bridge
William M. Dowd, Hoover Dam Bypass Design Project Manager/Executive Vice President (Retired)
HDR Engineering, Inc. - Austin, TX

9:40 Mine Subsidence at the Interstate 72/Sangamon River Bridge
Steve Beran, Bridge Engineer
Illinois Department of Transportation – District 6 - Springfield, IL

Bruce Schottel, Senior Engineer
Office of Mines and Minerals/Abandoned Mined Lands Division
Illinois Department of Natural Resources - Edwardsville, IL

10:15 INTERMISSION

EXHIBIT & REFRESHMENTS, SOUTH LOUNGE

10:30 Wacker Drive and the Burnham Plan of Chicago
Christopher Holt, Bureau Chief
Illinois Department of Transportation – Bureau of Local Roads and Streets - Schaumburg, IL

Daniel Burke, Acting Deputy Commissioner – Division of Engineering
Chicago Department of Transportation - Chicago, IL

John Sadler, Assistant Chief Engineer – Highways – Division of Engineering
Chicago Department of Transportation - Chicago, IL

11:00 Severe Weather - Challenges of the Past and Future
Eddy Weiss, Author/Educator
Chasing4Life - Waterloo, IA

11:30 Mississippi River Bridge Project
Jeff Church, Project Implementation Engineer
Illinois Department of Transportation – District 8 - Collinsville, IL

12:00 RECESS FOR LUNCH
EXHIBIT OPEN, South Lounge

1:30 - 4:30 TUESDAY AFTERNOON TECHNICAL BREAKOUT SESSIONS (See pages 5-8)

4:30-7:30 Exhibit / Mixer / Midwest BBQ Buffet Dinner
ILLINI UNION, ILLINI BALLROOM

Our sponsors and exhibitors invite you to join them for a casual evening filled with conversation, music, prizes, and delicious food and drink in the stunning Illini Union Ballroom. At this event, you will have the opportunity to...

- Network with colleagues and keep up with the latest industry trends...
- Stroll through informative Exhibits as you enjoy complimentary beer and wine, gourmet fruit, cheese and crackers throughout the evening...
- Mingle with ASCE, ITE, ACI, and ISP student officers and members along with other transportation students, and visit the Student Resume Exhibit...
- Dine at our Midwest BBQ Buffet Dinner (you won't leave hungry!), which will be served at the same venue, starting around 5:30 PM...
- Win Big!!! All registered THE Conference Participants present at this event will be eligible to win one of twelve amazing door prizes!!! The drawing will be held during the opening remarks, which will occur just before the buffet dinner.

You must be present to win.

Breakout Session I**BRIDGES AND STRUCTURES**

ILLINI UNION, ROOM 314 A AND B

Chairperson: Carl Puzey, Acting Engineer of Bridges and Structures, Illinois Department of Transportation, Springfield, IL

1:30 Congress Avenue Bridge Rehabilitation Construction Engineering

*Stan-lee Kaderbek, Regional Manager
Collins Engineering - Chicago, IL*

*Mike Haas, Structural Engineer
Collins Engineering - Chicago, IL*

2:10 Evaluation and Life Extension Recommendations for Concrete and Steel Bridges

*Siva Venugopalan, CEO
Siva Corrosion Services - West Chester, PA*

2:50 INTERMISSION

EXHIBIT & REFRESHMENTS, SOUTH LOUNGE

3:10 Gusset Plate Analysis and Efficient Repair Design

*Jonathan Lewis, Senior Associate
Wiss, Janney, Elstner Associates, Inc. - Northbrook, IL*

3:50 Structural Monitoring

*Christopher Kavars, President
SENSR Technologies - Elkader, IA*

Breakout Session II**TRAFFIC, OPERATIONS AND MAINTENANCE**

ILLINI UNION, ROOM B

Chairperson: Norman Stoner, Division Administrator, Federal Highway Administration – Illinois Division, Springfield, IL

1:30 Real-Time Traffic Monitoring with Mobile Devices

*Dan Work, Assistant Professor
University of Illinois at Urbana-Champaign - Urbana, IL*

2:10 Highway Incident Management Training Program

*Geno Koehler, Policy and Safety Manager
Illinois Department of Transportation – Central Bureau of Operations - Springfield, IL*

Huaguo Zhou, Assistant Professor

Southern Illinois University Edwardsville - Edwardsville, IL

2:50 INTERMISSION

EXHIBIT & REFRESHMENTS, SOUTH LOUNGE

3:00 Infectious Disease Threats and Control in a Post-Disaster Environment

*Eddy Weiss, Author/Educator
Chasing4Life - Waterloo, IA*

3:30 Adaptive Signal Control Technology

*Christopher DiPalma, Transportation Systems Management & Operations Engineer
Federal Highway Administration – Illinois Division - Chicago, IL*

4:00 Northeastern Illinois Roundabout Case Study

*Paul Lafleur, Project Manager
Kane County DOT - St. Charles, IL*

*Matthew Papirnik, Project Manager
Burns & McDonnell - Downers Grove, IL*

Jason Salley, Geometric Studies Unit Head

Illinois Department of Transportation – District 1 - Schaumburg, IL

Breakout Session III**LOCAL ROADS AND STREETS**

ILLINI UNION, ROOM C

Chairperson: Doug Staske, County Engineer, Vermilion County Highway Department, Oakwood, IL

1:30 Implementation of Pavement Management Systems by Illinois Agencies

*Katie Zimmerman, President
Applied Pavement Technology - Urbana, IL*

*Kerrie Schattler, Assistant Professor
Bradley University - Peoria, IL*

2:10 Pavement Preservation for Local Agencies

*Bill Vavrik, VP & Principal Engineer
Applied Research Associates, Inc. - Champaign, IL*

2:50 INTERMISSION

EXHIBIT & REFRESHMENTS, SOUTH LOUNGE

3:10 Sustainability in Pavement Rehabilitation

*John Ambrose, Vice President
Baxter & Woodman - Crystal Lake, IL*

3:50 Web 2.0 Technologies to Improve Project Public Relations

*Chris Sosnowski, General Manager
Baxter & Woodman - Crystal Lake, IL*

Breakout Session IV**DESIGN AND CONSTRUCTION**

ILLINI UNION, ROOM A

Chairperson: Matthew Mueller, Materials Engineer, Illinois Department of Transportation – Bureau of Materials & Physical Research, Springfield, IL

1:30 Safety Analysis Tools: HSM Prediction Model and Benefit Cost Tool Application

*Dante Perez-Bravo, Transportation Engineer
CH2M Hill - Chantilly, VA*

2:10 Introduction to the New AASHTO Roadside Design Guide

*Keith Harrison, Safety & Design Engineer
Federal Highway Administration - Resource Center - San Francisco, CA*

2:50 INTERMISSION

EXHIBIT & REFRESHMENTS, SOUTH LOUNGE

3:10 159th Street (U.S. Route 6) Reconstruction

*Edward M. McGuire, Resident Technician
Illinois Department of Transportation – District 1 - Schaumburg, IL*

3:50 Overview of the New AASHTO Green Book

*Keith Harrison, Safety & Design Engineer
Federal Highway Administration - Resource Center - San Francisco, CA*

GENERAL SESSION

UNIVERSITY OF ILLINOIS, ILLINI UNION, ROOMS A AND B,
URBANA, IL

Chairperson: Kevin Burke, Local Policy & Technology Engineer, Illinois Department of Transportation – Bureau of Local Roads & Streets, Springfield, IL

7:15 EXHIBIT & Continental Breakfast, South Lounge

8:20 PPP (Public Private Partnership) Illiana Expressway
Roger Driskell, Regional Engineer
Illinois Department of Transportation – Region 4 - Springfield, IL

8:50 Illinois Center for Transportation Update
Imad Al-Qadi, Director
Illinois Center for Transportation - University of Illinois at Urbana-Champaign

9:10 AWARD PRESENTATIONS

2011 IDOT ENGINEER AND TECHNICIANS OF THE YEAR
Bill Frey, Interim Director of Highways
Illinois Department of Transportation, Springfield, IL

ILLINOIS ASSOCIATION OF COUNTY ENGINEERS
Tom Klasner, President
IACE, Jersey County Engineer

ILLINOIS DIVISION, FHWA
Norman Stoner, Illinois Division Administrator
Federal Highway Administration, Springfield, IL

ILLINOIS CENTER FOR TRANSPORTATION
Imad Al-Qadi, Director
ICT, University of Illinois at Urbana-Champaign, Urbana, IL

9:50 INTERMISSION
EXHIBIT & REFRESHMENTS, SOUTH LOUNGE

TRANSPORTATION PLANNING AND FUNDING PERSPECTIVES

10:10 THE INDUSTRY VIEW
Doug Whitley, President
Illinois Chamber of Commerce - Springfield, IL

10:40 THE FEDERAL VIEW
Victor Mendez, Administrator
Federal Highway Administration - Washington, D.C

11:10 THE ILLINOIS VIEW
Jim Ofcarcik, Fiscal Analysis Manager
Illinois Department of Transportation - Springfield, IL

11:35 Tollway Program
Kristi Lafleur, Executive Director
Illinois State Toll Highway Authority - Downers Grove, IL

12:00 ANNUAL LUNCHEON
ILLINI UNION, ROOM C, URBANA, IL

Price \$20.00 per plate.
Tickets should be purchased at the time of registration or before noon on Tuesday, February 28.

Lunch Served

12:30 Presiding: WILLIAM G. BUTTLAR, T. H. E. Conference Director
Introductions of Transportation / Highway Agency Representatives

12:40 New Directions for Fighting Illini Football: Q & A with Coach Tim Beckman, Head Football Coach
University of Illinois at Urbana-Champaign
Urbana, IL

CONCLUSION OF THE 2012 T.H.E. CONFERENCE

PARKING AND TRAVEL INFORMATION

I.A.H.E. and I.A.C.E Holiday Inn Shuttle ILLINI UNION AND THE URBANA HOLIDAY INN

I.A.H.E. and I.A.C.E. are providing a shuttle between the Illini Union and the Urbana Holiday Inn.

Location: Illini Union circle drive located at the north entrance

Schedule:

Tuesday: 7:30 am – 9:30 am and 4:00 pm to 8:00 pm

Wednesday: 7:30 am – 9:00 am and 12:00 pm to 1:30 pm

Free Park & Ride

Illini Union and Parking Lot E-14

There is free parking in Lot E-14 (south campus) and free bus service from Parking Lot E-14 to the Illini Union. The Mass Transit District (MTD) has a free bus service, Free Park & Ride, which you can ride for free from Parking Lot E-14 to the Illini Union.

You must print and display the Parking Lot flyer (which can be found on the THE website) on the dashboard of your car for parking lot E-14. There is no overnight parking. Flyer is only valid through 2:00 am.

Parking Lot E-14 is located on the corner of St. Mary Road and First St. in Champaign, south of campus, just west of Assembly Hall. You may take a free MTD bus to campus.

Bus Schedule to Campus:

- Bus 1N Yellow to the Illini Bookstore and the Follett Bookstore, both on Wright Street every 10 minutes, leaves parking lot E-14 6:40, 7:08, 7:20, 7:30, 7:38, 7:55, 8:12 AM, & every 10 minutes thereafter until 2:52, and then :12, :22, :42, :52 minutes after the hour until 6:22 PM. Entrance to the Illini Union is approximately 1 block due east.

To return to Parking Lot E-14 from the Illini Union anytime before 10:00 pm, you may take a free MTD bus.

Bus Schedule to Parking Lot E-14:

- Bus 1S Yellow is recommended, which can be boarded at the Transit Plaza just 1-02 blocks west of the Union on Wright Street near the Illini Union Bookstore at 6:45, 7:12, 7:29, 7:47, 8:07, 8:17, 8:37, 8:47, 8:57, 9:17, 9:37, 9:47AM, then at :07, :17, :37, :47, minutes after the hour until 1:47PM Then :07, :17, :27, :37, :47, :57 minutes after the hour until 5:57 p.m. and then :07, :17, :27, :37, :47 minutes after the hour until 7:07 PM.

- After 6:57 pm, Bus 100S Yellow runs at 7:03 pm and then every 30 minutes after the hour at :29 and :59, until 9:59 pm.

- Please see <http://www.cumtd.com/> and look under campus routes for full details and maps.

T.H.E. CONFERENCE PROGRAM COMMITTEE

Jeffery Allen

Illinois Association of Highway Engineers
Paris, IL

Imad Al-Qadi

Illinois Center for Transportation
University of Illinois at Urbana-Champaign
Urbana, IL

Thomas Berns

Berns, Clancy & Associates
Urbana, IL

Kevin Burke

Illinois Department of Transportation
Springfield, IL

William G. Buttler

Conference Director
University of Illinois at Urbana-Champaign
Urbana, IL

David Dratnol

Illinois Municipal League
Village of Lombard, IL

Robert Miller

Township Officials of Illinois
Crystal Lake, IL

Matthew Mueller

Illinois Department of Transportation
Springfield, IL

John Peisker

Associated General Contractors of Illinois
Springfield, IL

Brian Pfeifer

Federal Highway Administration – IL Division
Springfield, IL

Douglas Staske

Illinois Association of County Engineers
Oakwood, IL

Gregory Stukel

Illinois State Toll Highway Authority
Downers Grove, IL

University of Illinois at Urbana-Champaign

Ilesanmi Adesida, Dean
College of Engineering

Amr Elnashaj, Head
Department of Civil & Environmental Engineering

William Buttlar, Conference Director
Department of Civil & Environmental Engineering

Trachia Wilson, Conference Coordinator
Illinois Center for Transportation

Meg Griffin, Associate Conference Coordinator
Department of Civil & Environmental Engineering

Megan Everette, Assistant Conference Coordinator
Department of Civil & Environmental Engineering

Illinois Department of Transportation

Ann Schneider, Secretary of Transportation
Bill Frey, Interim Director of Highways

Illinois Association of County Engineers

Tom Klasner, President - Jersey County
Bruce Bird, Vice President - Macon County
Curtis Cook, Secretary-Treasurer - Ogle County

Public Works Section, Illinois Municipal League

Larry Frang, Executive Director - Illinois Municipal League
Mike Drey, Chairman - Public Works Committee

Township Officials of Illinois

Michael Goral, President
Bryan Smith, Executive Director

Associated General Contractors of Illinois

Holly Bailey, President
Mike Boucher, Associate Director

Illinois Association of Highway Engineers

Warren Norris, Chairman of the Board

Illinois Division, Federal Highway Administration

Norman Stoner, Division Administrator

Illinois Center for Transportation

Imad Al-Qadi, Director

T.H.E. CONFERENCE EXHIBITION

Tuesday 7:00 am - 4:00 pm
Illini Union South Lounge

Tuesday 4:00 pm - 8:00 pm
Illini Union Ballroom, 2nd Floor

Wednesday 7:15 am - 10:15 am
Illini Union South Lounge

Sponsors

CH2M Hill

Jacobs Engineering

IL Association of Highway Engineers

IL Center for Transportation

IL Department of Transportation

IL Association of County Engineers

Exhibitors

2IM Group, LLC

Acrow Bridge

Barrier Systems

CEE Online MS Program at UIUC

CH2M Hill

Chicago Testing Laboratory, Inc.

Civil Design, Inc.

CONTECH Construction Products, Inc.

CPI Supply

Crafco

Ero-Tex

ESI Consultants, Ltd.

Fabreeka International, Inc.

Flint Trading, Inc.

Gateway Traveler Information System

Humboldt Mfg. Co.

HYSPAN Bridge Systems

IL Association of County Engineers

IL Association of Highway Engineers

IL Center for Transportation

Infrastructure Engineering, Inc.

Microdesk

N.E. Bridge Contractors

Reference LLC / SENSR

Siva Corrosion Services

Soil Nail Launcher

TAPCO (Traffic & Parking Control)

The Reinforced Earth Company

All T.H.E. Conference Registrants Welcome!

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T.H.E.

Civil & Environmental Engineering
UNIVERSITY OF ILLINOIS
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