

American Public Works Association – Minnesota Chapter



Workshop: November 17, 2021

Fall Conference: November 18-19, 2021

Earle Brown Heritage Center | Brooklyn Center, MN

apwa-mn.org

Facilitated by:

Crescendo Consulting Solutions, LLC



Welcome from Conference Co-Chairs

We are thrilled to welcome you back to our first in-person conference event in two years! We promise you, the wait will be worth it. This year's fall conference features one of the finest continuing education offerings in our industry, and the hard work of our Conference Planning Committee has produced a wonderful program full of timely and fulfilling topics.



Matt Saam, PE

The conference begins Thursday morning with Dr. Abdul Omari, who will take us on an introspective journey, helping us to reflect and embrace our everyday interactions with better mindfulness of our biases. Following Dr. Omari will be Chad Weinstein of Ethical Leaders in Action. Chad will provide valuable advice and practical steps for us to use as we strive towards achieving and maintaining excellence in performance and service delivery at our organizations.

After lunch, we have an outstanding array of concurrent sessions across five key areas: Sustainability, Asset Management, Communications, and two Technical Issues Tracks. Each session will leave you well-informed and better equipped to face current and potential challenges.

Of course, the opening day of the conference would not be complete without the opportunity to network and visit with many of our sponsors. To that end, we'll have a reformatted and enhanced reception for you to casually connect with sponsors on a personal level while learning more about what these companies have to offer.



Nick Egger, PE

To wrap up Thursday's events, the chapter is continuing its tradition of an evening networking activity. This year, we'll get behind the wheels of bumper cars to play Whirlyball. A big hit among our Young Professional members, Whirlyball is sure to garner new fans among our chapter's more "seasoned" ranks.

Friday will kick off with a brief update on MN2050, which is a perfect segue into our opening session: a bi-partisan, geographically diverse panel of Minnesota legislators. This session provides an opportunity to share perspectives and improve understanding of an issue important to all of us: infrastructure funding. We then welcome three of our colleagues from the cities of Rochester, Bloomington and St. Paul who will share stories from their agencies' pursuits in sustainability and innovations developed through those experiences.

As we mentioned, this year's program is one of the best we've ever assembled. Our closing session Friday afternoon is no exception, as staff from the cities of Minneapolis, St. Paul and Brooklyn Park will share their experiences responding and adapting to challenges created by the civil unrest events of the past 18 months. These events could happen anywhere and we look forward to hearing their lessons learned.

With this year's conference lineup of sessions and opportunities, there is no better way to honor and celebrate the Minnesota chapter's 75th anniversary. We are looking forward to getting back to some degree of normalcy with an in-person conference!

Matt Saam, PE & Nick Egger, PE
Conference Co-Chairs



General Information

Registration

Register Online: <https://bit.ly/3hMVoMA>

Fees

Conference (Nov. 18-19)

- ◇ \$325 — APWA-MN Members
- ◇ \$375 — Non-Members
- ◇ \$0— APWA-MN Student Members (Thurs. only)

Workshop (Nov. 17)

- ◇ \$175 — Winter Maintenance Supervisor Certificate Workshop

A 3% credit card processing fee will be added at checkout.

Fees include all sessions, handouts, meals and breaks.

Registration Deadline

The deadline to register is November 10, 2021.

Location and Parking

The conference and workshop will be held at the [Earle Brown Heritage Center](#), 6155 Earle Brown Dr. in Brooklyn Center. Free parking is available surrounding the facility.

Accommodations

Reserve hotel rooms at the Embassy Suites by Hilton Minneapolis North-Brooklyn Center, adjacent to the Earle Brown Heritage Center. Make your reservation online [here](#) at the discounted rate of \$139 or call the hotel at 800.362.2779. Ask for a reservation in the APWA Fall Conference block and provide the group code “APW” to receive the \$139 discounted rate.

Cancellation / Refund Policy

A refund of the registration fee, less \$15, will be issued for cancellation requests received by Nov. 5, 2021. Cancellations received after Nov. 5 are not eligible for a refund. Registrants who cannot attend may send a substitute.

Professional Development Hours (PDHs)

- ◇ Conference: 8.0 PDHs
- ◇ Workshop: 8.0 PDHs
- ◇ [Learn more about MN PDH requirements for PEs](#)

Contact

Mary Detloff, CAE, Crescendo Consulting Solutions
mary@crescendoconsultingsolutions.com or 612.597.7899

Schedule At a Glance

Wednesday, Nov. 17

- 7:00 am Workshop Registration and Breakfast
- 7:30—5:30 Winter Maintenance Supervisor Certificate Workshop

Thursday, Nov. 18

- 7:30 am Registration and Breakfast
- 8:30 am Welcome
- 8:45 am Keynote: Recognizing and Responding to Bias (Dr. Abdul Omari)
- 10:15 am Building an Ethical Culture from the Inside Out (Dr. Chad Weinstein)
- 11:15 am APWA-MN 75th Anniversary Recognition
- 11:30 am Business Meeting and Officer Installation
- Noon Luncheon
- 1:00 pm Concurrent Sessions
- 2:45 pm Concurrent Sessions

- 4:00 pm Exhibits, Reception
- 5:30 pm Off-Site Networking Event: Whirlyball

Friday, Nov. 19

- 7:30 am Registration and Breakfast
- 8:00 am Welcome
- 8:05 am MN2050 Update
- 8:15 am Infrastructure Funding: Legislative Panel
- 9:45 am Sustainability: Policies, Partnerships & People
- 11:00 am Recognition: Scholarships, Certificates and Awards
- Noon Luncheon
- 1:00 pm Civil Unrest Leads to a Redefined “First Response”
- 3:00 pm Adjourn



Workshop

Winter Maintenance Supervisor Certificate

This one-day workshop provides a well-rounded overview of all aspects of snow and ice control for anyone involved with winter maintenance operations.

Who Should Attend:

The program provides training for all public works professionals, engineers, supervisors, operators and anyone wanting a thorough understanding of winter maintenance operations.

Participants will:

- ◇ Expand knowledge of planning and preparation
- ◇ Interpret winter weather patterns and how they affect operations
- ◇ Identify how to better use traditional and alternative chemicals
- ◇ Consider what equipment is available and how to maintain it
- ◇ Expand understanding of snow and ice control techniques
- ◇ Appreciate the environmental impacts of winter maintenance policies
- ◇ Stress the responsible application of materials

Workshop presenters are to be determined. All contracted presenters will be APWA-approved Winter Maintenance Certificate experts.

Participants will be tested on topics throughout the day and will receive a Certificate of Completion upon achieving an overall score of 80% or above. Participants will receive 8 PDHs.

New in 2021: Workshop exhibitors will be on-site throughout the day. Participants are invited to visit with exhibitors during breaks and lunch.

Schedule

Registration and Breakfast

7:00—7:25 am

Quiz/Break/Exhibits

8:30—8:45 am

Welcome and Introductions

7:25—7:30 am

Weather

8:45—10:15 am

Policy and Planning

7:30—8:30 am

Winter is a year-round activity; planning and policies are vital to an agency's success. The planning cycle and policy content are covered.

This session covers basic winter weather concepts and how to use this information to select materials and methods. Definitions and basic weather terms will be discussed, as well as types of weather, conditions and monitoring, factors affecting precipitation, and tools available for snowfighters.



Workshop

Quiz/Break/Exhibits

10:15—10:30 am

Materials

10:30—12:00 pm

A wide variety of materials is used for snow and ice control. Various types of materials, including chemicals (solid and liquid) and abrasives, with an emphasis on proper selection, usage, and handling, will be discussed.

Quiz/Exhibits

12:00—12:15 pm

Lunch/Exhibits

12:15 pm—1:00 pm

Fleet and Equipment

1:00—2:00 pm

Different types of equipment available for winter maintenance will be reviewed. Fleet configuration, new technologies, and pre- and post-season inspections will be included.

Quiz/Break/Exhibits

2:00—2:15pm

Snow and Ice Control

2:15—3:45 pm

Winter maintenance practices when dealing with ice will be the focus of this session, including plowing procedures, removal and disposal, safety considerations, pretreating and pre-wetting processes, the use of anti-icers and deicers, and how to decide which to use when.

Quiz/Break/Exhibits

3:45—4:00 pm

What Happens When ...

4:00—5:00 pm

Quiz/Break/Exhibits

5:00—5:15 pm

Wrap Up

5:15—5:30 pm

Adjourn

5:30 pm

*Join the conference
conversation on Twitter*

Use hashtag #apwamn21



November 18—Conference Day One

Registration & Continental Breakfast

7:30—8:30 am

First-Time Attendee, Annual Leadership Academy Breakfasts

7:30—8:30 am

Welcome

8:30 am **APWA-MN Chapter President**
Beth Engum, PE, CBS Squared, Inc.

Keynote Presentation: Recognizing and Responding to Bias

Supported in part by a generous sponsorship from Metropolitan Council Environmental Services

8:45 – 10:00 am
PDHs: 1.0



Moderator: John Mazzitello, PE, Ramsey County
Presenter: Dr. Abdul Omari holds degrees in global studies and public policy and a PhD in Comparative and International Development Education from the University of Minnesota. He is the founder of AMO Enterprise and serves on the University of Minnesota

Foundation Board of Trustees, the Board of Directors for the YMCA Greater Twin Cities, AchieveMpls and Civic Eagle. Abdul has been recognized as one of the Minneapolis/St. Paul Business Journal's 40 Under 40.

This session will help participants explore, understand and acknowledge their biases. The goal is not to rid ourselves of bias but rather to neutralize, pivot and own our biases to shift our responses in situations where biases exist. In this session, participants are exposed to common language and common forms of bias to develop tools to address the topics discussed. Dr. Omari will explore his personal headlines and connect them to his daily work and explore examples of how we can recognize our biases by revealing his own. This session is guaranteed to be engaging, energetic and informative.

Break

10:00—10:15 am

Building an Ethical Culture from the Inside Out

10:15 – 11:15 am
PDHs: 1.0

Moderator: Nick Egger, PE, City of Rosemount
Presenter: Dr. Chad Weinstein, Ethical Leaders in Action



In so many respects, public works affects every resident, business and visitor in your city. To do that work, many employees effectively work entirely independently, across the city (and beyond) 24 hours a day. This session will provide practical concepts

and techniques to help public works directors and other senior leaders establish and maintain a culture of excellence and performance, assuring that all employees understand how to act in ways that pursue the mission, protect the reputation and uphold the values of your department and your city.

Following this session, participants will be able to:

- ◇ Appreciate the impact of workplace culture on performance and ethical conduct.
- ◇ Use clear values to establish and maintain clear expectations for conduct.
- ◇ Engage in personal reflection to promote ethical clarity and the moral courage to make difficult decisions.
- ◇ Have constructive conversations with stakeholders to solve or prevent problems.

APWA-MN 75th Anniversary Recognition

11:15 APWA-MN History Committee

Business Meeting, Officer Installation

11:30 APWA-MN Chapter Leadership

Luncheon

Noon



November 18—Conference Day One

Concurrent Sessions

1:00—2:15 pm

PDHs: 1.0

Sustainability Track: EV Programs: Opportunities and Practicalities

Moderator: *Bev Farraher, PE, City of St. Paul*

Presenter: *Russ Stark, City of St. Paul*

Electric Vehicles (EV) are not just the future; they are the NOW. Come learn what St. Paul and Minneapolis are doing with their joint EV program including Evie, the HourCar venture included with the program. Planning; coordination; determining locations and rates; coordination across Xcel, agencies, and contractors; establishing maintenance and operation responsibilities; and key lessons learned are valuable information and insights for any agency or consultant. Keep abreast of this amazing technology and efforts to make power more accessible for EV owners as well as efforts to promote car-sharing opportunities.

Asset Management Track: Three Case Studies

Moderator: *Brad Henry, PE, University of Minnesota*

Presenters: *Peter Muehlbach, PE, WSB; Russ Matthys, PE, City of Eagan; Jacob Strombeck, PE, AE2S; Barb Cederberg, Gopher State One Call*

Learn from three asset management case studies during this presentation.

The Benefits of a True Digital – on Design and Asset Management (Peter Muehlbach): The TH169 project in Elk River project is the first fully digital plan set delivered to MnDOT. The presentation will describe the digital impact on design, construction and asset management and the advantages of the CMGC delivery method.

Municipal Infrastructure Needs Analysis (Russ Matthys, Jacob Strombeck): To establish enduring financial stability, the City of Eagan is using a new infrastructure analysis procedure to help define its long-range infrastructure funding needs. The presentation will describe elements of the process including looking at all of Eagan's utilities, anticipating their rehabilitation and replacement requirements, and looking at the long-term; beyond 10 years to 50 years.

Underground Utilities Mapping Project (UUMP) (Barb Cederberg): The UUMP team is working to improve utility locate efficiencies and accuracy, reduce damage to Minnesota's underground infrastructure, and improve construction safety. This presentation will describe the initiative, its technologies and how session attendees can participate.

Communications Track: Rice Street Visioning Study

Moderator: *Cristina Mlejnek, PE, Bolton & Menk*

Presenters: *Nick Fischer, Ramsey County; Scott McBride, Bolton & Menk; Haila Maze, Bolton & Menk*

Rice Street is a hub of activity in St. Paul and serves a diverse mix of residents, travelers, visitors, businesses and modes of travel. There are safety and traffic concerns surrounding the existing, aging roadway, along with needs to strengthen community development, business vitality, bike and pedestrian connections, public safety, livability and compatible land uses in the corridor. Public engagement is a key part of the Rice Street Visioning study, putting emphasis on a community-based approach to roadway and community design. Mix in a pandemic and hear some innovative ideas our presenters came up with for engagement.



November 18—Conference Day One

Concurrent Sessions (cont.)

Technical Track 1: New Technology to Soothe Your Stormwater Woes

Moderator: *Sara Flagstad*, Henning Professional Services
Presenters: *Todd Hubmer, PE*, Bolton & Menk; *Edward Matthiesen, PE*, Stantec

Attendees will learn how contaminants of concern may be eliminated from the environment through superoxide treatment. This session will cover how pesticides, PAH and other contaminants may be removed from stormwater basins. This process has the potential to eliminate contaminants completely, leaving no harmful byproducts or residuals behind. We will share results of laboratory testing and field trials undertaken over the last several years. Superoxide technology shows promise to become an effective tool to combat some of our most persistent environmental pollutants.

Technical Track 2: We're Open! Navigating Construction and Operations at MSP During Construction of the Silver Ramp

Moderator: *Bridget Rief, PE*, Metropolitan Airports Commission
Presenters: *Jerry Schwientek, PE*, Kimley Horn; *Ashley Vlasak*, Metropolitan Airports Commission

The Minneapolis-St. Paul International Airport (MSP) is the 12th busiest U.S. airport for aircraft operations, with more than 400,000 landings and takeoffs each year. It generates an estimated \$15.9 billion in annual economic output through a combination of direct, indirect and induced impacts. Airport growth has significantly increased demand for additional passenger vehicle parking and ground transportation services. This presentation will discuss MAC's goals to provide the best customer experience for MSP visitors and how this led to a multi-year program to restructure transit services, roadways, parking, biking and rental cars. We will also discuss how MAC maintained airport operations during construction of the Silver Ramp and associated projects while working on a constrained site both on land and in the air.

Break—Exhibit Hall Open

2:15—2:45 pm

Concurrent Sessions

2:45—4:00pm
PDHs: 1.0

Sustainability Track: Shared Micromobility in Minnesota: Where are the Shared Bikes and Scooters?

Moderator: *Chris LaBounty, PE*, City of Plymouth
Presenters: *Danielle Elkins*, City of Minneapolis; *Ben Manibog*, City of Richfield; *Elliott McFadden*, Minnesota Department of Transportation

Interest in bikeshare and scootershare programs have sharply increased in recent years. We hear about bike and scooter sharing downtown, but where are the bikes and scooters in the suburbs and greater Minnesota? Our panelists will present industry trends, recent usage data and their experience managing shared micromobility in cities of different sizes. This session will also share potential strategies for partnering with third party companies; putting together request for proposals; and the practical challenges related to accessibility, data security and public perception.

Asset Management Track: New Technology and New Uses of Existing Technology

Moderator: *Cristina Mlejnek, PE*, Bolton & Menk
Presenters: *Kyle Mullen*, Bolton & Menk; *Mitch Hoeft, PE*, Bolton & Menk; *Joe Rubbelke*, Utility Logic

Using Reality Capture to Gather Infrastructure Data (Kyle Mullen): Learn about the suite of Reality Capture tools that can be used to document and model the conditions of our built and natural world, including UAVs, Laser Technology and 360° photography. In this session we highlight a pilot project in which our colleagues, working with the Joint Water Commission, used a suite of these reality capture tools to capture the interior and above ground conditions of an underground reservoir.



November 18—Conference Day One

Concurrent Sessions (cont.)

Asset Management Track: New Technology and New Uses of Existing Technology (cont.)

Advances in Trenchless Technology (Mitch Hoeft): This session will review new cutting-edge trenchless technologies that allow municipalities to repair, rehabilitate, and/or replace portions of their aging utility infrastructure in the most professional and qualified way. This is one session that is too expensive to miss!

Evolution of the Tracer Wire Specification - Theory, Products & Procedures (Joe Rubbelke): Learn about the “Complete Utility Locating System,” installed for the long-term purpose of locating underground utilities. Working with colleagues in the MN Rural Water Association, a group of experienced utility locators identified an industry need for an iron clad specification on trace wire systems. The Trace Wire Specification was published in 2014 after a three-year research and development effort.

Communications Track: FirstNet 2020 and Beyond: Latest Innovations on the National Public Safety Broadband Network

Moderator: *Eric Nelson, PE*, Alliant Engineering
Presenter: *Lesia Dickson*, FirstNet Authority

FirstNet, the public safety network mandated by Congress, is adding products and capabilities for managing incidents and events that every emergency manager -- as well as those who support emergency response -- needs to know about. The ability to see real-time network conditions at the tower level, uplift of extended primary users, Band 14 capabilities that can double coverage in some areas and many other new capabilities will be discussed in this session designed to get you up to speed on FirstNet’s newest tools that are changing the face of public safety communications. Don’t miss this opportunity to hear FirstNet Authority discuss what is available and what it means to public works stakeholders.

Technical Track 1: Sustainability in Water

Moderator: *Anna Bessel, PE*, Metropolitan Council Environmental Services
Presenters: *Bryan Bear*, City of Hugo; *Deborah Manning, PE*, Metropolitan Council Environmental Services; *Emily Steinweg, PE*, Metropolitan Council Environmental Services; *Timothy Amstutz, PE*, Metropolitan Council Environmental Services

Agencies of all types and sizes are taking a more proactive stance on water-related sustainability issues to meet evolving customer needs and make sustainably-minded changes. This session will provide examples of sustainable water re-use processes from the City of Hugo and MCES as well as how agencies responded to drought conditions and other sustainability issues facing water suppliers.

Technical Track 2: Nitrate Removal from Drinking Water Supplies Using Biological Filtration

Moderator: *Chris Petree*, WSB
Presenters: *Nick Egger, PE*, City of Rosemount (formerly City of Hastings); *Greg Johnson, PE*, WSB; *Ursinio Puga, PE*, WSB

Many communities across Minnesota have elevated levels of nitrate in their drinking water. WSB conducted a water treatment pilot study in the City of Hastings to assess the effectiveness of biological filtration for the removal of nitrate from the city’s raw water. This study showed that biological filtration can significantly reduce the nitrate levels present in the raw water while reducing the use of the chemicals needed for treatment. Biological filtration is also effective at removing other contaminants from drinking water such as manganese, iron and ammonia.

Reception, Exhibit Hall Open

4:00—5:30 pm

Adjourn and Off-Site Networking Event

5:30 pm



November 19—Conference Day Two

Continental Breakfast

7:30—8:00 am

Past President's Breakfast

7:30—8:00 am

Welcome

8:00 am **APWA-MN Conference Planning Committee Co-Chairs**
Nick Egger, PE, City of Rosemount
Matt Saam, PE, City of Apple Valley

MN2050 Update

8:05 am Greg Stonehouse, PE, HDR

Infrastructure Funding: A Legislative Panel

8:15—9:30 am
PDHs: 1.0

Moderator: *Kristin Asher, PE, City of Richfield*
Panel Facilitator: *Bart Fischer, WSB*
Presenters: *Representative Frank Hornstein (DFL-61A); Senator Ann Johnson Stewart, PE (DFL-44); Representative Tony Jurgens (R-54B); Senator David Senjem (R-25)*



Rep. Hornstein



Sen. Johnson Stewart



Rep. Jurgens



Sen. Senjem

Hear from a bipartisan panel of Minnesota's elected officials on the important issue of infrastructure funding. Not only will attendees and panelists better understand one another's perspectives as a result of this session, but we will also:

- ◇ Increase awareness of public works infrastructure issues like funding and aging

- ◇ Share ideas around public works: why it matters, the importance of public works investment and how public works contributes to our quality of life
- ◇ Learn how we can better communicate and support advocacy of local public works efforts and legislative leaders

Break

9:30—9:45 am

Sustainability: Policies, Partnerships & People

9:45—11:00 am
PDHs: 1.0

Moderator: *Chris Petree, WSB*
Panel Moderator: *Amy Fredregill, WSB*
Presenters: *Kevin Bright, Destination Medical Center; Lauren Jensen, City of Rochester; Russ Stark, City of St. Paul; Emma Struss, City of Bloomington*



Kevin Bright



Lauren Jensen



Russ Stark



Emma Struss

Learn how different agencies and communities are engaging in innovative approaches to sustainable practices that are flexible to the needs of each unique community. You will hear stories about sustainability at work from a variety of communities as well as the business case for these efforts. During this session, our presenters will engage in a panel discussion on sustainability.

Scholarship Presentation, Certificate Recognition and Awards

11:00 am—Noon

Luncheon

Noon—1:00 pm



November 19—Conference Day Two

Civil Unrest Leads to a Redefined “First Response:” Panel Discussion on Lessons Learned and What You Can Do to be Ready

1:00—3:00 pm

PDHs: 2.0

Moderator: *Mike Marti, PE, SRF Consulting Group*

Presenters: *Brette Hjelle, City of Minneapolis; Mike Colestock, City of Minneapolis; Senior Commander Troy Greene, City of St. Paul; Daniel Ruiz, City of Brooklyn Park*



Brette Hjelle



Mike Colestock



Troy Greene



Daniel Ruiz

Join us for a facilitated panel discussion to hear public works-related lessons learned from the civil unrest of the past 18 months. While the Twin Cities became an epicenter of civil unrest in May 2020, the news only covered part of the story. As events unfolded in real time, public works professionals were behind the scenes planning, preparing, strategizing and implementing hundreds of safety protocols. Learn from those who responded to keep infrastructure safe not only in Minneapolis and St. Paul but also in suburbs that faced potential threats.

Adjourn

3:00 pm



Committee Members

Nick Egger, PE, City of Rosemount, Co-Chair

Matt Saam, PE, City of Apple Valley, Co-Chair

Anna Bessel, PE, Metropolitan Council

April Crockett, PE, MnDOT Metro District

Mark Erichson, PE, WSB & Associates, Inc.

Beverly Farragher, PE, City of St. Paul

Sara Flagstad, Henning Professional Services

Brad Henry, PE, University of Minnesota

Matt Huggins, PE, Kimley-Horn & Associates, Inc.

Chris LaBounty, PE, City of Plymouth

Lucas Lortie, PE, Ramsey County Public Works

Mike Marti, PE, SRF Consulting Group, Inc.

John Mazzitello, PE, Ramsey County Public Works

Cristina Mlejnek, PE, Bolton & Menk, Inc.

Toby Muse, PE, Short Elliott Hendrickson Inc.

Eric Nelson, PE, Alliant Engineering

Chris Petree, WSB & Associates, Inc.

Bridget Rief, PE, Metropolitan Airports Commission

Nina Stanley, PE, SRF Consulting Group, Inc.

Tom Thompson, PE, Stanley Consultants, Inc.

Jessa Trbojevich, PE, Hennepin County

Transportation Project Delivery

Mary Detloff, CAE, Crescendo Consulting Solutions

