Welcome, readers, to another issue of Construction in Focus. In this issue, we have fundamentals on our minds—the building blocks of construction, both figuratively and literally. These building blocks include such key aspects as leadership, vision, and a commitment to quality, as well as the more concrete—if you’ll pardon the pun—elements such as stone and tile, building envelopes, and, you guessed it, concrete.

In Claire Suttles’ Representing the Concrete Pipe Industry, we take a closer look at the American Concrete Pipe Association. The voice of the concrete pipe industry since 1907, this key body has been instrumental in shaping and overseeing the modernization of America’s infrastructure. In its role as advocate, educator, and champion of quality and safety, the ACPA has made it its mission to represents its members’ interests and to keep a close eye on new developments and evolving technology.

“The ACPA has made it its mission to represents its members’ interests...”

A key issue for the ACPA is empowering engineers to choose the most appropriate pipe for a particular project’s needs, and the Association was instrumental in bringing about this change at the federal level; now it is turning its attention to the state level. Read about this initiative, the ACPA’s educational and training programs, and much more in this issue’s in-depth piece.
Concrete boasts numerous advantages as a pipe material. Strength is a leading asset. "Concrete pipes will handle between 80 and 90 percent of the load that is put upon them," says ACPA President Matt Childs. "The backfill is not having to do the work—the pipe is doing the work. With a flexible pipe like plastic pipe, you are depending on that low bid contractor to build a soil structure around that pipe because that pipe brings very little strength to the project. Anything made out of plastic is going to be much less strong than what you would make out of concrete." In fact, concrete pipes are so strong that they are often used as bomb shelters by civilians living in conflict zones.

Concrete pipe is also extremely durable. Immune to most elements, concrete does not burn, rust, tear, float, or buckle. "Concrete pipe will last at least 100 years," says Mr. Childs. "If you have an interstate or a U.S. highway evacuation route or something that is heavily used, you don't want to have to tear up that roadway to replace the pipe. You want a pipe that you can put under there and not worry about for 100, 150 years."
The American Concrete Pipe Association (ACPA) is the nation's voice of all matters influencing the concrete pipe industry. Representing the industry since 1907, the organization helped oversee the rapid modernization of America's infrastructure throughout the twentieth century. Now, in the twenty first century, the ACPA continues to move the industry—and America's infrastructure—forward through education, networking opportunities, and advocacy.

This is true even when flood or fire strikes. "If there is a natural disaster, concrete pipe is big and strong and heavy. It is going to be there to stay."

This resiliency is crucial, particularly when pipes run beneath major roadways. "Some states won't use much plastic pipe because there have been problems with road collapses after brush fires have caused the pipe to light on fire."

Of course, some circumstances do favor plastic over concrete. "A lot of plastic pipe is used for agricultural drains and small diameter storm sewers in neighborhoods. As the size of plastic pipe increases, so does the liability of the contractor and specifier because the pipelines or culverts have to be installed precisely according to standards to build the structure in the field and achieve an installation that will perform for the design life of the project."

Because different jobs call for different pipes, the ACPA wants to make sure that engineers have the freedom to use whatever pipe they feel is best for the circumstance—whether that means concrete or plastic. "Every pipe has its advantage and the engineer needs to be the one to decide what is the appropriate pipe for that project. Whether it is concrete, plastic, metal—whatever it is."

The ACPA's advocacy focuses primarily on this issue. "Our main battle is giving engineers the right to choose." The association believed that the 2005 federal highway reauthorization legislation—known as SAFETEA-LU—took away this right to choose. The bill was intended to promote competition in the procurement of culvert pipe for federally funded highways, but Mr. Childs says that instead, it forced the states to open their standards for culvert pipe—including products that had previously been rejected by the state's engineers.

Before SAFETEA-LU passed, "we were not heavily involved in Washington, DC in politics. We didn't have a lobbyist. We really did not even play in that arena." The association's concerns over the bill spurred them to action and they were well prepared for the next highway reauthorization bill, MAP-21. "When MAP-21 came around six or seven years later, we were organized. We started a grassroots campaign and educated the lawmakers in Washington, DC on what was actually happening."

In 2012, Congress unanimously restored the states' ability to select their preferred culvert pipe based upon their engineers' recommendations. "We didn't try to make legislation that was favorable just to our industry—we tried to make it fair to all industries and also reflect what needed to be done, which was
for the engineering community to make the decisions on what pipe materials to use for federally funded projects," Ms. Childs says. "So the language that we worked on—and was supported by the engineering community—said in MAP-21 that the engineers had the autonomy to select whatever culvert materials they want, which we felt was fair. It doesn't say you have to use concrete; it doesn't say you have to use plastic. It says that the engineer who is the expert and has the experience in designing these projects is the one who needs to make the decision."

In 2015 congress wrote the most recent highway reauthorization bill, the FAST Act. The ACPA lobbied against amendments that would weaken the 2012 language that gave states the authority to select culvert pipe materials for federally funded highways. "A lot of the DOTs around the country fought that also," Mr. Childs reports. Eventually, both the House and Senate versions of the bill rejected the amendment. "The reason that we were successful was because the lawmakers knew that what we were trying to do was fair."
Now, the ACPA is focused on the same issue at the state level. Arizona, Arkansas, Connecticut, North Carolina, Ohio, Oklahoma, Tennessee, Texas, and Virginia have all been on ACPA's radar as these state legislatures deal with the controversial topic. Mr. Childs says that local engineers have joined the association's cause. "Because what would happen if the engineers are not allowed to make decisions on piping materials in a state? Then other materials—guardrail, pavement, bridge materials—you take those out of the hands of the engineers also. So it is a very difficult precedent and the engineering community has risen up and defeated that language in every state that it has been introduced."

In addition to advocacy, the ACPA delivers a range of educational opportunities to keep the industry at the top of its game. Pipe School, Concrete Pipe University (CPU), Professional Development Courses, and ACPA webinars are just a few examples. The association also offers three days of classes at its Quality School in Irving, Texas. The ACPA's Professional Pipe Promotion Training Program (P3) is designed to advance and complement the organization's strategic plan and branding strategy. Graduates will understand both RCP technology and effective selling techniques.

The ACPA works to maintain industry safety. The association publishes safety statistics, developed a safety course for anyone working within the industry, and launched a national award to recognize plants that excel in safety and companies with innovative approaches to improving worker safety.

The association recognizes a range of industry accomplishments through its annual awards. The 2016 ACPA Project Achievement Award went to ACPA Producer Members involved in the Delaware Department of Transportation (DelDOT) Capital Transportation Program, which replaces failing pipe culverts with ACPA products. The initiative deals with several hundred short-span timber bridges that were fitted with corrugated metal pipe culverts in the late 1970s and 1980s. The culverts began to fail in the early 2000s, primarily due to Delaware's coastal climate, roadway salt usage, and farm runoff.

The ACPA has been the voice of the concrete pipe industry for over a century. The association has evolved with the times, focusing on the most relevant issues of the day. For now, that means actively lobbying for highway reauthorization legislation that protects the interests of the industry at both the state and federal level. The future will reveal new challenges, but the ACPA's dedication to the industry will remain the same—just as it has for the last 109 years.

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BESSER COMPANY SCHOLARSHIP A FIRST FOR ACPA'S NATIONAL CONCRETE PIPE WEEK

The employee-owners of Besser Company, in recognition of the American Concrete Pipe Association's annual National Concrete Pipe Week, 14 – 20 August 2016, established a scholarship with the ACPA Foundation. The $2500 college scholarship will be awarded to a student whose field of study is related to concrete pipe production, application/installation, or research. "We're excited to be taking the lead in addressing the ongoing need for providing a steady stream of young talent to our industry by offering this scholarship," said Kevin Curtis, President & CEO.

"The Besser Scholarship also serves as a tribute to our predecessors, Jesse Besser, Jon Dannenberg, Joe Pelchat and countless others who embraced training and education as pillars of our business," added Ryan Suszek, Director of Pipe and Precast. "Through their foresight, ingenuity, dedication and leadership we've earned an industry-wide reputation for providing impactful training during Pipe Schools held in Sioux City, Iowa, onsite courses in producers' facilities and as part of ACPA's annual short course." Each year Besser staff train and educate hundreds of industry members as to the production of concrete pipe, including mix design, machine operation and maintenance, and curing.

"The newly created Besser Scholarship is another demonstration of our long-term commitment to the concrete pipe industry," stated Gary Ericson, Director of Sales – Pipe and Precast and an ACPA Board Member. Applications will be available on both the ACPA and Besser Company websites as of 1 October 2016, with an application deadline of 1 February 2017. The committee will review applications in March and award the scholarship in April 2017. ACPA members interested in creating a scholarship or posting a link to the Besser scholarship on their website can contact ACPA for assistance.