

Vol 96-4

Our 111th Year

The Sidney Robin Memorial Newsletter of the Philadelphia Section ASCE

December 2023

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. http://www.asce-philly.org
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NON OMNIA POSSUMUS OMNES (WE CANNOT ALL DO EVERYTHING)



As we express our gratitude, we must never forget that the highest appreciation is not to utter words, but to live by them.

-John F. Kennedy

JANUARY JOINT DINNER MEETING

Delaware Valley Section, American Society of Highway Engineers

WEDNESDAY, JANUARY17, 2024

Crowne Plaza Hotel Philadelphia-Valley Forge, 260 Mall Boulevard (across from King of Prussia Plaza), King of Prussia, PA

Cocktails 6:00 PM, Dinner 6:45 PM, Meeting Presentation Follows SUBJECT: PennDOT Update – Secretary of Transportation

SPEAKERS: Secretary Michael Carroll will present PennDOT's long-range plans and other pertinent topics

RESERVATIONS FOR THIS MEETING MUST BE MADE THROUGH THE DELAWARE VALLEY SECTION, ASHE. The reservation process will be provided in the January edition of *THE NEWS*, as well as in upcoming e-blasts, along with more information on the meeting.

If you have any questions on this, please contact Section President-Elect Kevin Brown (kbrown@transystems.com).

A new survey found that 80 percent of men claim they help cook Thanksgiving dinner. Which makes sense, when you hear they consider saying "that smells good" to be helping.

– Jimmy Fallon



SECTION MEETING SCHEDULE 2023-24

The Section Meeting program for the upcoming season remains in the preparation mode and our meeting program committee is busy lining up speakers and topics for what we hope will be an interesting and informative series of meetings. The information we have at this point is provided below for your planning purposes. We would suggest that you use this to mark your calendar at this time and hold the dates.

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

We also note the advantage of joint meetings with other societies and will schedule these as we can.

Our schedule of remaining meetings, all in 2024, is:

February – to be determined

March 14 - Maggiano's Center City; Chinatown/Vine Street "Stitch"

April – multi-topic/breakout sessions; specific topics and venue to be determined

May 16 – Spring Social; Cescaphe Down Town Club

N-ASCE* 100 YEARS AGO - THE TRACKLESS TROLLEY WAS THE MOST PHILLY WAY TO GO!

Known to the rest of the world as trolley buses, Philadelphia was the first city to regularly operate "trackless trolleys." These vehicles combine the best features of trolleys (minimal levels of noise and air pollution) with the flexibility of a bus (they can steer around obstructions in the street).

A trackless trolley is an electric bus that draws power from dual overhead wires using spring-loaded trolley poles. Two wires and two trolley poles are required to complete the electrical circuit. This differs from a tram or streetcar which normally uses the track as the return path and needing only one wire and one pole (or pantograph). They are also distinct from other kinds of electric buses which usually rely on batteries.



A Philadelphia manufacturer began roadtesting the trackless trolley technology in 1921. Following this testing, a fleet built by J.G. Brill Company in Southwest Philadelphia (the firm which constructed the large majority of our city's pre-World War II trolley cars), was introduced on October 14, 1923 on Oregon Avenue. These were operated by the Philadelphia

Rapid Transit Company. This service, designated Route 80, ran from 22nd Street and Passyunk Avenue to Delaware and Oregon Avenues, across South Philadelphia. The first ride was filled with curious Philadelphians on a "joy ride" as described by The Inquirer at the time.

Philadelphia's second trackless route, Route 61, began operation in 1941. Route 61 ran the length of Ridge Avenue from Venice Island (an industrial island bounded by the Schuylkill Navigation canal in Manayunk) to Center City at 8th and Locust Streets. This was later cut back by a block, to Walnut Street, when the direction of Locust Street was changed from westbound to eastbound. This

ASCE, PHILADELPHIA SECTION OFFICERS AND BOARD OF DIRECTION — 2023-24 SEASON

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*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, these individuals will be serving in appointed positions:

ASSISTANT SECRETARY Assunta Daprano, AECOM ASSISTANT TREASURER

Patrick McCourt, PennDOT

We will continue to have honorary Board Members appointed as well and these names will be provided accordingly.

Contact Us:

President—Joseph Natale, PE

Senior Project Manager/Implementation Engineer Delaware Valley Regional Planning Commission 190 N. Independence Mall West, 8th Floor, Philadelphia, PA 19106 215-592-1800; jpnatale@gmail.com

Secretary—Dennis Wilson, PE

McCormick Taylor Associates 1818 Market Street, 16th Floor, Philadelphia, PA 19103 215-592-4200, dewilson@mccormicktaylor.com

PUBLICATIONS COMMITTEE

Editor of THE NEWS Robert Wright

Section Outreach Jesse Gormley, Dennis Wilson

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

COPY DEADLINE FOR JANUARY 2024 ISSUE DECEMBER 8, 2023

NOVEMBER SECTION MEETING

November 9, 2023

SEPTA – Transforming a Legacy System

Maggiano's Little Italy, Center City

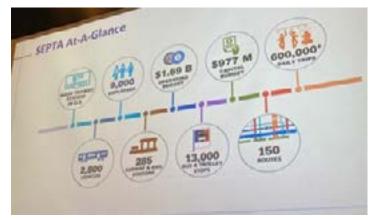
By Robert Wright, Editor

Our second Section dinner meeting for 2023-24 found us once again at Maggiano's as the day turned into evening darkness, the result of the recent fall back to Standard Time. We know from past experience that when we have certain topics, particularly those from agencies which will likely involve some insight into coming work and proposals, we tend to get lots of interest (and lots of faces we don't see regularly...). In the spirit of "if you build it they will come", we certainly built it with this month's topic on SEPTA and its plans for future improvements, and they certainly came, to the tune of exceeding the room capacity slightly and pushing some of our Board members to volunteer to have their dinners in the small room adjacent to the dining room, where the Board usually has its pre-dinner meeting. There were a handful of no-shows, but over 100 folks were there, easily one of our larger meeting turnouts, to hear what SEPTA has in mind for coming assignments and contracts. (And this time, fortunately (maybe...), no outside distractions like Phillies games or anything like that...)

President Joe Natale managed to get the somewhat-raucous crowd settled and seated to start the evening, with several announcements. Two Student Chapters, Swarthmore College and Widener University, were featured at this evening's meeting, adding to the crowd with groups from each school in the room, and President Natale asked each Chapter to present on its current events and happenings. Widener was first up, with its own cheering section led by Dr. Vicki Brown welcoming Chapter President Madigan Hockman and Vice President Julie Clarke to report on its activities and highlights, followed by Swarthmore, with a much smaller group present, and Chapter President Justin Chai and Vice President Ben Aaron tag-teaming its Chapter's report.

Dinner followed, with President Natale having the dubious task of once again settling the crowd down and bringing President Elect Kevin Brown to the podium to introduce SEPTA's presentation team, Rvan Judge, Deputy Chief Planning Officer and Anna Hooven, Program Manager. Mr. Judge opened the session with an overview of the SEPTA system, how it was created nearly 60 years ago from the remnants of routes established and built by private companies and railroads, and how it has been a continuing and ongoing challenge to create a cohesive and modern system from these separate and aging (and often maintenance-deferred) operations. SEPTA has risen to the challenge and expended considerable funding and effort to update and modernize the system to meet the needs of current-day riders and commuters, and offer consistent dependability, despite it being one of the least-supported transit agencies in the United States in terms of funding-percapita. SEPTA consistently finishes near the bottom of this list in a comparison of funding support of peer transit agencies in major metropolitan areas. Ironically, SEPTA's expenditures provide economic benefits for nearly the entire Commonwealth through its suppliers and product providers located throughout Pennsylvania.

Mr. Judge outlined recent efforts to bring the system to a state of good repair and to additionally be more responsive to the needs of current users, which have changed dramatically since the pandemic and related shutdowns. Ridership is returning slowly but still lags behind pre-pandemic levels and in



some scenarios anticipated to possibly never come back to what it once was. SEPTA is looking to change the way it operates as well, with possible revisions to routes that have run on the same streets and with the same service patterns since before the advent of SEPTA in the 1960's (and in some cases beyond that, to the start of the 20th century). Three major efforts were explained, SEPTA Metro, Bus Revolution, and Regional Rail Reimagined, which would allow SEPTA's current modes and services to adjust to be more responsive to currently-experienced travel patterns and needs. All three programs are currently underway with the Bus Revolution effort in final recommendations mode and changes anticipated to be effected next spring.

Ms. Hooven focused on the Trolley Modernization aspect of SEPTA Metro (this includes the current rapid transit, trolley/light rail and Norristown High Speed Line services). Trolley Modernization encompasses the five subway-surface trolley lines and Route 15 in the city and the Routes 101 and 102 in Delaware County. A new fleet is on order to replace the current 40-year-plus Kawasaki cars and introduce low-floor vehicles to make these lines fully accessible with the new cars having 50% more capacity and more doors for faster loading/unloading. The fleet will require revised stops and loading platforms, track alignment changes in some places, and other civil-oriented improvements and the first of several anticipated requests for proposals will be released for design work this year. Additionally, a completely new maintenance facility for the new fleet will be designed and constructed in advance of the cars' arrival (anticipated in 2027), and RFP's will be on the street for this work as well shortly.

Several questions and comments were offered by the attendees and insightful responses were provided. President Natale closed the evening and thanked them for their interesting program and offered parting gifts for their time and effort on this.

The full presentation will be made available on our webinar library on Teachable.com, an online platform where we will upload our recorded PDHworthy webinars, which can be watched at one's own pace and time to earn your PDH.

N-ASCE* SEPTA

Continued from page 2

would be the only trackless line to serve Center City. It was converted to a bus route in 1960.

There are currently around 300 trackless trolley systems in operation in cities and towns in 43 countries. In the US, Boston, Dayton, San Francisco and Seattle also operate these vehicles, and one system remains in Canada (Vancouver, which cited 75 years of operation of its system this past August). Numerous cities in each country once had trackless systems. SEPTA boasts the longest-running trackless trolley service in the entire Western Hemisphere and is the second oldest in the world behind Shanghai, China.

There are three trackless trolley routes still operating in Philadelphia today, Routes 59, 66, and 75, which serve the northern and northeastern parts of the city. A fleet of 38 modern low-floor coaches, dating to 2008, connect with SEPTA's two major rapid transit lines.

Philly was an early adopter of the trackless trolley, as it had its advantages. The vehicles are quieter and greener than other buses. But trackless trolleys generally lost the race against their diesel-powered counterpart. At its peak there were 6 trackless routes in the city, and as recently as 2003 five of them

YOUNGER MEMBER FORUM NEWS

Laurel Welch, Forum Editor Kirsten Brown, Forum President 2023-24 Michael Baker International, kbrown@mbakerintl.com

TTF Watershed Tree Planting – October 28

YMF partnered with the Tookany/Tacony-Frankford Watershed to plant golden ragwort and Arrowwood Viburnum in the stream corridor in Elkins Park. The new plantings will help intercept runoff before it



reaches nearby sewers and waterways which will help reduce contaminants in the Creek as well as reducing stormwater volume in the sewers during rain events. Thank you to our volunteers for their hard work and positive attitude in helping improve the quality of our local creeks!

Taggart School Outreach Event with Girls, Inc.

October 30

YMF members attended the Girls Inc. afterschool program at Taggart School in South Philadelphia. Volunteers introduced 15 students to Civil Engineering concepts and worked in teams to create marble roller coasters



out of foam pipe insulation and construction paper. Thanks to our volunteers, Yuki Ishii, Elvira Mikhael and Kerianne Chen.

Adopt A Highway Cleanup Event November 5

YMF teamed up with our counterparts at **ASHE Delaware Valley's Younger Member Committee** to field a combined group of 10 volunteers to clean our 2 miles of adopted highway, with volunteers picking up trash on the Bethlehem Pike corridor between Lafayette Avenue Connector and Butler Pike in Fort Washington/Ambler. The group enjoyed a nice fall day for this event, followed by some well-earned rest at the Fireside Bar & Grille. Thanks to all who came out and to Fireside for providing the "post-cleanup" meeting location!

This event is conducted twice a year and will likely be scheduled for a springtime cleanup in March/April 2024.

YMF Cited for Assistance!

We managed to partially report on this in the November edition of *THE NEWS*, where we had the photo but not the story, and we apologize for this error. Since we want to give you the complete report, it is included here with the photo.

On September 18, YMF was honored with the Volunteer Leader award from the Tookany/Tacony-Frankford Watershed Partnership. This award was given in recognition of YMF's continued service through various volunteer efforts including planting native perennials, trees, and shrubs in rain gardens and islands to intercept runoff from local impervious surfaces. Past efforts also reintroduced native plant species to help control erosion, improving the water quality of the Jenkintown Creek before it flows into the Delaware River. Volunteers also cut down an



invasive species called phragmites to help native species take root.

YMF representatives **Dan Bhaumik**, **Kevin Malley, Kirsten Brown**, and **Martin Wiliams** (from left in the photo) accepted this award from the Watershed Partnership representatives (at right).

TIME TO PAY YOUR DUES...

ALSO, LOOKING TO REFER A NEW MEMBER? OR SOMEONE WHO'S NOT AN ENGINEER?

And if you want to advise friends and colleagues of the benefits of membership, ASCE's Member Get A Member referral program is a good way to refer prospective new ASCE members to our society. For each new member you refer, you can receive a \$50 Amazon.com gift card when they join. You can refer up to five colleagues at a time. More details are available at asce. org.

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

There are additionally a number of free eLearning Webinars available to help you develop critical career skills, with topics covering a broad range of technical interests, leadership development tools, and key member programs. Many of these offer professional development hour (PDH) credit that you may need for your license renewal. Often these PDH's are valid in states such as Florida and New York, which are not all that easy to obtain given those states' pre-approval requirements. You are able to take up to 10 free PDH courses at your convenience, so this is indeed a valuable benefit. (And, a friendly reminder, if you haven't taken your 10 free courses yet, you have until the end of the year to do so for the current membership period.)

Also, please keep in mind that ASCE isn't just for Civil Engineers. While you may be surprised to learn this, ASCE allows non-Engineers to be members as well, with a specific grade of membership – the Affiliate Member grade – available for this purpose. While those with Civil Engineering degrees and backgrounds can usually join ASCE right out of school as Associate Members (and are eligible for reduced levels of dues if they have been Student Members), the Affiliate Member grade is available to anyone having "an interest in the advancement of the purposes and objectives of the Society", as stated in the definition provided in the ASCE Register, who may not have been eligible for Student Membership and/or do not meet the criteria for Associate Membership.

Thus, the Affiliate Member grade is ideal for those who work in related fields who may have an interest in Civil Engineering but do not have a Civil Engineering degree. Affiliate Members enjoy the same benefits and perks of ASCE membership as do other member grades above Student. Additionally, you may want to let some of your colleagues and friends know about this so they can consider ASCE membership and you can get some cash for the referral.

At the other end of the "spectrum", for those of you more senior and experienced members, the Fellow grade of membership is worth consideration. This is the highest level of membership one can attain on one's own and is a laudable and esteemed achievement. The specific requirements for application for this grade of membership are listed on **asce.org.**

N-ASCE* SEPTA

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were still operating, but two in South Philadelphia (Routes 29 and 79) were converted to bus operation for a number of reasons at that point.

At present, in addition to the trackless vehicles, SEPTA has one of the largest hybrid bus fleets on the road and earlier this year the SEPTA Board approved a contract for the purchase of 10 fuel cell electric buses (FCEB's).

Thanks to SEPTA for this information.

*N-ASCE – not always something concerning Engineering

NEWS FROM REGION 2 – OPENING FOR GOVERNOR

ASCE's Region 2 Nominating Committee is seeking candidates to fill one open position for Region 2 Governor.

The candidate for the vacant Region 2 Governor position shall be an ASCE member in good standing from the Central Pennsylvania, Philadelphia or Pittsburgh Sections, have served as a Section or Branch officer, as a member of a Section or Branch committee, or as a member of a Standing Board or Society committee. (Candidates from the Lehigh Valley Section will not be considered for this nomination in this cycle.) Region Governors serve a term of three (3) years.

Individuals who wish to be considered for Region Governor must submit a Letter of Intent, Biographical Statement, Vision Statement, and highresolution color photograph (in a professional setting) of the head and shoulders only to Joseph Platt, Nominations Chair (jplatt@trafficpd.com), with a copy to Wendy Dinwiddie (wdinwiddie@asce.org) by December 1.

The Biographical Statement MUST follow the template approved by the ASCE Secretary and is limited to 200 words for Region Governor candidates. The Vision Statement details the Candidate's vision for ASCE and plan for activities during his/her term in office. These Statements must be submitted in Word format, with the photo in .jpg format.

Interviews of candidates are expected to be conducted between January 15, 2024 and February 19, 2024. The Nominations Committee will provide the names of the selected Official Nominee(s) to the ASCE Secretary by **March 1**.

Please ensure that you meet the minimum qualifications and can dedicate the time and financial commitment to serve in this important position.

Electronic submissions will ONLY be accepted.

Please contact **Joe Platt** if you have any questions or need additional information on this.

PARC Category of the Month: Dams

As you may recall, the Pennsylvania Report Card (PARC) was released in November 2022 and assessed and graded 15 categories of infrastructure. We will continue to provide a summary of one category in each edition of *THE NEWS*. To keep it simple, we'll do this alphabetically by category. Up this month is Dams.

Dams: 2022 grade C 2018 grade C

Dams in Pennsylvania manage flood risk, provide fish and wildlife habitats, recreational opportunities, and drinking water supply. Of the 1,498 dams in Pennsylvania, over half (54%) are classified as high-hazard, likely causing death and economic damage under failure. The average age of Pennsylvania dams is 76 years old, nearly 20 years older than the national average and well beyond the typical 50-year design life. The high average age of Pennsylvania dams makes incorporating resiliency and innovation into the redesign cost-prohibitive, especially for the 61% of owners who are private citizens or organizations.

Raising the grade on Pennsylvania dams requires increased funding, perhaps the establishment of a loan or grant program to financially assist owners with repairs, abandonment, and removal projects. Supporting modernization of current federal assistance programs through the passage of the 21st Century Dams Act would also serve to benefit Pennsylvanians.

Please visit https://infrastructurereportcard.org/state-item/ pennsylvania/ for more information on this and how you can inform your elected officials on actions that should be considered to address this.

HOLD THESE DATES

ENGINEERS WEEK EVENTS SCHEDULED

The Engineers' Club of Philadelphia, through its **Delaware Valley Engineers Week Committee**, will cite **Engineers Week 2024 (February 15–24)**. We have traditionally extended our local celebration beyond that recognized by National Engineers Week to include our kickoff event.

Engineers Week in the Delaware Valley will officially begin with the Engineers Week Opening Dinner on Thursday, February 15 (two days before National E Week begins). At this event, we will introduce and formally induct the Delaware Valley Engineer of the Year and Delaware Valley Young Engineer of the Year, as well as highlight the various contributions of Engineers and Engineering students. All Engineers Week award and scholarship recipients will be cited at the Dinner.

The **Young Engineers Social** will be conducted during Engineers Week (date to be determined). This is a networking and social event to cite the newly-inducted Delaware Valley Young Engineer of the Year.

Please note this information in your calendar and plan to participate. More details on venues and pricing will be included in future updates.

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

THANKS TO OUR SPONSORS

Our Section Sponsorship program is off and running once again, with 12 firms "in" thus far. We extend our special and collective THANKS to each sponsor for their financial commitment and support.

Sponsor logos are displayed in a special Sponsors section of our website. Additionally, we provide direct links to sponsors' own websites so prospective employees can review all available and up-to-date positions. We also offer sponsors the



opportunity to have a "spotlight" article in an edition of *THE NEWS* as well as service as a sponsor of one of our monthly dinner meetings.

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

SECTION BOARD IN THE NEWS

Section Board Member **Mike DeVuono** has advised the Board that, given recent concentrations of his professional activities outside of our geographic area, he will be unable to continue to serve and be as active as he would prefer, thus has indicated that he would like to step down from his position as a Director. The Section has reluctantly accepted Mike's departure and appreciates his many contributions to the Section as a Director and in other capacities, and wishes him well.

Mike's term as Director expires this Spring. The Section will be appointing Honorary Director Troy Illig to fill the remainder of Mike's term accordingly. The roster of officers and the Board on page 2 reflects this new assignment for Troy. We are happy to welcome Troy who has, similarly to Mike, made many contributions to the Section and has led the effort for the Spring Social Committee for the past several years as well as ably handling our Dinner Meeting arrangements with Maggiano's. We thank Troy for stepping in to help.

SECTION AGENCY PARTNERSHIP PROGRAM

As you may be aware, our Section offers a Section Sponsorship Program to allow firms to help provide our various activities and programs for our membership and the Civil Engineering community in the Philadelphia area. This involves



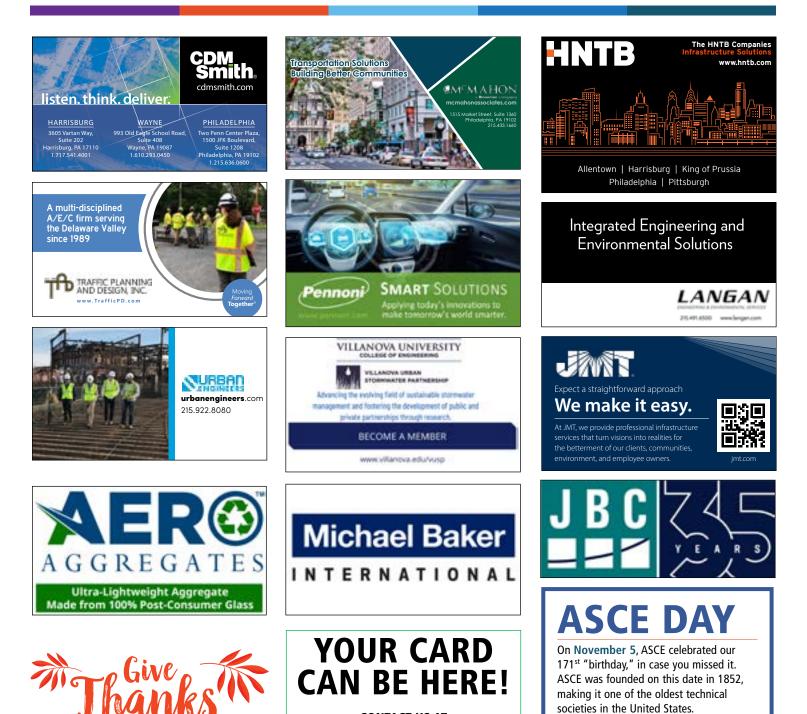
a financial commitment which is reflected in the placement of the participant's logo and business card in *THE NEWS* and on the Section's website, along with several other benefits.

Additionally, we have established an informal



recognition of government and quasi-government agencies for the assistance they have provided us, through volunteer assistance and award recognition among other things. Our Agency Partners' logos are shown below.





CONTACT US AT newseditor@asce-philly.org