

## THE ARIZONA CIVIL ENGINEER

Volume 93 Issue 7 - April 2018

### A Message From the President

Fausto Burruel, MPA, PE, CPM, M.ASCE, President, ASCE Arizona

Hello Everyone,

Another exciting month for the Arizona Section of ASCE! One of our members, Randy D. Randolph, was selected by the Utility Engineering and Surveying Institute of ASCE to receive the 2018 Stephen D. Bechtel Pipeline Engineering Award. The following is an excerpt from the award letter sent to Randy from ASCE Executive Director Tom Smith:



***“For leadership and service to the profession, particularly for significant contributions in analyzing failure modes and extents in prestressed concrete pipe. Your leadership has advanced the practices in monitoring and repairing these pipes and has mentored future engineers.”***

The award is given at the Society level and consists of a plaque and cash prize that will be presented during the Pipelines 2018 Conference in Toronto, Canada on July 17, 2018. However, the Phoenix Branch plans on acknowledging Randy's achievement during their next luncheon on April 11, 2018. If you have the opportunity please attend and congratulate Mr. Randolph and if you are unable to attend, please join me in congratulating Mr. Randolph on his achievement!

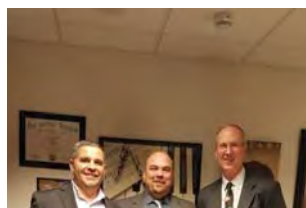
Speaking of members, one initiative the Section has been working on with the help of our Branches is making contact with our members who have yet to renew their memberships. The initiative is something that ASCE Society has dispersed to the various Sections throughout ASCE and asked that we each reach out to our membership. The Arizona Section and our groups understand the need to maintain our membership but would like to have a more grass roots initiative and personally reach out to our members if possible. Additionally, the Arizona Section plans to use this opportunity to get feedback from our membership in regards to the “product and/or service” we provide.

If you or someone you know hasn't renewed your membership and have questions or concerns please feel free to contact myself, a Section Board member or a Board Member from your respective Branch. Remember, our goal is to not to just gain or maintain membership but to answer the following:

***Does the Arizona Section of ASCE (including the Branches, Younger Member Groups, Student Chapters, Technical Groups, etc.) provide a beneficial commodity and if not, where are we falling short?***

So keep an eye out as you may (or already have) receive an email or phone call from a fellow Arizona Section Member wanting to discuss your membership and ASCE in general.

Another activity that I'm excited to discuss is the State Capital Drive-In that occurred on March 27<sup>th</sup>, 2018. Last Tuesday, a small contingent of Arizona Section members headed down to the Capital with some bound copies of our State's Infrastructure Report Card and met with elected representatives from both the House and Senate.





The topics of discussion included infrastructure, infrastructure funding, deregulation of professionals, and associated topics. I was fortunate enough to have the opportunity to participate in the Drive-In and can honestly say that it was a great experience and something that I would enjoy doing again if given the opportunity.

Some takeaways from the Drive-In experience are as follows:

- **It was easy to set up a meeting and meet with the elected officials.**
  - There is a web sites set up that you can use to put in your address and get the information of your respective elected officials.
  - Once you have that information it's simple enough to call your official's office and ask for a meeting – 15 minute blocks are typical time frames.
  - Show up for your meeting, sign in, and wait to be taken back.
- **They understand infrastructure needs (especially transportation).**
  - I was pleasantly surprised with the level of understanding the elected officials had in regards to the importance of infrastructure, infrastructure needs, and how important it is to protect the associated funds necessary to improve and maintain infrastructure.
  - Most of the officials mentioned the Highway User Revenue Fund (HURF) and the sweeping of those funds before the topic was mentioned.
  - A few of the Representatives mentioned HB 2166, which is a bill to add an annual vehicle registration fee that will fully fund the Department of Public Safety Highway Patrol (DPS) and negate the need for DPS to sweep HURF funds. The plan is have the bill placed on the ballot to be voted on by Arizonans.
- **They understand infrastructure needs but we did teach them a thing or two.**
  - We gave each elected official we met with a bound copy of the 2015 Arizona Infrastructure Report Card (complete document). While some understood some aspects of infrastructure needs, they were impressed with the document and learned about some other aspects of our state's infrastructure.
  - Relating infrastructure needs to other items, such as economic development, is something that catches their attention and some gained a little more appreciation. Also, tying it back to a relatable experience (such as hitting a pothole, etc.) also helped their understanding.
- **They want us to come in!**
  - One of the officials actually used the “squeaky wheel” proverb and asked for us to continue to come in and make our push for infrastructure needs. He said we need to be the “squeaky wheel”.
- **They want our help!** (I'll begin this one with the following caveat \*\*I'm not sure how involved we can get and I've extended the question to the ASCE Attorney for clarification.)
  - A few elected officials asked about ASCE participating in drafting of legislature or providing assistance – I let them know we are a resource for information but how involved we can be will need to be reviewed further.

I think it's pretty apparent that I enjoyed my experience at the Drive-In and would like to see more members involved the next time the opportunity arises.

Before saying adios I wanted to mention another BIG EVENT that is on the immediate horizon and I would be remiss if I didn't point it out. The Pacific Southwest Conference (PSWC) will be held April 12<sup>th</sup>-14<sup>th</sup> at Arizona State University (ASU). The conference is co-hosted by ASU and Northern Arizona University (NAU) and will have approximately 1,500 students representing 18 universities from California, Nevada, Arizona, and Hawaii. I believe volunteer positions may still be available. To find out more about the event or to ask about how you can help, please click [here](#).

Hoping everyone has a great April!

## April

Southern Arizona Branch Free Public Talk, April 5, 2018

Yuma Branch Luncheon, April 10, 2018

Phoenix Branch Luncheon, April 11, 2018

Southern Arizona Branch Luncheon, April 11, 2018

Northern Arizona Branch Luncheon, April 12, 2018

SARSEF, April 12, 2018

Southern Arizona Branch Mathcounts 2018, April 13, 2018

ASCE PSWC 2018, April 12-14, 2018

Geo-Institute Joint Members Meeting, April 17, 2018

Structures Congress 2018, April 19 - 21, 2018

SABYMF Pipe Bridge Competition, April 21, 2018

## May

Yuma Branch Luncheon, May 8, 2018

Phoenix Branch Luncheon, May 9, 2018

Northern Arizona Branch Luncheon, May 10, 2018

[For more information visit the ASCE Arizona Calendar](#)

## Phoenix Branch News and Notes

Larry Hanson, PE, M.ASCE, Vice President, Phoenix Branch

### Recap of the March Luncheon

At the March 14 Branch luncheon, Greg Byres, PE, provided an interesting presentation on the Arizona Department of Transportation (ADOT) Long Range Transportation Plan 2015-2014. This policy document describes the current state of the transportation system within the State of Arizona and provides guidance for the planning of future development programs. This document provides recommended investment choices for future development programs along with projections for spending and funding needs. Greg Byres is the Multimodal Planning Division (MPD) Director, Arizona Department of Transportation

The 2018 Branch award recipients were recognized:

**The Small Project (<\$10M) of the Year** recipient is the **Town of Wickenburg Ranch Water Reclamation Facility**. Owner: Town of Wickenburg. Consulting Engineer: GHD. Construction Contractor: Currier Construction.

**The Large Project (>\$10M) of the Year** recipient is the **City of Phoenix 27<sup>th</sup> Avenue Compost Facility**. Owner: City of Phoenix. Architect: Arrington Watkins. Consulting Engineer: Dibble Engineering. Construction Contractor: Brycon Corp.

The **Government Civil Engineer of the Year** recipient is **Allan Smolko, PE**, Engineering Supervisor with City of Phoenix Streets Transportation Department.

Approximately 85 people were in attendance at the luncheon.



Greg Byres, Multimodal Planning Division (MPD) Director, Arizona Department of Transportation, presenting the ADOT Long Range Transportation Plan.

The Small Project (<\$10M) of the Year recipient is the Town of Wickenburg Ranch Water Reclamation Facility. Owner: Town of Wickenburg. Consulting Engineer: GHD. Construction Contractor: Currier Construction.



The Large Project (>\$10M) of the Year recipient is the City of Phoenix 27<sup>th</sup> Avenue Compost Facility. Owner: City of Phoenix. Architect: Arrington Watkins. Consulting Engineer: Dibble Engineering. Construction Contractor: Brycon Corp.



The Government Civil Engineer of the Year recipient is Allan Smolko, PE, Engineering Supervisor with City of Phoenix Streets Transportation Department.

### MCDOT Connected Vehicle Test Bed Field Trip

Eleven ASCE members attended an informative demonstration of the Maricopa County Department of Transportation (MCDOT) Connected Vehicle Test Bed in Anthem, Arizona. The February 28<sup>th</sup> field trip was led by Faisal Saleem, MCDOT ITS Branch Manager.



### ASCE Legislative Fly-In

On March 13 and 14, three members of the Branch attended the ASCE Legislative Fly-in in Washington, D.C. Visits were made to offices of Representatives Sinema and Schweikert, and Senators Flake and McCain. The purpose of the visits was to discuss infrastructure needs and request support for infrastructure funding bills.



L to R: Dennis Richards, Kent Lall, Senator McCain staffer Mikayla Mowzoon, Larry Hanson



### April Luncheon: SRP-CAP: Water Wheeling

**Date:** April 11, 2018

**Location:** Because-Space for Life, 3419 E. University Dr., Phoenix, AZ 85034

**Time:** 11:30AM - 1:00PM

**Speaker:** Christa McJunkin, Director of Water Strategy at the



[Advanced registration required.](#)



## May Luncheon: Geologic Hazards in Central Arizona and Potential Impacts on Existing and Future Development

**Date:** May 9, 2018

**Location:** Calvin C. Goode Building East Conference Room 10<sup>th</sup> Floor, 251 W. Washington Street, Phoenix, AZ 85003

**Time:** 11:30AM - 1:00PM

**Speaker:** Phil Pearthree, State Geologist and Director of the Arizona Geological Survey.

The presentation will offer perspectives on the principal geologic hazards affecting the Central Arizona region including 1) earth fissures related to groundwater withdrawal and land subsidence; 2) flood hazards along smaller tributary washes and larger regional river systems; 3) landslides (rotational and translational landslides, major rockfalls, debris flows); 4) post-wildfire hazards, primarily flooding and debris flows; and 5) earthquake hazards.

Parking is available across the street at the Jefferson Street Parking Garage, or on street (parking meters).

For more information contact Rob Lyons at 480.222.5715

[Advanced registration required.](#)

## ASCE High School Chapter

The Phoenix Branch is working with the Chandler Hamilton High School to maintain an ASCE club at the high school. Immediate Past President Frederick Tack is currently leading this outreach effort. The Club meets every other Thursday. The Club has decided to participate in the Stockholm Junior Water Prize Competition. If you are interested in finding out more about this effort and/or would like to work with [Frederick](#), please email him or Phoenix Branch Outreach Chair [Kent Lall](#).



## Welcome Sustainability Liaison

Mr. Michael Naber, PhD, PE, ISI ENV-SP has volunteered to serve as the Phoenix Branch Sustainability Liaison. Michael is employed with the Arizona State Land Department. If you are interested in assisting with Branch efforts in the area of sustainability, contact [Michael](#).

## Leadership Opportunities in the Phoenix Branch

The Phoenix Branch leadership team currently has one opening – Social Media Chair. The anticipated time commitment is approximately two hours per month. If you are interested, contact President [Rob Lyons](#).

## ASCE PSWC Event Judges Needed

The Pacific Southwest Conference (PSWC) is ASCE's annual three-day competition that allows college engineering students to put their civil and/or environmental engineering skills to the test. The conference co-hosted by ASU and NAU, is being held April 12-24, 2018, at Arizona State University's Tempe Campus. Approximately 1,500 students from 18 universities in California, Nevada, Arizona, and Hawaii are expected to attend.

The conference organizers need volunteers and judges for the following events: Technical Paper Presentation, GeoWall, Environmental, Transportation, Survey, Sustainability Competition, Timber Strong Design Build, Concrete Frisbee, Jeopardy, Career Fair, Soccer, Basketball, Volleyball, Ultimate Frisbee, Obstacle Course, Kam Jam, Mystery Event, Impromptu Event, and Tug of War. If you can serve as a volunteer or judge for one or more of these events, [sign up](#).

## April Luncheon: Decision Making in Transportation Network Management and Data Driven Methodologies for Transportation Analytics

**Date:** April 11, 2018

**Location:** Hotel Tucson City Center, 425 N Granada, Tucson, AZ 85701

**Time:** 11:30AM - 1:00PM

**Speaker:** Seth Chalmers, PE, and Tobias Bennett-Gold, PE - Pima County Department of Transportation Analytics

Welcome ASCE-SAB Members and Guests!

[More Information and Registration](#)



living streets alliance presents:

**FREE PUBLIC TALK**  
**APRIL 5, 2018**  
 7PM-8PM • THE RIALTO THEATRE



**From Complete Streets to Thriving Communities:**  
 An Evening with  
**GIL PEÑALOSA**

**VIP RECEPTION 5:30-7:00PM**  
**\$40 TICKET** includes drinks, hors d'oeuvres, and conversation with Gil

**Details & tickets available at:**  
[livingstreetsalliance.org](http://livingstreetsalliance.org)

Experience an energetic and inspiring evening with **Gil Peñalosa**, world renowned urban planner and founder of the international ciclovía/open streets movement.

His philosophy is simple, yet powerful: if we create a great city for an 8 year old and an 80 year old, we will create a great city for all people. Join him in Tucson to explore sustainable mobility as a force for health, wealth, and happiness.

### EVENT SPONSORS

VISIONARY	PARTNER	SUPPORTER
	 	   
	 	   

## Free Public Talk

April 5, 2018  
7PM-8PM • The Rialto Theatre

Experience an energetic and inspiring evening with Gil Peñalosa, world renowned urban planner and founder of the international ciclovía/open streets movement.

Join him in Tucson to explore sustainable mobility as a force for health, wealth, and happiness.

[More Information](#)

# MATHCOUNTS®



## Southern Arizona Chapter

### Benefit Golf Tournament

#### MATHCOUNTS

Join the Southern Arizona Branch for the Mathcounts Benefit Golf Tournament on April 13, 2018 at the Randolph North Golf Course. [More Information](#).

#### Volunteer judges needed for the Southern Arizona Research Science and Engineering Fair (SARSEF)!

Help ASCE SAB award our annual *Excellence in Civil Engineering* award to 3 deserving middle school students. This year SARSEF is on Thursday, April 12, 2018 at the Tucson Convention Center Exhibition Hall.

Free parking, breakfast and lunch are provided.

Judging takes about half a day depending on the number of students projects to evaluate. Ideally at least 6 judges are needed for this task.

Please RSVP to [Deirdre Brosnihan, P.E.](#)

Please RSVP by March 30, 2018.

Deirdre will coordinate registering the ASCE SAB judging team with [SARSEF](#).

#### Dream Big DVD Pledges

Help bring the Dream Big DVD into every school in AZ. Interested? please contact ASCE SAB for more information.



### SEAoA 52nd Anniversary Convention and Conference

June 7th - 9th, 2018

#### Attendee Registration Information

**REGISTER ONLINE at <http://www.seaoa.org>**

**THE WIGWAM 300 EAST WIGWAM BLVD. LICHFIELD PARK, ARIZONA PHONE: (623) 935-3811**

- Exhibitor Trade Show and Welcome Reception
- SEAoA Excellence Awards
- Raffle Prizes for Attendees
- Commemorative Gift
- Relaxing Resort Atmosphere



#### SEMINAR TOPICS (10.25 PROFESSIONAL DEVELOPMENT HOURS)

**Keynote Presentation:**

- Virtual Outriggers and Creative Engineering - Reaching New Heights in Mexico** - Christopher Crilly (Thorton Tomasetti)
- Design and Detailing of Concrete Diaphragms** - Mike Mota (CRSI)
- Seismic Isolation of the Giant Magellan Telescope** - Eric Manuel (M3)
- Structural Engineering Emergency Response** - David Troxell (SEER)
- PCI Design Handbook, 8th Edition Updates** - Court Philips (Salmons PC)
- 75 Rockefeller Plaza Column Transfers** - Joe Mugford (Gilsanz Murray Steficek, LLP)
- Masonry Design Using Either ASD vs LRFD** - Dr. Richard Bennett (University of Tennessee)
- HSS Connection Design in AISC 360-16** - Kim Olson (FORSE Consulting)
- 2018/2015 NDS/SDPWS-Updates and Often Overlooked Provisions** - Michelle Kam-Biron (AWC)
- Sales and Marketing Tips for Structural Engineering Businesses** - Annie Kao (Simpson Strong Tie)
- Fiber Reinforced Concrete; A Review on ACI Guidelines for Design, Applications, Specifications and Practice** - Amir Bonakdar (Euclid Chemical)
- Consent to Assignment Agreements, Copyright/Licensing of the Instrument of Service** - Gail S. Kelley
- Empowering the Next Generation of Structural Engineers** - Ashraf Habibullah (CSI)

**SEAoA 52nd Anniversary MAIN EVENT**  
Sponsored by  
**Ashraf Habibullah and Computers & Structures, Inc.**  
Friday Evening June 8th 6-9pm  
Food, Entertainment and Honoring our History

*This event is included in the conference registration, however separate registration is available if you are not able to join us for the full conference (see website)*

**STRUCTURAL ENGINEERS ASSOCIATION OF ARIZONA PO BOX 645 TEMPE, AZ 85280 info@seaoa.org**





2018 REGISTRATION RATES				CONVENTION AND CONFERENCE SCHEDULE	
Thursday Afternoon and Friday Sessions (10.25 PDHs)	Registration Period	Member Rates	Non-Member Rates	<b>Thursday June 7th</b> 8:00 AM - 12 Noon Separate Registration Required (3.0 PDH) Sales and Marketing Tips for Structural Engineering Businesses AND Fiber-Reinforced Concrete: A Review on ACI Guidelines for Design, Applications, Specifications and Practice	<b>Friday June 8th</b> 6:30 AM - Breakfast 7:30 AM - 8:45 AM Keynote: Virtual Outriggers and Creative Engineering 8:45 AM - 10:15 AM Design and Detailing of Concrete Diaphragms OR 75 Rockefeller Plaza - Column Transfers
	Early Registration March 6 - April 30	\$250	\$300	10:00 PM Convention Opening Remarks	10:45 AM - 12:15 PM HSS Connections Design in AISC 360-16 OR Masonry Design Using Either ASD or LFRD
	Standard Registration May 1 - June 1	\$300	\$350	11:30 PM - 3:00 PM American Wood Council Presentation	12:15 PM - 1:45 PM Lunch Presentation SEAOA Excellence Awards
	Bring-A-Colleague Combo Rate	\$250 Each Person	\$300 Each Person	3:30 - 5:00 PM Structural Engineering Emergency Response OR Seismic Isolation of the Giant Magellan Telescope	1:45 PM - 3:15 PM PCI Design Handbook, 8th Edition Updates
LATE/Walk-In Registration After June 1	\$400		5:00 PM - 7:30 PM Exhibitor Trade Show	3:15 - 3:45 PM Attendee Raffle	
Students VALID ID REQUIRED March 6 - June 1	\$25 Fee waived if sponsored by Chapter		Join SEAOA now for member rates and membership through July 2019	3:45 - 5:45 PM Special Presentation Ashraf Habibullah	<b>Friday Evening</b> (Separate registration available) <b>7:00 PM - 11:00 PM</b> SEAOA 52nd Anniversary MAIN EVENT Sponsored by <b>Computers &amp; Structures, Inc., Ashraf Habibullah</b>
Companion Registration Anytime	\$175				7:00 PM - Complimentary Cocktail Hour 7:30 PM - Dinner Service 8:30 PM - Presentation 9:00 PM - Entertainment - To Be Announced
Thursday Morning Session (3.0 PDHs)	Standard Registration	\$85	\$95		<b>Saturday Ethics Seminar</b> 8 AM - 12 PM Consent to Assignment Agreements, Copyright/Licensing of the Instrument of Service Separate Registration Required
	LATE/Walk-In Registration Separate Registration on Website - After June 1	\$105	\$115		
Saturday Session (4.0 PDHs)	Standard Registration	\$65	\$75		
	LATE/Walk-In Registration Separate Registration on Website - After June 1	\$80	\$90		

### SEAOA Convention and Conference

The Structural Engineers Association of Arizona would like to invite the ASCE membership to their 52nd Anniversary SEAOA Convention and Conference in Phoenix, Arizona from June 7th - 9th.

This year's keynote presentation will be "Torre Koi: Virtual Outriggers and Creative Engineering: Reaching New Heights in Mexico" by Mr. Christopher Crilly, P.E., LEED AP, of Thornton Tomasetti. Please see the attached flyer for a complete list of all of the speakers and presentations.

They would like to offer their member registration rate to the ASCE as well. When registering online please select the NCSEA category and use the coupon code: NCSEA-SEAOA-2018

Early Registration Rates: \$250 for Members  
After April 30th: \$300 for Members

### Southern Arizona Branch E-Week Events

Matt Flores, Community Service, PE, M.ASCE

On February 17, 2018 the Southern Arizona Branch promoted engineering to children of all ages by hosting hands-on activities including the MESA PVC Bridge Competition and Discover Engineering at the Mall Day.

### MESA PVC Bridge Competition



### Discover Engineering at the Mall Day







## Southern Arizona Branch YMF

### Looking for Volunteers

ASCE is hosting a PVC Pipe Bridge Competition and we need your help! Come out and inspire the civil engineers of tomorrow...

April 21st @ Alhambra High School

[More Information](#)

## Geo-Institute Arizona Chapter with Structural Engineers Association of Arizona Event

Please join us for a joint Members' meeting with Structural Engineers Association of Arizona on Tuesday, April 17th at 5:30PM. John Niedzielski, PE from Gannet Fleming will be presenting on the Design and Construction of Drilled Shaft Foundations for the Phoenix Sky Train Project.

[Click here to Register and for More Information](#)

## Structures Congress 2018



DON'T MISS THE PREMIER EVENT FOR STRUCTURAL ENGINEERS.

SAVE \$  
REGISTER BY 2-14

# STRUCTURES CONGRESS 2018

Fort Worth, TX | April 19-21 • Fort Worth Convention Center  
[www.structurescongress.com](http://www.structurescongress.com)



### JOIN US!

- Participate in the Premier Event for Structural Engineering
- Learn from the experts
- Network with 1,200 of your colleague
- Earn PDH's

