

## 2019 OUTSTANDING SECTION / BRANCH AWARD NOMINATION FORM BASIC INFORMATION

	Very Large Section/Branch (> 2500 members)
Award Classification (check one):	⊠ Large Section/Branch (1001-2500 members)
	Medium Section/Branch (501-1000 members)
	Small Section/Branch (< 500 members)
Section/Branch Nominee:	Dallas Branch of the Texas Section
Name and Board Position of Contact Member:	Julie A. Jones, PE (TX), CFM   Branch Interim President (2019)   Branch President (2019-2020)
ASCE Member ID:	
Address:	
Telephone:	
E-mail:	

### NOMINATION QUESTIONS/SCORING

120 points maximum

#### A. <u>COMMUNICATION WITH MEMBERS</u> (15 Points Maximum)

Newsletter (1 point per issue, 5 points maximum):

Number of Newsletters Published Annually:	12   June Newsletter attached			
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Please include one electronic newsletter with the Award nomination package.

Website (5 points maximum):

Double check that all links are active prior to submission.

Website URL:	www.dallasasce.org	
	<ol> <li>The Branch website is updated monthly to include current information regarding:         <ol> <li>Latest monthly Branch meeting information</li> <li>Information on technical seminars and webinars (Branch, Texas Section, and National)</li> <li>Spotlights local firms sponsoring the Branch</li> <li>Upcoming events: DFW Joint Meeting with FTW Branch, Golf Tournament, E-Week Activities, YM and Education Outreach events, EWB-USA, Awards, events of partner organizations, mayoral infrastructure debate, Section news, and others.</li> <li>Links to social media such as Facebook, Twitter, LinkedIn, Instagram</li> <li>Calendar of Events</li> </ol> </li> </ol>	
Discuss the content included on your website:	<ol> <li>STEM education outreach events such as Woodrow Wilson and Hillcrest High School Civil Engineering Club visits by Dallas Branch members, and visits to middle schools and grade schools.</li> <li>Monthly newsletter and articles, and archived past articles</li> <li>Local Job Postings (Monthly Update)</li> <li>Picture Gallery page including monthly Branch Meetings and special events</li> <li>Branch organizational information</li> <li>ASCE membership information</li> <li>Monthly message from the President to highlight major activities, call for leadership, volunteer efforts, and other information.</li> <li>Links to ASCE Texas Section, Region 6, National, ASCE Smartbrief, professional societies, education, publications, and civil engineering links.</li> </ol>	

Other Tools (5 points maximum):

B. PROFESSIONAL / LEADERSHIP ACTIVITIES, AWARDS / RECOGNITION, SCHOLARSHIPS AND MENTORING (20 Points Maximum)

Professional / Leadership (Non-Technical) Activities (5 points maximum):

Professional / Leadership (Non-Technical) Committee Meetings (1 point each, 2 points max)

Professional	Number of	Presentation Topic(s):	
Committee:	Meetings:		
Board of Directors and all Committee Chairs	5+	Leadership Training. Dallas Branch is committed to leadership development for all Officers and Chairs. Our annual budget funds attendance of our key leadership to various seminars and conferences. Dallas Branch also includes within the annual budget for our institute chapters to attend their national conferences on a rotating schedule. The Dallas Branch participates in the Texas Section Leadership workshop each summer, Texas Section CECON (annual conference), YM Symposium, Concrete Canoe and Steel Bridge Competition, Institute Conferences, EWB-USA Conferences, and ASCE Presidents and Governors Forum.	
Education Committee	5+	In 2017, the Branch entered into a formal Agreement with <b>Dallas</b> <b>Independent School District (DISD)</b> to provide STEM outreach across the district. Through this program, Branch volunteers participated in STEM events at elementary and middle schools. Additionally, DISD and ASCE Dallas facilitated a bridge building competition among these students. The committee has arranged a number of all-morning presentations to the Woodrow Wilson High School Civil Engineering club, which is a multi class session commitment to make presentations to Mr. Brandon Carver's students who are on track to become civil engineers. Thanks in part to the support of the education committee, the branch now supports a second Civil Engineering Club at Hillcrest High School. The CE Club summary is in the attached newsletter. The Dallas Branch regularly attends <b>career days and</b> <b>STEM</b> nights at various schools in Dallas and northern suburbs. Annually, the Education and YM Committees host an interactive <b>E-Wee</b> k event at the Perot Museum of Nature and Science. During this multi day-long event hundreds of pre-college students are provided the opportunity to participate. This is a national event hosted by schools and museums where kids from various schools explore the museum and do activities related to engineering. ASCE Volunteers will run the penny bridge activity where kids see how many pennies they can suspend across an 8" gap using only 1 sheet of paper and 5 paper clips.	

Younger Members	5+	Annually, the Dallas Branch Younger Members Committee is provided the opportunity to take over Branch operations for the full month of May, during <b>Younger Member Month</b> . The YMs lead the entire operation of for the Branch Board and meetings for the month by running the Board meeting, make announcements, coordinate with the hotel, oversee meeting registration, preside over the Branch luncheon meeting, and introduce the keynote speaker. The Branch Director, this year Jennifer Smith, is a Younger Member and ran both meetings as acting President. The Dallas Branch also host <b>monthly social or service activities</b> for the Younger Members.
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Professional / Leadership (Non-Technical) Seminars (1 point each, 3 points max)

Date:	Approx. Attendees:	Presentation Topics / Describe Seminar:	
October 2018	35	Annual Kickoff Leadership Orientation Seminar: Each Branch President holds an Officer and Committee Chair Kick-off Meeting at the beginning of his/her term. Topics covered include our Branch Guidelines for Operation, Board and Committee responsibilities, the annual budget, among other housekeeping items. Each Committee Chair is encouraged to present goals for the coming year. In past years this was done at one meeting, but with 30+ people there is little time to get to know each other or talk about goals in depth. This year one meeting was held with all nine board members, with the overview and each sharing their goals. This was done over an extended dinner for more socializing. This model was continued with each board member having a similar meeting with the committee chairs that fall under that board member. This was an idea that we got from another branch at the President and Governors Forum.	
April 10-13 2019	4	ASCE Texas Student Symposium: Texas Section and ASCE Student Chapters from the Texas-Mexico Student Conference met early April for the annual Student Symposium and concrete canoe competition hosted by University of Texas – Rio Grande Valley on South Padre Island. Students had the opportunity to attend a series of soft-skill seminars to prepare them for their new careers. The students learned how to create an excellent resume, interview for a job, plan for their future careers, and how to network. A Texas-wide career fair gave them the opportunity to put this specific learning into play at the Symposium, and employers had access to exceptional students. The Branch's professional advisor's for the UTA and SMU student chapters supported student participation in the competitions.	
12-14 July 2019	5	Texas Section Leadership Development Weekend: This year Dallas Branch sent 5 leaders to participate in the Texas Section Leadership Development Weekend. This is a 2-day workshop planned by ASCE Texas Section President Elect. This workshop goes over ASCE Organizational Structure, Membership Strategies, Social Media, Volunteer Engagement, and Leadership skills such as how to deal with difficult people, just to give a few examples. This also allows for networking within the section, to discuss ideas and what works/didn't work for their branches. Dallas Branch had a mix of newer and more experienced leaders of all ages.	

<u>Awards/Recognition</u> (1 point each, 5 points maximum):
 Awards Given by the Section/Branch

P	Awards Given by the Section/Dranch		
	Name of Award:	Recipient:	Describe:
	2019 ASCE Dallas		This award recognizes established engineers who have made
	Branch Engineer of	Nancy Cline, P.E.	outstanding contributions to the civil engineering profession, the public
	the Year Award		welfare, and humankind.
	2019 ASCE Dallas		This award recognizes young engineers who have made outstanding
	Branch Young	Anthony Luce, P.E.	contributions to the civil engineering profession and their communities
	Engineer of the Year		during the early years of their careers.
	Award		

#### Society Awards Received by the Section / Branch or its members

Name of Award:	Recipient:	Describe:	
Outstanding Branch Award for Large Branches	Dallas Branch	The Dallas Branch received the award that is the subject of this form, for the 2017-2018 period at MRLC 2019 (Dallas).	

History & Heritage Citation	Dallas Branch	The Dallas Branch received this citation for the Texas Section Centennial Plaque dedication at the Old Red Courthouse.	
Margaret S. Petersen Award	Dr. Barbara Ellen Spang Minsker, Ph.D., M.ASCE	Environmental and Water Resources Institute selected Dr. Minsker to receive the 2019 Margaret S. Petersen Award for "technical accomplishments, leadership, and commitment to mentoring women pursuing engineering careers which concur with the ideals the award's namesake championed throughout her life".	
ASCE 2019 Innovation Contest Honoree	Bradford Russell, P.E.	Mr. Russell was given this honor for his load bearing Structural Assembly. Designed to absorb and redirect forces on a structure produced by extreme events such as earthquakes or explosions. This was the winner for General Civil Infrastructure Improvement.	
2019 ASCE Outstanding Practitioner Advisor Award	Jennifer Smith, P.E.	Ms. Smith was chosen for her outstanding work and dedication as a Practitioner Advisor to the Southern Methodist University ASCE Student Chapter.	
CRYMC Outstanding Younger Member in Community Activities	Jennifer Smith, P.E.	Conferred by the Central Region Younger Member Council (CRYMC) at MRLC 2019 (Dallas) for Ms. Smith's outstanding and persistent community activities and outreach specifically with the SMU Student Chapter.	
CRYMC Outstanding Younger Member Group Project	Civil Engineering Club Program	The Outstanding Younger Member Group Project was presented to the Civil Engineering Club Program that the Dallas Branch hosts at Woodrow Wilson and Hillcrest High Schools. This award was received by Jonathan Brower, ASCE Dallas Vice-President, for his work in starting CE Club program and expanding it to another school over the years.	
Texas Section ASCE Professional Service Award	Mark K. Boyd, PhD, P.E.	Mark Boyd, a long standing Dallas Branch leader, received this award from the Texas Section for career service to his profession in private consulting, public service, community outreach, and service to ASCE including Past President of the Dallas Branch.	
Texas Section ASCE Professional Service Award	Anthony D. Luce, P.E.	Anthony Luce, another long standing Dallas and Houston Branch leader, received this award from the Texas Section for career service to his profession in private consulting, public service, community outreach, and service to ASCE including President of the Dallas Branch and his dedication to the Branch.	
Texas Section ASCE Professional Service To Students Award	Jennifer Smith, P.E.	Ms. Smith was given this award for her service to the Texas Section for her service as the practitioner of the Southern Methodist University Student Chapter. This was also in part for her role in starting the mentoring program between the SMU and Dallas Branches.	
Texas Section ASCE John A Focht, Jr Citizen Engineer Award	Julie A. Jones P.E.	Ms. Jones was given this award for her service within Engineers Without Borders- USA, her church, and the community.	
Texas Section ASCE History & Heritage Award	ASCE Dallas Branch - Old Red Courthouse Plaque Dedication 5 points maximum):	To recognize the plaque dedication at the Courthouse Museum where the Texas Section was founded. This is within the Engineering portion of the museum. The dedication ceremony was attended by President Kemper, and many ASCE leaders across the state and nation.	

### • <u>Scholarships</u> (5 points maximum):

Scholarships to High School Students (1 point each)

Name of Scholarship:	Amount of Scholarship:		Describe:
G.B. Mann Scholarship	\$2,500	Awarded to: Adriana Aviles who attended Hillcrest High School and will attend University of Virginia.	The G.B. Mann Scholarship is awarded to outstanding high school seniors in the Dallas Branch area that are enrolled in accredited Civil Engineering programs at Universities or Colleges. The scholarship committee selects from applicants that provide a written

G.B. Mann Scholarship	\$2,500	Awarded to: Steven Figueroa who attended Woodrow Wilson High School and will attend Texas A&M University.	essay, references, scholastic performance, personal achievements, and extracurricular activities.
G. B Mann Scholarship	\$2,500	Awarded to: Macie Burgard who attended Woodrow Wilson High School and will attend University of Southern California.	

# Note all three of these students, while not a requirement were part of the Civil Engineering Clubs hosted by the Dallas Branch.

Scholarships to College Students (1 point each)

Name of Scholarship:	Amount of Scholarship:	Describe:
Dallas Branch ASCE Civil Engineering Scholarship Endowment	\$50,000 endowment. \$25,000 started in 2009 (\$25,000 match was made by the University's Maverick Match Program)	The Dallas Branch ASCE Civil Engineering Scholarship Endowment provides annual scholarships to CE graduate students, and undergraduate juniors or seniors, based on academic achievement, financial needs, and participation in extracurricular activities including student honor societies and professional organizations such as the UT Arlington Chapter of ASCE. <u>https://uta.academicworks.com/opportunities/1342</u>

#### • Mentoring Activities of ASCE Members (5 points maximum):

Date:	Approx. Attendees:	Describe:
Multiple	30	Branch professional advisor to UTA, Ed Penton (M. ASCE Dallas Branch) regularly attends UTA Student ASCE Chapters to mentor and advise ASCE student leadership. Likewise, Mark Boyd and Jennifer Smith, as SMU Chapter Professional Advisors attended chapter meetings and mentored student leadership. In September 2018, Dr. Boyd and Ms. Smith met with SMU ASCE Student Chapter officers to begin planning meetings and events to connect SMU students to Dallas Branch members to set up formal mentor-mentee relationships. Largely inspired by student ASCE officer initiative, the formal mentorship program between Branch members and SMU students started the Spring Semester of 2019. The program had 11 pairs of mentors/mentees. After the semester a survey was sent to both the mentees and the mentors to make the next year even more successful.

#### C. TECHNICAL COMMITTEES AND ACTIVITIES (15 Points Maximum)

Section/Branch Technical Committees or Institutes (minimum of 2 technical meetings per year; 1 point each, 5 points max) Note: The Branch hosts morning and afternoon technical sessions before and after our regular luncheon meeting, with 1 hour of PDH offered for each. The technical sessions take place 10 of the 12 months of the year (not in December or in July due to our joint meeting with Fort Worth Branch). The following is a listing of some of the 20 seminars hosted by the Dallas Branch.

Technical Committee:	Number of Meetings:	Presentation Topic(s):
Construction Institute (CI)	3	<b>1/14/19</b> : Innovative instrumentation for construction control; <b>4/8/19</b> : Construction Engineering and Inspections: A Refresher Course; <b>8/12/19</b> : Design and Construction of the Diaphragm Wall Foundations in Downtown Austin, TX
Environmental & Water Resources Institute (EWRI)	3	<b>10/8/2018</b> : The Challenge of Urban Flooding; <b>3/11/2019</b> : Climate Change and its Impacts to Texas; <b>6/10/2019</b> : Mills Creek, Peaks Branch, State Thomas Drainage Relief Tunnel
Geo-Institute (GI)	4	<b>11/12/2018</b> : Mechanistic Pavement Foundation Construction Quality Assurance and Process Control; <b>2/11/2019</b> : Pavement Design with Geogrids; <b>5/13/2019</b> : Research Innovations for Sustainable and Resilient Geotechnical Engineering; <b>9/9/2019</b> : Geopier Ground Improvement Solutions for the Lone Star State

Structural Engineering Institute (SEI)	4	<b>11/12/2018</b> : Behavior and Rehabilitation of Industrial Steel Stacks (Chimneys); <b>2/11/2019</b> : Abram Street Pedestrian Bridge; <b>5/13/2019</b> : Ship Channel Bridge; <b>9/9/2019</b> : Seismic Design and Detailing Requirements Set Forth in ASCE 7
Transportation & Development Institute (T&DI)	2	<b>10/8/2018</b> : DFW Lane Restriction Safety Study; <b>1/14/2019</b> : Lessons Learned from VDOT Accelerated Bridge Const. Project

Technical Seminars / Courses Offered with PDHs (1 point each, 5 points maximum). Note: The Branch produced PDH certificates for attendees at all the technical seminars mentioned in the section on the previous page. Monthly Branch meetings include a 3 course plated meal along with a technical keynote presentation of our monthly activities providing 1 PDH to attendees, a few examples of the Branch's eleven (11) 2018-2019 PDH-level luncheon meetings are listed below.

Section/Branch Technical Seminars / Courses with PDHs (1 point each, 5 points max)

Date:	Approx. Attendees:	Describe:
10/8/2018	191	Monthly Branch Meeting: Developing Facility Record Drawings: Reality Capture Technologies and BIM Modeling by Michael Graves. 1 PDH
11/12/2018	192	Monthly Branch Meeting: Dallas County's Mobility Plan by Alberta L. Blair, P.E. 1 PDH
1/14/2019	229	Monthly Branch Meeting: Update on Bond Program and New City of Dallas Design Manuals by Chris Turner-Noteware, P.E., and Rick Galceran, P.E. 1 PDH
2/11/2019	203	Monthly Branch Meeting: Connected and Automated Transportation in Texas by Christopher M. Poe, Ph.D, P.E. 1 PDH
3/11/2019	212	Monthly Branch Meeting: Update on Collin County Projects and Bond Program by Clarence Daugherty. 1 PDH
4/8/2019	221	Monthly Branch Meeting: TEX Rail Construction by Richey Thompson, P.E. 1 PDH
6/10/2019	221	Monthly Branch Meeting: NTTA Update by Mark A. Bouma, P.E. 1 PDH
8/12/2019	171	Monthly Branch Meeting: DFW Transportation: Planning for the Future by Kevin Feldt, AICP. 1 PDH
9/9/2019	171	Monthly Branch Meeting: Legacy Hall - The Food Hall / Beer Garden / Craft Brewery of the Legacy West Development by Phillip Pesek, P.E. 1 PDH

Other Technical / Educational Activities and Benefits for Section / Branch Members (1 point each, 5 points max)

th	<b>1) 4/8/19. Chi Epsilon UTA Student Chapter Induction Ceremony</b> . Conducted instead of ne Branch's regular technical morning session, 30 Branch members were in attendance to upport the UTA student group of inductees. After the ceremony, all UTA students and their aculty sponsors attended the Branch's regular luncheon.
SU	upport the UTA student group of inductees. After the ceremony, all UTA students and their
fa	aculty sponsors attended the Branch's regular luncheon.
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(2	2) The Dallas Branch records each branch meeting and posts the audio recording (to the
Te	exas Section online library) and, when made available, the speakers' presentations online.
Describe other technical / educational activities and benefits for Section / Branch members:	<ul> <li>an July, the Branch co-hosted a joint meeting with the Fort Worth Branch in Arlington Texas.</li> <li>3) The joint meeting offered a full morning, lunch and afternoon slate of PDH opportunities. The joint meeting had 5 tracks: TDI, EWRI, CI, GI, and SI. Each of these institutes had 3 morning presentations followed by a lunch presentation and then an ethics presentation.</li> <li>4) 3/21/19 The Younger Members (YMs) hosted an event for all members (YMs and other nembers) at Bishop Cidercade. Game play admission fees will be covered by us so be sure to ring your A-game, as the Cidercade showcases over 170+ arcade games. Your inner brew-naster skills will have a chance to expand as the Cidercade bar.</li> <li>5) On 6/13/19. The YMs of ASCE Dallas Branch traveled to "Escape the Room Dallas-Fort Vorth" where they were presented with a top-secret mission to identify and capture a villain rior to his or her escape in "The Agency" room. Having just 60-minutes, and equipped with only their "hard hats," the YMers uncovered several clues and solved numerous puzzles in ursuit of their target. However, despite their best efforts, the villain unfortunately escaped.</li> </ul>

#### D. MEMBERSHIP (10 Points Maximum)

	Branch leadership regularly invites student to its luncheon meetings,
	with great success. Student members from UTA and/or SMU have attended
Describe efforts to transition Student	most luncheons during the past year, including the Joint Meeting in Arlington,
Members to Associate Members (2	which was held on the UTA campus. The branch believes it is important to
points):	include CE students at various community service events and to Dallas Branch
	meetings, and applies the time and energy necessary to make it happen. Over
	the past year, the Student Chapter at UTA and SMU were both presented with

	a monetary contribution from the Branch at a monthly meeting and was
Describe efforts to transition Student Members to Associate Members (2 points): (cont.)	provided the opportunity to address the branch members present. Our Student Chapter Practitioners for SMU UTA regularly attend Student chapter meetings, assist with securing guest speakers and interact with the student leaders. The Younger Members communicate all community service and socials to Student Members. The relationships built and regular interaction has been key to transitioning new graduates from student to Associate members. The practitioner advisors at SMU and UTA are key to this process. They attend both the student meetings as well as the Dallas Board Meetings monthly to update Dallas Branch how we can better serve the student chapters.
Describe Member recruitment programs (2 points):	During the past year, the Dallas Branch has coordinated activities with the UT Arlington ASCE Chapter. The UTA ASCE Chapter has started planning the <b>Spring 2020 Student Symposium for Texas and Mexico</b> along with the concrete canoe and other competitions. There will be cross-institute presentations to show how most projects cross between multiple types of Civil engineering. Through this process Branch leadership has had the opportunity to interact with students, and share information about ASCE. This was also true when Dallas Branch hosted the <b>MRLC</b> . We also put in our newsletter and announce during the meetings to encourage members to invite others to join during the <b>ASCE membership campaign</b> .
Describe Member retention programs (2 points):	Annual Fellow & Life Member Recognition - Our Membership Committee identifies all Dallas Branch members that are eligible for Life Membership with ASCE. We presented <u>eight Life Member certificates and pins</u> during our May 13, 2019 luncheon and openly recognized each life member in front of membership. We share in the joy with our members at the start of their civil eng. career to the decade's long careers of our more experienced members. Monthly Raffle - Every month as part of the scholarship fundraiser, we sell raffle tickets online at, a discount, to members who register early. These raffle tickets are good for a chance to win the 50/50 raffle and support our scholarship fund. Meeting Discounts – Members are provided discount registration rates for monthly meetings. This has incentivized membership through saving up to \$120 annually. Quality Programs for earning PDHs – The Branch offers an opportunity for our members to earn over 36 PDHs annually. We offer free technical sessions before and after our monthly meetings, which do not require prior registration. Holiday Gathering – The Branch holds a holiday dessert gathering following the December meeting to allow members to network with their peers.
Describe any recognition programs for employers supporting ASCE (2 points):	The Dallas Branch offers <b>meeting sponsorships</b> to interested organizations. As the sponsor we spotlight the organization during the month of sponsorship and provide the following benefits: Sponsor is prominently seated at one of the 6 seats at the monthly meeting head table. Company name and logo prominently displayed on the website, newsletter and meeting announcements. The Sponsor company gets 3 minutes to make a presentation and distribute marketing material at the branch meeting. Sponsor company gets one job posting in that month's newsletter and on the website. They companies that <b>sponsor at a level</b> during the year (platinum, gold, etc.) have their logo on the monthly slide presentation, on the website, and have other benefits.
Describe other Membership Activities / Events (2 points):	The Dallas Branch invites and funds the High School Civil Engineering Club Students (1 teacher and 10 students) each to attend one Branch meeting annually, pending their schedule. This is typically the younger member month. This meeting allows the students to interact with actual civil engineers and learn from the complex topics and speakers on real world projects. The Branch invites Scholarship winners and their parents/guardians to attend a Branch meeting to be recognized for their achievements. The Younger Members have either a social or service activity every month. This is a great way for them to bring friends and coworkers to an activity to introduce them to ASCE.

## E. <u>PUBLIC OUTREACH ACTIVITIES</u> (10 Points Maximum)

Describe outreach activities with elementary, middle, or high schools (1 point each, 5 points max):	Private Firm Outreach: Firms of Branch members frequently bring in student interns during the semester to spend several hours in a working environment. For example, the firm of our present Technical Director Bradford Russell, BR Architects, Inc. – Architects and Structural Engineers, brings in two high school students per semester to spend a few hours per day in their office participating in engineering activities. Harrington Elementary STEM night (1/17/19): This is a local STEM night in Plano encouraging kids to think about careers in the STEM fields and to demonstrate that science and math can be fun. ASCE Volunteers will run the penny bridge activity where kids see how many pennies they can suspend across an 8" gap using only 1 sheet of paper and 5 paper clips. Future City Competition (1/26/19): This is a national event hosted by schools across the country where kids design the city of the future. ASCE volunteers participate in any many ways. ASCE Dallas Branch provides annual sponsorship for award to Creative Infrastructure; provide several judges and volunteers to help support all-day competition. Three Branch leaders participated in judging in 2018. DISD STEM Expo (2/2/19): Elementary students build bridges out of popsicle sticks and bring them here to test their final design to failure. The Middle School and High School students build balsa wood bridges to bring to test their final design to failure. ASCE volunteers will interview the teams after load testing, perform the load testing, interview the teams after load testing, interview the teams after load testing, integes, and give out final awards. Dallas Branch also participated in the DISD STEM Expo Day by hosting a booth with STEM related activities for students and their families. E-Week at the Perot Museum (2/19/19 - 2/21/19): This is a national event hosted by schools and museums where kids from various schools explore the museum and do activities related to engineering. ASCE Volunteers will run the penny bridge activity. This event host hundre		
Describe outreach activities via media outlets (1 point each, 3 points max):	We provide our Public Relations and Outreach chair for any local media requests we receive to answer questions that relate to the engineering field and projects. The Dallas Branch also hosted a Government Relations and Public Relations training event on July 20, 2018.		
Describe other public outreach or educational activities (1 point each, 2 points max):	<ul> <li>MathCOUNTS Competition – Provided volunteers on February 17-23, for grading, serving lunch, proctoring, and coordinating volunteers.</li> <li>Earth Day – Provided volunteers on April 26-28 to have a booth to promote STEM. The families build water filters to filter creek water out of various household items such as coffee filters, cotton balls, etc.</li> <li>Girl Scouts – Girl Scouts STEM Center of Excellence seeks to Inspire girls to be the STEM leaders of tomorrow by volunteering at the STEM Center of Excellence during a weekend during the Spring. Volunteers will primarily assist with STEM activities such as robotics, space science, engineering, cybersecurity, ecology, and citizen science for girls grades K-12.To find out additional information about the STEM center: http://stemcenter.gsnetx.org/</li> </ul>		
F.COLLEGE OUTREACH ACTIVIT	ES (20 Points Maximum)		
Describe Student Interaction Activities between ASCE Student Chapters/Clubs and the Section/Branch (1 point each, 5 points max):	On <b>11/1/2018</b> ASCE Dallas and the ASCE SMU student chapter co-hosted the ASCE SMU Mentorship Program Kick-off event on the SMU campus. Four ASCE professionals (3 of which are SMU alum!) and over 15 students attended the event. The professionals and students networked with each other about work-life and student-life and what the transition between the two is like. In addition to the four ASCE professionals in attendance, we have a list of nine individuals interested in being a mentor. From SMU, we have eleven students who want to participate in the mentorship program and have listed their first, second, and third choices of industry they would like to be paired with. The Civil Societies of UTA is hosting a Welcome Bash BBQ on <b>9/7/19</b> . This event is sponsored by ASCE and Chi Epsilon. On <b>4/8/2019</b> Dallas Branch hosted the initiation of the Chi Epsilon members for		
Updated 7/22/19	8		

Describe Student Interaction Activities between ASCE Student Chapters/Clubs and the Section/Branch (1 point each, 5 points max):	University of Texas at Arlington before the Branch meeting. ASCE members who were part of Chi Epsilon were encouraged to join. The initiates attended the Branch meeting to network with the members. The 2019 DFW Joint Meeting will be on <b>7/19/19</b> at UTA. There was a great program with morning technical sessions followed by the luncheon with a keynote speaker and an ethics session to follow. There was an update on UTA Engineering by the dean. This meeting gives our Branch members the opportunity to meet and network with engineers and students from all corners of the DFW metroplex. The MRLC on <b>2/7/19-2/9/19</b> was a great networking time between students, YMs, and Section and Branch leaders in the metroplex. Both SMU and UTA chapters were present and met with the Dallas Branch.
Note current Section/Branch Practitioner Advisors (5 points):	The Branch's UTA Practitioner Advisor Mr. Ed Penton, PE, and SMU Practitioner Advisors Dr. Mark Boyd and Ms. Jennifer Smith, PE are very active. Dr. Mark Boyd, PE, SMU alumnus and engineering faculty member, regularly meets with and mentors SMU ASCE student leadership in his class and at ASCE gatherings on campus. Jennifer Smith, PE, the Branch's primary practitioner advisor, also meets regularly with SMU ASCE student leadership. At the request and initiative of student leadership, Boyd and Smith assisted the student leadership to develop a formal mentor- mentee program with Dallas Branch members that took place in Spring 2019. Ed Penton is a UTA Alumni, and has working with that Student chapter for several years. The Branch's practitioner advisors are responsible for ensuring smooth communication and commitment follow up with member mentors. Also Jennifer Smith won both an <b>ASCE and Texas Section</b> <b>Award</b> this year for her role as practitioner advisor (see Section B). <b>UTA ASCE/XE Collaboration:</b> At UT Arlington, the ASCE and XE chapters generally share a budget. Over the past several months, our practitioner advisor has coordinated with both the ASCE student chapter and XE in the planning of the Spring 2019 Student Symposium.
Describe outreach activities for Sections/Branches without ASCE Student Chapters (5 points each, 10 points max):	The Branch is contacted several times per year by students in pre- engineering degree programs at local community colleges requesting information about civil engineering careers and mentoring. When this occurs, we generally direct them to the Education and YM Committees for involvement in social activities, where they can meet young engineers. CF. HISTORY & HERITAGE, SUSTAINABILITY, AND GOVERNMENT

#### **G.** <u>COMMUNITY SERVICE, PUBLIC SERVICE, HISTORY & HERITAGE, SUSTAINABILITY, AND GOVERNMENT</u> <u>RELATIONS</u> (10 Points Maximum)

<u>NOTE</u>: ASCE also awards a History and Heritage Award. If you have such activities and want to be considered for that award, describe those activities here and submit a copy of this application directly to Jennifer Lawrence at jlawrence@asce.org.

Щ	lawience@asce.org.		
	Describe public service projects (2 points):	In November ASCE Dallas member Ashlyn Morgan, a <b>Habitat for</b> <b>Humanity</b> Core Volunteer, presented to the CE Club at Woodrow Wilson High School about the mission and methods of Habitat for Humanity. Later in November the YM members along with the CE Clubs at Woodrow Wilson High School and Hillcrest High School had a Habitat for Humanity build day. The Students could ask Engineering related questions to the YMs, and all got to learn more about Habitat for Humanity, building a house, as well as helping a deserving family. Dallas Branch shows continuous support and communication with the local North Texas chapter with the inclusion of our <b>Engineers without Borders</b> Liaison/Chair. Dallas Branch announced at meetings or fundraising events for Culli Culli Alto Bolivia potable water and irrigation project. The project focuses on the rehabilitation of an inoperable well installed in 2007. The implementation of this project will be in Spring 2020. EWB presented about this project on 6/10/2019 after our main meeting.	
		implementation of this project will be in Spring 2020. EWB presented about this project on 6/10/2019 after our main meeting.	
		<b>39th Annual WBAP Christmas is for Caring Campaign</b> is a program supporting the Denton State Supported Living Center. The members of the	
		Dallas Branch of the American Society of Civil Engineers donated \$3,288	

Describe public service projects (2 points):	toward the 39th Annual WBAP "Christmas Is For Caring Campaign". To date our members have given \$21,544 to the Denton State Supported Living Center (formally known as the Denton State School) since we started in 2003. On Wednesday, December 11th, Quinn notified the Living Center that the members of the Dallas Branch of ASCE was mailing in their donation. They thanked our organization for participating again this year. The money was pledged toward the purchase of money purses, CD's, watches, radios, hair dryers, manicure sets, night gowns, puzzles, aftershave, DVD players, make-up kits, arts & crafts, coin purses, buy board games, bedspreads, coloring books, electric toothbrushes, body wash, mirrors, blankets, and electric razors. This is a residential facility housing over 550 people, with developmental disabilities and no family members to care for them.
Describe History and Heritage Activities (2 points):	
Describe Government Relations activities (2 points):	ASCE Texas Section Report Card: Dallas Branch Past-President Mark Boyd is leading the preparing the 2020 Texas Report Card as chair. Legislative Fly In: Tim Abrams, PE, as the public relations and outreach chair, participated in the Washington Fly-in. He reported fly in activity to the Branch at the regular luncheon session. Texas Legislative Drive-In: This past year, our PR and Legislative Chairperson, Tim Abrams, and the Texas Section Director, Patrick Williams, travelled to Austin on 2/26/19 to meet with our State House and Senate members, discussing legislation that effects our profession.
Describe Sustainability Seminars held by the Section/Branch promoting the advancement of the principles of sustainable development (2 points):	The Sustainability Chair set up a seminar on <b>3/11/2019</b> entitled Performance Measurement as Applied to Sustainability by Dr. Valerie Shoup, Danny Helm, and Erik Gonzalez. The GI on <b>5/13/2019</b> presented a seminar on Research Innovations for Sustainable and Resilient Geotechnical Engineering by Xinbao (Paul) Yu, Ph.D., P.E. The EWRI on <b>7/19/2019</b> presented a seminar on Water Conservation-Rainwater Harvesting & Greywater/Condensate Recycling Systems by Gregory Aymong. Each of them had over 30 attendees.
Describe Community Service events (1 point each, 2 points max):	For the third year in a row, Dallas Branch members supported the Water Environment Association of Texas' <i>Redeem the Stream</i> Trinity River clean up event in November. As they do multiple times for per, Younger Members volunteered at the North Texas Food Bank which provides meals and food for economically disadvantaged families and neighborhoods in minority communities. They also volunteered at Feed My Starving Children by packing nutritious meals for hungry children around the world.

#### H. DIVERSITY AND INCLUSION (15 Points Maximum)

ASCE supports and encourages the equitable opportunity for all people to participate within the civil engineering profession without regard to gender or gender identity, race, national origin, ethnicity, religion, age, sexual orientation, disability, political affiliation, or family, marital, or economic status. ASCE's Committee on Diversity and Inclusion reviews this section to select Outstanding Section/Branches for their efforts in developing and implementing programs that promote an inclusive climate in the profession.

Describe Section/Branch Diversity Seminars / Programs (1 point each, 5 points max):	The Branch provides meaningful support to a number of educational institutions with rich diversity in their student populations. This includes our support of the Civil Engineering Club (CE Club) at Woodward Wilson High School (WWH) and Hillcrest High School (HHS), which are further described in other parts of this form. WWH and HHS are an inner city, high minority population schools, and the CE club has similar make up to the larger student populations. The students in High School Civil Engineering clubs are diverse and consist of a high proportion of Hispanic and African American students planning to become Civil Engineers one day. Our Branch's volunteers go to the classrooms and speak to these groups several times per year. The students also tour offices and go to a
	construction site, which will hopefully inspire them to continue to aspire to engineering careers. The Branch annually supports the <b>DISD</b> Bridge

Describe Section/Branch Diversity Seminars / Programs (1 point each, 5 points max):	Competition and other DISD initiatives. The Branch lends heavy support, including funding, to the <b>UT Arlington ASCE Student Chapter</b> . The following are diversity statistics for the educational institutions the Branch Supports. <b>WWHS CE Club</b> : 56% at WWHS are eligible to receive a discounted or free lunch. 74% of enrollment is minority. <b>HHS CE Club</b> : 77% economically disadvantaged; 93% minority enrollment. <b>DISD Bridge Competition: Serves district</b> 95% minority & 88% economically disadvantaged. <b>UT Arlington:</b> 61% minority
Describe Section/Branch Diversity Committees and Diversity in Section/Branch Leadership Positions (5 points):	Our Branch leadership maintains a natural diversity and we continue to have rising leaders of all backgrounds. Over 1/3 of Branch leaders (Board and Committee members) are represented by minorities or females. We are proud of the inclusion that has evolved over the years and diversity flourishes due to our diverse membership.
Describe participation in local community diversity programs (5 points):	As they do multiple times for per, Younger Members volunteered at the <b>North Texas Food Bank</b> which provides meals and food for economically disadvantaged families and neighborhoods in minority communities. They also volunteered at <b>Feed My Starving Children (FMSC)</b> by packing nutritious meals for hungry children around the world. The Dallas Branch also focuses on promoting STEM at <b>DISD</b> and <b>Girl Scouts</b> .

#### I. ADDITIONAL SECTION / BRANCH ACTIVITIES (10 Points Maximum)

Describe any other non-standard activities that are not covered under other sections of the nomination form that your Section or Branch has undertaken to promote or advance the Civil Engineering profession to either your members or the public. Note that Sections applying for the award should not include their Branch activities and vice versa for Branches. These can include other Community Service projects, hosting of Regional meetings, fundraising, mentoring, and other best practices. Describe the activity and give dates, locations and number in attendance. Also describe any activities relative to the creation of a Section / Branch strategic plan and/or efforts to support the Society's Strategic Initiatives (ie. sustainability efforts). These activities may also be eligible for the Leader Training Committee Best Practices Manual. A maximum of two (2) points will be given for each of up to five (5) non-standard activities.

Type of Activity/Event/Initiative:	Date (if applicable):	Describe:
2019 Multi-Region Leadership Conference	February 7-9, 2019	The ASCE Dallas Branch was given the opportunity to host the 2019 Multi-Region Leadership Conference (MRLC) and show some Texas- style hospitality to ASCE Regions 3, 6, & 7. The Dallas Branch hosted over 300 ASCE members including 200 student members from universities all over the middle third of the United States from 2/7/19- 2/9/19. The Dallas Branch was able to showcase many of its wonderful professional, technical, and outreach programs, and many of our Branch leaders left inspired by the lessons we learned from other ASCE members. The MRLC weekend kicked off on Thursday afternoon where ASCE Dallas teamed up with staff from ASCE Pre-College Outreach to host a pre-conference outreach event centered on the ASCE Dallas Civil Engineering Club Program. Jeannine Finton of ASCE Pre-College Outreach began the session with a presentation on STEM and STEM engagement for professionals. About 20 students from Woodrow Wilson and Hillcrest arrived to participate in a group activity. Following the Pre-College Outreach Event the ASCE Dallas Branch had a fun night of bowling planned at Bowl & Barrel. Close to 25 ASCE Student Chapter Leaders, Younger Members, and Section, Branch, and Institute Leaders attended the event for some great fun and friendly competition. After the conference proceeding on Friday, the Dallas Branch was pleased to host the CRYMC awards banquet. We had a wonderful and fun evening of fellowship, fun, music, dancing, and learning at the Sixth Floor Museum. To cap off the 2019 MRLC weekend the ASCE Dallas Branch hosted a post conference event at the ice-skating rink inside the Galleria. Close to 20 ASCE Student Chapter Leaders, Younger Members, and Section, Branch, and Institute Leaders, including ASCE President Robin Kemper, attended the event.

DISD Bridge Building Kits	February 8, 2019	Thanks to a grant from ASCE Region 6, the Dallas Branch was able to enlist the help of the CRYMC to build kits for the bridge building competition that is held within Dallas ISD annually. The YMs were given an overview of the DISD partnership with ASCE Dallas and the competition by ASCE Dallas DISD Champion, Jennifer Smith. They were then grouped into six teams to split up the materials and build the kits. All kits contained a 5-gallon bucket to place weights in, both a 2.5- lb and 5-lb weight, and an S-hook to connect the bridge to the weights for load testing. The elementary school kits also contained 250 craft sticks, glue, 4 kids safety glasses, and 1 tape measure. The secondary school kits also contained 4 adult safety glasses and 1 tape measure. There were 40 elementary kits and 30 secondary kits built and over \$1500 worth of materials donated to DISD. There were approximately 35 people in attendance.
ASCE Dallas Mayoral Debate	March 26, 2019	On March 26, ASCE Dallas hosted an Infrastructure and Sustainability themed debate for the City of Dallas Mayoral Candidates. The candidates in attendance were Mike Ablon, Albert Black, Jr., Scott Griggs, Regina Montoya, Lynn McBee, Miguel Solis, and Jason Villalba. The candidates were each given an opportunity to comment and share their views on a wide range of infrastructure topics, including flood control, tollways, bond program sustainability, and other topics. The event was open to the public and held in the auditorium of Townview High School, located in east Oak Cliff, Dallas, Texas. Approximately 100 people were in attendance.
Pre-College STEM	FY2018-2019	Provided the Dallas ISD Mathematics Department with guidance on the STEAM Bridge Building Competition. The construction and testing of model bridges promotes the study and application of fundamental principles of physics and also helps students develop "hands on" skills through bridge construction. By participating in the Bridge Building Competition, students get a taste of what it is to be an Engineer, designing structures to a set of specifications and then seeing them perform their function. They are also provided with an academically-oriented extracurricular activity which is recognized school-wide. Mentored student bridge building teams at selected campuses or mentoring teachers in a central location, after school, at least twice during the school year. Supporting students via email and/or video conference that are participating in the bridge building competition. There were over 150 people involved.
Pre-College STEM	2019	Girl Scouts STEM Center of Excellence seeks to Inspire girls to be the STEM leaders of tomorrow by volunteering at the STEM Center of Excellence during a weekend during the Spring. Volunteers primarily assisted with STEM activities such as robotics, space science, engineering, cybersecurity, ecology, and citizen science for girls grades K-12.To find out additional information about the STEM center: http://stemcenter.gsnetx.org/ There were over 150 people involved.

#### **Julie Jones**

From: Sent: To: Subject: ASCE Dallas Branch <no\_reply@dallasasce.org> Wednesday, October 16, 2019 4:49 PM Julie Jones ASCE Dallas June 2019 Newsletter



June 2019

### In this issue

- <u>Welcome</u>
- <u>Calendar of Events</u>
- <u>Articles</u>
- <u>Job Listings</u>

### Sponsors



### Welcome

Welcome to the June 2019 edition of the ASCE Dallas Branch newsletter! This month's meeting will be held on Monday, June 10th. **Mark Bouma, P.E.,** from the North Texas Tollway Authority will be our keynote speaker. Please join us!

### **Calendar of Events**

#### June 2019 ASCE Dallas Branch Meeting

June 10, 2019 11:00 AM to 2:00 PM Add to Calendar

**Vouv Meeting & Event Space** 4445 Sigma Rd Dallas, TX 75244 <u>Directions</u>

Keynote Speaker: Mark Bouma, P.E. - North Texas Tollway Authority



REGISTER NOW 2018 at 11:45 PM) (Registration closes on June 7,

## Articles

## PASSING OF ASCE DALLAS BRANCH PRESIDENT ANTHONY LUCE, PE



It is with great sorrow that we share with you the passing of our Dallas Branch President, Anthony Luce, PE. Anthony passed away on Wednesday, June 5th after an extended battle with an illness. He joined BGE, Inc. in 2006 in the Transportation group in Houston, then transferred to the Frisco office ... Read More

## **PRESIDENT'S MESSAGE - JUNE 2019**



Dear Dallas Branch Membership: I am thankful to our younger membership for a great job on Younger Member month. This is a great opportunity to lead and organize Dallas Branch of ASCE. It prepared me for my role now, and gave me a better understanding of what all goes on behind the scenes when I... Read More

## KEYNOTE SPEAKER - JUNE 2019



## **Photo Gallery**

Would you like to see the images from our last meeting?



## **Contact Us**

P.O. Box 541373 Dallas, TX 75354-1373





Mark A. Bouma, P.E. - NTTA Senior Corridor Manager Topic: NTTA Update Mark Bouma started with the NTTA in 1998 leading the design and construction of the President George Bush Turnpike and Addison Airport Toll Tunnel. In 1999, he became Director of Engineering, leading the NTTA's rap... Read More

### **TECHNICAL SESSIONS - JUNE 2019**

MORNING SESSION @ 11:00 AM Topic: Mill Creek Tunnel Project Speakers: Milton Brooks P.E., City of Dallas AFTERNOON SESSION @ 1:10PM Topic: Water Supply and Distribution in Culli Culli Alto, Bolivia Speakers: Mattew Craig, P.E. Matthew Craig, PE is a past Vice President of the North T... Read More

# ASCE DALLAS-FORT WORTH JOINT MEETING

SAVE THE DATE! The 2019 DFW Joint Meeting will be on FRIDAY, JULY 19TH at UT-Arlington. Please note that this will deviate from our typical meeting schedule (2nd Monday of every month). The Fort Worth Branch is putting together a great program with morning technical sessions followed by the luncheo... <u>Read More</u>

### HILLCREST HIGH SCHOOL END 2018-2019 UPDATE

Hillcrest HS Civil Engineering Club 2018-2019 After going through a semester-long pilot program in the spring of 2018, the ASCE Dallas Branch decided to move forward with a full expansion of the Civil Engineering Club Program to Hillcrest High School for the 2018-2019 school year. With ... Read More

WOODROW WILSON HIGH SCHOOL END 2018-2019 UPDATE Woodrow Wilson HS Civil Engineering Club 2018-2019 Jennifer Smith & Omar Venzor from ASCE Dallas continued the partnership with the 2018-2019 CE Club at Woodrow Wilson High School with Brandon Carver as the teacher. The Woodrow Wilson CE Club in east Dallas had about 40 students st...

Read More

### JUNE 2019 YOUNGER MEMBERS EVENT

We have our YM social event scheduled for Thu, June 13th, 2019 at 7:00 PM. It will be held at the Escape the Room – Dallas location To RSVP please email Joe.Waugh@terracon.com <u>Read More</u>

### **Job Listings**

Project Manager - Traffic Engineering OTHON

Senior Municipal Engineer

**CEC Corporation** 

Back to top^

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## **ARTICLES** PASSING OF ASCE DALLAS BRANCH PRESIDENT ANTHONY LUCE, PE

Posted by admin on 06/06/2019 12:00 am / Announcement



It is with great sorrow that we share with you the passing of our Dallas Branch President, Anthony Luce, PE. Anthony passed away on Wednesday, June 5th after an extended battle with an illness. He joined BGE, Inc. in 2006 in the Transportation group in Houston, then transferred to the Frisco office as a Project Manager in Transportation Systems. Many of you knew Anthony and know him for his tremendous spirit, leadership and humor. Our hearts are heavy as we lift his family up in prayers for comfort and peace in this season of grief.

Anthony was a Texas A&M Aggie, earning his bachelor's in civil engineering in 2005 and a master's in civil engineering in 2006. While in college, he was a member of Chi Epsilon, Institute of Transportation Engineers and served as a Graduate Research Assistant for Texas A&M Transportation Institute.

He was a member of the American Society of Civil Engineers, serving as President of the Dallas Branch this year. He was named 2019 ASCE Dallas Branch Young Engineer of the Year in February.

He is survived by his wife, Sarah and their 2 children – Hannah 12 and Noah 10 as well as his brother, Andrew, a BGE Transportation System Project Manager in Fort Worth, and other family. A memorial service will be held on Saturday, June 15 at 2pm at Preston Ridge Church in Frisco. In lieu of flowers, please consider donating to the scholarship fund established for Anthony's 2 children. https://www.gofundme.com/college-scholarship-memorial-for-luce-children

Please join the ASCE family in lifting Anthony's family up in this time of grief.

## **PRESIDENT'S MESSAGE - JUNE 2019**

Posted by webmaster on 06/05/2019 12:00 am / President's Message



Dear Dallas Branch Membership:

I am thankful to our younger membership for a great job on Younger Member month. This is a great opportunity to lead and organize Dallas Branch of ASCE. It prepared me for my role now, and gave me a better understanding of what all goes on behind the scenes when I was Branch Director. The Civil Engineering Club at Woodrow Wilson had a packed day with a site visits to DFW Airport facilities in the morning, then our monthly meeting, followed by an office visit to AECOM. It was great to recognize the new lifetime members, other lifetime members, and past presidents of the Dallas Branch last month. We are grateful for all they have done to make the Branch what it is today.

This month we have Mark Bouma, P.E., Senior Corridor Manager with The North Texas Tollway Authority (NTTA) for our main presentation. We have the Environmental & Water Resources Institute (EWRI) in the AM technical session. Milton Brooks, PE, CFM from the City of Dallas will be speaking on the Mills Creek, Peaks Branch, State Thomas Drainage Relief Tunnel. We also have Matthew Craig, PE speaking on behalf of North Texas Professional Chapter of Engineers Without Borders (EWB) in the PM technical session. He is the Project Manager for the Culli Culli Alto water system project in Bolivia. All of these will be presenting on great projects!

We will have the joint meeting with Fort Worth next month in July in place of our regular meeting. This will be a change from the normal. It will be held on Friday, July 19th at UT-Arlington Campus. The Fort Worth Branch is putting together a great program with morning technical sessions followed by the luncheon with a keynote speaker and an ethics session to follow. More info to come soon!

Julie A. Jones, P.E., CFM President Elect ASCE Dallas Branch, 2018-2019

## **KEYNOTE SPEAKER - JUNE 2019**

Posted by webmaster on 06/04/2019 12:00 am / Main Speaker Info

## Mark A. Bouma, P.E. - NTTA Senior Corridor Manager Topic: NTTA Update



Mark Bouma started with the NTTA in 1998 leading the design and construction of the President George Bush Turnpike and Addison Airport Toll Tunnel. In 1999, he became Director of Engineering, leading the NTTA's rapid growth in planning, design and construction of toll road and capital improvement projects. In late 2007, with the creation of the Project Delivery Department, he assumed the responsibility of providing technical direction and quality assurance over row acquisition, design and construction of NTTA capital projects.

Previously, Mark was employed for 12 years by HNTB Corporation. His work included construction management of the Dallas North Tollway extensions from IH 635 to SH 121, TxDOT bridge inspections, rehabilitation design of the historic Waco Suspension Bridge, and design of bridges and interchanges.

Mark earned his B.S. and M.E. degrees in Civil Engineering from Texas A&M University in 1983 and 1986, respectively.

Mark is the past Chairman of the Engineering and Design Committee for the International Bridge Tunnel & Turnpike Association. He current serves as Secretary/Treasurer of the Infrastructure Advancement Institute and he remains active in the Boy Scouts in Frisco as a Venture Crew Associate Advisor and Special Projects Advisor to the Boy Scout Order of the Arrow honor society.

## **TECHNICAL SESSIONS - JUNE 2019**

Posted by webmaster on 06/03/2019 12:00 am / Technical Seminar

#### MORNING SESSION @ 11:00 AM

**Topic: Mill Creek Tunnel Project** 

Speakers: Milton Brooks P.E., City of Dallas



#### AFTERNOON SESSION @ 1:10PM

### Topic: Water Supply and Distribution in Culli Culli Alto, Bolivia

#### Speakers: Mattew Craig, P.E.

Matthew Craig, PE is a past Vice President of the North Texas Professional Chapter of Engineers Without Borders (EWB), and is the Chapter's current Project Manager for the Culli Culli Alto water system project in Bolivia. Mr. Craig has volunteered with EWB since 2007, shortly after the North Texas Professional Chapter formed. Matt also serves on the Board of Advisor's for the non-profit NGO Engineers In Action (EIA), who is the local partner with EWB on this project. Matt works for Halff Associates, Inc. as Transportation Practice leader in their Richardson office where he has worked since graduating from the University of Cincinnati in 1983.

## ASCE DALLAS-FORT WORTH JOINT MEETING

Posted by webmaster on 06/02/2019 12:00 am / Announcement

#### SAVE THE DATE!

The 2019 DFW Joint Meeting will be on FRIDAY, JULY 19<sup>TH</sup> at UT-Arlington. Please note that this will deviate from our typical meeting schedule (2<sup>nd</sup> Monday of every month). The Fort Worth Branch is putting together a great program with morning technical sessions followed by the luncheon with a keynote speaker and an ethics session to follow. More info to come soon!



## HILLCREST HIGH SCHOOL END 2018-2019 UPDATE

Posted by webmaster on 06/01/2019 12:00 am / Education Outreach

#### Hillcrest HS Civil Engineering Club 2018-2019

After going through a semester-long pilot program in the spring of 2018, the ASCE Dallas Branch decided to move forward with a full expansion of the Civil Engineering Club Program to Hillcrest High School for the 2018-2019 school year. With a full, four-year Engineering Academy, Hillcrest High School has a very similar set up to Woodrow Wilson High School, the location of the extremely successful CE Club Program that earned the ASCE Dallas Branch the 2019 CRYMC Outstanding Younger Member Group Project Award.



The Hillcrest Engineering Academy utilizes a Project Lead the Way curriculum and is led by Diane Combs, a registered professional engineer in the state of Texas, that formerly worked in private consulting and for the City of Dallas. The ASCE Dallas Branch was extremely excited to work with a civil engineer that had transitioned into education and Hillcrest High School presented a great central location within Dallas to draw in many great speakers from the industry. Much like the Woodrow Wilson CE Club, the Hillcrest CE Club

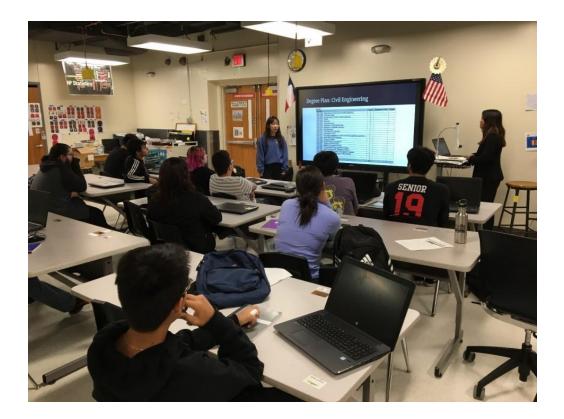
meetings occurred during the teacher's class periods. The professionals that would come into the classroom to speak would essentially serve as a substitute teacher for the day. This enhanced the class curriculum and showed students how the concepts they were learning in class could be applied in the real world.

You can check out some of the amazing things going on in this classroom by following their program on Instagram at <u>@hillcrestaoe</u>!

#### Southern Methodist University ASCE Student Chapter

Ola Wenno and Sharon Yang of the SMU ASCE Student Chapter kicked off the year at the new ASCE Dallas Civil Engineering Club at Hillcrest High School. They started off by outlining the degree plan of a civil engineering major including the major decisions that students must make as they work through their degree plan. They also focused on sharing a couple of senior design projects: the WEAT Competition and the fullsemester Carollo Project.

Ola and Sharon also explained the first-year design project that freshman engineers are put to work on. This project involved the students being assigned to a multi-disciplinary team to build a bridge, sensors, and an autonomous robot – a great way to illustrate real-world teamwork! The Hillcrest students were very interested to learn what could be in their very near future as a college engineering student. The presentation closed with a question and answer session where the high school students could ask candid questions about SMU, the college application process, and life as a college student.



#### Water Resources Engineering with AECOM

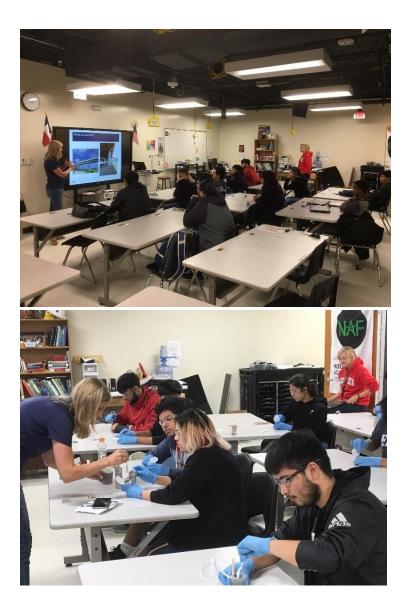
Rifat Alam, P.E., a water resources civil engineer at AECOM spoke about his background and how he became a civil engineer. He explained his role at AECOM, and how his career path eventually led him to become a water resources engineer. He gave an overview of water resources engineering including some very basic design concepts. He also shared some of his current work with various dams and reservoirs around the Dallas-Ft. Worth area that involves lots of hydraulics and hydrology modeling.

Next, Rifat discussed flooding with the students – the causes of flooding, recent flooding events, and a civil engineer's role in flooding. He gave an overview of 2D floor modeling including "waffle" theory. Finally, he led a brainstorming session for the students. He challenged the students to debate what engineering options they would choose to address an urban flooding incident (interior drainage improvement, channel improvement, pumping, etc.) and rank them from best to worst.



#### Materials Engineering with Wiss, Janney, Elstner Associates

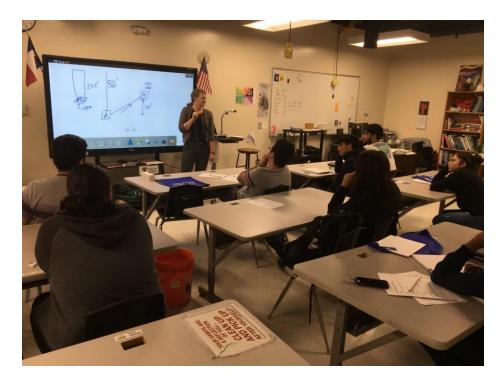
Kaitlin Forke and Doug Smith of WJE presented to the Hillcrest High School CE Club. With their extensive background in materials engineering, they gave a brief overview of concrete including the basic constituents (with specific focus on Portland cement and chemical admixtures), the batching process, and field placement and testing. The presentation included an activity that highlighted the effects of chemical admixtures, specifically super plasticizers and viscosity modifying admixtures (VMAs), on the rheology of a concrete mix. During the activity, each student mixed Portland cement and water in a small container. After seeing how difficult it was to mix just the cement and water, they added a few drops of super plasticizer and were able to see a drastic improvement in workability. However, when they placed a few aggregates in the mix (small pebbles), all the aggregate sank to the bottom. Next, they added a few drops of VMA to their mixes and didn't see any drastic changes in workability. However, when they placed aggregates in the mix, the aggregate stayed on top initially and could be evenly distributed by mixing. It was a great hands-on activity for the Hillcrest students that effectively and practically demonstrated the principles of concrete mix design!



#### Water Resources Engineering with Kimley-Horn

Ashlyn Morgan of Kimley-Horn presented on water and wastewater infrastructure engineering. She touched on all aspects of her day to day work, including pipe rehabilitation, new construction, modeling, and master planning. After this quick overview, Ashlyn put the students to work right away with a great group activity. For the activity, Ashlyn created a map of an imaginary town called "Agloe". The map identified the water delivery point and then a proposed development about a mile away that needed a certain amount of water. The

goal of the activity was to find the least expensive combination of pumps and pipe sizes to deliver water to the new development. The students learned about pump curves, head loss, and system curves to figure out which pipes and pumps could work to deliver water. Each team came up with what they believed to be the best solution, and then the entire class shared their unique results.



#### Field Engineering and Technical Marketing with Hilti

Alexis Clark of Hilti spoke to the Hillcrest High School CE Club about her career arc through field engineering and now in technical marketing. From her experience as a field engineer, she let the students know that not all engineers work from an office and do calculations and design in what most would call a "traditional" setting. She also reminded the students that engineering doesn't have to be your only passion – you can incorporate a passion of language, art, competition, travel, etc. into your pursuit of a career in engineering!

Alexis walked the students through the history of Hilti and some of her daily tasks as a field engineer and technical marketer. She then gave the students a hands-on exercise to design appropriate anchorage of a

column base plate to concrete using different anchor types. The students had to design with all anchor types and make an argument for one of the anchor types based on strength, overall cost, ease of installation and other parameters that professional engineers must take into consideration in their designs every day.



#### Land Development with Foresite Group

Julia Dang, Patrick Annett and Kyle Depperman of Foresite Group, a loyal partner to the CE Club Program in Dallas, led their now famous land development activity with the Hillcrest High School students. This great group activity illustrates to the high school students how land development teams must work together to achieve an under-budget, efficient, profitable, and welcoming community. Each student was given a specific role to personify on a development team:

- **Developer** interested in getting the most return on investment
- Home Owner's Association Chair- concerned with the long-term residents of the community and the impact the development will have on property values, quality of life, and comfort
- City Planner
   concerned about boosting the city's economy while also meeting the community needs

- **City Economic Developer** interested in the revenue the new development will generate and the jobs that will be created
- **Mayor** up for re-election and interested in making the community members as happy as possible; gives the final approval of the layout

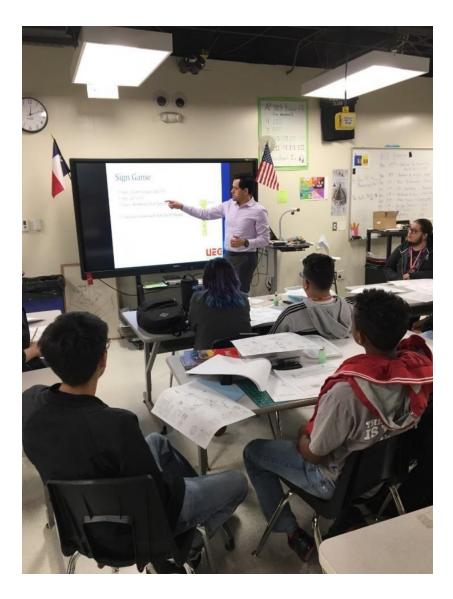
Students were given a site plan with four blank city blocks that was bordered by a neighborhood, a major highway, and commercial development. They were given a budget and a list of possible buildings and spaces that could fill up these four blocks, along with a cost associated with each building or space. Students then had to assume their roles within the development team to decide where and how many grocery stores, houses, apartment complexes, strips malls, pharmacies, parks, homeless shelters, schools, and community centers would be placed on the site plan. Students quickly realized the importance of patience and communication when each team member has a different agenda for the development. Each group then had to present their new development to the whole class while justifying the decisions they had made. The Foresite Group engineers then offered constructive feedback of each team's development.



**Traffic Engineering with Urban Engineers Group** 

Omar Venzor of Urban Engineers Group talked with the CE Club students about traffic engineering. He outlined what it takes to become a traffic engineer, including the licensing requirements. Students were also shown that they could work for either public organizations such as cities, counties, airports, and TxDOT or private corporations that do consulting work.

Next, Omar explained the types of projects that traffic engineers work on. The students were shown the reports that are produced from traffic studies that determine the existing conditions and capacity at a location, as well as future analysis to determine what improvements should be made to achieve a prescribed level of service. They also discussed signal timing, signing, and pavement marking design, ITS design, and roadway illumination. The students got to review a traffic signal plan set for a signal that has already been built.



#### **Geotechnical Engineering with Braun Intertec**

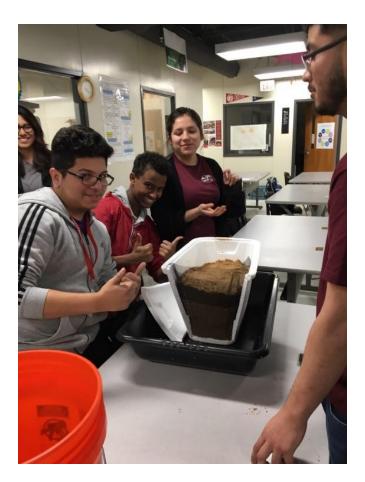
Reece Taylor of Braun Intertec spoke to the Hillcrest High School CE club about his area of expertise: geotechnical engineering. He presented a couple of the oldest, known, man-made structures and described how earth materials were used to construct them. Reece also discussed what a geotechnical engineer often does on a day-to-day basis and his or her role in the overall project. This day-to-day activity includes preparing subsurface exploration programs using geologic resources and experience, collecting samples of earth materials, performing laboratory analysis to determine the relevant physical/mechanical and chemical properties of these materials, and using these results to prepare and submit design recommendations to the project design team.



Reece highlighted types of projects geotechnical engineers get the opportunity to work on throughout their career and shared his personal experience with geotechnical challenges. Reece also shared that engineering doesn't just require math and science skills. An engineer often uses several other skill sets. In practice, excellent verbal and written communication and project management can differentiate an individual from his or her peers.

Finally, he led a hands-on activity that required consideration of geotechnical engineering principles. The students learned a few principals/behaviors of earth materials to consider (e.g. friction angle/angle of repose) and how engineers can use other man-made materials, such as geogrid, to control modes of failure. By using composite, earth structures, engineers can reduce the amount of material used to construct a retaining wall or embankment, thus often resulting in savings to the project. Using this information, three groups of students

attempted to construct a mechanically-stabilized retaining wall using only sand and window screen (geofabric)!



#### **Environmental Engineering with LCA Environmental**

Mark Boyd of LCA Environmental, and the current ASCE Dallas Branch Past-President, spoke to the CE Club students at Hillcrest High School about water resources and environmental engineering. The discussion started off with a run through the water cycle, including evaporation, condensation, precipitation, groundwater, surface water, and surface run off. Mark then had the students consider surface run off specifically. They were asked to list off what could be contained in surface run off and how do engineers need to handle and treat that water.

Mark then had a great group activity for the students to perform an improptu water quality risk assessment. The classroom was split up into teams, and each team had to evaluate the purity of ten different water samples with varying levels of contamination. Some samples had obvious bits of dirt, particles, and oil floating in them, while others appeared to be perfectly clear and "clean". The students were tasked with ranking the ten samples in order of their own concept of "cleanliness". Afterwards, Mark would reveal to the students the true ranking of the samples based on mandated requirements for drinking water.

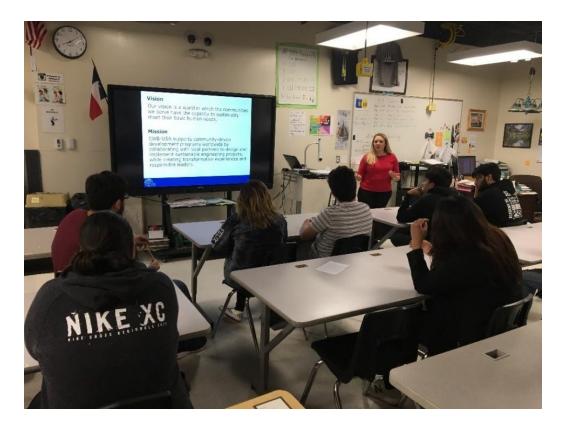


#### **Engineers Without Borders**

Julie Jones of Nathan D. Maier Consulting Engineers took time to talk about the impact she is making outside of her office job as a volunteer for Engineers Without Borders. She hoped to inspire the students to use their engineering skills to improve the world while also expanding their perspective on the world by traveling to other parts of the world that have much greater needs than those in our country. Julie began by giving the students an overview of the EWB mission, vision, and project types. She then went into deeper detail about a recent project she has been working on in the community of Culli Culli Alto, Bolivia. She described all the information her team gathered during an assessment trip to see how EWB could best serve the community. The community was in dire need of clean drinking water after the local well broke down. They worked to determine what went wrong with the current well and what could have been done to prevent in failure. Options for a water system were developed and analyzed, and the construction of a final design will be completed in the fall.

She also explained to the students that a sustainable project is needed so that the locals can maintain and fix the system with local materials and knowledge. Towards the end of the presentation she challenged the students to

come up with their own ideas for how they would collect data from the local community and how they would design and phase a sustainable project that meets the needs of the community.



## WOODROW WILSON HIGH SCHOOL END 2018-2019 UPDATE

Posted by webmaster on 05/31/2019 12:00 am / Education Outreach

#### Woodrow Wilson HS Civil Engineering Club 2018-2019

Jennifer Smith & Omar Venzor from ASCE Dallas continued the partnership with the 2018-2019 CE Club at Woodrow Wilson High School with Brandon Carver as the teacher. The Woodrow Wilson CE Club in east Dallas had about 40 students stretching over three class periods. The CE Club featured a robust curriculum that covers various aspects of civil engineering. All year, the students were really engaging and looking forward to future presentations and field trips.

Woodrow Wilson has 55 seniors graduating through the engineering program this year – over half of them are going into an engineering discipline in college, most of whom were in the CE Club. Of those 55 seniors, 13 are enrolling as (intended) Civil Engineering majors! Mr. Carver received great feedback from the students this year, with some of the presenters being the highlight of the year in the CE Club class.

In August, Jennifer and Omar gave a brief introduction and each talked about their educational and professional background. They introduced the students to the ASCE structure and highlighted different events ASCE Dallas participates in such as the bridge building competition, Future Cities, Earth Day Dallas, and the CE Club. They explain the role ASCE will fulfill within the CE Club and mentioned the benefits to the partnership including guest speakers, field trips, and attending an ASCE meeting. They also mentioned the ASCE Dallas Scholarship and encouraged students to apply. They closed their presentation with a TED talk and tower building competition.



#### Southern Methodist University ASCE Student Chapter

On Friday, September 28<sup>th</sup>, 6 ASCE student members from Southern Methodist University (SMU) visited the Woodrow Wilson Civil Engineering club 3 classes. The SMU students discussed life as a college student, the Lyle School of Engineering at SMU, a general degree plan to earn a Bachelor's of Science in Civil Engineering, and how to balance studying with leadership and volunteering. The Woodrow Wilson students were fully engaged and had great questions. Many of these SMU students attended the Dallas ASCE October luncheon – if you see them again, be sure to thank them for their educational outreach and encouraging high schoolers to study civil engineering. Special thanks to Ola Wenno, Sharon Yang, Gurveer Kaur, Sam Snyder, Arman Sanatinia, and Maddie Smithers!



#### Habitat for Humanity with Ashlyn Morgan

Ashlyn Morgan of Kimley Horn spoke to the Civil Engineering Club students at the Woodrow Wilson High School about Habitat for Humanity on Friday, October 29, 2018. This presentation was in preparation of the Habitat for Humanity build that the students had an opportunity to participate in on Saturday, November 10 (see below for more information on the event!).

Ashlyn discussed the mission and methods of Habitat for Humanity, such as the no-interest mortgage model, homeowner education and sweat equity hours, and other ways Dallas Habitat works in the community. She also talked about site development and construction (especially the key factors to consider when selecting residential lots, and different stages of site preparation and construction).

Woodrow Wilson HS has three different Civil Engineering club classes. In the first two classes, Ashlyn led the students in a lot layout activity where the student groups drew different home-building objectives, such as "architecturally interesting" or "biggest footprint" and had to conform to given zoning guidelines. One class, however, didn't participate in the activity because they had so many questions with Ashlyn that led to a conversation that lasted the whole class time! The students are so inquisitive and really enjoy learning from industry professionals.



#### Architecture with Corgan

Janah St. Luce, Erik Larsen, Mark Trance, JC Futterman-Baylon, and Tyler Mason from Corgan spoke to the CE Club students at Woodrow Wilson High School about architecture on November 2, 2018.

The group began the presentation with a brief history of architecture. They compared stone and brick buildings to more modern-day glass and steel buildings. The discussion continued with examples of architecture beyond shelters, such as buildings housing art and museums. They touched on the three E's of

architecture: education, experience, and exam. They discussed the eight collegiate programs in the state of Texas and talked about study abroad opportunities in both South Korea and Rome. The group explained the experience required to become a licensed architect and the six exams required. They finished the presentation with a video that challenges architects to think outside the box when designing for the future.



#### Habitat for Humanity Build

Ashlyn Kelbly, PE of Kimley-Horn, and a Habitat for Humanity Core Volunteer helped organize a build day for the Woodrow Wilson CE Club students in south Dallas on November 10, 2018. Omar Venzor, ASCE Dallas CE Club Co-Chair, volunteered from 8 am to 3 pm with the CE Club students. The group of 15 students included ten from Woodrow Wilson and five from Hillcrest High School. The students spent the day helping finish the roof and siding all around a four bedroom house under construction. The students got to climb on ladders, nail siding panels, and do lots and lots of nailing and those over 18 even got to use a nail gun and saw!

At lunch time, the students asked lots of questions about home construction. We hope to have another build day with more CE Club students in the spring!



#### **Engineers Without Borders with Julie Jones**

Julie Jones from Nathan D. Maier spoke to the CE Club students at Woodrow Wilson High School about Engineers Without Borders on November 30, 2018.

Julie highlighted a EWB project she assisted with in Bolivia. She mentioned most EWB projects incorporate providing clean drinking water to remote villages around the world. The group that traveled to Bolivia had the opportunity to practice their Spanish and meet the community and get their feedback. The group assisted with

building a base map using GPS that would identify major roads, limits of the community, schools, and other important landmarks. The group helped develop a water distribution system that would be built in phases depending on funding.



We thank Julie for speaking to the Woodrow Wilson High School CE Club.

#### Traffic Engineering with Urban Engineers Group

Omar Venzor of Urban Engineers Group talked with the Woodrow Wilson High School CE Club students about traffic engineering on Friday, January 11th. He outlined what it takes to become a traffic engineer, including the licensing requirements. Students were also shown that they could work for either public organizations such as cities, counties, airports, and TxDOT or private corporations that do consulting work.

Next, Omar explained the types of projects that traffic engineers work on. The students were shown the reports that are produced from traffic studies that determine the existing conditions and capacity at a location, as well as future analysis to determine what improvements should be made to achieve a prescribed level of service. They also discussed signal timing, signing, and pavement marking design, ITS design, and roadway illumination. The students got to review a traffic signal plan set for a signal that has already been built.



#### The Places You Can Go As a Civil Engineer with Jerry Jackson of Provident Realty

Jerry Jackson of Provident Realty presented to the Woodrow Wilson High School CE Club students about The Places You Can Go As a Civil Engineer. Jerry discussed how his career began with construction work experience in constructing culverts, dams, lakes, and bridges in the Dallas area. Later, he moved to Florida where he gained experience in marine construction by constructing docks, piers, and even a floating concrete dock! He then moved back to Dallas and entered the real estate industry and oversaw the construction of retail malls, high rise office buildings, and condominiums.

Jerry talked about the importance of giving back to one's community, both locally and abroad and shared pictures and stories of mission trips he had been on with his family where they helped build extensions to homes in Antigua, Guatemala.

Jerry continued to grab the students attention with international travel as he described his work in Qatar where he oversaw the construction of the 1,000 acre man-man island, "The Pearl" that features 50 high rise buildings, 20 miles of coastline, an underground trash collection system, and the largest district cooling plant in the world... all with a budget of \$18 Billion!

Most recently, Jerry has been involved in the construction of Preston Hollow Village and local apartments. His stories of all the fun and exciting experiences you can have as a civil engineer, has convinced more students to pursue an education and career in civil engineering. Thanks for sharing your time and passion with Woodrow, Jerry!



#### **Structural Engineering with LA Fuess Partners**

Francisco Estrada and Nick Prather from L.A. Fuess Partners spoke to the CE Club students at Woodrow Wilson High School about structural engineering on February 8, 2018.

Francisco and Nick gave the students an overview of the engineering process. They talked to the students about lateral forces and the impact different types of connections have on structures. Their presentation concluded with a group activity where the students built structures out of spaghetti, marshmallows, and gumdrops. The students were tasked with building a tall structure that could withstand earthquake like forces.

We thank Francisco & Nick for speaking to the Woodrow Wilson High School CE Club. If you are interested in speaking to the CE Club please contact Jennifer Smith (jsmith@haydenconsultants.com) or Omar Venzor (omarvenzor@urbanengineersgroup.com).



#### **Engineering and Business with Hilti**

Alexis Clark from Hilti visited the Woodrow Wilson High School CE Club to present on Engineering and Business on Friday, March 1, 2019.

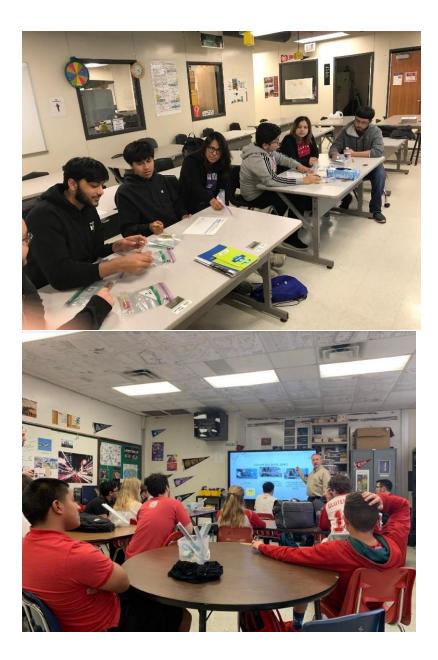
Alexis discussed the relationship between engineering and business and how going into engineering doesn't always mean working at a computer and doing design work, like many other presenters do. She also described "A Day in the Life as a Field Engineer". She discussed the day-to-day tasks, as well as the bigger picture of the role. The students were interested to learn about Alexis' job but also the products and services that Hilti offers, and how they are implemented into the built world around us. Thank you for taking time out of your busy day to visit the CE Club, Alexis!



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If you are interested in speaking to the CE Club please contact Jennifer Smith (jsmith@haydenconsultants.com) or Omar Venzor (<u>omarvenzor@urbanengineersgroup.com</u>).

## **JUNE 2019 YOUNGER MEMBERS EVENT**

Posted by webmaster on 05/29/2019 12:00 am / Younger Members

We have our YM social event scheduled for Thu, June 13th, 2019 at 7:00 PM. It will be held at the Escape the Room – Dallas location

To RSVP please email Joe.Waugh@terracon.com

