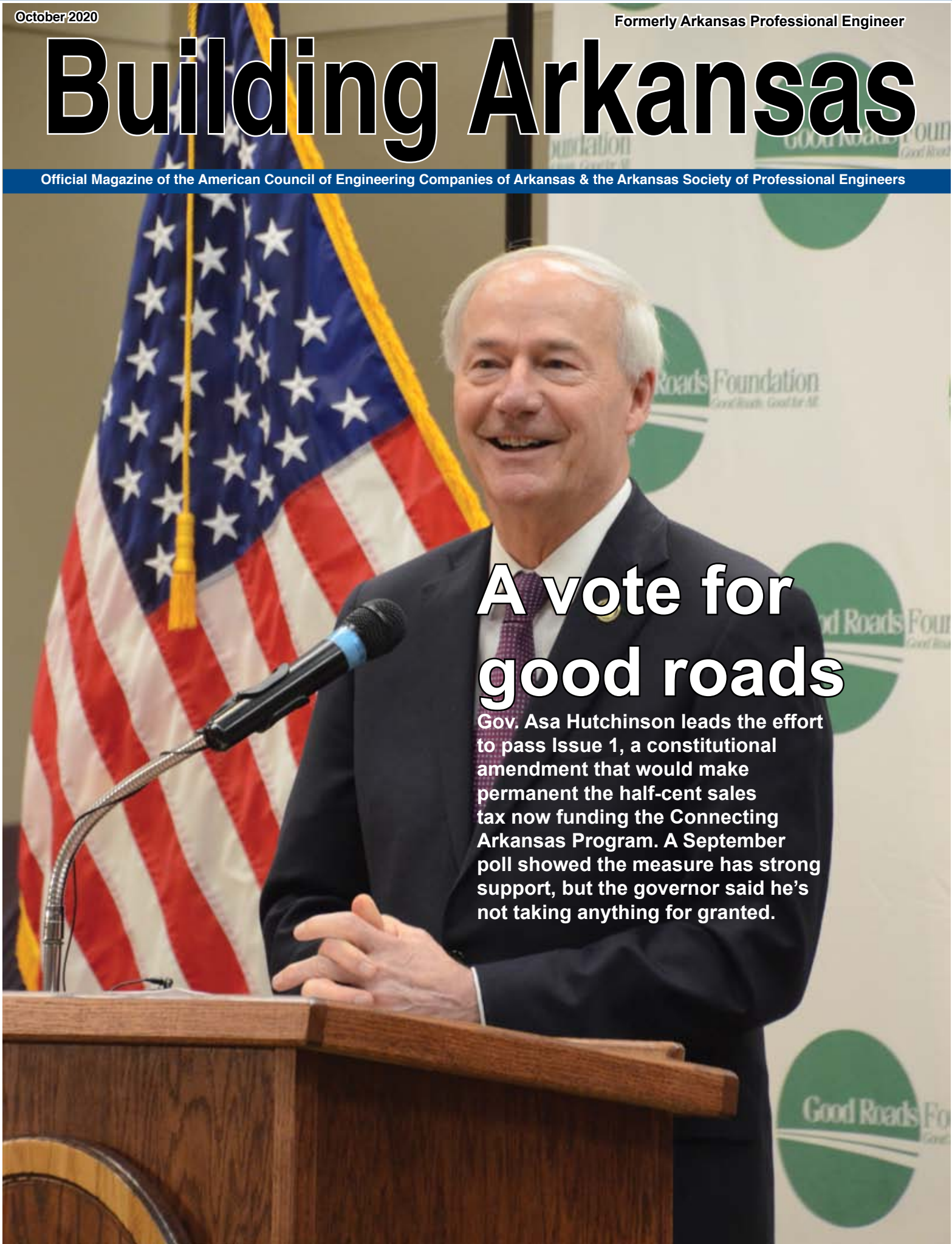


Building Arkansas

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



A vote for good roads

Gov. Asa Hutchinson leads the effort to pass Issue 1, a constitutional amendment that would make permanent the half-cent sales tax now funding the Connecting Arkansas Program. A September poll showed the measure has strong support, but the governor said he's not taking anything for granted.

When to adapt, and when to fight

Engineering is based on timeless principles – what goes up must come down, for example – but engineers also must adapt. Such has been the case in 2020.

The year began like any other, with one of the calendar's biggest events, the Engineering Excellence Awards, occurring March 5 at the Governor's Mansion. Little did we know how much our lives would soon change. Virtually everything on the calendar since has been cancelled or moved online.

Adaptation is inconvenient, but it also makes you stronger. The pandemic has forced us all to trim fat from our lives and organizations, while making us use technology that's been sitting on our shelves. Even though Zoom was founded in 2011, we still felt the need to fill up our tanks and drive three hours to meet. We still should do that sometimes, but now we realize we have a choice.

A good example of this adaptation will be the Emerging Leaders program, which trains young industry leaders in "soft skills" like management and communication.

This year, it will be a hybrid program where participants will gather in person for some events but attend others virtually. This is not only a challenge but also an opportunity because it will allow more participation from presenters who couldn't drive to attend.



Angie W. Cooper
Executive Director

Meanwhile, we've developed a "past presidents" program to use as a resource for the Emerging Leaders program and for ACEC/A as a whole. Our past presidents have experiences and a historical perspective that can be beneficial for the organization. If you are an ACEC/A past president and want to participate, shoot me an email at awcooper@engineers.org.

One adaptation we should try to avoid is figuring out how to exist in a world where highways, streets and roads have hundreds of millions of dollars less in funding each year. That would happen if voters this November say no to Issue 1, the half-cent sales tax.

Issue 1 would provide \$205 million annually to the state's highways and another \$87 million split between cities and counties. That money would produce safer, smoother, less congested roadways.

For the engineering community, this is almost a no-brainer. We see regularly the consequences of declining infrastructure. For average Arkansans, however, it's not so obvious. When they turn on the faucet, water comes out. When they flush the toilet, it goes away. And when they cross the bridge, it doesn't collapse. I've had friends tell me they only drive locally, so why should they vote to extend a tax?

That's why the engineering community must talk to them in their own language. Numbers like \$205 million mean nothing to our neighbors, but they know what it costs when they hit a pothole. They also understand what a death trap Highway 70 between Benton and Hot Springs was before the Connecting Arkansas Program turned it into a much safer route.

The stereotype is that engineers are really smart and somewhat technical. But engineers also must communicate costs and benefits with average people, including local elected officials, in language they can understand. I encourage each of you to be prepared to use that same skill and share with Arkansas voters why this is the best half cent they could spend.

You can start with a couple of friends of mine. And if you're not confident in your ability – and you're kind of young – check out the Emerging Leaders program. Did I mention part of it will be virtual this year, and it will be better than ever?

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Building Arkansas

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For HSA Engineering, the coming years will be a time of change and opportunity. The mechanical, electrical and plumbing firm will be responding to new ventilation design standards in the wake of the COVID-19 pandemic.

14 *Cover / Good news for good roads*

When voters in Arkansas cast their ballots this election season, they'll decide not just who'll be president for four years, but how Arkansas' roadways will be maintained for the next 40. And if a poll taken Sept. 19-21 accurately reflects voter opinions, the roadways will be getting some much-needed funding.

18 *Affiliate Spotlight / Springdale Water adds ex-city, huge dryer*

Springdale Water Utilities tries to conduct itself like it's a business, and its business is growing. In early September, the water/wastewater utility was quickly incorporating what had been Bethel Heights' operations into its own after that city was annexed into Springdale. Meanwhile, the utility this summer began full-time operation of the largest sludge belt dryer of its type in North America.



14 Gov. Asa Hutchinson told the Arkansas Good Roads Foundation Sept. 23 that a poll of 800 likely voters found 69% favor Issue 1. It would enact a constitutional amendment making permanent a half-cent sales tax for highways. Forty-four percent said they were "definitely for" the tax. However, he said he wasn't taking victory in the campaign for granted.

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Make Issue 1 our number one issue this election

For Arkansas' engineers, the top priority on this year's ballot does not involve any candidates. Instead, it's about a stronger, safer Arkansas.

Issue 1 would make permanent the half-cent sales tax that is currently funding the Connecting Arkansas Program. It would provide \$205 million annually for Arkansas state highways and \$87 million that would be split between county roads and city streets.

That money would come from a tax that Arkansans are already paying and that costs the average family only \$8 a month. That's a bargain considering the benefits it brings: less congestion, safer roads, a stronger economy and more jobs. I'm trying to think of an investment that would offer a better return. Maybe buying stock in Zoom last year?

What if Issue 1 doesn't pass? The Arkansas Department of Transportation cannot forever do more with less. Instead, it will do less with less. Cities and counties will lose millions of dollars for roads, streets and bridges that they're currently receiving. We cannot continue to rely on Washington to solve our problems for us. Arkansans stepped up big in 2011 and 2012 showing transportation funding is a priority for us, and now its time to make



Steven Beam, P.E.
ACEC/A President

sure we can take care of ourselves.

This is the best chance Arkansas has had in a long time – and will have for a long time – to address the state's highway needs. The major stakeholders are united, and the governor is leading the effort. Last year, lawmakers passed the first

part of the governor's long-term program, which provided \$95 million for highways and \$13 million each for cities and counties. That's a start, but it's not enough. We need to pass the second part of the program this November.

As engineers, we have a unique perspective on this issue because we'll be transforming those dollars into pavement. We also can play a special role in helping our fellow voters understand Issue 1. I don't have any objective information backing this up, but I like to think the average person sees engineers as trustworthy sources of information.

Let's make use of this trust that we've earned by getting out there and telling people why Issue 1 is important: our families and friends, our church group, Chamber of Commerce and civic club. Educate yourself at voteforroads.com and share the importance of November!

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We're only as good as those who follow us

First, I would like to share my excitement to serve as your Arkansas Society of Professional Engineers president. I consider this an honor and privilege, and I look forward to the upcoming year. I want to thank our outgoing past president, Fred Harper, P.E., with Michael Baker International, and outgoing national delegate, Travis Scott, P.E., with FTN Associates. Also, I would like to welcome our new state director, Tyler Avery, P.E., with Mid-South Engineering, and our new national delegate, Brad Peterson, P.E., with Crafton Tull. Brad is a familiar face to the board having previously served a rotation through the other officer positions.

ASPE offers a means for development and growth in our younger engineers. This starts at the chapter level by encouraging new engineers to attend meetings and develop interest. This interest could lead to becoming an officer. Serving as an officer exposes younger engineers to more of their peers in their geographic area, provides a means to develop leadership, and allows opportunities for public speaking in front of peers, just to mention a few



Daniel George, P.E.
ASPE President

benefits. Building and polishing all these skills is a directly transferable benefit to the practice and business of engineering.

We are only as good as those who follow us. This applies to state and chapter officers encouraging those following them to become more involved as officers at either level. This also applies to firm leaders. These

leaders are in a position to encourage employees to become further involved in our professional and technical organizations. Supporting the employee's involvement lets the employee know the firm believes in the mission of the organization. Firm leaders lead by example, with their own professional and technical organization involvement. As the involvement in these organizations aids the development of our younger engineers, we all benefit as we are only as good as those who follow us.

COVID-19 postponed the 2020 ASPE Annual Conference to August, and then the in-person Annual Conference was ultimately cancelled. ASPE is currently putting forth efforts for virtual weekly lunch hour sessions during October. More details to come!

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In the News

Garver one of best employers, says Zweig

Garver ranked number two on Zweig Group's latest Best Firms to Work For list of A-E consulting firms with 200 or more employees, the largest category in its annual awards program.

This is the seventh consecutive year that Garver has been included among the top three in a ranking that recognizes the industry's top firms in the United States and Canada.

Garver, which now boasts nearly 800 employees across the United States, has long been committed to providing the best employee experience through a competitive pay structure and employee benefits, the necessary resources to achieve work-life balance, and a responsive executive leadership team.

Garver was also named to Zweig Group's Hot Firms list, the 10th consecutive year it's been included among the industry's fastest-growing firms.

Garver on ENR's environmental, aviation lists

Garver appeared recently on two Engineering News-Record lists after having already appeared in the top 125 of its annual Top 500 Design Firms list.

Garver was number 21 on ENR's list of top airport consultants and number 147 on its Top 200 Environmental Firms list.

Garver has been providing solutions to increase the efficiency and safety of airports across the country for more than six decades. Today more than 90 aviation-specific engineers, designers, and planners collaborate with Garver experts across various disciplines to deliver designs for improved runways, taxiways, electrical systems, and landside facilities, as well as long-term planning efforts.

Garver also improved more than 30 spots on this year's list of Top 200 Environmental Firms, which tracks percentage of gross revenue reported from environmental services over the previous year. The rise can be attributed in part to growth throughout Arkansas, Oklahoma, Texas, and the West within Garver's Transportation Planning & Environmental and Water teams.

Garver noted by group for its wellness efforts

Garver has been named a Platinum Well Workplace by the Wellness Council of America for its comprehensive, corporate-wide wellness program that promotes quality workplace flexibility.

Garver was one of two companies in the nation to be recognized on the platinum level by WELCOA. The recognition acknowledges Garver has met the high-

est standards of wellness support and is a leader in workplace wellness promotion.

Garver Wellness was created in 2006. Each of Garver's nearly 800 employees have access to an in-house Wellness Team available for health consultations, personal training and nutrition assessments, on-site biometric screenings, and other benefits.

"Through coordination across all levels of the company, we have created a robust program that offers innovative and comprehensive wellness services to empower employees to take responsibility for their overall well-being – the physical, mental, social, financial, and occupational aspects of a positive lifestyle," said Garver Wellness Team Manager Sarah Palmiero.

FTN adds two to Water team

FTN Associates has added Alen Shrestha and Balbhadra Thakur to the firm's Water Resources Team. Both are working out of FTN's Little Rock headquarters.



Shrestha

Shrestha completed his bachelor's degree in civil engineering from Tribhuvan University in Kathmandu, Nepal, and earned a master's degree in civil engineering with a focus on water resources from Southern Illinois University, Carbondale. He has almost two years of experience in civil and water resources engineering.



Thankur

Thakur has a Ph.D. in engineering science, focused on water resources engineering, from SIU, Carbondale. His bachelor's degree in civil engineering is from Tribhuvan University, and he has two years of engineering experience.



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FTN is an engineering and environmental consulting firm that is celebrating its 39th anniversary this year.



Crafton Tull fixes Rogers bike trail drainage issues

Crafton Tull helped the Railyard Bike Park in Rogers address drainage issues

that have plagued the slope-style all-dirt course since it opened in 2015.

The city saw higher than average rainfall during the past few years, which made the course difficult to maintain. After rainfall events, city parks staff often spent several days repairing the dirt trails by hand before the park could reopen.

Crafton Tull engineers used a topographic survey captured via unmanned aerial vehicle to create a comprehensive drainage system for the park and adjacent downtown areas. The drainage basin is 15 acres, with more than 60 feet of vertical fall across it. The park itself occupies three acres on the lower end of the basin, and during the 100-year storm event the basin is expected to generate 157 cubic feet per second.

Pipes surrounding the park and those running through the park had to be upsized or added to handle the storm-water flow, and several area inlets were added within the bike park. The new storm pipes range from 12 to 36 inches

in diameter and include both reinforced concrete pipe and high-density polyethylene pipe. The final outlet structure has a nearly 20-foot drop from inlet top to the outfall. Winning bidder ARCO Construction installed the pipe system and 41 Nyloplast atrium grate inlets throughout the undulating bicycle park.

The city hired the international bicycle pump track construction firm

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In the News (Cont'd)

Velosolutions, which will place and compact 90% of the asphalt paving by hand as it sculpts the tracks. The switch from dirt bike paths to paved paths, combined with the improved drainage system, should allow the park to remain open to the public year-round.

The project is expected to be complete by late fall 2020.

B&F Engineering welcomes five staff members

B&F Engineering has expanded its engineering staff by two and surveying staff by three in 2020. The engineering additions are staff engineers working within the office, and the surveying additions are a mixture of office and field staff.



Woodfield

Landon Woodfield, E.I., joined B&F Engineering in March upon completion of his master's of science in civil engineering degree from the University of Arkansas, Fayetteville. His undergraduate and graduate course selection was focused on structural topics, and he has put those courses to use during his time at B&F analyzing bridges and building structures. Woodfield's research for his graduate degree was geotechnical earthquake-based, which included travel to Mexico City for field data collection.



Strahan

Terrence Strahan, E.I., is the newest addition to B&F after coming aboard the beginning of September. Strahan is a 2010 graduate of the University of Arkansas, Fayetteville with a bachelor of science in civil engineering. After graduating in 2010, he served in the United States Army as an aviation officer. His travels during his service took him to places such as South Korea, Iraq, Kuwait, and Afghanistan. His initial work with B&F has been site design within the civil engineering group.

Clayton McKelvin completed his education at the University of Arkansas at Monticello with a bachelor of science in land surveying degree and a minor in business. He began his career at B&F upon graduation in May. He has a mixture of survey duties that include office tasks as well as field duties on a survey crew.



McKelvin



Mclelland

David Mclelland first began working with B&F as a part-time employee in May 2017. In May 2020, he graduated from the University of Arkansas at Monticello with a bachelor of science in land surveying de-



McBay

gree and joined B&F as a full-time employee shortly thereafter. He has a wide variety of duties, primarily working as a surveying technician in the office. Titus McBay joined B&F in the summer of 2019 as an intern and then returned in May 2020 to become a full-time employee following completion of his associate's in land surveying technology degree at the University of Arkansas at Monticello. He works in the elements everyday as a member of the survey field staff.

Stewart to lead RP Power's industrial sales in six states



Stewart

Brandon Stewart has been appointed director of industrial sales for RP Power throughout Arkansas, Louisiana, Mississippi and Oklahoma as well as portions of Texas and Tennessee.

RP Power is the Kohler Power Systems distributor providing onsite power generators for emergency and prime

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Prior to joining RP Power, he served in the Air Force more than 23 years. He was superintendent of engineering with an enlisted workforce of more than 60 personnel. He managed numerous engineering specialties including structural engineers, engineering assistants, electricians, operations management and emergency management specialist, HVAC/R specialist, and power production specialist. He managed multiple deployment operations requiring 30-40 members of his unit to be sent overseas to support Operation Enduring Freedom, the United States' ongoing efforts in Afghanistan and elsewhere.

Stewart earned a bachelor of business administration in human resource management from the University of Memphis. He also earned associate of applied science in education and training management and associate of criminal justice degrees while serving in the Air Force.

Jack Tyler Engineering buys New Water Systems

Jack Tyler Engineering has acquired New Water Systems, a water and wastewater sales representative firm, the company announced March 30.



Davis

Joining the Jack Tyler Engineering team are Andy Davis, P.E.; Charlotte Hayes; James Spann; and Calvin Reynolds, all formerly of New Water Systems.

The company said in a press release that the acquisition will allow it to offer a wider range of products and equipment to its municipal, industrial, and commercial customers in Arkansas and the surrounding regions.

Based in Little Rock, Jack Tyler Engineering provides pumps, air compressors, and process equipment. The family-owned and operated business has been in operation more than 55 years. The combination of its pump sales and service team with New Water Systems' expertise, relationships and vendors has created one of the largest water and wastewater representatives and distributors in Arkansas, north-east Texas, eastern Oklahoma, western Tennessee and northern Mississippi, the company said in a press release.

As a factory-certified repair center for more than 25 leading manufacturers, Jack Tyler Engineering has a team of experienced technical engineers and factory-trained service technicians available for equipment repair 24 hours a day, 365 days a year.

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ACEC/A Member Spotlight

Changes, opportunities for HSA

The mechanical, electrical and plumbing firm will be responding to changes in design specs in the wake of COVID

For HSA Engineering, the coming years will be a time of change and opportunity.

The mechanical, electrical and plumbing engineering firm has focused much of its efforts on K-12 education while also serving other types of clients, including higher education, health care, industrial and community-based ones.

Scott Archer, P.E., LEED AP, BD+C, the firm's principal engineer, said it will be further diversifying its client base because the rush of school construction that occurred in recent years to meet state standards may be ebbing.

Moreover, Archer said when the COVID-19 pandemic began, many builders halted projects. Some won't be restarted or may be altered because the pandemic proved they don't need as much square footage as they thought they did.

But those same clients may also want to retrofit their buildings to defend against viral transmissions. ASHRAE, the American Society of Heating, Refrigerating and Air-Conditioning Engineers, has been providing opinions about coming changes to the HVAC industry, and those changes will be part of HSA's business model moving forward.

"We've started trying to increase our knowledge base in that so that when those things start to happen at the universities and of course the K-12 schools and the ... other institutional clients that we have, that we're ready to guide them as how to kind of bullet-proof their systems," he said.

Among the coming changes will be increased filtration, probably to the MERV 13 level, and the use of ultraviolet light that kills the virus in a fraction of a second. These will be widely used, affordable technologies, while other technologies such as bipolar ionization are being studied. Archer said more buildings will probably ventilate continuously to keep



HSA ENGINEERING has focused its efforts on K-12 public education while serving other types of clients. Above is the Bentonville West High School, which required 1,000-1,200 feet of piping for heating and air. At left is the J.B. Hunt Office Tower in Lowell.

particles from landing on surfaces, rather than cycling fans to save energy and reduce noise, as often occurs now.

The company has had plenty of business in the K-12 arena. Among its clients has been the fast-growing Bentonville School District, for whom it has done much of the work over the past 10 years as the district has constructed campus after campus. Those included the new Bentonville West High School, which required 1,000-1,200 feet of piping to transport air from one end of the main L-shaped building to the other.

HSA has also done work for other types of clients. It performed design work for the University of Arkansas Champions Hall, a LEED Gold-certified 63,000-square-foot facility completed in 2015 with classrooms, laboratories, offices and student lounges. The company also completed two major projects for J.B. Hunt, including the company's 144,000-square-foot J.B. Hunt Office

Tower in Lowell, which was completed in 2017, and the J.B. Hunt Training & Technology Center, a LEED Silver facility located just down the road from the tower.

HSA Engineering has about 27 employees at its Fort Smith and Conway offices, including seven licensed engineers, two of which are LEED-accredited professionals.

It was founded by architect Scott Hathaway and John Symonds, a mechanical engineer. Archer joined the firm in 1998 and became a partner in 2000. The name was changed to Hathaway, Symonds & Archer, Inc. in 2001. After Hathaway left to pursue other opportunities, Symonds and Archer established the company as an engineering-only firm and changed the name to HSA Engineering Consulting Services, Inc.

Along with Archer, the company's other primary partners are Rob May, P.E.; Trey White, P.E., LEED AP; and Nathan Wilson, P.E.

In the News (Cont'd)



ETEC, Crist help plant produce usable waste

A new biosolids plant in Paragould is distributing sludge to local farmers thanks to a Schwing Bioset system designed by Crist Engineers and sold by Environmental Technical Sales.

As reported by the Paragould Daily Press, the \$5.15 million improvement at the Paragould Light, Water and Cable's Wastewater Treatment Plant replaces a biosolids dryer. The new Bioset produces 24 cubic yards of lime-stabilized biosolids per day. The new equipment costs approximately \$100,000 a year less to operate and maintain compared to the previous dryer system. These improvements were constructed by Van Horn Construction.

The sludge is treated with quicklime and sulfamic acid at 131 degrees for 40 minutes. It creates a pH of 12 and kills most pathogens, producing an EPA rating of Class A EQ, or "Exceptional Quality."

Operations Manager David Romine was quoted by the Paragould Daily Press saying about 20 area pasture, hay and sod farmers were using the biosolid as fertilizer.

Avery to head firm's NWA office



Avery

Tyler Avery, P.E., has been named operations director for a new office that Mid-South Engineering is opening in Rogers in December. Rogers is Avery's hometown.

Avery is an ASPE state director and former Hot Springs chapter president, and he was the ASPE's Young Engineer of the Year in 2019. He also is a graduate of the Emerging Leaders program.

He also played a major role in designing a Weyerhaeuser sawmill in Dierks capable of producing 388 million board feet annually. That project received the ACEC/A's Grand Conceptor Award, its top award, in 2019.



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Good news for good roads

As Arkansans prepare to vote, the governor releases a poll showing strong public support for Issue 1, the half-cent sales tax for highways

When voters in Arkansas cast their ballots this election season, they'll decide not just who'll be president for four years, but how Arkansas' roadways will be maintained for the next 40. And if a poll taken Sept. 19-21 accurately reflects voter opinions, the roadways will be getting some much-needed funding.

The poll, shared by Gov. Asa Hutchinson Sept. 23, found 69% of 800 likely voters saying they favor Issue 1, a constitutional amendment to make permanent the temporary half-cent sales tax funding the Connecting Arkansas Program. Eighteen percent were opposed. The poll was conducted by Gilmore Strategy Group.

Poll respondents were read the ballot title and asked their opinion. The responses were as follows:

- **Definitely for: 44%**
- **Probably for: 25%**
- **Definitely against: 10%**
- **Probably against: 8%**
- **Undecided: 13%**

Hutchinson told the Arkansas Good Roads Foundation the tax had 69% support among Republicans, 72% support among Democrats, and 68% support among independents. He said the measure had strong support across the state's media markets. The highest was Jonesboro, where it had 81% support.

Hutchinson said he will fly around the state Oct. 19, the first day of early voting, to promote the tax with stops in Jonesboro, Fort Smith, Northwest Arkansas, El Dorado and Little Rock. He said he was not taking anything for granted.

"When I tell you those numbers, I'm gratified with them, but I've run campaigns before," he said. "I've lost campaigns before. I've won campaigns before, and you push till the finish line. And voters change their mind, there's going to be ads out there in opposition to it, so do not quit in terms of the messaging."



GOV. ASA HUTCHINSON tells the Arkansas Good Roads Foundation Sept. 23 that 69% of Arkansans supported Issue 1 in a recent poll. While encouraged by the numbers, he told his audience that he's "lost campaigns before," so "you push till the finish line."

The poll found that 53% of respondents planned to vote on Election Day, while 44% planned to vote earlier and 3% didn't know or refused to answer the question. Among that 44%, 30% planned to vote in person early, 13% planned to vote absentee, and 1% said they had already voted.

"With that high volume of absentee votes and early voting, you have to start that campaign yesterday, which we've done," he said.

The constitutional amendment would make permanent a 10-year tax approved by voters in 2012 that is set to expire in 2023. That tax has funded the Connecting Arkansas Program, in which 31 projects totaling 170 miles at a cost of \$2.1 billion will be completed or under construction by the end of 2021.

The tax extension would generate \$205 million annually for highway needs while providing \$87 million that would be split between cities and counties. The tax does not apply to groceries, can't be used to

pay for bonds, and can only be used for road improvements.

In anticipation of passage, the Arkansas Department of Transportation, or ARDOT, has created the Renew Arkansas Highways program. The 10-year, \$7.4 billion construction program includes \$3 billion for pavement preservation that will improve 7,000 miles of non-interstate highways. It also includes \$1.1 billion for bridge improvement and preservation and would replace or repair every structurally deficient bridge in Arkansas. Another \$1 billion would maintain interstates, while \$1.8 billion would address capital and capacity needs through a second Connecting Arkansas Program. Half a billion dollars would be set aside for specific safety needs as they are identified. Every county would be touched more than once over a 10-year period.

If the tax fails, the average household will see its sales taxes reduced by \$8 a month, ARDOT Director Lorie Tudor, P.E., said in an interview. In an address to the Benton Chamber of Commerce, she said, "ARDOT will be forced into the unfortunate position of managing the decline of the state highway system."

ACEC/A and ASPE on board

Issue 1 has the full support of the ACEC/A and ASPE. Steven Beam, P.E., ACEC/A president, said his national firm, Burns & McDonnell, opened an office in Arkansas after being selected as an on-call consultant for the Connecting Arkansas Program and the earlier Interstate Rehabilitation Program. That program was passed by voters in 2011 to pay for interstate improvements through a bond issue.

"We're kind of direct evidence of job creation that's caused by these types of programs," he said.

Beam noted that Arkansas voters have proven supportive of road funding in the past. The half-cent sales tax passed with more than 58% support in 2012. The Interstate Rehabilitation Program passed with 80.6% support in a special election in 2011, albeit with a 6% voter turnout.

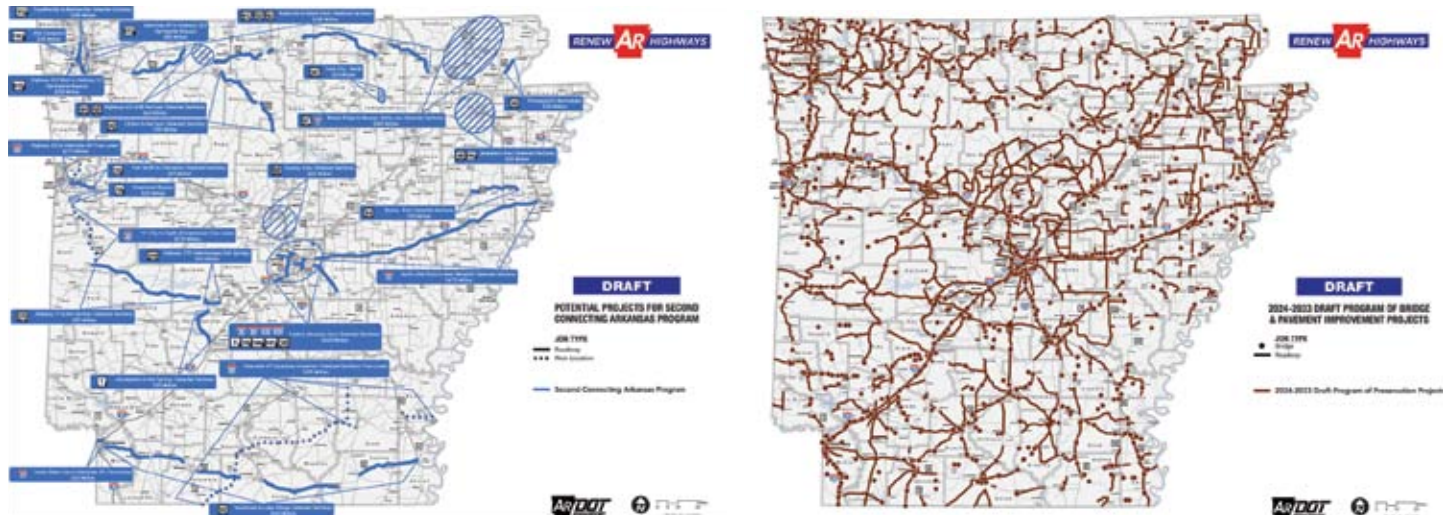
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ENGINEERING ARKANSAS

THE RAILYARD BIKE PARK
ROGERS, ARKANSAS



Crafton Tull



IF IT PASSES. The map on the left shows how \$3.6 billion would be spent over 20 years on a second Connecting Arkansas Program. The map on the right represents \$7.4 billion that would be spent the first 10 years for pavement and bridge preservation, interstate maintenance and safety projects. These maintenance and safety projects represent 76% of the total funding available the first 10 years.

He said the funding is needed for highway improvements.

“It’s not just a case of state government wanting more money to do more things,” he said. “There’s a real need out there that needs to be met in order for our economy to remain vibrant.”

ASPE President Daniel George, P.E., of B&F Engineering said good roads are necessary for a strong economy. The Connecting Arkansas Program has shown how more funding leads to highway improvements.

“As far as engineers go, I think it’s a win-win for our industry, and it generates work for engineers, generates work for construction companies,” he said. “And then if that spurs economic growth and more development there, there’s a spin-off of work for engineers developing whatever added improvements and developments that go in because of roadway improvements.”

Issue 1 is the result of years of lobbying by ARDOT and other highway advocates. Hutchinson in 2015 created the Governor’s Working Group on Highway Funding to provide recommendations for the 2017 legislative session. Lawmakers could not reach a consensus, but he made highway funding one of his core issues in his 2018 re-election campaign.

Under his leadership in the 2019 legislative session, lawmakers referred Issue 1 to voters. Meanwhile, the other part of the governor’s package was signed into law raising \$95 million in system preservation funding and \$13 million each for cities and counties. That money came

from a 6-cent tax increase on diesel fuel, a 3-cent increase on gasoline, an increase in electric and hybrid vehicle registration fees, and casino revenues.

Together, that legislation and the half-cent sales tax potentially would provide \$300 million annually for highways, 76% of which would be dedicated to system preservation and 24% for capital and congestion relief. Added to its current \$440 million, ARDOT would have \$740 million in total construction funding.

ARDOT’s Tudor said supporters were finally able to pass a highway package because “everybody got on the same page.”

“It’s just really been a great experience over the last couple of years to see it come together like this,” she said. “It was just so much trial and error before, and it was a process, but here we are at the door of possibly something really great for the state.”

Shannon Newton, president of the Arkansas Trucking Association and chair of the Vote for Roads. Vote for Issue 1 campaign, said the package was the result of polling and discussions with various groups. Continuing the half-cent tax was consistently popular.

“I think the need was real, and being able to convince policymakers that it wasn’t just a few segments of business, that it was really across all sectors,” she said. “It was business. It was people just trying to get to work or just trying to get their kids to school. Everyone over time began to understand the impact that roads and good infrastructure plays in their everyday life. ... Finally just I think

over time, that message reached enough people so that policymakers felt that they had the cover or the support to make that decision.”

Tudor has been advocating for highway funding for years, along with her predecessors. She said ARDOT has been losing ground for decades because the primary highway revenue source, the motor fuels tax, is a flat tax that hasn’t been raised nationally since 1993. Moreover, the country is trying to reduce fuel consumption as a matter of national policy. Meanwhile, Arkansans are driving more, and the cost of construction has increased. In 1998, \$10 million overlaid about 200 miles. Today it will overlay less than half that amount.

Tudor noted that the Arkansas highway system, with its 16,400 miles of pavement and more than 7,300 bridges, was funded by taxpayers and is a public asset benefiting everyone, whether they drive or not. ARDOT has estimated the cost to completely replace all its highways and bridges would be \$69 billion. Maintaining it, on the other hand, costs \$504 million a year, which is .73% of that amount.

Complicating the issue is the fact that Congress has not passed a long-term highway funding bill to replace the expiring Fixing America’s Surface Transportation Act. Instead, it will pass a short-term continuing resolution, or resolutions, to extend the act. Continuing resolutions are better than nothing, but they make it impossible to plan for long-term construction projects. Tudor said the Highway Trust Fund has been facing insolvency



ARDOT DIRECTOR Lorie Tudor, P.E., displays a framed magazine cover given her by the Arkansas Good Roads Foundation Sept. 23. Also pictured are, middle, Joe Quinn, executive director of the foundation, and Dan Flowers, president and a former director of what is now ARDOT. The Good Roads Foundation is a longtime advocate for highway funding. Tudor has been educating voters about Issue 1.

for several years now, and the uncertainty makes it difficult to plan or budget the amount of state funds needed to match federal dollars. Instead, a long-term appropriation supported by an adequate funding source is needed. Moreover, the department needs more flexibility regarding deadlines and matching requirements for federal funding.

The situation has been worsened slightly by the COVID-19 pandemic, but it's not as bad as it could have been.

Revenues were down about \$10 million compared to last year, Tudor said on Aug. 28. The first week of April, passenger vehicle travel fell by 40% while truck travel decreased by 10%. As of the last week of August, passenger vehicle travel had fallen 5% while truck travel had returned to expected levels compared to last year. Tudor said the department is being conservative but hadn't pulled any bid lettings.

"Our revenues dropped, but they're rebounding, and so it's not nearly as dire

as we originally thought it was going to be, but we're still proceeding with caution because we don't know what this fall is going to bring," she said.

Tudor said most people believe roads should be funded by user fees. The systems are in place for a motor fuels tax, but it's not sustainable given the national priority of reducing consumption. Another user fee option, a vehicle miles traveled tax, requires tracking mechanisms, which raises civil liberties concerns. And money isn't coming from Congress, which is why many states, including Arkansas, have been finding state-based sources. She said in an interview that Arkansas "can't sit back and wait for the political will in Washington to make up the difference with what we need to keep our system in a state of good repair."

Tudor told the Benton Chamber of Commerce that better roads are safer and an inducement for businesses to locate in Arkansas. Passing Issue 1 will improve accessibility, reduce repair costs on vehicles, and save fuel because of reduced congestion.

"This is not a new tax," she said. "I repeat, this isn't a new tax. It's an extension or a continuation of an existing tax that's in place that can only be used for our roads and bridges."

The tax is supported by a broad coalition of Arkansas entities that had raised more than \$2 million as of Aug. 31 and still had more than \$1.8 million to spend.

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Affiliate Member Spotlight

Springdale Water adds ex-city, huge dryer

The utility moved fast to incorporate what once was Bethel Heights. Meanwhile, it now runs the continent's largest wet sludge dryer, reducing trips to the landfill from seven truckloads to one.

The Springdale Water Utilities tries to conduct itself like it's a business, and its business is growing.

In early September, the water/wastewater utility was quickly incorporating what once had been the Bethel Heights utility into its operations. Bethel Heights had been annexed into Springdale after voters in the two towns approved the measure Aug. 11.

Heath Ward, executive director, said Bethel Heights' two wastewater plants were being shut down over the course of the next month, and eight-inch continuous polyethylene pipe was being laid above ground to intercept the flow and divert it to Springdale's sewer mains. The utility planned to complete the shutdown within 30 days and bury the lines a month or two afterwards. The short-term fix was expected to cost less than \$150,000.

Now in its 101st year, the utility serves about 100,000 people living in Springdale, Elm Springs, and parts of Lowell and Johnson. It serves roughly 38,000 water customers and about 32,000 sewer customers. It has about 120 employees including 13 in the engineering section and three engineers: Chief Operating Officer Rick Pulverinti, P.E., who is a former ASPE president; Ronald Watkins, P.E.; and Jonathan Castillo.

The utility is an affiliate member of ACEC/A because Ward said the engineering community is involved in many water and wastewater organizations and shares a lot in common with the water/wastewater community.

Springdale Water in 2018 became the first and only Arkansas utility to be awarded the Governor's Award for Performance Excellence, the highest honor given by the Governor's Quality Award. That achievement required the utility to submit an application based on the Baldrige Excellence Framework, a set of criteria that reflects high-performing organizations. Ward said the honor took three or four years to achieve.



QUALITY WORK. Springdale Water Utilities' new wet sludge dryer will allow its wastewater plant to operate 24 hours a day while reducing landfill costs and producing a useful Class A biosolid. Left, Executive Director Heath Ward poses with the utility's Governor's Award for Performance Excellence. It's the only Arkansas utility that has ever received the award.

from 20% to about 95%. That investment will reduce the number of truckloads going to the landfill from six or seven per day to one, while producing one-fifth the weight. Instead of spending \$1 million a year on landfill costs, the utility will be spending \$200,000 to \$250,000. It will be able to more efficiently operate its wastewater plant 24 hours a day rather than having to be tied to the landfill's hours, and it will produce a useful Class A biosolid safe enough to use on a backyard. The utility is talking to potential buyers.

The utility worked closely with McClelland Consulting Engineers to complete the project. It began exploring the possibility seriously in 2013 and began looking at options in 2014-15. It even undertook a pilot test with another dryer that proved to be the wrong option.

"Through the vetting process, we finally found a dryer that was probably number two or three on our list originally and ended up being the dryer we went with," he said. "But I can just say that working with your engineers and doing homework and asking those hard questions is very important."

"We like to say we try to run this utility as much like a business as possible," he said. "We know that our customers may not have a choice of what water utility they have if they live in Springdale, but you know what? Our view is they do have a choice of where to live, and we want to be their city of choice and their community of choice, and we want Springdale Water to be an asset for Springdale to make us competitive with our neighbors. And as I say, we're a region, and we all work together. We're also, I'd say, friendly but fierce competitors, and we want Springdale to be people's city of choice."

The utility this summer began full-time operation of the largest sludge belt dryer of its type in North America. The \$16 million project allows the utility to increase the amount of water it removes from wet sludge

Issue 1

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Supporters include the Arkansas State Chamber of Commerce, Arkansas Farm Bureau, The Poultry Federation, the Arkansas Trucking Association, the Arkansas Association of General Contractors and the Arkansas Asphalt Pavement Association. The J.B. Hunt trucking company donated \$100,000 to the campaign, as did both Alice Walton and Jim Walton of the Walmart family. Robert Moery, campaign director for Vote for Roads. Vote for Issue 1, said 82-83 cents of every dollar raised will go to some form of advertising, mostly on television. The campaign also has an active social media presence.

ACEC/A member firms contributed to the campaign individually, while member firms contributed \$5,000 to fund a social media campaign by the Arkansas Good Roads Foundation.

There is organized opposition. The state chapter of the anti-tax group Americans for Prosperity has led in the formation of a legislative question committee, “No Permanent Tax. No on Issue 1.” It’s composed of a diverse coalition that includes conservative and liberal groups. Member include Arkansas Community Organizations and Arkansas Public Policy Panel, which advocates for lower-income Arkansans, and environmental groups. State Director Ryan Norris said voters who are educated about ARDOT’s inefficiencies oppose Issue 1. He said ARDOT has not prioritized maintenance of existing highways and bridges and has focused too much on large construction projects in central and Northwest Arkansas. He said the sales tax is a regressive tax, meaning it hits lower-income taxpayers harder, that the burdens would be borne by consumers, and that taxpayers instead could spend locally the money they’d be saving from the sales tax. Norris said a sales tax that’s embedded in the Constitution would be permanent.

Norris said ARDOT is already receiving funding from the fuel taxes passed by legislators in 2019 along with the Arkansas Highway Improvement Act of 2016, which annually uses state funds to match federal funds over a five-year period. He said “several years of increased accountability and transparency” are needed before ARDOT should receive more money.

Pandemic demonstrated infrastructure is essential

Hutchinson said early in the campaign that he would make Issue 1 his top priority in the 2020 election, but he’s been a little distracted lately by the COVID-19 pandemic. ARDOT officials were hosting 12 town hall meetings across Arkansas but had completed only nine when the pandemic began. The last three were cancelled. Instead, they were making online presentations to educate citizens. Moery said the campaign paused its operations when the pandemic began and then resumed in July. The first television ad ran the day after Labor Day and made the connection between infrastructure and the pandemic.

“I like to tell folks (that) one thing we learned about the pandemic is that Arkansas is a state made up of essential businesses,” Moery said. “From Walmart to our trucking companies to our farmers providing food and shelter all over the world, we’re made up of a state that provides goods and services that are needed in

both good times and bad. And you can’t get those services to a consumer without having good roads to drive on.”

Joe Quinn, executive director of the Good Roads Foundation, said the pandemic has shifted the campaign’s messaging. Earlier, the focus was on safety, highway construction jobs, and reducing congestion. Now, it’s about why infrastructure matters. In March, Quinn went to a Walmart to buy groceries. There was no bottled water or toilet paper, but everything else was on the shelves.

“This is not like we are asking for funding to pay for a new local swimming pool,” Quinn said. “This is money that goes to supporting a system that was able to bring your family groceries and cleaning supplies and prescription drugs in the early, frightening days of COVID-19.”

Quinn also heads the Roads and Bridges Coalition, a group that includes many influential business organizations including ACEC/A. The Coalition was instrumental in getting Issue 1 on the ballot and also in passing the motor fuels tax increases in 2019.

Newton, the campaign chair and head of the Arkansas Trucking Association, said passage of Issue 1 would significantly address the state’s highway infrastructure needs – once and for all, or at least once for a long time.

“If we can be successful, we can stop talking about highway funding for the foreseeable future, and I don’t remember a time when that wasn’t on our agenda,” she said.

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