



# Civil Engineer

KANSAS CITY

## THE NEWSLETTER

April 2017

### UPCOMING EVENTS

#### May

2<sup>nd</sup> – 3<sup>rd</sup> – Missouri  
Concrete Conference

11<sup>th</sup>—Evening Board  
Election and Kickoff  
Party

#### June

1<sup>st</sup>—ASCE Presents:  
“*Dream Big*” at Union  
Station IMAX

23<sup>rd</sup>—YMG Royals  
Tailgate

#### August

11<sup>th</sup>—Annual ASCE  
Charity Golf  
Tournament

## DREAM BIG PREMIERE

The IMAX film *Dream Big* is coming to Kansas City! ASCE Kansas City Section will host a benefit premiere on June 1st at Union Station. Community leaders and engineering professionals in attendance will be encouraged to sponsor future *Dream Big* showings in the Kansas City area.

The Extreme Screen Theatre at Union Station will play the film for several months and ASCE Kansas City will coordinate other showings throughout the 2017-2018 school year. Imagine hundreds of showings impacting thousands of K-12 students - and we need you to make it happen! Please visit our website to learn more about potential sponsorship:

<http://www.kcengineers.org/dreambig/>



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**From the President**

The month of May marks an end to my term as President of the Kansas City Section of ASCE, and as a member of the Board. Time flies when you're busy and having fun. I still remember the phone call while I was on a family vacation, from Alysén Abel in Spring 2011, when she was on the Nominating Committee, looking for candidates for the next term of open Board positions. At the time, I was the Membership Chair, and I'm glad I accepted the nomination, because it has been

rewarding to support the section in all of the great things it does.

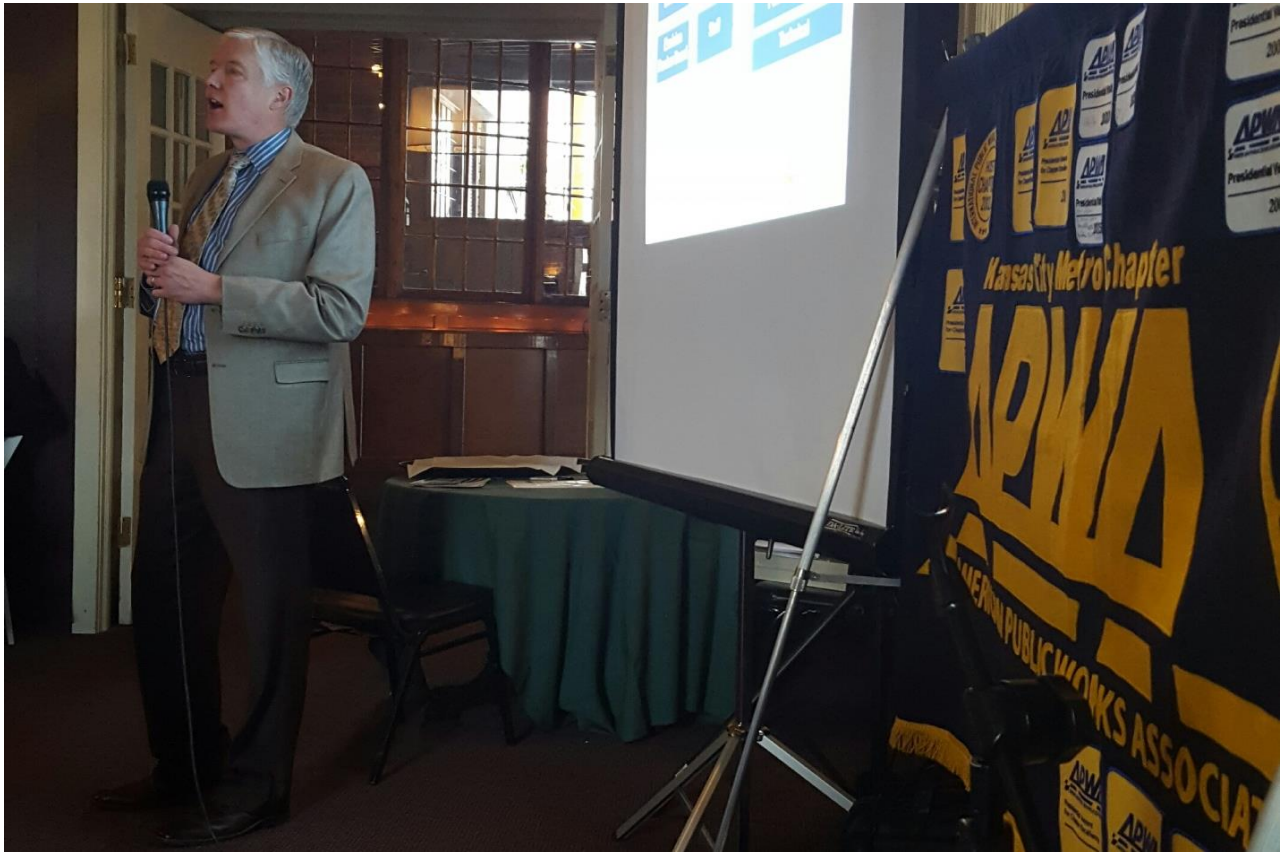
The incoming Board led by Mike Winckler (City of Independence) will have challenges ahead of them, but I know there are many eager members ready to fill open chair positions, and we have four (4) Board positions to fill during our Election and Kickoff meeting on the evening of May 11th at Cleaver & Cork in Power & Light District. In the coming year, we have the "Dream Big" events, MO & KS Infrastructure Reports Cards, and we begin preparing for the 100-year anniversary of our Section in 2021.

Since the last Newsletter, on March 2nd KSPE hosted ASCE for a luncheon at Cinzetti's, where Cameron McGown (HNTB) spoke on "The Evolution of Tolling".



On March 14th APWA hosted ASCE for luncheon at Californo's, where Andy Sauer (Burns & McDonnell) spoke on "Implementing Envision for More Sustainable Public Infrastructure Projects".





On April 11th the Society President-Elect Kristina Swallow visited Kansas City, where her and I met with the UMKC Student Chapter of ASCE; we took a tour of the Linda Hall Library with Eric Ward and Benjamin Gross, and at our annual awards luncheon meeting at the Plaza III restaurant she presented various and Life Member awards, and she spoke on ASCE's three (3) primary Initiatives: Raising the Bar, Sustainability, and the Grand Challenge.



If you ever have any questions or comment, please do not hesitate to contact me ([jblancett@hntb.com](mailto:jblancett@hntb.com)) or our incoming President Mike Winckler ([Mwinckler@indepmo.org](mailto:Mwinckler@indepmo.org)).

Thanks again for your support through the years,

John Blancett, PE, ENV SP

President, Kansas City Section  
ASCE



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## Engineer of the Year Award



The Section Awards Committee is pleased to recognize Sheryl Gallagher, P.E., D.GE. as the Kansas City ASCE Engineer of the Year. Sheryl has served as an exemplary leader with the American Society of Civil Engineers Kansas City Section for over the last seven years.

In 2013-2014, Sheryl served as the President of the Kansas City Section and led the organization exemplarily. Additionally, Sheryl has continued to provide strong advocacy for our infrastructure within the state of Missouri by being the Kansas City Section champion and continuously participating on the Legislative Fly-In to Washington D.C. for these annual visits. Sheryl remains involved within our Kansas City Section by chairing the 2018 Infrastructure Report Card Committee for Kansas and Missouri.

Sheryl serves as the Geotechnical Department Manager in Kansas City of Geotechnology, Inc. Before that, she worked in Chicago, IL and Toledo, OH regions for several years. She enjoys mentoring, training and working with younger engineers. Sheryl received her master's degree in civil engineering from The University of Kansas and her bachelor's degree in civil engineering from South Dakota School of Mines and Technology.

In early 2017, Sheryl received the recognition as a Diplomate, Geotechnical Engineer from the ASCE Geo-Professional Board Certification. This board was created in 2008 to recognize engineers who have an advanced degree of knowledge and expertise in the specialized field of geotechnical engineering and are recognized as respected and professionals within the field of civil engineering. There are slightly more than 330 engineers worldwide who have been awarded this prestigious status, and Sheryl is one of those individuals.



# Project of the Year Award

## MO 150 OUTER ROADS

**OWNER:** City of Grandview, Missouri | Dennis Randolph | drandolph@grandview.org

**CONSULTANT:** Burns & McDonnell | Jason Meyers, PE | jmeyers@burnsmcd.com

**CONTRACTOR:** Kissick Construction | Jim Kissick | jkissick@kissickco.com

**CONSTRUCTION COST:** \$2,625,000

### INTRODUCTION

Providing adequate access to the I-49 interchanges has long been a challenge for the City of Grandview, Missouri. The interstate essentially bisects the city and impedes local connectivity and development. The MO 150 Outer Roads design-build project addressed this issue by extending and realigning the outer roads that run along the interstate and improving the sidewalk and trail system that crosses the interstate and connects to the



This rendering illustrates the project goals to improve the trail that crosses the interstate and connect it to the park and trail system along MO 150.

park and trail system along MO 150. It improves access for an underserved population, enhances safety in the area, and provides attractive, sustainable and ADA-compliant infrastructure to promote the future development of over 150 acres of land. The project is adjacent to one of the largest developable sites in the area and runs along one of the highest volume interchanges in metropolitan Kansas City. It will provide enhanced access and attract development to a first-tier urban community that was previously passed over for sustainable infill development. The new facilities provide a walkable and bicycle-friendly environment with excellent access to future businesses.

The City selected the Kissick Construction/Burns & McDonnell team to deliver this project – the first design-build project for the Missouri Department of Transportation (MoDOT) for a local public agency. The design-build delivery method was a driving force for innovation on this project, which was funded with federal highway funds (Federal-Aid) and required specific documentation and procedures. As a result, teamwork and collaboration between the owner and design-build team were critical. For example, Federal-Aid procedures for right-of-way acquisition and park property use and clearance impose strict deadlines, especially where there is potential for property condemnation. The design team also worked through a multitude of permits, including Section 6(f), Section 4(f), 401 and 404 USACE permits, and U.S. Fish and Wildlife permits.

### PROJECT DESCRIPTION

The project was broken into three specific areas of work: Northwest Frontage Road, Southeast Frontage Road and rehabilitation of MoDOT Bridge L0091 on the existing SE-49 Outer Road just south of the Southeast Frontage Road. Roadway improvements included pavement construction, concrete curb and gutter, concrete sidewalks, asphalt trail, stormwater improvements, culvert installation, signal installation at MO 150 and Grand Summit Boulevard, and lighting. The City of Grandview used an evaluation process to determine a final score for each design-build proposal. The highest ranked proposal was considered the best value proposal. The Kissick Construction/Burns & McDonnell team was selected based on the highest total possible score of the following items: land use, environmental impacts, maintenance of traffic, and optional enhancements. All project costs (design and construction) had a budget not to exceed \$2.625 million.

The existing signal at the Grand Summit Boulevard intersection was upgraded to accommodate the additional leg of the intersection per the design criteria. Improvements included an eastbound left-turn lane on MO 150, along with an ADA-compliant pedestrian route incorporating all four legs of the intersection. Pedestrians can now cross MO 150 and Grand Summit Boulevard and connect to the existing pedestrian network. Landscaping and LED street lighting, a lighted pedestrian tunnel, trail improvements, park benches, and a bike repair station were provided on this frontage road.

The alignment of the Southeast Frontage Road was set to minimize the skew of the Little Blue River bridge crossing. Abutment locations and structure length of the bridge were designed to clear the proposed preliminary FEMA regulatory floodway at the elevation of approximately 944 to attain a no-rise condition. The bridge crossing of the Little Blue River did not have an impact on the Little Blue River since it spanned the floodway.

Rehabilitation of the I-49 Frontage Road Bridge (MoDOT Bridge L0091) was also part of the project. This three-span bridge over the Little Blue River was constructed in 1944. It is a continuous concrete slab structure that is approximately 75 feet in length, with 25-foot spans and a 28-foot clear roadway. The goal for this portion of the project was to rehabilitate the existing structure to extend its useful life by 25 years, and to reconstruct it in a way that would limit impact on motorists.

#### **MoDOT Bridge L0091 Construction**

The new bridge is a single-span, 70-foot long prestressed concrete girder bridge that provides 26 feet of clear roadway width and a 5-foot wide barrier-protected sidewalk on the south side. Shallow depth NU 35 girders were used to reduce the structure depth and profile grade. The NU girders have significantly more capacity than standard I-girder shapes and reduced the number of girder lines, thereby reducing the overall structure cost. The bridge has an 8.5-inch concrete slab utilizing precast prestressed panels to minimize formwork and accelerate construction. Barrier curbs are standard 32-inch safety barrier curbs.

The deck replacement plan entailed an innovative precast concrete panel sub-deck with a cast-in-place overtopping. The precast panels eliminated costly and time-consuming falsework, and significantly reduced the closure time for the bridge rehabilitation. Construction time for the rehabilitation took a total of 30 days. The new bridge decking was completed with accelerated bridge construction (ABC) techniques. The superstructure was demolished and replaced with large, customized precast prestressed panels to eliminate costly and time-consuming falsework.

#### **ENVIRONMENTAL CONSIDERATIONS**

Because the MO 150 Outer Road improvements traverse areas that are environmentally sensitive, coordination with federal, state and local permitting agencies was paramount to the project's success. In addition, the land for the park was acquired from a 1994 donation of Land and Water Funds. As a result, additional coordination through the Department of the Interior was required under Section 6(f) - Land and Water Conservation Act, which entailed a replacement-in-kind land transaction for the area converted to street right-of-way. As part of the 6(f) process, more than 120 letters of support were signed by local residents. Specific areas of environmental considerations are described below.



Construction of bridge over Little Blue River.



Placement of 25-foot precast deck panels.



Interconnected trail on both sides of roadway.



### Street / Park Furniture

In community and recreation planning, the guiding principles of green infrastructure, sustainability and walkability have become requirements. A key element in creating walkable environments is providing connections and accessibility. This project encompasses nearly 1 mile of multi-use trail within its boundary. The street furniture plan identified two key locations along the new proposed trail section where users can stop and recharge.



Along the proposed drive, street trees were placed at 40-foot spacing. These shade trees, such as the Redpoint Maple, enhance the park character of the corridor and offer outstanding fall color. On either side of the drive, planting beds with a mix of Red Twig Dogwood, Tam Juniper and Feather Reed Grass define the entrance and create a gateway feature that is vertically defined by White Bud trees. Along and above the pedestrian tunnel wall, a planting bed of native grasses frames the entrance areas and adds visual interest along the proposed drive. The native grass species is Heavy Metal Switch Grass with Feather Reed and Tam Juniper accent planting to enhance the edges, which are flanked by smaller ornamental trees, a mix of Horse Chestnut and White Bud, that offer seasonal color in the spring.



### UNUSUAL ACCOMPLISHMENTS UNDER ADVERSE CONDITIONS

Innovation is one of the driving forces behind design-build projects, and creative solutions helped the project team address a number of challenges in the project area, particularly related to drainage. The trail extension connecting the Route 150 trail to the park trail crosses the north outer road adjacent to the drainage crossing of the Little Blue River tributary.

The drainage and pedestrian facilities were consolidated with a trail crossing comprised of a 10-foot wide by 8-foot high box culvert, and the drainage is comprised of a pair of 48-inch concrete culverts. The 48-inch culverts were set at the approximate elevation of the existing swale, with the bottom of the pedestrian tunnel perched several feet above the drainage culverts. The design intent was to keep the 10-year rainfall confined to the 48-inch culverts, which required a berm approximately 3 feet high separating the pedestrian tunnel and the culverts to allow adequate head on the drainage culverts. Under more significant events, the hydraulic capacity will be supplemented by the pedestrian box culvert, providing more capacity than the existing 8-foot by 7-foot culvert that crosses MO 150 to the south.



A large block wall diverts low-flow events into double 48-inch reinforced concrete pipes.

### SUMMARY

The MO 150 Outer Roads project is already helping to bring the citizens of Grandview together. It has improved mobility and access for motorists, pedestrians and cyclists, and it has connected a community that was previously separated by an interstate. This tier-one community now has a beautiful, sustainable facility that will help promote economic development on over 150 acres of land, and bring much-needed jobs and tax revenue to the area.

The City and the design-build team accomplished these goals through innovative strategies that gave the public the most value for their investment, reduced construction time, and leveraged existing assets, including trails and parkland. The result is a facility that evokes a sense of community and a bright future for area residents.



# Government / Public Relations Committee

## 2017 ASCE Fly-In

Every March, ASCE members from around the nation descend onto Washington, D.C. for the Annual Fly-In. This year, over 200 members from 49 states made the trip to talk to Congress and their staff to advocate for issues impacting Civil Engineers and the nation.

This year's issues of concern were the release of the 2017 Infrastructure Report Card, a request to pass appropriations for fiscal year 2017 and 2018 to release funds at the end of 2017 approved for the FAST Act and WRDA/WIIN acts and to highlight the importance of keeping tax-exempt municipal bonds.

The 2017 Infrastructure Report Card (<http://www.infrastructurereportcard.org>) examines how America's infrastructure rates in 16 different categories. Overall the U.S. infrastructure earned a grade of D+ or near failing. Lack of investment and maintenance as taken it's toll on the system and would require nearly \$3.9 trillion to bring it up to an A.

(<https://youtu.be/4TdPpjevNSE>)



https://www.epw.senate.gov/public/index.cfm/wrda\_1

U.S. Senate Committee on Environment & Public Works  
U.S. Senator John Barrasso - WY Chairman

MAJORITY PAGE  
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**WRDA**

The Water Infrastructure Improvements for the Nation (WIIN) Act (S. 612) Act builds upon the reforms of the Water Resources Reform and Development Act of 2014. WIIN supports our nation's economic competitiveness by deepening nationally significant ports, providing protection from disastrous flood waters, and restoring valuable ecosystems by Congressionally authorizing 30 new projects and modifying 8 existing projects based on reports submitted to Congress by the Secretary of the Army. The WIIN Act promotes both public and private investment in the nation's critical water resources and drinking water infrastructure. It also addresses significant tribal and natural resources issues. Finally, the WIIN Act expands the exemption from the SPCC rule for farms; allows state permitting under EPA's coal ash regulations; and requires payment by EPA of costs incurred by States, local governments and tribes to respond to the Gold King Mine Spill.

WIIN Highlights  
WIIN Section by Section  
Full Bill Text

Another message that ASCE members took to Washington was to request Congress to pass appropriations bills for fiscal year 2017 and 2018 to release funding of projects under the [FAST Act](#) and [WRDA/WIIN Acts](#). At the end of 2017, Congress approved both bills, but needed to also pass the appropriations part of the bills. Appropriations are what authorizes spending for passed bills. The approved 2017 legislation identified the spending levels and funding sources for the Acts. Failure to provide the appropriations will result in delaying projects for both surface transportation and water resources (Corps of Engineers projects, Port projects, floodplain, drinking water, and wastewater treatment, dams and levees).



The last issue was related to tax-exempt municipal bonds. With one party having a majority in both houses of Congress and the White House, there were indications that comprehensive tax reform legislation may be worked on this year. ASCE and other partner associations wanted to remind Congress that tax-exempt municipal bonds are an important tool for local, county, and state agencies in financing projects. Over 80% of projects are financed using tax-exempt municipal bonds. On average, a tax-exempt municipal bond saves agencies around 2% in interest, saving them a substantial sum for long-term projects, helping to stretch taxpayers/users dollars.

For this year's visit, the Kansas City Section was represented by Ernie Longoria, P.E, PTOE and Sheryl Gallagher, P.E., D.GE. Although weather kept the two from arriving until late Tuesday evening, they were able to attend the issues breakfast briefings and made visits onto Capitol Hill on Wednesday.

As the Kansas Advocate, Ernie visited Senators Moran' and Roberts' and Representatives Marshall's, Jenkins', and Yoder's offices and spoke with their staff about the three issues. There is vacancy in one of the Representative districts as Representative Pompeo is now the CIA Director. All of the staff were supportive of the issues and had voted Yea on approval of the FAST, WRDA/WIIN Acts, but would follow up with any questions they may have about the 2017 Infrastructure Report Card or tax-exempt municipal bonds.

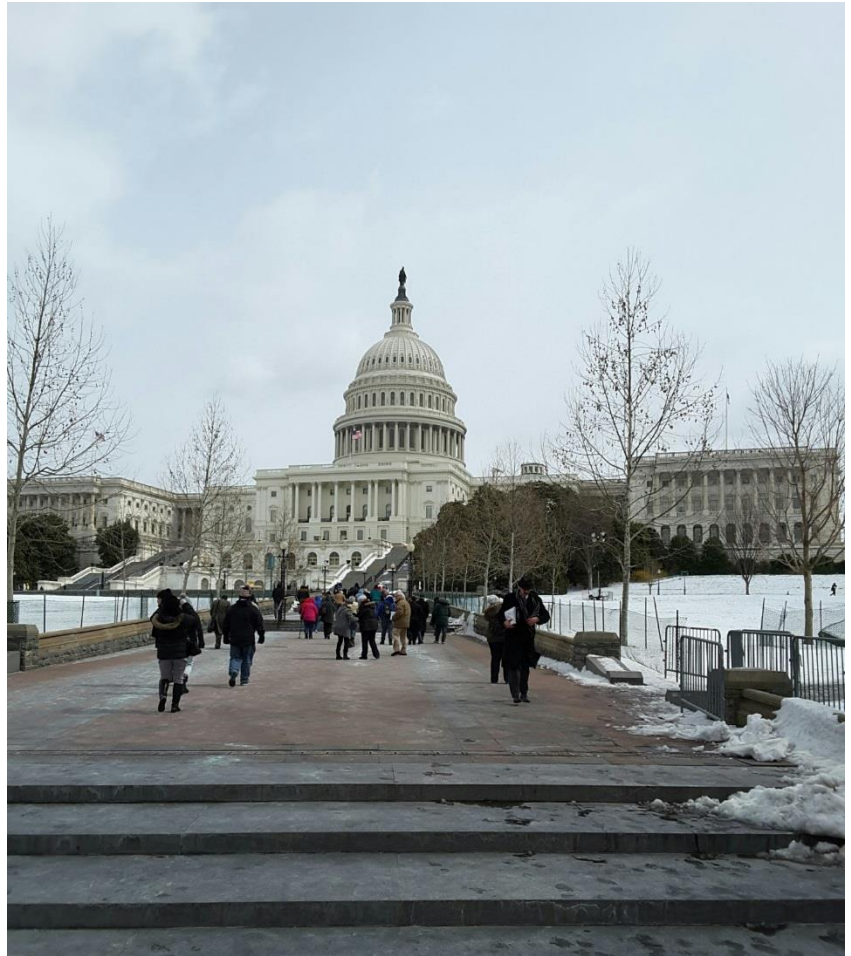


As the Missouri Advocate, Sheryl visited with Senators McCaskill' and Blunt' and Representative Graves's offices and also spoke with their staff about the three issues.

McCaskill's staff was supportive but had more of a doom-gloom perspective on the appropriation side. Blunt' and Graves's staff were all about getting the approved measures funded. Blunt's office was excited about the new National report card and asked for more information from the aviation section that they could use for a meeting they had the following week.

At the end of Wednesday's visits, the National ASCE President hosted a Reception with appetizers and drinks. ASCE members reconvened and shared how their visits

went. It also gave them a chance to strategize how to take their experiences back to their Sections and Branches to help build more advocacy support home.



### **Kansas and Missouri 2018 Infrastructure Report Card**

The Kansas City Section is combined with the St. Louis and Kansas Sections and the Wichita Branch for preparation for the 2018 Kansas and Missouri Report Cards. We have 39 volunteers across both states that are divided into the follow categories: Aviation, Bridges, Dams, Drinking Water, Energy, Inland Waterways, Levees, Ports, Rail, Roads, Schools, Stormwater and Wastewater. We also have representatives from MoDOT and KDOT that will be involved in the review process and we are working on representatives from the Corps of Engineers.

We had our kick-off webinars with National and the research has begun as of the 13<sup>th</sup> of April. We can use more help in dams, inland waterways, levees, ports and schools – it is not too late to help!



## Diversity Corner

### Spotlight: Ms. Sosena Teklemariam – Diversity & Inclusion Committee Co-Chair



Hometown:	Sosena was born in Harar, Ethiopia and grew up in Addis Ababa, Ethiopia. She moved to the United States in December 1996 and has lived in Alameda, California, Silver Springs, Maryland and her current hometown of Kansas City, Missouri (Her favorite!).
College(s) and Degree(s):	<p>Park University -Bachelor of Arts in Mathematics in May 2006.</p> <p>University of Maryland, College Park - Master's of Science in Civil Engineering, May 2009.</p>
Current Employer:	DuBois Consultants, a minority owned Civil and Structural Engineering firm, since 2014 as a Structural Engineer.
Job Function & Responsibilities:	Requires preparing details and calculations for the structural aspect of a design project.

On March 29, 2017, ASCE – KC Chapter members participated in the “Conversations with Civil Engineers” mentoring event at the National Society of Black Engineers 43<sup>rd</sup> Annual Conference held in downtown Kansas City. Engineering students from all over the country attended the conference and we had the pleasure of meeting and speaking with over 100 students! Special thanks to all those who volunteered for this event. A very special thanks to Mr. Ozzy Bravo for coordinating! It was a tremendous success!

# ASCE Younger Member Group

## PAST EVENTS

### Grain Valley STEM in the Gym

Members of the YMG volunteered at Prairie Branch Elementary for the Grain Valley STEM in the Gym on February 15<sup>th</sup>. They showed around 200 grade school and high school students how to create toothpick and gum drop bridges. Those structures' strength was tested by hanging Dixie cups in the middle of the span and adding weight (gum drops) until the bridges collapsed. Students were also shown the effect of earthquakes when they were tasked with making Jenga block structures and testing them on shake tables. There was also the cable-stayed bridge on display.





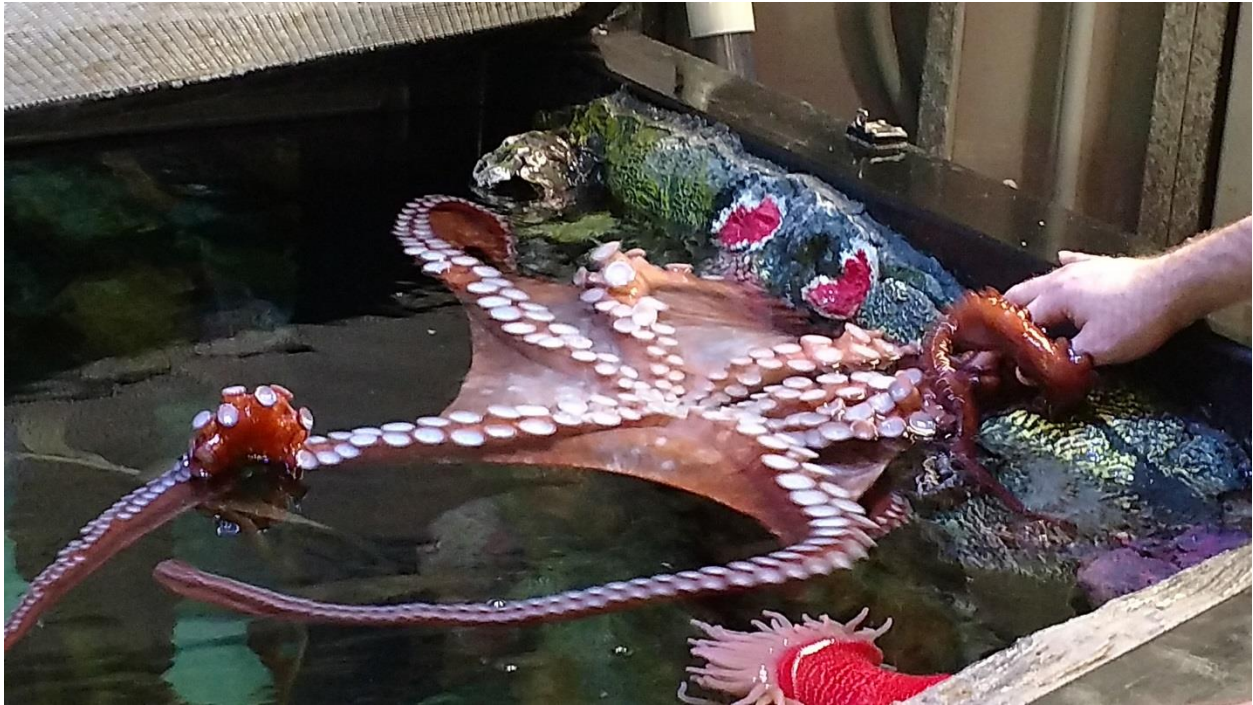


### Sea Life Aquarium Tour

Members of the YMG took a behind the scenes tour of the Sea Life Aquarium in Crown Center. The tour took attendees to areas of the aquarium not seen by the general public such as the life support system room, kitchen and quarantine areas. Attendees inquired about different topics regarding the aquarium and aquatic life. After the tour, some of the attendees went to Up Down for pizza, drinks and games.







### Conversations with Civil Engineers

Members of the YMG attended the NSBE national convention at the downtown Marriott to participate in Conversations with Civil Engineers on March 29<sup>th</sup>. Civil engineering professionals from various areas (structural, geotechnical, water resources, transportation,



environmental, construction management and surveying/GIS) met with college students to discuss their civil engineering and career related questions.



## Dream Big event with NSBE

Young minds, engaged leaders, and seasoned educators caught a glimpse into the fascinating, impactful world of engineering during a special showing of the ASCE IMAX film *Dream Big*. The ASCE Kansas City Section Younger Member Group worked with NSBE's annual convention to show the film and organize hands-on STEM activities for over 1,500 K-12 students.

On Friday, March 31<sup>st</sup>, 900 local students and 600 K-12 NSBE attendees joined over 30 volunteers for an action-packed event at Cinetopia and the Museum at Prairiefire. Participants floated foil boats, launched ping pong balls down a zip line, and even created binary code bracelets. Huge displays for UMKC's Steel Bridge team and a versatile cardboard suspension-to-cable-stay bridge drew large groups of students while laughter and squeals of surprise were heard throughout the night from the life-size wooden block stacking area.

A student from Westview Elementary School in Olathe wrote, "Thank you for inviting us to see the movie *Dream Big*. My favorite part of the movie was when they built the bridge because the engineers and workers helped the people. I want to be an engineer because I want to help people."

The event was a huge success and we look forward to future showings of *Dream Big*!



Thank you for the movie. The movie inspired me because it taught me that engineers can change the world.



## UPCOMING EVENTS

Royals Game & Tailgate on June 23<sup>rd</sup>



The poster features a blue background with a large orange crown at the top left. The word "Royals" is written in a large, white, cursive font with a blue outline. To the right, the text "FRIDAY JUNE 23" is in large, bold, orange letters. Below this, "TAILGATE (LOT N) 5:00 (\$20) GAME 7:15" is written in orange. In the center, the "ASCE KANSAS CITY SECTION" logo is displayed, with "YOUNGER MEMBER GROUP" below it. To the right of the ASCE logo, it says "PARTNERING WITH" followed by the "4P APWA YOUNG PROFESSIONALS" logo. Below these logos, it says "AND OUR TAILGATE SPONSOR" followed by the "davidson ARCHITECTURE + ENGINEERING" logo.

**Royals**

**FRIDAY  
JUNE 23**

**TAILGATE (LOT N) 5:00  
(\$20) GAME 7:15**

**ASCE**  
KANSAS CITY SECTION  
YOUNGER MEMBER GROUP

PARTNERING  
WITH

**4P**  
APWA  
YOUNG PROFESSIONALS

AND OUR  
TAILGATE SPONSOR

**davidson**  
ARCHITECTURE + ENGINEERING

Constant Contact sign up deadline:  
Friday May 26  
Questions? Contact: [hilary@davisonae.com](mailto:hilary@davisonae.com)

# Missouri S&T Education Programs



Missouri S&T offers full master of science degrees online in civil and environmental engineering. Why not get started on one by enrolling in a graduate certificate program of interest to you?

Graduate certificates give YOU the opportunity to broaden your knowledge in a particular discipline, learn the latest in developing fields and stay competitive in today's marketplace. By taking a few online courses, you will be able to demonstrate advanced knowledge in the field of civil or environmental engineering.

## Online Certificate Programs

- **Contemporary Structural Engineering** - Analysis and design of structural systems; including structural vibrations and stability, advanced steel and concrete design, and using composite materials to strengthen structural systems.
- **Geoenvironmental Engineering** - Design, implementation and management of cost effective site assessment and ground investigation, advanced analysis techniques in soil mechanics and environmental topics.
- **Infrastructure Renewal** - Assessment, repair and rehabilitation techniques with an emphasis on composite materials for infrastructure renewal.
- **Project Engineering and Construction Management** - Construction methods and project management, systems engineering and financial risk management.

## Online Graduate Degrees

Graduate certificate programs may also be used as a pathway to a graduate degree program. **Credits earned in a certificate program can be counted toward the master's degree** so long as you earn a B or better in each certificate course. In this case, you can apply for admission to the department's master's degree programs without needing to submit GRE scores.

For more information, please contact Jeannie Werner in the Department of Civil, Architectural and Environmental Engineering by phone at 573-341-4470 or email [wernerje@mst.edu](mailto:wernerje@mst.edu).

Go online to learn more at: <http://dce.mst.edu/credit/care>



## ASCE Events



### MISSOURI CONCRETE CONFERENCE

hosted by Missouri University of Science and Technology

Join us and our distinguished group of regionally and nationally known speakers at this year's [Missouri Concrete Conference](#), May 2-3, 2017, in Rolla, Missouri.

During this affordable two-day conference, you could earn approximately 10 Professional Development Hours (PDHs).

### TOPICS OF INTEREST

#### MATERIALS:

*Slag Cement*  
*Confirming Aggregate Quality*  
*Colored Concrete*  
*Steel Fibers in Building Construction*  
*Impact of Air Pollution Control on*  
*Fly Ash Quality*  
*MoDOT Research*

#### CONSTRUCTION:

*Timing of Slab Saw-cutting*  
*Compacted Concrete Pavement*  
*Internal Curing of Bridge Decks:*  
*Lessons Learned*

#### QUALITY CONTROL & INSPECTION:

*Field Testing: Cylinder Curing, Unit Weight,*  
*& Cylinder Weight*  
*ACI Adhesive Anchor Technician*  
*Certification*

#### READY MIX/PRE-CAST OPERATIONS:

*Factors Affecting Air Content*  
*Zero Discharge Production Water at Plants*  
*What's New in Pre-Cast, Pre-Stress, and Concrete Pipe*

#### MAINTENANCE & REPAIR:

*MoDOT CPR Spec Update*  
*Regional Aggregate Issues:*  
*ASR, ACR, D-Cracking*  
*ACR Deterioration of Streets*

#### DESIGN & SPECIFICATION:

*St. Louis Co. Material Spec Changes*  
*Evolution of Concrete Bridge Decks*

For more information, go online to <http://concrete.mst.edu>.

**...See you at the Conference!**

## ASCE Presents: *Dream Big* (Summer 2017)

ASCE will present *Dream Big* in IMAX at the Union Station B&B Regnier Extreme Screen Theatre **this Summer!** DREAM BIG is an awe-inspiring journey through various engineering marvels around the world. With the best IMAX cameras there are and Jeff Bridges' narration, you better be on the lookout Kansas City! To top it off, this not just a film for nerds. It is accompanied by STEM outreach activities and teaching curricula, for all ages, to inspire the engineers of the future. Kansas City has the added bonus of Science City adjacent to the film at Union Station, so your friends, family, and children can take part in hands on activities during your Dream Big experience. See the trailer: <https://www.youtube.com/watch?v=gWoGKpK3koM>

We'll soon be in touch with you and your companies for sponsorship opportunities, premiere tickets, and volunteer opportunities. ASCE Kansas City Section is already coordinating a huge outreach event with the NSBE convention on March 31<sup>st</sup> (7-11pm) and is **calling for volunteers** to share their engineering passion with students. We are also planning several screenings for our ASCE family and any collaborating organization interested. If you have an organization that is interested, please let us know! Contact [akulesa@burnsmcd.com](mailto:akulesa@burnsmcd.com) for any questions or to sign up for these opportunities.





# 12<sup>th</sup> Annual ASCE Charity Golf Tournament

**Hillcrest**  
golf & country club  
08.11.2017



**Neila Seda**  
*Tournament Chair*

**Kevin Gallagher**  
*Tournament Chair*



**Joe Kurokawa**  
**Mariah Schroeder**  
**Tom Greer**  
**Tony Kulesa**

**Megan Dierks**  
**Alex Griffin**  
**Emily Loiselle**  
**Kevin Koines**

**Spencer Ferguson**

*Sponsorship & Prize Chairs*

[www.kcengineers.com/golf](http://www.kcengineers.com/golf)  
[kcASCE.golf@gmail.com](mailto:kcASCE.golf@gmail.com)