

SECTION MEETING SCHEDULE 2020-21

The Section Meeting program for the upcoming season continues as a work in progress. Our meeting program committee is busy lining up speakers and topics for what we hope will be an interesting and informative series of meetings. It appears that virtual meetings will continue to be offered for the foreseeable future given the restrictions still in place, but we will provide updates on this as they occur. As you may have seen and experienced, the virtual format has worked well and these have been well-received. We thank those of you who have participated in them for your flexibility on this, as it has allowed us to have a meaningful program despite the restrictions. We intend to move forward with our usual full complement of both Section meetings and Technical Groups.

We do know that the main drawback of virtual meetings is the inability to interact and network as we would all do at in-person meetings. On the "plus" side, it has allowed many of us to more easily schedule to attend meetings as no travel is needed and many of us have done this sitting at our desks or our dining room tables. Also, we are recording the meetings when we are able and the presenters are in agreement, thus one can view them at a later date as well. (More information on this is provided elsewhere in this edition.)

The information we have at this point is provided below for your planning purposes. We would suggest that you use this to mark your calendar at this time and hold the dates.

In coming issues of *THE NEWS*, this information will be "fine-tuned" to provide updates as they are available. We also suggest you visit the Section website for the latest changes in our meeting program. As we have done, each month's edition of *THE NEWS* will feature detailed information on that month's meeting along with as much information as is available for the following month's meeting, and the "look-ahead" schedule will show details that are available at that time for your advance awareness. E-mail blasts will be sent out on a regular basis to advise and remind of upcoming events and registration deadlines.

These are our meetings for 2021:

2021

February – to be determined

March 11 – Maggiano's, Center City

April – to be determined

May 13 – Spring Social, Tendenza

DECEMBER MULTI-SOCIETY MEETING

Engineers' Club of Philadelphia and Numerous Technical Societies

THURSDAY, DECEMBER 10, 2020

Virtual – Presentation 4:30 PM

SUBJECT: An Air Treatment Mitigation for COVID-19

SPEAKER: Etienne Grignard, CEO, Grignard Company; William (Bill) Jordan, Former Deputy Director, EPA Office of Pesticide Programs

RESERVATION DEADLINE – WEDNESDAY, DECEMBER 9. The cost per attendee is \$5 for Engineers' Club members, \$10 for non-members.

Please register at www.engrclub.org/msm. The Philadelphia Section will NOT be accepting reservations for this meeting.

Please join the **Engineers' Club of Philadelphia** and our co-sponsoring partner societies for our annual Multi-Society Meeting. This year's presentation is a virtual event on a topic of wide interest to the engineering and technical community. Our presenters will introduce a game-changing innovation designed to mitigate the risk of spread of the COVID-19 virus in indoor environments. Currently in the late stages of expedited federal Environmental Protection Agency (EPA) review with potential approval expected by the year's end, this solution is an air treatment method with a 20+ year record of proven safety that achieves over 95% efficacy against airborne virus. This solution, developed by the Grignard Company, called "Grignard Pure," will be presented with details on its history and development, how it works, and the latest test findings that demonstrate its potential to address the challenge of indoor virus spread through airborne transmission. A question and answer session will follow the presentation.

Registrants will obtain a link to the virtual event in advance of the meeting.

The presentation is currently being evaluated for technical content. PDH credit may be available depending on the outcome of this evaluation.

JANUARY JOINT DINNER MEETING

Delaware Valley Section, American Society of Highway Engineers

WEDNESDAY, JANUARY 20, 2021

Virtual

SUBJECT: SEPTA Media/Elwyn Regional Rail Extension to Wawa

More information on this topic and the meeting start time will be provided in the January edition of *THE NEWS*. Reservations for this meeting must be made through the **Delaware Valley Section, ASHE**.

ASCE VISION

Civil Engineers are global leaders building a better quality of life.

ASCE MISSION

Provide essential value to our members and partners, advance Civil Engineering, and serve the public good.



PRESIDENT'S MESSAGE

It has been one heck of a year, hasn't it? Even so, I am proud to report that ASCE Philly has been busy with hosting another great virtual meeting in November highlighting All-Electronic tolling. Did you miss it? No need to worry as you can now view this presentation, along with all of our virtual presentations, and earn PDHs through our recently launched Virtual Webinar Library via **teachable.com**. All Section members should have received an email about accessing this Library. If you did not receive the email and believe you are a Section member, please let us know by sending us an email at info@asce-philly.org. Thanks to all our Board Members and volunteers who helped to develop this exciting benefit for our members!

Now that winter is right around the corner, we are entering the portion of our year where ASCE teams up with Engineering societies in the region to present diverse events. In December, ASCE Philly will participate in the Engineers' Club of Philadelphia's (ECP) Annual Multi-Society event. We will also co-host the Delaware Valley Section, American Society of Highway Engineers (ASHE) event in January 2021. We hope you will be able to join us at these events.

But until then, I hope everyone is able to take some time to decompress and enjoy some time with family and friends (safely and possibly virtually). I know I am feeling the fatigue of everything 2020 has presented us but I also know that some upcoming time off and (video) chatting with friends and family will help reenergize me so that I can welcome in 2021.

Stay happy and healthy!

Best,
Jen Reigle, PE
President, ASCE Philadelphia Section
jreigle@pennoni.com | 215-254-7723

MEMBERS IN THE NEWS

EARLE TIES THE KNOT...

President-Elect Briana Earle held the title of "bride" on November 6, when she joined Section Member Jeremy Pampuch in holy matrimony. The event was a private, mostly family ceremony held along the banks of Owasco Lake in New York, with what was described as "fantastic, warm 65-degree weather for the Finger Lakes region." The event exhibited an outdoor theme, as both Briana and Jeremy cherish the outdoors, and the attendees were surrounded by fall foliage along the hills surrounding the lake. The arbor fabricated by Briana's father will become a focal point as part of the landscaped yard at the new couple's home. Congratulations to Briana and Jeremy and we wish you many years of happiness and success! Thanks to **Joe Hy Photography** for the use of the photo.



cess of enlisting volunteers to help assemble the Report Card, as the update process will begin shortly. Positions that will need to be filled include category champions for each of the infrastructure categories that will be assessed (this will be determined as the effort gets underway – last time, 18 areas were assessed and graded) and support volunteers for each category to help obtain and gather data and write the narratives. For the last update, we had over 75 volunteers assisting the effort and this level of participation was definitely reflected in the overall quality and information gathered and provided for both the Report Card and its supporting materials.

If you have an interest in being part of this, or would like to get more information on the volunteer positions and how you can help, please advise **Cricket Schreppler** at cricketschreppler@gmail.com.

	2017	2020
Total Structurally Deficient Bridges	4,173	3,501
% Structurally Deficient	18.3	15.3
Deck Area Structurally Deficient	10.0	8.3
# Bridges needing repair	13,894	11,882
Estimated cost of Bridge Repairs	\$7.7 Billion	\$17.2 Billion
Rank SD Bridges as % of Inventory	4	5
Rank # SD Bridges	2	2
Rank Bridge area as % of total area	8	13

Source: <https://artbabridgereport.org/state/profile/PA>

PA REPORT CARD NEWS

An update on Bridges — over the last 3 years, the estimated cost of needed bridge repairs has increased a whopping **\$9.5 Billion**, despite overall progress towards decreasing the number of structurally deficient bridges, according to the 2020 ARTBA Bridge Report. Bridges earned a D+ in ASCE's 2018 PA Infrastructure Report Card.

A reminder on the Update — as you may be aware, the ASCE Pennsylvania Infrastructure Report Card is updated on a four-year cycle, with the next edition scheduled to be released in 2022. As reported last month, we have begun the pro-

ASCE, PHILADELPHIA SECTION OFFICERS AND BOARD OF DIRECTION—2020-21 SEASON

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Cathy Farrell, HNTB

**In accordance with our Constitution and Bylaws, only the immediate Past President will serve on the Board, and only for a one-year term. We show the most recent three Past Presidents as has become our tradition.*

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**COPY DEADLINE FOR
JANUARY 2021 ISSUE
DECEMBER 8, 2020**

YOUNGER MEMBER FORUM NEWS

Assunta Daprano, Forum Editor

Katrina Lawrence, Forum President 2020-21

McCormick Taylor

kalawrence@mccormicktaylor.com

TOOKANY/TACONY-FRANKFORD (TTF) WATERSHED PARTNERSHIP

OCTOBER 17

YMF partnered with the **Tookany/Tacony-Frankford (TTF) Watershed Partnership** to help plant over 170 trees near the Jenkintown Creek in Elkins Park, a great comeback after a long hiatus of in-person events! TTF was planning to postpone this planting project to next spring stemming from a lack of volunteers due to the COVID-19 pandemic, but YMF was able to lend a hand and keep the project on schedule.

Because of the spacing of the trees and the nature of the work, volunteers were able to maintain social distancing while getting the job done. This was a great way to spend an early autumn Saturday! A big thank you to the Partnership for having us.

ADOPT-A-HIGHWAY CLEAN-UP WITH ASHE DELAWARE VALLEY

OCTOBER 24

YMF and ASHE Delaware Valley's Young Member Committee got together for the first **Adopt-A-Highway** cleanup event in over a year. This was YMF's second community service event in back-to-back weekends and it was another smashing success! For the second week in a row we had great weather that allowed us to work hard without sweating too much.

We had 14 volunteers come out, which included both students and professionals. Working along the "adopted" segment of Bethlehem Pike, volunteers were able to socially distance and safely pick up trash along the highway. The community must have been excited to see us out there as some of them would honk their horns and wave while they passed. **Fireside Bar and Grill** was nice enough to let us stage in its parking lot as we usually do, and at the end of the day, we enjoyed some pizza, networked, and reflected on a job well done. We are already looking forward to our next Adopt-A-Highway event in the Spring!



VISION ZERO CRITICAL ISSUES SEMINAR

NOVEMBER 5

YMF hosted the **2020 Critical Issues Seminar** virtually through Zoom. The topic for this year's event was Vision Zero in the City of Philadelphia with specific focus on the implications of the coronavirus pandemic, including the Recovery Streets Proposal authored by the Bicycle Coalition of Greater Philadelphia, Feet First Philly, 5th Square, and the Clean Air Council. We were delighted to have **Lily Reynolds**, Deputy Director of Complete Streets at the City of Philadelphia; **Tara Woody**, Safe Routes to School Coordinator at the City of Philadelphia; **Erika Morgan**, planner at McCormick Taylor and Vice Chair of Feet First Philly; and **Randy LoBasso**, Policy Director at the Bicycle Coalition of Greater Philadelphia join us as panelists for this discussion.

The dialogue was diverse and comprehensive throughout, with highlights including the background as to how the Recovery Streets proposal was conceived and how the pandemic is really impacting the City's Vision Zero targets now that data points are available. Other exciting moments included a look ahead to the next Vision Zero plan, which is expected to be released this year, and the new look that's to come as the City continues to innovate and makes strides towards zero deaths on our City streets. Thank you so much to Lily, Tara, Erika, and Randy, as well as our moderator (and YMF President) Katrina Lawrence, for their participation in this panel. Also, thank you to Joe Natale and the Delaware Valley Regional Planning Commission for its generous offering to host the event through Zoom. Lastly, thank you to all the YMF members (50+ attendees!) who joined us virtually!

SECTION COMMITTEES

Our Section runs very well and it is mainly a result of the dedication and service of our many volunteers, both our Officers and Board Members as well as our various Committees. While many of you know the former group well, you may not be all that aware of the latter. Our Committees address many of our regular and ongoing issues and keep our Section vibrant and in the forefront of service to our membership. A list of our Committees and chairs for this season is provided below. We would like to thank all of these folks for their contributions and diligence in helping our Section do what it does.

Additionally, if you have a particular interest in helping the Section as a Committee volunteer, please reach out to us at info@asce-philly.org or through our Section Secretary, **Jesse Gormley** (contact information is provided on page 2).

Audit – Mohamed Elghawy

Awards – Bob Wright

Engineers Week Hall of Fame Recognition – Ruben David

Budget and Finance – Joe Natale

Civil Engineers in Government – Jeanien Wilson

College Scholarship – Scott Cepietz

Communications – Jesse Gormley

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Humphrey Fund – John Zarsky

Membership – Andrew Bechtel

Mural – Angelo Waters

Nominating (for Board Positions) – Jen Reigle

Program – Briana Earle

Venue Coordination – Troy Illig

Check-in/Name Tags – Nha Truong

Society Relations – Cathy Farrell

Region 2 Director – Jack Raudenbush

Region 2 Governors – Greg Kuklinski, Carol Martsolf, Joe Platt, Pat Sullivan

Region 2 Younger Member Representative – Joe Natale

PA Council – Cathy Farrell, Bob Wright

Legislative Affairs – Spencer Finch

Spring Social – Troy Illig

Subsidiary Groups – Mohamed Elghawy

Construction Management – Bob Wright

Delaware Valley GeoInstitute – Russ Preuss

Environmental and Water Resources – Eric Lindhult

Structural Engineering Institute – James Deeney

Transportation & Urban Development – Bill Thomsen

Younger Member Forum – Katrina Lawrence

TIME TO PAY YOUR DUES (AGAIN...)

It's that time again—by now you should have received reminders in your e-mail in-box for payment of your dues for 2021. Even though it probably seems as if you just paid this, it's renewal time once again. Either way, please don't forget to pay your ASCE and Philadelphia Section dues (both are due on January 1, with some incentives currently being offered for early renewal).

Keep in mind that your membership entitles you to be eligible for ASCE Member Advantages. These encompass benefits in several member discount programs including professional liability insurance, life insurance, credit cards and banking services, and rental car discounts. ASCE always looks to negotiate the best deal for members. Similarly, when members save through these programs, ASCE earns revenue that helps keep your dues rates as low

Continued on page 7

NOVEMBER SECTION DINNER MEETING

November 12, 2020

Virtual/Zoom

Pennsylvania Turnpike All-Electronic Tolling Effort

By Robert Wright, Editor

It was a dark and somewhat stormy November evening (sounds like the start of a bad novel), but with no one having to travel outside to a meeting location for our November meeting (thanks to the technological wonder of Zoom), about 70 attendees gathered in front of their warm computer screens for our second “dinner” meeting of the season (and only if they brought dinner with them to the screen was it that). **President Jen Reigle** opened the session with a few announcements and proceeded to cite the **Villanova University Student Chapter**, which was featured at this meeting. She introduced Chapter President **Hannah Booz** and Class of '22 Representative **Celia Pastore** who tag-teamed a short presentation on what the Chapter was up to these days, which was informative and interesting.

Following this, President-Elect **Briana Earle** brought the evening’s featured speaker, **Rob Bistline**, Vice President of HNTB and Project Director for the Pennsylvania Turnpike Commission’s (PTC) efforts to move toward all-electronic tolling (AET), into the event for his presentation. He began by noting that cashless tolling has the byline “no cash, no stopping, no worries,” and PTC is looking to have this fully implemented across its entire system in the next 8 years. He summarized an overview of the evolution of tolling systems, from the traditional cash payments and toll collectors in tollbooths, to coin baskets and automated payment methods/machines, to transponder-based programs such as EZ Pass. Because of the complexities of PTC’s toll rate schedule, cash transactions at tollbooths can be lengthy and this method can process between 250-400 vehicles/hour, which can lead to traffic backups at busy interchanges. EZ Pass has been able to greatly increase this throughput at toll plazas and has additionally brought in capabilities such as express lanes and cashless interchanges. PTC’s overall goal is to go to a cashless system which will have as a primary benefit barrier-free non-stop travel.

Mr. Bistline outlined the elements of a cashless system, which is basically the same as AET. It consists of EZ Pass readers, cameras to obtain license plate images, and pavement sensors to classify vehicles. AET got its start in 2009 in Texas and adjacent states and has spread to be used by 38 toll bridge/road agencies in 14 states at present. He explained several compelling reasons for the switch to AET. It can enhance safety, since toll barriers require a great deal of multi-tasking on the part of vehicle operators as they find their toll tickets and cash, seek the proper open toll lane, change lanes/weave, and in general may be driving while distracted. There have been observations of unsafe drive behavior and rear-end collisions which also put the toll collectors at risk. With vehicles not having to stop to obtain toll tickets or pay tolls, travel times and congestion are reduced and environmental and similar ancillary benefits are often realized. EZ

Pass lanes can be retrofitted to use existing toll lanes with the booths intact and can thus be fairly easily implemented.

The nature of interchanges can change if toll plazas are no longer needed as well. Mr. Bistline showed examples of how pavement areas can be reduced without the need for large, wide toll plazas. Interchange configurations can be varied as well, and the utilization of types other than the “standard” PTC trumpet can help reduce construction costs by elimination of overpasses and wide pavements. There is also the possibility of more PTC interchanges in the future with the reduced capital costs associated with them. He compared the costs of the recently-completed Neshaminy Falls toll plaza (\$88 million) to an AET installation at the Findlay Connector (\$5 million). A total of 17 new interchange locations have been requested by various parties and are being evaluated. A new interchange can bring with it increased development opportunities and economic benefits, and Mr. Bistline showed how the PA 29 EZ Pass-only interchange in Chester County has triggered \$2.5 billion in private investment in its immediate vicinity.

AET offers a number of operational efficiencies. Mr. Bistline showed that a cash transaction can cost eight times more to process than one with EZ Pass. There is a customer convenience element as well, which has been recognized by roughly 85% of PTC users who have opted for EZ pass transponders. Some challenges and issues are associated with AET, however, as it represents a business evolution as well as a technological one, and has significant infrastructure changes and associated capital costs for it to be implemented. He noted that the revised toll plazas need to have entry and exit zones for emergency response and traffic diversion as well as for those who may have entered the system mistakenly and wish to turn around. PTC will be revising the “toll zone” to have transponder gantries between interchanges and there are geometric preferences and requirements for gantry placement that must be considered, with fares to be based on segments traveled rather than the interchange-to-interchange rates currently charged. The availability of uninterrupted power as well as back-up generation is a must as revenue collection is dependent on it. Gantry placement must also take into account future capital improvement plans such as roadway widening and future interchanges that may need to be accommodated.

Mr. Bistline reviewed the effects of removal of the “metering” capability of toll plazas on downstream traffic, and analysis has indicated that there is no detrimental effect to this traffic as ramp capacity will continue to be the control factor at the interchanges. He noted that the AET systems are proprietary and governed by performance specifications. This has prompted a move from PTC’s traditional 11-vehicle-type catego-

ries by weight to a simpler axle-count and classification as high or low profile. He added that PTC has undertaken a considerable outreach and education component of AET, to address the changes and handle such things as having no toll collectors to provide directions or information, as well as the impact on PTC employees who will have changes in their jobs and duties with the new method. As a result of the pandemic, all toll collectors were removed from the facility in spring 2020 and cash payments are no longer available on the system, thus effectively PTC is cashless at this point and users are billed if they do not have EZ Pass.

AET has been gradually deployed on sections of the PTC system since 2016 and Mr. Bistline provided the timeline of current installations. Six installations are currently in operation and one will be brought on-line in 2021. The eastern section and the Northeast Extension will be all AET by 2024, followed by the central section in 2026 and the western section in 2028.

Several insightful questions were posed by the attendees and ably answered. President Reigle thanked Mr. Bistline for his informative presentation and concluded another successful Section meeting.

KEEP AN EYE OUT: NEW WEBINAR LIBRARY COMING SOON!

Our Section is working on a new Webinar Library initiative, in partnership with Teachable.com. This is the first of several announcements with information on what to expect from the initiative. Future announcements will include instructions on how to use this, a helpful FAQ, and more!



Teachable.com is an online platform where our Section will upload our recorded PDH-worthy webinars, which can be watched at one's own pace and time to earn your PDH. There will still be a delay from the live webinar to its availability online, so don't miss the chance to ask questions at the live event!

Each active member of our Section will be automatically enrolled and will receive an email from **Teachable.com** in the coming weeks that indicates his/her addition to this program. If your ASCE email address hasn't been used to create a **Teachable.com** account, you'll also receive instructions on how to do so.

These webinars will be provided for free to all dues-paying members, as an added benefit of being part of our Section. They will also be available for purchase by non-members, for the same price as the live webinar.

We're very excited to bring this Webinar Library to our members. Keep an eye out in future emails for more information!

NCEES MILESTONE – 100 YEAR ANNIVERSARY

Just in case you needed to know...

The National Council of Examiners for Engineering and Surveying (NCEES) is a national nonprofit organization dedicated to advancing professional licensure for engineers and surveyors. NCEES develops, administers, and scores the examination used for engineering and surveying licensure in the US and abroad. It also facilitates professional mobility and promotes uniformity of the US licensure processes.

This year NCEES is celebrating its 100-year anniversary. Below are a few notable moments in NCEES history that were recognized in the most recent edition of "Licensure Exchange," NCEES's publication for licensure of engineers and surveyors.

The first Council meeting was held on November 8, 1920 in Chicago and was attended by 10 state licensing boards.

The current Council's members are 69 engineering and surveying licensing boards from all 50 states, the District of Columbia, Guam, Northern Mariana Islands, Puerto Rico, and the U.S. Virgin Islands.

The first Fundamentals of Engineering (FE) exam was offered in Spring 1965.

The Fundamentals of Surveying (FS) exam was first offered in Spring 1973.

The initial Principles and Practice of Engineering (PE) exam was offered in Fall 1966, with separate exams for chemical, civil, electrical, and mechanical engineering.

The Principles and Practice of Surveying (PS) exam was initially offered Spring 1974.

Aeronautical/aerospace, ceramic, manufacturing, software and structural I/II (replaced with 16-hour structural) exams have all been offered and discontinued. Software engineering had the shortest run, beginning in spring 2013 and ending in spring 2019.

Thanks to the Delaware Association of Professional Engineers (DAPE) for this information.

DVGI 2020-21 GEOTECHNICAL PROJECT OF THE YEAR COMPETITION

Our Section's Delaware Valley GeoInstitute (DVGI) is excited to announce the 2nd Annual DVGI Geotechnical Project of the Year competition! Entries for this program will be accepted through April 1, 2021. All submissions will be featured in DVGI's newsletter, and the winner will be announced at DVGI's May 2021 meeting. The project submission template can be downloaded from the DVGI website (www.dvgi.org). We hope that you will consider sharing the details of your recent project successes with us!

Please contact **Theresa Loux** for more information or if you have any questions on this — tloux@aeroaggregates.com; 610-447-8900.

NEWS FROM NATIONAL

ASCE Welcomes Briaud as New President at Virtual Convention

In a ceremony unlike any ASCE has seen before, Jean-Louis Briaud assumed the role of 2021 Society president on October 29. He accepted the presidential pin and gavel from outgoing President K.N. Gunalan – in a trick of digital technology – during the annual membership meeting as part of the ASCE 2020 Convention, hosted virtually this year because of the COVID-19 pandemic.

"There's no doubt that I would have preferred to meet in person and get the gavel from Guna directly and give him a hug," said Briaud. "But it was not possible. That's what my mother was just telling me – 'This darn virus; I miss my hugs!' But you accept it and do the best you can with what you have, and hopefully we'll get back together in person soon."

Briaud attended the virtual event from his office at Texas A&M University, where he is a distinguished professor, addressing membership, "You've just handed me a 168-year-old jewel called ASCE." He likened his leadership approach to the way he plays his favorite sport. "I play tennis, and one thing that helps me is learning that you can only play the next point," Briaud said. "If you try to think too many points ahead, you usually don't do well. You can only play one point at a time."

One of those points no doubt will be communicating with members. Briaud emphasized communication during his campaign in 2019, and he helped bridge gaps during his year as president-elect, helping organize a summit between ASCE institutes and regions, as well as convening a student presidential group.

He will also launch a regular "town hall" event for members to ask the ASCE president questions about the Society – held every first business day of the month, beginning next week. "The role of ASCE president is a fantastic honor and responsibility," Briaud said. "I'm really pumped up, no doubt. I look forward to working with everybody to build upon the good work that's been done before me."

Gunalan now assumes the role of past-president. Meanwhile, Dennis Truax was installed as 2021 president-elect at the annual meeting, along with five new directors.

Convention Goes Virtual

The Convention was not in Anaheim, as originally planned, but instead presented as a virtual event, similar to the ASCE Virtual Technical Conference in September and other Society events throughout the year.

Much of the regular Convention programming continued – just in a digital form. Jacob Ward kicked off the Convention with an opening plenary talk about artificial intelligence and the disruptive technologies that will shape the 21st century.

The Industry Leaders Forum provided



attendees with an in-depth look at the new Future World Vision Mega City 2070.

And the annual Celebration of Leaders Lunch ... OK, the Celebration of Leaders Lunch did not include lunch this year, but it did honor the 2020 class of Distinguished Members and Society award winners, complete with video acceptance speeches.

Attendees could interact with speakers in special Q&A rooms or by posting questions in the session forums. The usual networking moved to direct messaging and daily happy hour events.

A new Code of Ethics, fully revised for the first time since 1974, was approved by the Board of Direction.

National ASCE Day – in case you missed it...

Happy ASCE Day! ASCE was founded on November 5, 1852, and this year marks our 168th anniversary. Various events and activities were conducted to commemorate what has grown to become a worldwide community of civil engineers.

ASCE Day is a celebration of the rich history, collective impact, and limitless future of our profession. ASCE members are devoted to serving the public good every single day. It is a day to celebrate the day we were founded and reflect on the joy and pride of being civil engineers.

Civil Engineering Is 90!

Civil Engineering magazine was launched 90 years ago. The inaugural issue, from October 1930, included an introductory letter to ASCE members. The magazine was conceived as a way to present information of importance to members in a more readable style than the Society's compendium of papers, called Proceedings, had done. The publication has evolved over the decades in its approach, style, and objectives and has won more than 200 awards for excellence in editorial and design achievements. Its mission today is to present significant news, events, trends, research, advice, and innovations of interest to civil engineers of all subdisciplines; showcase the extraordinary, creative, and socially important achievements of civil engineers worldwide; and foster enthusiasm and respect for both the profession and ASCE.

(Not that this is a contest, but you may notice that *THE NEWS* is a wee bit older, having its first edition published in November 1928...)

N-ASCE*

IMPATIENCE: WHY WE DON'T WANT TO WAIT, AND WHAT WE CAN DO ABOUT IT

As evidenced by pictures of Americans from all across the country, wherever you voted this year, there is a good chance you needed to be ready to wait. Waiting at the polls, at the grocery store, and in traffic, Americans are weary of waiting in today's exasperating times. However, even before the coronavirus pandemic hit, we spent an estimated two years of our entire lives waiting in lines.

With COVID-19 cases rising, it is fair to say many people can't wait for things to get back to "normal." But as Barry Petersen found out, impatience may be more harmful than some would expect. "You know, there was an interesting study where they gave people the choice to sit alone and get bored, or give themselves painful electric shock. And about 70% of men chose to give themselves painful electric shocks versus sit alone and get bored," researcher Amit Sood said. "People do not like to be controlled. People do not like uncertainty."

Dr. Sood founded a department that researches impatience at the Mayo Clinic in Rochester, Minnesota. Before the coronavirus pandemic hit, he spoke to Petersen about why humans "don't like to get bored." As he explained, people are "designed to be impatient. When little babies are born, they don't just wait for you to clean their diapers, you know? They cry," Sood said. "When was the last time you really preferred a slow elevator, or you loved, you know, slow internet connection?"

It turns out, how we handle ourselves in these uncertain times comes at a price. Impatience is not simply the opposite of patience, Sood explained. Rather, the absence of patience brings anxiety, illness, injury, loneliness — and even death. "An episode of explosive anger, stress or impatience can increase your risk of heart attack and sudden death by two to eightfold for the next few hours," he said.

Impatience, or a lack of patience, can even have a long-term effect on one's DNA. "If we were to take your blood sample and measure your... telomeres, which are at the end of chromosomes, the shorter they are, the smaller they are, the older you are. And people who are impatient have shorter telomeres," Sood said.

Stress is another negative emotion related to impatience. To see its effect on the average American, Petersen took the Mayo Clinic stress test, which is designed to simulate the stress of everyday life. The test includes activities such as squeezing a grip, and submerging a hand in ice-cold water for three minutes. Petersen's results showed dramatically higher blood pressure and changes to the heartbeat. Dr. Michael Joyner, who oversaw his test, explained that Petersen's "big rise" in blood pressure was tied to being in "imposed situations, where you weren't in control." Joyner agreed when Petersen compared it to the feeling of "being on the phone trying to get

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customer service... where you feel like you're endlessly waiting." He said it could "absolutely" have the same effect on one's body. "People have a very hard time understanding what they do and don't have control over," Joyner said.

While one might be inclined to feel like the world is out of control, especially at the current time, Dr. Sood said it was important to remember the ability to control oneself. "If you choose to be patient, you are helping yourself. You're living longer and happier. And you're helping your loved ones. Being patient is a choice," he said. Another word Sood said would help us through the pandemic: Resilience. "You do not have any bullets, you do not have any swords. You can't fist-fight with this virus," he explained. "You can empower your billions of immune cells to fight with this virus. And when you are resilient, your immune cells are stronger in waging that war."

Boosting resilience could be as easy as a walk in the park — something writer Florence Williams proved to be a literal reality. "The science is pretty clear on this," Williams explained. "Even after just 15 minutes of walking in a green space or a park, our blood pressure drops a little bit, our heart rate slows down, and even our stress hormones like cortisol lower." Williams traveled the world writing about how nature can help us master impatience and make us healthier. She said there are "many elements" of nature that people respond to. "It boosts our moods very dramatically," she added.

It is not surprising that the frustration of lockdowns quickly gave way to people flooding the outdoors when they could. People like psychologist Jane West took it to new lengths with the Japanese-invented practice of "forest bathing." Forest bathing is essentially hiking in slow motion. "The benefit of slowing down is that your life isn't passing you by," West said. West, who leads forest bathing sessions in the Colorado Rockies, said being in a forest and its "wonderful smells" allows people to "be lost in this moment as if nothing else exists. I know that's so hard to find these days," she said. "But it is doable, it's reachable — and I do this because it gives me those moments."

While the pandemic may not be ending anytime in the near future, Dr. Sood insists we can turn our impatience to good use, if we really want to: "There is tremendous opportunity during this pandemic to rise because of it."

Thanks to CBS Interactive for this information.

*N-ASCE – Not always something concerning Engineering...

TIME TO PAY YOUR DUES

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as possible. Please check [asce.org](https://www.asce.org) for the details on these offers and programs.

There are additionally a number of free eLearning Webinars available to help you develop critical career skills, with topics covering a broad range of technical interests, leadership development tools, and key member programs. Many of these offer professional development hour (PDH)

HOLD THESE DATES

ENGINEERS WEEK EVENTS SCHEDULED

The Engineers' Club of Philadelphia, through its Delaware Valley Engineers Week Committee, will cite Engineers Week 2021 from February 18 through February 27. We have traditionally extended our local celebration beyond that recognized by National Engineers Week to include our kickoff event.

Engineers Week in the Delaware Valley will officially begin with the Engineers Week Opening Dinner on Thursday, February 18 (two days before National E Week begins). At this event, we will introduce and formally induct the Delaware Valley Engineer of the Year and Delaware Valley Young Engineer of the Year, as well as highlight the various contributions of Engineers and Engineering students. All Engineers Week award and scholarship recipients will be cited at the Dinner.

The Young Engineers Social will be conducted on Tuesday, February 23. This is a networking and social event to cite the newly-inducted Delaware Valley Young Engineer of the Year.

Also, our Engineer of the Year for 2021 has been selected—our own Past President Bill Thomsen. Please see the separate article on this.

Please note this information in your calendar and plan to participate. More details on venues and pricing will be included in future updates. It is intended to conduct these events as in-person activities and this will be subject to restrictions and guidelines on social distancing as they are in effect at the start of 2021. A decision will be made at that time and information will be provided on the events accordingly.

Please visit the Engineers' Club website, www.engrclub.org, for more information and updates.

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We would like to thank our Section Sponsors for their ongoing financial commitment to and support of our Section. Thus far this season, we have 13 firms participating.

Sponsor logos are displayed in a special Sponsors section of our website. Additionally, we provide direct links to sponsors' own websites so prospective employees can review all available and up-to-date positions. We also offer sponsors the opportunity to have a "spotlight" article in an edition of THE NEWS as well as service as a sponsor of one of our monthly dinner meetings.

If you have an interest in joining our sponsorship program, there's still time to be part of this season's group. Please contact Bob Wright at newseditor@asce-philly.org for more details.

credit that you may need for your license renewal. Often these PDH's are valid in states such as Florida and New York, which are not all that easy to obtain given those states' pre-approval requirements. You are able to take up to 10 free PDH courses at your convenience, so this is indeed a valuable benefit.

Your dues are vital to the support of our Section's activities. We appreciate your ongoing support.

THOMSEN ELECTED DELAWARE VALLEY ENGINEER OF THE YEAR

Past Section President

William T. Thomsen has been elected as the 2021 Delaware Valley Engineer of the Year, following his nomination for this honor by our Section. Bill serves as the Senior Vice President and Chief Operating Officer of National Services for Urban Engineers, Inc., where he is responsible for the operations of all offices and services throughout the firm's national geography. He also serves as the President and Chief Executive Officer of Urban's related company in New York. Additionally, he serves as principal for overseeing "Mega Projects" program management services. He is a member of the firm's Board of Direction and the treasurer of the corporation.



Bill began his career at Urban in the early 1980's working on the design of a Railroad Midway Storage Yard for the major Philadelphia rail program at the time, the Center City Commuter Connection. He moved on to the construction management of the Connection, which was later recognized by ASCE as its Outstanding Engineering Achievement (1985). He has served in key roles in the growth of Urban's program management division and is a national leader in the management of large-scale projects. He has been the principal and program manager on Urban's efforts on New York City's high-profile One World Trade Center, East Side Access, and Second Avenue Subway projects. The latter two are among the largest public works projects built in America. He has significant national experience with major capital improvement projects, from planning through construction. He is a recognized expert by the Federal Transit Administration and the Federal Railroad Administration, as well as by many transit authorities across the country. A registered Professional Engineer in Pennsylvania and three other states, his extensive experience encompasses the management and engineering of major infrastructure projects, including tunnels, railways, electric traction power, and transportation systems.

Bill has been an active member of our Section for many years and has served in numerous capacities as a Section officer and Board member, culminating in his term as Section President in 1994-95. He continues to lead our Transportation and Urban Development Technical Group (now the T&DI, Philadelphia Chapter). He was recognized as our 2018 Philadelphia Civil Engineer of the Year. He is additionally a member of the Engineers' Club of Philadelphia, the Construction Management Association of America, the Women's Transportation Seminar, the American Public Transportation Association, the American Public Works Association, and the Society of American Military Engineers.

When Bill is not traveling nationally for Urban, he enjoys not taking himself "too seriously" and spending time with his wife Kim, and their family at the beach, running family marathons and Broad Street Runs, and playing golf and pond hockey with his son and friends.

We are proud to congratulate Bill on this honor.