



Fall 2016

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**J. Wesley Goodnight**  
Vice President

**Brandie C. Cookston, PE**  
Past President

**Sandra Knight Collins, PE**  
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**Randal Braker, PE**  
Environmental Chair

**Michael Bivens, PE**  
Geotechnical Chair

Greetings!

I am excited to start my term as President of the Tennessee Section. I follow in the footsteps of some amazing people, most recently, Brandie Cookston. Brandie did a great job leading our Section over the past year and I know that I have some big shoes to fill.

For those of you that don't know me, I'd like to start out with a small introduction. I became an ASCE member as a student while at Vanderbilt, and maintained my membership into my professional career doing civil/site design in Nashville. I became involved with the Younger Member Group, and eventually transitioned to the Branch leadership as President in 2010. I have been involved at the Section level as the Younger Member & Student Session Chair since 2012, and am looking forward to serving as your Section President. I encourage you to get involved in your local branch or section, and reap the rewards ASCE has to offer.

We had several exciting events during the fall. We had a wonderful turnout at the 2016 Tennessee Engineers' Conference at the Music City Center in Nashville. Over 550 people from across the state came to enjoy a wide variety of professional development sessions and network. Thanks to all of those that attended, as well as our wonderful sponsors and exhibitors! A special thanks to those that helped organize such a great conference. Plans for the 2017 conference are already underway, so please let me know if you have any suggestions on how we can improve it.

The Report Card for Tennessee's Infrastructure was released on Tuesday, September 27, 2016. Volunteers from across the state worked on the report for over a year and ultimately gave the state's infrastructure an overall grade of **C**. A summary and the complete report can be found on the [ASCE website](#).

The release event was held at the Nashville Airport, recently named an [ASCE Gamechanger](#) for their geothermal project. Two local television networks and one newspaper reporter attended the event, and over 15 media outlets reported on it later that day. Now that the Report is out, what can you do? Please take a minute to review the report, and start sharing it with your coworkers, neighbors, and friends. The best way to encourage an investment in our infrastructure is to get people talking about it. Also, don't forget to contact your state representatives and tell them your thoughts on infrastructure. Finally, a big thank-you to everyone who assisted with the development and release of the Report Card!

If you haven't done so already, don't forget to

**Ray Tant, PE**  
Government Affairs Liaison

**Ken Barry, PE**  
History and Heritage Chair

**Eric Gardner, PE**  
Membership Chair  
Younger Member Chair

**Don Yarbrough, PE**  
Structural Chair

**Brian Reynolds, PE**  
Transportation Chair

**Monica Sartain, PE**  
Report Card Chair

**Wesley Goodnight**  
Student Chair

**Ashley Smith, PE**  
Website Manager

#### BRANCH PRESIDENTS

**Lukas Salyer**  
Chattanooga

**Jennifer J. Moore, PE**  
Holston

**David Matlock, PE**  
Knoxville

**Blake Turner, PE**  
Nashville

**Larkin Myers, PE**  
West Tennessee

#### BRANCH WEBSITES

[Chattanooga](#)

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[renew your ASCE membership](#). As a volunteer, non-profit organization, we are reliant upon current membership dues to fund our many activities. We are grateful to you for your continued support of ASCE. I hope you have a great start to 2017 and please let me know if there's anything I can do to help you get more out of your ASCE membership!

Ashley T. Smith, PE, M.ASCE  
HFR Design, Inc.  
[asmith@hfrdesign.com](mailto:asmith@hfrdesign.com)  
President, ASCE Tennessee Section



## Save the Date!

**2017 TN  
Engineers'  
Conference**  
(ASCE, TSPE, ACEC, and  
TNSEA)



**Date:** September 27-29, 2017

**Location:** Music City Center, Nashville

### Chattanooga Branch Report

During the Third Quarter, our branch had two primary areas of focus. This consisted of highlighting advancements & issues related to our state's transportation infrastructure, and establishing a young member group within our branch. These activities included specific programming at our monthly meetings, the appointment of a Young Member chairperson (Melissa Kelly), and a social event focused on young members. The third quarter included the installation of new branch officers for 2016-2017 which are listed below. Additionally, branch members participated in the release and distribution of the 2016 TN Infrastructure Report Card. The branch is planning & coordinating events related to raising awareness about the Report Card and the benefits it provides.

Monthly events for the 3rd quarter of 2016 were:

- In July, Ted Kniazewycz, P.E., F.ASCE (Gresham-Smith), provided a presentation on TDOT's recently completed Fast Fix 8 Project.
- In August, Lukas Salyer, A.M. ASCE (Volunteer Speaker for Tennessee Infrastructure Alliance) provided a presentation focused on Tennessee's transportation funding crisis.
- In September, the branch held its first young member event at the Public House in Chattanooga. The event was a successful 2-hour social and included more than 15 young members, with support from ASCE officers. A follow up event is currently being planned. Additionally, the branch held its first life member event which consisted of a breakfast event attended by 4 members and coordinated by Bill Hoyt (Life member Chair).
- Also In September, several branch members attended the Tennessee Engineer's Conference, and participated in the Officer

Installation & Awards Event.

- Our Branch also sponsored & participated in the TN River Rescue event held in late September. This is an annual activity & sponsorship for our branch and several members attend & help coordinate the event.

#### **Branch Officers 2015 - 2016**

President:	Lukas Salyer (Forterra Drainage Products)
Vice-President:	Jeff Parris (S&ME)
Treasurer:	Ben Byard (TVA)
Secretary:	Bethany Griffin (TVA)
Past-President:	Maria Price (City of Chattanooga)
Young Member Chair:	Melissa Kelly (Halfen USA)
Webmaster:	Don Warrington (UT-Chattanooga)

### **Holston Branch Report**

The results of the Holston Branch Elections are as follows:

President - Jennifer J. Moore, P.E. - 13 out of 13 votes  
Vice-President - Stacy J. Date, P.E. - 13 out of 13 votes  
Secretary - Brian P. Johnson, P.E. - 13 out of 13 votes  
Treasurer - Ronald W. Crockett, P.E. - 13 out of 13 votes

The Branch would like to thank everyone who participated in the elections! Participation continues to increase every year.

The next branch meeting will be announced in the Branch e-mail after the ETSU vs WCU football game on September 17th. We are currently working out a tour date with Mr. Scott Hatcher, VP of Operations/Development, to give us a personal tour of the Engineering challenges associated with converting the Speedway into "Battle field" and also the structural challenges with installing and supporting Colossus.

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

### **Knoxville Branch Report**

The 19th Annual Scholarship Golf Tournament and Luncheon was held on Friday July 15, 2016 at Centennial Golf Course in Oak Ridge, Tennessee. Twenty-six different companies sponsored holes, door prizes and beverages. The format of the tournament was a Four Person Scramble with prizes being awarded for each flight. A total of \$6,200 was raised for Scholarships to UTK Civil Engineering Students.

In July an ASCE historical monument plaque was presented to TVA for placement at Norris Dam during the 80th Year Celebration. A celebration was held at the Dam for the public on July 29th and 30th. ASCE Members attended the kick-off dinner on July 28th, along with other dignitaries which included descendants of President Franklin Roosevelt and Senator George W. Norris.

Also in July, new officers were elected for 2016/2017 as listed below. The new officers will be sworn into office at the meeting on October 4.

Elected Officers

President - David Matlock  
Vice President - Dan Boles  
Secretary - Patrick Fiveash  
Treasurer - Helen Hennon  
Past President - Sam Mayes

The August Monthly Meeting was held on August 9, at Buddy's Banquet Hall in Knoxville. The speaker was Mr. Lukas Salyer of Forterra Pipe and Precast. Mr. Salyer represented the Transportation Coalition of Tennessee to speak about the transportation infrastructure funding dilemma in Tennessee. The Transportation Coalition of Tennessee was created to educate the public and state legislators as it seeks an increase and reform in Tennessee's transportation fees. The coalition aims to recruit other interested parties to join in seeking a comprehensive funding solution to maintain and expand Tennessee's critical transportation system. The meeting was attended by approximately 30 members.

The Knoxville YMG group had an August meeting that was a Professional Development Lunch. The speaker for the meeting was Mr. Daryl Armentrout. Mr. Armentrout is a past Daniel Barge Award Winner. Mr. Armentrout spoke about his career at TVA and the University of Tennessee.

On September 13, 2016, the monthly meeting was held at the Civic Center in Oak Ridge. The presentation was given by Dr. Dayakar Penumadu on the topic of Low Cost Carbon Fiber Composites. The title was "Low Cost Carbon Fiber Composites for Civil Infrastructure and 3D Printing: Is this the technological revolution we have been waiting for?" UT has recently taken a leadership role in establishing a national manufacturing institute on the Institute for Advanced Composites Manufacturing Innovation (IACMI) in collaboration with Oak Ridge National Laboratory and several academic and industrial partners. Dr. Penumadu introduced IACMI and presented technical details associated with carbon fiber reinforced composites. The meeting was attended by approximately 30 people. Additionally, Section Award nominees from the Knoxville Branch were recognized before the Tennessee Section meeting later in the week. The Award winners were Liam Weaver, Student Chapter Member Award, Karen McKeegan, Younger Member Award, Nancy Roberts, Daniel Barge Distinguished Engineering Service Award, and the Harriman Utility Board Water Loss Project as the Outstanding Engineering Project Award.

Planning continued on a consistent basis during three leadership meetings during the 3rd Quarter. Future events discussed during the planning sessions included the identifying an upcoming list of speakers for future meetings, discussions regarding the upcoming officers transition, and a tour of historic Neyland Stadium on the University of Tennessee campus where the Tennessee Vols just recently beat the Florida Gators.

A link to the Knoxville Branch website can be found here: [www.asceknoxville.org](http://www.asceknoxville.org). Check out the website for information on upcoming activities, the latest newsletter, and resources!

## **Nashville Branch Report**

The 3rd quarter of 2016 was another busy one for the Nashville branch. We were able to stay active with a variety of events for our members to attend and serve.

### July

July's meeting was well attended as our speaker was Mark Macy and his staff at Metro Nashville's Department of Public Works. They presented our members with an update of projects currently under construction and in development in the Davidson County area.

Our Younger Members held an exciting social event at the Escape Game in Berry Hill. Our group of 11 worked together to solve all the puzzles and games in the room to escape with over 20 minutes to spare, thus earning the extremely valuable "I escaped" sticker reserved only for those who escape.



### August

August's branch meeting was also well attended as we had a joint event with the members of SAME. Our speaker was Lieutenant Colonel Stephen Murphy, Commander of the Nashville District for the U.S. Army Corps of Engineers. Lt. Col. Murphy manages the water resources development and navigable waterways operations for the Cumberland and Tennessee River basins and a workforce of over 700 employees.

Also in the month of August, our YM group collaborated with young professionals of EWB (Engineers Without Borders) to haul dozens of wheelbarrows full of mulch over 1 mile to resurface some of the hiking trails surrounding Radnor Lake.

### September

We all gathered in Nashville at the Music City Center for the statewide TN Engineers Conference. Members attending were seen networking and collecting PDH's from all of the great presentations that were lined up. Thanks to Judy Logue, Ashley Smith, Monica Sartain, Kasey Anderson and everyone who contributed to all of the great educational tracks, meals and sponsors that supported this great event.

The YM group also had an event in late September. The Metro Nashville Airport Authority (MNAA) graciously offered to take the Nashville ASCE Group on a guided tour of the Nashville International Airport (BNA) ongoing construction projects and they had nearly 50 people attend! The airport recently announced plans for a \$1.2 billion overhaul of the airport including a new hotel.

Our branch will be transitioning to new leadership starting in October as new officers have been sworn in at the TN Engineers' Conference.

## **West Tennessee Branch Report**

The West Tennessee Branch Board met July 8, August 12, and September

10 to discuss Branch business. Branch meetings were not held in July and August as the Branch does not typically host summer meetings.

Our annual "Kick Off" meeting is scheduled for September 22nd with John Curran of St. Jude presenting. Engineering presentations were held in Jackson, TN with Mara Ryan / Contech presenting on July 26 and Joe Spain / Contech on August 23. Chris Triplett / BWSC is scheduled to present September 27.

Our annual Golf Tournament was held on July 15th and was a successful event raising about \$2,600, which will be donated to the ASCE Student Chapters within the West TN Branch area (U of M, CBU, UT Martin).

The University of Memphis ASCE Student Chapter will be hosting the Deep South Conference 3/31/17 to 4/02/17.

Katie Godwin has accepted the position of Chair of the Younger Member Committee. Executive board members met with Younger Member Committee members and pledged support of the YMC to help build interest and support functions.

Elections were held and the 2016-2017 West TN Branch Board will consist of Matt Odom (Past President), Larkin Myers (President), Duncan Adrian (Vice President), Roger Meier (Treasurer), Gene McGinnis (Secretary). New Directors: Nicole Craven, Doug Dietz, Matt Dorsey. Incumbent Directors: Russ Brasfield, Evan Boulanger, Wes Goodnight.

## 2016 Report Card for Tennessee

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 #1**

Find sustainable solutions that will help us build a transportation network for the future. Tennessee is at a crossroads of exploding population growth and a transportation system that lacks adequate funding. Our transportation system cannot support the expected growth projected for our state without an adequate funding source and innovative solutions, including mass transit, to effectively move people and relieve traffic congestion.

### **Bridges - B**

Tennessee has a total of 19,793 bridges on public roads with a length greater than 20 feet, excluding those owned and maintained by a federal agency. The state is home to the lowest number of bridges that are both structurally deficient and functionally obsolete of all the southeastern states. Of its bridges, 978, or 5%, are classified as structurally deficient, thanks to a concerted effort, beginning in the 1980s and continuing today, to repair or replace bridges. Since 2004, over 1,000 new bridges have been constructed in the state; hundreds have undergone major reconstruction. While funding for rehabilitation of state-owned bridges has been relatively stable, the funding available for locally-owned bridges does not keep up with the need. Without additional investments in bridges in Tennessee, bridge conditions in the state will deteriorate, leading to more bridge weight postings and closures, increased congestion, and a corresponding impact on businesses and the quality of life for those users who must endure slower and longer trips.

### **Roads - C+**

Tennessee has over 90,000 miles of roadways and boasts superior roads when compared to neighboring and peer states. Increasing levels of traffic congestion cause significant delays in Tennessee, particularly in its large urban areas, resulting in long commute times and negative impacts on commerce. The average driver in the Chattanooga area loses 28 hours to congestion each year, while each driver in the Knoxville area loses 35 hours each year. Drivers in the Memphis area lose 43 hours annually due to congestion and drivers in Nashville lose 45 hours annually. \$433 billion in goods are shipped from sites in Tennessee annually, and another \$266 billion in goods are shipped to sites in Tennessee, mostly by truck.

Tennessee is one of only 5 states that do not use debt as a funding source for its highway system, instead using pay-as-you-go strategies exclusively. However, currently the funding is not keeping up with demand or deteriorating performance, as an estimated \$475 million is needed annually to keep up the current state of good repair on state-maintained roadways, and this number grows with inflation every year.

### **Transit - D+**

Tennessee has 26 transit systems statewide that can be classified as Urban (4), Small Urban (12), and Rural (10). Although some positive programs for transit are occurring at the state level, there are many areas where the momentum has been stifled. Each of the systems has replaced transit vehicles as needed or has performed modifications that reflect the needs of the community it serves. However, overall accessibility to transit in Tennessee is limited. In general, about 40% of the cost to operate transit comes from fare-box returns and advertising sales, leaving about 60% to be covered by some other local, state, or federal revenue sources. Between 2013 and 2014 transit funding increased by 24.5% in total.