THE POWER OF CONNECTION
LOOK UP AND PLUG IN

Arvada Center
Arvada, CO | October 28-29, 2019
### ROOM Ballrooms A, B & C

<table>
<thead>
<tr>
<th>Time</th>
<th>Event</th>
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<tbody>
<tr>
<td>7:00 AM - 8:00 AM</td>
<td>Registration/Breakfast</td>
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<tr>
<td>8:00 AM - 8:30 AM</td>
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<tr>
<td>9:30 AM - 9:55 AM</td>
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<tr>
<td>10:20 AM - 10:40 AM</td>
<td>BREAK - VISIT OUR EXHIBITORS</td>
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<tr>
<td>10:40 AM - 11:25 AM</td>
<td>Smart Work Zone Strategies: Connecting Technology and Construction</td>
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<td>11:30 AM - 1:30 PM</td>
<td>Lunch and Keynote Speaker Nick Kittle Presenting “Transformations: Acknowledging, Assessing and Achieving Change” - BALLROOMS A, B &amp; C</td>
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**Thank You To Our Event Level Exhibitors!**

- Nilex
- Est
- Felsburg Holt & Ullevig
- HRGreen
- USIC

**Featured Sessions: Monday, October 28**
(Continued) Featured Sessions: Monday, October 28

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Visit us online at http://colorado.apwa.net
Welcome and Opening Comments
8:00 am - 8:30 am - BALLROOMS A, B & C

Welcome from APWA Colorado Chapter President James Phelps and Conference Opening by APWA Region IX Director Dan Hartman and APWA National President-Elect Mary Joyce Ivers. Plus, an Update from Jess Hastings, Young Professionals Chair.

"The Power of Connection" is certainly true in this project's scope of work and procurement that involved extensive stakeholder engagement. Not surprisingly, work that may appear to just be a roadway improvement, actually affects numerous departments at the airport.

CDOT Updates
8:35 am - 9:00 am - BALLROOMS A, B & C

Presented By: Josh Laipply, Chief Engineer, Colorado Department of Transportation
General overview from CDOT including the latest capital project updates.

CML Updates
9:00 am - 9:25 am - BALLROOMS A, B & C

Presented By: Morgan Cullen, Legislative & Policy Advocate, CML
This session will target transportation funding challenges, the bridge program, and more.

Opening Session Part 1 - Peña Boulevard Design Build Project Update
9:30 am - 9:55 am - BALLROOMS A, B & C

Presented By: Daniel Liddle, Project Manager - Peña Boulevard PMT, Michelle Martin, Acting Senior Director of Development, Michael Cloud, Landside Engineering Supervisor, Kate Iverson, Real Estate Director and Tim Hester, Senior Airport Planner, Department of Aviation, City & County of Denver
To meet passenger growth that has more than doubled since its opening 20 years ago, DEN is undertaking a $100 million capital improvement program that will reconstruct the terminal approach area of Peña Boulevard for operational and safety improvements.

Opening Session Part 2 – The Making of Stephen D. Hogan Parkway
9:55 am - 10:20 am - BALLROOMS A, B & C

Presented By: Matthew Kozakowski, Acting Transportation Project Delivery Manager, Cindy Colip, Interim Public Works Director and Geoffrey Nettleton, Project Engineer, City of Aurora and Michelle Stevens, Associate, Felsburg Holt & Ullevig
This session covers the journey of taking a major arterial roadway from concept to realization. The Stephen D. Hogan Parkway provides a needed connection from the I-225 corridor to the E-470 tollway corridor, serving community growth to the east of E-470. Learn more about this corridor that will close an almost two-mile gap in the major arterial street system, and will include a crossing of Sand Creek and its associated floodplain.

Smart Work Zone Strategies: Connecting Technology and Construction
10:40 am - 11:25 am - BALLROOM D

Presented By: Clark Roberts, Senior Engineer, Ulteig
Learn about the history of smart work zones in Colorado, and what future construction projects might look like. Roberts will outline smart work zone strategies that have been implemented, including those currently being used on projects in CDOT Region 1, and speak on the efforts being made to integrate smart work zone technology with CDOT’s existing ITS infrastructure. Region 1’s efforts to develop a smart work zone toolbox and the benefits of implementing these strategies on your future projects will also be covered.
Low Cost Modern Roundabouts
10:40 am - 11:25 am - BALLROOM E

Presented By: William Hange, Jr., City Traffic Engineer, City of Loveland and Mark Lenters, Principal, Kimley-Horn

Affordability of safe, modern roundabouts is a big factor that often comes up on many intersection improvement projects. “We’d really like to put in a roundabout, but the cost…” is a common statement heard when engineers and managers get down to decision-making. This session will discuss concepts and examples of how lower cost, modern roundabouts tip the scale. This includes the selection of a new intersection design for safety, capacity or other intersection improvement projects.

Utility Update Part 1 – That’s Not How We Used to Do It: Communities are Implementing Subsurface Utility Engineering Requirements
1:35 pm - 1:55 pm - BALLROOM D

Presented By: Jim Moody, Director of Owner Agency Relations, Colorado Contractors Association and Kat Duitsman, Senior Transportation Engineer, Felsburg Holt & Ullevig

It has been over a year since the subsurface utility engineering (SUE) plan requirements were mandated through CRS 9-1.5. This panel-based conversation will explore how local communities have implemented the legislation. They will share what changes they have made within their organizations and processes to accommodate the plan requirements – ranging from project scoping to construction documents. They will also highlight the latest geophysical technologies and how this has benefited project delivery.

About Our Event Exhibitor Nilex

For over 40 years Nilex has been a leader in the geosynthetics industry, providing innovative solutions to support the unique challenges of civil, resource and environmental construction projects. Our engineered, technically advanced materials and construction techniques are used in road and rail building, Mechanically Stabilized Earth (MSE) solutions for grade changes, erosion and sediment control, water management and containment. With a long-standing commitment to the environment and highly qualified staff, Nilex delivers products and technologies that lessen the environmental impact of a project while providing an economic advantage to our clients. Learn more at www.nilex.com.
Utility Update Part 2 – Underground Damage Prevention Safety Commission Update  
2:00 pm - 2:20 pm - BALLROOM D

Presented By: Kat Duitsman, Senior Transportation Engineer, Felsburg Holt & Ullevig

The Underground Damage Prevention Safety Commission was created on January 1, 2019 as part of SB18-167. The commission has made progress on its mission to advise on policies, create best practices and training, and review complaints related to the law. This session will provide an update on what the Safety Commission has accomplished since the beginning of the year and highlight what’s next.

Conflict Management Through Communication in Denver Storm and Sanitary Infrastructure Project Design and Delivery  
1:35 pm - 2:20 pm - BALLROOM E

Presented By: Thomas Blackman, Engineer Supervisor and Lisa Cherry, Project Manager, City & County of Denver

Success in project design and delivery is a result of strong communication and conflict management. This presentation discusses conflict management and communication strategies as exemplified by a number of the City and County of Denver’s capital storm and sanitary infrastructure projects.

About Our Event Exhibitor
Felsburg Holt & Ullevig

Felsburg Holt & Ullevig (FHU) specializes in transportation planning, traffic engineering, and civil engineering design. FHU provides high quality professional services on complex transportation and design problems with emphasis on the development of creative and results-oriented solutions. FHU’s goal is connecting and enhancing communities through thoughtful planning and engineering. Learn more at www.fhueng.com.
Safety Update Part 2 – Connecting the Dots in Road Safety Analysis
2:40 pm - 2:55 pm - BALLROOM D

Presented By: Jake Kononov and Rich Sarchet, DiExSys LLC
Understanding crash causality is critical to developing effective safety countermeasures. The use of predictive tools such as Safety Performance Functions in concert with diagnostic analysis can provide important clues to understanding what the problem is. However, the analyst must connect the dots so to speak, in order to be effective in reducing frequency and severity of crashes. This presentation will highlight the link between making predictions and making decisions in project scoping by integrating elements of geometric design and traffic operations. Three case histories will be examined to demonstrate this important point. Two cases will include observational before-and-after studies. Additionally, the long-term safety effect of modifying traffic signal phasing will be examined.

Safety Update Part 3 – Identifying the Maturity of Your Safety Culture
2:55 pm - 3:10 pm - BALLROOM D

Safety culture CAN be measured! Join us for a snapshot look at your current safety culture and take away ideas to move your culture in a positive direction. This session is suitable for health and safety managers and safety committee members who have 5-10 years of experience managing a safety program or management system.

West Vail Pass Auxiliary Lanes Environmental Assessment
2:25 pm - 3:10 pm - BALLROOM E

Presented By: Kara Swanson, Environmental Manager and Leah Langerman, Public Involvement Coordinator, David Evans and Associates; Tyler Bowman, Roadway Engineer, Wood and Karen Berdoulay, Resident Engineer, CDOT Region 3
A Programmatic Environmental Impact Statement for the I-70 Mountain Corridor identified a preferred alternative for West Vail Pass, extending from mileposts 180-190. CDOT Region 3 has refined this alternative with input via its Context Sensitive Solutions (CSS) process, created for all projects in the corridor. It’s an area unlike any other in Colorado - from large and numerous bridges and critical safety issues, to the wilderness area and recreation facilities that surround it. See how CDOT has worked diligently over the last two years to establish project core values and seek feedback from federal, state, local, and public stakeholders while working toward a transportation solution for this critical economic link between the Front Range and Western Slope.

Innovations in Concrete Pavement Construction
3:30 pm - 4:15 pm - BALLROOM D

Presented By: Amy Brooks, Chief Operations Officer and Matt Fonte, Assistant General Superintendent, Castle Rock Construction Company
Design Build is often used as the contracting mechanism when an owner is looking for innovative approaches to a construction project. On large roadway projects, maintaining the traffic at current levels while rebuilding the roads to meet future traffic demands is often a required component. Contractors must be sure their phasing and construction practices help facilitate the construction of these roadways. The C-470 Express Lanes project did just that to build this 12.5-mile project, while maintaining construction accesses and 111,000 daily vehicles flowing through the project.
About Our Event Exhibitor HR Green

Established in 1913, HR Green, Inc. is employee owned. We collaborate across geographies and markets to provide engineering, technical, and management solutions that build communities and improve lives for our clients and the people they serve. Learn more at www.hrgreen.com.

Monday, October 28

Connecting the Stormwater Community
3:30 pm - 4:15 pm - BALLROOM E

Presented By: Laura Kroeger, Manager, Stream Services and Shea Thomas, Manager, Watershed Services, Urban Drainage & Flood Control District (UDFCD)
UDFCD, a regional agency that touches many parts of the stormwater industry and the community, formed The Stormwater Learning Community Advisory Council to connect people, information and technology to advance the growth and development of knowledge, while protecting people, property and the environment from flooding and adverse impacts of urbanization on watersheds. This session will cover the five disciplines employed by a learning community, and how applying and practicing the first four helped them see advancements happen faster from team efforts than through the work of individuals alone.

Utilizing Technology to Manage Stone Age Processes
4:20 pm - 5:05 pm - BALLROOM D

Presented By: Rob Mosbey, Engineering Asset Manager and Jason Martin, Engineering Senior Construction Inspector, City of Fort Collins
The City of Fort Collins Engineering Department has been implementing various forms of new technology to manage construction permits, permitting process, inspections and tracking. In addition, staff is utilizing new technology to better coordinate capital projects.

A Unique Approach for Transportation Infrastructure Financing: A Story of Partnership, Collaboration and Successful Implementation in Aurora
4:20 pm - 5:05 pm - BALLROOM E

Presented By: Cindy Colip, Interim Public Works Director, City of Aurora
The City of Aurora, CO has struggled with the lack of adequate capital projects funding to support its growing roadway infrastructure needs. While new developments are required to construct public roadway infrastructure within, and adjacent to development, often there are gaps in the overall roadway network. Since 2015, City of Aurora staff has been working with developers, metro district attorneys and financial consultants to identify alternatives for financing and constructing regional transportation projects using the Aurora Regional Infrastructure (ARI) mill levy accumulated by Southeast Aurora Metropolitan Districts. In 2017, a Regional Transportation Authority Board was created in south Aurora. Currently eleven districts have joined the Authority, pledging their ARI mill levy. With this partnership, Aurora will be constructing these vital roadway connections that would not otherwise be funded.

Happy Hour Reception
5:10 PM - 6:00 PM - FOYER + BALLROOMS A, B & C

Enjoy a round of cornhole while you test your knowledge with Geeks Who Drink trivia.
The Power of Partnership: Procuring and Delivering Your Best Transportation Projects
8:30 am - 9:25 am - BALLROOMS A, B & C

Moderated By: Mike Skinner, Director of Pavement Engineering, Colorado Asphalt Pavement Association (CAPA) with a group of agency panelists
This technology-focused, interactive, moderated panel discussion highlights the successes and teamwork strategy used in delivering high-quality public works transportation infrastructure projects. The panel and audience will explore examples of projects from initial constructability reviews to identify risks and streamline opportunities, identify alternative delivery procurement, and develop a winning partnership approach to project delivery – including audience participation, via their phones, to solve challenges in collaboration with the group.

One Build – A New Approach to an Age-Old Problem
9:30 am - 10:20 am - BALLROOM D

Presented By: Lesley Thomas, Deputy Director and Mike Gill, Project Manager, City & County of Denver
One Build is a reinvented coordination activity that looks at all assets and programs affecting the Right of Way. By adding time to the coordination effort, and being open to adjustments in individual programs, Denver is achieving increased coordination, and reduced costs and impacts to Right of Way users.

Budget & Schedule Part 1 – Managing Preconstruction Budget and Scheduling Expectations: AACE Estimating and Scheduling Classifications
9:30 am - 9:55 am - BALLROOM E

Presented By: Bill Canterbury, President, Canterbury Construction Management Services, Inc.
The million-dollar question always asked in construction, especially by primary stakeholders, is “how much will the project cost and how long will it take?” AACE (American Association of Cost Engineers) has developed classifications for estimating and schedules that can be utilized to show a primary stakeholder the rationale for providing a large accuracy range due to little or no design deliverables (Class 4 or 5 estimate), or a tight range when the deliverables are almost complete (Class 1 or 2 estimate), and risk has been considered and mitigated. By following these protocols, an owner’s expectations and needs can be appropriately managed along the progression of design deliverables from inception to construction.

About Our Event Exhibitor USIC

Performing over 70 million locates annually, USIC is the most trusted name in underground utility damage prevention. USIC provides a full suite of utility services throughout Colorado, the United States and Canada. Our mission is to deliver quality, safe, efficient, and innovative solutions to protect our partners’ infrastructure and critical assets. Learn more at www.usicllc.com.

Visit us online at http://colorado.apwa.net
About Our Event Exhibitor EST

EST has served Colorado communities by providing over 20 years of comprehensive engineering services to Public Works. We are proud to have recently partnered with the City of Sheridan in their three year $30M “Moving Ahead” campaign, improving streets, drainage, sidewalks and traffic control. EST provided engineering, construction oversite and project estimating under a CM/GC delivery system. Learn more at www.estinc.com.

Tuesday, October 29

Budget & Schedule Part 2 – On-Time, Within Budget and On-Target Project Delivery
9:55 am - 10:20 am - BALLROOM E

Presented By: John Davis, Retired Public Works Engineer
Davis will share some of the most important keys to project delivery that he has identified in more than four decades of experience with local, regional and state public organizations. He’ll cover the major causes of project failure and where successful project managers spend 90% of their time. These best practices helped his organization deliver a $700 million sales tax transportation program on-time and with total change orders less than 1.3% of the entire program’s awarded construction contract values. How can they help your organization? Be prepared to share project delivery techniques you have witnessed or used during your career.

Hazards of Homeless Encampments and Working in Urban Environments
10:25 am - 11:10 am - BALLROOM D

This groundbreaking seminar provides an eye-opening introduction to urban hazards that face workforces in a variety of industries. Think “outside the box” of traditional safety and risk management concepts to see a new class of safety hazards stemming from homeless encampments, meth labs, aggressive persons, and other “non-traditional” workplace hazards. Examples of safety management strategies will be discussed.

Connecting the Dots
10:25 am - 11:10 am - BALLROOM E

Presented By: Mike Comstock, Traffic Engineer and Allen Peterson, Road & Bridge Division Manager, Arapahoe County
Traffic cameras and associated travel time data can prove beneficial to improving snow removal efforts. Knowing precisely when and where to deploy snow removal resources can improve efficiencies, save taxpayer dollars and reduce traffic congestion, even in winter driving conditions.

APWA Colorado Chapter Annual Awards Luncheon and Closing Comments
11:30 am - 1:00 pm - BALLROOMS A, B & C