

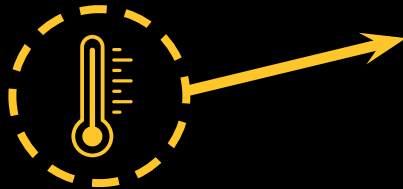
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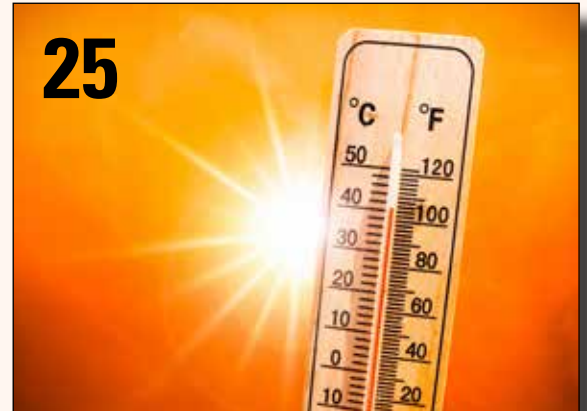
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"Transportation Builder" (TB) is the official publication of the American Road & Transportation Builders Association (ARTBA). We bring together all facets of the transportation construction industry to responsibly advocate for infrastructure investment and policy that meet the nation's need for safe and efficient movement of people and goods. ARTBA also offers value-added programs and services that create an environment where our members thrive in a competitive world. TB is the primary source of business, legislative, regulatory, safety and economic news that matters most to transportation development professionals.

## STAFF

**PUBLISHER**  
**Dave Bauer**

**EDITORIAL DIRECTOR**  
**Beth McGinn**  
[bmcginn@artba.org](mailto:bmcginn@artba.org)

**GRAPHIC DESIGNER**  
**Carrie Halpern**  
[chalpern@artba.org](mailto:chalpern@artba.org)

## CONTRIBUTORS

**Dr. Alison Premo Black**  
ARTBA Chief Economist

**Melanie Laird**  
ARTBA Manager of Safety and Foundation Programs

**Brad Sant**  
ARTBA Senior Vice President of Safety and Education

**John Schneidawind**  
ARTBA Vice President of Public Affairs

**Prianka Sharma**  
ARTBA Vice President and Counsel for Regulatory Affairs

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# EDITOR'S NOTE



**Beth McGinn**  
Editorial Director  
bmcginn@artba.org

## Protecting People

On a recent trip home, I found myself stopped in a work zone. Orange cones and an arrow board were the first clues. Traffic was at a near standstill for an hour. I turned to my trusty Waze app thinking there must be another reason for the delay.

Eventually, the actual cause came into focus. An accident forced five lanes of interstate highway traffic to merge onto the shoulder. My app showed the exact position and length of the work zone, but it never mentioned the traffic accident.

That's because the app relies on people to report incidents like this one. People are not always accurate or reliable. But the technology inside the construction vehicles was talking directly to my app. In some cases, it can give audible alerts far in advance of the arrow boards and cones, disrupting distracted drivers and potentially saving lives.

You can read more about this technology and the ARTBA Traffic Safety Industry members at the forefront of its use on page 12.

Thankfully, the incident I mentioned was well ahead of the construction site and no workers were affected. But work zone intrusions are just one of the many threats America's roadway workers face each day while on the job. Transportation construction is often difficult and dangerous work. Extreme heat, heavy equipment, and even emotional and physical stress is a threat to their health and well-being.

This issue of *Transportation Builder* looks at all the ways we can mitigate these risks. From mental health support to internal traffic control plans, ARTBA and its members share their knowledge and tools to help protect the industry's most valuable asset—its people.

A handwritten signature in black ink that reads "Beth McGinn".

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## CHAIR'S CORNER

TIM DUIT | President, Duit Construction Co., Inc.

# Making Mental Health and Well-Being a Priority

The number of suicides and drug overdoses in the construction industry is four times higher than the national average, according to the U.S. Centers for Disease Control & Prevention (CDC).

The transportation construction industry deserves better.

In September 2023, at ARTBA's National Convention in San Diego, Vince Hafeli of Ajax Paving Industries of Florida and I spoke both about our personal experiences and the need for greater attention on construction worker health and well-being.

Building on those discussions, I am pleased to announce a new partnership between ARTBA and Youturn Health to provide cutting-edge, virtual behavioral health tools to ARTBA members. See the full story on page 20.

Youturn Health's modern program bridges the gap between inaction and seeking treatment by making support accessible to employees who are grappling with stress, anxiety, depression, or suicidal ideation. Youturn Health prides itself on providing access to care, connecting members within 48 hours of when support is most needed. They help organizations create a culture where employees feel comfortable asking for support for themselves, their colleagues, and even their family members.

The partnership entitles members to discounted pricing and is specifically catered to meet the needs of small-to-medium-sized businesses.

We want to make clear that ARTBA will not be profiting from this partnership. Any royalties that materialize will be used to further discount these services or donated to a worthy charity.

To learn more, please contact Youturn Health's Bridget Kelly at [bkelly@youturnhealth.com](mailto:bkelly@youturnhealth.com).

Prioritizing the health and well-being of the transportation construction industry workforce is a journey that we all embark on together. Let's get moving.



*From left: Moderator Brad Sant (ARTBA), Hamilton Baiden (Youturn Health), Vince Hafeli (Ajax Paving Industries of Florida), and Cal Beyer (Holmes Murphy) spoke during the Sept. 12, 2023, Behavioral Health Town Hall session at ARTBA's National Convention.*

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# THE ARENA

DAVE BAUER | President & CEO, ARTBA

## Infrastructure in the Eye of the Beholder

Long-time political guru Charlie Cook told attendees at this year's Transportation Construction Coalition Fly-in, "people don't care about the economy, they care about their economy." That simple lesson on the importance of perspective was his way of helping explain why despite low unemployment, a robust stock market, and moderating inflation, just 25 percent feel the country is on the "right track."

Mr. Cook's observation parallels a dynamic those in our community know well—most of our fellow citizens pay attention to infrastructure when something does not go well. People rarely appreciate smooth roads, but absolutely know when they hit a pothole.

We saw this play out in real-time, following the recent collapse of the Francis Scott Key Bridge, when a lawmaker said of the 2021 federal infrastructure bill, "we're not spending it on roads and bridges... it was mostly Green New Deal." This and similar comments fail to recognize that: first, the bridge had no known structural issues; and secondly, the new law provided states \$16.5 billion at the time of the tragedy, specifically for bridge improvements.

The challenge of advancing infrastructure solutions in a political climate increasingly dominated by anecdotes and ideology can be daunting. The consequences of ceding the public policy arena to those forces, however, are far more dangerous.

The infrastructure law recently passed its halfway point, and its funding is supporting projects in nearly every U.S. county—more than 70,000 to date. The combination of that measure and state and local investment is producing documented outcomes: the number and value of contract awards are at record levels, industry employment is increasing, and demand for construction materials is strong. And there is much more to come, with many large projects just getting out of the design phase, two years of formula funds still to be released, and billions outstanding from some of the law's new programs.

These stats, combined with the anecdotes we hear from ARTBA members and elected officials, demonstrate that the law is working as intended—its long-term funding is enabling long-term investment in people and equipment across the transportation construction industry. This is not a short-term stimulus like in 2009.

As reauthorization of highway and public transportation programs looms in the next Congress, our focus will remain on demonstrating the efficacy of federal infrastructure investment through macro-level data, as well as the local effect of individual projects. We must ensure that all 535 members of Congress with the responsibility to reauthorize surface transportation programs realize their necessity to communities and the economy. To succeed, it will take a shared effort by all of us to help dispel falsehoods, highlight successes, and hold members of Congress accountable in ensuring continued federal investment.

A handwritten signature in black ink that reads "Dave Bauer". The signature is fluid and cursive, written in a professional style.



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## FROM THE FOUNDATION CHAIR

PAUL YAROSSI | Director, HNTB

# ARTBA Scholarship Program: Twenty-Five Years of Impact

In the late 1990's, two Roanoke, Va., contractors and brothers, Stan Lanford of Lanford Brothers and Jack Lanford of Adams Construction Company, felt an urgent need to increase public awareness about the unique safety hazards at transportation project sites.

Both men had experienced the painful loss of employees from their respective companies who had been killed in roadway work zone incidents. Fathers and mothers working just feet from fast-moving traffic, struck down with little warning and through no fault of their own. Having to share the horrific news with next of kin was the hardest part, for Jack and Stan knew that life would never again be the same for those families.

Out of these tragedies, Stan and Jack were resolute about the need to do something meaningful to help the loved ones left behind. With a generous \$100,000 donation to the ARTBA Foundation in fall 1999, they launched the first-of-its-kind "Highway Worker Memorial Scholarship" program.

Its goal: provide post-high school financial assistance to the children of highway workers killed or permanently disabled on the job.

The Lanfords' hope at the time was that their financial leadership would spur generous contributions by others in the industry to support this worthwhile initiative. Fast forward 25 years. Mission accomplished.

Nearly 225 scholarships have been awarded to students in 33 states, with more than \$860,000 in financial aid distributed thus far. The scholarship fund is strong today, thanks to continued annual gifts from industry firms and foundations, individuals, labor unions and the American Association of State Highway & Transportation Officials (AASHTO).

In late 2023, it was renamed the "Lanford Family Transportation Construction Worker Memorial Scholarship," extending the assistance to children of workers killed or disabled while building airports, bridges, marine, ports and waterways, public transit, roads, railroads, tunnels, and utilities.



*Brothers Stan, left, and Jack Lanford presented a check for the scholarship program at ARTBA's 1999 Mid-Year Meeting in Roanoke, Va.*

### Learn More



Scan the QR code to learn more about the scholarship program or make a tax-deductible donation.



On May 13, the Foundation's Board of Trustees met in the Nation's Capital and awarded \$90,000 for the 2024-25 academic year to nine deserving students (pictured above, left to right):

- **LaToya Hood**, a junior at Texas Southern University (healthcare administration);
- **Katie and Christopher Hutt**, a senior and first-year student at the University of Tennessee, Knoxville (architecture and chemical engineering, respectively);
- **Jenna Jares**, a graduate student at the University of Mary Hardin-Baylor in Texas (occupational therapy);
- **Breana Jones**, a junior at Winthrop University in South Carolina (graphic design);
- **Amy McNeil**, a graduate student at the University of Texas at Arlington (nursing);

- **Christopher "Tyler" Montgomery**, a first-year student at Arkansas State University (physical education);
- **Bethany Rains**, pursuing an undergraduate degree at Arkansas State University, Mid-South (certified nursing assistant); and
- **Zoe Watts**, a first-year student at the University of Central Arkansas (nursing).

Please consider making a tax-deductible donation at [artbafoundation.org](http://artbafoundation.org) so that we have sufficient resources next year and can continue to honor the memories of our industry's fallen workers by supporting their greatest legacy—their children.

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*Crews in Michigan stripe pavement inside a mobile work zone. Photo courtesy of PK Contracting, part of Frontline Road Safety Group.*



# Advanced Digital Warning Puts the Brakes on Distracted Driving

BY BETH MCGINN  
bmcginn@artba.org



Imagine sitting at work while hundreds of cars zip past your desk. Now, imagine some of the people behind the wheel are distracted or impaired. This is what America's roadway workers—also known as vulnerable road users—face every day while on the job.

The work zone is their office, and their safety depends on several factors—the most important being attentive and responsible drivers. Message boards, orange barrels, attenuators and other visual alerts and physical barriers are essential. But are there any emerging technologies that could also keep workers and drivers safe?

This question is always top of mind for Kurt Shea. As the safety director of Michigan-based PK Contracting—a leader in the pavement striping industry and subsidiary of Frontline Road Safety Group (FRSG)—he is constantly on the lookout for new ways to protect his employees and the motoring public.

Pavement marking and patch crews have the highest incident of crashes involving motorists. Unlike static work zones, which have fixed, posted signs warning motorists of the hazards ahead, pavement marking crews are mobile convoys. Their trucks are equipped with strobe lights to warn and arrow boards to direct traffic to the open lane. In Michigan, these crews move along the freeway between eight and 20 miles per hour. If drivers are not looking ahead, the large speed differential between workers and oncoming traffic can cause sudden braking and swerving. In some instances, the unthinkable happens. Shea estimates there are between four to seven catastrophic truck-mounted attenuator (TMA) crashes annually in his state.

“You are putting faith and hope in the motorists that they are attentive,” Shea said. “We can throw our hands up in the air and say, ‘it is what it is,’ or we can be innovative and find new technologies.”

### The “Ah-Ha” Moment

For Shea, it is personal. His dad started PK in 1976, and his son is one of a growing number of third generation family members to work there.

“Someone asked me during a meeting, ‘What percentage of improvement do you want to see in your safety?’ Our response was ‘we want 100 percent. We want zero incidents. That’s our driving force,’” said Shea. “We are family out there.”

Back in 2018, Kurt was returning from a night job when a light bulb went off. “I was in my Ford vehicle on I-94 at about one in the morning, and I got an alert: ‘crash ahead,’” he recounted. “This kind of woke me up.”

Seconds later he saw the lights of a police vehicle and ambulance on the shoulder. In industry speak, this is known as “advanced notice” for motorists. Instead of the notice coming from outside the car (think arrow boards), the notice was inside the car. A transponder in one of the emergency vehicles sent a message through his car’s navigation system.

PK Contracting is now part of an effort to test these advanced digital warnings in the roadway construction and maintenance industry. Working with the Michigan Department of Transportation and a grant from the Federal Highway Administration, PK pavement marking crews are collecting data that will help build the next iteration of this technology—self-driving cars and connected and automated vehicles (CAVs) that talk to smart work zone technology.

### The Future is Now

The application of CAVs is the future, but the use of advanced warning digital alerts is currently growing at a rapid pace. HAAS Alert is a company at the forefront of this innovation. The roadway safety company, based out of Chicago, has been around for almost 10 years. It is already the leader in this space with over 4,000 customers in North America and many more in Australia, New Zealand, the U.K., and Europe. Their product, Safety Cloud®, has become a standard tool for industries such as public safety agencies, departments of transportation (DOTs), construction and utility workers, parcel delivery companies, and even tow truck companies.

Tom Parbs, vice president at HAAS Alert, said, “When you have road workers out there that need to be protected,

Safety Cloud® is giving an audible and visual warning 30 seconds upstream. It’s intended to disrupt your phone call, your radio, the coffee you are drinking, or the makeup you’re putting



(Infograph courtesy of HAAS Alert)

See *Distracted*, 14



***Distracted, from 13***

on.” Parbs notes that driving and talking on the phone is the equivalent of driving with a .08 blood alcohol content.

“The motoring public likes to multitask,” he added. “These alerts disrupt the distractions. They make people aware 30 seconds before the traditional advanced warning area of a work zone.”

At faster speeds, these alerts can reach people a half-mile up from the work zone, giving drivers time and space to slow down and move over. Safety Cloud® does this by partnering with other software companies like Waze (a Google-owned company) and Apple Maps, as well as natively with Chrysler Fiat (Stellantis) vehicles, with whom it has a direct partnership.

HAAS Alert can provide crews with digital alerting transponders to place inside their flashing lights vehicles and construction equipment, or their software can synchronize with telematics (GPS) systems crews already have with them, such as Samsara, WebFleet, Geotab, Azuga, and Cradlepoint.

The relationship between Safety Cloud® and its digital partners is mutually beneficial. HAAS Alert is the world’s largest provider of road hazard data to companies like Waze, which traditionally depend on crowdsourced information provided by motorists.

Crowdsourced data is useful, but is not considered a “ground truth,” as it relies on what drivers perceive to encounter. It also may not reflect conditions in real-time. For example, the apps may not know when a disabled vehicle has been moved from the roadway, a police car has moved on to a new location, or road workers have moved to different parts of the highway.

“When we tell Waze or a Stellantis vehicle that you are there, and you need to be protected, there is no question.

That is a 100 percent ground truth because we know where workers are every second within three feet of accuracy,” Parbs said.

**IIJA Incentivizes Action**

Adoption of this digital alerting system by state DOTs has accelerated thanks to the passage of the 2021 Infrastructure Investment and Jobs Act (IIJA). U.S. Senators Dick Durbin (D-Ill.), Tammy Duckworth (D-Ill.), and U.S. Representative Cheri Bustos (D-Ill.) championed the Roadside Responders Act, which was added to the bill providing states with funding to purchase the technology if they write e-digital alerting with National Highway Traffic Safety Administration approval into their state highway plans. According to Parbs, 60 percent of states have done so, with the rest set to follow suit.

Transportation agencies are not the only ones taking notice. Contractors are purchasing access to these tools as well.

“They are buying our product because the safety of their employees comes first, and they want to have the advantage over another company that is bidding for that job who can’t provide the same level of safety that they do,” Parbs said. He noted that the added layer of advanced warning for employees can also help with hiring, retention, and morale. Fewer incidents can also lead to better safety scores and better insurance rates.

**Enhancing Safety is An Easy Decision**

While there is no data to draw a direct line between e-digital alerts and insurance rates, studies show they do have a dramatic impact on driver behavior. The odds of a crash were up to 90 percent lower when drivers received an advanced digital alert, according to a study published by researchers at the University of Minnesota. A 2021 Purdue University study found that digital alerting helped reduce hard-braking events on the interstate by 80 percent or more.

For Shea and his colleagues within the Frontline Road Safety Group, adding the equipment to their vehicles has been an easy decision.

“My dad started this company from nothing. He got an undersized paint truck, and within a year or two was cutting the tanks to make them larger. That’s American ingenuity and innovation,” Shea said. “As I get older, I want to pass that along and make it better and safer for the next person.”

*Beth McGinn is ARTBA vice president of communications.*

**Additional ARTBA Resources**



**The Intrusion Prevention Toolkit** is a customizable template with state model practices and guidance to prevent work zone intrusions. It includes best practices for mitigating, controlling and minimizing effects of work zone intrusions. Scan the QR code to access the toolkit.

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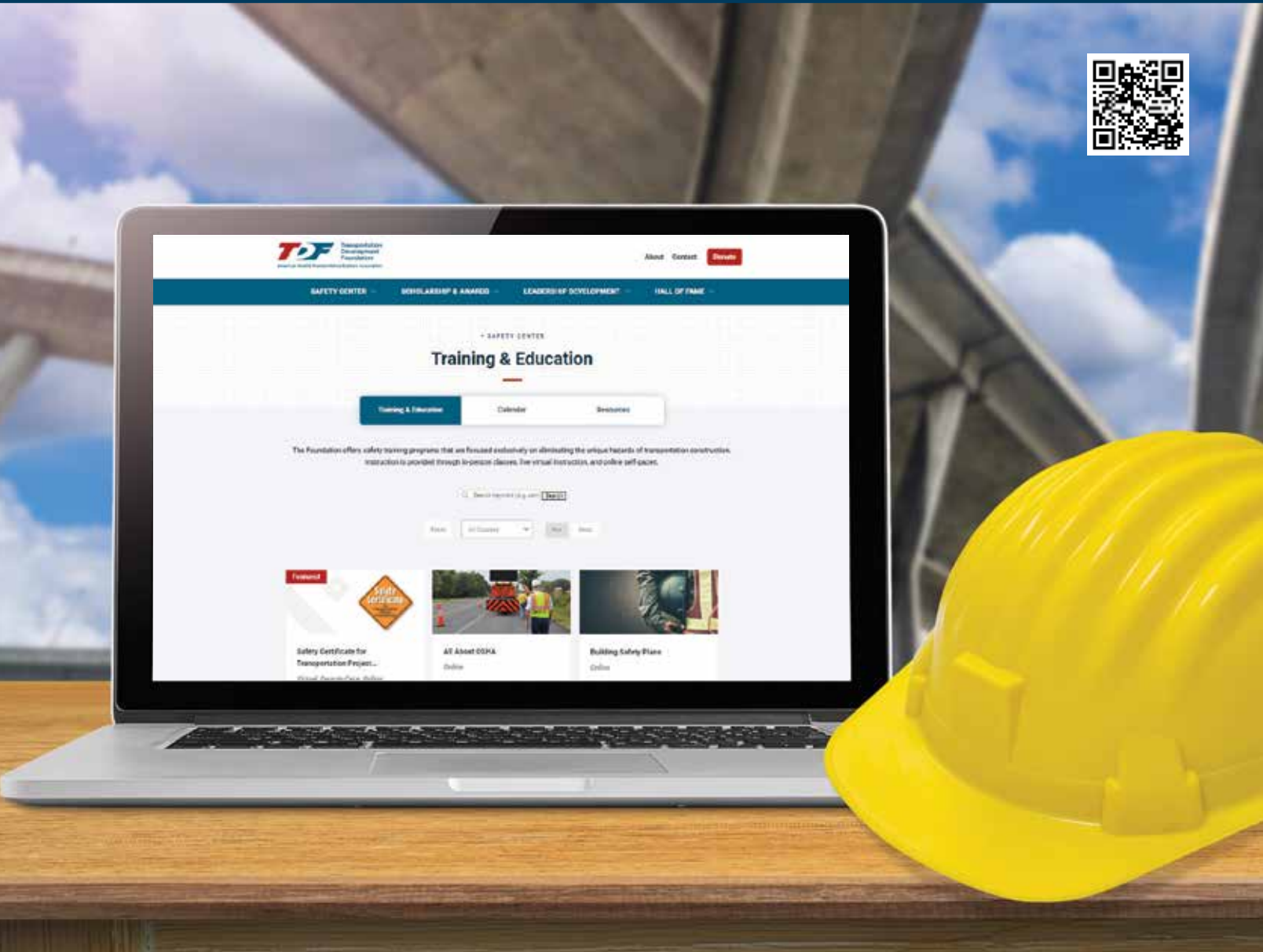


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# Internal Traffic Control Plans Save Lives

BY BRADLEY SANT  
bsant@artba.org

**W**hen you think “traffic control,” you might picture a stop light telling cars at an intersection when to stop, turn, and move forward. This guidance signals to drivers who has the right of way, preventing accidents and injuries.

Traffic control isn’t just for vehicles on the roadway. It is an important function for people and equipment on jobsites as well. Knowing when and where to move can be the difference between life and death. That is where Internal Traffic Control Plans (ITCPs) come in.

ITCPs are coordinated plans for roadway construction sites designed to protect workers on foot, aka “pedestrian workers,” who labor in close proximity to large vehicles and equipment, often adjacent to the motoring public.

Pedestrian workers are especially vulnerable for a variety of reasons:

- Construction vehicles and equipment have blind spots.
- Workers can get complacent when frequently near equipment, tuning out backup alarms.
- Operators and drivers are concentrating on their own tasks and may not be looking for pedestrian workers.

Other challenges include workers crossing the path of large dump trucks; equipment entering or exiting the work area; and workers taking shortcuts to latrines, rest areas, and parking areas.

## Additional Resources

**ARTBA Safety Center:** [artbasafetycenter.org](http://artbasafetycenter.org)

**National Work Zone Safety Information Clearinghouse:** [workzonesafety.org](http://workzonesafety.org)

**Center for Construction Research and Training:** [cpwr.com](http://cpwr.com)

**National Institute for Occupational Safety and Health:** [cdc.gov/niosh](http://cdc.gov/niosh)



ITCPs help separate workers on foot from the pathway of trucks and equipment. People are trained not to enter vehicle routes, except as planned and vehicle and equipment operations are planned and controlled to minimize or eliminate backing up. ITCPs also help coordinate the location of water coolers, latrines, employee parking, and break areas to help ensure workers are not “enticed” to cross vehicle pathways.

Phillip Russell, a veteran labor attorney with law firm Ogletree Deakins advises, “Employers who want to both improve safety and keep the Occupational Safety and Health Administration away should seriously consider implementing a robust ITCP. Even if tragedy strikes, it is important for employers to show they did all they could to provide a safe jobsite, including many of the elements of an ITCP.”

ITCPs are not new; in fact, they have been around for over 20 years. They are gaining wider acceptance today because the construction industry has a better understanding of them. They are growing in popularity because they function to prevent injuries and death while also streamlining construction operations by planning and controlling vehicle and worker interactions. The planning required to develop ITCPs can also streamline operations to create a more efficient site.

See *ITCPs*, 18



**ITCPs, from 17**

"Internal Traffic Control Plans provide a structured framework for managing construction traffic flow and ensuring the safety of workers, pedestrians, and motorists alike," explains Mandy Kustra, safety director for Ajax Paving Industries of Florida. "By clearly outlining truck routes, the placement of flaggers, the location of construction equipment, and the presence of workers on foot, the risks associated with construction activities can be significantly reduced, ultimately leading to a safer working environment for all involved." Ajax has pioneered the use of ITCPs in Florida for nearly a decade.


ITCPs may be extensive and planned well ahead of scheduled work or drafted on a clipboard at the beginning of each shift. The most important element is simply communicating the plan with workers, drivers, and operators.

Travis Parsons, director of occupational safety and health at the Laborers' Health and Safety Fund of North America agrees. "Effective communication is crucial in road construction projects, and ITCPs play a key role in this process. These plans are essential for contractors to convey safe movement protocols to workers during pre-construction meetings and daily safety briefings," said Parsons.


Just like a traditional traffic control plan keeps motorists safe, ITCPs help mitigate risks, minimize disruptions, and maintain a secure environment for workers and the public on construction jobsites. Knowing where to be, and most importantly where not to be, can save lives.

*Bradley Sant is ARTBA senior vice president for safety and education.*

**Additional ARTBA Resources**



The **Internal Traffic Control Toolkit** includes safety training materials to help workers create and apply internal traffic control plans. Scan the QR code to access the toolkit.



**Preventing Runovers & Backovers** virtual or classroom training (4 hours) provides step-by-step instructions on preventing worker "struck-by" incidents through creation of ITCPs. It focuses on blind spot recognition, work zone access/egress, and safe backing procedures. Scan the QR code to schedule.

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# Providing Effective Support for Behavioral Health and Substance Use in Construction

BY HAMILTON BAIDEN AND RICH JONES  
hbaiden@youturnhealth.com; rjones@youturnhealth.com

The behavioral health crisis facing construction is intimidating—the industry has the highest rate of overdose deaths and the second highest rate of suicides compared to all other U.S. industries—but it’s not insurmountable. Leaders in construction have reached a consensus that the old philosophy of telling workers to leave their problems at home simply doesn’t work. Construction workers need a toolbox of behavioral and mental health resources they can rely on for support, and they have to feel comfortable asking for help when they need it.

## Identifying the Problem

Several factors have contributed to the critical situation we find ourselves in regarding substance use and behavioral health, but to put it simply, construction is a tough job both physically and mentally. Muscle and bone injuries are common, and doctors often prescribe opioids for pain management. Opioids are highly addictive, and even prescribed use can very quickly escalate into dependence or an opioid use disorder. Additional factors like seasonal work and no paid sick leave may push employees to work even when they’re not mentally or physically ready.

And while not unique to just construction, we also need to consider the family members. Families are a system, and when one family member struggles, everyone struggles. If your child is battling a substance use issue or your spouse is fighting depression, you may be preoccupied with their safety. Physical safety on a jobsite requires you to be present in the moment, to remember to put safety gear on, to clip into a harness, and to be aware



HAMILTON BAIDEN



RICH JONES

of construction vehicles operating near you. But when a family member is struggling, these regular work routines can be easy to forget.

## Why Don’t People Get Help?

The fact is that only a small number of people ever reach out for treatment. In a 2023 report, the Substance Abuse and Mental Health Services Administration (SAMHSA) reported that 94.7 percent of adults who needed treatment for a substance use disorder (SUD) did not receive it. Further, about 53 percent of American adults do not get help for their mental health-related challenges. We see three main gaps in treatment that prevent people from getting help.

- 1. Stigma.** Construction work often values a “tough guy” mentality. If you’re hurt, rub some dirt on it, and get back to work. If they need help, employees may fear being seen as weak, getting passed over for the next job, or not advancing in their career. Additionally, there is a common misperception in the American public that SUD and mental health-related challenges are moral failings or character flaws instead of something that needs support to be properly addressed.
- 2. Misunderstanding of what treatment is.** For SUD, the idea of having to stop your life to go to a treatment facility for even 30 days can seem impossible. Further, the thought of having to remain abstinent from drugs or alcohol for the rest of your life is intimidating and keeps people from getting help. For behavioral health treatment, people may think their situation isn’t bad enough to warrant support or that they can “fix it” on their own. They may think therapy doesn’t really work, or they may actually want treatment, but there’s a lack of access in their area.
- 3. The scope of treatment puts the onus of engagement on the individual.** Recovery is possible if someone stays engaged. Too often treatment doesn’t



involve family education and support to heal the family system, and it relies too much on the person struggling to be responsible for their own outcomes.

### How Youturn Health Works

We founded Youturn Health to address these three gaps in treatment. As people in long-term recovery from substance use disorder and as people who've managed behavioral health-related challenges over our lifetime, we have the lived experience to understand the unique difficulties and nuances of SUD and behavioral health support.

Youturn Health is a virtual support program that helps people through life stressors like depression, anxiety, grief, substance use, and thoughts of suicide. The Youturn Health program includes:

- **Online education** with access to a video library with more than 450 educational and inspirational videos to provide an understanding of behavioral health struggles and coping strategies.
- **Peer Coaching support** from trained and certified professionals who use their own lived experience and

evidence-based strategies to help guide participants to developing new behaviors and identifying additional means of support.

- **Support and access for family members.** Inclusive family support is vital to successful, long-term outcomes, so family members have access to the benefits of Youturn Health at no additional cost.

We are pleased to partner with ARTBA to provide these behavioral health tools to the association's members. The partnership entitles members to discounted pricing and is specifically catered to meet the needs of small-to-medium-sized businesses. ARTBA will not profit from this partnership. Any royalties that materialize will be used to further discount services or donated to a worthy charity.

To learn more about how Youturn Health can help ARTBA members, please visit [youturnhealth.com/artba](https://youturnhealth.com/artba).

*Hamilton Baiden is co-founder and CEO of Youturn Health. Rich Jones is co-founder and chief clinical officer of Youturn Health.*

# New Partnership Addresses Construction Worker Health

## ARTBA & Youturn Health Join Forces

Youturn Health is a virtual support program that helps companies and their team members who are struggling with stress, anxiety, depression, or suicidal ideation.

Visit [youturnhealth.com/artba](https://youturnhealth.com/artba) to learn more.

**ARTBA members receive a discount on services.**



Contact Bridget Kelly at [bkelly@youturnhealth.com](mailto:bkelly@youturnhealth.com) for more information or scan the QR code to have someone reach out to you.





# ARTBA Foundation Scholarship Program is a Family Affair

BY MELANIE LAIRD  
mlaird@artba.org

**F**or many families, sending a child to college or post-secondary vocational school is a financial struggle. Sending two kids is an even bigger struggle. And when one parent is no longer able to provide support—the dream of a degree or other formal career training is nearly unattainable.

That is why the ARTBA Foundation’s "Lanford Family Transportation Construction Worker Memorial Scholarship" has meant so much to families of industry workers killed or seriously injured on the job. Since its inception in 1999, the program has provided financial support to 63 families, including 12 sets of siblings.

Twenty-three-year-old Jenna Jares is one of those siblings. Her older sister, Kristen, received the award from 2016 to 2019. Their father, Gregory, was killed in 2001 while working for Texas Department of Transportation.

"Losing my father as an infant taught me to value my time spent with those I love," Jenna said. "It has also been very meaningful to see how our father continues to be remembered and honored through this scholarship, and how his story has impacted others."

She plans to use her master's in occupational therapy from the University of Mary Hardin-Baylor in Texas to work as an occupational therapist and help others heal.

"I have always found purpose in helping others," Jenna added. "The donors' impact doesn't stop with my education but will allow me to give back through my career and hopefully support others in the way that I have been supported."

Breana Jones, a junior at Winthrop University in South Carolina studying graphic design, is another sibling making her dreams come true with help from the scholarship. Breana's father, Stan "Stan" Jones, Sr., died in 2007 after being struck by a vehicle while at work for the South Carolina Department of Transportation.



*"The donors' impact doesn't stop with my education but will allow me to give back through my career and hopefully support others in the way that I have been supported."*

— Jenna Jares



*"Having this scholarship means neither my mom nor I have to worry about the expenses and paying my way through college. It takes that load off our chest."*

— Breana Jones

"My older brother was the first in our family to receive this scholarship," she explained. "Having this scholarship means that neither my mom nor I have to worry about the expenses and paying my way through college. It takes that load off our chest."

Upon completing her degree, Breana plans to start her own business, a graphic and fashion design shop. "I know [my dad] is smiling down on me and with me wherever I go. I want to make him proud by following my dreams and becoming successful, that is my true motivation," she said.

"For the donors of this scholarship, I would like them to know that this scholarship truly helps a lot of students who have lost a parent in the line of duty," she added. "Every year when I receive that ARTBA email about my award decision, I tear up with joy every time."

---

*Melanie Laird is ARTBA manager of safety and Foundation programs.*

**Editor's Note:** The scholarship program is seeking new applications for the 2025-26 academic year. To share the name of a new student who could be eligible, or to make a tax-deductible donation, contact Melanie Laird at 202.683.1029 or [mlaird@artba.org](mailto:mlaird@artba.org).

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# Safely Working in Heat Means Knowing Your Numbers

BY BRADLEY SANT  
bsant@artba.org

**A**s I write this article, a dangerous “heat dome” is settling over the western half of the United States. Temps in several states will top out at 20 to 25 degrees above normal and it is only the first week of June.

This is also the time of year when transportation construction crews are at their busiest. A convergence of more people laboring in the heat, and hotter than average weather can be a dangerous recipe if workers and supervisors are not properly prepared.

Last year, the Occupational Safety and Health Administration (OSHA) announced employers may soon be required to have a Heat Illness and Injury Program (HIIP) to train their people about heat-related hazards. For example, there are about two dozen different signs and symptoms workers need to be on the lookout for—including headache, dizziness, confusion, and nausea.

One of the most important things workers can do to prevent heat-related illness is acclimatization—slowly adjusting the duration one spends in the heat. New employees whose bodies have not had time to adjust to working in the heat are most vulnerable. Nearly three out of four workers who die from heat-related causes die in their first week on the job. Acclimatization is achieved in most people within four to 14 days of regular work for at least two hours per day in the heat.



## Heat Index (HI)

- 80:** Caution (80°F-90°F HI)
- 91:** Extreme Caution (91°F-103°F HI)
- 103:** Danger (103°F-124°F HI)
- 126:** Extreme Danger (126°F or higher HI)

(Source: National Weather Service)

## Rest in Shade

- 2:** Take a break every 2 hours when the HI is between 90-100 degrees
- 10:** Minutes needed for rest breaks when HI is between 90-100 degrees
- 1.5:** Take a break every 1.5 hours when the HI is over 100 degrees
- 15:** Minutes needed for rest breaks when the HI is over 100 degrees

(Source: ARTBA-NAPA Heat Illness & Injury Guide for the Roadway Construction Industry)

OSHA says it is once again planning enhanced enforcement actions, with a strategic focus on geographic locations and industries where high heat impacts vulnerable worker populations. This means more inspection activity as well as a broader use of enforcement tools.

To help our member firms comply with OSHA's directive and keep their workers safe during these hotter than average months, ARTBA and the National Asphalt Pavement Association teamed up to create a customizable HIIP specific to the roadway construction industry. These free resources have all the numbers you need to help your crews stay safe this summer. Visit [artbasafetycenter.org](https://artbasafetycenter.org) for more information.

*Bradley Sant is ARTBA's senior vice president for safety and education.*

## Additional ARTBA Resources



The **Heat Illness & Injury Prevention Toolkit** includes a customizable template, checklist, poster, and other safety training materials to prevent heat-related illness and injuries. Scan the QR code to access the toolkit.



**Roadway Construction Focus Four and Heat Hazards** virtual or classroom training (4 hours) covers the leading causes of fatalities in roadway construction with a section on preventing heat related illnesses. Scan the QR code to schedule.



# A “Hail Mary” For a \$4 Billion Virginia Transportation Project

BY JOHN SCHNEIDAWIND  
jschneidawind@artba.org

**W**ith a long, painful moan that belied her remarkable achievement, the 4,700-ton tunnel boring machine known simply as Mary breached the confines of the tunnel she had burrowed, marking a major milestone in one of America’s biggest and most complex transportation construction projects.

The hundreds of workers witnessing Mary’s emergence April 17 on North Island whooped and applauded as she pushed through her last barrier—a circular concrete slab that flopped intact in a cloud of dust to the bottom of a receiving pit like an immense, cement pizza pie.

Mary’s “breakthrough” was more than physical. It was also a vindication for the Virginia Department of Transportation’s (VDOT) Hampton Roads Bridge-Tunnel Expansion Project, a mammoth, almost \$4 billion regional effort to relieve traffic congestion in part by expanding the traffic-clogged, four-lane segments along 10 miles of I-64 between Norfolk and Hampton with two, new twin-lane tunnels under Norfolk Harbor.

If you think that’s a tall order, you’re right. Decades in the making, the project is about 18 months behind schedule due in part to the pandemic and the painstaking re-

assembly of the \$70 million, 430-foot Mary when she arrived in the United States in December 2021 from Herrenknecht—her German manufacturer.

Add to that the challenges of drilling through almost 8,000 feet of rock, silt and unstable earth just 173 feet below the water’s surface, and you begin to appreciate the daunting assignment to which Mary—named after Mary Winston Jackson, NASA’s first female African American aerospace engineer and a Hampton native—has been assigned.

Mary’s journey to her first milestone began in April 2023. Now she must reverse herself to tunnel in the opposite direction—itself a five-month effort on a turntable-like structure at the bottom of the North Island pit—to dig a twin tunnel back to Norfolk. VDOT hopes Mary will reach Norfolk in 11 months, quicker than the 51 weeks she took boring through to North Island.

Project Director Ryan Banas so far is elated by Mary’s performance.

“We’ve been waiting for almost 30 years to see this progress, since the early 90s, so just a halfway milestone for us here but the lessons learned,” Banas told the

*Virginia Pilot.* “The pulling together, as a team, proves that we can accomplish monumental things here in Hampton Roads.”

For Banas, on the job 18 months and a 13-year Hampton Roads resident, Mary’s breakthrough is one of a series of challenges faced by project owner VDOT, the Hampton Roads Transportation Accountability Commission (HRTAC) and the contractor—Hampton Roads Connector Partners (HRCP), a joint venture of Dragados USA, Vinci Construction, Flatiron Constructors and Dodin Campenbon Bernard. WSP USA is lead project consultant, while HNTB is contract manager.

The Hampton Roads/Norfolk region is home to 1.7 million residents, the world’s largest naval installation at Newport News, as well as the biggest container port on the eastern seaboard. It also boasts the world’s largest collection of 10 immersed tube tunnels and the first tunnel in the world between man-made islands.

The confluence of low-lying land, economic expansion and its complex transportation infrastructure has made the region one of the biggest challenges in the country for traffic management engineers. The existing Hampton Roads tunnel was designed to handle 60,000 vehicles each day. Now it’s clogged with 100,000 vehicles daily and six-mile backups during peak travel times. The goal is that the tunnel’s expansion will help ease the congestion.

But expanding the tunnel itself has been a daunting task for Banas’s team. From a financing standpoint, the design-build project appears to be on solid ground, delays notwithstanding. Almost all of its \$3.9 billion price tag—92 percent—is funded from a regional gas tax and sales tax



*Mary took 14 months to construct in Germany; four months to ship to the South Island in Virginia; and six months to assemble in the pit.*

enacted in 2013, geared specifically for the project. The rest comes from state and federal funds, including \$153.5 million from 2021’s Infrastructure Investment and Jobs Act, according to ARTBA Highway Dashboard data.

“So, the money goes to Richmond, and is immediately turned around and deposited into the HRTF (Hampton Roads Transportation Fund),” Banas explained. “And with that, we’re seeing about \$180 million to \$200 million a year in revenue that the fund receives.”

“As a taxpayer and a Hampton Roads resident... if I’m going to pay taxes, I’m happy to see it come back and put to use on roads that I’m going to drive on every day rather than to different parts of the state,” Banas said.

What’s not so solid is the actual ground through which Mary is boring. “We have very poor soils from a geotechnical standpoint, with very soft material, compressible clays, lots of sand and silt,” Banas said.

Complicating Mary’s task was boring a tunnel between the two North and South man-made islands, with even more tortuous geology. “So, you’ve got poor soil, and you’ve created these artificial islands,” Banas said. “Now you’ve got even more weight and you’ve got mixed geology because you’ve got man-made materials you’re mining through and the natural sands and soils beneath.”

“If you’ve got to go out and dig a small hole in your backyard that’s three inches big, you can probably find an area where the soil’s pretty homogeneous and then you know how to handle it,” Banas said. “But when you’re talking about a hole that’s 46 feet in diameter, it’s very common that you would have ‘mixed space’ conditions.



*The tunnel boring machine nicknamed Mary broke through the headwall April 17 into a receiving pit on North Island, achieving a major milestone in the Hampton Roads Bridge-Tunnel expansion project.*

**See *Mary*, 28**

What might work at the bottom where there's clay doesn't necessarily work well with sand and that might not work well with silt that's in the middle."

That problem was solved through the arduous process of installing rectangular cement columns horizontally to stabilize the ground on which the almost 10 million-pound Mary was drilling. "She's heavy, she wants to settle, she wants to shift," Banas said. "On poorer soils we can't afford that, so we have to improve that ground to keep her where we want her to be."

Banas rattled off a series of other challenges and discoveries Mary and her team have met or encountered:

- Civil War ordnance. "We are home to the battle of the Ironclads," Banas noted. Mary came upon still-live cannon balls from the Battle of Hampton Roads between the USS Monitor and the CSS Virginia (formerly the USS Merrimack) in 1862. Experts from nearby Joint Base Langley-Eustis were dispatched to explode the ammunition.
- A 50,000-year-old mastodon, including a partial tooth, rib, limb, and vertebrae.
- The South Island from which Mary began her journey was home to one of the largest colonies of birds that are a protected species. "When we came to start our construction, we couldn't just displace those birds and not give them an additional area to go," Banas said. The project brought in barges covered with sand to create another habitat for nesting each year between April and September. And it uses border collies to chase nesting birds away from the construction site.
- Teddy the Sea Turtle. To prevent settlement due to rising sea levels and porous soil, the project added 15 acres to the North Island, building from the outside in and creating a berm with a pool to fill with material later. But a sea turtle broke into the pool and wouldn't leave, forcing a deconstruction of the berm to let the animal out—though it took Teddy two weeks to make his exit. "Teddy the Turtle has gone down in project lore as being an unwelcome guest, but one that we were happy to entertain while he was here," Banas said. "But man, we were happy to see him go."

Climate change, rising sea levels and storm surges are continuing threats that Banas and his project team prepare for every day. Banas's home itself is barely six feet above sea level, and storm surges between eight and nine feet in the region are common.



*The gantry of Mary inside the tunnel where she placed the new concrete rings.*

"For us, throughout the project corridor, stormwater management is a huge effort we go through, and it's very challenging because of the poor soil conditions, but also because we're so low lying," Banas says. "It's trying to find enough slope to drain water when you're already darn near at water level."

While Mary's recent breakthrough is the most recent project development, it's important to remember that the entire Hampton Roads project is more than just a tunnel. Five bridges are being replaced, 20 bridges are being rehabilitated or widened, a mile of interstate highway is being widened in Hampton, and four miles of interstate are being widened in Norfolk. The project is also adding two general purpose lanes, plus a Hampton Roads Express Lane, as part of a 45-mile continuous network.

With a nearly \$4 billion price tag, project goals are for the new system to last at least a century, even with a harsh environment occasioned by storms. Corrosive salt spray is a constant factor, forcing project designers to use stainless steel in bridge construction to prevent rust and corrosion.

"At one point in one of our years, we were consuming about one percent of the world's stainless steel," Banas recalls. "We really looked at it from a perspective of getting these facilities out of the salt spray. We can't run the risk of those systems and their support infrastructure corroding, requiring replacement and having down time."

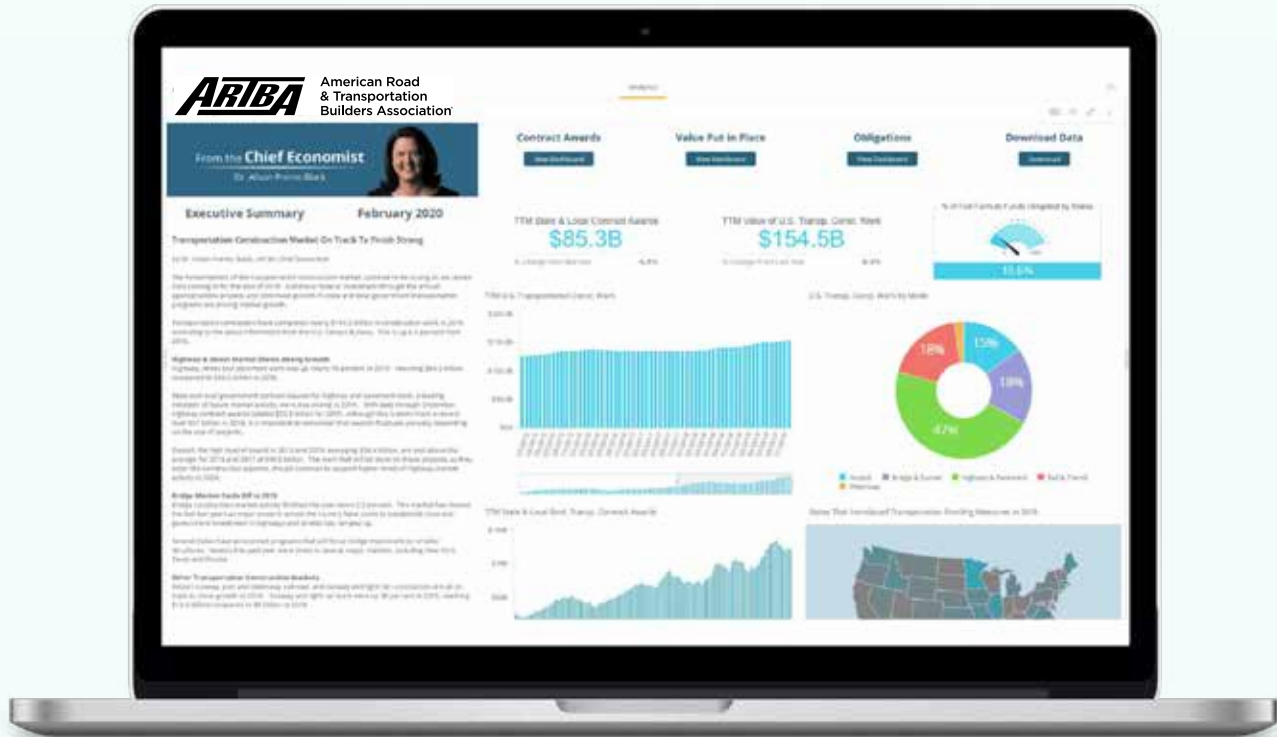
"There's a great likelihood that these tunnels will be here for a couple of hundred years," Banas said.

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*John Schneidawind is ARTBA vice president of public affairs.*

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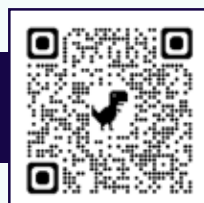
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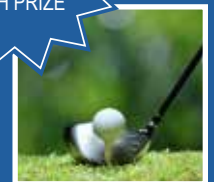
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# Paving the Way for the Next Generation of Construction Professionals

BY TODD SUTTON  
Todd.Sutton@Zachrycorp.com

Several years ago, Zachry Construction Corporation embarked on a journey to address the critical shortage of skilled craft and professional workers in the construction industry while also exemplifying our core values. The Zachry Career Exploration Program for Dreamers and Builders brings two programs under one umbrella of innovation.

The Career Exploration Program for Dreamers inspires future field and project engineers, while the Exploration for Builders Program stokes the interest of future skilled craftworkers. Both programs reach out to high school students with interests in engineering and technology and introduce them to the diverse opportunities available within the construction field. This eight-week program is designed to spark passion and ignite their imagination, while equipping them with practical skills that will benefit them in their academic and professional endeavors.

As the director of construction technology and a passionate advocate for workforce initiatives, I have had the privilege of leading this program for five years. With more than 35 years of experience in the construction industry, I am committed to fostering a culture of innovation and encouraging the next generation to embrace the transformative power of STEM in shaping the future of construction.

Collaboration is at the heart of the Career Exploration Program. We partner with industry experts to provide our interns with a comprehensive and engaging learning experience. Through hands-on projects, interactive workshops, and real-world case studies, participants gain firsthand insights into the latest technologies and practices used in highway infrastructure projects.

One of the highlights of the program is the use of STEM projects that directly apply to real-world construction scenarios. Students work in teams to tackle challenges related to data collection, analysis, and distribution. They utilize cutting-edge software such as Civil 3D, InfraWorks, Synchro 4D, Bluebeam Revu and Twinmotion to create models and visualizations that will be used in future projects. These projects not only showcase the practical applications of STEM but also teach valuable skills such as problem-solving, collaboration, and leadership.

In addition to technical proficiencies, the program also emphasizes the importance of soft skills, such as communication, teamwork, and adaptability. Students



*High school students from various San Antonio schools participated in the 2023 Career Exploration Program. Photo courtesy of Zachry.*

learn to effectively communicate their ideas, collaborate with diverse teams, and adapt to changing project requirements. These skills are essential for success in any career, but they are particularly crucial in the dynamic and ever-evolving construction industry.

The success of the Career Exploration Program is reflected in the enthusiasm and achievements of our participants. Previous projects have included building and programming a robotic arm, building a hyper local weather monitoring station using Raspberry Pi's, various sensors, python programming and creating detailed models in Civil 3D and InfraWorks for use in Twinmotion and Synchro 4D. These projects allow students to showcase their creativity, ingenuity, and ability to apply their knowledge to real-world challenges.

The construction industry is facing a critical shortage of skilled workers, and programs like the Zachry Career Exploration Program are essential in bridging the gap and ensuring a sustainable future for the industry. By inspiring and educating the next generation of construction professionals, we are building a foundation for innovation, excellence, and progress.

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*Todd Sutton is Zachry Construction Corporation's director of construction technology.*

**Editor's Note:** This is the third in a series of stories about how ARTBA members are tackling workforce shortages. To share your workforce development success story, please email Carolyn Kramer Simons at [csimons@artba.org](mailto:csimons@artba.org).

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# Q & A

With Maryland Department of Transportation Secretary

**PAUL WIEDEFELD**

## A Transportation Veteran Takes On His Biggest Challenge

*Paul Wiedefeld is no stranger to high-profile events in transportation. As chief executive officer of the Washington Metropolitan Area Transit Authority (WMATA) from 2015 to 2022, Wiedefeld coped with a series of train derailments, funding shortfalls and an unforeseen global pandemic from which D.C.'s Metro system is still trying to recover.*

*But nothing compares with the call he received in the wee hours of March 26, 2024, informing him that the massive container ship Dali had plowed into the Francis Scott Key Bridge in Baltimore's Patapsco River, collapsing the span, killing six road maintenance workers and throwing Baltimore's entire transportation ecosystem into momentary chaos. As Transportation Builder goes to press, the state has successfully reopened the crucial shipping channel. The bridge was broken into smaller pieces, more than 1,300 tons of steel debris was cleared, and the Dali was freed from the tangle of steel in which it was enmeshed.*

*Sworn in as Maryland Department of Transportation (MDOT) Secretary on March 2, 2023, Wiedefeld is drawing on some 40 years of experience to deal with the disaster, including transportation posts in both public and private sectors. At MDOT, he oversees six agencies and leads operations and maintenance of state highways, bridges, tollways, transit systems, motor vehicle licensing, Baltimore/Washington International Thurgood Marshall Airport and the Helen Delich Bentley Port of Baltimore.*

*Here's an edited transcript of a May interview with Wiedefeld and ARTBA Vice President of Public Affairs John Schneidawind:*

**Q: Can you give us a thumbnail sketch of how you run Maryland's transportation system?**

**A:** I'd like to point to the uniqueness of Maryland's transportation department; all the modes of transportation are under the secretary's office, and a consolidated trust fund to support the modes. Then we have the toll authority, which has its own authority for revenues, but is still under the office of the secretary.

That gives us tremendous opportunity to leverage dollars, to leverage political capital to be frank, and to deal with community issues. It gives us the ability to support overall statewide policies. And particularly under this administration, with its focus on not just how we efficiently move people and goods from point A to point B, but also do that in a manner that supports larger societal goals—whether they be child poverty, climate, or economic development. We have the tools of the airport, the port, the highways, and the transit system both in Washington and Baltimore. So, when you have an incident like we've had

with Francis Scott Key Bridge, we're able to bring all those resources to the table, both in terms of our response and as we think long term about how we're going to deal with this.

**Q: How has the bridge collapse affected traffic and toll revenue? Has the revenue loss from the bridge collapse been mitigated by people finding other ways to get around?**

**A:** There will be a loss. Clearly, we've seen increases in traffic on the two tunnels. We've seen this diffusion of traffic through some of the communities. Basically, a lot of the traffic is now going around the Beltway, which is not tolled. And then all the hazmat traffic, high loads and wide loads cannot go through the two toll facilities.

**Q: How much of a traffic delay has emerged?**

**A:** We're seeing anywhere from 20-minute to 30-minute delays now in traditional peak period travel patterns.

See **Q&A**, 34

**Q: Is there an estimate yet as to the actual revenue loss?**

**A:** Not yet. We were generating roughly about \$56 million a year out of the Francis Scott Key Bridge revenues. Again, some of that is being diverted to the two tunnels. So, we have to think much more globally about how we attack this. And again, that's the value of the port and state highway and the toll authority coming at this together. We are all at the same time working with transit and the business community on transit traffic demand, traffic management approaches, whether there should be changes again in teleworking, and when employees come in and out of work to help address the traffic conditions in the wake of the incident.

**Q: How did the transportation construction industry—including any ARTBA members—help you in the immediate hours after the bridge collapse? We've heard that Skanska, for one, was pulled off the Harry Nice Bridge project.**

**A:** We had (Skanska) under contract through a competitive process, so they had done work for us. You can imagine literally within hours of the collapse, we were trying to mobilize every resource we had. We had very large cranes for instance at the Chesapeake Bay Bridge where we were doing some major rehab. We started to mobilize them, and then Skanska had done a lot of work for us at the Nice Bridge and had done a lot of the salvage type issues down there. So, we brought them in right away.

Just so you understand, the channel under the bridge is the responsibility of the U.S. Army Corp of Engineers,

and outside of that is the responsibility of the state of Maryland. We provided those resources to Unified Command. We just said, "Look, this is another tool in your toolbox," and they started to use them right away. The first three openings of the harbor were done, in effect, primarily through that contract.

**Q: What is your goal for re-opening the bridge?**

**A:** As you can imagine, there was a lot of port traffic that went back and forth across that bridge—so it's a port issue, but then it's this larger regional issue. What we're pursuing is a progressive design-build approach to try to basically pick up some time there. We estimate roughly four years—fall of 2028. We're a little bit more than five weeks into this, and doing the best intensive engineering we possibly can in a five-week time period.

**Q: What's the cost?**

**A:** We're estimating \$1.7 to \$1.9 billion.

**Q: When will the construction start?**

**A:** Our initial focus will be on demolition. If that's what does occur, then let's get that contract moving and get through that process or are there things there we can save that could support a future structure.

**Q: Before the bridge collapsed, Maryland Gov. Wes Moore in December proposed cutting \$2 billion out of transportation funding due to budget shortfalls. After**

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**the bridge collapse, Annapolis lawmakers in April managed to pass a bill to generate up to \$350 million in transportation revenue annually. Was the COVID money running out the main reason for the shortfall?**

**A:** It was one of the factors. The cost of doing business has gone up because of inflation. Over time, what you can deliver for that same dollar you cannot deliver any longer. The time on a lot of projects has been pushed out because of labor and materials. These are things that the industry's been wrestling with.

Then, when you add on top of that the uniqueness of this region, which had two major transit authority systems, and the fact that the decision was made during COVID that we want those systems to continue to operate at the same level for lots of reasons, and you can see why a shortfall developed.

One option obviously at that time would have been, okay, we'll let all these people go. But that was not the national policy. That decision—at the time—was supported by COVID money, which is now dried up. To continue to deliver the services that you use at the Metro around the corner from you, those bills continue to grow as we continue to commit.

And also, I think an industry issue we all wrestle with is the state of good repair.

Those are significant dollars. And associated with that is the technology, the systems, that support these, the ability to run the system itself—those are things that literally you cannot find. Technology has changed over time, and you're replacing all that.

**Q: So where do things stand in Annapolis right now?**

**A:** The governor and the legislature felt it was not the time to go after an aggressive revenue proposal. So, there were some dollars put in which allowed us to do some of the core things we do. We were proposing significant cuts—particularly on the basics like reducing hours in the motor vehicle administration, restricting some of the transit operations, and picking up litter on highways.

We backfilled some of those basics, but the core issue is still there, and they've set up a commission that is going to address it before our session starts. They will have 90 days after the new year to work through those issues in finer detail.

**Q: With the bridge collapse, and the tragedy of six roadway workers losing their lives along with countless other damages and delays, what's your**



*The collapsed Francis Scott Key Bridge rests on top of the cargo ship Dali in the Baltimore Harbor in an undated photo provided by MDOT.*

**thinking about how that disaster has affected the attitude of legislators in Annapolis? Has it made them more conscious of the public's dependency on transportation systems? Is it the seminal event that changes attitudes?**

**A:** I think it has—on two levels. Clearly, what you see is the importance of infrastructure on so many levels—literally from a base community identity. That bridge was part of the culture of some of those communities. Yes, physically, it provided mobility. But at the end of the day, it was part of their community.

Then roughly it was about 250,000 vehicles a day between the three crossings—almost 40,000 at peak periods. So, a relatively small amount compared to the other two, but even that small amount quickly changes the balance of the system. So that's coming into clearer focus.

The other thing that's coming into clearer focus is the professionalism of this industry. To do what we've done over the last six weeks—the Corps of Engineers, Coast Guards, Toll Authority, the highway team—for all of us to wrestle with this, come out with a strategy and then implement that strategy literally overnight is an achievement.

It reinforces that when we spend these dollars, and we spend them wisely and efficiently, we're delivering something that people need. That is an overarching message not only to Annapolis, but to the public at-large.



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# Industry Leader Development Program Class of 2024

Almost four dozen industry executives participated in the ARTBA Foundation's annual Industry Leader Development Program (ILDP), held May 13-15 in conjunction with the association's Federal Issues Program and Transportation Construction Coalition Fly-In in Washington, D.C. The program introduces participants to the federal transportation policymaking process.

**Taylor Augustine**, Michigan Paving and Materials, Canton, Mich.

**Troy B. Brooks**, North Carolina Department of Transportation, Raleigh

**Kyle Chism**, Parsons, Louisville, Ky.

**Richard Crochetiere**, Reeves Construction, a Colas Company, Duncan, S.C.

**Neesha A. Desai**, Gannett Fleming Inc., New York, N.Y.

**Chris Dillman**, Ralph L. Wadsworth Construction, Draper, Utah

**Haley Duit**, Duit Holdings Inc., Edmond, Okla.

**Nick Duncan**, Callanan Industries a CRH Company, Albany, N.Y.

**Emily Gallo**, HNTB Corp., New York, N.Y.

**Daniel A. Garcia**, Texas Department of Transportation, Pharr

**Robby Graham**, Cone & Graham Inc., Tampa, Fla.

**David Greenberg**, CRH, Crown Point, Atlanta, Ga.

**Michael Izzo**, TranSystems Corporation, Baltimore, Md.

**Mi Hyeon [Christy] Jeon**, AtkinsRealis, Atlanta, Ga.

**Matthew D. Justice**, Harrison Construction Company, APAC-Atlantic, Inc., Knoxville, Tenn.

**Jessica Kiesel**, Ajax Paving Industries of Florida LLC, North Venice, Fla.

**Lane Kimble**, Wisconsin Transportation Builders Association, Madison, Wis.

**Vance Koonce**, The Lane Construction Corporation, Cheshire, Conn.

**Cathleen Kratz**, Texas Department of Transportation, Austin

**Patricia Lencki**, PJ Keating a CRH Company, Lunenburg, Mass.

**Jeremiah Leyba**, Michigan Infrastructure & Transportation Association, Okemos, Mich.

**William Linehan**, CRH, New Britain, Conn.

**Ryan M. Macander**, TranSystems Corporation, Lisle, Ill.

**Michelle Martin**, WSP USA, Virginia Beach, Va.

**Brian McGarity**, Superior Construction Company Southeast, LLC, Jacksonville, Fla.

**Matthew Miltner**, The Lane Construction Corporation, Charlotte, N.C.

**Caleb Mulzer**, JH Rudolph a CRH Company, Tell City, Ind.

**Junell O'Donnell**, Parsons, Crown Point, Ind.

**Andrew Parks**, Branch Civil, Inc., Mooresville, N.C.

**Shannon Ramos**, Texas Department of Transportation, Lufkin

**Lisa Rottmann**, Stowers Machinery Corporation, Knoxville, Tenn.

**Paul Schmitz**, Tensar, a division of CMC, Alpharetta, Ga.

**Chris Segur**, Parsons, Sacramento, Calif.

**Andrew Shelton**, Branch Civil, Inc., Chesapeake, Va.

**Meagan Smyth**, Skanska USA Civil, East Elmhurst, N.Y.

**Jim Splendoria**, Aldridge Electric Inc., Libertyville, Ill.

**Radha Krishna Swayampakala**, RS&H, Charlotte, N.C.

**Andrew J. Taylor**, The Shelly Company, Thornville, Ohio

**Heath Thompson**, Rogers Group, Cookeville, Tenn.

**Rachelle VanDeventer**, Michigan Infrastructure & Transportation Association, Okemos, Mich.

**Connor VanSteenberg**, AGC of Texas, Fort Worth, Texas

**Kush Vashee**, RK&K, Fairfax, Va.

**Jaclyn Weaver**, Pennsy Supply a CRH Company, Harrisburg, Pa.

**David A. Williams**, Terracon Consultants, Inc., Springfield, Mo.



# Shirley Contracting Company Celebrates 50 Years

BY BETH MCGINN  
bmcginn@artba.org

On April 10, 1974, Robert E. “Bob” Post founded Shirley Contracting Corporation in Arlington, Va., a suburb of Washington, D.C. The name was a nod to a massive project he previously managed for another company—the “Mixing Bowl” located along Henry G. Shirley Memorial Highway (I-395) next to the Pentagon.

The company’s first project was the rehabilitation of the George Washington Memorial Parkway Bridge over Four Mile Run, a major commuting artery along the Potomac River connecting communities north and south with bridges into D.C., as well as access to the Pentagon and National Airport.

“I’ll never forget they put us in an office trailer on land adjacent to National Airport, and that was our first office,” recalled company CEO Michael Post, Bob’s son.

As time passed, the company developed their headquarters in Lorton, Va., and took on bigger projects. One of Shirley’s earliest and most visible was the Pennsylvania Avenue Reconstruction and Improvements Project completed in the 1980’s. The iconic street connects two branches of American government—the White House

*Shirley Contracting Corporation  
Founder Bob Post*



and U.S. Capitol. It carries presidential motorcades during inaugural parades and has been the backdrop of many movies. This complex, high-profile project required extensive maintenance of traffic and pedestrian accommodations for the many tourists and was complicated by the multiple utilities under the roadway.

Another notable project came in 1986 when Shirley was tapped to build the historic Chinatown Friendship Arch in Downtown D.C. Sixteen Chinese artisans were brought in from China to work with Shirley’s team on the intricate, hand painted decorative elements. At the time, it was recognized by the Guinness Book of World Records as the largest single-span archway in the world. Today, it is one of the city’s most cherished local landmarks.

### **A New Era Begins**

Tragically, Mr. Post passed away after a brief illness in 1992. Shortly thereafter, Shirley became part of OMNI

Construction Inc., now The Clark Construction Group, LLC, and under the leadership of Michael Post.

By the late 1990's the population in and around the Nation's Capital exploded. Commuters and truck traffic were converging at the juncture of I-95/I-395 and the I-495 Capital Beltway, creating severe backups in all directions. To solve the problem, the Virginia Department of Transportation (VDOT) announced it was moving forward with the Springfield Interchange Improvements Project. Shirley was well positioned and won two of the largest segments—Phases II&III, and Phase IV. At the time, these were the largest projects in VDOT's history and the company's first \$100+ million projects. Both were completed early.

Today, Shirley Contracting Company, LLC, has grown to become a leading provider of comprehensive transportation and heavy civil construction services throughout the Mid-Atlantic Region. Some of their biggest projects to date include the half-billion-dollar Intercounty Connector (ICC) in Maryland and the Route 28 Corridor Improvements P3 Project in Northern Virginia. With two other divisions—Metro Earthworks (also celebrating their 25th anniversary in 2024) and Shirley Underground—the company has broadened their services to include site excavation and grading, underground pipe video inspection and cleaning, hydro excavation, and test-pitting.

The firm's diverse capabilities made it the perfect choice for helping build the National Museum of African American History and Culture near the White House and Washington Monument. Shirley's Metro Earthworks division was awarded the foundation excavation package in 2012. The challenging schedule required the team to work six days and six nights a week in a congested urban environment. The excavation was nearly 80 feet deep and encompassed a full city block on the National Mall.

### 50 Years And Counting

From national landmarks to interstate highways and local interchanges, Shirley has helped build the Nation's Capital.



ARTBA CEO Dave Bauer (right) and General Counsel Rich Juliano (center) April 17 attended the 50th anniversary reception for Shirley Contracting in Falls Church, Va. Shirley Senior VP Jon Harman welcomed them.

Looking back on the company's 50-year history, current president Greg Smith says, "We have accomplished so much because of our great people, and because we adhere to all of our core values—Safety, Integrity, Innovation, Pride, and People."

If you visit Washington, D.C., or the surrounding region, there is a good chance you are on infrastructure built by the company Mr. Post founded five decades ago.

And the need for Shirley's services will not slow down anytime soon. The D.C. Metro area and surrounding states are still growing and diversifying at a rapid pace. As they do, Shirley will continue to grow and thrive right alongside them.

*Beth McGinn is ARTBA vice president of communications.*



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# # Infrastructure Investment Works

*Seventh in an ongoing series highlighting the real-world benefits of the Infrastructure Investment and Jobs Act (IIJA).*



## Curing a Bottleneck Across the Great Divide

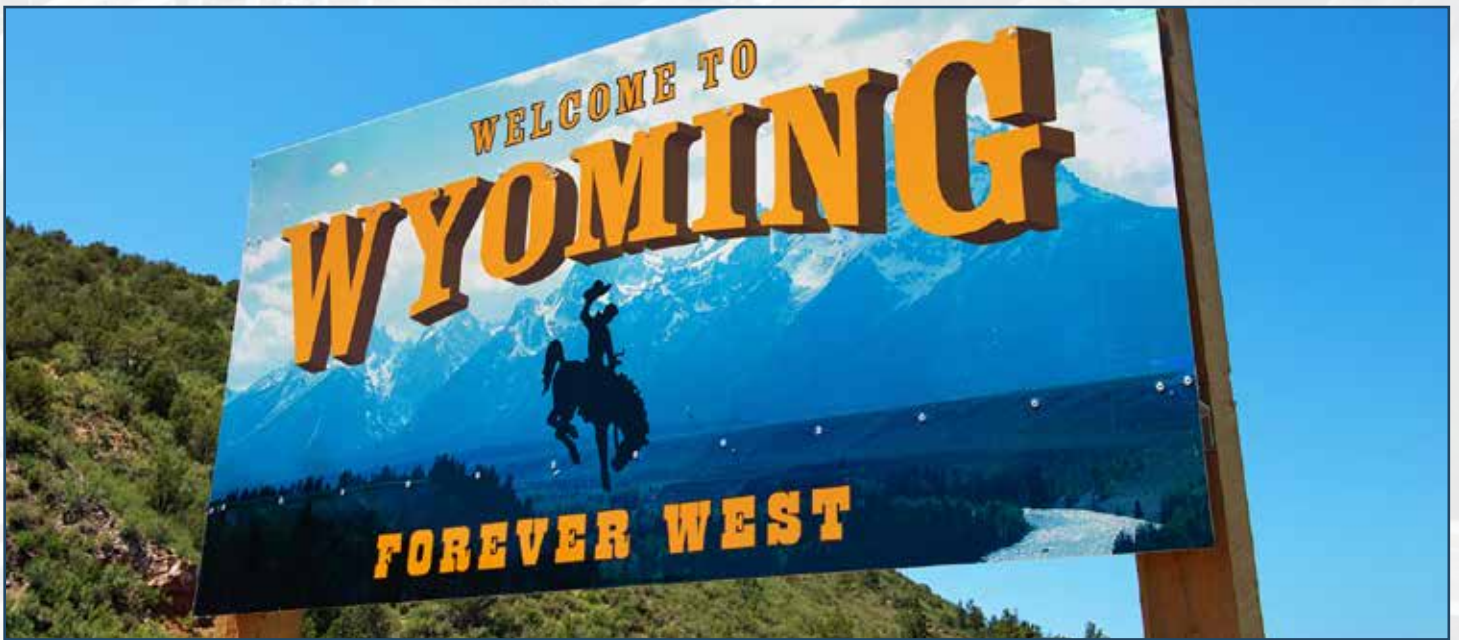
**Challenge:** If you have ever lived in Colorado, you’ve probably been frustrated by the traffic delays along the winding, eight-mile stretch of I-70 between Evergreen and Idaho Springs. The existing curves along this route frequently obscure drivers’ line of sight, creating slow-downs and rear-end crashes that lead to tie-ups and closures. The infrastructure around Floyd Hill was built in the 1960s and badly needs an upgrade, especially with the growing population along Colorado’s Front Range and the increasing traffic volumes on I-70.

**Solution:** The Colorado Department of Transportation (CDOT) began work last year on the first phase of a three-phase, mammoth project to add a third, west-bound, full-time toll express lane that runs from west of Homestead Road through the Veterans Memorial Tunnels to Colorado Boulevard and Idaho Springs. Funded in part by a \$100 million “Nationally Significant Multimodal Freight & Highway Projects” (INFRA) grant from the IIJA, the project also will rebuild bridges damaged by weather and heavy use, improve roadway curves, construct a two-mile section of frontage road between U.S. Highway 6 and the Hidden Valley and Central City Parkway interchanges, and build an extended on-ramp from U.S. Highway 6 to allow slow-moving traffic to more easily merge.

**What They’re Saying:** “From a public works perspective, this is huge,” said Skyler McKinley, spokesperson for AAA Colorado. “The area has always been a chokepoint. And it’s a significant area for safety concerns.” (Ski-Hi News)

*(As published on [artba.org](https://www.artba.org) Feb. 8, 2024)*

- **Estimated Cost:**
- \$700 million
- 
- **IIJA Funds:**
- \$100 million
- 
- **Designer:**
- Atkins Realis
- 
- **Contractor(s):**
- Kraemer North
- America
- 
- **Start Date:**
- 2023
- 
- **Estimated**
- **End Date:**
- 2028
- 
- 
-



## Wild Interchange Gets Safety-Focused Redesign

**Challenge:** The interchange at I-25/I-80 in Cheyenne, Wyo., was built in the 1960s. Back then not many people crossed through this part of the wild west. Today, this juncture is a different kind of wild—clogged with local, state, and national freight traffic. Trucks leaving the highway must slow from 70 to 20 miles per hour along tight turns. Crash rates have reached unacceptable levels—160 collisions since 2018. Experts say the culprit is its outdated cloverleaf design, tight curves, and insufficient acceleration and deceleration lanes. In its 60-year lifespan, no major improvements have been made.

**Solution:** With help from the federal infrastructure investment law, the state of Wyoming is finally able to redesign this outdated juncture to accommodate the demands of today's modern traffic and commerce. Engineers are figuring out how to replace the obsolete cloverleaf design with smoother turns and additional acceleration and deceleration lanes. For people who drive in and through Cheyenne—a safer and more reliable trip is just ahead.

**What They're Saying:** "If you've ever driven to Cheyenne you may be haunted about the I-80 to I-25 interchange. It's a fast, tight, loop-de-loop with little room for error as on-ramp and off-ramp traffic jockeys with one another in a short distance at fast speeds after hundreds of miles of safe distance. Who designed that mousetrap? It will all change soon. Wyoming Department of Transportation (WYDOT) receives federal funding to redesign the Cheyenne I-80 interchange." (KTGA 99 Big Foot Radio, 7/13/23)

*(As published on [artba.org](https://artba.org) Dec. 13, 2023)*

- **Estimated Cost:**
- 2020 estimate between
- \$207.2 million and
- \$310.7 million
- 
- **IJA Funds:**
- \$13 million RAISE
- Grant (Design Phase)
- 
- **Designer:**
- WYDOT and Jacobs
- 
- **Contractor(s):**
- Awarded after Bid
- Design Phase
- 
- **Start Date:**
- 2023 (Design Phase)
- 
- **Estimated End Date:**
- September 2027
- 
- 

If you have an IJA project that should be featured, please contact ARTBA's Beth McGinn at [bmcginn@artba.org](mailto:bmcginn@artba.org).



## Top States for Asphalt Demand in 2023

Texas, South Carolina, Florida, Missouri, California, and Illinois were the leading states for highway asphalt demand in 2023—driven by federal investments from the Infrastructure Investment and Jobs Act (IIJA), additional state funding, and the mix of projects, according to a new report by ARTBA's economics team. Three of those states (Texas, South Carolina and Florida) allocated over a third of their IIJA funds to added capacity or new construction projects.

State departments of transportation (DOTs) solicited bids for \$69 billion worth of highway and bridge projects in 2023, with asphalt materials totaling \$16.9 billion, making up nearly 25 percent of project costs. This was the largest single expenditure on most state DOT projects.

The ARTBA analysis included projects that went through the bid process in 49 states but excludes local work, direct government purchases, and design-build projects. State DOT bids accounted for about two-thirds of the total value of new projects and awards in 2023.

While the cost of materials has increased over the last few years, examining the actual volume of materials in state agency bids provides insight into real market growth. Growing demand for more materials indicates more construction activity—regardless of the change in prices.

The state DOT projects analyzed by ARTBA require over 116 million tons and 519 million square yards of asphalt material. These goods will be purchased and used as construction activity begins.

### Key States and Projects

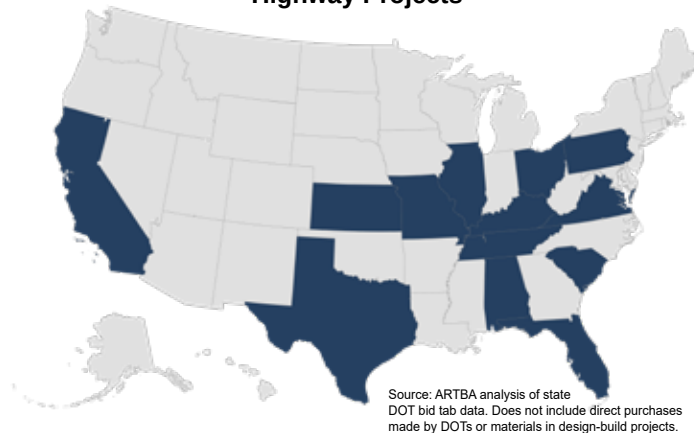
Asphalt demand in state DOT projects was also up sharply in 2022, increasing by 81 million square yards (+15.5%) and 12 million tons (+10%) compared to 2021.

Total U.S. volumes in state DOT bids declined in 2023 as demand grew for cement, concrete, and bridge related materials. It is common for material demands to fluctuate from year to year based on the mix of projects.

Despite the national trend, asphalt demand was up significantly in some states.

- **Top States for Asphalt Demand by Tons:** Texas, South Carolina, Kentucky, Florida, Tennessee, Missouri, California, and Kansas.

### Top States – Demand for Asphalt From State DOT Highway Projects



- **Top States for Asphalt Demand by Square Yards:** Pennsylvania, Ohio, Illinois, Virginia, and Alabama.

One notable project requiring significant amounts of asphalt was a bridge jacking and rehabilitation project in Newberry County, South Carolina. The federally supported project, let in April 2023, included bid items for surface and intermediate course, tons of base course, pavement milling, and full-depth patching.

Other top projects for square yards of asphalt included work on US 422 (Pennsylvania), I-57 overlay (Illinois), and resurfacing on I-59, SR-55, and US-80 (Alabama).

### Growing Demand

Demand for asphalt grew by 1.6 million tons in Florida in 2023; 1.3 million tons in Tennessee; and 1.2 million tons in California. Demand was up by nine million square yards in Florida, 7.8 million square yards in Texas, and 5.5 million square yards in California.

States showing the greatest gains in terms of the percentage increase in demand for tons of asphalt were West Virginia, Massachusetts, Florida, New Jersey, California, Tennessee, and Utah.

This includes work on projects like repaving I-79 in West Virginia between Big Otter and Frametown Road—a \$37.7 million project awarded to West Virginia Paving that includes over 142,000 tons and 1.78 million square yards of asphalt-related materials.

The percentage increase in demand for square yards of asphalt was highest in Nevada, Oregon, West Virginia, Arizona, Florida, and California.

### Additional Demand for Asphalt

Aside from state DOT projects, local projects, direct government purchases, and design-build projects also contribute to asphalt demand but are harder to quantify.

For example, a local repaving project recently awarded for \$2 million in the city of Lake Charles, La., to repair 10 streets requires nearly 11,500 tons of asphalt, plus additional demand for milling and patching work.

The \$4.7 million reconstruction of Hazard Avenue in Los Angeles was a project bid and awarded by the Los Angeles County Department of Public Works that also requires asphalt material.

Based on data from the U.S. Bureau of Economic Analysis, state and local government direct purchases of asphalt products for their own maintenance work and repairs are likely in the range of at least \$6 to \$7 billion per year.

### Other Major Materials

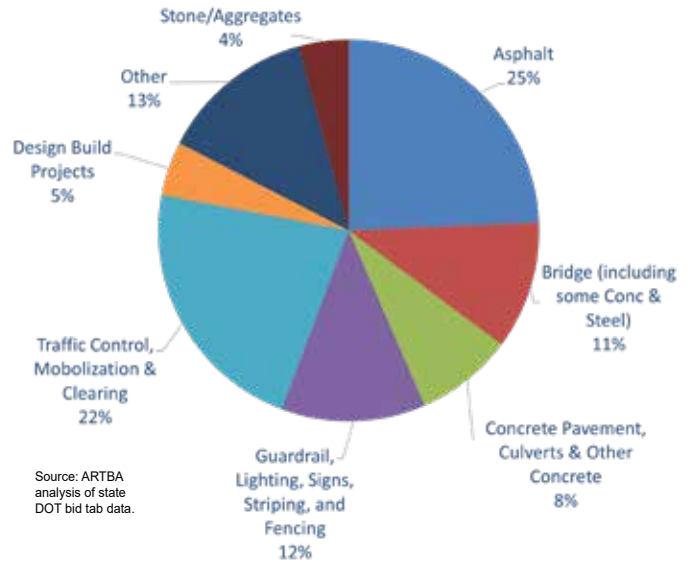
ARTBA also found growing demand for the volume of concrete pavement, culverts, and cement, which increased steadily in 2022 and 2023, with significant growth in demand in Maryland and Florida.

Volume demand has been growing for linear feet of striping and pavement markings, guardrails, the number of traffic signals, permanent signs, and items related to utility work.

The dollar value of lump sum items for traffic control, mobilization and clearing have also increased, indicating underlying cost increases likely related to wages and labor supply.

While demand for bridge related materials was down in 2022, volumes have rebounded in 2023. The rehabilitation

### 2023 Breakdown of State DOT Project Costs by Major Material & Related Services



of the Neil R. Underwood Bridge in New Hampshire, bid in December 2023, is a \$107 million project that requires over four million pounds of structural steel.

While the specific volumes of different materials can vary from year to year based on the mix of projects, ARTBA expects overall demand to continue to increase in 2024, indicating continued growth in real construction activity. This is also supported by the increased number of projects underway and record employment levels by highway and bridge contractors in 2023 and early 2024.

*Dr. Alison Premo Black is ARTBA chief economist.*

**Editor's Note:** ARTBA provides detailed custom analysis of state and local market demand for specific materials as part of the Transportation Construction Market Intelligence Service. For more information, visit [economics.artba.org](https://economics.artba.org).

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# Regulatory Roundup

BY PRIANKA SHARMA  
psharma@artba.org

## Regulations Meant for Safety Can Sometimes Miss the Mark

When it comes to the safety of roadway workers and drivers, regulations should enhance, not impede. Unfortunately, the recent deluge of federal regulations does not measure up.

Take the Occupational Safety and Health Administration's (OSHA) worker walkaround rule, for example. Historically, during jobsite inspections, an employee or a third party with relevant expertise was allowed to accompany an OSHA inspector if good cause was shown. Recently, OSHA expanded the rule to allow any third party to accompany an inspector if deemed reasonably necessary, removing the prior requirement for specific expertise. OSHA claims this move offers clarity to the process. However, in practice, it could lead to significant delays, logistical complications, and legal risks for employers. For instance, allowing a third party unfamiliar with a construction site to participate could result in safety concerns. The rule also opens the door for a disgruntled employee's attorney or a union representative to gain access to a non-union jobsite, potentially leading to further complications.

Similarly, the Mine Safety and Health Administration's (MSHA) silica rule aims to protect miners from the hazards of respirable crystalline silica, which can cause serious health issues. The rule imposes stringent mandates on mine operators, including a lower Permissible Exposure Limit (PEL) of 50  $\mu\text{g}/\text{m}^3$ , mandatory sampling, and regular written assessments of operations, even when there are no changes. It also mandates stringent monitoring and control measures, rejecting respirators as a permanent compliance method except under certain conditions. All operators, including portable and seasonal ones, must comply with periodic evaluations and sampling. While the rule aims to improve safety, industry groups are concerned the high costs and challenges of compliance may complicate rather than enhance current safety practices.



On the proposed rule side, the Federal Highway Administration's (FHWA) Highway Safety Improvement Program (HSIP) regulation, though well-meaning, misses a key vulnerable group: roadway workers. The HSIP requires states to develop and implement strategic highway safety plans to reduce fatalities and serious injuries on all public roads. Despite its comprehensive approach, the rule overlooks the specific needs of those working on the roads. ARTBA has urged the FHWA to explicitly recognize highway workers as vulnerable road users and include protections for them in state safety plans.

For regulations to truly enhance safety, it is crucial to balance well-meaning intentions with practical, effective implementation. ARTBA stands ready as always to work with the agencies to ensure that these regulations enhance the safety of our members who risk their lives daily to ensure that we have secure and reliable roads and bridges.

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*Prianka Sharma is ARTBA vice president and counsel for regulatory affairs.*



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# ARTBA on the Road

Sen. Mitch McConnell (R-Ky.), center, received the 2023 ARTBA Award May 15 from (left to right): ARTBA President **Dave Bauer**, ARTBA Senior Vice Chair **Jeff Nelson** (David Nelson Construction), ARTBA Chair **Tim Duit** (Duit Construction Co., Inc.), **Chloe Walker**, **Art Walker** (Walker Construction), and **Chad LaRue** (Kentucky Association of Highway Contractors).



Ajax Paving Executive Vice President **Scott Pittman** (left) and Florida Transportation Builders' Association President **Ananth Prasad** (right) visited with House Speaker **Mike Johnson (R-La.)** May 15 as part of the ARTBA Federal Issues Program and Transportation Construction Coalition (TCC) Fly-In.



**Duit** is flanked by Construction Industries of Rhode Island (CIRI) Executive Director **Ernie Carlucci** (left), and CIRI Chair **Mike D'Ambra** (D'Ambra Construction Co.) at the May 29 CIRI Spring Dinner Meeting in Warwick. **Duit** and U.S. Sen. Jack Reed (D-R.I.) were featured speakers at the event.

Construction Partners Inc. President & CEO **Jule Smith** (left) met April 5 with ARTBA COO **Matt Jeanneret** at the company's offices in Raleigh, N.C. The vertically integrated civil infrastructure firm operates across six southeastern states.



**Bauer** May 21 participated in a session on how to manage rising project costs during the North Carolina Department of Transportation's 2024 Transportation Summit in Greensboro.



ARTBA Senior Vice President of Safety and Education **Brad Sant** spoke from a Mobile, Ala., jobsite during an April 15 livestreamed National Stand-Down to Prevent Struck-By Incidents.

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## Breaking Down Stigmas: CONEXPO-CON/AGG's Commitment to Mental Health

CONEXPO-CON/AGG, North America's largest construction trade show, used Mental Health Awareness Month to spotlight the unique challenges facing the construction industry. In May, the organization launched a comprehensive resource hub dedicated to mental wellness. The hub provides actionable resources, inspiring personal stories, and practical advice for both employers and employees.

The content focuses on fostering a supportive community where discussions about mental wellness are normalized and encouraged. Through the award-winning CONEXPO-CON/AGG podcast, Denis Cashman courageously shares his battle with addiction and recovery. In another episode, Ryan Priestly provides insights on stress management and work-life balance in the demanding construction sector. This resource hub also addresses startling statistics, including reports that men are four times more likely to die by suicide, offering guidance on destigmatizing mental health discussions across all genders.

"The construction industry is filled with professionals committed to precision in everything they do," said CONEXPO-CON/AGG Show Director Dana Wuesthoff. "This level of attention and care must also be given to the mental health of all construction professionals. CONEXPO-CON/AGG is committed to breaking down stigmas and creating a future where mental health isn't an afterthought but the cornerstone of our industry."

Further demonstrating its dedication, CONEXPO-CON/AGG generously donated \$5,000 to the Construction Industry Alliance for Suicide Prevention (CIASP). This contribution supports CIASP's mission to dismantle the stigma associated with mental health in the construction industry and prevent suicides among construction workers.

"CIASP estimates 10 to 12 construction workers die by suicide every day," said Wuesthoff. "From the educational content at our events, to informative articles on our website, and now this contribution, CONEXPO-CON/AGG is committed to tackling this statistic and supporting our industry."



The combined efforts of CONEXPO-CON/AGG's resource hub and the donation to CIASP represent a holistic approach to mental health advocacy. By addressing the issue from multiple angles—education, community support, and financial backing—CONEXPO-CON/AGG hopes to help create a future where mental health is not an afterthought but a cornerstone of the construction industry.

### MARK YOUR CALENDAR

The next CONEXPO-CON/AGG event is scheduled for March 3-7, 2026, in Las Vegas.

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# A Simple Solution to Dangerous Highway Debris

BY JOHN SCHNEIDAWIND AND BETH MCGINN  
jschneidawind@artba.org; bmcginn@artba.org

You see it all the time obstructing the nation's crowded highways—a plastic bumper, a bloated deer carcass, a massive, shredded tire.

Highway debris is more than just a momentary distraction. It's a constant danger to motorists and the workers whose job it is to remove it.

That's why a simple device called "LaneBlade®" from J-Tech of Chester Springs, Pa., is such an epiphany. A cross between snowplow and forklift, LaneBlades® are fast catching on with state departments of transportation across the country.

Primarily known for two decades as a manufacturer of TMAs (truck-mounted attenuators), J-Tech has discovered that LaneBlades® is a much-needed addition to its product line.

"We build TMAs for the Pennsylvania Turnpike and have been doing that for a number of years," said Fred Bergstresser, J-Tech's marketing and business development manager. "And they came to us and asked us to make something to help them get the deer carcasses off the road."

"I think they had 600 deer hit in one month—the month of October this past year—and that's pretty much a routine every year, and they needed something to push the deer off the road," Bergstresser said. "We came up with the LaneBlade®, and that's our newest safety device."

J-Tech custom-made three for the Turnpike Authority—one for the Pocono Mountains, one for western Pennsylvania and one for Philadelphia. The agency liked the device so much they've outfitted their safety patrol vehicle fleet. "They must have 24, 25 of them now," he said.

Previously, road maintenance crews had little choice on clogged highways but to come to a rolling stop, halt traffic and run out to pull an object off the road.

"But that's dangerous because you're slowing down traffic and creating another problem of people queuing behind that," Bergstresser said, which can cause rear-end crashes.



"The other way that you get debris off the road is the worker just runs out of the road, looks for traffic, and grabs it."

Tragically last spring, a young highway worker in Arkansas went out into traffic to retrieve a shovel and was struck by a car. Since that time, the Arkansas Department of Transportation has purchased 13 LaneBlades® and has applied for a federal grant to purchase additional units.

Unfortunately, this tragedy was not an isolated incident. A study by AAA's Foundation for Traffic Safety found that between 2011 and 2014, road debris was a factor in a total of more than 200,000 police-reported crashes, resulting in roughly 39,000 injuries and 500 deaths. More than one in three debris-related crashes happen between 10 a.m. and 3:59 p.m., when people are hauling things like furniture or construction equipment.

Bergstresser says the LaneBlade® is a hydraulic device equipped with two steel wings folded back on each side. "But when they want to get debris off the road, (the operators) push a button, the wings come forward, it drops down and then they go to the debris and just push it off the road."

As word spreads in transportation circles, Bergstresser finds himself answering more and more questions about the LaneBlade®, both at home in the U.S. and abroad in Brazil, Australia, Taiwan and Europe.

"No life is worth a deer carcass or shovel," he said.

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*John Schneidawind is ARTBA vice president of public affairs. Beth McGinn is ARTBA vice president of communications.*

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