

January 2019

January ASCE Seattle Section Dinner Meeting Washington State Infrastructure Report Card

Wednesday, January 9

The 2019 Report Card for Washington's Infrastructure is set to be released on January 16, 2019 and was created to help Washington understand the state of our infrastructure. As civil engineers, our job is to plan, design, construct, and maintain our infrastructure networks and this document allows us the opportunity to share that information with the public. The Report Card provides a snapshot for residents and policymakers to engage in a conversation about where we are and where we want to be. Please join us to discuss the development process for the Report Card, and how we plan to have the greatest impact possible in the release and outreach efforts that follow.

Speaker: Richard Fernandez, PE, PMP, ENV SP Project Manager, Project Deliver and Engineering Branch Seattle Public Utilities, City of Seattle

Add to Calendar

<u>Mirabella</u> <u>116 Fairview Ave N</u> <u>Seattle, WA 981009</u>

5:30pm Social Hour 6:00pm Dinner 6:30pm Program

\$45 (\$40 early bird) for General Admission \$25 (\$20 early bird) for students and free agents

Early Bird Registration ends after Thursday, January 3

> Registration closes Sunday, January 6

Attendees must preregister; there will be no on-site registration.

Click Here to Register



Section Officers Contact

Newsletter Editor Contact

January President's Column

By Eset Alemu, PE, CFM, Seattle Section President

Happy New Year from Seattle Section of ASCE! I wish you new beginnings and renewed energy for your pursuits. At the start of 2018, my new year's resolution included civic engagement and it has brought tremendous value to my personal and professional growth. I hope you consider civic engagement in your new year's resolution as our industry evolves to embrace and implement new technologies; and our city's landscape changes.

2019 is an exciting year for ASCE members as we unveil the findings and recommendations of the Washington State Infrastructure Report Card which is a cumulation of the efforts of dedicated ASCE volunteers from around the state. The WA Infrastructure Report Card provides a comprehensive assessment and recommendation for improvement for ten categories of infrastructure: aviation, bridges, dams, drinking water, roads, schools, solid and hazardous waste, stormwater, public transit, and wastewater.

The 2019 Report Card for Washington's Infrastructure will be released on January 16, at Seattle City Hall where ASCE volunteers



will disclose the most recent grades of the infrastructure categories evaluated. This event will bring various public officials and agency administrators that are instrumental in informing and engaging policymakers in a conversation about gaps in infrastructure funding, and the need for sufficient investment. This release event will be followed by continued ASCE outreach to legislators in Olympia; advocacy effort targeting Federal, State and municipal level elected officials; and delivering the Report Card to Washington State representatives in the Senate and Congress.

ASCE will also continue to increase public awareness through press releases and events. Public engagement and legislative advocacy are integral parts of our duties as civil engineers as we plan, design, construct and maintain our infrastructure networks. We welcome your contributions and engagement as we try to reach a broader audience to publicize the findings of the report. Please contact <u>legislative@seattleasce.org</u> to get involved in this effort.

This year also marks the opening of the highly anticipated SR 99 and renaissance of the Seattle Waterfront. The Alaskan Way Viaduct Replacement Program, a multi-billion-dollar project, is one of the largest public infrastructure projects in the nation and is aimed at improving the Seattle waterfront's resiliency against earthquakes. The last remaining construction activities before tunnel opening necessitate Washington State Department of Transportation to close SR 99 through downtown Seattle for approximately three weeks to realign the highway into the tunnel. This closure starting on January 11, will cause significant transportation and mobility issues for our city that will compel residents and businesses to consider alternative routes and modes of transportation. Events like these highlight the integral role of transportation networks; the importance of investment in public transit systems; and the disruptive nature change. As civil engineers, we can facilitate conversations around how despite the temporary impacts, these projects bring a tremendous benefit the public by constructing sustainable and resilient infrastructure.



All ASCE Seattle Members are always invited to join the Seattle Section Board Members at the monthly Board Meeting. Interested in attending? Check the <u>calendar on the ASCE Seattle website</u> for the meeting time and location and email <u>president@seattleasce.org</u> if you plan on joining us!

LOCEA Spotlight: North City/Denny Clouse Pump Station

The ASCE Seattle Section newsletter is featuring projects that received a Local Outstanding Civil Engineering Achievement Award in 2018.

BHC Consultants & North City Water District



Completed North City/Denny Clouse Pump Station.

The North City/Denny Clouse Pump Station is the largest and most complex facility within the North City Water District. The station provides water to three distinct pressure zones and includes numerous components to improve water quality, system reliability, and redundancy. District staff are capable of monitoring and controlling the entire District water system from this one facility with a layout that provides direct access to all equipment.

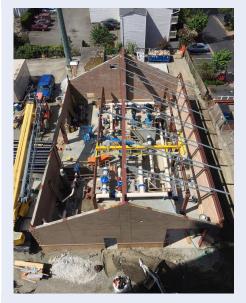
The station bundles what would normally be eight different facilities and structures into one structure at a single facility, providing a very cost-effective means of meeting the District's functional needs. While architecturally appealing, the structure uses commonly available CMU walls, a steel framed roof, and a metal roof. The station is designed with a long service life with minimal maintenance, thereby producing a very effective life cycle cost.

This facility provides the North City Water District with creative and innovative solutions to many of their system operational challenges. The station serves the 615, 590, and 502 pressure zones and meets 16 Functional Objectives including:

- Domestic and fire flow water demands within the 615, 590, and 502 pressure zones
- Water turnover in the 590 Reservoir to improve water quality
- Pressure relief from the 615 and 502 zones to prevent damage to customer fixtures
- Access to previously dead storage in the reservoir to provide greater reliability
- Supplemental fire flow to provide greater protection to the general public
- Ability to isolate the reservoir for maintenance and cleaning without sacrificing service to customers
- Providing redundancy and reliability to customers when sources of supply are out of service

System components are designed to maximize the usefulness of the station during normal as well as unusual and emergency conditions. Pressure relief valves and surge tanks protect the public from high and low pressures, and a seismic control valve retains water in the reservoir in the event of a significant earthquake. This will protect the public from water outages following an earthquake, provide fire volume to fight fires, and provide an emergency source of water following a major seismic event. The station includes a public tap that allows the District to provide water directly to the public from the reservoir following a major earthquake.

The design also considered goals the District had set for sustainability, environmental stewardship and being a good neighbor. The station incorporates low impact development features, extensive landscaping, and sound attenuation of the generator and the pumps to achieve compatibility with the surrounding environment. Various features, including provisions to recirculate water for testing, permeable pavers, and a tree retention plan are incorporated to promote sustainable use of a precious water supply. Translucent panels are provided to make effective use of natural lighting and reduce energy usage. The provision of three distinct pump sizes allows the engineer to maximize pump efficiency within the various operating flow ranges, reducing pumping energy usage. All pumps use variable frequency drives, allowing the District to very closely match pumping rates with system demand, further reducing energy usage.





Left Photo: North City/Denny Clouse Pump Station During Construction.

Right Photo: The station incorporates low impact development features, extensive landscaping, and sound attenuation of the generator and the pumps to achieve compatibility with the surrounding environment.

Congratulations to ASCE Seattle Life Members

A Life Member is an individual who has made a lifetime commitment to ASCE and the civil engineering profession by remaining a member for the full length of their professional career. More details about Life Membership can be found <u>here</u>.

Thank you to the following life members for your many years of commitment to the industry and ASCE:

- Gary Lobdell
- Richard Watson
- Dennis Hess
- Charles Cutting
- Paul Fuglevand
- Tracy Gill
- Robert Harn
- C Alexander
- William Grove
- J Gordon

- Eldon Jacobson
- Daniel Becker
- Keith Leytham
- Thomas Corcoran
- Joseph Shutler
- Amy Haugerud
- William Watson
- Randall Parsons
- Mark Siegenthaler
- Jack Bjork

A Talented Teacher: Remembering Ron Nece

By Brooke Fisher December 7, 2018 University of Washington Civil & Environmental Engineering

Many words describe the late professor emeritus Ronald Nece: humble, witty, a punster and lover of baseball. But the word that surfaces most often is teacher— and for good reason.



"My dad was first and foremost a teacher with an open door

policy, an open mind, and a keen grasp of hydraulics and fluid dynamics," Gary Nece said. "When I was in kindergarten, my dad would grade papers while I sat on his lap and he taught me chess."

A valued colleague, mentor and friend to many in the department for more than 30 years, Nece passed away in March 2018 at the age of 91. A highly respected and passionate educator, Nece taught at both the undergraduate and graduate levels. Throughout the years, he received awards for his teaching, including an Outstanding Teaching Award from the UW College of Engineering. In addition to serving as an adviser to students, he also supported student societies through his role as an adviser for the student chapter of the American Society of Civil Engineers (ASCE). Read More

(Photo Caption: CEE faculty members Stephen Burges, Scott Rutherford, Ron Nece, Joe Colcord, Colin Brown and John Ferguson, from left, at the ASCE Seattle Section Meeting in January 2006.)

Submit Your Paper for the 2019 Daniel W. Mead Prize

The 2019 National Mead paper topic is: In 2017, ASCE added a new guiding ethics principle on Treat All Persons Fairly, <u>Canon 8</u>. What value does this Canon add to the civil engineering profession and student chapters? For more details on this question and to submit your paper <u>visit the award page</u>. Submission deadline is February 1, 2019.



ASCE YMF Mentorship Program Applications

The Seattle Younger Member Forum is kicking-off a mentorship program in 2019 and will pair young professionals with more experienced civil engineers in the Seattle/Bellevue area. The program will start in January and continue through August. Applications are due Monday, January 7th.

Know of someone who would be a good mentor? Send them this application link: Mentor Application.

Know of someone who's interested in having a mentor? Send them this application link:<u>Mentee</u> <u>Application</u>.

Questions or looking for more information? Contact Don Nguyen and Schyler Bearman at

Mentor@SeattleASCE.org.

ASCE Sustainability Committee: Green Apple Days

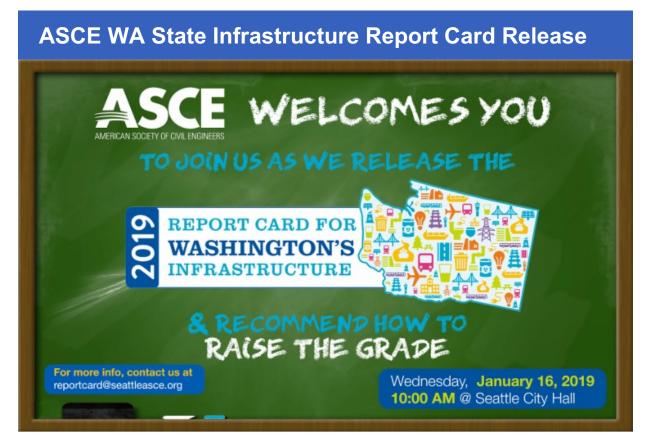
Stadium High School (Tacoma) - January 11 & Sammamish High School (Bellevue) - January 15



The ASCE Sustainability Committee is hosting a Green Apple Day event on January 11 at Stadium High School from 10:15am – 12:15pm in Tacoma and a second Green Apple Day

event on January 15 at Sammamish High School from 10:45am-1:45pm in Bellevue. Students will be conducting an energy audit on items at school. There will be a discussion on what they can do to conserve energy in their everyday life. The project will be done with two groups of students at each school. Come join us for one or both of the events.

Please contact Amanda Schweickert at <u>amanda.schweickert@abam.com</u> for more information or if would like to volunteer. Carpools may be available.



K-12 Outreach Event: Future City Volunteer Judging

Saturday, January 19th Shoreline Community College time commitment can vary between 7:30 AM - afternoon

The Future City Competition provides a fun and exciting educational engineering program for 6th, 7th, and 8th-grade students that combines a stimulating engineering challenge with a "hands-on" application to present their vision of a city of the future.

Volunteer as a Model & Presentation Judge! You will score the physical 3-D city model on the day of the competition and evaluate innovation, creativity, aesthetics, workmanship and the use of recycled materials. Lunch will be provided!

Find out more here: https://futurecity.org/region/judges

Register to volunteer here: http://futurecity.org/register

Contact Katarina if you have any questions!

ASCE YMF January Networking Events

Westside Networking at <u>Stout</u>

Thursday, January 31st 5:00 PM - 7:00 PM Stout Pub 1530 11th Avenue, Seattle

Eastside Networking at Palomino

Tuesday, January 22nd 5:00 PM - 7:00 PM Palomino 610 Bellevue Way NE, Bellevue

Look for the ASCE sign! If you have questions, please email <u>Matt</u>.

If you have any questions or concerns please email <u>Eamaan</u>.

Add to my Google Calendar

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ASCE YMF Tech Talk - Bridge Engineering

Don Nugyen @ HDR presents: Bridge Engineering - What even is it? Thursday, January 24th 6:00 PM - 7:00 PM HDR

929 108th Ave NE #1300, Bellevue



Join the YMF for the January Tech Talk at HDR! Don

Nguyen, the YMF Past President and Mentorship Co-Chair, will walk you through the world of Bridge Engineering. Don has six years of experience and is currently deputy-PM on the Marion Street Pedestrian Bridge Replacement Project in downtown Seattle. Food will be provided thanks to HDR!

HDR is located near the Bellevue transit center and paid parking is available in the 929 building.

RSVP here

If you are interested in presenting or hosting/sponsoring a tech talk in the future, please contact**Elyssa Dixon**. If you have questions for this event, please contact**Don Nguyen**.

Volunteer with Farestart

Saturday, January 26th 10:00 AM - 2:00 PM Farestart 700 Virginia St, Seattle

Start the new year right with **Farestart** where we will volunteer to help prepare meals for those in need. Please dress comfortably in long sleeves, long pants, closed toe shoes, and bring a hat if you have one. Aprons and lunch will be provided. Please note that we will stand for most of the event (~5 hours). As always, look forward to a fun learning and giving experience!

If interested, please email Shirley, ideally by January 4th!



Upcoming ASCE Seattle Events Never miss a Seattle Section event, link our calendar to your Outlook today!

Have you seen our new event calendar? <u>Click here</u> to see what exciting events we have planned!

The best way to stay up to date on Seattle Section happenings is to **add our calendar to your Outlook** or other email manager. All you have to do is <u>click</u> <u>here</u> to download a .ics file that you can open and add to your own calendar.

Welcome New Members!

ASCE Seattle is growing! This month we welcome the following new members. Be sure to say hello the next time you see them!

- Shane Joseph Markus, A.M.ASCE
- Tracy Pennell, S.M.ASCE
- Makenzie Fockler, S.M.ASCE
- Bryce Frisher, EIT, S.M.ASCE
- Alexandra Navarre, S.M.ASCE
- Matan Bilavsky, S.M.ASCE
- Maeve Harris, S.M.ASCE
- Margaret Honig, S.M.ASCE
- Devin Li, S.M.ASCE
- Shu Ki Chan, S.M.ASCE
- Hailey Roche, S.M.ASCE
- Calista Moore, S.M.ASCE
- Hojeong Bang, S.M.ASCE
- Tyler Wilcox, S.M.ASCE

- Koppany Kolyvek, S.M.ASCE
- Dylan Majewski, S.M.ASCE
- Cameron Lee Wressell, S.M.ASCE
- Minyong Lee, S.M.ASCE
- Ajla Selimic, S.M.ASCE
- Marcella Lorraine Li, S.M.ASCE
- Kiley Rempp, S.M.ASCE
- Danielle Pitcher, EIT, A.M.ASCE
- Emma Van Orden, S.M.ASCE
- Rowyn Lea, S.M.ASCE
- Matt Damian Klontz, P.E., M.ASCE
- Jacqueline Goh, P.E., M.ASCE
- Lawrence Paltep, S.M.ASCE
- Angella M. Mickowski, A.M.ASCE

Current ASCE Seattle Volunteer Opportunities



Urban Development & Transportation Committee

The Seattle Section is currently searching for two motivated members to lead and revamp the Urban Development and Transportation Committee take charge of the committee. The purpose of this committee is to provide a forum for engineers and designers to discuss the intersection between transportation and urban planning and network with professionals with similar interests. This committee

intends to. The committee will host monthly or bimonthly meetings and/or site visits. It can also get additional support from ASCE National's Transportation and Development.

This is a forum for ASCE members and non-members to discuss the issues facing the city and the world today, and how engineering and design are influencing the change. Seattle is going through a rapid and huge transformation of its urban fabric with the arrival of thousands of new employees every month. This has created traffic on the streets and highways, apartment and office space buildings popping up left and right around the city, and new rail systems and bicycle friendly infrastructure.

Please contact Homero Flores if you are interested in leading or participating in this group.

Washington State Report Card

Call for volunteers! The WA Infrastructure Report Card is getting close to public release! Members from ASCE Seattle, Tacoma-Olympia, and Inland Empire Sections have been working tirelessly to research, assess, and summarize our great state's infrastructure in the areas of Aviation, Bridges, Dams, Drinking Water, Roads, Schools, Stormwater, Transit, and Wastewater.

Upcoming work includes outreach to the public, media, and elected officials as well as event planning for the release event in January 2019. The team is looking for volunteers to help with outreach and plan the release event in January 2019! Are you passionate about our states infrastructure and addressing the funding gap? If so, please contact Richard Fernandez (<u>ichard.fernandez@seattle.gov</u>) or Bobbie Gilmour (<u>bobbiegilmour@kennedyjenks.com</u>).

Legislative Committee

ASCE Seattle Section is searching for volunteers to assist with the Legislative Affairs Committee. The level of Involvement can vary and can include providing engineering judgement on current legislative issues to assisting with lobbying.

The Legislative Committee functions in the political arena with focus on federal, state, county or other governmental issues that are of interest to the civil engineering profession; such as university engineering budget considerations, issues that affect the practice of or employment of civil engineers, and environmental issues of significance to the profession. The committee reviews proposed legislation and comments on it with regards to its effect on the civil engineering profession and may also be called upon to testify at Legislative hearings or for other governmental committees. It is also responsible for disseminating information from the Architects and Engineers Legislative Council (AELC) pertaining to state legislation. The committee typically sends at least one representative to the Society's annual Legislative Fly-In in Washington D.C.

Current Job Openings

- Transportation Engineer II -City of Issaquah
- Civil Engineer Project Manager - Davido Consulting Group

Click to View Job Descriptions & Apply!

REACH OVER 2,000 ENGINEERING PROFESSIONALS

Click Here to Post Your Employment Ad on the Seattle Section Website

Advertise your current open positions to ASCE Seattle members today for only \$75 for the first month and \$50 for each subsequent month. <u>Email communications@seattleasce.org to</u> <u>learn more.</u>

