

ANNUAL MEETING

Jan 30-Feb 1, 2019

Earle Brown Heritage Center
Brooklyn Center, Minnesota

THE CITY ENGINEERS ASSOCIATION OF MINNESOTA

ceam.org

Sponsors:

City Engineers Association of Minnesota
Minnesota Department of Transportation
League of Minnesota Cities

Facilitated by:

College of Continuing and Professional Studies,
University of Minnesota

The City Engineers Association of Minnesota (CEAM), with membership hundreds strong, enthusiastically invites you to the Annual Meeting in January 2019. As always, the conference will be a positive, educational atmosphere for networking, getting involved, and connecting and reconnecting with colleagues old and new. It continues the tradition and celebration of our organization, begun in 1954.

Our conference agenda has something for all, such as keynote speaker Christine Cashen with a positive, humorous perspective on sparking fresh ideas and reducing stress, sessions on resilience and overcoming challenges, agency partner updates, and celebrating our project and professional successes of the past year. Based on positive feedback, the 2019 conference includes three sets of concurrent sessions, similar to last year. And back by popular demand, Hamline University Professor David Schultz will again lead a session, this time on ethics. His presentation of this topic is sure to be engaging and enlightening.

Your work and leadership will continue to do great things in Minnesota. That's why we hope the conference will educate and inspire you, and provide helpful resources and ideas to take back to your local communities. Let's begin the New Year in the continued positive spirit of camaraderie, to meet with peers and spend valuable time together... both in the sessions and during the breaks. We look forward to seeing you!

On behalf of the Conference Planning Committee, welcome!

2019 CEAM Conference Planning Co-Chairs

John Gorder, City of Eagan

Joseph Rhein, Bolton & Menk, Inc.

Program

Wednesday, January 30, 2019

7:30 a.m. Registration and Continental Breakfast

8:30 Welcome

Glenn Olson, CEAM President and City of Marshall

8:40 Carpe Change: How To Get Along, Get It Done and Have More Fun!

Moderator: *John Gorder, City of Eagan*



Christine Cashen, National Speakers Association, CPAE Speaker Hall of Fame

Seize the change before it seizes you! It is time to take back your power and own it. It doesn't matter what happens to you, it is all about your response. It is time to Carpe Change! Seize your time, seize your energy, and take the reins to your life—all while enjoying the ride. You don't want to miss this compelling presentation! Join Christine to take charge of what you can change today. You'll leave feeling charged up, enthused, motivated, and excited to get back to it!

10:05 Refreshment Break

10:25 Minnesota's Ever-Changing Demographics

Moderator: *John Gorder, City of Eagan*

Susan Brower, Minnesota Department of Administration

The past two decades have meant big changes for Minnesota. The next two decades will bring even greater changes. Minnesota State Demographer Susan Brower will talk about how the people of Minnesota are changing and will describe what to expect in the future. She will also provide information on Minnesota's aging trend and discuss impacts and implications in the areas of health, disability, volunteerism, the state budget, the future labor force, and beyond.

11:15 Awards and Scholarship Winners' Recognition

12:15 p.m. Lunch



Program

Wednesday, January 30, 2019

1:15 p.m. Concurrent Sessions

1 Neighborhood Traffic Control

Moderator: *Marc Culver*, City of Roseville

Mark Ray, City of Crystal; *Bryant Ficek*, Spack Consulting; *Tony Kutzke*, City of Woodbury

This session will present recent research results on stop sign compliance and the effectiveness of 25 mph and 30 mph posted speed limits. It will also review the recently released guidebook *Addressing Citizen Requests for Traffic Safety Concerns*, which is the result of Local Road Research Board (LRRB) project. This guidebook specifically focuses on the importance of communication, logging requests, steps for following up on a request, standard responses, and an explanation of why a requested strategy may or may not be the appropriate solution.

2 Groundwater/Surface Water Interactive Modeling

Moderator: *Dave Sonnenberg*, Stantec

Alisa McCulloch, Stantec Consulting Group, Inc.; *Evan Christianson*, Barr Engineering Company, Inc.

Presentation and discussion of different modeling approaches to create an interactive groundwater/surface water model.

3 The New MS4 Permit

Moderator: *Phil Olson*, City of Minnetonka

Randy Neprash, Stantec & Minnesota Cities Stormwater Coalition; *Duane Duncanson*, Minnesota Pollution Control Agency; *Meghan Litsey*, WSB & Associates, Inc.

The MS4 Stormwater General Permit is expected to be reissued in early 2019. Come ask and hear questions about this new permit from the perspectives of the state regulator, the coalition of regulated cities, and consultants who work with some of those cities. The EPA's new requirement that MS4 Permit requirements be "clear, specific, and measurable" will be reflected in this reissued permit and how cities comply with it.

4 Leveraging GIS to Make Our Lives Easier, Not Harder

Moderator: *Steve Dodge*, City of Inver Grove Heights

Tami Maddio and Leah Sperduto, City of Eagan
Scott O'Donnell and Ben West, City of Inver Grove Heights; *John Shain*, Bolton & Menk, Inc.

The City of Inver Grove Heights and the City of Eagan have long recognized the benefits of GIS and its relationship to infrastructure management. These organizations have used GIS throughout their cities but Public Works and Engineering staff have remained the heaviest users. Finding a balance of simplicity and completeness is sometimes the largest challenge when implementing a project. Many cities struggle with the challenge of the infrastructure-mapping update process and rely on as-built information provided by developers and others. Data collection and post processing are essential for creating a comprehensive plan for use by all stakeholders from field staff to city council members. This presentation will demonstrate the tools a city can use across departments and divisions to achieve more efficient update processes, improve data quality, and explain how to leverage GIS to increase productivity across the city. When implemented properly, GIS can be a flexible platform for communication and data management. GIS isn't just maps on the wall, it may offer solutions or insight to help solve common existing issues. Over the years GIS and its platforms have evolved to offer tools to enhance and demonstrate issues and present them to stakeholders.

2:30

Refreshment Break

Program

Wednesday, January 30, 2019

3:00 Concurrent Sessions

5 **Bike Facilities in Minnesota: User Types, Planning, and Case Studies**

Moderator: *Dan Coyle*, Kimley-Horn and Associates

Marcus Bush, Metropolitan Council; *Deb Heiser*, City of St. Louis Park; *Reuben Collins*, City of St. Paul

This session will look at the state of bike facility design in Minnesota, including user types, planning, and case studies. We will start with information about the variety of bicycle user types and which types of bicycle facilities are appropriate for each user type. We will discuss bicycle facility planning and the specific experiences St. Louis Park has had over the last ten years, including the use of “level of street” indicators to help prioritize bike facility investments. We will end with bicycle facility implementation and operation best practices and case studies from experiences in St. Paul.

6 **PFCs 101 and the State of Minnesota - 3M Settlement**

Moderator: *Jack Griffin*, Focus Engineering, Inc.

Kirk Koudelka, Minnesota Pollution Control Agency; *Jim Kelly*, Minnesota Department of Health; *Ward Swanson*, Barr Engineering Company, Inc.

On Feb. 20, 2018, the State of Minnesota settled its lawsuit against the 3M Company in return for a grant of \$850 million. Minnesota’s attorney general sued 3M in 2010 alleging the company’s production of chemicals known as PFCs (perfluorochemicals) had damaged drinking water and natural resources in the southeast Twin Cities metro area. After legal and other expenses are paid, about \$720 million will be invested in drinking water and natural resource projects in the Twin Cities east metropolitan region. This session includes a panel of speakers who will explain the basics of PFCs, discuss the findings of the state’s extensive investigations over the past decade, and discuss how the grant funding may be used to address these issues.

7 **To Dig or Not To Dig, That Is the Question**

Moderator: *Jim Studenski*, TKDA

Paul Pasko, Short Elliott Hendrickson, Inc.; *John Schmeling*, City of Burnsville; *Jesse Freihammer*, City of Roseville

Major sewer or water main breaks under interstates, trunk highways, and city streets are a huge concern. Have you wondered about the condition of the pipes in your city? The City of Burnsville is estimating remaining water main wall thicknesses at major road crossings using an Acoustic Velocity Testing tool and using this data to make major capital water main rehabilitation decisions. A 2018 street project offered an opportunity to validate this wall thickness data therefore improving the use of this tool. This data is now being used to research options, including no-dig methods of pipe rehabilitation, especially where closing or detouring traffic are not likely options. Sanitary sewer lining using cured-in-place pipe (CIPP) is a technology that many cities have utilized to rehabilitate aging utilities. The City of Roseville will discuss its large-scale use of CIPP for its sanitary sewer system over the last ten years, the benefits of CIPP to agencies, and how to develop CIPP plans and utilize current technology to maximize cost savings. The City will also discuss ongoing city-wide flow monitoring to track and evaluate the effectiveness of using CIPP in reducing infiltration.

8 **Small Cell Update and Lessons Learned**

Moderator: *Marc Culver*, City of Roseville

Pam Whitmore and Chris Smith, League of Minnesota Cities; *Kent Exner*, City of Hutchinson; *Brian Hansen*, City of Bloomington

The recently enacted small cell law is having an impact on right-of-way infrastructure for Minnesota cities both large and small, with some to a greater extent than others. The League of Minnesota Cities will present on the impact this law has on right-of-way ordinances, provide model collocation agreements, and preview potentially related upcoming legislation. Examples will be given from both metro and outstate cities with varying circumstances and how they have implemented ordinances in their own cities to manage the small cell legislation and the results they have seen.

4:15

Reception

Program

Thursday, January 31, 2019

7:00 a.m. Past Presidents' Breakfast

10:20 Break

7:30 Continental Breakfast

10:45 Concurrent Sessions

8:00 Welcome

Moderator: *Joseph Rhein*, Co-Chair, CEAM Conference Planning Committee, Bolton and Menk, Inc.

9 Update on the Emergence of Connected and Automated Vehicles

Moderator: *Jenn Edison*, WSB & Associates, Inc.

Jay Hietpas, Minnesota Department of Transportation; *Schane Rudlang*, City of Bloomington; *Jon Wertjes*, City of Minneapolis

8:10 Trunk Highway 53 Bridge Relocation

Moderator: *Kristine Elwood*, Minnesota Department of Transportation

Pat Huston, Minnesota Department of Transportation

The Minnesota Department of Transportation constructed Highway 53 in 1960 on a private easement owned by US Steel across a taconite reserve in Virginia, Minnesota. Many state, county, and local roads also were constructed across the reserve in this fashion. The terms of the easement agreement stated that US Steel would be responsible to move the highway if the ore reserve was needed prior to 1987, and MnDOT would be responsible for relocating the highway after 1987. The original agreement required the move to be made within three years of notice. In 2010, MnDOT received notice that the highway would have to be relocated to make way for mining, triggering the start of one of MnDOT's greatest engineering challenges to date. The presentation will cover MnDOT's unique project development and construction challenges and outside-the-box solutions on this high-risk, fast-track project.

We have all heard the buzz about connected and autonomous vehicles, but what is the current update for how this will affect the development and management of Minnesota cities? MnDOT is in the process of completing a statewide strategic plan to provide vision and policy for connected and autonomous vehicles. An executive order was due for the governor's signature in late 2018 that will determine the policy for autonomous vehicles in the near future. This session will give an update on MnDOT's current plan along with highlighting any implications for cities moving forward. In addition, information will be given from metropolitan cities that are planning ahead for these changes in mobility.

10 The Geysers of Minneapolis

Moderator: *Steve Klein*, Barr Engineering Company
William T. Shutte, City of Minneapolis Surface Water & Sewers; *Christian E. Frias*, Barr Engineering Company

The City of Minneapolis frequently sees dangerous geyser-type eruptions from its storm sewer tunnel system. This session will describe the numerous geyser surcharges in the City of Minneapolis (including a video), the detailed modeling performed to capture the cause of the geysers, and design the retrofits necessary to prevent future occurrences.

9:20 Race Equity and Inclusion: the Journey Continues

Moderator: *Debra Heiser*, City of St. Louis Park

Alicia Sojourner, City of St. Louis Park

This session continues the conversation from the 2018 conference surrounding implicit bias. Our speaker will go deeper and bring a new perspective to the topic, expanding the discussion to explore the challenges and opportunities available in your jobs to advance race equity and inclusion, and providing you with tools to be intentional in the journey towards culture change.

Program

Thursday, January 31, 2019

11 Design Considerations for Improved Pedestrian Safety

Moderator: *Matt Hansen*, SRF Consulting Group

John Maczko, SRF Consulting Group, Inc.;
Bryan Nemeth, Bolton & Menk, Inc.;
Fay Simer, City of St. Paul

Planning and designing safe, effective pedestrian accommodations is critical in many public improvement projects. Our expert panel will draw from their real-world experience to provide attendees with information on current practices and lessons learned. The presentation will include a review of current engineering design solutions and their practical application on municipal projects; discuss guidelines and requirements from State Aid and Federal Aid perspectives; and how the City of St. Paul uses their crosswalk flowchart and their Pedestrian Safety Plan.

12 Economic Development—Are You Ready or Not?

Moderator: *Morgan Dawley*, WSB & Associates, Inc.

Jim Gromberg, WSB & Associates, Inc.;
Steve Schwanke, Inland Development Partners;
John Seifert, City of Rogers

Many communities want to attract growth to provide employment opportunities to their residents and retain the existing workforce. This allows the community to have the resources to not only keep existing families, but draw new residents as well. Communities can encourage such growth by having areas that are ready for development, along with a process to reduce the risk associated with development. Risk can be managed in a variety of ways, such as having good policies and processes in place to allow for smooth project review and approval, and extending infrastructure to potential development sites before projects are identified.

1:00 p.m. LRRB Update

Moderator: *Matt Hansen*, SRF Consulting Group, Inc.
Renae Kuehl, SRF Consulting Group, Inc.

Presentation includes update on topics currently being studied by the Local Road Research Board of interest to City Engineers.

1:35 Ethics—Why Good People and Organizations Do Bad Things

Moderator: *Joseph Rhein*, CEAM Conference Planning Committee Co-Chair and Bolton & Menk, Inc.

David Schultz, Hamline University

Ethics and Professional Responsibility Professor David Schultz returns to the annual CEAM conference after giving top-rated presentations the previous two years relating to the ongoing political atmosphere and how city engineers can communicate in today's social and "fake news" climate. This year he will be speaking on ethics and professional responsibility. More and more, city and consulting engineers and support staff are faced with very real (and what are perceived as ethical and professional) issues. Professor Schultz will give a very interesting presentation on this topic and how it interweaves with today's society. Professor Schultz is a national expert on election law, professional ethics, state constitutional law, and eminent domain and land use law. He teaches courses in Election Law, State Constitutional Law, Constitutional Law, and Professional Responsibility. He is a well-known and respected Hamline University Professor of Political Science. Besides being a local television news commentator, the author of numerous books, and a frequent speaker at a wide variety of forums, he has spent part of his career working for and with local governments.

Noon Lunch

2:35 Refreshment Break

Program

Thursday, January 31, 2019

3:00

Strong Towns: Neighborhoods First and Stories from Brainerd

Moderator: *Dan Coyle*, Kimley-Horn and Associates, Inc.

Chuck Marohn, Strong Towns;
Cassandra Tortenson, City of Brainerd

Risky, low-return projects too often become expensive boondoggles that haunt a community for decades. Public officials everywhere are desperately seeking an alternative. This talk will cover the “Neighborhoods First” approach to show how a community can grow stronger by making small, incremental investments over time. By observing how neighbors live their lives, by asking them where their daily struggles are, by getting out on the street and discovering what is actually going on, any local government can discern what their community’s pressing needs are. These projects are the high-return investments and they are all around us. A portfolio of incremental projects, each building on observed needs and past successes, is the basis of a solid, long-term investment strategy for communities of any size. It is an approach that fits into every budget. It will empower a local government to move beyond the lack of ownership and control that comes with traditional grant programs. And most importantly, you can get started right now. A Neighborhoods First presentation will demonstrate how to take less risk and grow financially stronger, all while directly serving the people already living and working in your city.

4:30

Reception



Program

Friday, February 1, 2019

7:30 a.m. Continental Breakfast

8:00 Welcome

John Gorder, CEAM Vice President, Conference Planning Committee Co-Chair and City of Eagan

8:10 MnDOT Commissioner's Update

Commissioner, Minnesota Department of Transportation (invited)

8:40 MnDOT State Aid Engineer's Update

Kristine Elwood, Minnesota Department of Transportation

9:00

One Watershed, One Plan & Watershed-based Funding

Moderator: *Steve Dodge, City of Inver Grove Heights*

Kevin Bigalke, Board of Water & Soil Resources

Minnesota has a long history of water management by local government. One Watershed, One Plan is rooted in that history and the work initiated by the Local Government Water Roundtable (Association of Minnesota County, Minnesota Association of Watershed Districts, and the Minnesota Association of Soil and Water Conservation Districts) in 2011, which recommended that the local governments charged with water management responsibility should organize and develop focused, comprehensive watershed management and implementation plans on a watershed scale. In 2014 the Minnesota Board of Water and Soil Resources (BWSR) funded five pilot areas to develop One Watershed, One Plan and test this comprehensive watershed management concept. Following the recommendation of the Local Government Water Roundtable, One Watershed, One Plan was signed into law by Governor Dayton in 2015. BWSR also developed a watershed-based funding pilot program, launched in 2018, aimed at providing more systematic Clean Water Funding for local water management authorities on a watershed basis. The watershed-based funding model is intended to provide local governments throughout Minnesota with efficient, transparent, and stable funding. BWSR envisions transitioning from project-by-project competitive grants to a coordinated watershed-funding approach designed to increase water management outcomes, enhance accountability, and improve consistency and efficiency across the state. This presentation will provide information on the One Watershed, One Plan program as well on the watershed-based funding pilot program, lessons learned, successes, and the future direction of the programs.



Program

Friday, February 1, 2019

9:30 Refreshment Break

9:50 Extreme Storms

Moderator: *Tom Mathisen*, CEAM Lifetime Member

Mark Seeley, University of Minnesota;
Randy Neprash, Stantec & Minnesota Cities
Stormwater Coalition;
Cindy Voight, City of Duluth

Hardly a week goes by without news of an unprecedented extreme storm event somewhere. In the US, rainfall events of 10 to 12 inches are now common-place. Using NOAA Atlas 14 for flood frequency analysis and design parameters is being called into question. The Clausius-Clapeyron relationship states that the air holds 7 percent more moisture per 1°C of warming. What does the future hold for what are ever-increasing extreme events? Why is this happening, what are some examples of such events, and how should engineers and governmental entities plan for these events that are now the new normal? Dr. Mark Seeley, retired State Climatologist, will discuss the first of these three questions. Dr. Seeley has spoken on climate change at the CEAM conference in the past but will now zero in on extreme events and what the future holds. Cindy Voight, Duluth City Engineer, will present a refresher on the June 2012 mega-storm and the steps the city has taken to prepare for the future. Randy Neprash, Stantec stormwater specialist, will present thoughts on our approach to planning and design that will make our infrastructure more resilient in the face of continued extreme storms.

11:20 CEAM Business Meeting

12:35 p.m. Lunch/Adjourn



General Information

Registration and Fees

The registration fee is \$315 and includes all sessions, instructional materials, lunch on Wednesday and Thursday, two receptions, and refreshment breaks. An optional lunch on Friday is available for \$15 (total conference fee of \$330).

Participants may also pay for their annual CEAM membership (\$60) while registering for the conference.

Please register online at www.ceam.org.

\$375 - Conference + CEAM Membership

\$315 - Conference ONLY and Lifetime Membership

\$60 - CEAM Membership Only

\$0 - Student Conference Registration (Wednesday only)

Add-on \$15 - optional additional lunch on Friday

Cancellation Policy

If you need to cancel your registration, a refund of your fee—minus a \$30 processing fee—will be made if **written notice** is received January 18, 2019. Cancellations after this date are not eligible for a refund. The University reserves the right to cancel the event if necessary and would issue a full refund in this case.



Guidebook Mobile App

The City Engineers Association of Minnesota Annual Conference has gone mobile! Prior to the conference this year, we will send instructions to registered participants on how to download and view the Guidebook mobile app. Attendees will be able to plan their days with a personalized schedule and browse general and concurrent sessions, presenter biographies, and a meeting room map, and participate in the conference backchannel by posting on Twitter and sharing photos before and during the conference.

The app is compatible with iOS and Android devices. Windows Phone 7 and Blackberry users can access the same information via the mobile site.

Follow us on Twitter at [@CEAM_org](https://twitter.com/CEAM_org)!



Social Media: Join the Conversation

We invite you to join the conversation about the CEAM Conference this year by tweeting about the conference, or posting updates to your LinkedIn and Facebook pages. The conference hashtag is **#CEAM2019**. Type this hashtag in your tweets or postings to continue the conference backchannel, or you may also search Twitter for this hashtag to view the tweets online. These social media efforts will help participants network and meet new colleagues prior to and during the conference.

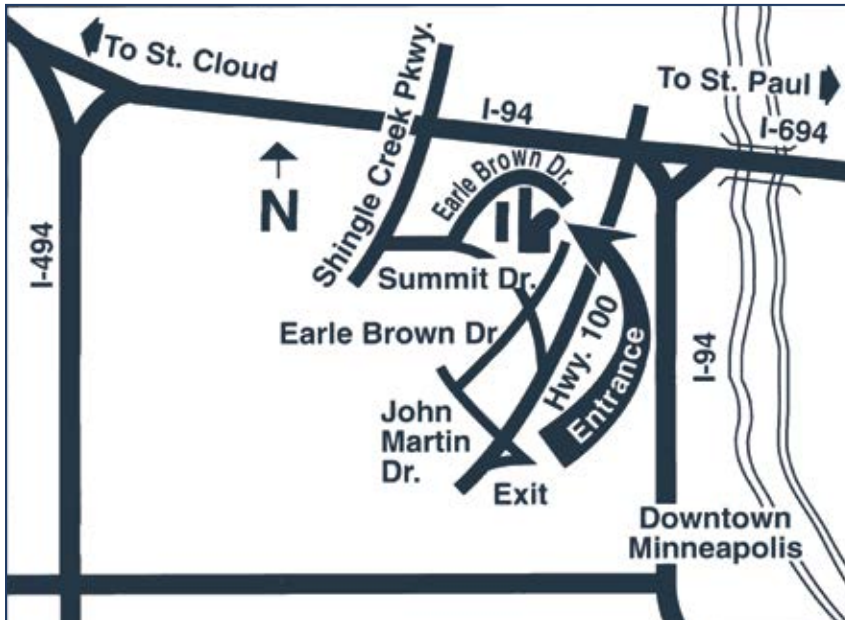
Conference sessions and presenters may also engage online participants before, during, and after the conference with additional information.

Attire

Casual attire is welcome. We recommend wearing layers, as the temperature in the meeting rooms is sometimes cold.

Location and Parking

The City Engineers Annual Conference will be held at the Earle Brown Heritage Center, 6155 Earle Brown Drive, Brooklyn Center, Minnesota, 55430. For further information or directions, please visit www.earlebrown.com. Free parking is available surrounding the facility.



Accommodations

Hotel rooms may be reserved at the Embassy Suites by Hilton Minneapolis, 6300 Earle Brown Drive, Brooklyn Center (conveniently connected to the Earle Brown Heritage Center by walkway). Make your reservation by calling the hotel directly at 763-560-2700. Ask for the "U of M" rate.

Continuing Education Units

Participants who attend the entire conference will receive 1.55 Continuing Education Units (CEUs). One CEU is defined as 10 contact hours of participation in an organized continuing education program. A CEU certificate will be sent to each participant after the conference. A permanent record of CEUs earned will be maintained by the University of Minnesota Office of Admissions and Records Transcript Office.

Please visit the following website for pertinent information about PDH requirements: mn.gov/aelslagid/index.html

2019 City Engineers Annual Conference Planning Committee

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Joseph Rhein, Co-Chair, Bolton & Menk, Inc.

Kevin Bittner, Bolton & Menk, Inc.
Todd Blank, Short Elliot Hendrickson, Inc.
Steven Bot, City of St. Michael
Dan Coyle, Kimley-Horn and Associates
Marc Culver, City of Roseville
Morgan Dawley, WSB & Associates, Inc.
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Jennifer Edison, WSB & Associates, Inc.
Kristine Elwood, State Aid for Local Transportation, Minnesota Department of Transportation
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Jim Studenski, TKDA
Michael Thompson, City of Plymouth
Steve Winter, MSA Professional Services

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