Featured Group

Get Involved, Stay Technical, Grow Professionally—Join T&DI!
by Kayla Sousa, Howard Stein Hudson and Chair, Transportation and Development Institute Boston Chapter

As we move into the 2019–2020 year, the Boston Chapter of the Transportation and Land Development Institute (T&DI Boston Chapter) is building on last year’s success and is planning more social, technical, and networking events. As summer turns to fall, the chapter’s executive committee is putting the finishing touches on the year-long effort to plan this year’s approach to events, meetings, communications, and operations. We will continue to collaborate with other technical committees to provide opportune networking and encourage new membership while enhancing T&DI’s presence in the engineering community.

On June 12, 2019, we hosted the annual Bertram Berger Seminar at the University of Massachusetts Club on Beacon Hill. Local BSCES members gathered to hear from a total of nine speakers who were all asked to offer their comments on the seminar’s theme of Leadership in the Storm: Combating Climate Change in the

Recently I returned from ASCE Headquarters in Reston, VA and would like to share the experience with you all. ASCE holds annual meetings throughout the year for the leaders of Sections and Branches. This specific meeting was targeted for the Section and Branch presidents, region governors and society directors.

On September 22–23, 2019, 107 Section and Branch presidents, region governors and society directors from across the country and abroad attended the annual Presidents and Governors Forum (PGF) at ASCE Headquarters in Reston, VA. This event provided opportunities for attendees to learn about ASCE resources, network with other ASCE leaders, and develop skills that would benefit their Sections and Branches.

The program began on Sunday, with several sessions including an “An Introduction to Region 10” and “Leadership in the Century of Disruption” by ASCE Distinguished Member Gerald Galloway, PhD, PE, Hon.D.WRE, Dist.M.ASCE. Sunday also featured President-Elect Kancheepuram Gunalan, PhD, PE, D.GE, FASCE and Executive Director Tom Smith, CAE, ENV SP, FASCE who shared their thoughts and experiences on Society activities.

Monday continued with additional Best Practice sessions including: “Developing a State Infrastructure Report Card;” “Student Transition Strategies;” “Running a Successful Section/Branch;” and breakout sessions on ASCE Institutes. The program continued with a roundtable discussion with participants sharing measurable goals for their Section/Branch. Closing remarks were made by President-Elect Jean-Louis Briaud, PhD, PE, D.GE, Dist.M.ASCE.

After two solid days spent with ASCE staff and attendees, I left with new knowledge that will be useful in the upcoming year.

First, we were reminded of some leadership traits necessary in a global and continuously changing environment:

- Technically Sound
- Take Responsibility
- Confident
- Communicate
- Integrity
- Evaluate Risks
- Use all Resources Available

Your participation in committees and events locally at BSCES and at ASCE nationally are all

President’s Report

by Richard Maher, PE, Managing Associate, Perry Associates, LLC

The T&DI had a great afternoon hearing from and exchanging thoughts with Senator Boncore (left) and Representative Straus at the State House this past Spring.
Join T&D1

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Bay State. Similar to years past, the event was broken out into two separate panel discussions followed by a lunchtime program, which was capped with a presentation from our distinguished keynote speaker, Massachusetts Department of Transportation’s CEO and Secretary, Stephanie Pollack.

The first panel discussed ways in which we are planning for climate change though policy, standards, and action plans such as Climate Ready Boston and the Boston Public Works Climate Resilient Design Guidelines. The second panel was comprised of leaders from state agencies, who presented projects that are being designed and implemented according to these planning efforts.

The Berger Seminar is the signature event of the Transportation and Development Institute Boston Chapter and we are always looking for new members to join the planning committee. However, there are numerous other events that are typically hosted by T&D1 group. Continuing with the success of the webinars hosted by the T&D1 Boston Chapter, which were the first of its kind for BSCES, a webinar on Complete Streets Design was hosted in October. In May of last year, members also met with State Representative William M. Straus and Senator Joseph Boncore, co-chairs of the Joint Committee on Transportation, at the State House to hear a report on the latest transportation bills under consideration and entertain questions from the attendees.

On August 14, we held our first meeting of the new fiscal year for all interested committee members to discuss a full agenda of T&D1 Boston Chapter action items for the upcoming year. During this meeting the executive committee welcomed some new faces and provided more information about this year’s planned T&D1 Boston Chapter events, set meeting schedules, and discussed members’ personal goals and how they would like to enhance their presence within the engineering community. The group meets every other month at TECET and is actively welcoming new members—video conferencing is available, as well.

As a collective group, it has been determined that our role in the array of professional organizations is to provide technical learning and networking opportunities for transportation specialists and enthusiasts. T&D1 plans to host events that solicit expert speakers that can spark engaging discussion. On November 5, T&D1 is partnering with our friends in Western Massachusetts to host UMass Tech Day, including participating in technical sessions, discussing professional expectations with students, and opportunities for student recruitment and development. As we have done in the past, the group also plans to host webinars on topics that are relevant and innovative to our field. We are seeking members who are interested in planning these webinars as an easy, fun way to get involved.

T&D1 also plans to continue to network through social partnerships with other BSCES committees. We hope to see you at the annual joint holiday party with the Younger Members Group. There is also a Commonwealth Avenue site walk in the early planning stages with NEITE for the coming spring. As always, we will finish the year with a Summer Social at a local establishment.

In order to become successful in achieving our goals, we are looking to engage innovators, leaders, and motivated individuals in the transportation and development profession. It is through new ideas and an extensive knowledge base in engineering practices, social interactions, and event management that the T&D1 Boston Chapter will contribute to enhancing the engineering community at large. This is your opportunity to stand out and show what you can do outside the day-to-day practices within your private company or public agency and to advocate for and help communities throughout the commonwealth. If you are a transportation or land development professional and a BSCES member looking for a group where you can discuss current happenings, exchange ideas, and strive to make a difference—you are invited to join the Boston Chapter of T&D1.

To learn more, you can contact tdi@bsces.org or visit our LinkedIn and Twitter pages. Be sure to review our newsletter for current news on events and meetings for the T&D1 Boston Chapter sent to all chapter members.
City of Boston Releases Carbon Neutrality Plan
by Peyton Siler Jones, Communications Manager & Katherine Eshel, Carbon Neutrality Program Manager, City of Boston's Office of Environment, Energy, & Open Space

Boston released an update to its Climate Action Plan, accelerating action towards carbon neutrality and putting Boston on track to meet the goals laid out in the Paris Climate Agreement, which the Trump Administration withdrew from in 2017. The updates to Boston's Climate Action Plan will significantly cut carbon emissions from Boston's buildings, the single greatest source of emissions citywide, and Boston will take immediate action to require new city-owned buildings to lead by example and be zero net carbon. This updated plan sets Boston's priorities for the next five years on carbon neutrality, with a goal of making Boston carbon neutral by 2050.

Directly following the release of the plan, Mayor Walsh attended the international C40 Mayors Climate Summit in Copenhagen, discussing climate solutions with other leading cities around the world committed to upholding the Paris Climate Agreement. As North American Co-Chair for C40's Steering Committee, Mayor Walsh participated in a panel to share Boston's global leadership on preparing for rising sea levels and climate change.

“Climate change is the defining challenge of our time,” said Mayor Walsh. “As a coastal city, Boston is at the frontlines of this global crisis, and we understand the urgency. While national action is at a standstill, cities like Boston are leading with plans, solutions and results. The 2019 update to our Climate Action Plan is our roadmap to carbon neutrality, and together we will ensure all of Boston's residents will benefit from our work to protect against climate change, and create an equitable, resilient city for all.”

Boston's Climate Action Plan update will take immediate action to continue reducing carbon emissions in Boston, supporting the Walsh Administration's work to combat climate change. Boston's buildings account for approximately 70 percent of citywide emissions and represent the greatest opportunity for reductions. With buildings as the main contributor to Boston's emissions, the updated Climate Action Plan accelerates action to decarbonize the city's largest buildings, while working to improve incentives and programs to help small buildings and to strengthen workforce development programs.

In Boston, city-owned buildings account for nearly three-quarters of carbon emissions from local municipal operations. With this in mind, Boston has worked to reduce its buildings' footprints: emissions from local municipal operations in fiscal year 2017 were already 41 percent less than 2005 levels, far exceeding Boston's goal set for 2020. Boston's continued progress towards its goals can be attributed to such programs as Renew Boston Trust, which currently implements energy-saving projects and retrofits in existing City-owned buildings. Projects are already underway at 14 municipal buildings across Boston, including libraries, community centers, and police and fire stations.

The announcement this month began a process to develop carbon emissions performance standards to decarbonize large buildings over time. This measure, when implemented, could cut citywide emissions nearly 40 percent by 2050 from business-as-usual projections. Citywide carbon emissions are currently down 21 percent—a 4 percent decrease from the previous year—and are on track to meet Boston's carbon target for 2020, a 25 percent greenhouse gas reduction.

“With the release of today's Climate Action Plan update, Mayor Walsh is continuing to take bold action to combat climate change and to ensure that Boston continues to grow and thrive in the face of unprecedented challenges,” said Richard A. Dimino, President & CEO of A Better City. “I applaud the Mayor's commitment to reduce emissions from municipal buildings and look forward to working collaboratively with the City to develop smart strategies to reduce emissions across the buildings and transportation sectors.”

Additional immediate steps outlined in the plan include the development of new zoning requirements for zero net carbon new construction in new large projects and guidelines for zero net carbon City-funded affordable housing. The updated plan also includes

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City of Boston Releases Carbon Neutrality Plan

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recommendations to continue advocacy for priority transit programs, continues Boston's focus on active transportation infrastructure, and supports zero-emission vehicle deployments and municipal fleet transition to zero and low-emission vehicles. Finally, the plan includes recommendations to encourage efforts to decarbonize Boston's energy supply, and help communities decarbonize throughout Boston.

“At the Boston Society of Architects, we know the impact that a well-designed building can have, not only for the climate but also for the health and well-being of the people who work, live, learn, and play within them. Net-zero buildings are something we know how to do--our members are designing them every day. We’re excited to work with the City of Boston on the equitable development of better buildings in Boston,” said Jean Carroon FAIA, 2019 Boston Society of Architects/AIA president.

Boston continues to be one of the world’s leading cities committed to urgently pursuing high-ambition climate action. As a leading city on climate action, Boston is already driving down emissions and preparing for sea level rise, extreme temperatures and storms. At the same time, Boston continues to be ranked the most energy efficient city in the country. The top ranking highlights the success of programs such as Renew Boston Trust, Community Choice Energy, and Boston’s long-standing building energy benchmarking program.

By reducing carbon emissions, Boston can ensure that the City is not worsening the impacts of climate change. To prepare for those impacts, Mayor Walsh created a climate-ready vision to enhance Boston’s waterfront. Announced during Mayor Walsh’s 2018 Chamber of Commerce speech, Resilient Boston Harbor shows how a network of accessible open spaces and climate-ready buildings and infrastructure will increase resilience to major flooding events, while also increasing access and open space area along the waterfront. Like all the City’s current planning, it prepares the City for 40 inches of sea-level rise. Furthering the Mayor’s vision are a series of detailed neighborhood plans for coastal resilience. Coastal resilience plans are complete for parts of East Boston and Charlestown, for South Boston, and are underway for Downtown, the North End, and Dorchester.

In addition, earlier this year, Mayor Walsh released the Zero Waste Boston plan, which would divert at least 80 percent of the City’s waste from landfills and municipal solid waste combustors by 2035. The City has begun implementing strategies, including expanding education and outreach campaigns around recycling in partnership with institutions like the New England Aquarium, and is currently developing curbside composting and textile recycling programs for residents.

“The strategies detailed in the updated Climate Action Plan will be transformative for building a sustainable and resilient city,” said City Councilor Matt O’Malley and Chairman of the Council’s Environment, Sustainability and Parks Committee. “I am proud to have led the Council’s efforts and advocated for a pathway to a carbon-neutral future. It is evident that the greatest contributor to carbon emissions is our buildings. I look forward to working with Mayor Walsh and his administration to promote the construction of zero net carbon buildings in

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resources for self-improvement that are applicable during every level of a civil engineering career. Remember, BSCES is a resource for its members.

Second, ASCE Talking Points

- **Future World Vision: Infrastructure Reimagined.** “ASCE has launched a bold, comprehensive project to identify, anticipate and prepare for future change.” ASCE has identified a vision of the potential communities of tomorrow: resilient cities, progressive megacities, dispersed settlements, and unequal enclaves. How many projects that you are working on are considering climate change and disasters?

- **Global Thirst for Knowledge:** 16% of ASCE membership is international (outside of US, Canada, and Mexico). How many of you have worked on projects outside of Massachusetts? Outside the US? Has the frequency been increasing?

- **Technical Areas:** ASCE has nine discipline-specific institutes. Members of the institutes have traditionally been in the institutional field at the national level. While at the Section and Branch-level committee and group members locally have discussed institute topics and are traditionally in the engineering, management, and contractor fields. The local institute chapter unites all fields into one conversation for greater member benefit. BSCES has established six local institute chapters for its members to participate in:
  - Coasts, Oceans, Ports, and Rivers Institute (COPRI) Boston Chapter
  - Construction Institute (CI) Boston Chapter
  - Environmental & Water Resources Institute (EWRI) Boston Chapter
  - Geo-Institute (GI) Boston Chapter
  - Structural Engineering Institute (SI) Boston Chapter
  - Transportation & Development Institute (T&DI) Boston Chapter

Have you ever had a question with no sure answer? Please come and share your civil engineering thoughts at a BSCES event or participate in an institute meeting.

BSCES is a strong leader in the civil engineering community. After speaking with leaders from around the country, they were amazed at the breadth and depth of activities BSCES presents year after year. They were also truly impressed by the programs for members, young engineers, college students, K–12 STEM, and public outreach. BSCES continues to strive to become a worldwide leader of civil engineering excellence with your involvement. The strength of our bond between members, sponsors, employers, and educational institutions makes BSCES truly unique as compared to other Sections and Branches throughout the country. We depend on the passion of our volunteers and financial support received to continue the tradition.

Donations to BSCES are always accepted by credit card, click here to make a donation.

Click here for more information about donating to BSCES.

Thank you for your support and keeping the BSCES tradition alive and well since 1848!

The theme of this month’s newsletter is “Transportation” and its featured group is the ASCE Transportation & Development Institute (T&DI) Boston Chapter. Be sure and read the page 1 article entitled “Get Involved, Stay Technical, Grow Professionally—Join T&DI!” This article was written by Kayla Sousa from Howard Stein Hudson who is the chair of the T&DI Boston Chapter.

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**Become a BSCESNews Contributor**

Would you like to contribute to the newsletter of the oldest civil engineering society in the country? The BSCES Newsletter Editorial Board is seeking members who are willing to write articles for publication in BSCESNews or to join the Editorial Board.

Typically 400 to 900 words, BSCESNews featured articles are about technical topics or professional matters of interest to civil engineers. The December 2019 issue of the newsletter for example, will highlight the Geo-Institute Boston Chapter and feature one or more articles on the theme of Geotechnical Practices.

Editorial Board members meet monthly via conference call to plan upcoming issues of the newsletter. They also solicit, write and/or review newsletter articles.

For more information on how you can become a BSCESNews contributor contact BSCES Newsletter Editorial Board Chair Sean Horan at Sean.Horan@gza.com or BSCES Association Manager Rich Keenan at rkeenan@engineers.org or at 617/305-4110.
News from the ASCE Region 1 Assembly

by Bruce Jacobs, BSCES President Elect and Danielle Spicer, ASCE Region 1 Governor

The ASCE Region 1 Assembly met on the weekend of September 4 in sunny Saratoga Springs, NY. Bruce Jacobs and Danielle Spicer from BSCES were in attendance. Highlights from the meeting include:

1. **Report by Tony Cioffi, region director.**
   Tony described the six goals that make up the ASCE strategic plans. These include promoting membership, encouraging the development and adoption of innovative practices, advancing engineering and professional standards, raising public awareness of civil engineering’s role in society and improving ASCE effectiveness in carrying out its functions. Tony related to us that ASCE has for a number of years operated under a deficit as expenses have increased year-to-year while membership has simultaneously fallen off.

2. **Committee on Student Competitions.**
   The Steel Bridge competition is not coming back. The ASCE Committee on Student Competitions has however endeavored to increase the number of opportunities to participate in competitions. Current student competitions include concrete canoe, sustainable solutions, blue sky competition (on smart mobility), and surveying competition.

3. **Other issues** under discussion at ASCE within appropriate committees include student member voting, revenue generation, and updating of the code of ethics.

4. **Community Engineering Corps.**
   Melissa Prelewicz of ASCE described this volunteer program—founded jointly by AWWA and EWB—that is intended to provide engineering services to underserved communities. Typical projects include sanitation, water supply, structures, and civil works. These are provided on behalf of non-profits, community groups, schools, and municipalities. Project services include consultation, engineering studies, and design. Projects may not include construction, although in practices this may be completed as a non-Corps element of the project. The Community Engineering Corps carries professional liability insurance for volunteers and also provides training to potential volunteers and ASCE-level review of all deliverables.

5. **Leadership Training Committee.**
   LTC exists to support ASCE sections and branches. Upcoming events includes the Committee Chair Training on November 5, Section Best Practices on October 31, and Section / Branch Exchange on October 3. Email nberson@asce.org for more information or to register for a particular webinar. LTC has produced a series of Best Practice Guides and Talking Points presentations. The Talking Points presentations are useful resources should you be called on to make presentations about ASCE. These are all available at the LTC web page.

6. **Region 1 Grants.**
   Region 1 provides grants for up to $500 to sections and student chapters. These may be used for any ASCE-related activity. Click here for information on applying. About 90% of last year’s grant requests were approved.

7. **Student Member Support Committee.**
   This committee was formed to ensure that the student groups receive support from Region 1 that enables them to thrive and attract members. Email Rafiq Chowdhury (ra@kagepc.com) or Laurel Welch (lwelch@urbanengineers.com) for information or to offer to help.

8. **Canadian Student Chapters.**
   There are five student chapters in Quebec and Ontario that have been assigned to Region 1: Ecole de Technologie Superieure, Universite Laval, University of Waterloo, University of Sherbrooke, Polytechnique Montreal, and Concordia University. Governors will discuss further and refer back to the sections.

9. **Membership.**
   Loretta Cranboune, ASCE, related new and some not-so-new member benefits including Access Engineering, salary report, Career-by-Design, mentor-match, career connection, and iLead workshops. ASCE is expanding the member-get-a-member contest to sections. Winning section can earn as much as $1,000 for recruiting new members. They have also created a ascemembershipkit.org web page that provides resources for student groups. She also described student member research that related that students want membership to a fun experience, the want to understand the professional development value of membership, and emphasized the importance of faculty and practitioner advisor in promoting membership.

10. **Communications best practice.**
    Some groups are adopting direct mail for large events, such as a post card because of the low click rate on email blasts.

11. **Open positions on Region 1 Board of Governors.**
    Danielle Spicer’s term as the BSCES Region 1 Governor will end in October 2020. She is eligible to serve for one more term. Click here for information on the BSCES Region 1 Governor. Election process deadlines and a description of Region Governor qualifications can be found here.

12. **Upcoming ASCE events:**
    - ASCE Multi-Region Leadership Conference in Philadelphia, PA January 31–February 1, 2020
    - ASCE Legislative Fly-in, Washington DC March 11–13, 2020
Bell, Choe, Pollack and Taylor Named 2018–2019 BSCES Honorary Members

by Richard F. Keenan, Association Manager, BSCES

During the 170th BSCES Annual Awards Dinner on July 16, 2019, the BSCES Board of Government was pleased to present the Section’s highest award, BSCES Honorary Membership, to Glenn Bell, PE, SE, C.Eng, Katie J. Choe, CCM, Stephanie Pollack and Stephen Taylor, CBE, PE (posthumously). Brief biographies of these four exceptional individuals who have made significant contributions to the civil engineering profession as well as the public good are presented below.

**Glenn Bell, PE, SE, C.Eng**
Senior Principal
Simpson Gumpertz & Heger Inc.

Glenn Bell, senior principal and the former CEO of Simpson Gumpertz & Heger Inc. (SGH) was named a BSCES Honorary Member for his distinguished career as a professional engineer, his leadership in the engineering community at the local and national levels, and his longstanding support for the BSCES and ASCE.

Glenn joined SGH in 1974. Mr. Bell has lectured and published extensively on technical, managerial, and professional practice in structural engineering and has served on many professional committees and boards, including for the American Society of Civil Engineers and the Building Seismic Safety Council. Mr. Bell is the recipient of the ASCE’s Edmund Friedman Professional Recognition Award in 2014. He served as Chief Executive Officer of the SGH from 1995 until 2016.

Glenn supports BSCES and has encouraged SGH engineers to be active in BSCES. As a result, several SGH engineers served on BSCES committees over the years and SGH provide their offices and conference rooms for BSCES activities.

SGH also provides $7,500 of scholarships every year to university students and invites the BSCES president and Younger Member Group chair to serve on the selection committee.

Glenn is a leader in the engineering community both at the local and national levels and is fully deserving of this proposed honor.

**Katie J. Choe, CCM**
Chief Engineer and Director of Construction Management
Boston Public Works Department

Katie Choe, CCM was named a BSCES Honorary Member for her work to develop tools and programs to protect against flooding, promote smarter development, and build resilient communities.

Katie is chief engineer and director of construction management for the Boston Public Works Department responsible for 800 miles of roadway and 1,600 miles of sidewalk within the City, including an annual $40+ million construction program. She also oversees utility and private construction coordination and inspection, infrastructure asset management, and ADA compliance in the Right of Way. Katie led the development of the award-winning Public Works Resilient Design Standards and StreetCaster equity-based infrastructure investment strategy. She is also a member of both the Boston Smart Utilities and the Climate Action Plan steering committees.

At the Boston Public Works Department, Katie, spearheaded Climate Ready Boston actions for Public Works infrastructure. This is an ongoing effort to identify the City’s vulnerabilities and provide conceptual solutions throughout neighborhoods in Boston, including sea level rise within the Boston Harbor. The Boston Public Works Department is putting in place tools and programs to protect against flooding, promote smarter development, and build a resilient community. Katie has led the Department’s effort to navigate the challenging path from planning to implementation and helped to overcome the daunting obstacles to resiliency.

Katie and the Boston Public Works Department prepared the Climate Resilient Design Standards and Guidelines for engineers and designers as guidance when designing flood barriers to protect the public right-of-way. The guidelines are intended to provide climate design adjustments and a standardized climate resilient design process for flood barriers. It augments existing City and State design standards by considering climate impacts and managing segmental shore-based flood protection projects over time.

Prior to joining the City of Boston, Katie served as a construction project manager, sustainability program manager, and assistant director of capital programs for Massport where she oversaw the development of award-winning Sustainable Design Standards and Guidelines. She is an active member of WTS and CMAA and serves as vice chair of the Construction Management Certification Institute Board of Governors. Katie was invited in 2013 to be a delegate at the first national Green Infrastructure Summit and was awarded the 2015 Rita Barron Public Official Award from the Charles River Watershed Association. Katie earned her Bachelor’s and Master’s degrees in Civil Engineering from MIT.

**Stephanie Pollack**
Massachusetts Secretary of Transportation and CEO of Massachusetts Department of Transportation

Secretary Pollack was named a BSCES Honorary Member for her years of service and leadership in transportation planning and public policy.

Stephanie Pollack is the current Massachusetts secretary of transportation and Massachusetts Department of Transportation (MassDOT) CEO. As secretary, Stephanie has led efforts to establish project selection criteria and set investment priorities for a $18.3 billion, five-year capital plan that focuses on improving safety and reliability for the traveling public by modernizing Massachusetts’ transportation assets. She has focused MassDOT on better serving its customers, with initiatives such as All-Electronic Tolling, reducing wait-times at the Registry of Motor Vehicles, and improving construction coordination and communications.

Since July 2015, the leadership of the Massachusetts Bay Transit Authority (MBTA) has also reported to Secretary Pollack, giving her a critical role in steering the ongoing turnaround of the transit system serving eastern Massachusetts. Secretary Pollack leads the Department...
2018–2019 BSCES Honorary Members

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Boston residents and support community-level projects. His work brought him to the gold mines of South Africa, airports in Iraq, a nuclear submarine facility in Scotland, and the London Underground. His projects included the design of the Queen Elizabeth II Bridge over the Thames, a pedestrian walkway just over normal water level in Hong Kong Harbor, the MBTA’s Green Line Extension Project, and the Central Artery/Tunnel Project.

Steve’s broad experience focused on the design and construction of complex structural systems, particularly tunnels. As a hands-on manager he had a reputation for delivering projects that were cost effective, constructible, and maintainable.

Steve joined Mott MacDonald in 1993 to work on the design of the Central Artery/Tunnel Project. His work included a series of world-record-setting jacked boxed tunnels that were orders of magnitude larger than anything previously constructed. One of these required the largest man-made block of frozen ground ever created. During this period, he also helped establish Mott MacDonald’s presence in Boston. His leadership served as the foundation that enabled Mott MacDonald in North America to grow to what it has become today.

In addition to his work, Steve volunteered extensively within and outside the engineering community. Among his roles, he served as chair of the ASCE Structural Institute Boston Chapter. He also received several recognitions for his accomplishments. Most notably, he was awarded a CBE (Commander of the British Empire). This is one of the highest orders of chivalry awarded by Her Majesty the Queen. Upon receiving this distinction, Steve said, “I am thrilled to be honored with this award and feel that there are so many people that have made it possible. I share this award with my family, especially my wife, and with the many, many engineers and others who have helped, educated, and inspired me over the years.”

Steve was not only an incredibly gifted engineer; he was unusually humble and thoughtful. He put the interests of others ahead of his own and supported those around him. His kindness knew no bounds. He mentored dozens and made each of us better in the process. Above all, he loved and was extremely proud of, his entire family.

Steve earned his reputation as a technical expert and innovative thinker and his legacy continues to serve as an example of someone we should all emulate.

City of Boston Releases Carbon Neutrality Plan

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Boston and continue to work to reduce the impacts of climate change.”

“This new roadmap reflects a steadfast commitment to slashing fossil fuels and making Boston a leader on bold climate action. These are the sort of ambitious efforts that the Bloomberg American Cities Climate Challenge winners are helping spearhead across the country. With this plan, Boston is truly tackling climate change in its own backyard and setting a strong example for others to follow.”

In his fiscal year 2020 budget, Mayor Walsh nearly tripled the City’s investment in Greenovate Boston to expand outreach to Boston residents and support community-level climate action. Since the investment, Greenovate launched a climate action guide for Boston residents to reduce their carbon footprint at home, at work, in school and around town, and starting this month will host a series of trainings and dialogues throughout the community on climate change.

“As the voice of students across the Boston Public Schools, we have been calling for more ambitious action on climate change. It’s great to see a plan that takes our call for action seriously with real, actionable strategies to reduce carbon emissions in our city,” said Simon Chernow, Boston Public Schools student and Boston Student Advisory Council member. The Student Advisory Council was active in the Climate Action Plan working group.

Under Mayor Walsh’s leadership, in 2017 the City strengthened Boston’s emissions reduction goal to achieving carbon neutrality in line with the Paris Climate Agreement. The 2019 Climate Action Plan Update sets the stage for Boston’s transition to carbon neutrality and is available on the City’s website. Carbon neutrality means releasing no net carbon emissions on an annual basis. For Boston, this means reducing carbon emissions from Boston’s buildings, transportation, waste, and energy supply as much as possible, and supporting activities that remove carbon from the atmosphere to compensate for any remaining emissions.
BSCES Legislative Fellow Update from Beacon Hill—191st Massachusetts Legislative Session
by Heather M. Ford, 2019–2020 BSCES Legislative Fellow

September is a busy time at the State House with everyone back and fresh from the summer break. However, it can be hard to get the most current information available regarding proposed legislation. The available information is often out of date.

The Executive Branch and Governor Charlie Baker have two initiatives that are of interest to civil engineers for this session. These initiatives, which have implications across industry and everyday life, are transportation and climate change. Both evoke strong citizen emotions. Both have funding challenges.

Transportation
Governor Charlie Baker’s $18 billion (yes with a B) transportation bill (H 4002), focusing on relieving congested roadways and rider frustration, seeks additional funding of $3.4 billion toward MBTA projects (with municipal funding for improving operation of the MBTA and RTA buses); “making” hundreds of millions of dollars available for road and bridge improvements (up to $600 million for bridge spending); using a still-in-development state partnership to boost public transit funding with innovative financing and project delivery approaches; approval for MBTA and MassDOT to enter into public-private partnerships as well as to use a suite of new project delivery and procurement tools to expedite capital projects; and providing a $2,000-per-employee tax credit to employers who let workers telecommute and therefore avoid traveling on already-clogged roads during rush hour. This legislation put forth by the Governor this past July will be on the front burner for the Joint Transportation Committee as various constituents and lawmakers debate both content and how to fund it.

However, it is likely that the funding debate will be on a larger stage as House lawmakers are gearing up for a debate on a broad transportation financing package this fall. House Speaker Robert DeLeo has said he is open to tax hikes or just about any other prescription to address the state’s critical needs and wants the House to vote on a plan this fall (rather than the Transportation Committee alone). This has not yet been scheduled.

A wide range of transportation issues were discussed during a Joint Committee on Transportation public hearing which occurred on October 8th. In addition to Bill H 4002, participants also wrestled with the lack of proper handling of RMV documents—the result of the fatalities of the seven motorcyclists in NH by a driver with a MA license. The hearing featured continued discussions from July 30th on whether or not to allow undocumented immigrants to receive drivers licenses (H 3012 / S 2061). Chairmen Senator Bonecore and Representative Straus, along with their staffs, are both busy supporting the issues. Stay tuned.

Environment
There is unanimous agreement in both the House and Senate that, in Massachusetts, climate change must be addressed and addressing how we create and renovate our infrastructure is the best way to do this. Several bills have been passed and ideas floated over the past couple of years. As usual, whether we bond it or tax for it, and how each of these are done, will be the main sticking point.

House bill H 3941 (several drafts/amendments) “An Act Relative to Greenworks” would create the GreenWorks infrastructure program under the Executive Office of Energy and Environmental Affairs to help communities address things such as the threat of rising seas and floodwaters with planning dollars, and mitigate the damage that has already been done. The bill authorizes the state to borrow $1.3 billion and to dole out $100 million for GreenWorks each year for a decade. These allocated funds are to include loans, grants, and matching funds for design, construction, buildings, land and repair/improvements to infrastructure. This bill has been moving through various committees with amendments attached, rejected, and modified. Passage of House bill H3941 appears to be a longshot this year. This House Greenworks bill will need to be joined with an earlier bill that Governor Baker supports, S10, “An Act Providing for Climate Change Adaptation Infrastructure Investments in the Commonwealth” that was put forth in January 2019. This bill provides a dedicated revenue stream for the Global Warming Solutions Trust Fund, which will be used to expand funding for Commonwealth communities preparing to meet the challenges of climate change. This bill is currently sitting in the Joint Committee on Revenue.

Further information on specific bills is available on the Legislature’s website, which contains links to legislators, bills, hearings, and session laws. You may contact me at LegislativeFellow_Ford@bsces.org.

The Aldrich Center—where history and technology meet on Beacon Hill...

Two blocks from the State House and overlooking Boston Common, the Aldrich Center is the perfect venue for your next event. This historic building accommodates private functions and business meetings. BSCES members receive a 20% discount off our room rental rates.

Visit www.aldrichcenter.org for more information.

Visit www.aldrichcenter.org for more information.
Recent News and Updates

BSCES Welcomes New Society Sponsor
The BSCES Board of Government would like to thank Keller for becoming a 2019–2020 Society Sponsor.

BSCES Diversity and Inclusion Task Force Looking for Volunteers
BSCES has reformed the Diversity and Inclusion Task Force after a few years of dormancy and appointed Alyson Stuer, PE, Alfred Benesch & Company, as its chair. The task force’s primary objective is to create a culture within BSCES that values diversity, inclusion, and equity, whose members are reflective of the communities we serve. Ensuring that BSCES is inviting and open to all members of the civil engineering community is in line with the BSCES mission. If this excites you and you want to learn more, email Alyson at AStuer@benesch.com.

Suggest a Seminar Topic
Is there an engineering topic that you would like BSCES to feature in an upcoming seminar? If so, members of the BSCES Program Committee would like to hear from you. Charged with developing technical training programs that address members’ professional development needs, the Program Committee oversees the Society’s National Highway Institute training, spring and fall Professional Engineer Refresher Courses and other topical workshops. If you have a technical topic that you would like the Program Committee to consider, send your suggestion to BSCES Program Committee Chair Jeff Lewis at jlewis@garofaloassociates.com or BSCES Association Manager Rich Keenan at rkeenan@engineers.org.

ASCE Plot Points Podcast Releases Season 2
Earlier this year, ASCE launched their first podcast, “ASCE Plot Points,” and produced a 14-episode first season of interesting discussions with civil engineers on a variety of career and technical topics. ASCE News editor Ben Walpole, producer and host of the podcast, has just debuted a second season. Click here to learn more and listen to the podcast.

Call for Abstracts
The 2020 ASCE-EWRI International Low Impact Development (LID) Conference Steering Committee is looking for dynamic speakers to deliver innovative and informative educational talks to the EWRI membership and special guests attending the conference. Are you involved in a LID research effort that incorporates green infrastructure, sustainability, engineering or a related field, and want to share your ideas with your fellow engineers and academia? Your ideas may help with “Setting the Vision for the Next 20 Years!” Click here for more information including how to submit an abstract.

Learn More About Your ASCE Member Benefits
ASCE has launched a variety of new and expanded benefits in 2019. Many are geared to helping young engineers get their careers off to good starts. These include:

- ASCE Career by Design an online portal with a variety of tips, resources, opportunities and member discussions.
- ASCE Mentor Match a tool that brings together mentors and mentees to develop workplace and technical abilities, find a proper work/life balance, resolve dilemmas and in the process perhaps even become friends.
- 10 free PDHs, a doubling of this member benefit to coincide with the recent doubling of the number of on-demand webinars available to earn those PDHs.
- Student Loan Refinancing, an ASCE partnership with the online personal finance company SoFi that can reduce the payback burden by thousands of dollars.

Update Your ASCE Profile
Have you moved lately, changed jobs, or do you have a new email address? It is very important that we receive your updated contact information. Please make sure you update your profile at ASCE National. Every month BSCES receives updated member information from ASCE that we utilize for all BSCES correspondence. You have a personal profile that you can access and update your contact information. Simply go to the ASCE “Membership & Communities” page and click on the “Log in…” bullet under the Already a Member section. Once you’ve logged in, you can edit your contact information. Members can also always call 800/548-2723 and have someone in Customer Service make updates for them over the phone.

DSS-WISE Lite—Rapid Dam Break Flood and Consequence Assessment Class on November 5–6, 2019
Whether you are responsible for preparing dam breach mapping, preparing dam safety emergency action plans, want to identify critical infrastructure at risk prior to dam incidents, assess flood risk during incidents, or to prepare evacuation plans, the DSSWISE Lite tool will give you a cost-effective means of improving public awareness and safety. This workshop, offered by FEMA will teach dam safety professionals, dam safety regulators, community officials and emergency managers to understand how to rapidly identify the potential flood hazard areas downstream of dams, why it is important to evaluate the consequences of potential dam releases or failures, what steps can be taken before a dam failure incident to mitigate flood risk and manage the risk that remains. Click here to learn more.

GeoEngineers Announces National Construction Design Group and Boston Office
GeoEngineers Inc. has recently announced a new national Construction Design Group to better serve contractors working in heavy civil infrastructure. They have acquired Boston-based firm FGG Consulting owned by Franklin Grynkewicz. Mr. Grynkewicz has joined GeoEngineers Inc. as senior principal geotechnical engineer. Joining him in the new Boston office with be BSCES members Yelena Bronshyav, Mark Champagne, Dimitrios Palantzas, and Heidi Cashman.
Upcoming Events

For more information and to register for events, please visit www.bsces.org
To register online for an event at the BSCES member rate you must login using your BSCES assigned username and password. If you do not know your login information, call 617/227-5551.

Fall 2019 Public Private Partnership Workshop: Innovative Financing Methods for Large Projects in New England

Sponsored by the Government Affairs & Professional Practice Committee, Construction Institute Boston Chapter, and Transportation and Development Institute Boston Chapter

Friday, November 1, 2019
Connolly Center, Boston, MA
7:30 AM – 12:30 PM, Luncheon to Follow

This half-day workshop will focus managing large projects including market and organizational problems. How the project is organized and procured is a significant factor in possible delays and cost overruns. The “Legacy Benefit” will be discussed including efforts to form a multi-state non-profit corporation to evaluate mega projects that benefit multi-jurisdictions. This program will feature five speaker presentations and conclude with a panel discussing a possible “New England Plan.”

Please see the Insert at the end of this month’s newsletter for further details.

UMass Amherst Tech Day

Sponsored by the Transportation & Development Institute Boston Chapter and the University of Massachusetts Civil Engineering Department

Tuesday, November 5, 2019
Campus Center, University of Massachusetts, Amherst, MA
1:00 PM to 7:30 PM

Keynote: Transportation Engineering & Vision Zero—Jason DeGray, Boston Office Director, Toole Design

The T&D Boston Chapter and UMass Amherst civil engineering department are partnering to host an event on a campus. This full technical day kicks off with a seminar conducted by MassDOT Chief Engineer Patricia Leavenworth. This will be followed by a panel for students who are seeking advice about their upcoming professional careers. A traffic focused technical panel will discuss issues ranging from the traffic issues of cannabis developments to the progress of the Complete Streets program in the Commonwealth. The evening social will include networking with colleagues and students, as well as a poster session where students will display and discuss specific research being conducted. The day concludes with a dinner featuring keynote speaker Jason DeGray discussing the relationship of transportation engineering and Vision Zero. Please see the Insert at the end of this month’s newsletter for further details.

2019 Fall Lecture Series: Final Lecture—Current Efforts in Boston for Sea-Level Rise

Sponsored by the Structural Engineering Institute Boston Chapter

Thursday, November 7, 2019
Simpson Gumpertz & Heger, Waltham, MA
6:00 PM Registration/Refreshments
6:30 – 8:30 PM Lecture

Speaker: Julie Eaton, PE, Lead Resiliency Engineer, Weston & Sampson

There is still time to register for the fifth and final lecture in SEI Boston Chapter’s 2019 Fall Lecture Series: Resilience and Sustainability for Structural Engineers. Entitled “Current Efforts in Boston for Sea-Level Rise,” this session will feature a discussion of infrastructure issues associated with potential sea rise due to climate change. The focus will be on guidelines prepared for the City of Boston and the city’s preparations for 40 inches of sea level rise by 2070. Please see the Insert at the end of this month’s newsletter for further details.

Save the Date!

Thursday, December 5, 2019
2019 Executive Lunch Session
Sponsored by the Engineering Management Group and Younger Member Group
Kleinfelder, Boston, MA
11:45 AM – 1:30 PM

Speaker: Brian P. Sullivan, PE
President, Tetra Tech Infrastructure Northeast

Look to future issues of BSCES News and broadcast emails for more information.

Third Charles C. Ladd Memorial Lecture: Geotechnical Lessons Re-learnt from Hong Kong Airport Extension

A Geo-Institute Boston Chapter Special Fund Event

Thursday, November 21, 2019
Tufts University, Medford, MA
5:30 PM Social/Registration
6:30 PM Presentation

Speaker: Dr. David W. Hight, Senior Consultant and Founding Director, Geotechnical Consulting Group

Dr. David Hight is a senior consultant and founding director of the Geotechnical Consulting Group in London. He has vast experience in both industry and academia. He was a lecturer at Imperial College London (1975–1983), visiting professor at Imperial College (1993–2012), the National University of Singapore (2000) and Massachusetts Institute of Technology (1983). He has published widely on the subjects of soil behavior, offshore geotechs, soil sampling, laboratory testing, stability problems, earthworks and foundations. He delivered the 38th Rankine Lecture in 1998. He was elected to the Royal Academy of Engineering in 2001 and he was recently elected as a Fellow of the Royal Society of London. Please see the Insert at the end of this month’s newsletter for further details.

2019–2020 BSCES Sponsors

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Tufts University—Department of Civil and Environmental Engineering | VHB | Wentworth Institute of Technology | Weston & Sampson | WSP USA
Fall 2019 Public Private Partnership Workshop: Innovative Financing Methods for Large Projects in New England

Friday, Nov 1st, 2019

Connolly Center, Federal Reserve Bank, 600 Atlantic Avenue, Boston, MA
7:30 AM – 12:00 PM, Event program on the following page.

The Workshop will focus managing large projects including market and organizational problems. How the project is organized and procured is a significant factor in possible delays and cost overruns. The “Legacy Benefit” will be discussed including efforts to form a multi-state non-profit corporation to evaluate mega projects that benefit multi-jurisdictions. A discussion of the benefits of RPA in the Tri-state area of NY-NJ-CT. and a possible New England Plan Group which would work across state boundaries in New England.

Featuring: Fall 2019 Public Private Partnership Workshop

Tim McManus,
Global Infrastructure Advisor, former Vice President with McKinsey & Company

Dan McNichol,
Author and Journalist, Mega Construction Projects

Carolyn Ryan
Senior Vice President, Policy and Research, Boston Chamber of Commerce

Keith Craig & Chris Hersey
Director, NB Development & Project Manager, Skanska Corporation

Tom Wright
President and CEO, Regional Plan Association, NY, NJ and CT Tri-state Region

Registration Deadline: Wednesday, October 30th, 2019

$45 BSCES & BSA Members, $55 Non-Members
$20 Public Sector Members, $30 Public Sector Non-Members
$20 Senior and $20 Student Members

*Continental Breakfast and refreshments included in registration fee.

Registration Information:

Register to attend this meeting and pay by credit card online at https://bit.ly/LargeProjectsinNewEngland. To register online for an event at the BSCES member rate you must login using your BSCES assigned username and password. If you do not know your BSCES member login information call 617/227-5551. You can also register for this event by mail or email. To do so, download and complete a BSCES Event Registration Form and follow the submission instructions. Cancellations received after Friday, October 25, 2019 and no-shows will be billed.
Fall 2019 Public Private Partnership Workshop: Innovative Financing Methods for Large Projects in New England

Program:

7:30 AM – 8:15 AM  Registration & Continental Breakfast

Welcome Remarks

Moderator: Dan McNichol Dan McNichol is a number one best-selling author and an award-winning journalist. His published books, articles and thought-leadership work focuses on mega construction projects in the United States and around the world.

8:15 AM – 8:45 AM  Speaker Presentation

Carolyn Ryan, Senior Vice President, Policy and Research, Boston Chamber of Commerce

Directs and manages the Chamber’s policy priorities and strategizes for the team’s long and short-term goals. She is a member of the Federal Reserve Bank’s New England Public Policy Center Advisory Board and will briefly outline the work of the New England Public Policy Center.

8:45 AM – 9:30 AM  Speaker Presentation

Tim McManus, Global Infrastructure Advisor, former Vice President with McKinsey & Company

Managing Large Projects, A review of global infrastructure projects with focus on infrastructure demands in growing metropolitan areas. He is supportive of non-profit corporate multi-state regional planning groups. In his paper Managing Big Projects, Mr. McManus outlines five essential elements for successful projects. The lack of a few (if not all) of these elements will hinder project activities and cause suffering along the critical path.

9:30 AM – 10:00 AM Speaker Presentation

Keith Craig, Director, NB Development and Chris Hersey, Skanska Corp.

The newly completed Boston Landing Station project in the Allston-Brighton neighborhood in Massachusetts is the recent recipient of the Envision® Silver Award. Constructed by Skanska, the project is part of a larger complex currently underway by NB Development Group, an affiliate of New Balance Athletics, Inc. In a public-private partnership that has been lauded by city and state officials alike, NB Development Group funded and managed the design and construction of the approximately $20 Million station in close collaboration with the Massachusetts Bay Transportation Authority (MBTA) and the Massachusetts Department of Transportation (MassDOT).

10:00 AM – 10:15 AM Break with coffee and refreshments

10:15AM – 11:00 AM Speaker Presentation

Tom Wright, President and CEO, Regional Plan Association, NY, NJ and CT Tri-state Region

The success of RPA on shaping the future of the New York City region is legend. Beginning in the 1920s with the RPA’s recommendations on the location of the George Washington Bridge to its latest Fourth Plan on a sustainable future for the next century, the RPA is a model for effective multistate regional planning. Recent efforts to kick-start a congestion pricing solution which would help to fund tri-state public transit and rail projects will be presented.

11:00 AM – 12:00 PM Workshop Panel

Speakers will lead a discussion of a possible New England Plan which include multi-state issues where large mega-projects extend benefits and costs across state boundaries. Many projects include transportation and energy issues. Q&A from the audience.

12:00 PM Closing Remarks Lunch menus from selected local restaurants will be available at the registration table.

This presentation provides 3 Professional Development Hours (PDH)

Supported by the staff of The Engineering Center Education Trust
UMass Amherst Tech Day

Keynote:
Transportation Engineering & Vision Zero
Jason DeGray, Boston Office Director of Toole Design

Tuesday, November 5, 2019
Campus Center, University of Massachusetts, Amherst, MA
1:00 PM Seminar with Chief Engineer Patricia Leavenworth
2:15-3:15 PM – The Best Advice I Ever Received Panel
3:30-5:00 PM – Technical Panel (1.5 PDHs)
5:00-6:00 PM – Social Hour, Networking and Student Poster Session
6:00-7:30 PM – Dinner and Keynote Speaker, Jason DeGray

The Transportation & Development Institute and UMass Civil Engineering Department are partnering to host an event on a campus with a very active ASCE Student Chapter. The full technical day kicks off with a seminar conducted by MassDOT Chief Engineer Patricia Leavenworth with the students. This will be followed by a panel to provide advice to the students as they embark on their professional careers. The technical panel includes a smorgasbord of traffic-related topics ranging from the traffic issues of cannabis developments to the progress of the Complete Streets program in the Commonwealth, including speakers Douglas Halbert of GPI and UMass alumnus Michelle Danila from MassDOT. The social will include networking with colleagues and students, as well as a poster session where students will display and discuss specific research being conducted. The night culminates with a dinner where invited speaker Jason DeGray will discuss the relationship of transportation engineering and Vision Zero.

Registration Deadline: Tuesday, October 29, 2019

Registration Fee:
$65 BSCES Members, $75 Non-members
Free for Students (Registration required)

Information/Registration:
Register to attend this event here. If there are any questions regarding the form, please email UMassITE@gmail.com. You will be billed by UMass Amherst after the event.

Cancellations received after October 29, 2019 and no-shows will be billed.
2019 Fall Lecture Series

Resilience and Sustainability for Structural Engineers

Thursdays, October 3, 10, 17, 24 and November 7, 2019
Simpson Gumpertz & Heger, 480 Totten Pond Road, Waltham, MA
6:00 PM Registration/Refreshments, 6:30 – 8:30 PM Lecture

ASCE SEI Boston Chapter is pleased to present the 24th Fall Lecture Series entitled Resilience and Sustainability for Structural Engineers. Topics include 'Key Roles that Engineers Must Play in the Development and Integration of Future-Ready Infrastructure', 'Offshore Wind and the Transition to Renewables', 'Resilient Design - A New Paradigm in the High-Performance Building Movement', 'Building Performance and Design for Multi-Hazard Resilience', and 'Current Efforts in Boston for Sea-Level Rise'

Lecture 1 – Thursday, October 3, 2019
Key Roles that Engineers Must Play in the Development and Integration of Future-Ready Infrastructure

Tom Lewis, PE, JD, President, Louis Berger U.S., a WSP Company

Truly “Future-Ready” infrastructure must take into account many considerations well beyond just being compliant with codes, regulations and standard specifications associated with the particular owner and type of infrastructure. And no professional is in a better position to do this integration of considerations and solutions than engineers working for the infrastructure owner, its investors/funders its regulators, its consultants, its contractors, and its operators/maintainers. As such, a Future-Ready-focused infrastructure engineer - as well as planner, scientist, manager, etc. - should take every opportunity as early in the project life cycle as possible to ask and assess whether the right project scope is being proposed... before focusing on doing the initially proposed project scope right. This includes asking and answering many key questions like, is there an alternative approach or are there better materials and design elements that are: more efficient? ...more synergistic with other community needs? ...more innovative? ...more in line with future demands and conditions that may be very different than those that exist today? ...more sustainable? ...more resilient and enduring? ....lower in negative environmental and social impacts? ...lower in cost all-in (i.e., across the entire life cycle and not just capital cost)? ...better able to integrate “smart” sensors and monitoring as well as take into account other current and future “big data” resources that improve user experience, preventive maintenance, life-span, and overall asset management? This lecture presentation will further assess these types of questions and offer integrated Future-Ready solution scenarios, examples, and events/organizations/resources for consideration by infrastructure engineers.

Supported by the staff of The Engineering Center Education Trust
Lecture 2 – Thursday, October 10, 2019
Offshore Wind and the Transition to Renewables
Eric Hines, Ph.D., PE, Professor of Practice, Tufts University
Dan Kuchma, Ph.D., Professor, Tufts University
Over the next 30 years, the US must expand and modernize its power grid while retiring half of its existing power plants and transitioning to a low-carbon energy system. Along the nation’s coastlines, it is now realistic to imagine geographically distributed networks of privately developed but coordinated offshore wind plants as a major contributor to this evolution. However, the current project-by-project and short-term approach to developing this new US industry cannot deliver and sustain the anticipated deployment levels required to meet the demands of this transition. Bringing these new power networks to scale and realizing their maximum social value by 2050 will require harmonization of diverse domains and stakeholders.

Lecture 3 – Thursday, October 17, 2019
Resilient Design – A New Paradigm in the High-Performance Building Movement
Derek Kelly, PE, Principal, RWDI
Since the 1970’s RWDI has seen a global five-fold increase in the number of catastrophic weather events and a twenty-fold increase in annual insured disaster claims. In Canada alone insurance claims resulting from extreme weather events have exceeded a billion dollars each year for the past 5-years, totaling $8.25 billion over that time period. The June 2013 floods in Calgary, Alberta alone resulted in insurance claims exceeding $1.7 Billion (preliminary). Are you ready? Since their inception in 1972 RWDI has been a leader in the development of advanced technics to understand and model the climate and have worked on all 7 continents and every climate zone to development climate responsive, resilient design solutions. In this session they will be sharing, through examples of their work, methods and means: to understand climate; develop resilient passive architectural solutions; design for wind, snow and rain; and the benefits of a low energy building in our every changing climate.

Lecture 4 – Thursday, October 24, 2019
Building Performance and Design for Multi-Hazard Resilience
Mehrdad Sasani, Ph.D., PE, Professor, Northeastern University
While safety and collapse prevention should remain the primary objectives in building design, it is important to recognize that building functionality and reparable, which are key factors to achieve multi-hazard resilience, are not explicitly addressed by current building codes and standards. Accounting for these key factors in design requires reliable evaluation of severity and frequency of hazards (e.g. hurricanes and earthquakes), associated building demands and capacities, and assessment of post-hazard conditions in metrics such as extent of damage and time to recover. These, along with identifying a desirable level of rapidity in bouncing back following hazardous events, can help develop provisions in future building codes that quantify and enhance multi-hazard resilience.

Lecture 5 – Thursday, November 7, 2019
Current Efforts in Boston for Sea-Level Rise
Julie Eaton, PE, Lead Resiliency Engineer, Weston & Sampson
This presentation will discuss infrastructure issues associated with potential sea rise due to climate change. The focus will be on guidelines prepared for the City of Boston. Currently, the City is preparing for 40 inches of sea level rise by 2070. The Climate Ready Boston initiative is working to identify vulnerabilities and provide conceptual solutions throughout neighborhoods in Boston; the Coastal Resilience Solutions for East Boston and Charlestown Final Report was completed in 2017, the South Boston coastal resilience report is underway, and more studies are planned to follow. The City experienced significant coastal flooding during two Nor’easters in 2018. Recent findings of the Feasibility of Harbor-wide Barrier Systems: Preliminary Analysis for Boston Harbor, prepared by the Sustainable Solutions Lab at UMass Boston, indicate that shore-based climate adaptation solutions have significant advantages over a harbor-wide strategy for the City. With the growing number of conceptual solutions, emphasis on shore-based flood protection, and urgency for action, the City proactively identified that a framework for designing and evaluating climate resilient projects was needed to protect the public right-of-way.

Note: No Lecture on October 31, 2019
SPEAKERS

Tom Lewis, PE, JD, President, Louis Berger U.S., a WSP Company

Mr. Lewis is President, in charge of Federal Programs and Logistics for WSP USA. Prior to its acquisition by WSP, he previously served as president of Louis Berger’s U.S. Division, and prior to that as its senior executive lead on environment, renewables, climate resilience, disaster and emergency management, and hazardous materials and waste services for federal, military, state/local, and commercial sector clients. Mr. Lewis previously sat on Louis Berger’s board of directors, was a founding board member for the Berger Charitable Foundation, and has held multiple other corporate, philanthropic and industry organization board and committee positions – including more than 15 years with the Transportation Research Board and with the Zofnass Program for Sustainable Infrastructure Advisory Board at the Harvard University Graduate School of Design. He is a licensed professional engineer (PE) and passed the bar in multiple states, holds both a BS and MS in Engineering from the University of Connecticut, and holds a Doctorate of Jurisprudence with focus on environmental law/regulation from Rutgers. He has over 30 years of technical/management experience in the following services: transportation/infrastructure; emergency management; sustainability and climate change; contaminated sites investigation/remediation; environmental and IH/hazmat; geotechnical/geoenvironmental; environmental planning, assessments, impact statements; global infrastructure and development support projects; litigation, claims, permits and brownfields redevelopment; eco-restoration, sediments and water quality support; general civil and environmental engineering; and waste/landfills.

Eric Hines, Ph.D., PE, Professor of Practice, Tufts University

Mr. Hines, Ph.D., P.E., F.SEI has over 20 years of experience as a structural engineer designing innovative infrastructure and large-scale testing programs. Dr. Hines designed the Wind Technology Testing Center in Charlestown, MA and advised the Massachusetts Clean Energy Center on the development of the New Bedford Marine Commerce Terminal. As a Professor of Practice at Tufts University, he has led the POWER-US convening initiative and directs the Tufts University Offshore Wind Engineering Graduate Program. Formerly a partner of LeMessurier Consultants in Boston, Dr. Hines has over 70 publications and numerous awards related to systems design, industry-driven research and higher education. Dr. Hines completed his Ph.D. at the University of California, San Diego after studying the relationship between engineering and public policy as an undergraduate at Princeton University and as a Fulbright Fellow in Germany.

Dan Kuchma, Ph.D., Professor, Tufts University

Mr. Kuchma has been a Professor of structural engineering at Tufts University since 2014. Prior to this, he was a professor at the University of Illinois for 17 years; he obtained his PhD at the University of Toronto. His research is primarily focused on the design, testing, and modeling of concrete structures. He serves on the Building Code committee of the American Concrete Institute (ACI), chairs an ACI committee on wind turbine support structures, and is a member of 8 other national and international technical committees. The areas of application of his research and instruction are in offshore wind energy, earthquake engineering, railway engineering, and more generally in the design of structural concrete subjected to complex states of stress.

Derek Kelly, PE, Principal, RWDI

Mr. Kelly is a Principal and Project Manager at RWDI where he has been employed since 1998. He received his Bachelor of Engineering Science (Civil Engineering) from the University of Western Ontario, Canada, his Master of Engineering (Civil Engineering) from McMaster University, Canada and is a licensed Professional Engineer. He has vast experience having worked in projects in New York, Boston, Vancouver and Kansas City just to name a few. These include projects such as Yankee Stadium, Empire State Building, Verrazano Narrows Bridge, George Washington Bridge and the New Tappan Zee Bridge in New York, Millennium Tower and The Boston Gardens in Boston, The Golden Gate Bridge in San Francisco and the kcICON Bridge in Kansas City.

Mehrdad Sasani, Ph.D., PE, Professor, Northeastern University

Mr. Mehrdad Sasani is a Professor at the Department of Civil and Environmental Engineering of Northeastern University. Sasani’s research interests include progressive collapse of structures, earthquake engineering, and structural integrity, resilience and reliability. He is the principal investigator of a $1.1M project on A Decision and Design Framework for Multi-Hazard Resilient and Sustainable Buildings, which is supported by the National Science Foundation. Sasani is a member of several professional committees, among which, he is the chair of American Concrete Institute Committee 377: Performance-Based Structural Integrity & Resilience of Concrete Structures, and a member of committee for General Structural Requirements of ASCE 7. He is a fellow of American Concrete Institute; American Society of Civil Engineers; and Structural Engineering Institute.
Julie Eaton, PE, Lead Resiliency Engineer, Weston & Sampson

Julie is the Lead Resiliency Engineer at Weston & Sampson. For over a decade, her professional and academic ventures have focused on looking at climate change resiliency and adaptation from policy and design/engineering perspectives. She specializes in using a risk-based approach to identify and prioritize adaptation strategies. In addition to the resiliency program, she is also a Geotechnical and Dam Safety Engineer with Weston & Sampson. She has a Bachelor’s degrees in Political Science (University of Rochester) and Civil Engineering (UMass Lowell), and a Master’s degree in Civil Engineering (UMass Lowell). Climate change adaptation has been her passion since Hurricane Katrina hit New Orleans during her freshman orientation at Tulane University. Shocked from the devastation, she dedicated her first undergraduate career to understanding why it happened and how it could have been prevented from a political science and urban planning standpoint. She started taking engineering classes to understand how the levees failed and the role of the Army Corps of Engineers, which led her to her second Bachelor’s and Master’s degree. She is a licensed Professional Engineer (Civil) and Municipal Vulnerability Preparedness (MVP) provider in Massachusetts.

Registration Deadline: Friday, September 27, 2019

Register to attend individual lectures or the full lecture series and pay by credit card online at http://bit.ly/BSCESFallLectureSeries2019. To register online for an event at the BSCES member rate you must login using your BSCES assigned username and password. If you do not know your BSCES member login information call 617/227-5551. To register for multiple lectures, please complete the registration form below and mail, email or fax it to BSCES, One Walnut Street, Boston, MA 02108, bscesreg@engineers.org or 617/227-6783, respectively. Cancellations received after September 27, 2019 and no-shows will be billed.

Directions to Lecture Hall and Parking:
Lecture Hall: SGH Lecture Space, 480 Totten Pond Road, Waltham, MA
Parking: Parking garage entrances off of Totten Pond Road and Prospect Hill Lane

Handouts: Registered attendees will be provided a website reference for downloading handouts/notes.

Pizza! We begin each evening with pizza starting at 6 pm during registration.

Registration Form

BSCES SEI Boston 2019 Fall Lecture Series
Thursdays, October 3, 10, 17, 24 and November 7, 2019
SGH Lecture Space, 480 Totten Pond Road, Waltham, MA
6:00 PM Registration, 6:30 – 8:30 PM Lecture

Registrant Information
Name:
Company (if applicable):
Address:
City: __________________________ State: __________________________ Zip Code: __________________________
Phone: __________________________ Fax: __________________________ Email: __________________________

Registration Fees

Full Series of Five Lectures
$195 BSCES/ASCE Member
$245 Non-Member
$165 Public Employee Member
$195 Public Employee Non-Member
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Presentation Workshop

In The Hot Seat!

Wednesday, November 13, 2019
5:30 PM Registration & Dinner
6:00 PM Workshop

Featuring:
Joanne Linowes
Founding Principal, Linowes Executive Development Institute

Join the BSCES Younger Member Group for a presentation workshop featuring Joanne Linowes, Founding Principal, Linowes Executive Development Institute (LXDi). Joanne will be speaking about how to make the impression that counts and help you advance your career in regular project/team meetings!

Registration Information
Register and pay by credit card online at bit.ly/YMGWorkshop2019. To register online at the member rate you must login using your BSCES assigned username and password. If you do not know your login information, call 617/227-5551. To register by mail or email, complete an Event Registration Form and follow the submission instructions.

Registration Deadline:
November 8th, 2019

Online Registration:
bit.ly/YMGWorkshop2019

Registration fee includes dinner. Space is limited, register today!

For more information, contact: BSCESYMG@gmail.com
Third Charles C. Ladd Memorial Lecture

Geotechnical Lessons Re-learnt from Hong Kong Airport Extension

Dr. David W. Hight
Senior Consultant and Founding Director
Geotechnical Consulting Group

21 November 2019
Tufts University
5:30 PM Social/Registration at Tufts Alumnae Lounge, (40 Talbot Avenue, Medford)
6:30 Presentation at Cohen Auditorium (40 Talbot Avenue, Medford, MA 02153)

Speaker
Dr. David Hight is a Senior Consultant and Founding Director of the Geotechnical Consulting Group in London. He has vast experience in both industry and academia. He was a lecturer at Imperial College London (1975-1983), Visiting Professor at Imperial College (1993-2012), the National University of Singapore (2000) and Massachusetts Institute of Technology (1983). He has published widely on the subjects of soil behaviour, offshore geotechnics, soil sampling, laboratory testing, stability problems, earthworks and foundations. He delivered the 38th Rankine Lecture in 1998. He was elected to the Royal Academy of Engineering in 2001 and he was recently elected as a Fellow of the Royal Society of London.

Synopsis
The lecture will describe a focused and closely supervised ground investigation, along the lines of the Bothkennar Study, at the site of the extension to Hong Kong International Airport. The investigation revealed that the Marine Clays are microstructured, like many natural clays around the world. The implications of this finding on the predicted performance of the reclamation are discussed. The reasons why the extensive earlier ground investigations missed this key finding are identified and presented as lessons re-learnt.

Registration Deadline: (15 November 2019)
Free to Members, Students, and Non-members

Information/Registration:
Register to attend this lecture at 3rd CCL Lecture 2019. For questions regarding this event, contact Lucy Jen at Lucy.Jen@Tufts.edu or 617.642.0502.
2019 Executive Lunch Session

Brian P. Sullivan, P.E.
President – Tetra Tech Infrastructure Northeast (INE)

Thursday, December 5, 2019
Kleinfelder, One Beacon Street, Suite 8100, Boston, MA
11:45 am Registration
12:00 – 1:00 pm Lunch Presentation and Q&A
1:00-1:30 pm Networking Session

Gain insights into engineering leadership and business operations from Brian Sullivan, President of Tetra Tech INE. Mr. Sullivan will offer insights on engineer career development, leadership, and management drawing from his experience and unique perspective leading nearly 200 engineers and architects in New England and New York.

This lunch program will include brief prepared remarks followed by a Q&A session. Bring your questions for Mr. Sullivan who can offer his insights and experience from a distinguished career as a regional and national engineering leader.

Registration Deadline: Friday, November 22, 2019
Registration Fees $25 Members, $20 Public Sector Members
$30 Non-Members and Public Sector Non-Members
$10 Senior Members (65+) and Student Members

Information/Registration:
Register to attend this meeting and pay by credit card online at [bit.ly/BSCESExecutiveLunch].
To register online for an event at the BSCES member rate you must login using your BSCES assigned username and password. If you do not know your BSCES member login information call 617/227-5551. You can also register for this event by mail or email. To do so, download and complete a BSCES Event Registration Form and follow the submission instructions. Cancellations received after Friday, November 22, 2019 and no-shows will be billed.