

## May 2023 Section Meeting

### The Wharf Phase II: Interdisciplinary Design and Construction of a World-Class Waterfront Development

The Wharf Phase II in Washington, DC's Southwest Waterfront district is a highly anticipated addition to one of the district's most popular neighborhoods to live, work, eat, shop and visit. Phase 2 completes a mile-long waterfront experience with the addition of over 1.15 million square feet of mixed-use space, including a marina, office, residential, retail as well as parks and public spaces. The Wharf has been described as one of the most significant and successful urban waterfront developments in the world.

Members of the interdisciplinary design team for The Wharf Phase 2 will share a brief overview of the challenges and solutions throughout the design and construction process. The panel presentation will feature Jason Abbey of Perkins Eastman DC, the master planner and master architect of The Wharf, Nima Arjomandnia of SK&A, the structural engineer of record for Garage 2 and parcels 6 & 7, Henry Clouting of Thornton Tomasetti, the structural engineer of record of Garage 3, and Aaron Sacks of Mueser Rutledge Consulting Engineers, geotechnical engineer and support-of-excavation designer for the garages over and adjacent to the WMATA tunnels. The project team will discuss the unique challenges presented by the program and the site conditions related to the below-grade parking garage located directly adjacent to the Washington Channel, in close proximity to active subway tunnels, and below multiple buildings. Following the discussion, the team will reflect on the collaborative solutions developed in response to these challenges to make this project a success.

All parking on the site is contained in a two – to three-story below grade parking garage and is protected from the Washington Channel by a new seawall that extends to depth up to 85 ft into the channel. The garage was designed to



accommodate multiple existing systems on the site, including an existing 108-in diameter DC Water pipe that bifurcates the site, as well as two decades-old Washington Metropolitan Area Transit Authority (WMATA) tunnels that curve through the site. Design and construction of the parking garage directly relates to the challenges presented by these existing systems, and influenced the design of the towers located above.

#### About the Speakers

Nima Arjomandnia, PE is a Senior Project Manager in SK&A's DC office and the structural engineer of record for Garage 2 and parcels 6 & 7. Nima specializes in the design of conventional and post-tension concrete structures in addition to steel-frame systems.



Jason Abbey, AIA is a Principal in Perkins Eastman DC, the master planner and master architect of The Wharf. Jason's portfolio of large, resilient projects on the waterfronts of Washington, DC, and New York City demonstrates that shaping the water's edge fulfills an opportunity to connect a city to its history, its people's needs, and its potential for future prosperity.



Henry Clouting, PE is an Associate in Thornton Tomasetti's DC office and the

Please join us on **Tuesday, May 23, 2023** at the Hilton Arlington, 950 North Stafford Street, Arlington, VA, on the second floor in the Gallery Ballrooms. Parking is available at the hotel (\$10), at the Ballston Mall garage (\$1 after 6 pm), and on the street (free after 6 pm). The Hilton is on the same block as the Ballston Station on Metro's Orange and Silver lines. Registration and networking will be from 6:00 to 6:45 pm, followed by dinner. The program will end by 8:30 pm. The cost is \$45 for those preregistering, \$10 for students and \$55 for walk-ins, as space allows. For questions, please contact [Elizabeth Wheeler](#). Please click [here](#) to register by **Friday, May 19th**.

*Note that no-shows will be charged the full registration fee. We welcome walk-ins, including any registrations made after the guaranteed number of guests is provided to the hotel. However, the cost for walk-ins is higher because the Section is charged accordingly by the hotel for late registrations.*

structural engineer of record of Garage 3.



Aaron Sacks, PE is a Senior Associate in Mueser Rutledge Consulting Engineers' Virginia office and the geotechnical engineer and support-of-excavation designer for the garages over and adjacent to the WMATA tunnels. Aaron has worked on hundreds of projects involving site characterization, soil mechanics, foundation design and construction, earth support structures, slope stability, instrumentation, dewatering, and hydraulic barriers. ■



## President's Corner

Hello, National Capital Section! As always, I hope this communication finds you well, and I'm pleased to share the following updates with you since the last Newsletter.



We held our Annual Awards Banquet in April, and I am thrilled to announce that the event was a success! It was our first in-person banquet opened to the Section since 2019, and we had a great turnout. Thank you to everyone who came out to support the Section and the award winners. A few highlights from the evening:

- Thank you to all of the Past Presidents who came out to celebrate the evening and learn more about the current state of the Section. Your guidance is always appreciated, and I'm happy we were able to coordinate a Past President's Reception.

- The Section awarded over \$14,000-worth of scholarships to students within our local ASCE college chapters. We also recognized the Outstanding Seniors from those universities. From the speeches given by the Faculty Advisors, it sounds like we have quite a few exceptional young professionals getting ready to join the career.

- The Executive Director for ASCE National, Mr. Tom Smith, gave the Keynote Presentation. He introduced the *Future World Vision: Mega City 2070*. Similar to the efforts that were done a few years ago with the *Dream Big* campaign, ASCE has developed another feature film, which is set to hit theaters in 2024.

- We gave out Service Awards to several very deserving individuals, all of whom I am delighted to have active within the Section. Many of the events and meetings that are coordinated for the Section could not be done without these dedicated volunteers. Furthermore, their commitment to not only Civil Engineering, but also to the community, is such an inspiration to see, and one that I know I will personally continue to strive for throughout my career.

- Both the Sustainability and Project of the Year Awards were presented to fascinating projects from around the DC-metro area. I received multiple comments from attendees about their enjoyment of learning more about those projects that won the awards.



From Left to Right: Past NCS President Jameelah M. Ingram, Current NCS President Elizabeth Wheeler, Current NCS Vice-President Tricia Wolfbauer, and Current YMF President Hala Abdo.

We recently had Tara Hoke, ASCE General Council, present at our April 2023 Section Meeting. Ethics is always an interesting topic, especially as it plays into our civil engineering profession. It was helpful to learn more about ASCE's Code of Ethics, which was recently updated in October 2020. Tara explained one of the major updates to the Code of Ethics was its establishment for a hierarchy of ethical duties. More information on the Code of Ethics can be found at ASCE's website: <https://www.asce.org/career-growth/ethics/code-of-ethics>.

There was a recent discussion at our April Board of Directors meeting about the need for more social events for the Section. Currently, the Board is considering two social events for the upcoming months, including a summer picnic and a potential boat tour. I'd love to hear your thoughts on any social events you would be interested in attending with ASCE NCS.

As always, if you are interested in getting more involved with the Section, please feel free to reach out to me at [president@asce-ncs.org](mailto:president@asce-ncs.org). I hope you all enjoy your summer, and I look forward to seeing you at the 2023-2024 Planning Meeting, which will be held later this summer. Please be on the lookout for the email invite.

Sincerely,

Elizabeth M. Wheeler, P.E., M. ASCE  
ASCE NCS President

## Newsletter

**Maria Raggousis, Editor**

**September 2023 Issue Deadline:** August 11, 2023

**To Submit Articles:** [newsletter@asce-ncs.org](mailto:newsletter@asce-ncs.org)

**NCS eNewsletter Archives:** go to [www.asce-ncs.org](http://www.asce-ncs.org) and view along the sidebar.

**Address Changes:** Call 1-800-548-ASCE, e-mail [member@asce.org](mailto:member@asce.org), visit [www.asce.org](http://www.asce.org), or write: ASCE – Membership, 1801 Alexander Bell Drive, Reston, VA 20191. Include your membership number.

## National Capital Section

### Officers (2022-2023)

**Elizabeth Wheeler, P.E.,** President

**Jameelah Muhammad Ingram, P.E.,** Past President

**Kelly Cronin, P.E.,** Previous Past President

**Tricia E. Wolfbauer,** Vice President

**Joseph Whartenby Jr., P.E.,** Treasurer

**Ken Klewicki, Ph.D., P.E., BCEE, LEED AP,** Secretary

**Lisa Anderson, P.E.,** Director

**Shainur Ahsan, P.E.,** Director

**Stephen P. Barna, P.E.,** Director

**Ardalan Mosavi, Ph.D., P.E.,** Director

**Maria Raggousis, P.E.,** Director (Newsletter Editor)

**Hala Abdo, E.I.T.,** YMF President

**Christopher Friend, P.E.,** Reston Branch President

### Committee Chairs

Please refer to the [NCS website](http://www.asce-ncs.org) for a current list of NCS committees and chairs.

## FGIA Releases Updated Design Wind Loads Technical Information Report

Schaumburg, Illinois – The Fenestration and Glazing Industry Alliance (FGIA) has updated a technical information report determining design wind loads on exterior fenestration and cladding systems using national standards ASCE/SEI 7-16 and ASCE/SEI 7-22, Minimum Design Loads and Associated Criteria for Buildings and Other Structures. [AAMA TIR-A15-23 \(https://store.fgia-online.org/pubstore/ProductResults.asp?cat=0&src=A15\)](https://store.fgia-online.org/pubstore/ProductResults.asp?cat=0&src=A15), *Overview of Design Wind Load Determination for Fenestration Systems*, an FGIA document, provides details for exterior fenestration and cladding systems and covers Boundary Layer Wind Tunnel (BLWT) testing and its use. This document was last updated in 2014 and is now available for purchase in the FGIA online store.

“Over the years, improvements in predicting wind velocities and patterns have been made so that many buildings can be reliably

designed using the data and formulas provided in the 2016 and 2022 editions of ASCE/SEI 7,” said Rich Rinka, FGIA Technical Manager, Fenestration Standards and U.S. Industry Affairs and staff liaison for the document’s developing group, the FGIA Design Wind Loads on Fenestration Task Group. “BLWT testing is still necessary, however, under certain conditions that cannot reliably be predicted.”

Wind load is a principal load to which components and cladding, exterior fenestration and cladding systems are



subjected. It is of paramount importance, therefore, to have some knowledge of wind and how it acts on the building envelope to ensure a structurally adequate design is achieved.

“FGIA members interested in learning more are encouraged to review a presentation about ASCE/SEI7 from the April 25

Southeast Region Meeting,” said Rinka. FGIA member login is required to [view this presentation \(https://fgiaonline.org/pages/ser-meeting-presentations\)](https://fgiaonline.org/pages/ser-meeting-presentations).

[AAMA TIR-A15-23 \(https://store.fgia-online.org/pubstore/ProductResults.asp?cat=0&src=A15\)](https://store.fgia-online.org/pubstore/ProductResults.asp?cat=0&src=A15), as well as other documents available from FGIA, may be purchased from the online store at the discounted member rate of \$20 or the non-member price of \$60.

For more information about FGIA and its activities, visit [FGIAonline.org](https://fgiaonline.org). *Your trusted industry resource, setting the standards for fenestration and glazing.* ■

### Employment Clearinghouse

**KPD Contractors – Construction Estimator:** KPD Contractors LLC is looking for a Construction Estimator. Candidate MUST have at least 2 years of experience in the construction estimating industry. Candidate will prepare estimates of probable time, cost of materials, labor and equipment, and subcontracts for construction projects

based on contract bids, quotations, schematic drawings and specifications. Salary range is \$35–45 per hour based on experience, with a remote work location. If interested, contact [info@kpdcontractors.com](mailto:info@kpdcontractors.com).

*The NCS provides the Employment Clearinghouse as a free service to*

*its membership. The Clearinghouse allows members to post short notices for available positions or candidates seeking employment. All employers listed herein are equal opportunity employers. If you have questions, are seeking employment or would like to post a position please contact the [newsletter editor](#).*

### ASCE-NCS Newsletter Patrons





# 1. Hire a chatbot, really

**A series of articles examining tech trends and their influence on engineering tools: past, present, and future.**

By Ranjit Sahai, PE, F.ASCE

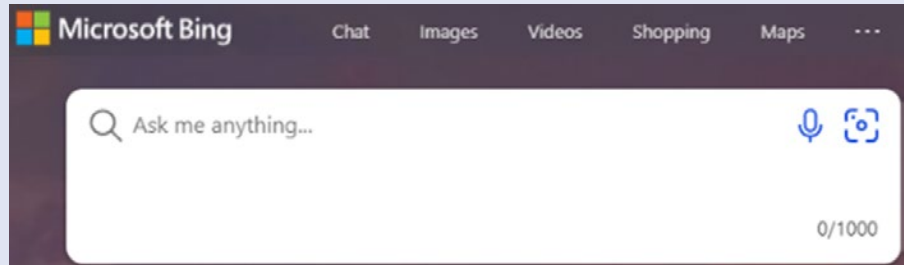
On December 20, 2022, a reference to ChatGPT made its first appearance in my Inbox' tech-news subfolder. References to it became a steady stream in three weeks. On March 8, 2023, even ASCE Source ran an [article by Brian Benner](#), a civil engineer, who wondered – tongue in cheek – “What if the digital twin is the real bridge and the real bridge isn’t real?”. In that article, he refers to ChatGPT as “artificial intelligence to assist us with philosophic questions such as this.”

In January this year, during my regular visit with the dentist, I asked if she had heard of the media buzz on ChatGPT? “Oh, yes!” Turns out, her dad is in agriculture and was looking for a poem with an agricultural theme for an event. He asked ChatGPT to generate one. It wrote a poem perfect for the occasion. Imagine asking a poet to write a poem on a theme you fancy in less than a minute!

### So, what is ChatGPT?

It's a chatbot from OpenAI that the likes of Microsoft, Salesforce and others have in recent months integrated with their chatbots. Think of it as your college educated research assistant as close as your phone or computer. It not only locates information relevant to what you request, it does a superb job of summarizing it too. Superb job? Check it out for yourself. Form your own opinion. Get a feel for what the ChatGPT buzz is all about across the globe:

- Navigate to Bing.com. You need to be logged in with a Microsoft account for access to Bing Chat. Click Chat.
- Type in the chat box: “Provide a history of coal mining in Maryland from its early use to the present, with a focus on its economic impact.” (Wait. Feel free to request information that will make your day. Such as “Compile a list of resources to share with high-school teachers to promote interest in civil engineering.” Or “How do I tailor



my resume for a career switch from engineering design to project management at an engineering software company?”) I was writing a chapter for a coal mining permit tracking system we’d created for a Maryland coal permitting agency. Naturally, the chat was meant to save time on research and summarizing findings.

I had never seen a search engine do what Bing Chat delivered. A well-researched well-crafted summary sourced from trustworthy sites, including references to where the information came from. I read it. Paused. Checked out the references. Reread it. The four paragraphs it wrote needed no edits. Usable as delivered.

### I know chat, but what is GPT?

The letters GPT are an acronym for Generative Pre-trained Transformer. It's a chatbot you can hold an intelligent and extended conversation with – just as you would with another person. It remembers the context of the conversation. It generates responses to your queries in perfect English. It recognizes language syntax and has been **pre-trained** with Internet content and taught how to identify trustworthy information sources. It **transforms** existing knowledge to **generate** responses that address your stated purpose.

Bing Chat differs from how traditional search engines work. Instead of providing informational links for you to read and whet and assemble purpose-centric content, Bing Chat transforms the information it retrieves into a response suitable for your purpose, just like a research intern would.

Is it intelligent? No way. Well, it depends. If you go by the imitation game criteria, also known as the [Turing Test](#), introduced by Alan Turing in his 1950 paper, ChatGPT would pass the intelligence test.

According to the Turing Test, if a machine exhibits behavior, as judged by a human observer, to be indistinguishable from that of another human, it passes the intelligence test. However, ChatGPT cannot think as we think of thinking. It cannot use reason to solve problems in new contexts and spheres of knowledge.

### Parting Words

The next time you want to brainstorm an idea or want a draft on a burning topic you know but don't have the time to research or craft a summary, hire Bing Chat. It doesn't cost a cent but may very well surprise you with its spot-on suggestions and research summaries.

In the upcoming article #2 we'll go over what training a chatbot means and how engineering software vendors are integrating it in their solutions to expand the value they can deliver to your engineering analysis and design needs.

### About the Author

Ranjit, a Past President (2013–14) of ASCE-NCS, is a principal and founder of RAM Corporation, a firm serving State DOTs with a focus on traffic engineering design, stormwater facility inspections, and IT solutions for engineering workflows.



# ASCE-NCS Committee and Branch News and Updates

## Reston Branch

By Michael J. Magyarics, P.E., M. ASCE,  
Reston Branch Vice President

**Virginia Transportation Research Council (VTRC) Presentation:** On April 12, 2023, the Reston Branch hosted Michael Fontaine, P.E., Ph.D., Associate Director for the Safety, Operations, and Traffic Engineering team at the Virginia Transportation Research Council (VTRC) in Charlottesville, VA, for his presentation entitled, "Recent Safety and Traffic Operations Technology Research at VDOT." Similar to March, this luncheon meeting was a hybrid event, with both in-person and virtual attendees, and was again hosted at WSP's Herndon, VA, office in the 1st floor conference room. His presentation discussed how the Virginia Department of Transportation (VDOT) operates the 3rd-largest state-maintained highway system in the country, encompassing facilities ranging from congested urban freeways to mountainous rural two-lane secondary roads. VDOT has been actively involved in a number of projects where innovative technology is being deployed to address safety and mobility issues in these very different environments. The presentation provided an overview of a number of completed and ongoing research projects that examined innovative technology, including a number that are occurring in Northern Virginia. Topics discussed included:

- Low speed automated shuttle deployment in Fairfax
- Variable speed limit deployments on I-77 in southwest Virginia and I-95 south of Fredericksburg
- Smart work zone technology deployments, including the development of an automated truck mounted attenuator
- Smart intersection testing in Northern Virginia
- Using connected car data to improve safety analytics

Michael Fontaine, P.E., Ph.D., is the Associate Director for the Safety, Operations, and Traffic Engineering team at the Virginia Transportation Research Council (VTRC), which is the research division of VDOT. In that role, Dr. Fontaine manages VDOT's research program in the areas of highway safety, traffic engineering, operations, intelligent transportation systems, and connected and automated vehicles. Dr. Fontaine also currently serves

as the chair of the Transportation Research Board Urban Transportation Data and Information Systems committee, and is a member of the TRB Forum for Automated Vehicles and Shared Mobility. He has his Ph.D in Civil Engineering from the University of Virginia and is a registered professional engineer in Virginia. Dr. Fontaine has also previously worked for the University of Virginia, Old Dominion University, the Texas A&M Transportation Institute, and the City of Charlottesville.



## Tysons Pedestrian Bridge

**Presentation:** The Reston Branch hosted a presentation and field trip on April 13 for the new Tysons Pedestrian Bridge located in Tysons, VA. Attendees first had lunch at the Great Falls Conference Room located on the 1st floor of Tysons Executive Plaza for participating a classroom-style presentation led by Michael A. Trabucco, PE, M.ASCE, Vice President, Shirley Contracting Company, LLC. Attendees then drove to the project site for a tour of the newly built pedestrian bridge over I-495 in Tysons, VA. The Virginia Department of Transportation selected Shirley Contracting Company to build the phase 1 project consisting of a bridge and shared-use path along Old Meadow Road, providing a crucial connection from Tysons Corner Center to the McLean Metro station over I-495.



The project provided a bridge over the Capital Beltway for pedestrians and bicyclists, who previously had no easy way to cross the interstate at the Route 123 interchange. It involved the addition of a 4,662-foot-long, 10-foot-wide trail along the west side of Old Meadow Road.

Construction unfolds in two phases due to the availability of funding. The first phase introduced the bridge and a portion of the ten-foot-wide shared-use path that runs nearly half a mile from Tysons One Place and Fashion Boulevard to Old Meadow Road and Provincial Drive, providing a new link between the Tysons Corner Center Mall and Tysons residential areas east of the Beltway. Construction on the first phase of the Tysons/Old Meadow Road Bike/Ped Improvements project began in August 2021. The bridge and shared-use path opened in October 2022 and final completion was in November 2022. With preliminary engineering \$2.3 million, right-of-way acquisition and utility relocation \$3.1 million, the total \$13.4 million Tysons/Old Meadow Road Bike/Ped Improvements project was financed with federal, state and Fairfax County funds. The shared-use path will then be extended to Route 123 during the project's second phase, which will be procured and begin construction once additional funding becomes available.

Michael A. Trabucco, PE, M.ASCE, is Vice President of Operations at Shirley Contracting Company, LLC, where he oversees numerous infrastructure projects in the NOVA Region. With 18 years experience, Mike has developed a reputation for creatively solving constructability issues, developing value based solutions for the project owner and leading his teams on projects large and small. With a background in structures and passion for bridges, Mike has been an integral part in delivering several complex and structurally focused projects including the Hot Lanes Bicycle/Pedestrian Facilities Over 495 Phase II, I66/Route 29 & Linton Hall Interchange and the I66 Widening from Gainesville to Haymarket. He received his BS in Civil Engineering from The Pennsylvania State University.



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He also serves as Treasure on the Board of Directors for the local Heavy Construction Contractors Association.

### Occoquan River Crossing

**Presentation:** On May 9 the Reston Branch hosted Robert Cotton, PE, M.ASCE, Engineering Department Manager and Jerry Scott, PE, M.ASCE, Construction Department Manager, both at Fairfax Water, for their presentation entitled, "Occoquan River Crossing." This event will once again be hybrid, presenting to both in-person and



virtual attendees, and will be hosted at WSP's Herndon, VA, office (13530 Dulles Technology Drive, Herndon, VA, 20171) in the 1st floor conference room. Their presentation will highlight the unique challenges of installing two parallel 42-inch water transmission mains in a new tunnel under the Occoquan River between Fairfax and Prince William Counties. Fairfax Water, at the behest of its two wholesale customers in eastern Prince William County, undertook a project to replace two aging water mains and associated infrastructure to increase capacity and improve wholesale service pressures and reliability. This presentation provides insight into planning for a critical pipeline connection between three independently operated water systems; design of the new tunnel, including selection of tunneling methods; and construction challenges associated with maintenance of operations and work in a sensitive area. The project is currently under construction with completion anticipated in 2024.

Robert "Bobby" Cotton, PE, M.ASCE, is the Engineering Department Manager at Fairfax Water. He has worked as a project manager and engineer in the water/wastewater industry for 18 years with a primary focus on pipeline design and construction. Bobby joined Fairfax Water in 2011 after 6 years in the private sector supporting numerous public utility clients in Virginia and Maryland. Bobby is a Northern Virginia native and lifelong



resident who graduated from Virginia Tech in 2004 with a Bachelor of Science in Civil Engineering. He is a licensed Professional Engineer in Virginia and a member of ASCE and the American Water Works Association.

Jerry Scott, PE, M.ASCE, is the Construction Department Manager at Fairfax Water and is responsible for construction contract administration, overseeing the construction of water infrastructure projects with a combined value exceeding \$50 million annually. Mr. Scott joined Fairfax Water in 2007 as the Chief Construction Engineer and has Bachelor and Master of Science degrees in Civil Engineering from the University of Maine. He is also a licensed Professional Engineer in Virginia and Maine, a Certified Construction Manager (CCM), and a member of ASCE, APWA, and the American Water Works Association.



**LinkedIn:** The Reston Branch has launched a [group](#) on LinkedIn to provide regular updates for the Branch as well as offer a place for branch members to connect. See the following link for additional information: <https://www.linkedin.com/groups/13759693/>.

**Upcoming Events:** May 9, 2023, at 12 PM – Hybrid (option for either in-person or virtual) Luncheon Meeting at WSP's Herndon, VA, office (13530 Dulles Technology Drive, 1st floor conference room) – Presentation on the Occoquan River Crossing by Fairfax Water.

### Architectural Engineering Institute

The Capital Area Food Bank is vital to the supply chain for the procurement and distribution of food in the Greater Washington Metropolitan area. AEI DC is giving back to the community by volunteering to

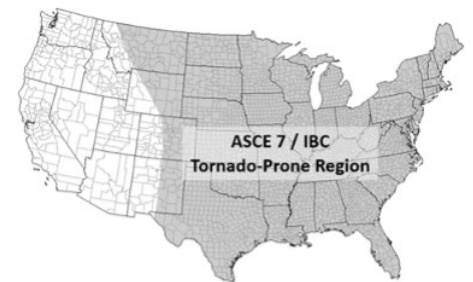
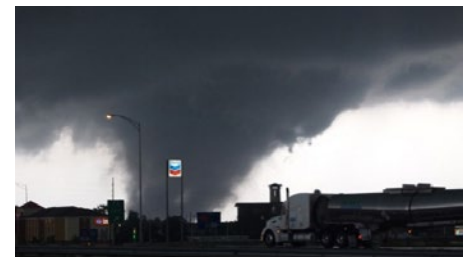


package food boxes on Thursday, May 11th. We sorted and packed donated food to assist in the distribution process to the men, women, and children that this food bank serves. Next time, we hope you join us – only 15 volunteer slots are available!



### Structural Engineering Institute May Committee Presentation: New Tornado Load Requirements in ASCE 7-22 and the 2024 IBC

Join us on Thursday, May 25 at 12 (Noon) for a technical presentation at Arup's Office at 1120 Connecticut Ave NW, Suite 1110, Washington, DC 20036. Virtual registration is \$5 and physical attendance is \$20, with lunch included. One PDH will be awarded for attendance. [Click here to register!](#)



The ASCE 7 Standard is the basis for load determination in US model building codes. Until recently, ASCE 7 specifically excluded tornado hazards. It should therefore come as no surprise that our buildings and infrastructure perform poorly in these severe storms. Tornadoes kill more people in the U.S. than hurricanes and earthquakes combined, and most tornado fatalities occur inside buildings. Additionally, tornadoes and tornadic storms cause more insured catastrophe losses than hurricanes and tropical storms.

The presentation will provide a brief overview of tornado hazards, the rationale for consideration of tornadoes in *continued on page 7*



conventional engineering design, and a summary of tornado load requirements in ASCE 7-22 and the forthcoming 2024 International Building Code. The tornado load provisions are based on the wind load framework provided in ASCE 7, with modifications for the unique wind and wind-structure interaction characteristics of tornadoes. While the most significant impacts of these new requirements will occur in the central and southeast US, large Risk Category IV facilities in the National Capital Region may also be affected. Highlights of an economic analysis showing the cost impact of well under 1% from several case studies will also be shared.

*About the Speaker:*

Dr. Marc Levitan is the Lead Research Engineer for the National Windstorm Impact Reduction Program at the National Institute of Standards and Technology. He has over 25 years' experience in research on tornado, hurricane, and extreme wind effects on buildings and structures. With respect to tornado research, Dr. Levitan served as lead investigator for NIST's National Construction Safety Team technical investigation of the 2011 Joplin tornado, as well as for the NIST study of the 2013 Moore tornado. Dr. Levitan also leads implementation of many recommendations resulting from these investigations, including chairing the ASCE/SEI committee that developed the tornado load provisions for ASCE 7-22; the ICC committee developing the 2023 and previous editions of the ICC 500 Storm Shelter standard; and co-chairing the ASCE/SEI/AMS committee developing a new standard on Wind Speed Estimation in Tornadoes.



*Additional Information:*

Early Registration is open through Thursday, May 12th. Registration after May 12th will include a \$5 late fee in addition to the registration fee. Online registration for in-person attendance will close at noon on Monday, May 22th. At that time all reservations will be considered firm and billed. No refunds will be given after that time. Walk-Ins are welcome pending availability. Walk-Ins will be billed the late registration fee.



**Younger Members Forum**

By Kush Vashee, P.E., CAPM, M. ASCE

**Recent Events:** Last month during the section's awards banquet, Hala Abdo – YMF president awarded the very first YMF president's appreciation award! Congratulations to our secretary, Kush Vashee, PE, who is the very first recipient of this award!



Welcome our new Communications Chair, Sanskrit Singh from WSP. He joins our the YMF leadership and will assist with sending out email blasts for our upcoming events and assisting with social media posts.

Hala Abdo recently spoke at the Arab American Associate of Engineers and Architects – National Capital meeting, where she shared her experience with non-profit organizations. Thanks for sharing your valuable experience, Hala!

**Monthly Happy Hour:** The NCS Younger Members Forum (YMF) holds monthly happy hours, alternating between Arlington, VA and Washington, DC. Happy hours are usually the first Wednesday of each month unless a holiday falls during that week.

The group will be holding a social event in May. Look out for some emails soon with registration details and location information. We hope to see you there!

**Professional Development:** Please share suggestions of any professional development activities you would like us to organize in the future.

**Stay Connected!** Check out photos and stay up-to-date with YMF events by visiting the new YMF Facebook page (ASCE National Capital Section Younger

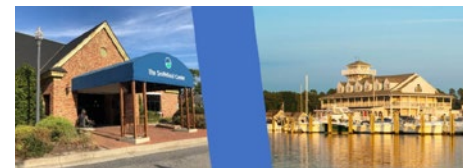
Members Forum), following us on Twitter (@ASCE\_NCS\_YMF), LinkedIn (ASCE National Capital YMF), and Instagram (@asce\_ncs\_ymf)

**Get Involved!** We have an opening for social chair to assist with planning our monthly happy hours and social events. If you are interested, please reach out to us on social media or email ncsymfpresident@gmail.com. Are you interested in getting involved with more Younger Members activities? Do you have ideas for social events or volunteering activities? The NCS Younger Members Group is always looking for new members! Let us know if you are not already on our mailing list!

**Geo-Institute of Virginia**

Join the Virginia Geo-Institute Chapter for two days of short courses in Smithfield, Virginia on June 5th and June 6th! The Geo-Institute proudly presents a short course on Micropiles on June 5th and a short course on Drilled Shafts on June 6th – you don't want to miss this!

The events are both located at: Smithfield Center at 220 N. Church Street, Smithfield, VA 23430, (757) 356-9939. There is ample FREE parking on site. Registration does not include lodging.



**Micropile Short Course, June 5th:**

This course is designed for anyone who wants to learn more about the design, installation and testing of micropiles for various applications.

The Virginia Geo-Institute Chapter of ASCE is committed to providing premier educational opportunities to the Civil Engineering communities that we serve. The Micropile Short Course represents that ethos and is a full day of comprehensive coverage of Micropile Design and Construction State of Practice.

This course is led by nationally and internationally recognized leaders in all aspects of Micropile design and construction. The course will cover Micropile fundamentals, materials, equipment, structural design,

*continued on page 8*

geotechnical design, testing, and new developments in the industry.

**Download the program by clicking [here](#) and make sure to [register now](#) if interested!**

*Meet the Speakers:*

**Jonathan Bennett, PE, DGE**  
Short Course Chair / Instructor  
Design-Build Manager  
*Wagman Geotechnical Construction*  
[Visit Jon on LinkedIn](#)



**Helen Robinson, PE, PMP, DGE**  
Instructor  
Branch Manager / Senior Project Manager  
*GEI Consultants*  
[Visit Helen on LinkedIn](#)



**Dr. Jesus Gomez, PE, DGE**  
Instructor  
Vice President  
*GEI Consultants*  
[Visit Jesus on LinkedIn](#)



**Drilled Shaft Short Course, June 6th:** This course is designed for anyone who wants to learn more about the design, installation and testing of drilled shafts for various applications.

The Virginia Geo-Institute Chapter of ASCE is committed to providing premier educational opportunities to the Civil Engineering communities that we serve. The Drilled Shaft Short Course represents that ethos and is a full day of comprehensive coverage of Drilled Shaft Design and Construction State of Practice.

This course is led by nationally and internationally recognized leaders in all aspects of Drilled Shaft design and construction. The course will cover Drilled Shaft fundamentals, materials, equipment, structural design, geotechnical design, testing, and new developments in the industry.

**Download the program by clicking [here](#) and make sure to [register now](#) if interested!**

*Meet the Speakers:*

**J. Brian Anderson, PhD, PE**  
Short Course Chair / Instructor  
Professor  
*Auburn University*  
[Visit Brian on LinkedIn](#)



**Jeremy Ashlock, PhD**  
Instructor  
Assistant Professor  
*Iowa State University*  
[Visit Jeremy on LinkedIn](#)



**Lance Kitchens, PE**  
Instructor  
Vice President – Engineering  
*Russo Corporation*  
[Visit Lance on LinkedIn](#)



## **FHWA Nighttime Visibility for Safety**

Join us on Thursday, May 18, 2023 3:00–4:30 p.m. ET for a presentation on nighttime visibility for safety presented by the Federal Highway Administration Local Aid Support as part of *Innovation Exchange: Conversations Launching Change*.

Nighttime adds another dimension to intersection, roadway departure, and vulnerable road user safety. The nighttime fatality rate on the Nation's roadways is three times higher than the daytime rate. Urban areas usually have streetlights near schools, parks, transit stops, sports complexes, and the like to help illuminate pedestrians, but what are other effective safety countermeasures, including for rural areas? Streetlights, although highly effective, can come at a price.



Source: vbaleha – stock.adobe.com



Source: National Park Service

FHWA will host an Innovation Exchange Webinar with subject matter experts to discuss options for increasing nighttime safety. The discussion will include experts from FHWA, local agencies, and the National Park Service, to provide a perspective of nighttime safety in intentionally dark areas.

If you have questions about this upcoming webinar, please contact Karyn Vandervoort with FHWA's Office of Federal Lands Highway at [karyn.vandervoort@dot.gov](mailto:karyn.vandervoort@dot.gov).

No registration required. To join the webinar: [Join ZoomGov Meeting ID: 161 162 7430](#), Passcode: 889904 ■