The civil engineering profession has many different paths that we can pursue: public, private, environmental, structural, water, transportation, etc. We don’t always stay the course we intended to follow while in college. The demands of our current position often dictate the type of work we do. Time and again we are completing tasks that we aren’t prepared for; and as civil engineer, we learn, adapt our skills, and complete the task to the best of our abilities.

One of those tasks that isn’t covered by most training courses offered to civils, is grant writing. With tight budgets, public agencies face the tough challenge of funding public works improvement projects. Grants plays a key role in funding most of the projects constructed today. We as civil engineers, whether on the public or private side, are the best asset for public agencies to define the purpose and need of a project, and its intended outcome and benefits. However, creative and critical writing is not something that comes to mind when we think about engineers! Engineers tend to stick to the technical data, avoiding any “fluff”, and often missing key parts to telling a compelling story that will resonate with a peer reviewer. Adding this tool to your arsenal will not only look good on a resume, you will be a key resource to the company and/or agencies your work for. In an effort to develop that skill, the Branch is proud to announce our upcoming workshop, Critical Grant Readiness and Writing Steps and Processes for Civil Engineers, that will focus on giving civils the tools they need for successful grant writing.

The workshop will be on March 16 hosted by none other than Dr. Beverly A. Browning, MPA, DBA. Dr. Browning is a grant writing course developer who has been consulting in the areas of grant writing, contract bid

...CONTINUED ON PAGE 4
Like it or not, automobiles are an integral component of modern life within the United States of America and probably the entire world. While difficult to imagine, there was a time when Americans did not always have such a complex and comfortable network of freeways and interstates. Before the thousands of miles of super roads, the U.S. Highway System was constructed and funded by the Federal Highway Act of 1921. One of the most famous of these highways is Route 66.

Arguably, Route 66 is the most iconic and symbolic road in the United States and is even colloquially known as the Mother Road or the Main Street of America. Route 66 has forever been a mainstay of modern American history and repeatedly referenced in mainstream media.

The official path of Route 66 starts in Chicago, Illinois and ends in Santa Monica, California. It is made up of pieces of existing roads, and extends approximately 2,448 miles long. Route 66 crosses three time zones and eight states including Illinois, Missouri, Kansas, Oklahoma, Texas, New Mexico, Arizona, and California. When it was first commissioned on November 11, 1926, only 800 miles were paved. Not until almost a decade later in 1937 did Route 66 get paved end-to-end.

Route 66 was critical in carving a path for travel from the Midwest to the Pacific. During the Great Depression, this highway helped to create thousands of jobs. When the great Dust Bowl devastated farming in the Central US, farmers strapped their entire lives onto automobiles and headed west along Route 66. As America entered World War 2, Route 66 was a critical highway for delivering military supplies and soldiers. Cities and towns arose from the dirt along Route 66 and as much larger interstates were being constructed during the Interstate Highway Act, most of the same cities and towns went back from whence they came.

Thanks to lessons learned from the construction of Route 66, many engineering methods and design features were developed and are still used today for modern highways and freeways. One example is the first major use of Medians to separate the two directions of traffic was used on Route 66 and we still use it today.

So, next time when you travel locally in the Inland Empire via Foothill Boulevard, look at the sign that says Route 66 and take a moment to appreciate what engineering has brought to us.

Legends of America Route 66
By: Andrea Gonzalez, E.I.T., A.M. ASCE

ASCE San Bernardino/Riverside Counties YMF (YMF) and the Cal Poly Pomona (CPP) ASCE student chapter hosted its second collaborative event at CPP on Friday, January 15, 2016. This event consisted of three professional development workshops: resume review, mock interviews, and a mock job fair that ran simultaneously every hour from 2:00-5:00PM.

Two years ago, CPP ASCE asked SBR YMF to help them organize such an event so the students can be prepared for the upcoming job fairs.

YMF brought industry volunteers to help out with this event; these volunteers were distributed amongst the three workshops and helped students greatly enhance their resumes, sharpen their interview skills and provided students with the dos and don’ts at a job fair.

The resume review workshop consisted of a short presentation given by Michael Andersen, YMF President and Project Engineer for AECOM who gave tips and advice for an effective resume. The “interactive” activity then followed after the presentation—industry volunteers reviewed students’ resumes and provided them with feedback.

The mock interview workshop consisted of a short presentation provided by Julianna Gonzalez, SB/R Branch Treasure (2014 YMF Past President) and Associate Civil Engineer for Riverside County Flood Control and Water Conservation District who provided interview tips. After the presentation, students rotated amongst the industry volunteers who served as the interviewers. The overall goals were for students to be exposed to different types of interviewers and to be provided constructive criticism on what they are doing well and what they need to improve on. Several interviewers were part of a two-person or a one-person panel and this greatly benefitted the students.

The mock job fair workshop consisted of representatives from the City of Corona Department of Water and Power, Kiewit and Michael Baker International. The mock job fair was led by Ryan Condol (Kiewit) who presented a skit and discussion which all the students engaged in. Company reps then provided students with feedback on what they needed to improve on. Students enjoyed speaking to the representatives and learned what they needed to work on for the actual job fair.

Overall, this was a fun and successful event. YMF and CPP ASCE are looking forward in collaborating on another event next year—this event would not have been possible without the industry volunteers who took time out of their busy schedules to make this happen and the student volunteers who helped set-up, clean-up, participated in this event and who were amazing co-hosts. Thank you once again to all volunteers, student and industry volunteers alike for helping make this event a reality!
clients throughout the United States in receiving awards of more than $100 million. Amongst many other publications, Dr. Browning authored *Grant Writing for Dummies*.

The interactive workshop will focus on assessing grant readiness and project team capabilities, assessing the competition, reading the proposal solicitation for red flags, understanding the government peer review process, creating an application production schedule, drafting the application, bringing your writing style to life, and avoiding budget red flags. For more information, see the workshop flyer on Page 12.

Having attended one of Dr. Browning’s workshops in the past, I would say that has been a valuable tool in furthering not only my overall writing style, but my writing effectiveness. While I still wouldn’t consider myself the strongest writer, improving this often overlooked skill has proved to be valuable to my progress in the civil profession. We often forget that our audience may not always know the project details as we do, and may not understand the impacts of 3,000 cfs of runoff to an urban area; it’s up to us to paint that picture, tell that story, and convey the importance of our project to secure grant funding to see the project come to fruition.

We look forward to seeing you there!

Sincerely,
Steven W. Ledbetter, P.E.
San Bernardino and Riverside Counties Branch President

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**To get Involved ...**

*with Engineers Week (E-Week)*
contact ASCE Board member
*Michael Sampson (Branch)*
[msampson@riversideca.gov](mailto:msampson@riversideca.gov)
or *Michael Andersen (YMF)*
[Michael.Andersen2@aecom.com](mailto:Michael.Andersen2@aecom.com)

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**Lighter Side**

*A Civil Engineer is a device for turning coffee into buildings.*

*Don't forget to get your cup of coffee this morning*
On November 20, 2015, about 20 members from ASCE YMF and the Branch went on a technical tour of the Milliken Avenue Grade Separation project in the City of Ontario (City). Jay Bautista, a Project Manager of the City, gave a fantastic presentation and summary of the project at Ontario’s City Hall. After a series of very technical questions with which Jay and his team answered, the group formed carpools and travelled to the project site. Our first stop was on South Milliken Avenue and East Philadelphia Street, where we met with a foreman from the project’s construction contractor Griffith Company. There we were shown the current status of the grade separation in coordination with the Union Pacific Railroad Tracks.

The next stop was the intersection of South Milliken Avenue and East Mission Boulevard, where we were shown the very high and very large retaining walls that would become the new elevated East Mission Boulevard roadway. We were quite in awe with seeing the actual construction and manpower necessary to complete such an engineering feat. The drawings, plans, and renderings we see in the office truly pale in comparison to what we see in the field.

The South Milliken Grade Separation is one of the two grade separation projects in the City of Ontario in recent years. Both projects aim at improving mobility by separating the local streets and the railroad tracks. The South Milliken Grade Separation project will elevate South Milliken Avenue over the Union Pacific railroad tracks. The major intersection of Milliken Avenue and Mission Boulevard, which runs parallel to the railroad tracks, will also be elevated. The construction cost of the project is estimated to be $57.4 million. The construction started in February 2014, and anticipated to finish by Spring 2017.
February 3, 2016 Presentation
How Structural Engineers use Geotechnical Information
Brad Mielke and Chad Harden with Michael Baker International

This topic “How Structural Engineers use Geotechnical Information” is a preview for the upcoming national joint congress between the Structural Engineering Institute and the Geotechnical Institute.

The joint Geotechnical and Structural Engineering congress is in Phoenix, Arizona February 14-17. [http://geo-structures.org](http://geo-structures.org)

The presenters will discuss what use is made of geotechnical inputs during the structural design process. Critical factors for structural design that should be included in the geotechnical report will be shown. Discussions between Structural and Geotechnical Professionals are supportive of a complete and comprehensive design process. The factors that should be discussed at project initiation will be outlined.

Brad Mielke leads the Structural Group of Michael Baker in Orange County
Chad Harden works with Michael Baker, and also with the TRB.

**Technical Presentation:**

**Date:** Wednesday, February 3, 2016

**Time:**
- 6:00 - 6:45 PM Registration and socializing
- 6:45 - 7:30 PM Dinner
- 7:30 – 8:30 PM Technical presentation

**Location:** Zendejas Mexican Grill, 8106 Milliken Avenue, Rancho Cucamonga

**Cost:**
- $30 members w/ RSVP, $35 non-members or no RSVP, $10 students

**Registration and Additional Info:** RSVP by January 29, 2016 to Paul Kim at: pkim@geotekusa.com
Come & Volunteer with: Keep Riverside Clean & Beautiful

Join us to volunteer with Litter Cleanups, Graffiti Abatement, Community Greening, and Storm Drain Cleanups in the City of Riverside

Event Information:
Saturday, February 6th
8am – 11am

Where: Dario Vasquez Park (2400 14th St. Riverside, CA 92507)

RSVP as soon as possible with Ryan Johnson cell: 951-313-9955

For more information please contact Ryan Johnson: ryan.johnson.egr@gmail.com
The Inland Empire Brine Line (Brine Line), aka Santa Ana Regional Interceptor Line (SARI), conveys primarily highly saline, non-domestic wastewater from industrial dischargers and municipal desalter facilities within Riverside and San Bernardino Counties to the Orange County Sanitation District wastewater treatment facility. The Brine Line is a key component in improving water quality in the watershed, and the expansion of reclaimed water use within the two counties.

The U.S. Army Corps of Engineers ("ACOE") Santa Ana River Mainstem project raised the crest of Prado Dam 28 feet and constructed new outlet works. These modifications, combined with future spillway improvements and planned changes in operational procedures, will result in increased discharges to the Santa Ana River of up to 30,000cfs. The proposed Project is necessary as these increased flows would result in lateral erosion and scour, which could undermine and damage the Brine Line and adversely impact water quality in the watershed.

The Project consists of the installation of approximately 2,500 LF of sheet pile, having a width of approximately two feet and an average toe depth of 55 feet (15 feet below the scour depth), with tiebacks spaced approximately every 10 feet. This tour is scheduled to see the installation of the sheet piles.

Who: First 16 to RSVP
When: February 19, 2016
Where: Riverside County Flood Control and Water Conservation District
Presentation: 1995 Market Street
Riverside, CA 92501
Tour: Prado Dam

Time: Presentation at 9AM by: David Ruhl-Project Manager at Santa Ana Watershed Project Authority and Tour to follow (Transportation will be provided to tour location)

Please RSVP with Julianna Gonzalez at juliannagonzalez@rcflood.org
ADVANCING TECHNICAL AND PEOPLE SKILLS THROUGH PROFESSIONAL SOCIETY INVOLVEMENT

with Dr. Steven K. Starrett

ASCE-EWRI President Elect, 2015-2016
ASCE-EWRI Vice President, 2014-2015
ASCE-EWRI Treasurer, 2012-2013
Director of CE Undergraduate Program, Kansas State University
Associate Professor of Water Resources Engineering, Kansas State University
Water Resources Engineering Expert, Starrett Engineering, LLC

FEBRUARY, 18, 2016 | URSA MINOR
Professionals $40 | Faculty $30 | Students Free

Networking 5-6:30 PM | Dinner 6:30-8PM

--- TICKETS GO ON SALE IN JANUARY - REGISTER AT www.CPP-EWRI.EVENTBRITE.COM ---

Funding for this event was made possible by the 2015-2016 CPP SPICE Instructional Innovation Program
For more information, contact Taylor Thorig at cppasce.vpi@gmail.com
22nd ANNUAL

YOUNGER MEMBER FORUMS:
- ORANGE COUNTY
- LOS ANGELES
- SAN BERNARDINO & RIVERSIDE

POPSICLE STICK BRIDGE COMPETITION

Save the Date!

Join us for a fun one day competition where students compete against schools across Los Angeles, Orange County and San Bernardino Riverside counties to see which bridge can outlast the others and is the strongest of them all! Students will be challenged to think critically, solve problems, and be innovative. This event will be held at the Anaheim Regional Transportation Intermodal Center (ARTIC) on Saturday, February 20, 2016. Be on the look out for more details to come!

* For more information, check out:
  - http://bridge.mlab-ymf.org
  - www.facebook.com/popsiclestickbridge

* To volunteer, register at:
  - http://events.constantcontact.com/register/event?llr=d9cpyznab&oeidk=a07ec4mebbq99ad9633

SPONSORED BY: ASCE

AMERICAN SOCIETY OF CIVIL ENGINEERS

YOUNGER MEMBER FORUMS:
- ORANGE COUNTY
- LOS ANGELES
- SAN BERNARDINO & RIVERSIDE
ASCE LA Section—Annual Life Member Brunch

Saturday, March 5, 2016
11 am to 2 pm
Monterey Hill Steakhouse
3700 W. Ramona Blvd., Monterey Park, CA 91754 [map]

San Bernardino Riverside Branch, Join ASCE LA Section for its Annual Life Member Brunch, a luncheon held to honor those members who have advanced to the ASCE Life Member status and in recognition of their career achievements. The Keynote Speaker will be ASCE Society President-Elect, Norma Jean Mattei, Ph.D., P.E., F.SEI, F.ASCE.

Cost is $35 for ASCE members & guests, and FREE for students. Table sponsorship opportunities are also available.
For more information and to register, click here.
Please RSVP by February 26.

ASCE January 2016 Leadership Conference in Anchorage, Alaska

By: Jeff Meiter, PE

The ASCE Multi-Region Leadership conference for Regions 8 and 9 was held in beautiful, cold Anchorage Alaska on Friday, January 22 and Saturday, January 23. Having just joined the local section board this past year, when I was offered the opportunity to attend the event, I jumped at the chance. I thought to myself, ”when am I going to get an opportunity to represent my local board as well as enjoy the picturesque landscape of Alaska in the month of January again.” So off I went to the land of 20° temperatures. The experience was memorable and well worth wearing several additional layers of clothing.

I was fascinated by the level of excitement and engagement for learning by all who were in attendance. From the seasoned veterans of Civil Engineer, to the younger members who are full of zeal, to the students who were wide eyed and eager, the cross section of attendees made for lively conversation. There were numerous seminars available which stretched individuals beyond the normal confines of Civil Engineering to cause each of us to become more well-rounded professionals. There were opportunities for interaction with local colleagues as well as introducing yourself to individuals outside of your sphere of influence. There were technical tours which introduced us to common “civil engineering” projects that require uncommon design and construction methods due to weather and other circumstances. But the highlight of the trip was the 7.1 earthquake that woke us up at 1:30 AM on the last day of the event. What an ironic way to end a civil engineering conference, but with a shaking reminder of why our field is so important to the safety and well-being of those around us and why we should feel blessed and honored to be a professional in the industry that we are.
March Technical Workshop

Critical Grant Readiness, Writing Steps, and Processes for Civil Engineers

Dr. Beverly A. Browning, MPA, DBA
Director
Grant Writing Training Foundation

Join Dr. Browning, with 41 years of successful funding award strategies and training presentations, who has assisted clients throughout the United States in receiving awards of more than $100 million and authored *Grant Writing for Dummies*, for an interactive workshop focused on developing competitive grant writing skills for civil engineers.

Topics include: assessing grant readiness and project team capabilities, assessing the competition, reading the proposal solicitation for red flags, understanding the government peer review process, creating an application production schedule, drafting the application, bringing your writing style to life, and avoiding budget red flags. Note, 3 CEU’s are available for Workshop attendees.

**Date:** Wednesday, March 16, 2016

**Time:** 9:00 am to 12:00 pm

**Location:** TBD

**Cost:**

- $55 ASCE members w/ RSVP
- $65 non-members or no RSVP
- $25 students

**Deadline:** Please reserve by March 9, 2016

**Additional Info:** Steven Ledbetter, P.E.

(951) 680-0440

sledbetter@tkeengineering.com
Donald G. Wells
ALUMNI GOLF TOURNAMENT
Cal Poly Pomona Civil Engineering

FRIDAY, APRIL 15, 2016
12:00 PM TOURNAMENT START
5:00 PM COCKTAILS
6:00 PM BANQUET & AWARDS DINNER

Register [here](#) for Tournament (4-Man Scramble) and Banquet

Questions? Contact us at: cppascegolf@gmail.com
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(626) 812-5173
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Want to advertise an employment opportunity?
Contact the Newsletter Editor
Melissa Barbosa, PE
at mbarbosa@ci.azusa.ca.us
Contact ASCE Board member
Julianna Gonzalez (Branch)
juliannagonzalez@rcflood.org
Calendar of Upcoming ASCE Events

February 3, 2016 – ASCE Geotechnical Meeting
February 6, 2016 – ASCE Branch Board Meeting at TKE
February 6, 2016 – ASCE YMF Community Service Event
February 18, 2016 – ASCE Dinner Event (All are welcomed to attend) at CPP
February 19, 2016 – ASCE Branch Technical Tour Brine Line
February 20, 2016 – Volunteers Needed - Popsicle Stick Bridge Competition and High School Outreach at Artic
February 21–27, 2016 – Engineers Week
March 5, 2016 – ASCE Annual Life Members Brunch at Monterey Hill Steakhouse, Monterey Park
March 16, 2016 – ASCE Branch Grant Writing Workshop

Membership Information

Types of Membership and Annual Dues (National)

<table>
<thead>
<tr>
<th>Membership Type</th>
<th>Annual Dues</th>
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</thead>
<tbody>
<tr>
<td>Students</td>
<td>FREE</td>
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<tr>
<td>Associate Member</td>
<td>$50 per year of Baccalaureate degree and first year after, then incremental increases to $225 over five years.</td>
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<tr>
<td>Member</td>
<td>$225</td>
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<tr>
<td>Affiliate</td>
<td>$225</td>
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<tr>
<td>Section (Branch) Dues</td>
<td>$55</td>
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National ASCE student membership is now FREE! Those who have chapters or clubs still must be a member of them before joining National. Log onto https://www.asce.org/online, fill out the short application or call 1-800-548-ASCE (2723) and instantly become a member of ASCE.

Online membership renewal is available! Go to https://www.asce.org/renewal/inform Renewal.cfm. You will need your membership number. All payments must be made with a major credit card. An e-receipt is transmitted to the member upon completion of the transaction.

Newsletter Information

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Newsletter Editor:
Melissa Barbosa, PE
626-812-5173
mbarbosa@ci.azusa.ca.us

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Julianna Gonzalez, PE
951-955-8064
juliannagonzalez@rcflood.org