# Building Arkansas

Official Magazine of the American Council of Engineering Companies of Arkansas & the Arkansas Society of Professional Engineers

# Taking over the reins

FTN Associates' Kale Farmer, P.E., CFM, left, brings, his stormwater management expertise to ASPE as its new president, while Garver's Jerry Holder, P.E., right, brings his experience managing the Connecting Arkansas program to the presidency of ACEC/A.



## Happy new year, ACEC/A and ASPE!

Another year has passed in the ACEC/A and ASPE calendars, which means we have new leadership in both associations. I know that Garver's Jerry Holder, P.E., and FTN's Kale Farmer, P.E., will lead our organizations with the same integrity they bring to their companies. I'm thankful they are willing to serve.

I'm also thankful to Steve Pawlaczyk, P.E., of CEI Engineering, and Travis Tolley, P.E., of Crafton Tull. It's an old joke by now, but they have earned the most coveted titles of any volunteer organization: past president.

Actually, their work is not done, because past presidents are still active board members. A special thanks also goes to Steven Beam, P.E., of Burns & McDonnell, and Daniel George, P.E., of B & F Engineering, the most recent past presidents who are cycling off the board. They have stayed faithful to these organizations throughout their tenures.



Angie W. Cooper Executive Director

Thanks go to all the experienced board members who are working their way through the ranks, as well as to the new board members: at ACEC/A, Adam Triche, P.E., of McClelland Consulting Engineers and Mike Stengel, P.E., of Michael Baker International, and at ASPE, Landon Miller, P.E., of Michael Baker.

While our boards of directors' slots have been filled, there is always room

for volunteers to serve on one of our ACEC/A committees. Likewise, our ASPE local chapters, which became relatively inactive during the pandemic, need to be reinvigorated. Let's get involved!

• • •

This issue features our first conversation with Fred Harper, P.E., the Michael Baker International engineer (and 2018-19 ASPE president) who discovered the fracture in the Hernando de Soto Bridge crossing the Mississippi River.

Fred's quick, decisive action prevented a potential catastrophe. If the bridge would have collapsed, it could have cost billions to replace it, and of course the lives that would have been lost could never be replaced.

Read the story in this issue to see what Fred has to say about one of the biggest engineering stories in years.





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20 Kale Farmer, P.E., CFM, of FTN Associates, left, is the new president of ASPE, while Jerry Holder, P.E., of Garver, is the new president of ACEC/A.

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## **News and Features**

16 Member Spotlight / HDR moving to larger state office

One of the country's largest design firms is expanding its presence in Arkansas. HDR, which has more than 11,000 employees in more than 225 offices around the globe, was moving to a larger office near Little Rock this summer so it can have more room to grow across market sectors.

- Michael Baker wins ACEC Grand Award
  Fred Harper, P.E., didn't have any doubts the moment he looked down and saw the fractured tie girder on the Hernando de Soto Bridge connecting Memphis and West Memphis over the Mississippi River.
- 20 Cover / Another Holder takes the helm
  An engineer named Jerry Holder is now ACEC/A president –
  again. Jerry Holder, Jr., P.E., Garver's senior vice president and
  director of transportation, holds the same position held by his
  dad, Jerry Holder, 41 years ago.
- 23 Cover / Farmer: Show ASPE's benefits
  Kale Farmer, P.E., the new president, says engineers will join the way he did: By someone inviting them.
- Expert: How low-cost marketing is done
  Engineering firms that might believe they can't handle more
  business should market themselves knowing they'll eventually wish they had it, and they can do so inexpensively. That
  was the message of an ACEC webinar, "Low-Cost Marketing
  Ideas," presented Aug. 9 by Lindsay Young of Rogers-based nu
  marketing, which works with ACEC/A and engineering firms.



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## Taking our show to the road

president of ACEC/A for the 2022-23 term. My father served as president of ACEC/A 40 years ago, so I am very humbled to have this opportunity to follow in his footsteps. I hope I will make him proud.

I have served on the board for several years now and built relationships with the other board members.

I don't believe I have ever served with such a quality group of engineers and surveyors as the past and current board members. Every one of them represents Arkansas with integrity. I want to thank Past President Steve Pawlaczyk for his service and our current national director, Matt Crafton, for serving in that role. Angie Cooper, our executive director, is so effective in all she does for us. It's certainly a great crew, which is good considering this is such an exciting and important time for infrastructure development – not only in our state, but the country.

The big news in our industry is the Infrastructure Investment & Jobs Act (IIJA). The IIJA is a historic investment in America. It authorizes \$1.2 trillion for transportation and infrastructure spending, which includes \$550 billion for new programs and \$650 billion for the continuation of core programs, made possible under the Fixing America's Surface Transportation (FAST) Act and other authorizations. Funding is expansive in its reach, addressing energy and power infrastructure, access to broadband internet, water infrastructure, and more.

The majority of the new spending is as follows: \$110 billion for roads, bridges, and major projects; \$66 billion for passenger and freight rail; \$11 billion for safety and research; \$39 billion for public transit; \$65 billion for broadband; \$25 billion for airports; \$17 billion for ports and waterways; \$54 billion for water infrastructure; \$65 billion for power and grid; \$46 billion for resiliency; \$7 billion for electric vehicle charging; \$1 billion for reconnecting communities; and \$21



Jerry Holder, P.E. **ACEC/A President** 

billion to address legacy pollution.

With \$550 billion in new funding over the next five years, you can imagine the amount of engineering that will be needed. Ask any manager of an engineering group, be it private or public, what their number one concern is today, and they will almost always answer "finding

people." There is a shortage of engineers in America - but we're going to need more. We have got to create a bigger pipeline into the engineering fields to deliver the IIJA projects.

To address this situation, ACEC is embarking on The Engineering and Public Works Roadshow. This is a strategic partnership with the American Public Works Association (APWA) and the American Society of Civil Engineers (ASCE). The partnership will center around a public awareness and education effort promoting the essential value of engineering and expanding the pipeline of new engineers into our industry.

The Engineering and Public Works Roadshow will include events, earned media, and targeted advertising to showcase ACEC member firms' incredible work. The Roadshow will show that good infrastructure creates jobs, strengthens the economy, and generates investment in private markets.

The Roadshow is what ACEC National is taking on to help firms meet the infrastructure industry's future demands. We as consultants need to be thinking about what we can do, as well. Each of our firms need to be working at the grassroots level to promote STEM in our local schools. Meet with a local school and ask them how you can help them with STEM programs. Contact your local science museum and ask how you can help promote science and engineering in your community. While it is great that ACEC National is launching The Roadshow, it will take our member

Please see ACEC/A om page 8

## ACEC

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## Pack the house each month

As I begin my term as the president of the Arkansas Society of Professional Engineers, I'd like to first thank Travis Tolley, P.E., ASPE past president, and his predecessor, Daniel George, P.E., for guiding this ship through a stormy past couple of years. During a time when in-person conferences and meetings were not possible, they

worked hand-in-hand with Angie W. Cooper, our executive director, to effectively lead our board meetings utilizing online file sharing and teleconferencing. They also were able to pivot our Annual Conference to a virtual format in 2021 with little impact on typical attendance numbers, and they were able to safely host an inperson conference earlier this year. I believe their leadership during this time has strengthened ASPE, and honestly has set up my tenure for smooth sailing.

It appears that we may never return to pre-COVID "normal." Instead, we have a new normal. COVID will be a part of our lives for the foreseeable future, but we have learned how to mitigate risk and once again enjoy the networking and fellowship aspects of our meetings and conferences.

Moving forward, our challenges as an organization seem to be changing. Work is abundant, but finding and retaining staff is difficult, which puts a high premium on engineers' time. With so much going on, it can be hard to make attending a chapter meeting – including for the first time – a priority.

We must overcome this challenge. I first became involved in ASPE because I was strongly encouraged to attend chapter meetings by my supervisor and senior engineers in my office. The social interaction is what drove my desire to become even more involved. I was able to reconnect with classmates and get to know other engineers and clients outside of project work in a more relaxed setting. That social aspect eventually led me to consider volun-



Kale Farmer, P.E., CFM ASPE President

teering to become an officer in the Northwest Chapter.

We are fortunate in Arkansas to have strong leadership in our three regional chapters: Northwest, Central, and Hot Springs. Chapter leaders have had a much tougher row to hoe in sustaining active involvement than the state leaders have had. The state chapter has

one annual meeting that requires substantial planning and coordination; the regional chapters regularly plan monthly meetings, and unlike the ASPE Annual Conference, they don't lend themselves to virtual attendance.

Well attended, in-person meetings benefit everyone. The training and networking opportunities are better. You can't develop relationships with an empty seat, and it's hard to develop lasting relationships with a face in a little box on a screen. Whether it's an ASPE chapter meeting or a football game, a full house is more electric than an empty one.

So how do we pack the stands with engineers in this new normal? The same way I first got involved in ASPE during the old normal. If you've been missing meetings lately, go back. You're going to eat lunch anyway. If you're active, invite those who are not. Drag them if you must. It's especially important for supervisors and senior engineers to encourage younger engineers to attend - and by "encourage," I mean put a little pressure on them. Sometimes mentors have to do that. The leaders of ACEC/A member firms should make a special effort to do this. They've made a corporate commitment to engineering, so let's make an individual one as well.

With the COVID lockdowns in our rearview mirror, our chapters can be reinvigorated, our Annual Conference can be well attended (as our recent one was), and our membership numbers can increase.

A new year has started in this new normal. Let's pack the house each month.

## ACEC/A

Continued from page 6

firms stepping up to make it happen. I challenge you as leaders to step up and make a difference in our communities and in our industry.

Going back to the topic of "finding people," contractors are in the same situation. Spending this amount of money in such a short amount of time is going to contribute to more inflation simply due to the law of supply and demand.

While overall inflation is reported at over 9% at the time of this writing (the highest in more than 40 years), inflation in the construction industry is much higher. We are seeing project bids coming in 25% over the estimates. We are also seeing projects only get one bidder or no bidders due to the workloads the contractors currently have.

Another great way to help our industry is to support the Arkansas State Chamber of Commerce's Be Pro Be Proud program. This is a workforce development initiative intended to change perceptions surrounding technical careers in Arkansas. For more information, visit the Chamber's website at www.arkansasstate-chamber.com. You might be saying this isn't supporting engineering. I would say design and construction are connected at the hip, and we can't successfully promote one without promoting the other.

Finally, please connect with us on Facebook and Linkedin to keep up with the latest ACEC is doing. Let's have a great year – we already know it's going to be a big one.

## - In the News



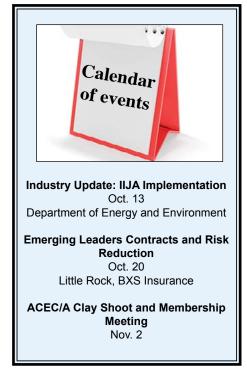


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## New year brings new officers at ACEC/A, ASPE

The calendar year may be only threefourths over, but a new year with new officers for both ACEC/A and ASPE has begun.

For the ACEC/A, Jerry Holder, P.E., of Garver is the new president, while Steve Pawlaczyk, P.E., of CEI Engineering Associates moves into the immediate past president position. Paul Crawford P.E., P.G., of FTN Associates is presidentelect. Jerry Kelso, P.E., of Crafton Tull is secretary. Mike Foster, P.E., of Pickering is treasurer. Lawren Wilcox, P.E., of Garver is senior state director, while Matt Crafton, P.E., of Crafton Tull is national director. All of those professionals served on the ACEC/A board in other positions in 2021-22 and moved up one spot except for Wilcox and Crafton, who are serving the second year of a two-year term. Joining the board are two new state directors, Mike Stengel, P.E., of Michael Baker International and Adam Triche, P.E., of Mc-Clelland Consulting Engineers.



For ASPE, Kale Farmer, P.E., CFM, of FTN Associates is the Society's new president, while Travis Tolley, P.E., of Crafton Tull is now past president. Tyler Avery, P.E. of Mid-South Engineering is president-elect. Mary Fair, P.E., of Garver is secretary-treasurer. As with ACEC/A,



Miller

all of those officers served on the board last year and moved up one spot. Brad Peterson, P.E., CFM, LEED AP, of Crafton Tull remains the Society's national delegate.

The new state director is Landon Miller, P.E., of Michael Baker International.

# Garver Tulsa project wins ACEC national award

A Garver-led project was recently awarded a National Honor Award by the American Council of Engineering Companies during the 2022 Engineering Excellence Awards Gala in Washington, D.C.





The Pathway to Hope marks the recent centennial of the 1921 Tulsa Race Massacre. Garver worked alongside the 1921 Tulsa Race Massacre Commission, the Oklahoma Department of Transportation, the City of Tulsa, the Tulsa Drillers baseball team, and other engineering firms. Opened to the public in May 2021, the walkway recognizes an important piece of Oklahoma history and serves to reconnect the historic Greenwood District and John Hope Franklin Reconciliation Park along I-244.

Garver Director of Transportation Jerry Holder, P.E., and Bridge Team Leader Lawren Wilcox, P.E., accepted the award presented during the Gala.

"We were grateful to have worked with so many local partners on the pathway's design and construction," said Transportation Team Leader Jenny Sallee, P.E., who served as project leader. "After three decades as part of the Tulsa community, we know the importance of honoring Oklahoma's history and working together to memorialize it."

## Garver marketing team wins national awards

Garver won awards in both the Promotional Campaign-Mixed Media and Advertising-Mixed Media categories at the recent Society for Marketing Professional Services' (SMPS) 2022 Marketing Communications Awards program

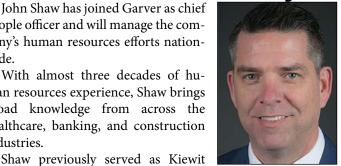
Garver's nationally recognized Communications Team created the "Beyond the Design Campaign" and collaborated with the company's Water and Wastewater Team to bring to life the "Behind-the-Scenes Operators" initiative. The two campaigns helped Garver connect with clients, communities, and employees across the country.

"The recognition by SMPS is not only a testament to the hard work and alignment of both teams, but to the commitment of our employees as a whole," said Garver Chief Operating Officer Michael Graves. "Both of these campaigns showcase one of the things we do really well at Garver, and that is connect with our clients and the communities in which we serve."

Shaw hired to lead Garver HR nationally

John Shaw has joined Garver as chief people officer and will manage the company's human resources efforts nationwide.

With almost three decades of human resources experience, Shaw brings broad knowledge from across the healthcare, banking, and construction industries.



Corporation's vice president and chief Shaw human resources officer, where he managed a team supporting more than 28,000 employees geographically dispersed across the United States, Canada, and Mexico. Shaw directed the restructuring of human resources across the company to create a more efficient and effective HR model.

As Garver's chief people officer, Shaw will be responsible for managing Garver's health and retirement benefit programs, recruitment, learning and development, and wellness initiatives.

"We are thrilled to have someone with John's expertise to lead human resources for our growing company," said Garver President and CEO Brock Hoskins, P.E.

"We believe John's passion and alignment with our mission will enhance our ability to meet our growth objectives and take great care of our people."

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## **Garver's Martin** makes magazine's **Future 50 list**

Garver Arkansas Water Team Leader Jerry Martin, P.E, earned a spot on Arkansas Money & Politics' Future 50 list.

The list identifies the up-andcomers in Arkansas business,



policy, and culture who have shown the potential to drive progress across the state.

"I'm honored to be included with this group of accomplished leaders from across the state," Martin said. "I look forward to continue making a positive impact on those I share Arkansas communities with and giving back to a state that has given me so much."

Committed to supporting his industry both in and outside of the office, Martin serves several industry organizations, including the University of Arkansas for Medical Sciences College of Public Health Advisory Board.

He's also vice president of the Arkansas Water Environment Association, has recently been named to the elite Arkansas 5S Society, and is an active member of the Water Environment Federation, the American Society of Civil Engineers, the American Water Works Association, and many more.

## Four engineers join Hawkins-Weir's offices

Four engineers have joined the Hawkins-Weir staff in June in the company's Fayetteville, Van Buren and Little Rock offices.



**Noble** 

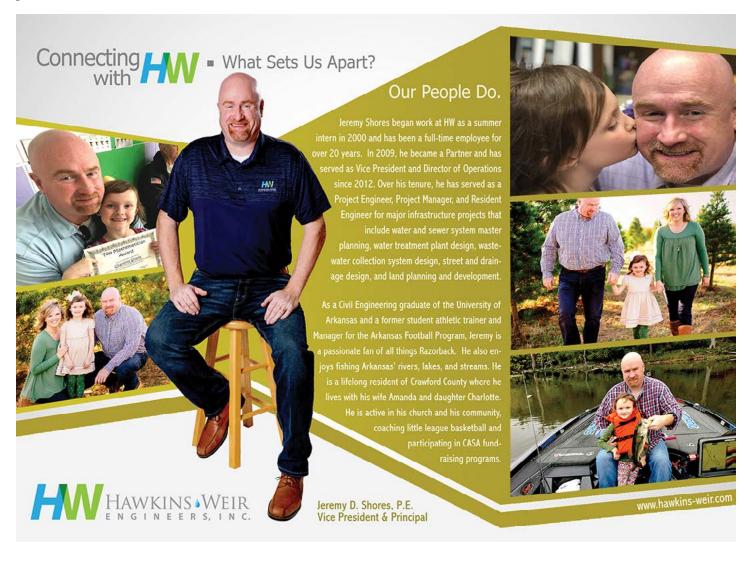
Oren Noble, P.E., and Samuel Nepomuceno joined the Fayetteville office.

Noble specializes in sanitary sewer collection and general civil projects and has more than

years' experience in civil engineering in the private and public sector. He graduated from Arkansas State University with a Bachelor's of Science in Civil Engineering in 1993.

Nepomuceno graduated from the University of Arkansas - Fayetteville with a Bachelor's of Science in Biological Engineering in July 2022. As an undergraduate, he conducted research aiding in the development of passive sampling devices

In the News continues on page 12







Nepomaceno

Torres

for per- and polyfluoroalkyl substances (PFAS) and disinfection by-products.

Olivia Torres joined Hawkins-Weir's Van Buren office. She graduated from the University of Arkansas with a Bachelor's of Science in Biological Engineering in May 2022. As an undergraduate, she conducted research in nanotechnology and consumer machine learning.

Ian Mills ioined Hawkins-Weir's Little Rock office. He graduated from the University of Arkansas with a Bachelor's of Science in Biological Engineering with Environmental



Mills

Concentration in May 2022. As an undergraduate, he performed an engineering internship with the U.S. Forest Service.

## Hawkins-Weir engineers pass their PE exam

Two Hawkins-Weir engineers, Wes LeMonier, P.E., and Will Henson, P.E., have passed the Principles and Practice of

Engineering (P.E.) exam.

LeMonier is a project engineer and has assisted HW in the design of several water and wastewater projects throughout Arkansas. He joined HW's Van



LeMonier

Buren office in late 2016 following his graduation from the University of Arkansas at Fayetteville with a Bachelor's of Science in Civil Engineering.

Henson graduated from Arkansas Tech University in Russellville with a Bachelor's of Science in Electrical Engineering in 2017 and joined HW in 2020. Henson is an electrical engineer and has



Henson

assisted HW in electrical and controls design of several water and wastewater projects throughout Arkansas.

## Michael Baker ranked 28th by ENR

Michael Baker International rose to number 28 in Engineering News-Record's Top 500 Design firms and to number 17 in the Top 100 Pure Designers category.

Michael Baker also achieved the following notable national rankings:

- 5th, Bridges
- 6th, Dams & Reservoirs
- 12th, Water Supply
- 13th, Transportation
- 15th, Construction Management
- 16th, Highways
- 17th, Airports
- 24th, Mass Transit & Rail

ENR also recognized Michael Baker as the #3 Top Design Firm in Arkansas. This is the firm's highest ranking in Arkansas to date.

## Michael Baker hires Arkansas staff members

Michael Baker International has hired several new Arkansas design staff.

Anthony Rivas, E.I., joined the Bentonville Roadway Design team as a civil associate. He earned his Bachelor's Degree in Civil Engineering from the University of Arkansas in May 2022.





Rivas

**Freitas** 

Jeff Freitas joined the Bentonville Roadway/Civil Design team as a senior design specialist. He has more than 20 years of CAD drafting and design experience. He has provided design services for engineering firms in Texas and Arizona. He recently relocated to Arkansas.



Mir Ali, E.I., Michael joined Baker's Little Rock Bridge Design team as a civil associate. He earned his Bachelor's Degree in Civil Engineering from the University of Arkansas -

Fayetteville in May 2022.

## Michael Baker's Saleem earns S.E. license

Hussam Saleem, Ph.D., P.E., S.E., who serves as a project manager in Michael Baker International's Little Rock Bridge Design Team, passed the 16-hour National Council of Ex-



Saleem

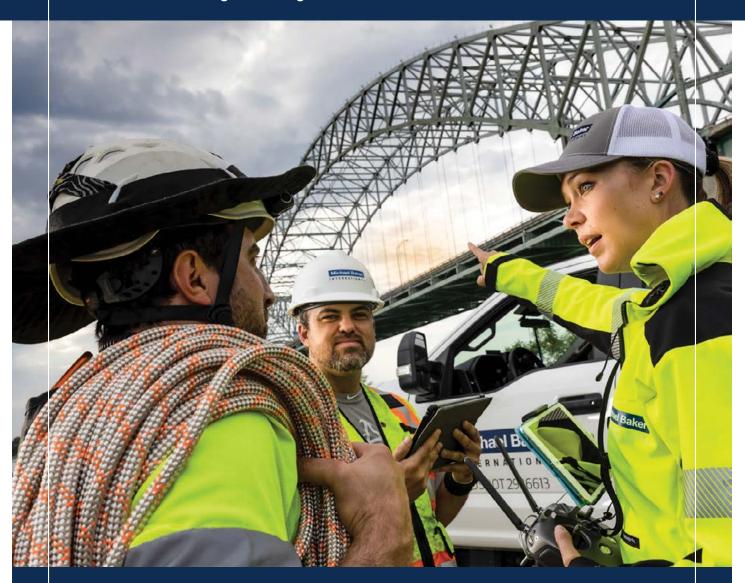
aminers for Engineering and Surveying (NCEES) Structural Engineering examination, and subsequently became a licensed S.E. in Illinois.

The exam tests and recognizes the skills and abilities required to practice structural engineering.

In the News continues on page 15

## I-40 HERNANDO DE SOTO BRIDGE EMERGENCY REPAIRS

ACEC Engineering Excellence Grand Award Winner



ADDITIONAL PROJECT AWARDS

Grand Conceptor Award

ACEC Tennessee Engineering

Excellence Awards

Large Project Winner – Structural Systems

ACEC Arkansas Engineering

Excellence Awards

**Merit Award** NSBA Prize Bridge Awards



## **Olsson picked** by ARDOT for on-call services

Olsson was recently selected by the Arkansas Department of Transportation for its on-call Safety Studies & Engineering Services. The firm will assist ARDOT in the scoping and design of projects to improve highway safety in Arkansas.

Within the last year, Olsson's Transportation team in Fayetteville has worked on projects for the cities of Fayetteville, Rogers, Springdale, Bentonville and Harrison.

## **Smith becomes** a partner at **McClelland**



Smith, P.E. was promoted to partner at Mc-Clelland Consulting Engineers in July.

Smith is a senior associate and project manager for MCE's Aviation Department, where he has been

working for the past decade. He joined MCE's Little Rock office in 2010 after graduating from the University of Arkansas, where he obtained his Bachelor's Degree in Civil Engineering.

## Whitehorn marks 51 years, Barnes hits 20 with MCE

Larry Whitehorn, a construction observer in McClelland Consulting Engineers' Fayetteville office, celebrated 51 years with the company July 4.



Whitehorn



Barnes







Vinyard

Whitehorn joined the firm in 1971.

Daniel Barnes, P.E., celebrated 20 years with MCE in June. Barnes oversees the overall management of a wide variety of the office's ongoing public works projects.

Matthew Vinyard, P.E., and Maneesh Krishnan, P.E., both celebrated their 15year anniversaries with MCE in August. Vinyard is a partner and also serves as the assistant Aviation Department head. Krishnan is the assistant Transportation Department head.

Both work out of MCE's Little Rock location.

## MCE announces seven new hires in three offices

McClelland Consulting Engineers recently hired several individuals for three of its Arkansas offices.

In the Little Rock office, Covy Brown was hired as a project designer, Jason Temple was hired as a senior project manager, Jessie Perry was hired as a CAD technician, and Justin Woodall was hired as a project designer.

MCE has hired three other individuals in other offices. In Fayetteville, Jorge Mares was hired as a CAD technician, and Joe Islas was brought on as a geotechnical drilling assistant. In the Fort Smith office, Jason Winters was hired as a CAD technician.







## McMichael, Smith join Halff's team

Halff has welcomed Garrett McMichael, P.E. and Joey Smith, P.E., to its Little Rock Water/Wastewater team.

McMichael joined Halff in May 2022, with experience in environmental engineering, water and wastewater treatment systems, stormwater management, and hydraulic systems. He has more than a year of project management experience and has experience with group oversight, multiphase project work, developing and maintaining client relationships, and generating client proposals, budgets, and scopes of work. He earned a Bachelor's of Science in Biological Engineering from the University of Arkansas.

Smith brings 14 years of previous experience in engineering in Louisiana. He has reviewed final engineering plans and specifications for water and sewer projects, conducted sanitary surveys at public water systems, collected chemical samples at water systems, and assisted in GIS data collection of water infrastructure assets in northwest Louisiana. He has also managed water and sewer projects for the city of Shreveport.

He earned his MBA and Bachelor's of Science in Electrical Engineering from Louisiana Tech University and is a licensed professional engineer in Louisiana and Arkansas.

Water/Wastewater Team Leader and Vice President Mike Marlar, P..E, PLS, CFM, said, "We are thrilled to have Garrett and Joey on our team. Their experience in water/wastewater is essential to helping us continue growing our practice in Arkansas."

# Crafton Tull does master plan for Conway park

The City of Conway hosted a ground-breaking ceremony in early August for Veterans Plaza at Pompe Park. Crafton Tull provided the master plan for the park, and is working with Sowell Architects to make this plaza a reality.

Veterans Plaza is designed to serve as an inviting, congregational space that will honor the sacrifice of military veterans and their families while providing seating and walking paths. The centerpiece of the plaza will be a monument featuring the flags of each military branch as well as POW/MIA veterans.



GROUNDBREAKING. From left, Crafton Tull's Dave Roberts, Sowell Architects' Cody Ferris, Conway Mayor Bart Castleberry, and Crafton Tull's Brad Peterson and Austin Paul are shown at the groundbreaking ceremony.

Other features in the current phase include a small amphitheater, a pavilion, and improved parking. Crafton Tull has been providing planning and design services for this 25-acre signature park, and there are more developments to come, including pedestrian bridges over Tucker Creek, more walking paths, and additional parking on Morningside Drive.

Pompe Park is located north of Prince Street between Morningside Drive and Kinley Trail in Conway.

# Carson new PM at Crafton Tull

Kirk Carson, P.E., has joined the Crafton Tull team in Rogers as a project manager for local government infrastructure projects.

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## ACEC/A Member Spotlight

## HDR moving to larger state office

Top 5 nationwide firm with worldwide talent and history in Arkansas is expanding to reach new market sectors here

One of the country's largest design firms is expanding its presence in Arkansas.

HDR, which has more than 11,000 employees in more than 225 offices around the globe, was moving to a larger office near Little Rock this summer so it can have more room to grow across market sectors.

The firm also is expanding its local staff over the coming years to increase its already established local transportation presence while meeting clients' needs in transit, rail, aviation, maritime, environmental services and strategic communications.

HDR ranked number 5 in Engineering News-Record's 2022 Top 500 Design Firms, which lists U.S.-based companies according to design-specific revenue for 2021. ENR also tracks specific market and sector rankings. HDR ranked third in the Pure Designers category; fifth in Transportation and Water; sixth in General Building and also Sewer and Waste; and 10th in Telecommunications.

HDR's Arkansas team takes advantage of the firm's worldwide talent while working to grow local staff.

"Recently, a local transportation client inquired about a specialized weir design for a project," said Justin Carney, P.E., S.E., who serves as the transportation lead for Arkansas. "We were able to put together a highly experienced team of engineers from across the nation from our Dams and Levees business group that focuses exclusively on designing similar structures. Many other specialized groups are available throughout HDR."

With the passage of the federal Infrastructure Investment and Jobs Act, the engineering community will need to grow to meet the demand for new and rehabilitated infrastructure projects across Arkansas. Transportation investment is also expected to continue after voters approved the passage of the state's transpor-





HDR provided traffic analysis, conceptual interchange studies, public involvement services, geotechnical and material testing services, design, and full construction plans for ARDOT for the I-30/I-49 Interchange in Texarkana, top photo. The interchange was part of the Texarkana Northern Loop project, which included 15 miles of new alignment mainline, ramps, and crossroads. Bottom photo, HDR provided a feasibility study for North Little Rock Wastewater Utility. *Photos courtesy of HDR*.

tation sales tax extension. In response, HDR is growing its staff in the areas of engineering, environmental and construction services.

While HDR is expanding its Arkansas presence, it is hardly new to the state. Over the last 30-plus years, HDR has completed numerous projects here, including work on roadways, bridges, traffic signals, geotechnical projects and construction engineering inspections.

Its projects include several of the largest transportation projects by the Arkansas Department of Transportation (ARDOT). For example, HDR is providing bridge and roadway design and geotechnical engineering services as a subconsultant for Kiewit-Massman for the I-30 Crossing Project. HDR is helping reconstruct and widen I-30 from downtown Little Rock, across the Arkansas River, to the northern I-30 terminal interchange with I-40. The I-30 Crossing Project corridor has an average daily traffic of more than 130,000 vehicles, making it the single largest project undertaken by ARDOT to date.

HDR has been serving ARDOT as far back as the early 1990s, and it also continues to support the U.S. Army Corps of Engineers Little Rock District.

More recently, HDR has grown its Arkansas services with projects for other clients, including ports in Little Rock and West Memphis, street improvements for the City of Little Rock, rail upgrades in southeast Arkansas, and transit in central Arkansas with Rock Region Metro.

HDR is also providing engineering services for water/wastewater clients in the Little Rock/North Little Rock area, and it's helping private clients expand their operations, including ConAgra and Tyson in northwest Arkansas.

"The promise of better infrastructure in Arkansas has been realized in part due to the efforts of ACEC/A and its member firms, including HDR," Carney said. "We are excited about growing our team in Arkansas to continue to help tackle clients' most challenging infrastructure projects to improve mobility, safety and quality of life for all who visit, travel through or live in the state."



Carson

Carson brings nearly 30 years of experience. He has knowledge of street improvements, industrial subdivision projects, singlefamily residential subdivisions, water and wastewater

projects and site development.

Additionally, Carson has spent significant time working with tribal nations. He has worked as a transportation manager for the Muscogee (Creek) Nation as well as working as a supervisory engineer for the Bureau of Indian Affairs.

Carson also brings extensive knowledge of construction inspection with experience working for the Missouri Department of Transportation. He holds a Bachelor's of Science in Civil Engineering from the University of Missouri - Rolla.





Dodroe

## Three Crafton Tull pros complete Leadership training

Three Crafton Tull employee-owners have completed Leadership programs.

Crafton Tull's Fort Smith office leader, Michelle Dodroe, P.E., recently completed Leadership Arkansas as part of Class XVI. This program equips leaders to become better acquainted with the issues facing Arkansas and educates participants on the dynamic interactions between cities, industries, governmental units, and the people they serve.

Little Rock-based Senior Project Manager Matthew Breckenridge, P.E., recently graduated from the Leadership Greater Little Rock program. This program seeks to develop community leaders by training and informing participants on a wide array of local public policy issues and concerns. The program covers a full slate of topics, including government, the ar-



Mauldin

ea's economy, education, social services, and more.

Ashley Mauldin, AIA, of Crafton Tull's Fayetteville architecture office graduated Leadership Fayetteville. This

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civil engineering | landscape architecture land surveying | program management

## START HERE. GET THERE.





With offices from coast to coast and a dedicated team of more than 160 professionals, CEI is a diverse, experienced and inclusive firm ready to help our clients meet every challenge and take advantage of every opportunity that comes their way.







BRIDGE INSPECTORS. Fred Harper, P.E., center, a project manager with Michael Baker International, discovered the fracture in the Hernando de Soto Bridge and helped make the decision to shut it down. At right is Alicia McConnell, P.E., sUAS, national aerial technologies director. At left is Bridge Department Manager John Zuleger, P.E. Photos courtesy of Michael Baker International.

## Michael Baker wins ACEC Grand Award

### Harper's fracture discovery, firm's Mississippi River bridge repair work honored

Fred Harper, P.E., didn't have any doubts the moment he looked down and saw the fractured tie girder on the Hernando de Soto Bridge connecting Memphis and West Memphis over the Mississippi River.

"I knew right away that the member was fractured and it wasn't completely separated obviously, but I could see the large portion of it was," he said. "Half of the section was fractured, and I knew it was a serious situation."

Thankfully, that situation was safely resolved in less than three months at a cost of \$9.7 million.

Harper and his firm, Michael Baker International, were a big reason why. He discovered the fracture, and the firm helped design the solutions that saved the bridge. For its work, it was awarded a Grand Award at the ACEC Engineering Excellence Awards Gala in Washington, D.C., on May 24. Earlier, it won the Struc-



MICHAEL BAKER INTERNATIONAL engineers inspect the Hernando de Soto Mississippi River bridge using unmanned aerial system technology and rope access techniques.

tural Systems – Large Project award at the ACEC/Arkansas Engineering Excellence Awards. It also won ACEC/Tennessee's Grand Conceptor Award.

Harper was the project manager for a bridge inspection team that was inspecting the main arch-truss spans and the part of the bridge that was above the deck level on May 11, 2021.

About 20 rope access inspectors were working above him, while Harper was supervising, walking along the length of the

deck, and inspecting the lower portions of the hanger cables along the rail and the lower sockets.

The tie girder below the deck was not the firm's responsibility. It had been inspected by an Arkansas Department of Transportation inspector who had failed to adhere to basic standards.

At about 1:50 p.m., Harper happened to look down at the tie girder just east of the middle pier and saw that it was severely fractured. The tie girder is one of



AARON STOVER, P.E., S.E., Michael Baker's regional bridge lead, said the firm was dealing with "a lot of unknowns."

two spanning the length of the bridge, and it's a fracture-critical piece, meaning its failure could cause the bridge to collapse.

In an interview with Building Arkansas in 2021, Steve Frisbee, P.E., ARDOT assistant chief engineer for operations, compared the bridge to a compound bow, with the tie girder serving as the string. Cutting the string even partially would cause it to snap and the bow to open. In the case of the bridge, the arches would expand and push against the piers, leading to a collapse.

"It was definitely a serious issue, and there have been bridge collapses in the past. ... The engineers don't really understand at this point how it didn't fall," he said. "We definitely were blessed."

Harper said his initial reaction upon seeing the fracture was "a feeling of shock." He knew the team had to act quickly. The team agreed the situation was serious and relayed its findings to points of contact with the Arkansas and Tennessee Departments of Transportation. Harper called emergency services to inform them the bridge needed to be shut down.

Realizing the situation was urgent, Harper and the team made the call to close the bridge and stop traffic themselves at about 2:15 p.m. They explained the situation when law enforcement authorities arrived. Within a couple of hours, representatives from ARDOT and TDOT were on the scene.

Harper said the decision to take the initiative and stop traffic was not difficult.

"It happened so quickly," he said. "The seriousness of the situation, it was a no-brainer. I can envision other types of situations that would be a much more difficult call, but this one was not."

Harper and Michael Baker International would play a critical role in the repair process. Sixty professionals in 20 offices would work with ARDOT, TDOT, repair contractor Kiewit and others. Unmanned aerial systems and a secure live feed relayed information to staff members. At one point soon after the discovery, a lone Michael Baker International professional physically inspected and measured the fracture. With the drones and live feed, team members could see what he was seeing.

"That was a very powerful moment for us because we were able to get information and real-time data from the field on exactly how much the tie girder had distorted, which was critical to our repair plans," said Aaron Stover, P.E., S.E., Michael Baker International regional bridge lead and vice president.

The repair process was completed in three phases. In phase 1, the tie girder was stabilized so construction crews and equipment could be staged on the bridge. Within a week of the bridge's closure, a stabilization splice with temporary structural steel plates restored the fractured section's capacity. In phase 2, eight three-inch-diameter high-strength steel post-tensioning tendons were connected at either end of the fractured tie, removing about 1.2 million pounds of tension. New strengthening plates covering about 150 feet replaced the temporary plates. While this was going on, non-destructive testing of all similar welds in the tie led to repairs. In some cases, steel plating was added. Harper coordinated part of the nondestructive testing. In total, close to 200,000 pounds of structural steel and 9,000 bolts were used to make the repairs.

"It was very challenging at times," Stover said. "There were a lot of unknowns that we were dealing with, so getting your head around some of these engineering challenges and figuring things out as we went, as you might imagine, was a pretty high-stress situation. Obviously, we all breathed a big sigh of relief once we had that stabilizing plate out there that gave us that little extra measure of comfort.

"As an engineer, looking out for the public safety, that's what you hold in highest regard, and we're happy to be a part of it and happy that it turned out to be a successful outcome for both states and the communities."



## Another Holder takes the helm

ACEC/A's president, Garver's Jerry Holder Jr., P.E., is leading the organization 40 years after his dad did.

An engineer named Jerry Holder is now ACEC/A president – again.

Jerry Holder, Jr., P.E., Garver's senior vice president and director of transportation, holds the same position held by his dad, Jerry Holder, 40 years ago. The senior Holder spent the first half of his career at Bill Graham and Associates and the last as the Pulaski County Special School District's director of plant planning.

Holder, an only child, remembers surveying with his dad as a youngster. When Holder was in high school, his dad would ask him how he'd arrived at the answer to a problem in his schoolwork.

"He'd give me the impression that I had gotten it wrong, but then he made me defend it," he said. "I'd come up with the same answer, and it reiterated that, hey, it's not just the answer. It's the thought process."

Holder considered becoming a dentist and an eye surgeon but in the end returned to his engineering roots. When he went to college, his dad gave him his old textbooks and homework assignments. In one engineering structures class, points had been deducted from his score despite the answer being correct. The professor had penalized his dad for his handwriting.

As ACEC president, Holder said growing the talent pool of engineers is a priority. The passage of the federal Infrastructure Investment and Jobs Act will create many opportunities for work, but there aren't enough engineers to do it. For Holder, the solution starts with supporting STEM classes – science, technology, engineering, and math – in schools.

Holder also hopes to pass legislation that would make Arkansas' indemnification laws fairer to engineers. At its worst, the current law could force firms to hire a client's attorneys at the beginning of the legal process, with no guarantee of ever being reimbursed.

Holder said ACEC/A should be the voice of the consulting engineer community.



ACEC/A PRESIDENT Jerry Holder stands in front of a drawing of the 30 Crossing Project in his office at Garver's headquarters in North Little Rock. Holder is the project's program manager.

"If an agency is trying to put a contract term on us that's not fair, it's very difficult for an individual company to go argue with that agency because then that agency may just say, 'Well, we just won't hire you," he said. "But if that firm can go to ACEC and say, 'Hey, this is happening. Can ACEC go and talk to them?' then it's not a personal deal. It's a community deal, and so I want to always be there to represent individual firms on an ACEC level and try to make sure that we play on a level playing field, and so do all our agencies."

#### **Starting at Garver**

Holder was an intern at Garver in 1985. That year over Christmas, he worked on a hydroelectric plant at Murray Lock and Dam near the company's current headquarters that generates electricity for North Little Rock.

After graduating in 1986, he went to work full time for Garver. Going to classes at night, he earned his master's of business administration degree from the University of Arkansas at Little Rock.

His first major project for Garver was the second runway at what is now the Bill and Hillary Clinton National Airport in Little Rock – a runway where he often lands now.

Not long afterwards, he embarked on his first major project where he was a lead designer: I-49 from south of what is now the Bobby Hopper Tunnel north to Fayetteville. Holder led the roadway design while Garver's Glynn Fulmer, P.E., led the bridge design.

The tunnel was contracted to a firm based in the Northeast part of the country. In a meeting at Garver's old downtown headquarters, a professional from Boston asked Holder where the nearest fire department was. Holder told him there wasn't one and then rolled out an aerial photograph to show just how remote the location was. The closest was 30 miles away, so a radio tower was erected to provide adequate communication.

Holder recalled approaching the edge of a cliff to study where the road would be laid out.

"I remember that, holding onto a tree, looking out and saying, 'We're going to put a bridge from here to there, and when people bust out of these trees, it's going to be one of the prettiest views in the state as far as driving," he said. "I feel like I was right. When you go across some of those bridges, you look each way down the valley, it's really pretty."

The Little Rock native would soon leave his hometown for the next 20 years. In about 1993, he and former Garver CEO Dan Williams, P.E., moved to Tulsa and opened Garver's first branch office. About four years later, Holder moved to Jackson, Mississippi, to open its second. When his father-in-law grew ill in Dallas and Holder's wife, Pam, wanted to go there to help, Holder explained to the company that he would be moving. Garver offered him the opportunity to open

Continued on next page



an office there, but he knew he would not have time to do that.

Instead, he spent the next 12-13 years working for HNTB, eventually becoming a vice president and Texas district leader who oversaw the company's offices in that state. Among his activities was serving as program manager for the North Texas Tollway Authority and as program manager for a Dallas stormwater project that constructed a tunnel that was 100 feet below ground and 30 feet in diameter.

#### **Connecting Arkansas**

In 2012, Garver asked Holder to return. He rejoined the company in October planning on remaining in Texas. But the next month, Arkansas voters passed a temporary half-cent sales tax to fund the Connecting Arkansas program. A month later, ARDOT said it was hiring a program manager, which is what he had been doing in Texas. In January, he interviewed for the job. He moved back in 2013.

The Connecting Arkansas Program would be one of ARDOT's largest-ever highway construction programs. It involved 36 projects in 19 corridors. Holder met with representatives from eight engineering firms at Garver's headquarters and told them that everyone would get a job starting out. Those who performed well would get more work. He tried to be respectful.

"I think you'll find that we're one of the most ethical industries out there," he told Building Arkansas magazine. "You don't see a lot of engineers being put in jail for fraud at the civil engineering level. ...

"We're really risk-averse people. ... Well, maybe a better way to put it is that we're conflict avoidance specialists, and so we don't want to get into arguments, whether it's the public or whether it's our other consulting engineering friends. The whole time I did this, I thought to myself, 'Hey, that guy might be the program manager next time, and I might be the designer, so I'd better treat him like I want to be treated."

While most projects were not controversial, opposition arose to the 30 Crossing project enhancing Interstate 30 through Little Rock and North Little Rock and reconstructing the Arkansas River Bridge. Some community activists

"If you aren't calm, it's not going to get defused, period. And then, you have to acknowledge that you're listening to them. Even if it's a good, bad or otherwise idea, you've got to listen to it, and you've got to come up with a reason of doing it or not doing it. You can't just brush them off. People want to be listened to. If you make them feel like you're not listening to them, then they're going to dig their heels in, and it's not going to get resolved."

at one time argued instead for a boulevard design. Holder became one of the project's primary faces.

"I presented to the Little Rock City Council," he said. "I said, 'Hey, I've just got a really brief presentation because I have to go across the river and give this same one to the North Little Rock city council after this.' One of the council members leaned into their microphone and said, 'Well, you're not going to make that meeting.' And I thought, 'OK."

City council members asked pointed questions that evening. Afterwards, Holder approached the most challenging alderman and invited him to lunch to discuss concerns. The alderman called the next day, they went to lunch, and he became a strong supporter.

"He asked me if we don't do this job, what's going to happen to downtown Little Rock?" Holder said. "And I said, I think it'll die a slow and painful economic death. He asked me why. I said, 'Well, you can go to Dallas, and the same thing was happening to Dallas until they opened up the toll road down there and widened [I-]75."

Unfortunately, Holder couldn't have dinner with everyone who opposed the project. He spoke at a couple of large public meetings at the Clinton Presidential Library. Some members of the public continued to oppose it.

What started as a \$540 million project has grown to more than \$700 million with additional work and inflation. It was scheduled to be finished in 2025, but now the work won't be completed until 2027. But the earlier contentions have largely been resolved, and the public's input improved the project. For example, designers altered the Cantrell interchange to create a large green space between the Clinton Library and downtown Little Rock.

"We can say we listened to the citizens, and we made changes to the design to accommodate some of the things that we didn't know about the community when we started," he said. "So having those public meetings, they're not just for show. They're to listen and learn."

His earlier life experiences had prepared him for the job. He'd faced opposition while serving as program manager in Dallas. Before that, he'd been involved in civic organizations in Tulsa and Jackson. In Tulsa, he'd been appointed to a golf authority formed after a group of landowners had donated land to Broken Arrow, Oklahoma, with the stipulation that a golf course be built. He was the engineer representative and the only member in his 30s without gray hair. He watched how an older member would defuse tense situations with the public.

He saw the same dynamic while in Texas serving on the board of the Frisco Economic Development Corporation for eight years.

"You've go to stay calm yourself, first," he said. "If you aren't calm, it's not going to get defused, period. And then, you have to acknowledge that you're listening to them. Even if it's a good, bad or otherwise idea, you've got to listen to it, and you've got to come up with a reason of doing it or not doing it. You can't just brush them off. People want to be listened to. If you make them feel like you're not listening to them, then they're going to dig their heels in, and it's not going to get resolved."

How can a person stay calm in such a challenging situation?

"I think part of the way you stay calm is that you just know your craft first of all, and you have confidence that you know what you're talking about," he said. "Obviously, if I went in to talk about nuclear energy and someone started questioning me, I probably wouldn't stay calm because when you don't know your subject, you start to defend yourself in ways that you probably shouldn't. So I think just knowing the project and knowing your craft helps you stay calm."

## Farmer: Show ASPE's benefits

The new president says engineers will join the way he did: By someone inviting them

Kale Farmer, P.E., CFM, is not a kale farmer. In fact, he's not even a "Kale."

The new Arkansas Society of Professional Engineers president's real name is "Kenneth," although no one has ever called him that and he probably wouldn't know to answer if someone tried.

He's actually Kenneth Lloyd Farmer III. He's named after his father and his uncle, the latter of whom died in the Korean War.

"In the hospital, some family members started with 'Big Kenny' and 'Little Kenny," he said. "And my mom said, 'Absolutely not.' She said, 'We're going to call him 'Kale."

Kenneth Lloyd ... K.L. ... Kale, right? "The initials, 'K.L.,' that would make sense, but she denies that," he said. "She says she just came up with 'Kale' out of the clear blue sky, and that's what it was and has been since."

Farmer, 39, is a certified floodplain manager with FTN Associates working out of the firm's Fayetteville office.

Like many engineers, Farmer first became involved in ASPE at the chapter level when someone encouraged him to go to a meeting. Soon chapter members were looking for volunteers to serve as officers. He eventually became involved at the statewide level and worked his way up to being president.

"It's important, definitely, because they advocate for professional engineering licensure, keeping the ethics front and center as a P.E., really sticking to that Engineer's Creed, keeping public safety at the forefront," he said of the ASPE. "There's been some pushes in recent years to do away with licensure as a whole throughout the state, and engineers are one of those that I feel should be protected. You don't want somebody who hasn't done the work, have the background, to design different features without that license."

Farmer said the ASPE serves as an advocate for engineering among elected officials. He said it along with ACEC/Arkansas have been able to tackle engineering issues from different angles.



Like other community and professional organizations, it's been a challenge for ASPE to keep its members involved, particularly during the pandemic. Farm-

er said the way to recruit new members is to do what was done for him – invite them.

Continued on next page



"We have to get younger staff involved, and I think that's going to come from somebody higher up at each organization saying, 'Hey, there's a meeting. Sign up. Go," he said.

Farmer said ASPE should help engineers understand the benefits of membership, including professional development hours and the Society being the voice of professional licensure.

"We have to make sure that it's known how beneficial this is, and what the end game for ASPE is as far as keeping that licensure secure, keeping people acting ethically in their jobs and projects," he said. "I think it's going to take a combined effort both from the ASPE, the state chapter, the local chapters and the leadership, ownership of the big firms to push those folks to go to those meetings and get involved.

"Once they're involved, I think it will be kind of an easy thing to keep them coming back, but numbers is really the best way to keep this organization viable. We've got to get enough members that people see a benefit of coming for the networking. It's not just a meeting of five people. It's 25 people or more."

Farmer was born and raised in Rogers and graduated from Rogers High School as the oldest of three children. His father was a policeman who eventually became Bella Vista's police chief, while his mom was a radiology technician. He had enjoyed his math and science classes as a high school student, so he enrolled in the University of Arkansas College of Engineering. He spent a year in industrial engineering but decided he wanted a more hands-on discipline and switched to civil engineering.

Also, he had done a lot of hiking and camping growing up and enjoyed navigating and studying topography. He'd made it all the way to Life Scout, the step before Eagle Scout, when he decided to switch to Venturing, a separate Scouting youth program.

"Around the time that I was starting to think about Eagle Scout projects, the Venture Crew started," he said. "I jumped over there because it was doing more exciting stuff, and [it was] co-ed, honestly. And it worked out. I wound up meeting my wife [Stephanie] in that Venture Crew. She was on the trip that we took to

"There's been some pushes in recent years to do away with licensure as a whole throughout the state, and engineers are one of those that I feel should be protected. You don't want somebody who hasn't done the work, have the background, to design different features without that license."

Canada. Her boyfriend was along, too, but that didn't last much longer."

During his last two years of college, Farmer worked an internship with Crafton Tull in its Rogers office. When he graduated, he took a job with that firm in its residential development department. While there, he developed an interest in drainage and flood plain management and passed his certified floodplain manager exam. In 2007, he began working for FTN, which specializes in stormwater and floodplain management.

"There's a lot of, both the modeling aspect, trying to figure out what's out there and how water's going to behave, how high, how fast, all of that, and then pushing that forward into, 'OK, how do we manage the floodplains?" he said. "It's hard to control stormwater, but how do we direct it where it can be less harmful or keep folks out of harm's way?"

In his 15 years, he's worked for cities in the Northwest Arkansas region where he grew up – Rogers, Bentonville, Fayetteville – along with other cities including Little Rock and Conway. He's done a lot of work with the Federal Emergency Management Agency, where the work has trended toward two-dimensional urban studies.

Farmer said developers often call FTN at the end of a project when stormwater issues arise. He enjoys working for a firm that specializes in stormwater management. After big rains, he drives around taking pictures, as do some of his coworkers.

"I would say there's a lot of people who really like numerical analysis, so modeling is kind of where it's at, at least in the group that I work in, water resources group," he said. "We really like to dive in, and if we come across a problem, we're all working on similar projects using the same software generally. We bounce problems off each other. One person might have seen an error message and know exactly what that means even if it's very obscure, and so there's a lot of collaboration in that way."

Some of the most rewarding work has involved his hometown. He worked on a project involving Lake Atalanta Park in Rogers, which he visited growing up with his parents and grandparents. For another project, Rogers wanted to expand Veterans Park and add soccer fields adjacent to a creek, but a subdivision on the creek's other side had already experienced flooding issues. Underperforming ponds were opened up so water could drain off the fields into a storm sewer and make its way to the creek. The improvements kept the entire area, including the subdivision, out of the 100-year floodplain. He also helped restore a stream bank off Pleasant Ridge Road along the route his school bus traveled when he was a student.

It was, he said, "Another project that hits close to home. All of those, the Lake Atalanta, the stream bank and the Veterans Park are all right around where I grew up, so something that's really cool [is] being able to help folks and solve problems in your backyard."

Farmer said cities are vulnerable to stormwater damage. Many originally were developed when there was little floodplain regulation and management. In downtown Bentonville, for example, the stormwater was managed with road-side ditches that have filled in over time, so a strong rain event leads to standing water. While FTN Associates hasn't completed a formal study, its analysis of individual events indicates that cities are seeing smaller pockets of very intense rains that exceed the design storm events for which they are prepared.

Outside of the office, Farmer has plenty to keep him busy. He and Stephanie have twin 11-year-old boys, Anderson and Fletcher, and a nine-year-old daughter, Rosemary. All three children are involved in Scouting, so Farmer has been a Scout leader and cubmaster for a pack in Rogers. His sons play travel baseball, and Farmer has coached them at times. Rosemary is involved with competitive dance, and he's a "prop pop," which means he builds, transports and handle the props.

program lets participants take an upclose look at the challenging issues facing the city and county as well as the hidden gems that make Fayetteville special.

## **Burns & McDonnell** hires three in state



Wheeler

Burns & Mc-Donnell continues to grow in Arkansas with transfers from its Kansas City headquarters and additions to the firm. Three hires this summer are Jennifer Wheeler; Han-

nah Allen, E.I.; and Garrett Wallace, E.I.

Wheeler joins the office as a senior consultant within the firm's 1898 & Co.





zero-emissions team. She comes from the North American Council for Freight Efficiency and will provide fleet operators with strategic guidance in making the business case for and successfully transitioning to low- and no-emissions fleets. Prior to that, she spent 18 years in various roles within Walmart Transportation.

Allen joins the firm's bridge practice as an assistant structural engineer after graduating from the University of Arkansas. She is continuing her studies through the University of Oklahoma's online Master of Science in Civil Engineering program, with an emphasis in structural engineering. She is working on bridge replacement projects for ARDOT.

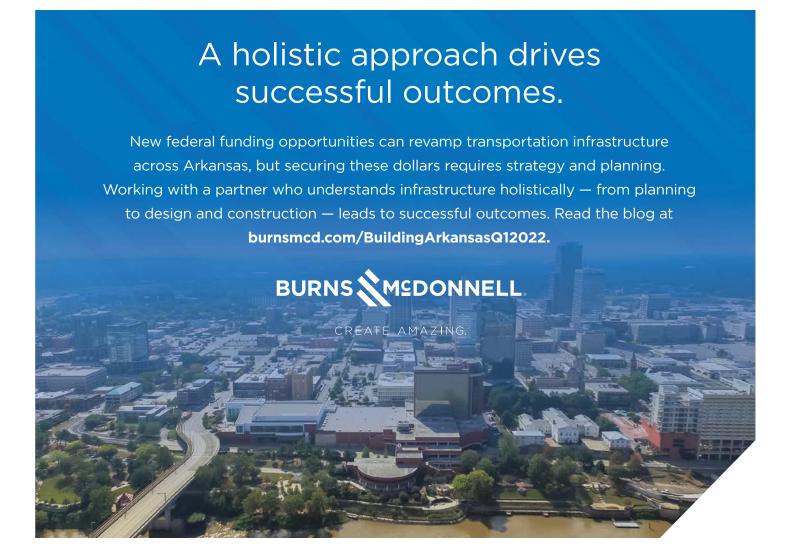
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## **Expert: How low-cost marketing is done**

In an ACEC webinar Aug. 9 engineering marketing expert Lindsay Young emphasized a targeted, personal touch

Engineering firms that might believe they can't handle more business should market themselves knowing they'll eventually wish they had it, and they can do so inexpensively.

That was the message of an ACEC webinar, "Low-Cost Marketing Ideas," presented Aug. 9 by Lindsay Young of Rogers-based nu marketing, which works with ACEC/A and engineering firms.

"The best time to market is when you're busy because there will be a dip, and you will be more prepared because you have marketed your firm, and you will see a lot less of a dip than those firms that don't market consistently," she said.

Young stressed having a SMART marketing plan, the acronym standing for "Specific, Marketable, Actionable, Relatable and Timely." Firms can start by setting three to five goals in a brainstorming session and then consider how they can build upon those. Firms should seek feedback from clients to determine their strengths and weaknesses and then use that feedback to create testimonials that they can use in their marketing efforts.

Firms should make a list of their prospects with specific names and contact information. A small, targeted list is better than a large, general one that can be overwhelming. One of her contractor clients that performs preventative maintenance sent 100 cards to facility managers with a silver dollar glued to the top left corner. The effort led to six sales meetings and three service clients.

Young stressed the idea that firms should be different both in their business and in their marketing efforts. One way to know how they are different is through client surveys. One architecture firm's clients said other firms design to a Taj Mahal, but that firm listens, designs to the client's needs, and communicates well.

Firms will want to have an active social media presence. Linkedin is Young's preferred tool for professionals and businesses, with Facebook second, Instagram third and Twitter fourth. Social media



## Low-Cost Marketing Ideas



- Strategic Marketing Plan
- Gather Client Testimonials
- Call Past and Existing Clients
- Create a Very Targeted Prospect List
- · Write a Hand-Written Note
- Utilize Social Media
- Update Website Frequently
- Volunteer for Speaking Engagements
- Publish E-Newsletters

**GETTING THE WORD OUT.** In this screenshot, Lindsay Young of nu marketing sums up her webinar presentation on "Low-Cost Marketing Ideas."

can help firms be seen as subject matter experts. They can connect not only with clients but also with potential employees who can see the type of work the firm is doing and what it's like to work there. She said posts should always include an image or video. Advertising on social media is relatively inexpensive. One client that works with school districts does a lot of posting and blogging that it will boost with \$250 to \$300 a month in Facebook and Twitter ads.

"Social media can be a black hole, but it also is a great place to connect with clients and prospects," she said.

Likewise, firms should keep their website updated at least quarterly but preferably monthly. Google ranks frequently updated sites higher than those that are not frequently updated. Include photos of projects, and provide updates on the firm's services. All client-facing professionals should be featured on the website.

"People do business with people they like and trust, so if they go to your website and go to your team, and they see your team, and there's these smiling faces, they connect with you," she said.

Between social media posts, the website, and e-newsletters, firms can repurpose content and use it in multiple places. She gave a shoutout to Building Arkansas, noting that member firms featured in the magazine can be found on its online version at arkansasengineers.org.

Firms should be a presence at their client's conferences and should seek to be speakers or panel hosts. Doing so gives them an opportunity to educate their clients, be seen as subject matter experts, and stay visible.

"Marketing is about consistency," she said. "That's really what marketing is about. So you have to be consistently top of mind with your clients."

Personal touches are important, especially as Americans come out of the isolation of the COVID-19 pandemic. People are hungry for interaction. Even in the digital age, a handwritten note after meeting someone new can be very effective. Handwritten notes are personal, they don't take much time or cost much money, and people will open them. She'll also cut out printed articles about clients, add a handwritten note and mail it.

"I am a big believer of handwritten notes," she said. "It's a lost art, I know. You probably don't receive very many, and you probably remember the ones that you do. Write your clients and your past clients a handwritten note."

Wallace is an assistant civil engineer in the municipal engineering practice with a focus on roadways, storm drainage, and water/wastewater systems. He graduated with a Bachelor's of Civil and Construction Engineering degree from the University of Arkansas at Little Rock. His training, construction management courses and field experience will enable him to integrate into the firm's design-build focus.

# ETEC helps plant install red, white, blue screw pumps

Environmental Technical Sales replaced three internal lift screw pumps by Evoqua Water Technologies at the Jacksonville Wastewater Treatment Facility.

ETEC Vice President Chad Cooley said the replacement was the first phase

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of an expansion and upgrade of the plant. The plant also is retrofitting and expanding its aeration system and expanding its filtration and disinfection capabilities. It also is upgrading its grit system using Smith and Loveless equipment that is being provided by ETEC. The design work was provided by Hawkins-Weir, and the construction was done by Van Horn Construction.

Since Jacksonville is the home of the Little Rock Air Force Base, the client wanted a patriotic theme with red, white and blue pumps.

# Benchmark Group's Kraner one of Forty under 40

Benchmark Group, Inc.'s William R. Kraner, P.E., CEM, has been recognized by the Northwest Arkansas Business Journal and sponsor InTrust Bank as a Forty Under 40 honoree.

He is the program manager for the refrigeration and energy teams and serves on the board of directors. He is active in the Children's Advocacy Center of Benton County.

"Will is not only a talented engineer, he is also a servant leader and valuable role model. He trains and mentors many team members while bringing integrity and excellence to his work. We are happy to see him receive this outstanding honor and congratulate him," said David P. Kimball, P.E., president of Benchmark Group.

