President’s Corner

This is my last article for the NCS newsletter as Section President. This past year as President has been wonderful…but not exactly how I imagined it would be!

Starting my tenure last September 2019, I was looking forward to several events we were planning for the section, particularly with the local universities (resume workshop, coffee & connections, etc.). I was also excited about our newest committee – Architectural Engineering – and to see the enthusiasm that the members who pushed the start of that committee have. Our monthly section meetings in the fall and early winter had great turnouts. Our Younger Members Group organized a very popular holiday party and hosted an event that provided head-shots for our young professionals.

Unfortunately, the universe threw a curve into our plans. I was incredibly disappointed to have to cancel our Annual Awards Banquet in March due to the pandemic. This is usually our opportunity to celebrate some of the amazing students at our local universities, thank the members of NCS who have gone above and beyond to support the section, honor our life members, and acknowledge some outstanding projects in our area. We still provided our scholarship winners with their checks and hope to honor the other awardees at some point this coming year. In addition, this past spring the Board approved the founding of two new memorial scholarships that will be awarded in March 2021!

Despite not having in-person section meetings, the section has embraced virtual meeting platforms and was able to host a virtual May section meeting – which had more than 80 attendees! We also had a great turnout for our annual summer planning meeting. Many of our committees – EWRI, Transportation, YMF, and others – have continued to host virtual events over the summer. The Section in the past has not had many – if any – virtual meetings and I think this opportunity will allow us to continue to be valuable to our members and we hope to engage even more members. As always, if you have any suggestions, please do not hesitate to reach our (president@asce-ncs.org).

As I conclude my term as President, I would like to thank the fabulous Board and Committee Chairs that have worked with me this past year. The section would not be what it is without them. My friend Mike Venezia will be stepping into the President’s role and I wish him the best of luck. I of course will continue to be active with the section and help him as we navigate the coming year!

Best,

Kelly Cronin, PE
ASCE NCS President 2019–2020

New ASCE NCS Board of Directors

Over the summer, ASCE NCS held elections through digital voting. We are pleased to announce the following 2020–2021 ASCE NCS Board of Directors slate:

President: Mike Venezia
Vice President: Jameelah Ingram
Secretary: Norine Walker
Treasurer: Vic Crawford
Director: Lisa Anderson
Director: Elizabeth Wheeler
Director: Tricia Wolfbauer
Director: Joseph Whartenby Jr.
Newsletter Editor: Maria Raggousis
YMF President: Ariana White
Past President: Kelly Cronin
Previous Past President: Emily Dean

Congratulations and a warm welcome to the new Board. ASCE NCS looks forward to navigating through this upcoming year with our members. As always, please reach out to the Board at asce-ncs@asce-ncs.org if you have any questions, comments, or ideas for future professional events.
2020 National ASCE Election
By Thomas W. Smith III, P.E., ENV SP, CAE, F.ASCE, Society Secretary

The 2020 national election concluded on Monday, June 1, and the Tellers Committee convened this morning to validate the election results. Consistent with the Society’s Bylaws, I am writing to give you formal notification of the results of this year’s election. Publication of the results will be provided on the Society’s web page, ASCE SmartBrief, and in ASCE News.

The membership also approved by 75.4% the proposed Constitutional amendments intended to improve the organization’s flexibility, nimbleness and responsiveness, as well as give voting equity to dues-paying Affiliate members. Amendments to the Constitution require the affirmative vote of two-thirds (2/3) of those members voting.

If you have questions regarding the election results please contact Patty Montgomery, Managing Director of Executive and Board Operations, at 703-295-6101 or pmontgomery@asce.org.

President-elect Elect
Dennis D. Truax, Ph.D., P.E., DEE, D.WRE, F.NSPE, F.ASCE

Region Directors-Elect
Region 1 John C. Folts, P.E., M.ASCE
Region 5 William L. Pratt IV, P.E., LEED AP, M.ASCE
Region 9 Kenneth H. Rosenfield, P.E., ENV SP, F.ASCE
Technical Region Kevin D. Nielsen, Ph.D., P.E., M.ASCE

Region Governors-Elect
Region 1 Danielle H. Spicer, P.E., LEED AP, ENV SP, M.ASCE
Region 2 Joseph Platt, Jr., P.E., M.ASCE
Region 3 Craig W. Bursch, P.E., F.ASCE
Region 4 Therese R. Kline, P.E., F.ASCE
Region 4 Christina L. Ammens, P.E., M.ASCE
Region 5 John F. Garner, P.E., M.ASCE
Region 5 Brian Reynolds, P.E., M.ASCE
Region 6 Rudolph A. Simoneaux III, P.E., M.ASCE
Region 6 Jennifer Sloan Ziegler, Ph.D., P.E., ENV SP, M.ASCE
Region 7 Tim C. Newton, P.E., M.ASCE
Region 7 Kensey W. Russell, P.E., M.ASCE
Region 7 Steven G. Hakes, P.E., M.ASCE
Region 8 Tor J. S. Anderzen, P.E., F.ASCE
Region 8 Fausto B. Burrel, Sr., P.E., M.ASCE
Region 9 Tapas Dutta, P.E., ENV SP, QSD, F.ASCE
Region 9 Raymond Hai Ming Leung, Ph.D., C.Eng, P.E., F.ASCE
Region 10 Panagiotis Andreas Chatzipanos, Ph.D., P.E., D.WRE, M.ASCE
Region 10 Raymond Hai Ming Leung, Ph.D., C.Eng, P.E., F.ASCE

Upcoming Events
Until further notice, all in-person ASCE NCS events have been cancelled. Opportunities for virtual events will be announced as they are planned.

Newsletter
Maria Raggousis, Editor

October 2020 Issue Deadline: September 20, 2020
To Submit Articles: newsletter@asce-ncs.org
NCS eNewsletter Archives: go to www.asce-ncs.org and view along the sidebar.
Address Changes: Call 1-800-548-ASCE, e-mail member@asce.org, visit www.asce.org, or write: ASCE – Membership, 1801 Alexander Bell Drive, Reston, VA 20191. Include your membership number.

National Capital Section

Offices (2019–2020)

Kelly Cronin, President
Mike Venezia, Vice President
Vic Crawford, Treasurer
Jameelah Ingram, Secretary
Emily Dean, Past President
Brian Barna, Previous Fast President
Maria Raggousis, Newsletter Editor
Joe Whartenby, YMF President

Norine Walker, Director
Elizabeth Wheeler, Director
Lisa Anderson, Director
Tricia Wolfbauer, Director
Shainur Ahsan, Reston Branch President

Committee Chairs
Please refer to the NCS website for a current list of NCS committees and chairs.
FE Exams During Covid-19: Most Frequently Asked Questions and Exam Day Experience

The COVID-19 pandemic has touched every corner of our lives including the FE and PE exams. In this month’s article we would like to list some of the questions regarding taking the exams during COVID-19 and what you are expected to do during taking the Fundamentals of Engineering (F.E) exam.

The most frequently asked questions about taking tests during the Covid-19 pandemic

When will test centers reopen? Why can’t I find appointment availability? Can I travel to a different state/jurisdiction to take my test? Am I required to wear a face mask? I would like to take my exam sooner. Is that possible? Why has my exam been moved to another location? Why was my exam canceled? My exam was canceled, but my friend’s exam wasn’t. Why is that? Will I get a refund if my exam is canceled? When can I reschedule my exam? Where can I find test delivery information specific to my country? I am scheduled to take my exam at a third-party test center, and I’m worried it is going to be closed. What should I do? Why was my cancellation notice so delayed? My window to certify is expiring soon. What should I do? What health and safety measures are you taking at your test centers? How can I find the latest information on test delivery during this pandemic?

The answers to these questions and more are given at Pearson VUE website: https://home.pearsonvue.com/coronavirus-update.aspx#face-masks

When approaching the FE Exam for the first time, it’s natural to feel a bit overwhelmed. The best way to build your confidence is to prepare for the test and familiarize yourself with the FE Reference Handbook 10, the only official reference material for the computer-based FE exams. Review the latest version of the handbook prior to exam day. Most importantly, familiarize yourself with the charts, formulas, tables, and other reference information provided. An electronic version will be available onscreen during the actual exam. Printed copies will not be allowed in the exam room.

Exam day experience

Once you register and know your exam date, NCEES recommends the following: First, you should plan to arrive at the testing center 30 minutes prior to your scheduled appointment. Upon arrival, a representative will provide you with a copy of NCEES-CBT exam rules for your review.

After doing so, you will be asked to provide your digital signature to confirm that you have read the rules and agreed to abide by them. Also you will be asked to provide a current government issued form of ID such as a driver’s license. Once the representative confirmed your identification and the exam that you are taking, you will be asked to provide palm vein scan and have your photo taken. Your signature, palm vein scan and photo will be stored with your exam result.

Prior to be admitted into the testing room, a representative will ensure that you have in your possession only the items that NCEES allows them to the testing room. These items include, your ID, an NCEES approved calculator and eye glasses. Most test centers have secure storage lockers on site for you to store prohibited items such as cell phones, other electronic devices and personal belongings such as a watch, wallet and bag.

Once you complete the check in process, then you report to an exam proctor who will ask you to confirm your ID by providing again your palm vein scan. Then the proctor will give you a reusable booklet and marker for scratch work. Then the proctor will review the exam rules and will escort you to the exam room and assigned workstation and launches the exam. Before starting your exam, all examinees will be required to read and agree to the NCEES’ non-disclosure agreement and complete a brief tutorial to learn how to ADVANCE to the next item, RETURN to a previous item and FLAG items for review.

The exam includes 110-questions. The exam appointment time is 6 hours long. Nondisclosure agreement (2 minutes); Tutorial (8 minutes); Actual exam (5 hours and 20 minutes) and scheduled break (25 minutes).

After completing approximately 55 questions, examinees will be prompted on screen with the option to take a 25-minute break. Examinees who wish to take the scheduled break should raise their hands and wait for the prompter to assistance. Unscheduled breaks may be requested at any time during the exam by following the same procedure. However, examinees should be aware that clock will not stop during an unscheduled break. Examinees are allowed to access their lockers during the scheduled and unscheduled breaks.

After completing the exam and a brief survey, you should raise your hands and proctor will verify that you had properly exited from exam and escort you from testing room and collect your booklet and marker. You will receive an email from NCEES within 7 to 10 days notifying you that your results are available for viewing in your MYCEES account.

And lastly, stay relaxed and confident. Always keep a good attitude and remind yourself that you are going to do your best!

Until next time,
Ahmet Zeytinci (Dr. Z.)
az@akfen.com

Dr. Z’s Corner
**Attention: Science, Technology, Engineering, Mathematics Volunteers**

The National Capital Section has been continuing to work with the American Association for the Advancement of Science (AAAS) program for STEM, which has been bringing engineers and scientists into classrooms for over twelve years.

Please consider becoming an AAAS volunteer in supporting STEM in the school districts in the DC metro area, including surrounding counties in both Virginia and Maryland. The AAAS STEM Volunteers Program, [stemvolunteers.org](http://stemvolunteers.org), needs scientists, engineers and physicians to assist K-12 STEM (Science, Technology, Engineering, Mathematics) teachers in school districts in the DC metro area during the 2020–21 school year. Due to the pandemic, it is anticipated that instruction will be virtual. We will work with our school district partners and volunteers to determine the best ways to support STEM teachers in a virtual environment.

If you care about K-12 STEM education and have time to share your knowledge with students and teachers, please send a note to bcalinge@aaas.org expressing your interest to volunteer.

---

**FGIA Virtual Fall Conference keynote speaker Chris Kuehl to forecast post-COVID-19 economic pattern changes**

Schaumburg, Illinois – The Fenestration and Glazing Industry Alliance (FGIA) is pleased to announce that Dr. Chris Kuehl, managing director of Armada Corporate Intelligence, will serve as the keynote speaker at the Virtual Fall Conference taking place October 6–8. On Tues., Oct. 6, Kuehl will present “The Post COVID-19 Economy: Ten Patterns Likely to Change.”

“An economist and forecaster for many industries, Dr. Kuehl is in a unique position to shed some much-needed light on the trajectory of the next few months as the economic picture of COVID-19 more fully takes form,” said Janice Yglesias, FGIA Executive Director. “This session will center around the multiple ways we might see change in our day-to-day business.”

Kuehl will focus on what has changed in the economy since the pandemic and the lockdown response. He will answer questions such as:

- Where do we stand as far as COVID-19 is concerned?
- Where will the economy be at the end of this tumultuous year?
- What are the expectations for the coming year, and what are the assumptions?

Per Kuehl, in most economic situations, there are three scenarios: the good, the bad and the in-between. Kuehl will share the details of these and forecast which of them is most likely to emerge.

Kuehl provides forecasts and strategic guidance for a wide variety of corporate clients around the world. He is the chief economist for several national and international organizations, such as the Fabricators and Manufacturers Association, the National Association of Credit Management, Chemical Coaters Association International, and others.

Registration for the [FGIA Virtual Fall Conference](https://fgiaonline.org) will open September 8.

For more information about FGIA and its activities, visit [https://fgiaonline.org](https://fgiaonline.org).

Your trusted industry resource, setting the standards for fenestration and glazing.
**Section’s Scholarship Trust – Your Section Voluntary Contribution Makes a Difference**

The NCS Scholarship Trust annually awards scholarships to high academic civil engineering students at the 5 universities in our Section boundary: Howard University, Catholic University, George Washington University, University of District of Columbia, and George Mason University. We need your help with this effort, and it’s easy. You will be receiving your annual ASCE membership dues request soon. On the form, the block for Section Voluntary Contribution allows you to contribute directly to our NCS Scholarship Trust. Life Members are encouraged to consider giving at a higher level with their annual renewal since they no longer pay the full dues. Your contribution will have a direct impact on the future of the Civil Engineering profession. Please be generous in your contribution – no contribution is considered too small. Other sources of funding for our Trust include: the Past Presidents Annual Contributions, Memorial Contributions, and Corporate Contributions.

---

**ASCE-NCS Committee and Branch News and Updates**

**EWRI**

EWRI Launches Webinar Series.

EWRI kicked off a monthly webinar series over the summer. The webinars are being held on the First Thursday of the month at noon. The series kicked off in June with Nate Norris and Chris Moody from AWWA discussing the regulatory and legislative landscape for PFAS. The July talk was given by Dr. Sunil Sinha from the Virginia Tech Sustainable Water Infrastructure Management Center. He discussed Smart One Water: Cyber-Physical-Social Infrastructure. In August Dr. Arash Massoudieh discussed A flexible framework for process-based hydraulic and water quality modeling of Best Management Practices.

EWRI plans to continue the webinar series for the calendar year. If you are interested in attending or have ideas for speakers contact Ken Klewicki at Klewicki_joseph@bah.com.

**Transportation Committee**

Have you heard of the DDOT Bus Priority Program?

By Norelis M. Florentino, P.E., PMP, M.ASCE

The District Department of Transportation (DDOT) Bus Priority Program was kicked off earlier this year with the goal of improving bus travel speeds and reliability across the city. The pre-COVID-19 statistics show that the Metrobuses are getting slower and ridership is falling. The Metrobus ridership has typically been about the same as the Metrorail ridership. However, during COVID-19, the Metrorail ridership has declined more significantly than the Metrobus. On June 23, 2020, Megan Kanagy, DDOT Bus Priority Program Manager, presented the program in detail at the first virtual Transportation Committee Meeting of the year. The meeting sparked the interest of many and had 149 registrants. Megan mentioned that the program is systematically advancing transit planning, engineering, and policy work across the agency. It encompasses many factors such as corridor projects, tactical / pilot projects, automated enforcement, bus lane policy, transit signal priority / queue jumps, WMATA Partnership, fare collection / all-door boarding, public outreach, and data / reporting. In addition to providing a comprehensive program background, the three main areas of focus during Megan’s presentation were the program development, Toolbox, and current projects.

The program development focuses on corridor rankings for the project pipeline and project delivery for different project types. Earlier this year, DDOT and WMATA identified 17 bus priority high-ridership corridors obtained from moveDC 2014, WMATA’s Priority Corridor Network, and circulator routes. Data-driven analysis with metrics developed by internal and external stakeholders was used to create and rank the corridor list. The metrics include a Transit Score, Equity Score, Vision Zero Score, and Land Use Score. The Transit continued on page 6
Score was modeled after the Portland Oregon Rose Lane project and has a Passenger Delay factor, which accounts for the bulk of the scoring, and a Bus Delay factor. The Equity Score carries the next highest weight and considers low-income housing density, low wage jobs, minority population, and people with disabilities. Vision Zero Score considers coordination with the Vision Zero priority corridors. The Land Use Score explains the near-term overall population and employment densities for forecasting.

The project delivery process is currently being mapped out for different project types that range from large to small. The large-scale projects involve major redesign and reconstruction. Medium scale or tactical projects consist of working within the existing curb to curb and re-allocating lanes. Small scale or operational projects encompass bus stop consolidation or projects that do not require environmental or public outreach processes. DDOT is looking at how to streamline the current methods of delivery and considering how they think about procurement. They are identifying project or design elements that take up lots of time on the environmental process side but do not provide much benefit to the bus performance side. They want to be aware of the tradeoffs so they can make smart decisions. They are also trying to decide if they should have more work-in-house or more on-call contracts. For example, HNTB has been instrumental in leading the consultant team for the program development work and they have allowed the city to take on more work.

Like in many other cities across the United States, DDOT developed a Toolbox to streamline the project delivery process, advance District-specific treatments, and communicate/educate the public. The Toolbox provides context-sensitive bus priority treatments to address common problems such as congestion, delays, pedestrian traffic conflicts, bus zone dwell time, growth in ridership, and inefficient route design. There are 5 groups of treatments that incorporate bus operation, traffic control, infrastructure, bus lane, and bicycle/bus strategies. The Toolbox helps individuals identify the best bus priority treatments for specific circumstances. For example, a congested intersection can be improved by relocating stops, implementing turn restrictions, adjusting passive traffic signal timing, prioritizing transit signals, adding queue jumps lanes, etc. DDOT’s plan is to have an agency-facing and public-facing version of the Toolbox to improve communication and discover what is working well and what is not. In addition, DDOT is creating a reference book that documents their thinking and decisions so everyone can benefit going forward.

The current projects discussed during Megan’s presentation include the H&I Street NW Bus Lanes, 14th Street NW Protected Bus / Bike Lanes, 16th Street NW Bus Lanes, K Street Transitway, and Pennsylvania Avenue SE Corridor Study. The H&I Street NW Bus Lanes project is just north of the White House and covers about 1.35 miles over the two streets. It addresses the high ridership in the area which accounts for 40% of the District bus riders. The project involves adding bus lanes to improve bus speeds from as low as 2.8 mph and slower than walking in certain areas. Some areas have over 70 buses per hour at peak times. Although this project had a quick design process of six months including a pilot period from June 2019 to September 2019, the planning phase took several years. Prior to the pilot, there was a planning study led by WMATA in 2013 and one led by DDOT that concluded in 2017. The bus lanes were made permanent in November 2019 and were painted with a red paint that cost less than $15K to improve compliance. Although, the pilot period helped to provide a better design, DDOT is now working on making the bus lanes operate better by addressing delay sources that were not previously considered. These sources consist of heavy right turn volumes and parking garages, narrow lane widths, illegal parking/loading/pick-up/drop-off, and bus layovers in the bus lane. A lesson learned on this project is that it is desirable to move out of the planning stages quickly to implement projects on a quicker timeline. Overall, this project has been successful because the project area evolved from having no bus lanes at the beginning of last year to having bus lanes that will help improve the travel time for District bus riders. The 14th Street NW Protected Bus / Bike Lanes project is a novelty for DDOT and for the 15,000 bus riders along the corridor. It will address bus speeds as low as 3.6 mph during peak times and the existing unprotected bike lanes. The project is currently under construction and the improvements encompass protected bus/bike lanes, bus stop consolidation, left turn pockets, and a pick-up / drop-off zone. The shared bus/bike lane is a design that is rapidly evolving, and it is used in Portland, Oregon. This design works well because buses and bikes travel at about the same speed and the bikes can go around the buses when they are stopped. The results will be noticeable after the 1-year demonstration period that has been allocated for this project.

The 16th Street NW Bus Lanes project is located north of the White House on a 2.7-mile high-volume corridor that has about 20,000 daily riders. The project will address the bus bunching issue along the corridor due to buses arriving every 60 to 90 seconds. DDOT desires to have evenly spaced bus arrival intervals to better serve the passengers. The project improvements consist of peak hour/peak direction bus lanes, bus stop consolidation, transit signal priority (existing), queue jumps (existing/additional), more limited stop service, and simplified patterns (in progress). The design for this project was completed in January 2020 and construction will start later this year. The K Street Transitway is the largest bus priority project ever taken by DDOT and involves a major redesign/reconstruction of K Street NW. It will have dedicated bus and bike lanes separated by curbs. The existing service lanes will be removed, and improvements will be made to the streetscape, landscaping, stormwater, and bike and pedestrian paths. The Pennsylvania Avenue SE Corridor Study project was originally planned for an unprotected bike lane, but it now has a protected bike lane on a bus priority corridor in the Capitol Hill neighborhood. The existing conditions have three travel lanes in both directions, full-time parking, and a wide median that is owned by the park service. At first glance, this project seems challenging, but the end-result of a protected bike lane will be worth the effort.

continued on page 7
Employment Clearinghouse

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 and visit our jobs page.

Education Committee
By Jameelah Muhammad Ingram, PE, M ASCE
Welcome Back! The ASCE NCS Education Committee would like to extend a warm welcome to our student members! ASCE NCS has five student chapters under its purview, including Catholic University of America (CUA ASCE), George Mason University (GMU ASCE), George Washington University (GW ASCE), Howard University (HU ASCE), and the University of the District of Columbia (UDC ASCE). Labor Day marks a transition back from summer break to business. This shift happens whether a student makes a physical return to campus or participates in virtual instruction. Either way, ASCE NCS would like to make sure that students are aware of the many resources available to them through ASCE. This organization is here to help ease the changes. Please find a guide below:

- **ASCE Collaborate**
  https://collaborate.asce.org/home
  This online resource provides an opportunity to chat with ASCE members across the globe. Post your own inquiries or give a helping hand to another with a reply of your own.

- **ASCE Student Conferences**
  Please view this link for a listing of upcoming student conferences and related competitions: https://www.asce.org/student_conferences/

- **ASCE Virtual Technical Conference**
  https://vtech.asce.org/
  As noted on the website, you’ll hear from top technical global leaders on topics from offshore wind technology to outer space and everything in between on all an innovative and interactive platform.

- **ASCE 2020 Convention (Virtual)**
  https://www.asceconvention.org/
  The ASCE 2020 Conference will be going virtual this year. Take advantage of this opportunity to log on from the comfort of your desk at home or on campus.

- **Virtual Resume Clinic**
  A virtual resume clinic will be planned for ASCE NCS students this year. Our goal will be to assist students in polishing their resumes. A checklist will be provided for your use. If you are interested in becoming a professional resume reviewer for ASCE NCS, please contact jameelah.muhmmadingram@wsp.com to sign up. More details to come!

- **Practitioner Advisors**
  Are you interested in becoming more involved with one of ASCE NCS’s Student Chapters? If so, please consider becoming a Practitioner Advisor. The role of a Practitioner Advisor is to offer support and guidance to the student chapter as they plan activities and prepare for competitions throughout the school year. Please contact jameelah.muhmmadingram@wsp.com to express your interest.

**History & Heritage Committee**

Our H&H Committee looks forward to the upcoming season. The COVID-19 Pandemic has introduced us all to a new virtual reality – video-conferencing. As we start the new season, the H&H Committee will explore the use of WebEx Meetings to conduct meetings and get folks involved. We want to revitalize the Committee and bring those who are enthusiastic about our Civil Engineering Heritage to the table to discuss and plan field trips, develop content for the Section web page, and prepare Historic Civil Engineering Landmark applications. We plan to have our first WebEx Meeting meeting in late September and will have a great time delving into our CE heritage. If you want to be involved, please send an email to and watch this newsletter for future announcements. Send your email to: Bernie Dennis (bernedennisjr@gmail.com) and Steve Pennington (steve.pennington@geo-instruments.com).

**Architectural Engineering Institute Committee**

Mark your calendars for Thursday, September 24th at 6 PM as the AEI Committee will be hosting a Virtual Planning Meeting and Happy Hour! All are welcome to explore how to get more involved in the Committee, provide input for the 2020–2021 schedule of events, or just to drop by and listen to the exciting discussions as we brainstorm how to maintain a vibrant professional organization during this unprecedented time. [Click here to register!](#)