



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

Our 104th Year

April 2017

ENGINEERS WEEK A SUCCESS (ONCE AGAIN)!

Vol. 89-8

We hope you participated in Engineers Week this year. In case you missed it, it was celebrated locally from Friday, February 17 through Saturday, February 25.

The Delaware Valley Engineers Week Committee (DVEW) events were popular and successful. The Kickoff Luncheon, conducted at the Loews Hotel on February 17, drew over 170 attendees. The Young Engineers Social, held at the 2nd Story Brewing Company in Old City on February 21, and the Awards Reception on February 23, at Dave & Buster's in Penns Landing, were similarly well attended and enjoyed by many.

As we know, the completion of this year's events only kicks off the planning for next year's. DVEW, a committee of the Engineers' Club of Philadelphia, is always in need of volunteers to assist in many of the activities surrounding Engineers Week. DVEW has a need for your talents and skills in several diverse areas. If you are interested in volunteering or would like information on volunteer opportunities, please visit our website at www. dvewc.org.

And, once again, we offer our congratulations to our members who were cited at these events, Delaware Valley Engineer of the Year John Nawn and Young Delaware Valley Engineer of the Year Kazi Hassan. At the risk of causing "happy hour burn-out" for our members (we at THE NEWS have neither heard of this affliction nor have ever suffered it from our remembrances), our Section conducted an informal congratulatory event featuring John and Kazi on February 28. About 30 members participated and spent some time networking with the awardees in a smaller setting than was available at the Engineers Week events as well as interacting with each other.

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.

APRIL DINNER MEETING

American Society of Civil Engineers, Philadelphia Section

THURSDAY, APRIL 6, 2017

Philadelphia Marriott West, West Conshohocken, 111 Crawford Avenue (south of Matsonford Road/Fayette Street, near I-76 Exit 332 and I-476 Exit 16), West Conshohocken, PA Cocktails 5:30 PM, Dinner 6:30 PM, 7:30 PM Meeting

This meeting will follow the "breakout" format that has been the theme of our April event for the last six years. Attendees will assemble together 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.

RESERVATION DEADLINE - FRIDAY, MARCH 31. The cost per attendee is \$50, with a discounted (\$20) cost for government agency employees and students, for reservations received

RESERVATIONS RECEIVED AFTER MARCH 31 - All reservations received after the deadline and "walk-ups" without prior reservations paying at the door will be charged \$60 but will be subject to acceptance on a space-available basis. Please note that payment via PayPal will NOT be available at the close of 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 via e-mail at info@asce-philly.org or electronically 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. There is a choice of dinner entrée to be made when you reserve. 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.

The featured "breakout" sessions will consist of the following:

SR 30 ABC Bridge (sponsored by the Structural Engineering Institute (SEI))

SPEAKER: HNTB (to be announced)

This presentation will outline a bridge replacement project in PennDOT District 11-0 on US 30 that occurred over one weekend. Continued on Page 3

2017 SPRING SOCIAL & DINNER DANCE

American Society of Civil Engineers, Philadelphia Section

THURSDAY, MAY 4, 2017

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

Our last Section event of the season will be our annual Spring Social. Please mark the date and location in your calendar.

We hope you can join us for our end-of-season festivities, socializing, networking and fun at an interesting and different venue.

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



PRESIDENT'S MESSAGE

The Section has been busy over the last few weeks. On February 28, we held a networking event which provided a more informal atmosphere for members to interact. On March 9, we had a sold-out crowd at Maggiano's to learn about the 30-year journey of the Delaware River Dredging. The March meeting marked the Section's final meeting at Maggiano's until the Fall.

After the Spring-like weather in February, and the "blizzard" in March, the Spring season has officially arrived. Every year, March Madness, Opening Day

and The Masters are signs for me and other sports fans that Spring is upon us. In the Section, the signs of Spring are always our annual **Technical Group Multi-Topic Meeting** with breakout sessions in April, and the Spring Social in May. During the April 6 meeting we will also honor the Section's new Life Members and Past Presidents. The **May 4 Spring Social** will celebrate the Section's achievements for this past year and induct the new Section Board for the upcoming year. Also, between these events is a private screening of the IMAX film, "**Dream Big**", at the **Franklin Institute** on **April 11**. This is a family-friendly film and we are excited to showcase it in Philadelphia.

Finally, the United States received a "D+" in ASCE's newly released 2017 Infrastructure Report Card, which graded 16 categories of infrastructure. The country's 2013 report card, which also received a "D+", estimated that \$3.6 trillion investment would be needed by 2020 to improve the nation's infrastructure to a good level. Under the current Report Card, that investment estimate is now nearly \$4.6 trillion by 2025. It is estimated that if current spending levels continue, the country's need will fall short by \$2 trillion. In 2018, Pennsylvania's report card will also be issued. In 2014, Pennsylvania's infrastructure received a "C-". Please look for opportunities to assist in the State Report Card update in the near future, as we look to keep the momentum going for better infrastructure. It is important that everyone to continue to use your voices to remind our elected officials of the critical condition of our infrastructure and the continued need for a solution.

Sincerely,
Guy DiMartino, P.E.
President, ASCE Philadelphia Section

DREAM BIG! YOUR CHANGE TO SEE IT!

Dream Big is a HUGE film. Literally. From the Great Wall of China and the world's tallest buildings to underwater robots, solar cars and smart, sustainable cities, **Dream Big** celebrates the human ingenuity behind Engineering marvels big and small. With its inspiring stories of human grit and aspiration, and extraordinary visuals for the world's largest screens, **Dream Big** reveals the compassion and creativity that drive Engineers to create better lives for people and a more sustainable future for us all.

For additional information, please visit **www. DreamBigFilm.com** where you can watch a trailer for the firm.

Our Section will be sponsoring a screening of the firm at the IMAX Theater on **Tuesday, April 11** at the **Franklin Institute**, starting at **5:30 pm**. We are offering discounted tickets (\$7 per person) so you can attend with your friends and family. Tickets must be pre-purchased using PayPal or a credit card (payment at the event will not be an option). Please visit **www.tinyurl.com/Philly/DreamBig** to purchase your tickets.

This is a family-friendly movie and a great way to encourage kids to get involved with and consider STEM fields.

This is a one night event, so sign up and don't miss your chance to see this film. We hope to see you there!



INFRASTRUCTURE REPORT CARD

On March 9, ASCE released the 2017 Infrastructure Report Card. The Report Card found the cumulative national grade remains a "D+," the same grade as the 2013 report. Some incremental progress was made over the last four years, as seven category grades improved, including Hazardous Waste, Inland Waterways, Levees, Ports, Rail, Schools, and Wastewater. However, three categories' grades declined -Parks, Solid Waste, and Transit. The remaining six categories of Aviation, Bridges, Dams, Drinking Water, Energy, and Roads grades remained the same as in 2013. Explore the full Report Card including the category analysis, videos, and interactive charts at InfrastructureReportCard.org.

ASCE, PHILADELPHIA SECTION OFFICERS AND BOARD OF DIRECTION—2016-17 SEASON

PRESIDENT

Guy DiMartino, Traffic Planning & Design, Inc.

PRESIDENT ELECT

Cathy G. Farrell, HNTB, Inc.

VICE PRESIDENT

Angelo Waters, Urban Engineers, Inc.

SECRETARY

Briana Earle, Langan Engineering & Environmental Services

ASSISTANT SECRETARY

Mohamed Elghawy, Traffic Planning & Design, Inc.

TREASURER

Marc B. Preim, STV

ASSISTANT TREASURER

Jennifer Reigle, Pennoni Associates, Inc.

MEMBERSHIP SECRETARY

Nha Truong, City of Philadelphia Water Dept.

DIRECTORS

Andrew Bechtel, College of New Jersey ('15-'17)
Spencer Finch, Langan Engineering &
Environmental Sciences ('16-'18)
Kazi Hassan, Pennoni Associates, Inc. ('15-'17)
Troy Illig, WSP/Parsons Brinckerhoff ('16-'18)
Joseph Natale, WSP/Parsons Brinckerhoff ('16-'18)

Jeanien Price, City of Philadelphia ('16-'17) PAST PRESIDENTS*

AnnMarie Vigilante, Langan Engineering & Environmental Services Joseph Platt, Traffic Planning & Design, Inc.* Jennifer K. Walsh, McMahon Associates Inc.*

* 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.

President—Guy DiMartino, P.E.

Project Manager Traffic Planning & Design, Inc. 2500 E. High Street, Suite 650 Pottstown, PA 19464 (610) 326-3100 gdimartino@trafficpd.com

Secretary—Briana Earle, EIT

Senior Staff Engineer Langan Engineering and Environmental Services PO Box 1569 Doylestown, PA 18901-0219 (215) 491-6500 bearle@langan.com

PUBLICATIONS COMMITTEE

Editor of THE NEWS Robert Wright

Section Outreach Coordinator Nha Truong

SEND COPY TO:

Robert Wright, Pennoni Associates, One Drexel Plaza, 3001 Market Street, Suite 200, Philadelphia, PA 19104

> COPY DEADLINE FOR May 2017 ISSUE April 7, 2017

YOUNGER MEMBER FORUM NEWS

Nicole Eno, Forum Editor Kevin Brown, Forum President 2016-17 Urban Engineers, Inc. 530 Walnut Street Philadelphia, PA 19106 kbrown@urbanengineers.com

NEW ADDITION TO ENO FAMILY



The YMF would like to share news of YMF Public Relations Chair **Niki Eno's** new baby, **Dylan Robert Eno**. Dylan made a very punctual arrival on his due date, January 26 at 2:59 PM. He weighed 7 lbs 14 oz and was 21 inches long, a very healthy baby boy. Family is all doing well, and Niki is expected to be back to newsletter editing next month!

GARNET VALLEY SWE CLUB VISITJANUARY 20

The YMF continued its K-12 outreach with a visit with Garnet Valley High School's SWE club on January 20. The students learned about Civil Engineering through a presentation given by Eloise Gibby, who was impressed with how dedicated and driven the students were. She noted "the students were miles ahead of where I was at their age. They were taking AP level classes and were interested in specific engineering disciplines which really impressed me. One student asked which classes she could take in high school to prepare her to major in Environmental or Civil Engineering. It was so encouraging to be asked questions like that and to talk to an engaged and enthusiastic group of students." We were initially introduced to Garnet Valley High School and their SWE President while our YMF reached out to students at last year's Girls Exploring Tomorrow's Technology (GETT) Expo. Thanks again to Eloise for visiting Garnet Valley HS!

BRIDESBURG ELEMENTARY SCHOOL VISIT FEBRUARY

YMF Board members **Nick Kirn** and **Kevin Brown**, along with Melissa Mertes, visited Bridesburg Elementary School to speak to the 2nd grade students about Civil Engineering. The volunteers presented to about 90 students and then answered students' questions. While the presentation was geared toward an older age group, the presenters were able to craft it in a way that the students were able to better understand. The students were really engaged with ASCE's "What is a Civil Engineer" video as well. After the presentation, the students went back to their respective classes and the volunteers

visited each class individually for the JENGA tower activities. The students thoroughly enjoyed the activity. Thanks to Kevin and Nick for volunteering and thanks to Melissa and YMF K-12 co-chair **Charlie Mumford** for coordinating with Bridesburg!

TEMPLE PANEL FEBRUARY 22

On February 22, Temple University's student chapter welcomed a panel of Young Civil Engineers to speak to their members. The panel included YMF Board Members Katrina Lawrence, Joe Natale, Ajin Fatima, and Eammon Farley, Temple Alumni Peter Bamford, and YMF Board Member/Temple Alum Lauren Davenport. The students were able to ask the panel about management advice, the Raising the Bar initiative, time management, and graduate school. The students mentioned that the panel discussion was very informative.

2017 ASCE LEGISLATIVE FLY-IN MARCH 11-12

On March 11 and 12, Jesse Gormley and Joe Natale represented the Section at the 2017 ASCE Legislative Fly-in, a nationally coor-



dinated effort to educate legislators on the need for viable Infrastructure spending plans, advertise the ASCE Infrastructure Report Card, and offer our expertise to our Senators and Representatives. The two-day event includes advocacy training for younger members, briefings on current legislation before Congress, and networking between other Sections. Jesse and Joe met with staffers from both Senators Casey's and Toomey's offices, as well as several local State Representatives. It was a very educational experience, and anyone interested in government relations should look into ASCE's national and state-wide efforts!

ADOPT-A-HIGHWAY April 9

Fireside Bar & Grille, Ambler

Join the YMF and ASHE Delaware Valley Young Members Committee for 2017's first Adopt-a-Highway event! We will be cleaning up our two-mile section of Bethlehem Pike in Ambler. The group will meet afterwards at Fireside Bar and Grill for refreshments. Sign up at http://tinyurl.com/AAHApril2017.

CRITICAL ISSUES SEMINAR COMING...

Keep an eye out for more information about the YMF's annual **Critical Issues Seminar**, a technical presentation where we invite professionals to discuss a currently pressing issue in the field of Civil Engineering.

Thanks to **Meredith Lis** for filling in once again for new mom Niki Eno.

2017 SECTION AWARDS SELECTED

Our Section Awards will be presented at our **Annual Spring Social and Dinner Dance** on **May 4** at the **Top of the Tower** in Center City. More information and details on the Social will be included in the May edition of *THE NEWS*.

We received a record number of Award nominations this year and the Awards Committee managed to not easily develop a slate of nine Award recipients have been nominated for these honors and approved by our Section Board of Directors. The honorees are:

John Nawn, Fleisher Forensics – Philadelphia Civil Engineer of the Year

Kevin Brown, Urban Engineers – Philadelphia Young Civil Engineer of the Year

Nha Truong, Philadelphia Water Department – Young Government Engineer of the Year

Robert Crawford, James J. Anderson Construction – Geotechnical Engineer of the Year

James Pezzotti, Pennoni Associates – Structural Engineer of the Year

Frank Falcone, Villanova University – Educator of the Year

Michael Carroll, City of Philadelphia – Government Service Award

Katrina Lawrence, DVRPC and Kevin Walsh, Pennoni Associates – Community Outreach and Service Award

Centennial Book Committee (31 individuals) – History and Heritage Award

In addition, we will be citing **Charles Mumford**, Pennoni Associates, on his receipt of the 2017 Eastern Region Outstanding Younger Member in Community Activities from ASCE National. This award was presented to Charlie at the ASCE National Multi-Region Leadership Conference in Newark, NJ in January.

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

When we return from our summer vacation, 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

 $Continued\ from\ Page\ 1$

Partially Grouted Rock

SPEAKER: Bechara E. Abboud, Temple University

This presentation will outline the evaluation, selection and design of scour countermeasures for PennDOT bridges, many in District 6-0.

 $\begin{array}{lll} \textbf{Lightweight} & \textbf{Aggregate} & (sponsored & by & the \\ Delaware & Valley & GeoInstitute & (DVGI)) & & & \\ \end{array}$

SPEAKER: Craig Calabria

This presentation will cover the use of foamed glass lightweight aggregates on various highway and bridge applications and green roofs.

MARCH DINNER MEETING

March 9, 2017

Maggiano's Little Italy, Center City

The Delaware River Deepening Project – A Thirty-Year Journey

by Robert Wright, Editor

The lack of winter we have enjoyed thus far this year had our March meeting competing with unusually moderate temperatures outside, providing a temptation for folks to skip the meeting and enjoy the weather. What we found is that a good number of people – over 100, filling the meeting room to the capacity (and putting a handful of Board folks at a table in an adjacent room) – ignored the temptation and showed up to enjoy the usual great meal that Maggiano's has to offer as well as to hear about a local project that has had significant impacts on our economy and employment and one that touches on almost all aspects of Civil Engineering.

President **Guy DiMartino** settled the large crowd down and into their seats to get the evening underway. Two Student Chapters were featured at this meeting, and first up was **Yasmina Shields**, President of Drexel's Student Chapter, followed by her counterpart at Temple's Student Chapter, President **Anthony Moffa**. Each gave a short update on what their respective Chapters are up to and planning for this season. Dinner followed, and as the feasting was winding down, Vice President **Angelo Waters** came forward to introduce the evening's speakers.

Representatives of the Philadelphia District of the US Army Corps of Engineers, the project sponsor, presented on the effort. Anthony DePasquale, Chief, Operations Division, and Peter Gori, Geologist of the Engineering and Construction Branch, started with the history of dredging operations on the Delaware River, which since the late 1800's have increased the channel depth from the 15'-20' range to 40' by 1938. The increase to 45' was necessary to permit ships of "post-Panamax" dimensions to serve the River, which is the fifth busiest port in the US and the largest freshwater port. The work, with an overall construction value of over \$360 million (with \$230 million of this in federal funding), has been divided into ten contracts, eight of which have been completed to date.

The program was first proposed in 1981 and after several environmental studies, legal challenges, and funding issues, a project sponsor agreement was formalized with the Philadelphia Regional Port Authority in 2008, PRPA became the sponsor of the project to advance it, as then-Governor Rendell had made it one of his top priorities to promote the Port of Philadelphia and the Commonwealth funded the initial construction contract (even though it was in the middle of the 103-mile channel, adjacent to Delaware), which began work in 2009. Legal challenges by New Jersey were being worked out at the time, so no work could take place that would affect that state's portion of the River (and, through a boundary anomaly, the Delaware-New Jersey border is on the east shoreline of the River). Messrs. DePasquale and Gori described the various dredging methods employed, the location of dredge spoils areas, and protective measures in place to handle hazardous materials, unexploded ordinance, and fish and wildlife that call the River home.

In one of the two current contracts, blasting must be employed to handle and remove considerable rock formations in the Marcus Hook area. Messrs. DePasquale and Gori showed a video that illustrated the blasting process and the measures in place to protect fish, particularly two endangered species of sturgeon, before blasting begins. They also noted the different types of dredges used depending on the expected river bottom conditions and soil characteristics.

The nature of cargo on the River has changed over the years and will continue to do so with the deepened channel, which will assist the growth of the local ports. Messrs. DePasquale and Gori outlined the geographical and transportation advantages of the port facilities and how, at the start of the effort, the mix of cargo was 80% oil and 20% other products. Much of this was attributable to the larger tankers being unable to enter the River, and needing to "lighter" cargo to barges at the mouth of the Delaware Bay. These tankers are now able to use the River all the way to their intended piers, and market forces have contributed to local ports handling different materials, resulting in a change in the mix of ships to 20% oil and 80% other products today.

Messrs. DePasquale and Gori noted that dredge spoils have been able to provide beneficial reuse as aggregate for construction projects needing fill, including the recent Runway 17-35 extension at the Philadelphia International Airport, the River Winds golf facility across the River from the Airport in New Jersey, coal mine reclamation in upstate areas of Pennsylvania, and several local roadway projects. Much of the sand removed at the southern end of the channel was used to replenish the Delaware Bay shoreline at Broadkill Beach, Delaware, resulting in higher property values for adjacent homes. Despite the many soundings, cores and similar investigation undertaken, there have been a handful of construction changes necessary to accommodate unforeseen situations, including the striking of a gas pipeline, which is currently in litigation. Many pipe crossings are shallow and these have been "grandfathered", but new installations will need to be at least 25' below the channel bottom.

Federal budget approval pending, the last contract will be getting underway this summer and the effort will be complete when it wraps up in late summer 2018. Messrs. DePasquale and Gori reminded the crowd that regular maintenance efforts will be needed and ongoing to keep the channel depth adequate for years to come.

The speakers touched on various project facts and figures and ably handled several questions from the audience as they concluded their comprehensive and very informative presentation. President DiMartino closed the meeting and thanked everyone for coming, and he presented tokens of the Section's appreciation to each speaker for a job well done.

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

Jay A. McKelvey III jaym@earthengineering.com

ENGINEERING MANAGEMENT

Chair currently vacant

ENVIRONMENTAL AND WATER RESOURCES

Eric Lindhult eric.lindhult@gmail.com

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

Josh Amsler joshua.amsler@aecom.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.

SPONSORS IN THE NEWS

URBAN ENGINEERS' PHILADELPHIA OFFICE EXPANDS STRUCTURAL SERVICE CAPABILITIES

Urban Engineers is pleased to announce the expansion of structural engineering capabilities in its Philadelphia office, with the relocation of Jeffrey S. Yeager, PE. Mr. Yeager serves as the deputy structural practice leader for the firm and previously worked in Urban's Erie office. He has extensive design experience from early planning stages through construction administration. He provides project management and Structural Engineering for facilities and building systems, including mid-rise projects in high seismic and high velocity hurricane zones. He oversees other Structural Engineering experts that use innovative programs for Building Information Modeling (BIM) and 3-D modeling to provide detailed, comprehensive analyses that help stakeholders in envisioning a project's desired future.

Urban's structural project portfolio consists of commercial development, including office, residential and mixed use; higher education; historic structures; transportation; arts and cultural; and industrial facilities. The firm's Structural Engineering practice has received national recognition for its efforts and has garnered numerous awards and accolades in national publications.

PRESIDENT DIMARTINO – WE HAVE A "GUY" FOR THAT...

As is our custom here at *THE NEWS*, when spring rolls around, just like the red knots making their scheduled stop on their journey from south to north at Cape Henlopen to feast on horseshoe crabs, we assess and summarize the accomplishments of our current Section President. While this exercise might be comparable in the olfactory sense to the horseshoe crab thing (i.e. they both tend to stink), we can't explain the origins of it. It seems to be a tradition that has gone on for some time and was handed down to the current administration of *THE NEWS* to continue, without much explanation or rationale. Thus, we offer this summary and "roast" of our standing President, **Guy DiMartino**.

When we do this, we usually explain that, just as the genesis of "why" it's done is a mystery to us, the "what" is a little shaky as well. Our esteemed predecessor in the Editor's chair, whose name now graces THE NEWS itself (and who is no doubt sitting at an editor's desk somewhere in the great beyond, wondering what in heck the "youngster" is doing with HIS News), enjoyed the assembly of this article maybe a little too much and often used words that we haven't seen since we studied for the SAT's. Many of us learned to keep the dictionary handy when we read these articles, and not the little pocket version (as it didn't always contain the words that were being used). In any event, in the somewhat less-skilled hands of the current Editor, needless to say we'll stick to words we all know and use, for the most part (even though we already tossed "olfactory" into the mix...), and will use some discretion to basically keep it clean. We do have standards we must uphold. albeit loose ones, but they remain standards. And as you can see, what the current Editor lacks in the use of big words, he makes up for with long sentences (just you try and diagram one of those you have read so far - make sure you have a backup red pen if you do!).

Before we proceed, we would note that some people think this writing thing is hard. Many of them are Engineers. As we know, writing skills are not taught in Engineering schools, and in many ways it's a good thing for many of us that writing, spelling and grammar aren't graded in our Engineering endeavors. Many Engineers would rather take on the most difficult Engineering assignment than being handed a report or proposal that has to be written. Surely this is a punishment without equal and a harsh one at that for many of us. When it came to us having to pen this sendoff of our esteemed President, we realized from the get-go that, as much as writing doesn't scare your Editor, this assignment was going to be a lot tougher than others. As a matter of fact, it has proved to be very tough. This is what we are up against here.

If this is starting to look like one of those 500word compositions you had to write in grade school, you're catching on. We have to fill some space, give our President his due tribute (or ribbing), and somehow capture the interest of you, the reader, not necessarily in that order. As noted, not easy, because, as you may or may not know, our President is a very tough study. He keeps a lot to himself and runs very quietly. But he gets things done, which is important.

Very often we hear about someone in need of a service or a product or something similar and someone will respond that they have a "guy" for that. Well, not quite a year ago, on a somewhat chilly early May evening, we gathered at the Le Meridien Hotel at our annual Spring Social and installed our Guy into the Section Presidency. And he was certainly the guy for this, having served as our Section Treasurer for a few years, after being the Assistant Treasurer under his colleague Joe Platt until Joe got kicked upstairs to start his own rise to the President's seat four years before. And don't think we haven't noticed the similarities between Joe and Guy both are Widener graduates, both work at Traffic Planning & Design, both have been Section Treasurers, and both are the strong but silent types. A couple of years back we had to write this piece about Joe and we were going through much the same angst, trying to find the "dirt" or skeletons in the closet that Joe might have, and came up with nothing. This has been our same experience with Guy. We kidded Joe about being the "stealth" President - this adjective could describe Guy just as accurately (hey, there's another similarity...).

If you're counting, we've rounded the 800-word "bend" right about now, but we feel we may be on a roll, so we'll keep going. Since we've written almost two 500-word compositions here, and managed to not yet tell you anything, we pretty much have to continue. (You're welcome...)

Guy's clients at TPD include a mix of schools and hospitals, both places where quiet is valued, and this describes Guy. He doesn't rock the boat or make waves. Your Editor reminds him that we need his President's message. It shows up within a day or two. It's usually poignant (dictionary alert for some of you...) and concise. He didn't rely on photos other than his "mug shot" that accompanied each message, and he didn't vary the photo - same one all year. He didn't go the "cutesy" route and slip in any of his kids' photos. Some of our Presidents (and we won't name names, but you know who you are) were a bit tardy and asked for extensions. We get the feeling they dreaded having to write these. On the other hand, Guy was consistently very good about the monthly assignment. It was almost as if he had them written and ready to go. And they were good. We like that. (Hint to our President-Elect...)

You may joke about that one friend you have who isn't on social media and wonder how anyone can do that in this day and age. Well, from what we've been told, Guy is one of those people. Again, if this works for you, fine, but he is one of the few. This might be a good thing, having seen what has happened with some social media sites and how many "unfriending" actions are occurring over simple disagreements on political opinions. But we digress...

Guy has presided over quite a bit in his year at the top. The long-awaited Centennial Book finally saw the light of day, and while we may be a little biased and say it was worth the wait (because it is...), it's also good to be able to say it's finished. Our Section's mural is looking to be revitalized and reinstalled in the fall, after a number of years and several attempts to do this. Two of our members were cited during Delaware Valley Engineers Week as the recipients of the top honors (see the separate article on this). Our Section will be participating in the update of our statewide Report Card, which is getting underway this spring for release in spring/summer '18. While Guy may not have direct involvement in all of these, as they say in real estate, location is important, and as they say in politics, if you're the top "guy" when things are happening, you can take the credit for whatever happens.

In our search for "dirt", very little turned up. We were advised that Guy didn't let on about being an expectant father until he was literally buying the cigars to hand out for the momentous occasions. We were also told that he golfs but doesn't use a driver, preferring his 3-wood for the job. Your Editor, whose golf game can usually be described as "hitting them long or straight" (changing the conjunction, for those of you who know golf), sees no issue with this, as he has a driver that looks as if it were brand new, alongside 3 and 5 woods that have many battle scars... So this is what passes for dirt. (Note to self – find better dirt-gatherers next time...)

The "word-o-meter" is telling us we're getting close to 1500 of them, and it's sad to say we have to wrap it up despite having next to no dirt to offer, and making you read this far to finally tell you this. But, if you know Guy, this is no surprise. Thus, we'll leave you with the veritable crumbs provided. We could take a different tack and wonder if Guy is in the Witness Protection Program or something like that, but that wouldn't be right. (Hopefully we're not blowing his cover here, if he is...) Thus, we will close this venture of ours and offer Guy the usual thanks and honor of being almost a Past President (one more month or so...), when he can go to that place where most Past Presidents hang out and take a well-deserved rest after an intense and productive year. We look forward to the "next guy", Cathy Farrell, picking up where Guy left off, and with apparently little to accomplish given what has been done during his term (refer back a couple paragraphs). A year from now we'll follow tradition and offer our assessment of what Cathy has done and what dirt she has dragged into the mix, not necessarily in that order.

We are what we repeatedly do.

Excellence, therefore, is
not an act but a habit.

- Aristotle

I ON INFRASTRUCTURE

Another in our overview of infrastructure issues elsewhere...

A massive project to build a new rail tunnel under the Hudson River won't fall prey to the type of interstate political spats that have bedeviled other large infrastructure plans in the New York region. Senators Bob Menendez and Cory Booker of New Jersey and Chuck Schumer of New York, along with Amtrak Chairman Tony Coscia, attended a panel discussion in December that provided an update on the so-called Gateway project, the \$20 billion-plus plan to build a new tunnel, expand New York's Penn Station and make other significant improvements along the aging, congested and vital rail line between Newark and New York City.

One past and one current project offer cautionary tales, and, as in many big-ticket projects, unfortunately the issues are more political than technical.

Six years ago, New Jersey Governor Chris Christie curtailed a rail tunnel project, citing concerns of cost overruns, after more than \$100 million already had been spent. The project, Access to the Region's Core (ARC), wasn't fully supported by New York lawmakers and was to be funded by the State of New Jersey, the Port Authority of New York and New Jersey and the federal government. ARC focused on new access primarily for New Jersey Transit trains and would have its two tunnels go directly into a new twolevel terminal beneath 34th Street in New York City, adjacent to Penn Station. While the proposed terminal would be physically connected to Penn Station for pedestrian access, it would not for train traffic. The terminal would dead-end in New York, thus allowing no connection to the east and basically useless for Amtrak trains to/from the north. For this reason, the New York side saw limited value to the effort and did not support it. Amtrak trains for the most part would still have to deal with the existing 105-year-old North River Tunnels beneath the Hudson River to get to points west of Manhattan as they do today.

Last year, bickering between the two states brought the development of a new \$7.5 billion bus terminal in Manhattan to a near-standstill. This new terminal would replace the existing under-capacity and dilapidated 65-year-old Port Authority Bus Terminal. New York lawmakers claim the process is being dictated by New Jersey lawmakers, and say the Port Authority will need to seize land to build the new facility. A final location for the new terminal has yet to be identified, although several are being evaluated, with the cost of real estate itself being a major determinant in this evalution.

The Gateway project, which has the support of Christie and New York Gov. **Andrew Cuomo**, is different, Menendez said. "I don't see this as a bistate squabble. I see that this project is one where we're all singing off the same song sheet. Maybe there might be some debate about the bus terminal, but that's not going to affect this project. This project is about opening up the *Continued on page 7*



Dr. Peter DeCarlo

Graduate Advisor (215) 895-2345 pfd33@drexel.edu

Dr. Charles Haas, F.ASCE

Head, Civil, Architectural & Environmental Engineering haascn@drexel.edu







Integrated Engineering and Environmental Solutions

LANGAN





JBC ASSOCIATES, INC.

Construction Management

120 S. Warner Road, Suite 100

King of Prussia, PA 19406 610.992.9090

Fax 610.992.9099

www.jbcassociates.com

"Success is in the details. We handle them for you." $\,$













INFRASTRUCTURE

Continued from Page 6

economics of the entire region. I think everybody on both sides of the river fully understand that."

Gateway has already been approved for expedited environmental permitting, a process that should be completed by early next year, Coscia said. Schumer and Booker both expressed cautious optimism that President Trump would continue the government's financial commitment. "At the end of the day, he's a New Yorker," Booker said. "And this is a vital artery into this city, and to have this artery continue to crumble threatens the lifeblood of New York."

Coscia reminded listeners of the ticking clock that provides a backdrop to Gateway. Two years ago, Amtrak predicted the existing tunnel would someday have to have each of its two tubes

closed for a year or more to repair saltwater damage from 2012's Superstorm Sandy. The 55 hours per weekend Amtrak now spends on tunnel repairs eventually won't be enough, Coscia said. "The reality is, I think we're doing everything we possibly can, but I can't, nor can any Engineer, really predict how long we can actually do this before a problem arises that is beyond what we can fix in the normal course of a repair program," he said. Realistically, the existing tunnels will need to remain in service until the new tunnels are available and operational before any significant repair work, which will necessitate their complete closure, can begin. No one is certain how long this situation can continue as is, given the age and fragile condition of the existing tunnels.

Thanks to the New York Times for this info.

requirements to be easily estimated and jobs tracked from start to finish.

His older workers also played a key role in reimagining the operation, and Nava turned to them for guidance and advice on everything from where to place equipment for easier use to how to better gauge quantities of fabric for specific jobs. "They have a tremendous amount of experience gained over the course of many years in the industry," he says. "So to be effective, you have to lead from humility."

Few younger Americans have the sewing and tailoring skills Brooks Brothers relies on, which is why the company recruits through recommendations from current employees, from apparel plants that are closing, or within immigrant communities that excel in sewing. In the past, many workers came from Italy, Croatia, and other parts of Europe, but increasingly newcomers hail from Central and Latin America and China.

Nava changed some rules to make everyday work-life easier for the older staff. Workers who are ill or need to care for ailing relatives have flexibility to take time off. In addition to vacation, each employee receives 1,400 minutes a year to use for doctor appointments or to go to school events for children or grandchildren. And employees get ergonomic help at their workstations.

Workers at the factory—an airy, light-filled, open space that resembles a start-up office more than an old plant—churn out ties and bow ties in different fabrics for four seasons and also fill special orders for colleges and other groups. Retired tailors willing to work are routinely called back during busy times. Paola Posca, a 67-year-old widow who learned to sew when she was 8 years old in Italy, says she wants to keep working as a full-time tailor in alterations until she's at least 70 and becomes eligible for maximum Social Security benefits. Then she hopes to continue working part-time at Brooks Brothers well into her 70s.

"This place is more my home than my home," says Posca, who commutes 90 minutes each way to work. "I still walk fast, which means I also work fast, and I wouldn't want to be sitting in my apartment all day watching television."

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

* N-ASCE-not always something concerning engineering...

N-ASCE*

THE VALUE OF "SEASONED" WORKERS – WHY BROOKS BROTHERS IS INVESTING IN VETERAN TAILORS

Some of us who meet this definition (including your Editor) may appreciate that the "old guys" (and girls) still can contribute...

Julia Yeje, who wears her graying hair in a long braid, runs her hand up and down a bolt of striped silk fabric, checking for flaws. Then she turns to her sewing machine and effortlessly shapes a tie, focusing most on the tip, and sews in its lining at a Brooks Brothers plant in Long Island City. "I love my work," says Yeje, 64. "When I have a suggestion for making something better, people here listen."

So much for the notion that older workers spend part of each day watching the calendar. Yeje has no intention of retiring anytime soon, nor do her employers intend to let her. In today's fast-paced, transitory workplace, where many companies favor young, inexpensive workers or outsource to low-cost contractors overseas, Brooks Brothers considers senior employees such as Yeje worth the extra cost.

Though the factory's 222 employees range in age from 22 to 80, more than half are 55 or older. The average tenure is 30 years. The plant is an example of age diversity, providing a glimpse of where the U.S. workplace may soon be heading as the population ages. Almost 20 percent of Americans 65 or older were employed last year, up from 12 percent a decade ago. More seniors are keeping their jobs beyond traditional retirement age, because they want to continue working and often need the income. At the same time, manufacturers, retailers, and even legacy technology companies are rediscovering the value of older, more seasoned workers and are taking steps to keep them.

"U.S. companies increasingly are heading in the same direction as those in aging countries like Japan and Germany with shortages of skilled workers," says Ruth Finkelstein, associate director of Columbia University's Robert N. Butler Columbia Aging Center. "Brooks Brothers is ahead of the curve and a model for other companies" in tackling the challenges and opportunities of managing multigenerational employees, she says.

Yeje and her peers can cost more to employ than their younger colleagues. Older sewers in the alterations department—where half the factory's employees work, altering about 225,000 items of clothing a year from stores with too much work to handle—can earn up to 15 percent more in pay than newbies. But Brooks Brothers considers the veterans a worthwhile investment, because they excel at speed and precision and make few mistakes. The operation is largely automated, but some work is still done by hand, and older, more experienced tailors are more skilled. They can make sample neckties in only 30 minutes—a task a newbie can't handle. Twenty minutes later those ties are in the hands of Brooks Brothers executives at headquarters in Manhattan.

"You can't do that from a plant in China," says Luis Nava, director of operations at the factory, which makes 1.5 million ties annually along with alteration work. Brooks Brothers, the nation's oldest men's clothing manufacturer, has outfitted 39 U.S. presidents, including Abraham Lincoln and Barack Obama, and is now owned by Italian billionaire Claudio del Vecchio.

At 37, Nava sees himself "right in the middle" of the generations he manages. After taking over the factory three years ago, he hired a few younger employees with computer skills and added an engineer to help modernize the plant. He quickly realized younger employees sought different ways of doing work and career advancement, while veterans wanted respect for their knowledge and years of service, even as they needed retraining in new methods.

Nava was able to please both groups by consulting closely with older workers every step of the way as he made changes. His mandate was to eliminate "everything that was wasteful," including unnecessary movements of employees during the tie-making process and excess inventory, while maintaining quality. His younger professionals helped instruct workers about new equipment and introduced computerized planning tools, allowing fabric

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