

Wisconsin Professional Development Hour (PDH) Credits Available!



**A SPECTRUM OF
OPPORTUNITIES**

March 6-7

WISCONSINDELLS

GLACIER CANYON LODGE
at the Wilderness Resort

Presented by:

ACEC
Wisconsin



PLATINUM SPONSORS

emcs inc



Globetrotters[®]
Engineering Corporation

GRÄEF

JEWELL

associates engineers, inc.

Engineers - Architects - Surveyors

Michael Baker

INTERNATIONAL

CONFERENCE DETAILS

TRANSPORTATION IMPROVEMENT CONFERENCE MARCH 6-7, 2018

The American Council of Engineering Companies of Wisconsin and the Wisconsin Department of Transportation are partnering for the tenth consecutive year to present the 2018 Transportation Improvement Conference. This year's theme is "A Spectrum of Opportunities." The conference brings together the department and consulting engineering community for two days of transportation-related professional development programming and networking opportunities.

The conference and networking reception are open to registered attendees only.

PROFESSIONAL DEVELOPMENT HOUR CREDITS

Credits awarded at the 2018 Transportation Improvement Conference are eligible for Wisconsin continuing education credit. Professional development hour (PDH) credits will be awarded for sessions attended. Full conference attendance is eligible for an estimated 6 PDH credits (includes participation in March 6 sessions). ACEC WI is listed as an approved provider of continuing education programs for professional engineers by the Wisconsin Department of Safety and Professional Services.

CONFERENCE LOCATION

Glacier Canyon Lodge (at the Wilderness Resort)
45 Hillman Road, Wisconsin Dells, WI 53965
800-867-9453 | www.glaciercanyonlodge.com

Guest Room Reservations

Guest rooms are available at the Glacier Canyon Lodge the evening of March 6 at the prevailing government rate (\$99 for double, triple and quad rate). This rate is available to the entire room block. Room rates are subject to tax (12.25%) unless tax-exempt information is provided. **Make your reservation by February 3 to receive the group rate.**

To receive the group rate, call 800-867-9453 and tell the agent you are booking under ACEC-WisDOT Transportation Improvement Conference Reservation at the Glacier Canyon Lodge, Leader #512152, D22301. A credit card is required to hold and guarantee the reservation. The card will not be charged at the time of reservation. An alternate card may be

provided at check-in. Every effort has been made to block rooms within the conference center wing; however, due to the variety of room types available, not all blocked rooms are in close proximity to the conference center. A limited number of larger suites are available upon request. There are a limited number of rooms available the evening of March 5.

Hotel check-in time is 4:00 p.m. and checkout is 11:00 a.m.

Tips for a Smooth Hotel Check-in

Tax Exempt Reservations – The Glacier Canyon Lodge sends reservation confirmation notices via email. Follow the link within the confirmation email for instructions on claiming the tax exemption for government room rates. Since reservations are made on an individual basis, tax exempt documentation is required for each guest.

Pre-register at the Glacier Canyon Lodge Lobby – You may check-in at the front desk in the lobby after 12:00 p.m. At that time you will receive room keys. If your room is not available, you will receive the key and then a text message once the room is ready. If you arrive before noon, you may pre-register at the front desk for your room; however, your room key will not be available.

Glacier Canyon Lodge Guest Room Cancellation Policy

- Prior to Feb. 3 = no charge
- After Feb. 3, but more than 72 hours prior to scheduled arrival = \$20 cancellation fee
- Within 72 hours of scheduled arrival = entire room rate will be charged

CONFERENCE APP

The conference will utilize a phone app which will contain all session information, maps, personalized scheduling information, presentation materials and evaluation surveys. These materials will also be available after the conference through the app and through a traditional website.

If you do not have a smart phone, you can also contact ACEC WI before the conference for a pdf download of the conference materials. You can also utilize the website to download the materials.

It is highly recommended that you download the app before the conference. The app will be available in mid-February. Watch for an email notification to download the app.

GOLD SPONSORS

AVRES
ASSOCIATES

CORRE



raSmith

CREATIVITY BEYOND ENGINEERING

cbs²



**Mead
& Hunt**

SA STRAND
ASSOCIATES[®]

SILVER SPONSORS



AMERICAN
ENGINEERING
TESTING, INC.



CONFERENCE AGENDA

Sessions are described in detail on the following pages. Session and session descriptions are subject to change. Conference attendees are asked to pre-register for the conference and breakout sessions.

Tuesday, March 6

- 1:00 p.m. Registration Begins
- 2:00 p.m. ACEC WI Legislative Update
- 2:15 p.m. Autonomous Vehicles
- 3:15 p.m. Networking Break
- 3:30 p.m. Breakout Sessions A
- 4:30 p.m. Networking Reception
- 6:00 p.m. Evening Concludes

Wednesday, March 7

- 8:00 a.m. Registration & Breakfast Buffet
- 9:00 a.m. Opening Session
 - WisDOT Welcome
 - FHWA Updates
 - ACEC WI Updates
- 10:00 a.m. Networking Break
- 10:30 a.m. Breakout Sessions B
- 11:30 a.m. Networking Lunch
- 1:00 p.m. Breakout Sessions C
- 2:00 p.m. Networking Break
- 2:30 p.m. Breakout Sessions D
- 3:30 p.m. Networking Break
- 3:45 p.m. Closing Session
 - Masterworks Update
 - WisDOT Technical Updates
 - WisDOT Excellence in Highway Design Awards
- 5:00 p.m. Conference Concludes

THANK YOU

Thank you to the 2018 Transportation Improvement Conference Planning Committee for planning and coordinating this year's event!

Conference Co-chairs:

Matt Bronson, WisDOT
George Schulz, SRF

Committee Members:

Mike Bakalars, KL Engineering Inc. (TSC Liaison)
Jeff Abramson, Ayres Associates
Kevin Anderson, Foth
Paul Conlin, WisDOT
Rahcel DeSombre, raSmith
Chris Dry, EMCS
Ben Goldsworthy, CH2M
Dan Grasser, Alfred Benesch
Andrew Heidtke, ACEC WI
Luke Holman, Strand Associates
Angie Kerrigan, Mead & Hunt
Linda Krueger, Michael Baker International
Ray Kumapayi, WisDOT
Kevin Meyer, CORRE
Brian Roper, WisDOT
Dan Ryan, KL Engineering
Scott Stevenson, AECOM



www.acecwi.org

REGISTRATION OPENING & CLOSING SESSIONS

The conference registration fee includes: conference app; March 6 programming, networking reception and appetizers; and March 7 breakfast buffet, lunch and networking break refreshments. The networking reception on March 6 will include a cash bar.

ACEC WI Member Rates

Early Registration (by February 20) - \$175

Regular Registration (by February 27) - \$200

Non-Member Rates

Early Registration (by February 20) - \$315

Regular Registration (by February 27) - \$365

FHWA/Government (non-WisDOT) Registrations

The registration rate is \$100. Use the enclosed form or register online by February 27. WisDOT registrants, please see the special registration instructions.

Return registration forms or register online by February 27:

ACEC WI

316 W. Washington Ave, Ste. 950

Madison, WI 53703

608-257-9223 | fax 608-257-0009

acecwi@acecwi.org | www.acecwi.org

WisDOT Registrations

Registration for WisDOT employees is coordinated through the department's central office. The registration rate is \$100.

All WisDOT registrations should be directed to Nina Berkani by February 27. Please contact Nina at nina.berkani@dot.wi.gov or 608-266-1496 with questions or to register.

Conference Registration Cancellation Policy

Registration is fully refundable if cancellation is received by February 27. Cancellations will not be accepted after February 27; registration is transferable to another individual.

OPENING & CLOSING SESSION DESCRIPTIONS

Opening Session

Wednesday, March 7, 9:00 a.m.

WisDOT Welcome

Wisconsin Department of Transportation leadership is invited to provide updates on the department's latest initiatives.

FHWA Updates

Get the latest information on FHWA's initiatives.

ACEC WI Updates

Hear from ACEC WI's transportation leaders on what the organization is doing and what you can do to help.

Closing Session

Wednesday, March 7, 3:45 p.m.

Masterworks Updates

Receive new updates from WisDOT on the status of Masterworks and some future plans.

WisDOT Technical Updates

WisDOT will update attendees on the latest information on the department's technical initiatives.

WisDOT Excellence in Highway Design Awards

The closing session features the presentation of the 2018 WisDOT Excellence in Highway Design Awards.

MARCH 6 SESSIONS

March 6 is the opening day of the conference and all attendees are encouraged to attend. Please note changes in the start time from previous years. All sessions and the networking reception are included with registration.

March 6 Agenda

| | |
|-----------|----------------------------|
| 1:00 p.m. | Registration Begins |
| 2:00 p.m. | ACEC WI Legislative Update |
| 2:15 p.m. | Autonomous Vehicles |
| 3:15 p.m. | Networking Break |
| 3:30 p.m. | Breakout Sessions |
| 4:30 p.m. | Networking Reception |
| 6:00 p.m. | Evening Concludes |

SESSION DESCRIPTIONS

ACEC WI Legislative Update

Join ACEC WI for a discussion of legislative items that could affect the engineering industry and professional engineers.

Autonomous Vehicles

Autonomous vehicles have been a popular topic for years now but technological innovations have brought them from the realm of possibility to reality. Transportation professionals need to start planning for these vehicles in near-term projects. This session will review how far autonomous vehicles have come in just a short amount of time and what possible directions they could go in the future. There will also be a discussion of Wisconsin-specific actions should be expected, both in relation to Foxconn and to other projects around the state.

March 6 Breakout Sessions

A1 Ethics

Although much of the emphasis in professional ethics is on individual behavior, the fact is that most people are significantly influenced by the ethical norms of their work environment. This means that in order to promote ethics within a particular profession, it is necessary to find effective ways to improve the ethical culture of professional workplaces. This session is eligible for one (1) ethics/professional conduct PDH.

A2 Insurance & Claims Trends in Transportation Design

Please join Holmes Murphy & Associates to hear stories of real life claims scenarios related to design services in the transportation industry. During the course of this discussion, the speaker will discuss claims scenarios, break down the key issues, and discuss ways that problems could have been avoided.

Learning Objectives:

- Gain an understanding of the nature of risk.
- Review claims statistics.
- Develop strategies for risk management.

Networking Reception

Join your peers for networking and socializing immediately following the sessions. Appetizers will be provided. There will also be a cash bar for attendees.

BREAKOUT SESSIONS B | March 7, 10:30 a.m.

B1 2017 US Open Transportation Plan

[Design Track]

Speaker: Art Baumann, WisDOT

The presentation will provide an overview of the planning and coordination that was performed prior to and during the 2017 US Open held at Erin Hills in Washington County. It will discuss route selection, parking locations, and signing. The presentation will review issues that occurred during the event and the response. Finally, a synopsis on the lessons learned and how to approach future events of this type.

Learning Objectives:

- Review the amount of planning for an event of this magnitude.
- Learn how to do contingency planning for events.
- Understand the importance of sharing information with event patrons.

B2 Civil 3D and Infracworks

[Technology Track]

Speakers: Matt Dapp & Jim Rinzel, WisDOT; Paul Kirkendall, Mastergraphics

This course will focus on the latest civil design software using Autodesk's Civil 3D and Infracworks. We will explore some project examples of how these tools help communicate the design intent with stakeholders, efficiently manage the design approach, and enhance the decision making of a project's technical elements.

Learning Objectives:

- Gain an understanding of the latest features of Civil 3D and Infracworks.
- Learn how Civil 3D differs from Infracworks and when you use one over the other or use both together.
- Learn how these tools help communicate design intent with stakeholders.

B3 All Things Environment, but Mostly Permits

[Environmental Track]

Speakers: Robert Armstrong, Alyssa Barrette, Pat Trainer & Jay Waldschmidt, WisDOT

This session will focus on the new Stormwater Construction General Permit to be issued by the Wisconsin Department of Natural Resources later in Spring of 2018 and what will be required for compliance. Discussion will focus

on how this new permit integrates with our current liaison process under the Cooperative Agreement with DNR; what parts of our process will stay the same; and what parts of our process will change. The session will also provide an update on new Regional General Permits being issued by the US Army Corps of Engineers early in 2018. The changes this will bring to WisDOT and our partners will be highlighted. Lastly, general environmental updates and emerging issues.

Learning Objectives:

- Gain an understanding of what the new permits are and how they pertain to WisDOT projects.
- Learn how the permits will be implemented, what will be needed to comply and when they go into effect.
- Receive tips on where to find additional information and who to contact.

B4 Contractors Roundtable: Cost Saving Strategies

[Efficiency Track]

Speakers: Ben Holz, Michels; Mike Hahn, Lunda; Brian Enders, Northeast Asphalt

This session will be a moderated Q&A session with contractor representatives to discuss varying cost saving strategies that are applicable to today's modern transportation projects. Discussion will focus primarily on best practices and strategies engineers can implement to minimize costs without infringing upon the safety of workers and traveling public. There will be time at the end of the session for questions from the audience.

Learning Outcomes:

- Understand how decisions made during design can reduce project costs.
- Develop cost reduction strategies when developing staging plans and determining work restrictions.
- Discover how engineering and contracting industries can work together to deliver more with less.

BREAKOUT SESSIONS C | March 7, 1:00 p.m.

C1 Marquette Interchange PPC Overlays & Mega-Projects Update

[Design Track]

Speaker: Lindsay Kaufmann & Jason Sadowski, Michael Baker; Jason Roselle, WisDOT

In today's climate, an effective preventative maintenance program is more important than ever. Polyester Polymer Concrete (PPC) overlays are one tool that can be used to extend the life of our bridge infrastructure. The presentation will give an overview of PPC bridge deck overlay applications and benefits through lessons learned on the ongoing WisDOT project in the Marquette Interchange.

Learning Objectives:

- Gain an understanding of PPC material properties and behavior.
- Learn appropriate applications for PPC bridge overlays.
- Review updates on mega projects in Wisconsin.

C2 Bluebeam & OnStation

[Technology Track]

Speakers: Josh Skarsten & Margaret Welch, AECOM; Sara Schoenmann, JT Engineering

This course will focus on how the use of technology improves collaboration and workflow throughout the life of a project. The course will highlight the use of two programs.

An introduction to Bluebeam: a user-friendly PDF creation, editing, markup and collaboration technology. This presentation will highlight introductory functions and useful features of Bluebeam as an advanced communication and management tool.

OnStation is a project-specific app for your smartphone that offers the ability to view detailed project drawings on your phone and out on the construction site. OnStation also features a station finder tool and the ability to create field notes by adding comments and sketch drawings to your maps.

Learning Objectives:

- Gain an understanding of Bluebeam and OnStation features and time-saving techniques.
- Understand project document editing and management.

- Learn how these tools improve collaboration during design and construction.

C3 Decision-Making Tools from Planning to Design

[Environmental Track]

Speakers: Cameron Smith & Jay Waldschmidt, WisDOT

This session will focus on the exciting world of NEPA documentation for transportation projects and what the future may hold. Hear from WisDOT's Environmental Process and Documentation Section regarding recent trends in environmental documentation for transportation projects in Wisconsin and thoughts on the practice moving forward. We will also hear from WisDOT's Office of General Counsel regarding the potential impacts of the recent Presidential Executive Order issued regarding streamlining the environmental review and permitting process for infrastructure projects.

Learning Objectives:

- Learn best practices as the result of recently completed documents.
- Review changes in environmental documentation guidance.
- Understand the impact of executive orders on project planning and development.

C4 Innovation Vision

[Efficiency Track]

Speaker: David Esse, WisDOT

Back by popular demand, WisDOT Innovation Chief Guru, David Esse will share WisDOT's latest from study to implementation of the many technical, IT, software, material, equipment, etc. innovative tools being used to deliver the Department's programs. Innovative ideas become reality through the WisDOT process. And in the end, it's not about recreating the wheel but rather building partnerships that minimize resource investment but maximize innovation.

Learning Objectives:

- Learn about the latest innovations being studied and used in the delivery of WisDOT programs.
- Learn about the WisDOT innovation process.
- Review WisDOT local, state and national innovation partnerships.

BREAKOUT SESSIONS D | March 7, 2:30 p.m.

D1 Restricted Crossing U-Turns

[Design Track]

Speakers: Ben Wilkinson, MSA; Greg Helgeson, WisDOT

The purpose of this program will be to discuss the restricted crossing u-turn (R-CUT) applications that have been applied on Wisconsin expressways. The program will include the different kinds of R-CUTs and which are best suited for differing situations. Some data on the performance of Wisconsin R-CUTs will also be presented along with some design guidance based on experience from those already constructed.

Learning Objectives:

- Review where to consider R-CUTs.
- Discover different kinds of R-CUTs and their benefits.
- Understand design guidance based on experience from existing R-CUTs.

D2 Big Data for Improved Transportation Decisions

[Technology Track]

Speaker: Ryan Loos, SRF

Big data is a hot topic, with an ever expanding list of definitions and characteristics. As civil engineers and planners we understand that the greater prevalence of data can be used to help make better decisions. However, we often struggle with the lack of technology/software, analytical skills, and budgets. Our industry is on the precipice of a dramatic age with AV and CV vehicles unleashing torrents of data, and we should be excited about the prospects of utilizing that data to extract what is useful and make better informed decisions. This presentation will focus on a case study and the use of big data to inform planning, design, and outreach decision makers.

Learning Objectives:

- Understand when big data should be used as an analysis tool for informed decision-making.
- Learn how to incorporate big data into a corridor study.
- Learn about real project examples and how to avoid pitfalls.

D3 Model Vortex: Moving from Traffic to Transportation

[Environmental Track]

Speaker: Tom Lynch, Strand Associates

This presentation will describe the multifaceted study of the intersection of John Nolen Drive/ Blair Street (US 151) and Wilson Street/Williamson Street just east of the Capital Square area in Madison. The intersection accommodates an exceptionally high volume of motor vehicle traffic, buses, bicyclists, and pedestrians while also being bisected by an active railroad crossing that sees four or more trains per day. The project is also evaluating measures to improve the connection between the Monona Terrace and Capital Square and the Monona Lakeshore for pedestrians and bicyclists.

Learning Objectives:

- Learn how to perform stakeholder outreach and how to incorporate the comments into alternatives.
- Discover how to apply safety counter measures and use non-standard geometry for special situations.
- Understand how to balance near and long term needs and improvements.

D4 Low-Cost Safety Improvement Techniques and Strategies

[Efficiency Track]

Speaker: Lee Gibbs, SRF

In the current transportation economic climate, roadway preservation projects are becoming more commonplace to maximize useful life and stretch construction dollars. However, as transportation professionals, our goal to make the transportation network safer continues to remain paramount. This presentation will highlight field-implemented roadway and intersection safety improvements that focus on reducing crash probabilities while doing so with lower design and construction costs than typical reconstruction or expansion-type projects.

Learning Objectives:

- Understand what Crash Modification Factors are and how to interpret them.
- See several examples of low-cost safety improvements.
- Discover how to implement strategies based on existing crash patterns.

2018 TRANSPORTATION IMPROVEMENT CONFERENCE - REGISTRATION FORM**REGISTRANT DETAILS**

Name _____ PE, SE, etc. _____

Firm Name _____

Address _____

City/State/Zip _____

Email _____ Phone _____

Dietary Restrictions (vegetarian, gluten-free, etc.) _____

MARCH 6 BREAKOUT SESSION

Please select your breakout session preference by selecting one of the options:

Ethics (A1)

Insurance (A2)

Not Attending

MARCH 7 BREAKOUT SESSION

Please select your breakout session preference by selecting one session in each section below:

Breakout Sessions B – 10:30 a.m.US Open Trans.
(B1)

Civil 3D (B2)

All Things Enviro.
(B3)

Contractor Roundtable (B4)

Breakout Sessions C – 1:00 p.m.PPC Overlays &
Megas (C1)Bluebeam & OnStation
(C2)Enviro. Updates
(C3)

Innovation Vision (C4)

Breakout Sessions D – 2:30 p.m.Restricted U-Turns
(D1)

Big Data (D2)

Model Vortex (D3)

Low Cost Safety (D4)

REGISTRATION TYPE & PAYMENTPlease select a registration type and payment option. Electronic registration is available at www.acecwi.org. Please contact ACEC WI at 608-257-9223 with questions.**ACEC WI Member**

\$175 (by 2/3/18)

\$200 (by 2/27/18)

Non-member Consultant

\$315 (by 2/3/18)

\$365 (by 2/27/18)

Gov't Rate

\$100 (by 2/27/18)

WisDOT Registrations: Contact nina.berkani@dot.wi.gov to register.**Please return this form and payment to ACEC WI by February 27:**ACEC WI | 316 W. Washington Ave, Ste 950 Madison WI 53703 | 608-257-9223 | fax 608-257-0009 | acecwi@acecwi.org

Check enclosed

Check mailed separately

Credit Card*

Card Number _____

Expiration Date _____ Security Code _____

Email for Payment Receipt _____

* ACEC WI is PCI compliant in protecting credit card information. Do not send credit card information by email; it is not secure.

Cancellation Policy: Registration is fully refundable if cancellation is received at ACEC WI by February 27. Cancellations will not be accepted after 2/27/18; however registration is transferable to another individual.