# The American Society of Civil Engineers Tennessee Section

#### Winter 2018

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# **OFFICERS**

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> Lukas Salyer Vice President

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#### QUICK LINKS Website Newsletter Events

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#### Greetings!

Hello Tennessee ASCE Members and Friends,

I hope you've made it through winter and are ready for Spring! This winter we focused on educating the Section Members about the topic of decoupling the PE license test from the required 4 years of experience, and we issued a survey to take the temperature of the Section with regard to decoupling. I hope each of you has taken time to fill out the survey, and if you've not, you can find it <u>HERE</u>. We feel it is important for us to know whether the general membership is in favor of decoupling, or adamantly opposed to decoupling. We will publish survey results in April. Our Branches have all had good things going on this quarter, as you can read in the newsletter, and the Student Conferences are going on now. We wish all of our student chapters good luck at conference!

We're making preparations for this year's Tennessee Engineering Conference, which will be held at the Franklin Marriott, with free parking and a much better situation for our exhibitors, which we agreed was a top priority. We also got really good room rates. The dates of the conference are September 17-18<sup>th</sup>, which is Monday-Tuesday, so mark your calendars now!

Let us know if we can do anything to help you or your Branch, or if you think of something that will help us to be a better Section! As always, thanks to the many volunteers who work so hard to make the Branches and the Section successful!

Helen S. Hennon, PE President, ASCE Tennessee Section <u>hhennon@utk.edu</u>





If you haven't renewed your ASCE membership for 2018, please do so soon. Memberships run on a calendar year schedule. Each Branch and Section has a database with contact information for members and past members. After two years, former members that haven't renewed for two years will be removed from the database. Please

#### **Environmental Chair**

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Brandie C. Cookston, PE Federal Government Affairs Liaison

> Ken Barry, PE History and Heritage Chair

Eric Gardner, PE Membership Chair Younger Member Chair

> Vacant Structural Chair

Brian Reynolds, PE Transportation Chair

Monica Sartain, PE Report Card Chair

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Ashley Smith, PE Website Manager

## **BRANCH PRESIDENTS**

Jeffrey Parris, PE Chattanooga

Jennifer Moore, PE Holston

> Dan Boles, PE Knoxville

Clint Camp, PE Nashville

Duncan Adrian, PE West Tennessee

### **BRANCH WEBSITES**

**Chattanooga** 

Holston

Knoxville

Nashville

West Tennessee

renew before your contact information is removed.

Log in to the ASCE website to renew your membership and get access to several free webinars. Renew Here Today!

# Save the Date!

2018 TN Engineers' Conference (ASCE, TSPE, ACEC, and TNSEA)



Date: September 17-18, 2018 Location: Franklin Marriott Cool Springs

# Chattanooga Branch Report

The primary focus of the Chattanooga Branch has been to continue and build on our monthly programs. While continuing this effort, the Branch is also strengthening student chapter at the University of Tennessee, Chattanooga, and having a more active role in the community and local charities. During this quarter, some of our events have been:

#### <u>November</u>

Jason Bates of ADS gave a one-hour course, with training/discussion on standards and specifications, quality control/quality assurance, structural design including pipe stiffness, hydraulic design, durability, construction considerations of storm and sanitary sewers.

#### <u>December</u>

In December, we held our annual Holiday Social (joint event with TSPE, ACEC, and the ASCE Student Chapter) along with our annual Toys for Tots drive. Enough toys were raised to give about 30 families a great Christmas celebration.

#### <u>January</u>

Doug Shoemaker of Filtrexx gave a presentation on structural living walls and environmental benefits implanted in Chattanooga. The meeting was well attended and had a higher attendance than any regular monthly meeting in 2017. Planning groups began working on Eweek.

On January 17, we held a kickoff meeting for BRIC (Building Recognition in Chattanooga). This will be the third year of BRIC, which is basically a method of recognizing outstanding building projects in Chattanooga or designed/built by Chattanooga firms. There has been little to no engineering participation the first two years, but ASCE/NSPE have decided to be the first engineering societies to participate this year. Award ceremonies are to be announced.

#### Additional Activities

We have updated the website, but it is still under construction: <u>http://branches.asce.org/chattanooga/</u>

#### 2017-2018 Chattanooga Branch Officers:

President - Jeffrey H. Parris, P.E. Past President - Lukas Salyer, P.E. Vice President - Ben Byard, PhD, P.E. Secretary - Bethany Griffin Butler, E.I. Treasurer - Melissa De Alejandro Kelly, P.E. Assistant Treasurer - Don Warrington, PhD, P.E. Chattanooga Development Symposium Director, Maria Price, P.E.

2017-2018 Chattanooga Branch Committee Chairs

Life Member Committee Chair - Bill Hoyt, P.E. Young Member Committee Chair - Melissa Kelly, P.E. Nominating Committee Chair - Mark Harrison, P.E. Scholarship Committee Chair - James Kapsho, P.E.

# **Holston Branch Report**

The Branch would like to thank Mr. Thomas Meador with Lane Construction and the students of ETSU's Geological Engineering class for participating in the discussion about the construction challenges of the "Missing Link" of the Foothills Parkway. The meeting that took place on January 30, 2018, at the Johnson City Public Library was a joint meeting with the students attending due to the geotechnical challenges of the Foothill Parkway project. In addition to our special speaker, the Branch also recognized our newly inducted Life Members, Mr. Stephen Mingle, Mr. Randy McQueen, and Mr. Clyde Kidd, in front of quite possibly our largest meeting attendance to date with well over 50 people in attendance.

The Branch would also like to recognize Kristy Plummer, David Guerriero, Tom Tidwell, Patrick White, John Barrett, Jennifer Moore, and Krisin Dauer, for volunteering their Saturday at the Holston's Branch Activity Table for the Volunteer State Regional Middle School Science Bowl. The brave volunteers entertained over 120 middle schoolers throughout the competition introducing the students to structures, geotechnical core samples, engineering drawings, permeable pavements, Newton's Cradle and answered a lot of technical questions.

The next meeting with be in March with the City of Johnson City discussing their downtown stormwater improvement project. More information will be provided once the details have been worked out.

All of the latest Branch events can be found on the website calendar at <u>www.asce-holston.org</u>. If you would like additional information about our branch or upcoming meetings please contact us at <u>asce.holston@gmail.com</u> (goes to the current President).

**Knoxville Branch Report** 

The ASCE Knoxville Branch installed new officers for the 2017/2018 year. The officer positions filled included the following: Dan Boles - President Patrick Fiveash - Vice President Karen McKeehan - Secretary Helen Hennon - Treasurer David Matlock - Past President Cassy Gordston - Young Member Group Chair Brian Williamson - Young Member Group Vice Chair Will Littlejohn - Young Member Group Treasurer Melissa McKenzie - Young Member Group Event Chair Ashley Kirby - Young Member Group Communications Chair

Our speaker for October was Mr. Adam Alexander of Rembco speaking about Soil Stabilization, Foundation Support, and Specialized Grouting. Our meeting was held at Bearden Banquet Hall in Knoxville.

Our November meeting was held at the Oak Ridge Civic Center in Oak Ridge. Mr. Richard Yeager of Gresham Smith and Partners spoke about Relocating Utilities on TDOT Roadway Projects. The Young Member Group had an informal get together at the Bearden Beer Market. The Board meeting discussed the potential for branch meeting sponsorships, updating the website, the YMG next event, charity sponsorship for the December meeting, brainstormed for speakers for the next year, and discussed potential goals for the year.

In December, the branch meeting was at Bearden Banquet Hall. Our speakers included We Soward from the Appalachian Mountain Bike Club and Marty Mason with Superior Drainage. Mr. Soward spoke about the impact of the AMBC's trail development on the community including bike, running, and walking uses and the impact to South Knoxville with increased development around numerous trailheads. Mr. Mason spoke about the Hardin Valley Middle School Entrance Bride Project and the Modular Bridge over Red Bud Road constructed with AMBC. The Branch raised \$450 for AMBC during the meeting. An introduction to the decoupling issue was discussed and ASCE national's stance on the new tax bill was share with the members. Our Board meeting began planning for our March technical seminar and finalized plans for our January meeting.

# **Nashville Branch Report**

November - Lipscomb University graciously hosted the Nashville Branch for an evening meeting where they shared mission efforts in Guatemala that are being spearheaded by the College of Engineering.

January - Nashville hosted its monthly lunch meeting by hosting Steve Bland and Jim Czarnacky regarding the potential Transit for Nashville plan along with over 100 of our members. The Branch also hosted its first screening of the Dream Big film, held at the Adventure Science Center and screened in the planetarium. Over 110 members, guests and friends were able to enjoy a great evening.

February - The Branch hosted its annual bowling tournament, with funds to support the annual scholarship program, in addition to a special Girls' Night Out screening of the Dream Big film, where we hosted local high school students and provided a structured program.

West Tennessee Branch Report

The West Tennessee Branch Board met October 13th, November 10th and December 8th to discuss Branch business. Stewart Smith and David Smith spoke at the October 19th branch meeting and presented Beyond the Box: How Germantown Embraced the Future of Public Education. Ashraf Elsayed presented on the Memphix 4: I-240 Bridge Replacements (CMGC) project at the November 15 branch meeting. No meeting was offered in December, due to the holiday. Engineering presentations were hosted monthly in Jackson, TN.

The Board is moving forward to request nominations for local ASCE awards that will be given in May and aid in nominating projects and engineers for the Section level awards this spring. The board has also made progress with purchasing trailers for the U of M, CBU and UT Martin student chapters for transporting concrete canoes to conference. The first younger member group meeting is planned for February 1st. Also planned for later this year are a local School of Rock with the TN Concrete Pipe Association and the 26th ASCE West TN Golf Tournament.

# 2016 Report Card for Tennessee - Solutions

The 2016 Report Card for Tennessee's Infrastructure Committee prepared a full report on the state of Tennessee's Infrastructure. The Report included 5 Key Solutions and Summarizes of each of the 10 areas highlighted. Over the next year the Tennessee Section will be highlighting the Key Solutions and respective infrastructure areas.

#### Solution #2

Leverage infrastructure investments to help manage the impact of expected population growth. Our infrastructure investments must be considered as a holistic system to keep up with demand from population growth. If we want to continue to lead the country we need to begin leading in these areas of infrastructure as well.

#### <u> Parks - C</u>

The Tennessee State Park system contains 56 State Parks on 62,073 acres and 85 Natural Areas containing 128,548 acres. Some of the buildings and infrastructure of the park system are nearing 70 years of age. The parks are generally well maintained, although there are several instances of park facilities being closed due to lack of funding for maintenance. Since 2009, the park system has been on a very positive track. However, there is a continued shortfall in both maintenance and capital project funding.

#### Solution # 5

Lessen the unknowns about farm pond dams. How do you manage a threat you can't even quantify? Tennessee needs more data on farm pond dams across the state. We know there are farm pond dams that protect the health and welfare of people downstream, but where are they? How often are the inspected? What maintenance schedule is being used? Is anyone even doing any maintenance? Without adequate information we can't fully define the risk to the people of Tennessee.

#### Dams - D

Similar to the nation's dams, the average age of Tennessee's dams is about 50 years, with about half of the regulated dams built between 1950 and 1979. Ninety-three percent of the dams in Tennessee are earth dams, 3% are concrete dams, and the remaining 4% are gravity, masonry arch, and rockfill. Of the 661 state-regulated dams in Tennessee, all but 10 are in compliance with the state's safety standards. Of the dams that are regulated by the TN Safe Dams program, high hazard potential dams are inspected annually, significant hazard potential dams are inspected every two years, and low hazard potential dams are inspected every three years. However, 576 farm ponds in Tennessee (about 41% of the state's dams listed in the National Inventory of Dams (NID)) are exempt, meaning they are not regulated or inspected, a major contributing factor to the Dams category grade. Funding for the state-regulated dams has typically fallen below that of the national average but has not significantly impacted the ability to inspect all dams currently under their authority.