



PHILADELPHIA SECTION AMERICAN SOCIETY OF CIVIL ENGINEERS Web site: http://www.asce-philly.org National ASCE Central Number 1-800-548-ASCE • Toll Free

The Sidney Robin Memorial Newsletter of the Philadelphia Section ASCE

Vol. 90-5

Our 105th Year

January 2018

SECTION MEETING SCHEDULE 2017-18

The Section Meeting program for the remainder of the season has being finalized at this point. Please mark your calendars for these dates. More details will be provided in the upcoming editions of *THE NEWS* as well as our e-blasts and website.

March 8 – Maggiano's Little Italy, Center City Longwood Gardens Promenade/Fountains Rehabilitation

April 12 – Multi-topic meeting/breakout sessions. Topics/location being finalizedMay 3 – Spring Social, SkyPhiladelphia, Center City

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.

THANKS TO OUR SPONSORS

As we approach the midpoint of the season, we note that there are 15 firms participating in our Section sponsorship program. We extend our special and collective THANKS to each sponsor for their financial commitment and support.

Sponsor's business cards are printed in each edition of *THE NEWS*. Their logos are displayed in a special Sponsors section of our website, where we provide direct links to their own sites 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*.

If you have an interest in joining our sponsorship program, please contact **Bob Wright** at **newseditor@asce-philly.org** for more details.

Anyone without a sense of humor is at the mercy of everyone else.

- William Rotsler

JANUARY JOINT DINNER MEETING

American Society of Civil Engineers, Philadelphia Section American Society of Highway Engineers, Delaware Valley Section

WEDNESDAY, JANUARY 17, 2018

Radisson Hotel/Valley Forge Casino, 1st Avenue and Gulph Road, Valley Forge, PA Cocktails 6:00 PM, Dinner 7:00 PM, Meeting Presentation 8:00 PM

COST: \$40 through January 11 (\$25 for government employees and students), \$50 January 12 and after and at the door

SUBJECT: The Delaware River Joint Toll Bridge Commission's Scudder Falls Bridge Replacement Project

SPEAKERS: **Roy W. Little, PE**, Chief Engineer and **Kevin M. Skeels, PE**, Assistant Chief Engineer, Delaware River Joint Toll Bridge Commission (DRJTBC)

PLEASE NOTE – RESERVATIONS MUST BE MADE THROUGH DELAWARE VALLEY SECTION, ASHE. The Philadelphia Section will NOT be accepting any reservations for this meeting. Reservations can be made as follows:

BY MAIL – please send your check with the names of attendees to **Delaware Valley Section ASHE**, c/o Contractors Association, 1500 Walnut Street, Suite 1105, Philadelphia, PA 19102.

BY FAX – please fax the names of attendees to the **Contractors Association**, **215-546-2259**, with payment to follow.

BY E-MAIL – please e-mail the names of attendees to **Samantha Schultz (sschultz@caoepa.com)** or **Diana Perez (dperez@caoepa.com)** with payment to follow.

BY PAYPAL - visit delvalley.ashe.pro for details.

Payment will be accepted at the door with no penalty for faxed and e-mailed reservations received before the RSVP deadline. "Express" self-service registration is available for those using PayPal, which will allow you to skip the registration line.

We encourage you to reserve ahead to ensure a place at the meeting. Walk-ins will be accepted on a space-available basis. THERE IS NO GUARANTEE THAT SPACE WILL BE AVAILABLE IF YOU DO NOT RESERVE A SPACE. This has always been a popular meeting and a significant turnout is expected.

The existing Scudder Falls Bridge, which carries I-95 over the Delaware River, was completed in 1959 and opened to traffic in 1961. The bridge and its adjoining interchanges and highway segments, have not been substantially improved since they were constructed. The National Bridge Inventory lists the bridge as "functionally obsolete" due to concerns with capacity, roadway geometry, and safety deficiencies. The bridge is nearing the end of its useful lifespan and is in need of replacement.

The bridge is a heavily used commuter crossing. The bridge's owner, DRJTBC, in cooperation with the Federal Highway Administration, the Pennsylvania Department of Transportation, and the New Jersey Department of Transportation, has contracted to replace the aging bridge, reconfigure

Continued on Page 2

FEBRUARY JOINT DINNER MEETING

American Society of Civil Engineers, Philadelphia Section Women's Transportation Seminar, Philadelphia Chapter

The details of our February meeting, which will be a joint effort with the Women's Transportation Seminar, Philadelphia Chapter, are being finalized as of this printing. More information will be provided in the February edition of *THE NEWS* and in upcoming e-mail blasts.



PRESIDENT'S MESSAGE

Happy New Year!

You can tell it's winter time when ASCE takes a pause from our regular section dinner meetings and teams up with other societies. December's multi-technical society meeting on "Building the National Museum of African American History & Culture" (thanks to the Engineers' Club of Philadelphia for organizing) catered to those Civil Engineers who work in the "vertical" as someone whose career began in highways. I'm excited for our lanuary 17th

world. Personally, as someone whose career began in highways, I'm excited for our January 17th dinner meeting where we team up with the American Society of Highway Engineers to learn about the Scudders Falls/I-95 Bridge Replacement Program.

Although it may appear ASCE has taken the winter off, that couldn't be further from the truth. The Philadelphia Section, along with the three other ASCE Sections in Pennsylvania, officially kicked off the effort to update PA's Report Card on Infrastructure. This PA Report Card is similar to the national report card (www.infrastructurereportcard.org) released in 2017, except ours will focus on infrastructure exclusively in Pennsylvania and will come out in 2018. The report card is the greatest advocacy tool Civil Engineers have to explain to the public, elected officials and media the status of our infrastructure.

For this report card to be a success, we're looking for volunteers (experience levels can vary from college students to life members). We're in need of help for the following categories:

- Transit Passenger Rail Solid Waste Schools Freight Rail Stormwater Aviation
- · Levees · Inland Waterways · Ports · Hazardous Waste

Volunteers can anticipate a 4-8 hour/month commitment from January to June with most of the work occurring on your schedule. If you're interested in helping with the research, analyzing and writing, please contact **Cricket Slattery** at **cslatte1@gmail.com** and let her know which category you'd like to help with. If you have questions about the report card, please contact me at **cgfarrell@hntb.com**.

Also, it's hard to believe, but we're already thinking about our slate of board members for the 2018/2019 season. If you're interested in being on next year's board, please contact **Troy Illig** at **Troy.Ilig@wsp.com** by **February 15th**. I contribute my strength and depth of my professional network to my volunteer efforts over the years with ASCE. It has also provided me memorable exposure to decision makers that I may have not had otherwise (like this past month when **Jeff Knueppel** recognized me from the November meeting and gave up his Doylestown Line train seat for me). My involvement with ASCE has also let me practice business skills in a supportive environment. I hope that each of you will volunteer, whether it's with ASCE or another professional society organization.

Government Relations Update – This month I came out of my shell, met my county commissioner and started up conversations with staffers of elected officials. The first occurrence was at the GVFTMA's Mobility Summit when I had the pleasure of speaking with a staffer from US Senator Bob Casey's office. The second occurrence was at an event for Montgomery County Commissioner Ken Lawrence, where I spoke with him and staffers from State Representative Donna Bullock's office. Through these interactions, I practiced my message of infrastructure to a non-technical audience.

I hope you've been challenging yourself monthly to become more involved with government relations. If not...maybe it can be your new year's resolution.

Sincerely, Cathy Golata Farrell, P.E. President, ASCE Philadelphia Section cgfarrell@hntb.com | 610-290-5108

JANUARY DINNER MEETING

Continued from Page 1

and/or reconstruct its adjoining interchanges, and make corresponding improvements along the I-95 approaches in New Jersey and Pennsylvania. The total project area is 4.4 miles, consisting of the I-95 segment extending from the Route 332 interchange (Yardley-Newtown Road/Newtown Bypass) in Pennsylvania to the Route 579 interchange (Bear Tavern Road) in New Jersey. The project has a duration of 4.5 years.

The project will replace the current congestionprone, functionally obsolete bridge with a dualspan structure carrying six thru-traffic lanes (three in each direction) and three auxiliary lanes (two northbound, one southbound) for traffic merging on and off of the bridge. Adjacent interchanges in Pennsylvania and New Jersey will be reconfigured to enhance traffic movements and safety. A pedestrian/bicycle walkway will be provided on the new bridge's upstream side, connecting the recreational canal towpaths in Pennsylvania and New Jersey. Infrastructure for all-electronic tolling (AET) and highway-speed toll collection will be installed along the new bridge's southbound lanes through EZPass tag readers and high-speed video cameras for license-plate billing.

Take your work seriously but yourself lightly.

– C.W. Metcalf

ASCE, PHILADELPHIA SECTION OFFICERS AND BOARD OF DIRECTION-2017-18 SEASON

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Josephi Flau, Traffic Flainning & Design, Inc.

*2nd and 3rd Past Presidents are non-voting members.

In addition, we have a number of Committees which handle various activities. Please visit our website for more information on how you can serve on one or more of these.

President—Cathy G. Farrell, PE

Department Manager, Transportation HNTB, Inc. 1650 Arch Street, Suite 1700 Philadelphia, PA 19103 610-290-5108 cgfarrell@hntb.com

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PUBLICATIONS COMMITTEE Editor of THE NEWS Robert Wright

Editorial Assistants Lindsay Chateauvert, Assunta Daprano Section Outreach Coordinator Briana Earle

SEND COPY TO: ASCE, c/o Urban Engineers, Inc. 530 Walnut Street Philadelphia, PA 19106

> COPY DEADLINE FOR February 2018 ISSUE January 19, 2018

YOUNGER MEMBER FORUM NEWS

Lindsay Chateauvert, Forum Editor Nha Truong, Forum President 2017-18 Philadelphia Water Department 1101 Market Street Philadelphia, PA 19107 nha.truong@phila.gov

DELAWARE RIVER CLEAN UP NOVEMBER 4

Nick Kirn, Joe Natale, Lauren Davenport, and Pete Bamford from YMF joined United by Blue, Delaware River City Corp., Philadelphia Water Dept., The Philadelphia Wooden Boat Factory, and Honeygrow to participate in Love Your Park Day! The groups spent the day cleaning up the K & T Trail along the Delaware River, collecting a total of 3,085 lbs of trash/ recyclables! It was great opportunity to discover this hidden gem in Northeast Philadelphia and to help continue to keep the trail beautiful on Love Your Park Day!



YMF PANEL EVENTS AT VILLANOVA & DREXEL

NOVEMBER 6 / NOVEMBER 8

Villanova University's ASCE Student Chapter hosted members of YMF for a panel discussion on "Paths to a Successful Career". Panelists Caroline Voigtsberger, Joseph Natale, Nha Truong, Scott Cepietz, and Belinda Lester answered questions pertaining to their professions and provided career advice to an audience of aspiring Engineers at various undergraduate levels. Later that week, Drexel University's ASCE Student Chapter held a panel discussion on "Job Search Preparation", led by members of the YMF. Panelists Eammon Farley, HuYoung Kim, Joseph Natale, and Katrina Lawrence shared their knowledge and experiences with the packed room of Engineering students as they chowed down on pizza!

Both events were great opportunities for students to learn from successful Engineers, engage with YMF members, and share their hardearned knowledge with the next generation. The YMF would like to thank the panelists and the ASCE Student Chapters for their successful outreach events!

If you are interested in volunteering for future panel discussions at local universities, please contact YMF College Contact Co-Chairs, Belinda Lester (blester@langan.com) or Jacob Nichols (jnichols@pennoni.com), for more information.

PHILABUNDANCE EVENT NOVEMBER 21

Several members of YMF went to the Philabundance Hunger Relief Center in South Philadelphia to help sort recently donated food in preparation for the Thanksgiving holiday. Members primarily worked in the facility's refrigeration area, sorting and packaging 10,000 lbs of perishables for distribution. Everyone had a great time and left feeling like they made a difference. Thanks to everyone who volunteered and to our YMF Community Service Co-Chairs, **Lauren Davenport** and **Nick Kirn**, for organizing the effort!

YMF has a proud history of serving the Philadelphia community through Philabundance and has made charitable donations numerous times, both in the form of funds raised from the Winter Social and canned goods from our CANstruction effort. It was great to add a donation of our time to that list. We thank Philabundance for all they do for Philadelphia and look forward to working with them again in the future!



K-12 OUTREACH AT FOX CHASE ELEMENTARY November 28

YMF's K-12 Outreach hosted its second event of the 2017-18 school year with a visit to Fox Chase Elementary School in Philadelphia. Outreach Co-Chairs, Assunta Daprano and Caroline Voigtsberger, were joined by volunteers Nik Karumsi and Tisha Garrett to present to two classes of 4th graders at the elementary school. The students learned about various disciplines within Civil Engineering, as well as how they relate to the student's everyday lives. Next, the students constructed cars out of paper and competed to see whose car could move the fastest when being powered by the student's breath. If you are interested in volunteering at similar events, please contact YMF K-12 Outreach at ASCEPhilaYMFK12@gmail.com to join our volunteer list!



CIVE CLUB

The 2017-18 Civil Engineering Club at the **Chester A. Arthur School** is already off to a great start this fall, making it the sixth year running! YMF is currently seeking the help of local Civil Engineers to volunteer with the program as meeting hosts, presenters, or field trip hosts for our Club. Additionally, YMF is seeking assistance in planning local, exciting, Civil-Engineering-related field trips for our middle school student club members. For more information, or to get involved, please contact YMF CivE Club Co-Chairs, **Tim Abel (tabel@pennoni.com)** or **John Doyle (jdoyle@trafficpd.com)**. We look forward to the rest of the year, and hope

you will join us in educating middle school students about the field of Engineering!

ANNUAL WINTER SOCIAL JANUARY 22

It's the most wonderful time of the year... time for YMF's Annual Winter Social! Our most popular and longest-running event, complete with revelry, networking, and charity; it's sure to be a great time. This year's event is scheduled for **Monday, January 22**, and will again be held at **McGillin's Olde Ale House** in Center City. Be on the lookout for the RSVP link!

As in years past, the event is anticipated to bring together over 150 students and Engineers from the Philadelphia area! We will have a raffle in which all of the proceeds go to local, nonprofit charities. At this time, we are looking for companies interested in sponsoring the Winter Social by providing raffle prizes such as gift cards. Please contact **Eammon Farley (Eammon.Farley@mbakerintl.com)** if you would like to be a sponsor! Your name and logo will be featured on the sponsorship board at the event, as well as on our website!

CORRECTION

Every so often we check to make sure you're paying attention – and we found out you were.

For the record, in the YMF Report in the December edition of *THE NEWS*, it was noted that YMF Secretary **Jesse Gormley** was appointed Secretary and Eastern Geographic Member of the National Committee on Younger Members (CYM) for 2017-18. We were advised by a few folks that Jesse was actually appointed Chair of the Committee for the current term.

We apologize for this error and thank those of you who caught it and let us know.

SPONSORS IN THE NEWS TPD NAMED BEST PLACE TO WORK

In November, **Traffic Planning and Design**, **Inc. (TPD)** was named the #4 Best Place to Work in PA (medium-sized employer category) at an annual event hosted by Team Pennsylvania, the Department of Community and Economic Development, and the Central Penn Business Journal. The firm jumped EIGHTEEN spots this year, compared to their 2016 ranking at #22. It credits this impressive progress to the consistent improvement of its work environment, practices, and benefits taken directly from employee feedback.

This was TPD's 12th year on this list.

Since its establishment in 1989 in Oaks, PA, TPD has expanded to eight PA locations, with additional offices in NJ, MD, and NC and provides transportation engineering services to a diverse selection of clients throughout the eastern United States.

Each year, judges use a combination of an employer and employee survey to determine a company's score and final ranking on the list. TPD was ranked among 100 total employers (44 small, 27 medium, and 29 large) providing services across the board including pharmaceutical, accounting, marketing consulting, financial services and many more.

Congratulations to TPD on this honor.

ECP DECEMBER MULTI-SOCIETY MEETING

December 8, 2017

Sheraton Society Hill Hotel, Old City

Begin with the Past — Building the National Museum of African-American History and Culture

by Lindsay Chateauvert, Editorial Assistant

On a chilly day in December, the Engineers' Club of Philadelphia (ECP) hosted its 8th annual Multi-Society Meeting at the Sheraton Philadelphia Society Hill Hotel in Old City. Members from the ECP and the eight co-sponsoring partner societies, which included our Section, hurried into the hotel lobby to escape the just above freezing temperatures outside. Each year, this well-attended lunch meeting provides a unique opportunity to network with Engineers and other professionals that you might not see at your regular society meetings! This year was no exception, as the number of bulky winter jackets lining the coat racks and the liveliness of the crowd continued to grow.

With everyone finally thawed out, ECP President and Section Member **Michael V. Griffin** began the afternoon by welcoming members from the various societies. He made several announcements including dates and information on the Delaware Valley Engineers Week events coming up in February.

Following a delicious lunch, ECP Past President E. Mitchell Swann took to the podium to introduce the afternoon's speaker, Eve Errickson, Supervisory Attorney Advisor for the Smithsonian Institution. She began by giving a general overview of the 19 museums, galleries, and gardens as well as the National Zoo comprising the Smithsonian Institution. When describing the artifacts within each of the Smithsonian Collections, she stated, "They can be extraordinary, they can be ordinary, but they should tell you something about the United States". The Smithsonian has been referred to as the "USA's Attic" for the many and varied items it has in its collection, not all of which are always on display.

The Smithsonian has continued to preserve and share the heritage of the United States through the recently opened National Museum of African American History & Culture (NMAAHC). Started in 2003, the project faced two main challenges; comply with Federal Law and remain affordable — as the majority of their budget was

appropriated by the Federal Government. To meet these challenges as well as open on schedule, it chose the Construction Management at Risk (CMR) delivery method as opposed to the typical Design-Bid-Build. As Ms. Errickson explained, under the CMR delivery method, the Owner, the Architecture/Engineering Firm (A/E), and the Construction Contractor (CC) are all involved in discussions from the beginning. With the collaborative team structure, the CC is able to begin construction prior to the completion of the overall design. Then as the design progresses, issues encountered during construction are resolved quickly. She highlighted two of these, including the relocation of a main gas line and the installation of a 77-million-ton trolley during construction.

Ms. Errickson continued her presentation by explaining that while the NMAAHC was successfully opened on time in 2015, the original design contract had never been revised to accommodate a CMR delivery method. In planning for the rehabilitation of the Air and Space Museum in 2016, major contract modifications were taken into consideration including the addition of the Scope Validation, her personal idea. Despite the relatively young "age" of the Air and Space Museum, there are significant issues with its granite cladding that have caused segments to warp, thus they must be removed and replaced. She continued to explain the scope of the rehabilitations, the sensitivity which must be given to the many items on display, the various contract changes, and ended with a photo of the cheetah cubs born at the National Zoo in March.

After a few oohs and ahhs from the crowd, as they soaked in the cuteness of the cheetah cubs, there was a question and answer discussion followed by a loud applause. To conclude the afternoon, Mr. Swann presented Ms. Errickson with two books, including *Philadelphia: Finding the Hidden City*, as a token of appreciation for her insightful presentation.

MARK YOUR CALENDARS

ENGINEERS WEEK EVENTS SCHEDULED

The Engineers' Club of Philadelphia, through its Delaware Valley Engineers Week Committee, will be celebrating **Engineers Week 2018** from **February 16 through February 24** and will continue its schedule of three events which will highlight the various contributions of Engineers and Engineering students in the Delaware Valley. Please note this information in your calendar and plan to participate.

LUNCHEON: FRIDAY, FEBRUARY 16

Sofitel, 120 S. 17th Street, Center City

CALENDARS Young Engineers Social: Tuesday, February 20

U-Bahn, 1320 Chestnut Street, Center City

AWARDS RECEPTION: THURSDAY, FEBRUARY 22

IATSE Ballroom, 2401 S. Swanson Street, Philadelphia

More information will be provided on price and other details in the next edition of *THE NEWS*. Please visit **www.dvewc.org** for up-to-date announcements.

TECHNICAL GROUPS/CHAIRS

Information on the ASCE, Philadelphia Section's Technical Groups is given below. If you have any topics that you think would be of interest to the Groups, please feel free to pass this information along to the appropriate Group Chair.

CONSTRUCTION

Dennis MacBride dmacbride@septa.org

DELAWARE VALLEY GEO-INSTITUTE (DVGI) www.dvgi.org

Archie Filshill archie@aeroaggregates.com

ENVIRONMENTAL AND WATER RESOURCES

Eric Lindhult eric.lindhult@gmail.com

STRUCTURAL ENGINEERING INSTITUTE (SEI) www.sei-philly.org

Joe Fazio jfazio@hntb.com

TRANSPORTATION AND URBAN DEVELOPMENT

William T. Thomsen wtthomsen@urbanEngineers.com

Please check the noted websites as well as the main Section site (**www.asce-philly.org**) for up-to-date information on Technical Group meetings and events. These will be included in our regular e-mail blasts as well.

ENVIRONMENTAL AND WATER RESOURCES TECHNICAL GROUP MEETING

WEDNESDAY, JANUARY 24

SUBJECT: Using GIS and Enterprise Data Management to Manage Your Capital Assets SPEAKERS: Raymond Lees and Brett Milburn, Langan Engineering and Environmental Sciences LOCATION: Peppers, 239 Town Center Road, King of Prussia

TIME: 5:30 PM *COST:* members \$30, government employees and students \$25

RSVP by Monday, January 22

This presentation and discussion will explore the use of GIS and enterprise data management to manage capital assets and will focus on solutions that can be provided to the water and wastewater industries.

Reservations and payment can be made by PayPal at our Section's website (asce-philly.org). Payment for reservations by check can be made at the event (checks should be made payable to "Philadelphia Section ASCE"). Contact Eric Lindhult (215-852-0068 or eric.lindhult@gmail. com) if you have any questions or if you will be unable to attend after you have registered.

Attendees are eligible for one (1) Professional Development Hour (PDH) for attending this presentation.

N-ASCE* THE SAFFIR-SIMPSON HURRICANE SCALE

With the 2017 hurricane season being a very active and destructive one, you have no doubt heard quite a bit about "Category 1, 2, etc" storms. But did you know that the rating method for this classification, the Saffir-Simpson Hurricane Scale, was co-developed by a Civil Engineer? (Well, now you do...)

Herbert S. Saffir, born in Brooklyn in 1917, obtained his Bachelor's Degree in Civil Engineering from the Georgia Institute of Technology in 1940. Following military service in World War 2, he began working as an assistant county engineer in Dade County, FL, in 1947. One of his tasks was the updating of the county building code, as a post-war building boom was getting underway. Because of the area's vulnerability to hurricanes, he began to focus on ways to make the code more responsive to wind and storm damage, and he quickly became well known as an expert in this area.

HONING YOUR SOFT SKILLS THE OTHER LANGUAGE: NON-VERBAL

When people write on their resumes, "excellent communication skills," I wonder exactly what it means. Does it mean that they speak and write well, or does it mean that they are clear and appropriate at giving and receiving those nonword signals that are called non-verbal language?

Nonverbal communication is our body language: our facial expressions, eye contact, posture, gestures, and spatial distance. It is also our tone of voice. It can be different in different cultures, and it speaks volumes. In fact, it speaks louder than the spoken word. People will believe what they see before they believe what they hear. With nonverbal messages, you can enhance relationships and build trust more easily with clients, peers, and other stakeholders. You can also damage those relationships unintentionally if you are not sensitive to how they might be received.

Today we are looking at some of the nonverbal messages in our country.

Our eyebrows and other facial expressions express our emotions. A smile, of course, is the most engaging. It is probably the best way to connect with others. There are other expressions, too. Imagine yourself sitting in a meeting, and you knit your eyebrows together and frown. Without saying a word, you have sent the very clear message that you are not happy with the way things are going. If you think you are signaling that you are neutral, think again. You have given yourself away with your expressions.

In our culture, eye contact is powerful. It is a sign of credibility, attention, and interest. Think about someone with whom you interact who averts his/her eyes while talking to you. How do you feel about that person? True, it can be fake, but for the most part, the truth is in the eyes.

Continued on Page 7

In 1965, he was working on a United Nations project to study windstorm damage on low-cost housing, and from that effort, he produced a scale to categorize storms based on wind speed. He collaborated with his friend Bob Simpson, the director of the National Hurricane Center, in 1969, adding information on storm surge and barometric pressure to each category. The result of this joint effort was what later became known as the Saffir-Simpson Hurricane Scale. Before this was available, hurricanes were described as either minor or major. (And before 1950, storms were not even named, as they are today.)

With the new scale, the potential for destruction from a storm was ranked, from Category 1 (trees and unanchored mobile homes receive the bulk of the damage) to Category 5 (full failure of roofs and some structures), primarily based on sustained wind speed. At first the rankings were used purely within the National Hurricane Center, but it was considered so useful that weather reporting agencies and others adopted it. What agencies liked about the Scale, is that it helped them communicate and prepare for the power of approaching storms. The National Hurricane Center could not accurately tell relief groups how much and what materials they should be stockpiling and shipping, but the Scale gave them a much better handle on these needs.

The Scale applies to Atlantic Ocean storms only. A similar scale for Pacific Ocean storms, called typhoons instead of hurricanes, is based on wind gusts rather than sustained intensity.

While Mr. Saffir became known for the Scale, he continued to work as a structural engineer into his 80's. He also traveled to inspect storm damage, even producing reports on the performance of structures during Hurricane Katrina in 2005. However, despite devoting much of his life to thinking about and preparing buildings for hurricanes, he acknowledged that his own home was not completely protected from a storm with hurricane shutters. He had done studies on the glass in the windows and found it was relatively shatter-proof. He passed away in 2007 at the age of 90.

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

NOMINATIONS NOW AVAILABLE FOR SECTION AWARDS

It's that time again. Our Section's Awards Program for 2018 is now open for nominations. Our Awards recognize Section members and others for their contributions to the Civil Engineering profession. All awards will be presented at the Spring Social/Dinner Dance, which is scheduled for **Thursday, May 3** at **SkyPhiladelphia**.

We encourage you to submit nominations for those deserving individuals who should be recognized for their various contributions, achievements, and career milestones, appropriately.

GUIDELINES/RULES

- Nominations must be received by **Friday**, **January 26**. Nominations should be submitted on forms which are available from the Committee Chair.
- Individuals may be nominated for awards by a member in any grade of membership.
- Individuals may receive only one award in a single year, but may be nominated for more than one award in a single year.
- Award recipients are subject to the approval of the Section's Board of Directors.
- All awards are presented only during years in which, in the judgement of the Selection Committee or the Board, there is at least one suitable candidate.
- The Selection Committee, at its discretion, may nominate an alternate for each award for Board consideration.
- The Selection Committee will recommend to the Board whether the recipient should also be nominated for applicable National or Regional awards by the Section.
- A nominee for an award MUST be a member in good standing of the Philadelphia Section in the year in which the nomination is made, with three exceptions. Nominees for Educator of

the Year, Government Service Award, and Philadelphia History and Heritage Award need not be members of ASCE and/or the Philadelphia Section. (Please note, this is a change in the requirements for Educator of the Year this year.)

AWARDS

The Section has a total of 14 awards which cover various specialty areas. In addition, the Section President can nominate an individual for the Presidential Award at his/her discretion. The awards are as follows:

- Philadelphia Civil Engineer of the Year
- Philadelphia Young Civil Engineer of the Year
- Philadelphia Government Engineer of the Year
- Philadelphia Young Government Engineer of the Year
- Government Service Award
- · Educator of the Year
- Philadelphia History and Heritage Award
- Community Outreach and Service Award

Individual Technical Awards:

- Civil Engineering Manager of the Year
- Construction Engineer of the Year
- Geotechnical Engineer of the Year
- Structural Engineer of the Year
- Transportation Engineer of the Year
- · Water Resources Engineer of the Year

If you are interested in submitting a nomination for consideration, please contact Bob Wright, Committee Chair, at **215-433-1666**, or via e-mail at **newseditor@asce-philly.org**, to obtain a nomination form. You may also call Bob, if you have any questions or need any additional information on the Section's Awards Program.

DUES DUE!

Your dues statement/invoice for 2018 is coming up on overdue. Please don't forget to pay your ASCE and Philadelphia Section dues (both are due on January 1). As noted on the invoice, you can pay by check or electronically.

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 as possible. Please check **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. One of the most popular benefits of membership is that every year you can earn up to five free PDHs for the eligible ASCE On-Demand Webinar courses you successfully complete. Every year we update the list of courses to ensure we have relevant and timely topics across all the major facets of Civil Engineering.

This benefit is perfect to share with your peers as part of your referral efforts for the Member Get a Member program, as it will help them stay current and up-to-date with their professional requirements. Through this program you can receive a \$50 Amazon.com Gift Card for each new professional member you refer. Please visit **asce.org** and review the Member Get a Member page for more information. You can refer up to five colleagues at a time, by providing their name and email address, and they will be sent a few emails with information about ASCE on your behalf.

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



YOUR CARD CAN BE HERE! CONTACT US AT newseditor@asce-philly.org FOR DETAILS





A JOYOUS HOLIDAY SEASON TO ALL

The Officers and Board of Directors of the Philadelphia Section extend our very best wishes to all Section Members, their families and friends for a safe, enjoyable and memorable holiday season, whether you celebrate Christmas, Hanukkah, Kwanzaa, or your own particular event (or all of them). We hope this special time of the year is great and full of good cheer. We also offer our best wishes for a great new year and we sincerely hope that 2018 brings good things your way.

We at *THE NEWS* would also like to send the same good wishes. We continue to try to give you the best we can in each edition, information you can use and otherwise... We hope you accept what we provide in the spirit that it is presented, sometimes a little tongue in cheek, since we know we could all use a little more humor in our lives (and maybe some of us need a little more than a little...). We provide our information for your use and enjoyment and we certainly hope we're hitting the mark, so to speak.

As you may recall, in past seasons we had a contest for submissions for our annual Lightly Amusing Yuletide Message (LAYM). And, as you may recall, the contest faded away since there was apparently no interest in it. Since 'tis better to give than receive, we'll still give you a LAYM and we believe it meets the usual low standards that make it worthy of the LAYM title. Not exactly iambic pentameter, but in the spirit of the season, enjoy!

From our Section's cannon that is generally loose Who seems to like sharing stuff that's often obtuse After a few beers why do reindeer start looking more like moose? Happy Merry Good Tidings of the Season to you

Your Editor has penned this, but can't accept all the blame We had several contests but no holiday messages came Thus we're forced to have him draft our annual LAYM Happy Merry Good Tidings of the Season to you

We are thankful this year that some helpers appeared To assist with The News, they bravely volunteered But they didn't work on the LAYM, so shouldn't be jeered Happy Merry Good Tidings of the Season to you

It's coming up on that great time of year Good will to everyone, peace on earth, holiday cheer Maybe rhyming will get easier after just one more beer? Happy Merry Good Tidings of the Season to you

Get the lights up, hang stockings, no time to kick back Boughs of holly, deck the halls, leave St. Nick a snack Hey, that's not a gift, don't wrap that 6-pack! Happy Merry Good Tidings of the Season to you

The herald angels are singing, as the carol goes, hark No creatures are stirring, no dogs try to bark You won't find this stuff on cards by Hallmark Happy Merry Good Tidings of the Season to you

The very best of the season from your Officers and Board They've been busy so our members' needs won't be ignored Another Report Card coming, so our efforts will again get scored Happy Merry Good Tidings of the Season to you

Our Section Officers and Board sincerely extend All the best for you, as the year's about to end More good stuff coming, on that you can depend Happy Merry Good Tidings of the Season to you

Good holidays, happy new year and all days between And best wishes for good things to come your way in '18 Enjoy them even if there's no nativity scene Happy Merry Good Tidings of the Season to you

Season's Greetings to everyone, enjoy every carol Eat, drink and be merry, and roll out the fun barrel Don't miss the "real" holiday message from President Farrell Happy Merry Good Tidings of the Season to you



HONING YOUR SOFT SKILLS

Continued from Page 5

Your posture also is an indicator of confidence and interest. How do you feel when you are presenting to your manager, and that manager slumps in a chair or is trying to hold her/his head up while you talk? On the other hand, sitting steel rod straight up in your chair with your head held stiffly on your shoulders can signal inflexibility.

Hand gestures add emphasis to our words. They tell a story. For example, you might be talking about a project and showing with your hands a comparison in size. However, hand gestures can also signal other things. What do you think hands across your chest might be saying? Sure, it might be that you are cold, but it could also look like you are defensive. What about tapping your fingers on a desk? That looks like you are impatient. Even though you might not mean to send that message, inadvertently you are.

Spatial distance communicates, too. In our country, most people like 18-24 inches of space around them. Anything closer might be thought to be too intimate or aggressive.

What about your tone of voice? Simply by changing the inflection, the pitch, or the speed of your words, you can communication a myriad of emotions. Experiment with the following sentence to express confidence, boredom, and annoyance. "We can get this done by May."

In brief, "excellent communicator" should encompass nonverbal as well as verbal communication. Practice becoming aware of what you are conveying nonverbally and be sensitive to the nonverbals of others.

–Anne Weisbord

Anne Weisbord, president of Career Services Unlimited, has been a communications consultant for over 20 years. She has worked with professionals in a wide range of industries helping them become more compelling, confident, and articulate speakers. www.awlearningconsultants.com.



SECTION VOLUNTEER SPOTLIGHT

Last month we started our Section Volunteer Spotlight effort to focus on our members who give their time and effort to provide meaningful programming and services to our Section or who promote our Section nationally through their volunteer efforts. At a time when all of us have considerable workloads keeping us busy, it is commendable that volunteers are still giving us their time, coming through and helping. This gives us an opportunity to also highlight those who do not have an "official" capacity as an officer or Director.

This time around, **Patrick McCourt** has been nominated and selected for the Spotlight. Pat serves as a Project Manager at McMahon Associates at the firm's Center City office. He has been with McMahon for 17 years, with his primary



focus being in the design of traffic signals. He also has considerable experience in traffic data collection, volume/capacity analysis and roadway design. He has been involved in numerous projects in our region and has prepared traffic signal permit plans, construction plans and bid documents for various intersections as part of these efforts. He is certified by the International Municipal Signal Association (IMSA) as a Work Zone Safety Specialist, Traffic Signal Technician and Traffic Signal Inspector.

This year is Pat's first season of formal volunteer service with our Section, after some assistance with miscellaneous tasks such as coordination of joint society events. You may recognize Pat as one of the people who have been roaming around at our dinner meetings hawking copies of our Centennial Book. In addition to this help, he is currently serving as a member of our Financial Audit Committee which will make an in-depth review of our Section's financial transactions, income and payments to make sure our records are accurate and our budget and cash flow are consistent. As with most of us, Pat is quite busy with his professional duties and also at home where he and his wife have four young daughters to keep them on their toes, so we are happy he can carve out some of his scarce free time to help our Section do what it does.

For his contributions and help, we are proud to cite Pat as our **Volunteer of the Month**.

If you know a member who should be recognized for his/her volunteer service, please feel free to nominate that person for consideration for our **Section Volunteer Spotlight**. Additional information and the nomination form are provided on our website.

I ON INFRASTRUCTURE STANDARDS ARE DIFFERENT IN OTHER PLACES.

Living up to Japan's reputation for being precise as well as contrite, a train company in Tokyo delivered a formal apology on November 14 because one of its trains left a station just 20 seconds early. In a country where conductors will beg forgiveness when a train is even a minute late, the Metropolitan Intercity Railway Company posted an apology on its website for "the severe inconvenience imposed upon our customers" when the No. 5255 Tsukuba Express train left Minami-Nagareyama station in Chiba, a suburban prefecture east of Tokyo, at 9:44:20 AM, instead of as scheduled at 9:44:40 AM.

According to the statement, the train arrived at Minami-Nagareyama on time, at precisely 9:43:40 AM. But when it came time to leave, the overeager crew closed the doors prematurely and pulled out of the station ahead of schedule. According to Metropolitan Intercity, no passengers missed the train or complained about the jump-start.

The effusive apology was in keeping with a culture where an ice cream company ran a television advertisement to express regret for raising the price of an ice cream bar by 10 yen last spring. As the foreign news media began to cover the news, observers abroad expressed envy on Twitter at the trainspotting exactitude. The Japanese were bemused by the foreign fascination.

According to one article this month on the Gendai Business website, Tsukuba Express, which carries 130 million passengers a year, markets its "safety and high speed." The article listed what it described as "concerning" incidents from earlier in the year, including two cases of trains stopping in the wrong position and an episode where customers were stuck in elevators at a station for 30 minutes. By comparison, this microscopically early train passed with no apparent impact other than a few laughs on social media, unlike a deadly crash in 2005 that killed more than 100 passengers when the train driver began speeding to make up for a lost 90 seconds in the schedule.

Thanks to the *New York Times* for this information.

Meanwhile, back in the USA... Highway tolls are following the airline-pricing model (if there is indeed such a thing).

New toll lanes kicked off in November along a 10-mile stretch of Interstate 66 in the Northern Virginia suburbs of Washington, DC. At first blush, the rates seemed rather high. The estimated toll for one-way travel from the Capital Beltway to Washington before 8AM was \$28.50. About 8:40 AM, the toll was \$34.50.

The rates are variable depending on traffic conditions. Officials with the Virginia Department of Transportation (VDOT) said the \$34.50 rate was the "peak of the peak rate" and will vary and fluctuate based on the demand. The toll changes every six minutes. Rates were lower than the morning commute, with westbound I-66 drivers paying \$6.25 to travel from Washington to the Beltway at 4:15 PM.

Previously, there were HOV restrictions that limited the use of that section of I-66 during rush hour to vehicles with two or more people and drivers of hybrid vehicles with special clean-fuel license plates. Single-occupant vehicles can use the toll lanes as long as they are willing to pay the toll.

There is no cap on the toll pricing. The price changes as congestion rises and decreases as congestion is less. The hours of the toll lanes are from 5:30 to 9:30 AM eastbound and 3:00 to 7:00 PM westbound on weekdays. The lanes are free to all drivers during off-peak hours and weekends.

Transportation leaders have said they expect the new tolls to encourage carpooling and to push more people to use mass transit. When tolling was talked about in 2015 and models on traffic and pricing were done, transportation officials had said that, on average, the price would average about \$9 for the 10 variations of trips drivers could take on the highway.

Part of the reason toll prices can spike at any given time, VDOT officials said, is that the system bases rates on the volume and speed it is trying to maintain. On Monday, VDOT said the average speed was 57 mph, compared to 37 mph at roughly the same time a year ago.

Transportation planners felt that the new toll had done its job — to help provide a more reliable trip. But at a cost.

Editor's note – those of you who use the New Jersey Turnpike and pay with EZ Pass may notice the same sort of variable pricing depending on the time you use it, although it's not as pricey as in Virginia and much more subtle.

Thanks to the *Washington Post* for this information.

PRIVATE SCREENING — DREAM BIG

Dream Big: Engineering Our World. Who will build the amazing future of our human race? Whatever you think Engineering is, you'll probably think again as the film reveals not only the grandeur, but the heart, humanity and optimism that exists within every problemsolving project.

If you missed *Dream Big* when our Section conducted two screenings of it last spring, you can catch it at a private event, sponsored by **Schnabel Engineering** and the **Villanova University College of Engineering**, which will be conducted on **Saturday**, **January 20** at 10:00 AM at the **United Artists Theater**, 300 Goddard Blvd., King of Prussia. The doors will open at 9:30 AM. Tickets must be pre-purchased thru <u>http://www1.villanova.edu/villanova/</u> engineering/forms/DreamBig.html.

Please contact **Mia Painter** (610-656-5536, **mpainter@schnabel-eng.com**) for additional information.

If you cannot make this, please note that *Dream Big* will be added to the Franklin Institute's schedule in Spring 2018. Additional details will be available shortly.