

2018 SECTION AWARDS SLATE — CONGRATULATIONS!

Our Section Awards will be presented at our Annual Spring Social and Dinner Dance on **May 3** at **SkyPhiladelphia/Top of the Tower** in Center City. More information and details on the Social will be included in the May edition of *THE NEWS*.

For the Section Awards this year, we received several outstanding nominations! The Awards Committee then had the not-so-easy task to “boil this down” and develop a slate of eight Award recipients for these honors. With further approval from our Section Board of Directors, we are pleased to present our honorees for this year:

- William Thomsen**, Urban Engineers – Philadelphia Civil Engineer of the Year
- Jesse Gormley**, Pennoni Associates – Philadelphia Young Civil Engineer of the Year
- Katrina Lawrence**, Delaware Valley Regional Planning Commission – Young Government Engineer of the Year
- Melissa Logan Gillespie**, TRC Solutions – Geotechnical Engineer of the Year
- Carmen Zappile**, Philadelphia Industrial Development Corporation – Engineering Manager of the Year
- Franco Montalto**, Drexel University – Environmental/Water Resources Engineer of the Year
- John Doyle**, Traffic Planning & Design, and **Timothy Abel**, Pennoni Associates – Community Outreach and Service Award

We hope you will join us at the Social to honor our Awardees for this year.

When we return from our summer “hiatus”, in the October edition of *THE NEWS*, we will present more information on the awardees as well as a detailed report on the Social. (Or you could just attend the Social and not have to wait until October...!)

APRIL DINNER MEETING

American Society of Civil Engineers, Philadelphia Section

THURSDAY, APRIL 12, 2018

The Inn at Villanova University (formerly the Villanova Conference Center)

County Line Road, Radnor, PA

Cocktails 5:30 PM, Dinner 6:30 PM, Meeting 7:30 PM

This meeting will follow the “breakout” format used that has been the theme of our April event for the last seven years. Attendees will assemble in the main room for dinner and announcements, then move to other rooms depending on which topic they want to hear. There will be a choice of three separate modules/topics as described below.

We are returning to the Inn at Villanova this year after using a different location last year while the Inn was closed for renovations.

RESERVATION DEADLINE: MONDAY, APRIL 9. The cost per attendee is \$50, with a reduced price (\$20) cost for government agency employees and students, for reservations received by this deadline.

RESERVATIONS RECEIVED AFTER APRIL 9: Reservations received after the deadline and “walk-ups” without prior reservations paying at the door will be charged \$60 (government agency employees and students will be charged the regular \$20 rate), but will be subject to acceptance on a space-available basis. Please note that payment via PayPal will NOT be available at the close at the reservation deadline.

THERE IS NO GUARANTEE THAT SPACE WILL BE AVAILABLE IF YOU DO NOT RESERVE A SPACE. Walk-ins and anyone without a reservation will be handled on a space-available basis.

Reservations can be made through our website (www.asce-philly.org) and pay via PayPal. As noted above, the PayPal option will NOT be available as a payment option after the reservation deadline. Payment for reservations by check (made payable to “Philadelphia Section ASCE”) will be accepted at the reservation table at the door as an option to electronic payment.

As always, guests will be welcome to attend the presentation without dinner at no charge. The individual modules will be subject to room capacity constraints.

SPECIAL FEATURES: Life Members Night – Newly-inducted Life Members will be featured and honored at this meeting as guests of the Section.

Past Presidents Night – Past Presidents are invited to attend this meeting as guests of the Section in appreciation of their service and assistance.

Villanova University Night – The ASCE Student Chapter, Faculty and Alumni of the Department of Civil and Environmental Engineering of Villanova University will be highlighted at this meeting. All Faculty, Alumni and Students are cordially invited to attend and participate.

The featured “breakout” sessions will consist of the following:

Interoperability: BIM and Structural Design Software

SPEAKER: Michael Warren, AECOM. Sponsored by the Structural Engineering Institute

Paulsboro Marine Terminal Wharf Design and Construction

SPEAKERS: Michael Wagner, Urban Engineers and **Chris Lawrence**, CH2M/Jacobs.

In Situ Characterization of Subsurface Stiffness Using Surface Waves: Geotechnical Applications, Limitations, and Recent Developments

SPEAKER: Joseph Coe, Ph.D., Temple University. Sponsored by the Delaware Valley GeoInstitute

The Inn at Villanova is NOT on the University campus. For directions, go to www.theinnatvillanova.com.

SPRING SOCIAL AND DINNER DANCE THURSDAY, MAY 3, 2018

Our last Section event of the season will be our annual Spring Social.

Please mark the date and location in your calendar

SkyPhiladelphia/Top of the Tower, 3 Logan Square (1717 Arch Street)

We hope you can join us for our end-of-season festivities, socializing, networking and fun at an interesting venue (the same location as last year’s Spring Social).

More information will be provided in the May edition of *THE NEWS*.

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

Dear Section Members,

The month of March had many moments that reminded me of why I love being an ASCE member. The first moment was during the March Dinner meeting when the **Chester A. Arthur Middle School CivE Club** was recognized. Through the effort of the School's science teacher, **Mike Franklin**, and our **Younger Member Forum**, they have been running a Civil Engineering after-school club to expose students to Civil Engineering. The Chester A. Arthur Middle School is located in the Graduate Hospital area of the city where 92% of students qualify for subsidized lunches. It's inspiring to see that **Terrell Greenaugh**, a student in the inaugural class of the club, is now a student at University of Pittsburgh-Johnstown studying Civil Engineering! Although we don't know if Terrell's major would have ended up differently if he were not in the CivE Club, I would like to believe the Club helped to lead Terrell to the field.

Also during this meeting, **Jim Bilella** of Urban Engineers gave an interesting presentation on the restoration and revitalization of the Longwood Gardens fountains. My favorite part of the presentation was when Jim retold that during his effort to find an economical solution for his client, the main creative person for Longwood Gardens was not interested in saving money because "my creativity cannot be limited."

The second moment this month that reminded me why I am an ASCE member was when I attended **ASCE's Legislative Fly In Day**. The morning of the Fly In we were briefed on the status and ASCE's stance on:

- The Trump Administration's infrastructure plan
- The reauthorization of the Federal Aviation Administration Act
- The reauthorization of the Water Resources Development Act (WRDA)
- The Securing Required Funding for Water Infrastructure Now Act (SRF WIN)

We also spent time with a policy advisor to **US Secretary of Transportation Elaine Chao** and two Congress people from Louisiana and Connecticut. In the afternoon ASCE members from around the country hit the hill to meet with Senators and Congress people to advocate for the above items. As a result of my ASCE membership, I was qualified to attend this day where I learned so much about our government and it helped prepare me to speak with elected officials from Pennsylvania. All of the Pennsylvania ASCE members attending (including Philadelphia Section members **Adrienne Nikolic**, **Tim Abel**, **Joe Natale** and **John Caperilla**) were very supportive to share their Government Relations knowledge to a first-time attendee/novice like me. The National Fly In Day is in the top three of ASCE members-only opportunities I have participated in. Next November, when ASCE nationals sends their email looking members to participate in the 2019 Fly In Day, I strongly encourage you to attend.

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



At last month's ASCE National's "Fly In" visit to Washington, our local contingent visited Congressman Dwight Evans (second from left) at his office. From left to right, Karen Armfield (Lehigh Valley Section) joined President Cathy Farrell, Member Tim Abel and Director Joe Natale at this visit. Member Adrienne Nikolic also participated in the event. Thanks for your help and representing the Section at the Fly-In.

A common mistake that people make when trying to design something completely foolproof is to underestimate the ingenuity of complete fools.

— Douglas Adams

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

PRESIDENT

Cathy G. Farrell, HNTB, Inc.

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VICE PRESIDENT

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Environmental Sciences ('16-'18)

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Joseph Natale, WSP ('16-'18)

Jeanien Wilson, Phila. Dept. of Streets ('17-'19)

PAST PRESIDENTS*

Guy DiMartino, Traffic Planning & Design, Inc.

AnnMarie L. Vigilante, Langan Engineering &
Environmental Sciences

Joseph Platt, Traffic Planning & 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

Secretary — Briana Earle, PE

Staff Engineer

Langan Engineering and Environmental Services

PO Box 1569

Doylestown, PA 18901-0219

(215) 451-6500

bearle@langan.com

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

May 2018 ISSUE

April 13, 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

CIVIL ENGINEERING CLUB AT PHILADELPHIA SECTION DINNER MEETING MARCH 8 – MAGGIANO'S

Representatives from the **Chester A. Arthur Middle School Civil Engineering Club** (CivE Club) recently joined our Section at its monthly dinner meeting at Maggiano's Little Italy in Center City.

Tyrell Greenaugh, an 8th grade club member, and his brother, **Terrell Greenaugh**, club alumnus and current University of Pittsburgh-Johnstown freshman (studying Civil Engineering!!!), attended and were joined by Chester A. Arthur School teacher and CivE Club moderator, **Mike Franklin**, as well as the YMF's current and former CivE Club coordinators. The evening included recognition, dinner, and a presentation on Longwood Gardens' New Heights Fountain Revitalization Project.

This was the first time since the CivE Club started six years ago that Club members joined our Section at a dinner meeting, and it generated a round of well-deserved applause for one of the YMF's most successful outreach programs. Thank you to our Section for its continued support and for hosting the CivE Club!



Pictured above – **Nha Truong**, **Mike Franklin**, **Kevin Walsh**, **John Doyle**, **Terrell Greenaugh**, **Tyrell Greenaugh**, **Tim Abel**, **Jesse Gormley**, **Kazi Hassan**

CIVIL ENGINEERING CLUB

YMF is currently seeking the help of local Civil Engineers to volunteer with the program as meeting hosts, presenters, or field trip hosts for the upcoming spring semester. 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@penno-ni.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!

SECTION OFFICERS AND BOARD OF DIRECTION – 2018-19 SEASON

The recommended slate of Section officers and Board members was developed by the Nominating Committee and presented to the Section Board at its March meeting. The Board moved to adopt this recommended slate for the coming season. This slate is as follows:

President: **Angelo Waters**, Urban Engineers, Inc.

President Elect: **Kazi Hassan**, Pennoni Associates, Inc.

Vice President: **Troy Illig**, WSP

Secretary: **Briana Earle**, Langan Engineering & Environmental Services

Treasurer: **Jennifer Reigle**, Pennoni Associates, Inc.*

Membership Secretary: **Mohamed Elghawy**, Traffic Planning & Design, Inc.

Directors: **Andrew Bechtel**, College of New Jersey*

Kevin Brown, Urban Engineers, Inc.*

Spencer Finch, Langan Engineering & Environmental Services

Joseph Natale, WSP

Nha Truong, Philadelphia Water Department

Jeanien Wilson, Philadelphia Department of Streets*

Past Presidents: **Cathy Farrell**, HNTB

Guy DiMartino, Traffic Planning & Design, Inc.**

AnnMarie L. Vigilante, Langan Engineering & Environmental Services**

*These positions have one year remaining to serve in their current terms.

**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.

In addition, we will have these folks in appointed positions:

Assistant Secretary: **Caroline "Cricket" Slattery**, Advantage Engineers

Assistant Treasurer: **Joseph Natale**, WSP

We wish these brave and generous folks our collective good luck for the coming season.

Thanks to the Nominating Committee for this slate, chaired by **Cathy Farrell**, with committee members **Troy Illig**, **Kazi Hassan**, **Angelo Waters** and **Bob Wright**.

Efforts have begun on the 2018 Pennsylvania Infrastructure Report Card, which is anticipated to be released in the Fall. For updates and to view the 2014 Pennsylvania Infrastructure Report Card, visit pareportcard.org.



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 BUILDING A BETTER QUALITY OF LIFE.**



The Philadelphia Section of the American Society of Civil Engineers is a proud sponsor of the



MARCH OF DIMES SPONSOR

Our Section is proud to have been a sponsor of the **March of Dimes 25th Annual Transportation, Building and Construction Awards Luncheon**, held on March 15 at the Pennsylvania Convention Center. Our ad, which appeared in the Luncheon Program, is shown above.

PE APPLICATION POINTERS... HOW DO I GET ENOUGH DESIGN EXPERIENCE FOR MY PE LICENSE IF I WORK IN CONSTRUCTION?

Civil Engineers working in construction often ask this question. There is not a catch-all answer here, but the short answer is you must be persistent in finding ways to do design work in your job.

The reason this is a tricky question to answer is that Professional Engineering license experience requirements differ in every state. That being said, I will focus my answer on how to implement design experience into a Construction Engineering position.

First let me say that, while I have never worked for a general contractor as a Civil Engineer, I have worked on projects where my company served as the construction management representative. Secondly, my wife, who is also a Civil Engineer focused in Geotechnical Engineering, has worked for a contractor and spent many years on construction sites. And no, we don't sit around the house and talk about Civil Engineering all day – only a few hours a day.

Here are three actions you can take as a Civil Engineer in the construction field to increase design experience:

1. Volunteer to work with the Design Engineer of record as often as possible on your projects.

Often, there will be a Design Engineer who has the responsibility of ensuring that projects are

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MARCH DINNER MEETING

March 8, 2018

Maggiano's Little Italy, Center City

Longwood Gardens – New Heights Foundation Revitalization Project

by Assunta Daprano, Editorial Assistant

As always, the sound of President **Cathy Farrell**'s gavel filled the air at Maggiano's Little Italy and began the evening as several announcements were made, including recognition that March 8th is **International Women's Day**. This was followed by a presentation by the featured **Student Chapter** from **Temple University**. President **Cory Bogas** and Vice President **Angelo Algeri** spoke about past and future Chapter events. Next, YMF President **Nha Truong** introduced members of the **CivE Club**, including the **Greenough Brothers (Tyrell)**, an 8th-grade Club member, and **Terrell**, an alumnus currently studying Civil Engineering) and Chester A. Arthur School teacher and CivE Club moderator, **Mike Franklin**, who gave a brief update about the program. Finally, members of ASCE Region 2 presented **Cory Bogas**, with the 2018 Outstanding Student Member Award.

Following this, President Elect **Angelo Waters** introduced the evening's speaker, **James Bilella**, Vice President and General Manager of Facilities & Building Systems at Urban Engineers. Mr. Bilella started the presentation with some history and photos of Longwood Gardens and its original 80-year old fountain, located in the Main Garden. Work to be done on the fountain included the incorporation of LED lights, water jets and fire effects. The total amount of swirling water jets increased from 380 to 1,719 and the renovated fountain can pump over 325,000 gallons of water per light show. Mr. Bilella went on to describe the two-story underground pump house that was constructed to accommodate the increased water flow, and its benefits, including its sustainability measures and innovative design. This led to a discussion regarding the Garden's stormwater management plan, primarily work done to decrease the stormwater runoff.

Next, he described the construction process, including the extensive deconstructing of the original fountain, cataloging, inspecting, and determining which pieces could be reused. The fountain also includes over 5,000 pieces of new stone, some from a local quarry in Avondale, PA. Mr. Bilella admitted that one of the problems faced in this \$90-million project was adapting to the one of a kind system and coordination with various entities involved in the restoration, including his client, who was more concerned with quality and less bothered by cost (how many of us have heard that expressed by a client?).

Mr. Bilella ended by encouraging everyone to visit Longwood Gardens and the revitalized fountain soon. The presentation concluded with a few questions and applause by all the attendees. President Farrell thanked Mr. Bilella for the informative session and presented him with an ASCE Philadelphia solar charger as a token of our appreciation for a job well done.



Following the meeting we were able to get many of the women in attendance to the front of the room and take the photo above to cite International Women's Day. We managed to have 21 of our female attendees participate in this. Thanks for your help!

N-ASCE*

AUSTRALIAN BIOHACKER WHO IMPLANTED TRANSIT PASS IN HIS HAND WAS CONVICTED FOR NOT USING VALID TICKET

While SEPTA is busy trotting out its KeyCard program, we haven't heard of it going to this extreme — yet.

Digging through your purse or pockets every time you enter public transit can be a hassle, so last year Australian biohacker **Meow-Ludo Disco Gamma Meow-Meow** (yes, that's his legal name) had a chip from a transit pass implanted in his hand. The chip allowed him to tap on or off of trains in Sydney with a wave of his wrist. That is, until last August, when transit officers handed him a fine for traveling without a valid ticket, despite still having \$14.07 left on the chip.

Earlier this month, in an unprecedented legal case, Meow-Meow pled guilty in a Sydney court to charges of traveling without a valid ticket and failing to produce a ticket for inspection. He did this reluctantly, though, to resolve the issue of the charges and legal issues. However, the battle is very likely far from over.

At the heart of the case is not just whether one man was within the bounds of the law when he took apart his transit pass and implanted it in his hand, but whether governments have the authority to intervene in the technology we put in our bodies, and how laws will adjust to the rapid expansion of implanted technology.

"I paid my fare. I tapped on just like anyone else," Meow-Meow told *Gizmodo*. "The law hasn't caught up with the technology. That's all this case was."

Thanks to *Gizmodo* for this information. (No, this is NOT an April Fool's joke — you can read the full article at <https://gizmodo.com/australian-biohacker-who-implanted-transit-pass-in-his-1823832689>

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

Farrell at the Helm

OUR 2017-18 SECTION PRESIDENT

Throughout the ninety years that our Section has had *THE NEWS*, there are several items that are "givens" that, by tradition or otherwise, appear during the season. One of these, which pre-dates your current Editor's occupancy of that seat (and probably even pre-dates your Editor lifetime-wise!), involves our summary of the performance of the Section President as the season is drawing to a close. Sometimes (most times, actually...) this degenerates into a "roast" of sorts, depending on what kind of information, data and/or "dirt" we've managed to collect during said season. As noted, your Editor knows little of how this started, but he does know it's been around for at least as long as he's been a Section Member (and that's coming up on 40 years — amazing given that your Editor is a young fellow...), and he knows better than mess with tradition. Besides, all of the other Presidents had

it done to them (including your Editor), so it's only fitting that we continue to do this to Presidents to come. Who are we to upset the cosmos or karma, or, worse yet, to not meet the expectations of our tens of loyal readers?

We do know that we do this in April as once upon a time it was our last edition of the season (some of you may have thought there was a tie-in to April Fool's Day, but we can't say for sure...). In the past few years your intrepid Editor has expanded our coverage (you're quite welcome) to include a May issue, which gives the President an opportunity for rebuttal. Maybe adding that issue wasn't such a smart move...

One more caveat — some of you may be "seasoned" enough to recall when the previous and exalted occupant of the Editor's desk would pen this piece and how he used words that made many of us wonder whether they were compliments or insults. (And we'll transition to writing this in the

first person at this point, to make things a little easier.) From my standpoint, despite being a mediocre Ivy League alum with a strong background in spelling, grammar and vocabulary, I promise not to foist this knowledge upon you and we'll keep this such that no one will have to grab a dictionary at any point in reading this. You might need to take a breath or two since I am known for my run-on sentences, however.

As we know, this is all in fun, but it is based on the facts as we know them. As we also know, I am not all that good at paying attention to detail, and I do suffer from CRS (can't remember... stuff — we don't want to risk the PG rating of *THE NEWS*!), so the facts may be a bit subjective and in some cases a little bit stretched or distorted. You, the reader, are thusly cautioned.

In last year's "roast" of then-President **Guy DiMartino**, we referred to this year's President as the "next Guy." Obviously we meant this in the biblical sense since this time around the President is a "she", and we therefore continue

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FARRELL AT THE HELM

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this mysterious tradition and offer our take on the term of one Catherine Golata Farrell. Cathy, as we know her, has come up through the ranks of the Section over the past several years and started out as an active member of the Younger Member Forum, our “farm team” of sorts, from which many exalted and legendary folks came (I am proud to say I “made my bones” this way as well, so I’m at least in the league of the exalted and legendary). I first met her perhaps a dozen years ago at a Section meeting and kept running into her at both our meetings as well as those of our “sibling” society, ASHE. She rose through the ranks at her firm at the time and was in key roles in several significant projects such as the US 202 Parkway and the Gustine Lake Interchange.

On the latter, we got a chance to work together. I was a rookie of sorts in the “real world”, having gone into consulting after years in government, and a community organization engaged my firm to look at Gustine Lake and see how it could be made more neighbor-friendly and welcoming as a “gateway” and less of a complicated “bowl of spaghetti” interchange. Given my very close knowledge of the facility, both from my government work as well as a daily user, I suggested that one bridge structure could likely not be replaced, as was planned, and the ramp it carried could be reconfigured into a conventional at-grade intersection. While we determined there were more benefits than disadvantages for the change, the project was fairly far along in design and this would impact the progress and schedule (but lower the cost). I found working with Cathy on this to be a very pleasant and interesting experience, even though we often didn’t agree on how things should proceed, but the effort did win some awards and rave reviews and I like to think this was in some part due to that late change. Cathy might disagree.

Cathy moved on to her current firm, HNTB, a couple of years after this, and has advanced to Transportation Department Manager in a short time, surely a reflection on her abilities and drive to get things done. Having said that, however, one of her current projects is the Roosevelt Boulevard “Route for Change” study, which will likely add some gray hairs for her given the many challenges the Boulevard has to offer (the same place to which I can attribute some of my extensive gray collection). Not that Cathy isn’t up to these challenges, but trying to calm a 12-lane highway is certainly a big one. We wish her luck on that... Many have tried to date, and no one has really succeeded, but Cathy just might.

On a warm spring evening last May, Cathy took the reins of the Section, becoming our 104th President when outgoing President Guy DiMartino handed her the gavel in front of a nice-size crowd at our Spring Social at SkyPhiladelphia. Just over a month later she had her first Board meeting and looked to identify strategic initiatives and focus on priority items identified through an interactive process. She is known to be a task-master and that has helped

our Section in many ways. Two big things happened just before she got to the President’s spot, and she played a key role in each of them — getting the long-awaited *Centennial Book* to reality and getting things going to re-establish our long-gone Section Mural. Thus, when she was handed the gavel, each of these was in process, so what was left for her to do? She took on a significant assignment in November when the 2018 PA Report Card effort was in search of a leader and she decided to volunteer to co-chair the effort, despite her already-full plate as President. That was very much appreciated given that the person who had volunteered to be the chair previously had to step away given other commitments. We know the Report Card is in good hands with Cathy in a lead spot.

As we have seen in her President’s messages, Cathy has gotten interested in the political side of things, having participated in her first Legislative Day last May and thoroughly enjoying the experience. At the start of that event, just as we were getting our “marching orders” and leaving our meeting room to begin the day’s visits to elected officials, she was surprised and a little taken aback that we did not rehearse the “spiel” to the electeds, and merely went to each visit armed with prescribed discussion points but no orchestrated plan of who would say what. Once she saw how it worked, during the first visit, she caught on and contributed well. She has also gotten a seat on her train from co-rider SEPTA GM and fellow Section Member **Jeff Knueppel** despite her knowledge of how he reacts sometimes when reviewing plans and documents during his ride (you may recall his self-described “punching” of the train walls, to which he ‘fessed up in his presentation to us in November). We trust Cathy keeps one eye on him if he stands near her seat to avoid any second-hand injuries from such reactions ...

Cathy is a proud graduate of Villanova and is married to an Engineer, Tim. They have two young children (one of each). We often feel bad for the kids in these two-Engineer marriages, with what little hope they may have for “normal” lives, but so far so good with the Farrells. We’ve been told that Cathy is encouraging both kids to consider Engineering careers, maybe to follow in their parents’ footsteps? And there are some big shoes to fill here, as Cathy’s efforts have been cited with her receipt of our Section’s Young Civil Engineer of the Year award in 2010, followed two years later with the Delaware Valley Young Engineer of the Year honors.

While Cathy has proven quite capable in her leadership abilities, she bemoans her “high-pitched” voice, and indeed her diminutive stature can be a challenge when she’s in a crowd or behind a podium, as we’ve been told. She certainly is in no way pusillanimous (we lied – go get the dictionary...). Having said that, however, we recall the first dinner meeting over which she presided in October 2016, serving in Guy’s absence. Things were going well, until the presentation ended and she called for questions from the audience. Despite at least one warning from an attendee (this guy), she unwittingly turned the

microphone over to an audience member who will remain nameless, who decided to take advantage of having the mike to get into a bit of a debate with the presenters. Obviously, this was not something she anticipated, and Cathy wasn’t quite sure how to wrestle the mike back, but she persisted and got it (and at that point, many of us in attendance were hoping we might be getting a second PDH, as the meeting seemed to be going that long...). Some things you don’t learn in Engineering school...

Having a female President has helped the cause a little, as we’ve managed to get into a “boy-girl” alternating pattern since 2009, upping the “score” of Presidents to Men 96, Women 8, but the streak is going to end with the incoming slate. In any event, to wrap this up, we hope we have been able to give you a little insight on our outgoing President, and we thank Cathy for her service and diligence (and we await her rebuttal next month). Also next month, she will get the usual reward and honor of Past President, but will certainly be keeping busy finishing the Report Card, so she won’t exactly fade away. With her great service at the helm, the proverbial bar has been set high for the “next guy” (indeed a guy this time), Angelo Waters. We have little doubt that Angelo will succeed, and this time next year tradition will once again dictate that we do this “roast” for him, which means we’ll need to try and pay attention during the coming season to prepare for that.

THANKS TO OUR SPONSORS

We thank those firms who have made the financial commitment to Section Sponsorship for this season. The business cards of these 15 firms are included in the sponsor section of *THE NEWS*. Sponsor logos are also displayed in a special Sponsors section of our website. Through a click on the particular sponsor’s logo, we provide direct links to its own website so prospective employees can review all available and up-to-date positions being offered by that firm. Sponsors can additionally provide a profile article in *THE NEWS*.

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

**If you want children
to keep their feet
on the ground,
put some responsibility
on their shoulders.**

— Abigail Van Buren (“Dear Abby”)

Normal people believe that if it ain't broke, don't fix it. Engineers believe that if it ain't broke, it doesn't have enough features yet.

— Anonymous

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
wthomsen@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.

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ARE THERE ANY QUESTIONS?

A presentation isn't complete without the Q&A session. Don't dread that part of your talk. Questions are good. They give you a chance to show off the knowledge of your topic, determine what you need to clarify, get new ideas (perhaps), and hone the skill of thinking on your feet.

Of course, just like you did for the content of the talk, you need to prepare. Anticipating what might be asked (and what you really don't want to be asked) will help you prepare the answers. Although you will never be able to anticipate all the questions, once you know your audience, you will have a good idea of what they will want to hear. Are there finance people present? They will want numbers. Compliance? Questions will arise about risk. Sales? They want answers about service and product details.

Below are some guidelines that will help you stay in control and handle the questions professionally.

- Listen carefully to the entire question.
- Understand what is being asked. Paraphrase it back to the questioner for clarification.
- Don't interrupt.
- Pause before answering to collect your thoughts.
- Don't be afraid to say you don't know the answer. Say that you will get back to them with the answer, and do that.
- Allow the experts in the room to respond to certain questions by sharing their expertise with you.
- Make all your answers brief and to the point.
- Make eye contact with your questioner, then move your eyes to include others in the room.
- Stay in control. Don't get defensive.

Always end your Q&A session with something positive. You could review your main points, remind the audience of the action plan, or simply say that you feel this was a good meeting, and you were happy to answer the concerns of the group. Remember that the Q&A session is still part of your presentation, and you want to be remembered as a confident, clear, and compelling speaker from the beginning until the end.

—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

SPONSOR SPOTLIGHT HNTB EMPLOYEES GIVE BACK

This past February, Engineers from HNTB were busy living the ASCE Vision “global leaders building a better quality of life” through their philanthropic efforts.

Cameron Connors, a Highway Engineer from the firm's King of Prussia office, spent a week in Haiti building a new roadway and bridge to serve as the official entrance to the iF Foundation's catchment area. Believe it or not, right-of-way problems were the genesis of the project. The existing driveway contained an undersized and deteriorated bridge that was technically outside of the property, and promoted the construction of a new roadway and bridge to a new entrance. This was Cameron's second trip to Haiti through the Foundation.



Alex Hazuda, a Structural Engineer, and **Cory Bogas**, a Highway Engineer, both from HNTB's Philadelphia office, volunteered their time during Engineers Week at North Penn High School to promote Civil Engineering along with other members of our Younger Member Forum. Alex co-led an activity that let students use their creativity to see who could create a vehicle that could travel the furthest with only using paper, tape, wheels, paperclips and their own breath for wind! Cory is no stranger to North Penn, as this was his second year reaching out to the school, and he gave advice on the college application process and what to expect from an Engineering curriculum.

Cameron, Alex and Cory work alongside 150 other professionals across HNTB's five Pennsylvania offices located in Philadelphia, King of Prussia, Allentown, Harrisburg and Pittsburgh, delivering infrastructure solutions for transit/rail systems, bridges, aviation, architecture, tolling systems, construction management and inspection, and project management as well as planning and environmental services. The firm's clients include SEPTA, Amtrak, City of Philadelphia/Philadelphia International Airport, Pennsylvania Department of Transportation, Pennsylvania Turnpike Commission and the Delaware River Port Authority, among others.

**He who has the fastest
golf cart never has a
bad lie.**

—Mickey Mantle

VOLUNTEER SPOTLIGHT

This month's spotlighted volunteer is **Tim Abel**. Tim is an Associate Highway Engineer with Pennoni Associates and works at the firm's headquarters in Center City



Philadelphia. He is a board member for the Younger Member Forum and a co-chair for the Chester A. Arthur School Civil Engineering Club. As part of the latter, he has planned and participated in over 50 CivE Club meetings with nearly 20 middle school students at the Chester A. Arthur School in South Philadelphia over the past two years. Many of these meetings have featured presentations by local engineers and group activities in topics such as transportation, water resources, construction, and sustainability.

Tim has also organized a few field trips for the Club, including one to the Cira Green at Cira Centre South and one to the Franklin Institute for our Section's private screening of the Dream Big Film. He has planned a few events including a “Mini-Engineering Fair” as well as a “Balsa Wood Bridge Building and Testing Competition” for the Club as well.

Outside of YMF, Tim is an appointed member of the National Committee on Sustainability. He volunteers on the COS Advocacy and Communications Committee as well as a few constituent committees, including the Technical Committee for the 2019 International Conference on Sustainable Infrastructure. He has also volunteered as a panelist on the Committee on Younger Member's Vision 2025 Panel at the 2017 ICSI and as a judge on the CYM's Selection Committee for its 2018 Younger Member Awards.

In addition to his involvement with ASCE over the past three years, Tim has volunteered with the Future City Philadelphia Competition, the University of Delaware's E-Week Speed Mentoring program, the Philadelphia Friends of the V Foundation for Cancer Research, the American Heart Association, the University of Delaware Men's Crew Team Alumni Association, and St. John the Evangelist CYO. For all of these things he has done, we are proud to recognize Tim in this month's **Volunteer Spotlight**.

**Let us make a special effort
to stop communicating with
each other, so we can have
some conversation.**

—Judith Martin (“Miss Manners”)

I on Infrastructure

SOMETIMES INFRASTRUCTURE INVESTMENT CHANGES EVERYTHING...

In the mid-to-late 1980s, Copenhagen was experiencing a 17.5 percent unemployment rate, a loss of taxing capacity, and an annual budget deficit of \$750 million. For decades, government policies had subsidized the outmigration of families to the city's outskirts, leaving the municipality overrepresented by pensioners and college students, neither of whom contributed greatly to its tax revenue (does this sound familiar? - Ed.). With a stagnant economy and the traditional manufacturing industry moving out, the city government had to do something radical to spur economic growth and attract a strong tax base.

And so it did.

Beginning in 1990, an alliance formed among several local leaders and elected officials, with an agreement to transform Denmark's capital city by catalyzing investment in housing and state-of-the-art infrastructure, making it attractive to new citizens and strengthening the city's tax base. Undertaking these improvements without increasing local taxes posed a challenge, so the focus went to developing public land within the city's borders that had been left idle and unused.

The solution was a new publicly owned, privately managed corporate vehicle that could regenerate large areas in the city's core, maximize the value of underutilized public land, and use the revenues generated by smart zoning and asset management to finance transit and other infrastructure. The aspiration was to combine the efficiency of market discipline and mechanisms with the benefits of public direction, legitimacy, and low-cost finance.

And so began the remarkable transformation of Copenhagen over the past twenty-five years from an ailing, depopulating manufacturing city to one of the wealthiest cities in the world. Through this process, Copenhagen established itself as a pre-eminent leader of New Localism, demonstrating that market power, innovative thinking, and solid leadership can be used for public benefit.

The intervention proceeded in three discrete phases. The first involved creating the Ørestad Development Corporation in 1992, which was charged with redeveloping an area about 1.2 square miles in total. This had been reserved for military purposes and was located between the city of Copenhagen and the airport, near the bridge connecting Denmark to Sweden. The revenues generated by redevelopment would finance the construction of a transit system for portions of the city. The catalytic move to spur development of this area was the construction of a metro transit line connecting the Copenhagen city center to the airport.

The full development of Ørestad is expected to take twenty to thirty years, at which point an estimated 25,000 people will live in the area, along with a daytime population of 20,000 students and 60,000 workers. The first office building was constructed in 2001 and the first residential build-

ings were completed three years later. As of late 2017 the residential population had reached 10,000 and the worker population totaled 17,000.

The second phase of development involved the revisioning of the Copenhagen port and the restructuring of its management. Historically, the Port of Copenhagen was run largely as an industrial harbor, was managed inefficiently, and ran continuous annual deficits. To balance these deficits, the port's management would generally sell unused land to developers. The opening of the Øresund Bridge in 2000, connecting Copenhagen with Malmö, Sweden, dramatically reduced harbor traffic in the ports of both Copenhagen and Malmö, opening up opportunities for the redevelopment of inner-harbor areas for residential and commercial purposes.

To take advantage of these possibilities, the Port of Copenhagen Ltd. was put in charge of both the land management and urban redevelopment of the commercial harbor. As a result, for the first time in a century, the port realized profits by operating in a more efficient and cost-conscious manner.

The final phase of development involved consolidating the Ørestad Development Corporation and the Port of Copenhagen Ltd. under one entity — The Copenhagen (CPH) City & Port Development. A transit construction company was split off from the merged company to take full responsibility for building the expansion of the metro system. Over the past decade, the new agency has transformed various areas of Copenhagen and has deployed the same innovative model of governance, finance, and operations used by both the Ørestad Development Corporation and the Port of Copenhagen. Eleven of its sites are landfills reclaimed from the sea.

A revitalized economy, a stronger tax base, and an expanded transit system have recharged the city. By 2013 the daily ridership on the Copenhagen metro amounted to 150,000, with an annual ridership of 55 million passengers. CPH City Port & Development was established with the explicit purpose of using the revenues of redevelopment to finance the construction of infrastructure. Consequently, the financing of transit expansion, as well as of metro connections to North Harbor itself involved sophisticated management of public assets.

The Copenhagen story is an example of how the public sector can realize the full potential of public assets to spur large-scale regeneration, finance critical infrastructure or other needs, and participate in the value appreciation that naturally comes with urban prosperity. The public asset corporation model has made the city's industrial harbor a vibrant, multipurpose waterfront while channeling the proceeds of land disposition, revaluation, and development to finance new infrastructure.

Thanks to LinkedIn and authors Bruce Katz and Jeremy Nowak of *The New Localism: How Cities Can Thrive in the Age of Populism*, from which this article is excerpted.

PE POINTERS

Continued from page 3

constructed according to plans and specifications. If you can work with that Engineer on tasks related to the design — like shop drawing preparation, design-related meetings, and other design-related tasks — you might be able to receive credit for design experience on these tasks.

In some states, the Design Engineer, even though not at the same company as yours, may be permitted to sign off on this experience for you.

2. Gain design experience through volunteer work.

I know an Engineer who volunteered for a wonderful organization called **Engineers Without Borders** to help design a water treatment system for a community in a developing country.

3. Consider taking a side job for a small sole-proprietor Civil Engineer.

If your company allows, consider taking on a part-time position with a very small one-person Civil Engineering company. Doing so can give you 5-10 hours of design experience per week and a chance to work with a PE one-on-one.

This can be a win-win, because often sole proprietors can't commit to a full-time employee so a flexible arrangement like this works well for them, and of course you will get the much-needed design experience.

These are just a few ideas for gaining design experience as a Civil Engineer in a construction company.

Please note that every US state has different guidelines on what they deem design experience, so be sure that before you take action in your career, you are clear about your local guidelines.

Lastly, let me urge you to never accept the idea that you can't gain design experience or sit for the PE exam if you work in construction; it's just not true. Be persistent and find ways to gain experience and obtain your PE license. Your Civil Engineering career will be better for it.

Thanks to **Anthony Fasano**, author of the "Ask Anthony" segment in the weekly ASCE informant.

**We live in a society
exquisitely dependent
on science and
technology, in which
hardly anyone knows
anything about science
and technology.**

Carl Sagan