Kilgore, TX

Aerial view of new pedestrian bridge and elevator tower

See page 42

Photo courtesy of RLM General Contractors

SECOND ANNUAL SOUTHEAST REGION CONFERENCE

ASHE Southeast Region

October 8 - 10, 2025

Jacksonville, FL

Hosted by Northeast Florida Section

The 8 Sections of the ASHE Southeast Region invite you to attend our 2nd Annual Conference, held in downtown Jacksonville. Join us as 200 transportation industry professionals gather at the beautiful Hyatt Regency for a full day of technical sessions and a River Jam happy hour, followed by a day of local project site tours, and more!

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Jim Shea, PE
ASHE National President 2025-2026

New Directions

We recently gathered at the 2025 ASHE National Conference at the Kalahari Resort and Convention Center in Pennsylvania's Pocono Mountains. The hosts were Delaware Valley Section, East Penn Section and North East Penn Section. Dick Cochrane, Heather Heeter, John Caperilla and the entire planning team welcomed ASHE members and delivered a memorable event. It was an honor to accept the position of ASHE National President during the Saturday night gala. I left inspired by the award winners, the technical excellence on display and the continued commitment to ASHE's mission of education, fellowship and service to the industry.

At the Conference, I had the opportunity to host my first Board meeting as President and share a few key goals for the year ahead. We'll be launching a national membership drive, continuing to roll out user-friendly technology to reduce the burden on Section volunteers. We will focus on deeper engagement between National leadership and our local Sections. I'm proud of the growth we've seen through the formation of new Sections. It's exciting to see ASHE reach new geographies and new professionals. At the same time, I believe there is untapped potential within our existing Sections. Many events draw strong participation from across the industry, and I see a real opportunity to welcome even more of those attendees into ASHE's membership. Whether it's their first time engaging or they've been around for years, we know the value that ASHE brings: professional connection, leadership development, technical enrichment and a strong sense of community. This year's membership campaign is about growing in both directions, continuing to support new Section development while also maximizing participation and engagement where we already have a strong foundation.

I hope to visit many Sections this year to meet your officers, hear what's happening locally and thank you in person. Your ASHE stories are my ASHE stories: the camaraderie of planning Section events, the pride in advancing through officer roles and that sense of giving back to something that's given us all so much. I feel the same hope and optimism now that I did when I became President of ASHE Lake Erie Section. I am hopeful that I can leave the organization better than I found it, and grateful for the relationships and moments of impact we will create along the way.

Just a week after the National Conference, I visited the Chesapeake Section to attend their Annual Member Appreciation event. Their energy, strong programming and emerging leaders reminded me exactly what ASHE is all about: our Sections and our members. Across the country, hundreds of volunteers are putting in the work, organizing technical sessions, networking events, fundraisers and young-member programs. That work matters. It's what makes this organization so special. Keep it up; we all benefit from it.

ASHE scanner

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From *scanner*'s Chair

ASHE President Don Di Zuzio presents Rhonda with the ***President's Award*** for her leadership and talent as Chair of the *scanner* committee.

Our nation's infrastructure is the backbone of the American economy and the foundation of our global competitiveness.

From bridges and highways to transit systems and airports, our transportation networks are long overdue for the transformation they need, along with new infrastructure systems for growing communities. As infrastructure professionals, we are proud to lead this effort, designing and delivering projects that make our communities safer, more resilient and more connected.

This work requires vision, collaboration and the best minds in the industry. That's why *scanner* exists, not only to document the technical and creative achievements of our members but also to bring the nationwide community together in pursuit of a shared mission.

The *scanner* SAY Article of the Year Awards shine a spotlight on the standout stories that elevate our profession. These articles capture the heart of what we do: deliver projects that serve the public, advance innovation and respond to society's evolving needs.

Through these awards, we celebrate the people and projects that exemplify excellence in transportation and infrastructure. We honor the authors who have taken the time to share insights, lessons and inspiration, helping to strengthen our profession and connect our local success stories to a national audience. Together, we are building more than infrastructure; ***we are building the future.***

Scanner Say Article of the Year AWARD

It is my pleasure to announce the top winners of the SAY awards 2024-2025:

First Place Champion Award: *Floating a New Bridge Upriver to Ease Traffic on US 60.* Authors: Taylor Perkins, PhD, SE, PE, Stantec, and Austin Hart, PE, Kentucky Transportation Cabinet; Great Lakes Region, Bluegrass Section; **Winter 2025 issue**

Second Place Platinum Award: *Creative Urban Space Design Revitalizes Dallas.* Author: Chris Hoff, PE, Jacobs; Southwest Region, Dallas-Fort Worth Section; **Summer 2024 issue**

Third Place Gold Award: *Repurposing with a Purpose.* Authors: Tom McClelland, PE, PTOE, Assistant District Executive-Design, Pennsylvania Department of Transportation (PennDOT); Jill Harry, Community Relations Coordinator, PennDOT; Dawn Schilling, PE, AICP, Senior Project Manager, McCormick Taylor, Inc.; Brandon Newpher, PE, Associate Project Manager, Structural Engineering, McCormick Taylor, Inc; Northeast Region, Franklin Section; **Spring 2025 issue**

1st Place Champion award, ASHE Bluegrass Section member, accepting for authors Taylor Perkins and Austin Hart

2nd Place Platinum award, ASHE Dallas-Fort Worth Section member, accepting for author Chris Hoff

PEOPLE'S CHOICE Award

Upgrades to Ohio Bridge Help Avoid Future Traffic Snarls, Author: Matthew DeSapri, Project Manager, Great Lakes Consturction, ASHE Lake Erie Section, *2023 Project of the Year Award Under $10 Million*; **Fall 2024 issue**

3rd Place Gold award, Tom McClelland (center) with Rhonda and other members of ASHE Franklin Section

I'd like to thank Don Di Zuzio, ASHE 2024-25 National Past President, for presenting me with the President's Award for Leadership and Talent as Chair of the National Scanner Committee at the 62nd Annual

Rhonda Cardone
scanner Chairwoman
ASHE New York Metro Section

In New York State's capital city, few streets are as well-known as Lark Street. Often referred to as the "Greenwich Village of Albany," Lark Street is renowned for its eclectic neighborhood vibe. It is the home of local artisans, hip nightlife, small independent businesses, art galleries, LGBTQ pride and regional festivals that have closed the entire street. It is also in the heart of Albany's Center Square-Hudson Park Historic District, one of the oldest in the city. Its residents and business owners are urban-centric, pedestrian-minded and enthusiastic about their neighborhood. Creation of a "pedestrian-only" street environment would likely garner wide support in the neighborhood.

However, Lark Street is also the primary south-north urban arterial through mid-town Albany (also known as US 9W), linking two of the largest towns in Albany County (Bethlehem to the south, Colonie to the north). Lark Street's importance as a major commuter route (with annual average daily traffic approaching 10,000) cannot be understated, particularly since there are no other convenient alternative routes in the vicinity.

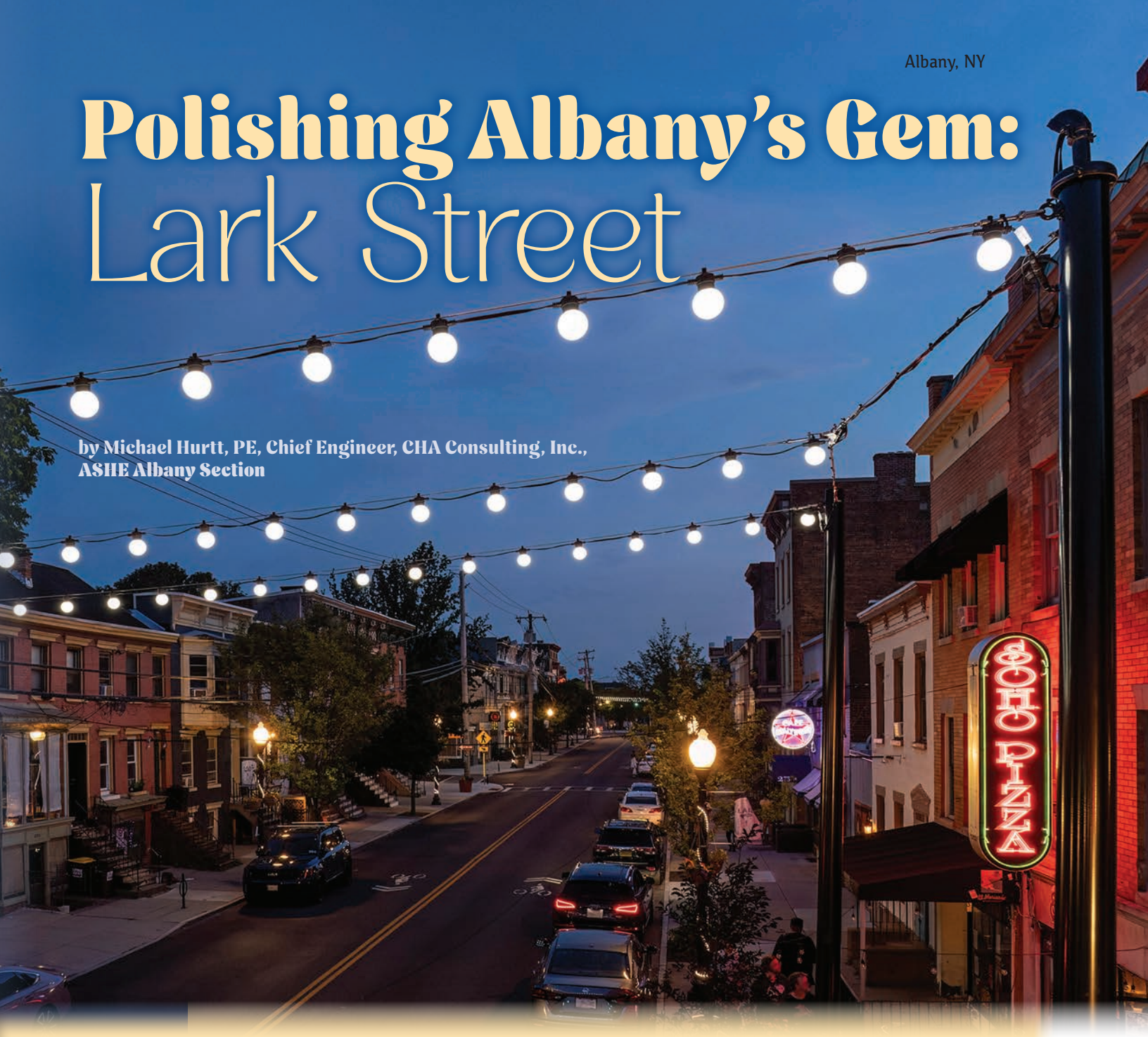
This has always been the challenge of Lark Street: how to support the community's desire for a pedestrian-centric neighborhood street while still providing for the car-centric nature of its functional classification.

The City of Albany is one of the oldest surviving settlements of this country's original 13 colonies. It was also the end point for Henry Hudson's 1609 exploration of the river that now bears his name. The Dutch settlement of Fort Nassau was built near present-day Albany in 1614. The city, the oldest in the state of New York, was charted in 1686 and became its capital in 1797.

In the 18th century, Simeon DeWitt laid out the street plan of the city, with Lark Street still thriving today. Over the next two centuries, Lark Street evolved from cobblestone streets for horses and buggies, later a trolley system, and finally to the automobile. Lark Street held firmly to its past,

Polishing Albany's Gem: Lark Street

by Michael Hurtt, PE, Chief Engineer, CHA Consulting, Inc., ASHE Albany Section



Simeon DeWitt laid out the Plan of Albany in 1794.

with many of the old brick and stone structures reflecting its history. Those same buildings also defined the narrowness of the street's current width.

Sandwiched between the buildings today is just enough room for sidewalks, two travel lanes and one narrow parking lane.

The last major rehabilitation of Lark Street occurred 20 years ago. That project replaced all sidewalks and rehabilitated the pavement structure, including removal of the old trolley tracks still embedded in the cobblestone roadway base. It also added decorative lighting and traffic signals and replaced the overgrown mature trees. As a nod to the past, pavement at the signalized intersections was reconstructed using salvaged cobblestones.

Now, after another 20 years, the pavement has once again reached the end of its service life, and the city has obtained federal funding for a street rehabilitation. Fortunately for the city, the chosen design firm CHA Consulting, Inc., (CHA), employed the same design team from the previous rehabilitation 20 years earlier. The team was already familiar with the street, the neighborhood, the politics and challenges associated with it.

(continued on page 8)

Polishing Albany's Gem: Lark Street

(continued from page 7)

What was new this time was the guiding document to be used for the design, namely a Corridor Improvement Study (CIS) previously commissioned by the city. That study provided a road map for pedestrian-centric improvements expected by the residents who participated in the process, with less regard for the reality of the street's arterial functional classification. This, coupled with the fact that the project funding was focused primarily on curing the deterioration of the roadway, clouded the goals and objectives of the project.

This reality was the foremost concern at the project's public meeting attended by hundreds of participants, most with expectations well beyond the funding limitations secured by the city. And maybe more importantly, these expectations essentially ignored the significance of the arterial function of the street. Public expectations included raised intersections, speed humps, roadway narrowing, urban forest creation, sculptures, fountains, rain gardens and string lighting. The secured funding, however. was allocated for pavement rehabilitation, ADA improvements, sidewalk repairs, high visibility crosswalks and watermain rehabilitation.

The design team walked a fine line with the public when presenting the proposed improvements. Fortunately, the CIS had outlined a three-phase approach to the study's improvement implementation. The city and design team used this approach, classifying this project as Phase I. Taking elements from the study in a similar fashion, the team recommended improvements that connected with the stated purpose of the funding obtained. These included pavement rehabilitation, sidewalk repairs, midblock crosswalks and ADA curb ramp replacements. They also entailed tree replace-ments and string lights directly above crosswalks and as gateway elements at each end of the project. The project did not preclude inclusion of other elements from the corridor improvement study if funding became available.

The project involved far more than simply maintaining the status quo. The pedestrian space was improved to provide a safer and more inviting environment. Mid-block crossings allowed improved access to businesses. Curbline extensions at all intersections were installed to increase pedestrian visibility and safety, and ADA accessibility was improved throughout. The pavement service life was once again reset, using cold milling and resurfacing. Finally, pedestrian-centric amenities were added, including the string lights.

As is always the case, life is but a series of compromises. This project, completed by spring 2024, was no different. The function of historic Lark Street remains as it was, but the neighborhood benefited greatly from improve-ments to the pedestrian environment and sense of place, while the improved roadway still functions as a commuter route. The project did not reinvent Lark Street, but its luster was given a good shine.

MileMarkers

News From Across ASHE-Miles

Tee-rrific Way to Raise Scholarship Funds

Since 2021, **ASHE Derby City Section** has awarded a $1,500 scholarship each year to a University of Louisville Civil Engineering student, with an emphasis in transportation. In March, the group's first fundraiser of the year took place at Topgolf Louisville. The event hosted 10 teams, with six players each. Attendees enjoyed lunch, and the first, fifth and last-place teams received prizes. Although the goal was to reach $2,800, the group raised $4,500! With plans to make this an annual event, the Section hopes to continue to increase the amount of the scholarship or create more scholarships. ASHE Derby City Section is proud of its members for supporting scholarship events and promoting the transportation industry.

<< Carissa Vincent, 2024 recipient of ASHE Derby City Section's scholarship award, with Jon Berry, the Section's treasurer.

With 540 guests, the 2025 National Conference was among the best attended Conferences. Hosted at the famous Kalahari Resort with its indoor waterpark and its African theme, it was a family-oriented experience. For the sixth time in our history, the three Sections of northeastern Pennsylvania provided first-class entertainment, local history, and over 25 possible technical presentations from which to choose.

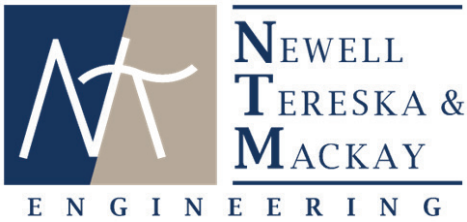
With 35 exhibitors, attendees could talk to a variety of vendors and suppliers at the Ice Breaker reception, with music provided by the Presbybop Jazz Quartet.

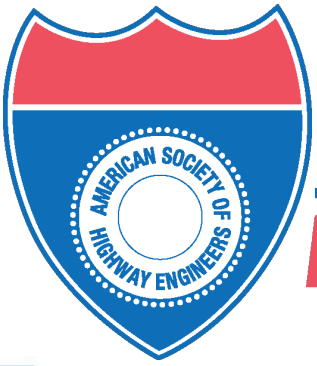
Two major project tours gave the Conference goers plenty of fresh air and a glimpse of the major projects underway in northeastern Pennsylvania. A unique backstage tour of the indoor waterpark gave the hydraulics engineers a bit of variety.

Friday night's event was an authentic Hawaiian Luau, with hula dancers and fire dancers in the outdoor Conference spaces that the Kalahari Resort is known for. Dueling pianos entertained at the Saturday Gala.

What would a Conference be without golf? At a local favorite course, the Mt. Airy Resort and Golf Club, golfers were challenged by holes modeled after famous links from well-known courses throughout the world.

PRESENTING OUR 20





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Getting to Zero, One Mile at a Time

by Loreen Bobo, PE, Florida Department of Transportation District 5 Safety Administrator, **ASHE Central Florida Section**

Florida Department of Transportation (FDOT) supports Target Zero, the initiative to reduce to zero the number of transportation-related serious injuries and deaths across Florida.

Getting to zero will require a multifaceted approach using both Beyond Infrastructure and Infrastructure efforts. FDOT's District 5, which covers nine counties in Central Florida, was asked in 2019 to identify a corridor with the highest rate of crashes, fatalities and serious injuries, especially for its most vulnerable users.

The corridor identified was one-and-two-tenth miles on SR 500/Orange Blossom Trail (OBT) in Orange County, FL, from Holden Avenue to 34th Street. It saw 123 crashes involving bicyclists and pedestrians between 2007 and 2019; 21 fatalities resulted from those crashes with five fatalities in 2019 alone. Based on this data, it was determined to be the deadliest corridor for people walking, biking and using public transit in Central Florida. Reducing the number of fatalities to zero was of urgent importance.

The Orange Blossom Trail (OBT) Pedestrian Safety Project in Central Florida is helping to save lives.

Outreach events along the OBT corridor encouraged safe driving and safe walking.

The main safety improvements in the corridor consisted of constructing three new Pedestrian Hybrid Beacon (PHB) crossings to go along with the three PHB's already in place. Crosswalks were raised at the six PHB crossings, which also included in-road lighting at each crosswalk.

FDOT made improvements to this corridor over the past decade to reduce the number of fatalities. But more upgrades were needed. This latest construction project began in mid-2022, with completion in October 2023. There have been zero pedestrian fatalities or serious injuries since August 2022, a significant improvement for the community where one to five pedestrians were fatally struck every year before construction began. In addition, drivers have been observing the new posted speed of 35 mph (40 mph before construction); the raised crosswalks appear to slow traffic down. People walking regularly will push the pedestrian buttons to cross, and drivers are stopping for people crossing the street. Pedestrians have commented that they feel safer.

Many people in this area use walking or cycling as their main means of transportation, and their quality of life has now improved. Many tools as possible made this corridor safer, including not only the raised crosswalks and median fencing but also landscaping, a lower speed limit and narrower lanes. There is a total of six mid-block and two signalized crossings, providing crossing opportunities on average every 600 feet within this corridor, and they are used frequently. Fencing in the median now guides people to use the mid-block and signalized crossings.

During design, these recommendations were presented in several public meetings, and at outreach events along the corridor.

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Getting to Zero, One Mile at a Time

(continued from page 15)

Pop-up outreach events gathered input from the most vulnerable users: people walking and biking. A tent was set up near transit stops, and the public was asked how they felt about walking along the corridor. We informed users how to properly use the PHBs that were already in place. The project doubled the number of PHBs, adding the raised crosswalks to all of them. There was much support from the people who walk this corridor and use local transit.

This project's safer environment has also encouraged more users to feel that public transit is a safe and viable option. In fact, some studies state that public transit is 10 times safer than driving. Safer transportation systems and mobility are related to sustainability and economic development.

One issue identified during the design process was that transit stops were not located near identified crossings. People were seen crossing at unmarked crossings where drivers were not expecting them. This correlated to the areas where fatalities had occurred. To improve this issue, there was significant coordination with LYNX, the region's transit agency. The goal was to determine how best to locate mid-block crossings and transit stops so that users were not walking out of their way to safely cross after exiting a bus or trying to catch the next one.

https://www.youtube.com/watch?v=hdGyA-oEx1M

One of six raised crosswalks with a Pedestrian Hybrid Beacon added safety for pedestrians and cyclists.

As a further safety enhancement beyond improving the infrastructure, the pedestrian crossings were equipped with PedSafe (Pedestrian Safety Guide and Countermeasure Selection System), an online system providing passive detection. It senses that someone wants to cross the street, and the individual does not need to press the button. People are often seen not pushing the button to initiate the light cycle, and this system helps make that happen. The device will "talk" to the pedestrian, indicating that they will soon have a chance to cross the street.

This project shows that a combination of efforts and resources can create the right infrastructure for a corridor when based on its context classification, coordination with the community and continued safety outreach. We look forward to saving more lives in the future on this corridor and on many other roadways around Central Florida.

Median fencing was installed the entire length of the project with gaps only at intersections to prevent random crossings.

MileMarkers

News From Across ASHE-Miles

Gresham Smith and Renewal Project in Danville, KY, Receive Recognition

Gresham Smith, Louisville, KY, received a National Recognition Award for its role in Danville's Downtown Streetscape Renewal project. The *scanner's* 2024 summer issue featured an article by Jared R. Kaelin, PLA, ASLA, and John Eckler, PE, **ASHE Derby City Section**, about Gresham Smith's participation in the project. The American Council of Engineering Companies presented the award during its 58th annual Engineering Excellence Awards celebration in May.

Gresham Smith served as prime design and engineering consultant on the project to revitalize the heart of downtown Danville. A two-and-a-half-block section underwent enhancements, such as improved pedestrian and vehicle safety, streamlined interaction between businesses and foot traffic and creation of a more welcoming environment for residents and visitors. The project introduced approximately 21,000 square feet of public pedestrian space, fostering opportunities for businesses and outdoor gatherings.

One of the project's major accomplishments was the redesign of Main Street to prioritize pedestrian safety and manage vehicular traffic. This was accomplished by burying overhead aerial utilities, expanding road diets and creating additional open spaces. The project incorporated design elements encapsulating the history of the Black communities, businesses and individuals who were instrumental in shaping Danville's story.

ASHE Middle Tennessee Section Enhances Highway Beauty

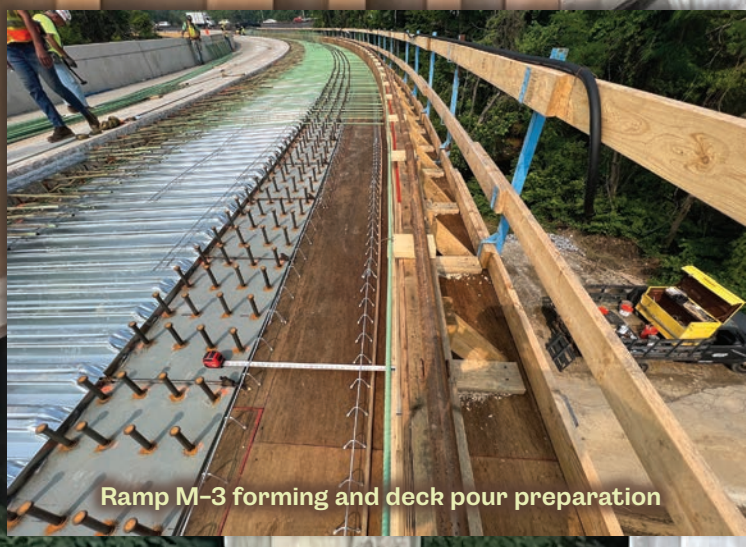
In March, **ASHE Middle Tennessee Section** took part in an Adopt-A-Highway cleanup event, bringing together volunteers to enhance the beauty of local roadways. The Section members and community participants gathered along SR 254/Old Hickory Boulevard at I-65 to remove litter and debris and promote a cleaner environment. The initiative underscored the Section's commitment to sustainability and community service while also helping to remove more than 100 pounds of trash from their local community. The group hopes to continue this tradition and its mission of improving transportation infrastructure and environmental stewardship.

Upgrading MacDade

by ASHE Delaware Valley Section

Ramp M-3 nighttime work during construction

Removal of Ramp 7 and construction of stormwater management



Ramp M-3 forming and deck pour preparation

Boulevard Interchange

The MacDade Boulevard/I-476 interchange in Ridley Township, Delaware County, PA, was completed in 1992. As part of the I-476 project, it connected Philadelphia's western suburbs to I-76 and I-95. Now I-476 carries over 30,000 vehicles per day, and the MacDade Boulevard Interchange provides connectivity from I-95/I-476 to local communities. The purpose of the SR 2006, Section 476 project was to improve safety by adjusting traffic patterns and relieving congestion on northbound I-476.

The need for this project was driven by existing operational challenges and safety concerns related to the existing ramp from northbound I-476 to East MacDade Boulevard. Conditions along northbound I-476 for the on-ramp merges from I-95 and MacDade Boulevard were insufficient to meet peak traffic volumes, resulting in long delays. These back-ups increased the risk of crashes due to difficult merging and sudden stops.

Motorists traveling northbound on I-476 would avoid the mainline traffic queues by using the MacDade Boulevard East exit ramp and then moving into the left-turn lane on MacDade Boulevard. By doing this, they could access the on-ramp back to the northbound I-476. This created significant weaving on MacDade Boulevard, blocking traffic and causing numerous accidents. During final design, the potential to improve traffic operations, travel time and safety along I-476 was evaluated. Acceleration/merge lanes were extended as much as possible.

The traffic operational evaluations and improvements on northbound I-476 were modeled using VISSIM software. Concepts for achieving reduced congestion and improved travel times were assessed, resulting in the conversion of existing shoulders to extended auxiliary lanes. This allowed additional merge and acceleration lengths within the heavy merge areas from the I-95, MacDade Boulevard and US 1 entrance ramps to northbound I-476.

The project also addressed safety by eliminating the exit ramp, requiring motorists destined for MacDade Boulevard to use the former MacDade Boulevard West exit ramp (Ramp M3). This ramp was reconstructed to allow traffic to enter MacDade Boulevard both eastbound and westbound. The I-476 Northbound exit ramp was widened to accommodate additional traffic volumes. In addition, the ramp terminus at MacDade Boulevard was signalized to allow both left and right turns onto MacDade Boulevard.

Ramp M3 was reconfigured to carry an additional lane from I-476 to MacDade Boulevard, requiring widening of the existing three-span, curved steel two-girder bridge. A third girder was added to the bridge. The cantilevered abutments were widened, and single columns were added at both piers. A 3D finite element analysis, using BSDI software, was performed to design the new curved girder and cross frames. This analysis was also used to determine the

(continued on page 20)

Ramp M-3 curved girder construction

Upgrading MacDade Boulevard Interchange

(continued from page 19)

Structure for pedestrians: before and after

deflections of the existing girders and the new girders during the construction stages, which involved partial demolition of the existing deck and deck widening.

Along with conventional techniques, the bridge widening process utilized an innovative slide rail/trench box system for construction of the bridge foundations. Use of slide rail instead of traditional piling and tieback supports allowed the contractor to have single-crew control of the advancement of the excavation and installation of the temporary excavation support. This technique saved time during construction.

Several additional factors added to the project's complexity:

· **National Pollutant Discharge Elimination System/ Permitting Coordination:** Permits required updating multiple times during the design to incorporate Pennsylvania Department of Environmental Protection changes in regulations. During the onset of the COVID shutdown in March 2020, the design team worked remotely to keep the project on schedule. Even with this new era of working remotely and communicating with agencies over email and virtual meetings, permit approval was obtained well before Plans, Specifications and Estimates.

· **Utilities/Subsurface Utility Engineering (SUE)**: The proposed work required substantial SUE investigations for a majority of the 10 public utility companies within the project limits. There were more than 70 utility conflict locations. Many of the anticipated conflicts were avoided, which minimized utility relocations during construction.

· **Intelligent Transportation Systems Facilities:** Pennsylvania Department of Transportation (PennDOT) is transitioning from analog to digital closed-circuit television cameras. New specifications were adopted during final design, requiring additional planning between PennDOT and various contractors involved with the integration of PennDOT's fiber optic communication infrastructure.

The scope of the MacDade Boulevard Project expanded significantly in construction. PennDOT elected to upgrade the paving beyond milling and overlay, providing increased rideability and service life of the pavement. A signalized intersection at the MacDade Crossing Shopping Center was added to support local commerce.

In addition to improving vehicular traffic flow, the design focused on improved safety and connectivity for pedestrians. There were concerns for those who crossed between the residential community on the west side of I-476 and the commercial area on the east side of I-476. The project included construction of a new walkway directly adjacent to MacDade Boulevard, and lighting was improved. Temporary pedestrian routes used during construction helped maintain connectivity and avoid negative economic impacts to local businesses.

The project was a result of collaboration, originality and innovation. Federal, Commonwealth, and local agencies worked together to bring the traveling public improved transportation. The completion of this project, 615 days earlier than anticipated, exceeded PennDOT's expectations. Final inspection took place on December 17, 2024, with a total cost of $19.1 million.

MileMarkers

News From Across ASHE-Miles

ASHE Franklin Section Awards $8,000 in Scholarships

Four students each received a $2,000 scholarship from **ASHE Franklin Section** at its February meeting. In addition to presenting the students with scholarship awards at the event, the Section also presented its Project of the Year Awards.

Jaxson Schoedel, scholarship winner, with his father, Rich Schoedel, and ASHE Franklin Vice President Ginkel

Ella Bartholomew, scholarship winner, with her father, Scott Bartholomew, and ASHE Franklin Section Vice President Stacy Ginkel

Not pictured: Haley Lincoln, scholarship winner, daughter of J.T. Lincoln

Alison DeLong, scholarship winner, with her father, Steve DeLong, and ASHE Franklin Section Vice President Ginkel

ASHE Phoenix Sonoran Section Awards Scholarships

ASHE Phoenix Sonoran Section awarded scholarships totaling $15,000 for the 2025 school year to four in-state students majoring in Civil Engineering, Urban Planning or Construction Management. The students, each accompanied by a family member, received their scholarship awards at the Section's December 2024 meeting.

Two Receive Scholarships from ASHE Lake Erie Section

ASHE Lake Erie Section offers a scholarship each year to a student (or students) in a transportation- or construction-related academic program. The scholarship is awarded based on a student's academic performance, community and scholastic involvement, commitment to the transportation industry and technical writing skills. Applications for the 2024 scholarship were accepted through December of 2024 and then evaluated by a panel of reviewers in late January. The panel chose Asha Kartha and Jamie Talpas to each receive a $1,500 scholarship. Kartha is a senior Civil Engineering major with structural concentration and a Religious Studies major at Case Western Reserve University. Talpas has dedicated a decade to Bramhall Engineering & Surveying Company, where she has gained experience in the civil engineering industry as a computer-aided designer. Since 2020, Talpas has pursued a degree in Civil Engineering at Cleveland State University, and she expects to graduate in 2028

ASHE South Florida Section Launches Scholarship Fund

ASHE South Florida Section demonstrated commitment to workforce development by launching its General Academic Scholarship Fund in November 2024. Aligning with the Florida Department of Transportation's ongoing efforts to cultivate a skilled workforce, the Section hosted an event to promote this initiative and recognize its first cohort of promising scholars.

The scholarship fund was established to support talented students from South Florida universities who are pursuing technical programs directly related to the transportation industry. Recognizing the need for qualified professionals in this sector, ASHE South Florida Section solicited applications from candidates eager to contribute to the future of transportation infrastructure. The recipients of ASHE South Florida Section's inaugural General Academic Scholarship Fund are:

Alejandra Ledesma Rivero: Born and raised in Cuba, Alejandra's journey to the United States underscores her dedication to education and her aspirations in civil engineering. After earning an Associate degree in Civil Engineering from Miami Dade College, Alejandra transferred to Florida International University. She is completing her Bachelor's degree with a focused concentration in Transportation Engineering. Her long-term goal is to contribute to the development of innovative and sustainable transportation solutions that will positively impact communities for years to come.

Yasmine Al Moghrabi: A PhD candidate in Transportation Engineering at Florida International University, Yasmine holds two Master's degrees: one in Road Safety Management and one in Highway, Transportation and Traffic Engineering, where she received top academic honors. Her advocacy for road safety and her dedication to sustainable development goals have garnered international acclaim. This included her selection as the Regional Youth Leader of Road Safety in North America and her recognition as one of the Remarkable Voices in Transport 2023.

ASHE South Florida Section is proud to support Alejandra and Yasmine in their academic pursuits and looks forward to their future contributions to the transportation industry. This scholarship fund represents a significant step in fostering the next generation of transportation professionals in South Florida and underscores ASHE's commitment to workforce development and the advancement of the highway engineering profession. The Section congratulates these students and wishes them continued success in their academic and professional endeavors.

From left: Kathy Lajo, PE, (Section Memberships and Events Chair); David Mairena, PE, (Section Treasurer); Cecilia Villoria, PE, (Section Secretary); Alejandra Ledesma Rivero (scholarship recipient); Yasmine Al Moghrabi (scholarship recipient); Bryan Wilson, PE, (Section Vice President); Naldo Gonzalez, PE, (Section President).

Building the Future: **Innovation *and* Civil E**

In this era of rapid technological change, climate volatility and increasing urban strain, civil engineers stand at a critical crossroads. The imperative to modernize not just our methods, but also our mindset, has never been more urgent. As stewards of the built environment, we now shoulder an added responsibility: to innovate in ways that uphold sustainability, bolster resilience and integrate data-driven decision-making into every project. The traditional toolbox of civil engineering is expanding fast, but is the industry evolving quickly enough to match? There are three pivotal issues shaping the future of civil engineering, alongside exciting innovations and a call to rethink how we design, build and maintain our world.

Sustainability and the Environmental Cost of Highway Construction

Drive past any highway construction project and you will likely see the same familiar materials by the roadside: mountains of asphalt, precast concrete barriers, steel girders and bundles of rebar. These form the backbone of our transportation infrastructure, but they also carry a significant environmental burden. For example, cement production for concrete highways alone contributes millions of tons of carbon dioxide (CO2) to the atmosphere each year. As environmental regulations tighten and the push for greener infrastructure grows, highway engineers face a major challenge: how to expand mobility without accelerating climate change.

Innovators in the field are beginning to answer that question. Research institutions and infrastructure startups are developing carbon-sequestering concrete mixes that actively absorb CO2 from the atmosphere, rather than emit it. Others are experimenting with geopolymer binders created from industrial waste, such as fly ash and slag, to reduce the carbon footprint of concrete pavement.

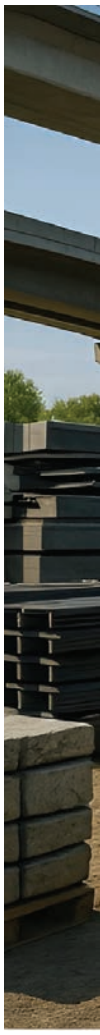
The transition is not limited to materials. New construction techniques, such as prefabricated bridge elements and modular roadway slabs, are making highway builds faster, cleaner and more efficient in use of resources. These approaches, often supported by automation and robotics, reduce both waste and the amount of time that crews spend working on the road. Moreover, digital tools, such as life-cycle carbon analysis and intelligent design optimization, now allow engineers to assess and reduce environmental impact long before the first shovel hits the ground.

However, scaling these solutions to the national highway network remains a significant hurdle. Code limitations, risk-averse stakeholders and a lack of long-term performance data slow broader adoption. To overcome these barriers, highway engineers must champion new methods and help reshape the industry's definition of responsible construction, ensuring that roads not only connect communities, but also respect the planet.

Digitizing the Future of Highway Infrastructure

This is an era when global positioning system apps predict traffic in real time, and Artificial Intelligence (AI) recommends optimal driving routes. The design and construction of highways have often lagged, still relying on books of guidelines, PDFs of reference material, outdated spreadsheets and fragmented workflows. But that is starting to change.

Traditionally, a major highway interchange project would be guided by static drawings, educated estimates and the accumulated experience of road crews. Today, engineers are beginning to leverage digital twins: intelligent, evolving digital replicas of physical infrastructure. These models integrate real-time data, such as live traffic flow, weather patterns and sensor feedback from pavement and bridges. They



Engineers' Evolving Role

by Mike Sewell, Director of Innovation, Gresham Smith, **ASHE Derby City Section**

Artificial Intelligence provides an interpretation of what the future of roadways might look like.

offer transportation engineers powerful insight, from planning through post-construction maintenance.

AI is also transforming highway design. AI-assisted software can rapidly evaluate thousands of design permutations, identifying the most efficient alignments and optimizing materials to minimize cost, environmental impact and long-term maintenance. Meanwhile, networks of embedded IoT sensors in everything from roadbeds to overpass supports enable predictive maintenance and continuous structural health monitoring. These can detect small issues before they become major failures.

The road to a fully digital infrastructure system, however, is not without roadblocks. Many departments of transportation and smaller engineering firms face budgetary and training hurdles when adopting advanced design platforms or real-time monitoring systems. Legacy roads and bridges are not easily instrumented, and inconsistent data

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Building the Future:
Innovation *and* Civil Engineers' Evolving Role

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formats make system-wide integration a complex task. Moreover, the adoption of AI and automation can challenge old-school traditions, where many engineers still lean on field intuition rather than digital diagnostics.

The tools for smarter highways are already here. The next challenge is cultural: building a transportation engineering workforce that is not only tech-savvy, but also confident in applying data-driven insights to design, build and maintain the resilient roads of tomorrow.

Highway Resilience in the Age of Climate Disruption

What once was considered a rare climate event is now a recurring threat to critical transportation lifelines. For example, a coastal highway could lie submerged under saltwater when a storm surge outpaces outdated drainage. Traffic would halt, emergency routes may vanish and fuel supply lines could be severed.

For highway engineers, the atmosphere has become a design input. Rising sea levels, extreme heat, floods and wildfires are redefining what it means to build "to spec." A culvert sized to manage a once-in-a-century storm may now be overwhelmed twice in a decade. Asphalt is warping under higher average temperatures, and highway shoulders are being scorched by advancing wildfires. The question facing transportation agencies and engineers alike: how do we future-proof our roadways in an age where the future is increasingly unpredictable?

New practices are emerging. Climate projection data is now being integrated into early design phases, replacing historic averages with forecasts stretching 50 to 100 years forward. Adaptation-ready designs are gaining traction with elevated causeways, floodable corridors and smart drainage systems that dramatically expand capacity. In some cities, green infrastructure is beginning to complement traditional highway design, with vegetated swales and permeable pavements.

I-24 Motion computer video detection can analyze traffic patterns resulting in "phantom traffic jams," where only minor breaking downstream causes severe delays upstream. (Work conducted with Vanderbilt University)

Stormwater basins deployed alongside pavement help to mitigate flooding and reduce surface heat.

Creative modular solutions are also taking hold, from barrier walls that can be raised as sea levels rise, to embankment reinforcements engineered to flex with saturated soils. And yet, resilience does not live in asphalt alone. Many transportation departments still struggle to secure funding for long-term climate adaptation or face policy frameworks frozen in outdated assumptions. There is a pressing need not only for stronger and smarter designs, but also for visionary leadership.

Now engineers are required to do more than build roads; they must anticipate disruption, adapt to it and help lead the charge toward a transportation system that is as resilient as it is reliable.

The Future Is Not Fixed; It Is Designed

What lies ahead for civil engineering is not just about smarter design or greener roads. It is about reimagining the role of the engineer as a technologist, an environmental steward and an innovator. The built environment touches every part of human existence. With emergent technologies at our fingertips, we have the opportunity and the obligation to reshape our impact.

Let this be a challenge for the engineers of today and tomorrow: Embrace the tools, push the boundaries and start solving problems that have not yet been named. Because the future does not just happen; it gets engineered.

As The Wheel *Turns*

ASHE Members on the Move!

McInnes Named Philadelphia Civil Engineer of the Year

The Philadelphia Section of the American Society of Civil Engineers (ASCE) has named **Sarah McInnes, PE**, as the recipient of its Philadelphia Civil Engineer of the Year Award for 2025. This Section's highest honor was presented to McInnes at the group's Spring Social on May 15. McInnes is also a **member of ASHE Delaware Valley Section** and has served on its Board for several years. She is a Senior Construction Services Engineer at the Pennsylvania Department of Transportation (PennDOT) District 6 office in King of Prussia. She has been with PennDOT in various capacities for the past 29 years, involved with all phases of transportation project development. With her promotion to Construction Services Engineer four years ago, McInnes oversees construction staff, materials, surface treatment, constructability and schedule review, consultant agreements, structure control and multiple construction projects. She received her Bachelor's degree in Civil Engineering from Syracuse University and a Master's degree from Villanova University. McInnes is active in the Section's Delaware Valley Geo-Institute and has authored and published papers and presentations on geotechnical topics as well. She was also recognized for her efforts by receiving ASCE Philadelphia Section's Geotechnical Engineer of the Year award in 2020.

Dewberry Welcomes Donna Babihuga and Dianna Rocheleau

Fairfax, VA—Dewberry has welcomed **Dianna Rocheleau, PE**, and **Donna Babihuga, PE**, to the firm's Atlanta, GA, office. Rocheleau, a **member of ASHE Georgia Section**, joined Dewberry as a project manager and has been in the engineering industry for over 20 years with nearly 10 years in transportation. She brings project management experience with municipal clients in Metro Atlanta and design experience for both Georgia Department of Transportation (GDOT) and municipal roadway projects. She will support municipal and state roadway projects across Georgia. Rocheleau earned a Bachelor's degree in Civil and Environmental Engineering from Georgia Institute of Technology. She holds a Master of Arts in Teaching for mathematics and science education from the University of Georgia. Rocheleau is also a member of the Institute of Transportation Engineers.

Babihuga, a project engineer, will support the traffic and transportation team. Prior to joining Dewberry, she served as a lead operations engineer responsible for the daily functions of over 1,500 traffic signals in Metro Atlanta. She worked directly for the Georgia Department of Transportation (GDOT) as a transportation engineer for two years. Babihuga holds a Master's degree in Project Management from Kennesaw State University. She earned a Bachelor's degree in Applied Physics from Georgia State University and a Bachelor's degree in Civil Engineering from Kennesaw State University. Babihuga is a member of the Institute of Transportation Engineers and the National Society of Black Engineers.

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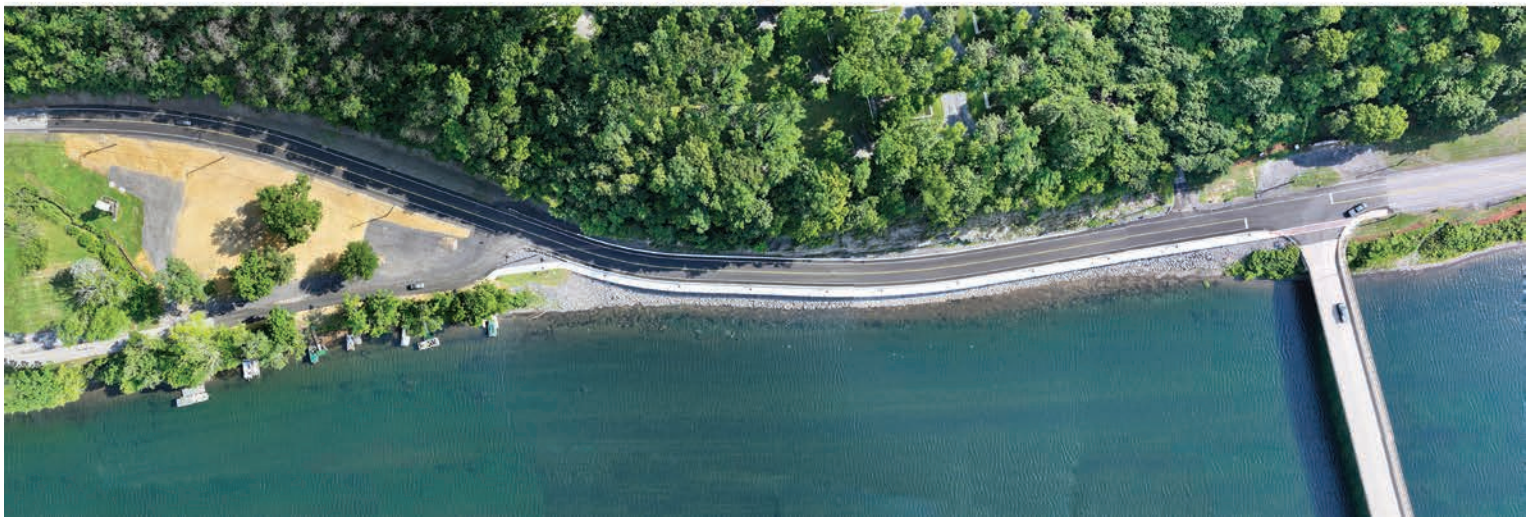

Revolutionary New Girder for Betsy Ross Bridge Interchange

by **ASHE Delaware Valley Section,** photos by Billy Kyle

The four-phase $880 million reconstruction of the Betsy Ross Bridge Interchange (BRI) along I-95 in Philadelphia is among the Northeast's largest highway improvement programs. Its goal is to rebuild the complex network of roadways, ramps and bridges to create a safer, more efficient interchange for the 160,000 vehicles traveling I-95 daily

The program's second phase, BR2, involved complete reconstruction of the three-level interchange, prioritizing efficiency, safety and long-term stability. Pennsylvania Department of Transportation (PennDOT) District 6 contracted STV, Inc., (STV) for preliminary engineering, final design and construction support services.

Designing BR2's ramps required overcoming site constraints, including rail lines, electric transmission lines, a maintenance yard and Frankford Creek. These challenges led PennDOT to pilot the nation's first steel curved tubular flange girder (TFG) bridge, conceptualized by Dr. Richard Sause of Lehigh University. Collaborating with Dr. Sause and PennDOT's civil engineering team, STV adapted the TFG for a curved girder bridge, designing a horizontally curved steel bridge with a rectangular tube top flange.

TFGs offer multiple benefits over traditional curved girders, including increased torsional stiffness, lateral-torsional stability and web stability. These advantages result in weight savings, maximized underclearance and simplified erection. They also eliminate cross frames, improve structural performance and reduce fabrication and erection materials.

During beam erection, a 500-ton crane delivered beams via a nearby access road, eliminating the typical two-crane "sistering" method. A constructability analysis enabled single-crane operation within a 550-foot radius, navigating significant site constraints. Temporary 150-foot-long supports installed off each pier staggered transmission line interruptions and maintained traffic flow. Careful coordination with Conrail, NJ Transit, Amtrak and the local electric utility reduced impacts on transmission lines and trains.

During construction, the team provided services such as fabrication coordination, modeling and testing. Tube deformations from bending were evaluated, using a handheld 3-D imaging tool. PennDOT utilized smart glasses for remote visual inspections, improving coordination and effectively addressing construction challenges.

The temporary supports helped achieve major goals, including maintaining traffic on existing ramps to minimize detour durations and preserving infrastructure from previous construction phases. Temporary supports for the existing structure allowed bridge demolition, foundation, embankment and new bridge construction to proceed ahead of ramp detour implementation. This reduced the detour duration by over a year.

Several safety improvements were made to the interchange ramps as part of the BR2 project. These focused on the major flyover ramps and the crossings of Frankford Creek

The second section of the Betsy Ross Interchange reconstruction, BR2, completely rebuilt the three-level interchange.

Pennsylvania Department of Transportation piloted and STV designed the nation's first steel curved tubular flange girder.

and Conrail/NJ Transit, specifically the clearances and ramp geometry improvements. By replacing the existing structures that were initially scoped during preliminary engineering as rehabilitations, vertical clearance design exceptions were eliminated. In addition, barriers were improved to meet Manual for Assessing Safety Hardware's TL-5 criteria. Ramp structures were built with wider inside shoulders to meet horizontal sight distance requirements, improving the existing substandard conditions.

The new bridge crossings at Conrail/NJ Transit allowed PennDOT to improve the existing horizontal clearances and build the proposed piers completely outside of the railroad's right-of-way.

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Revolutionary New Girder for Betsy Ross Bridge Interchange

(continued from page 31)

With a nod to Betsy Ross, the project's form liners represent the waving stripes of the American flag.

Operational improvements enhanced advanced guide signage, acceleration lane and merge/exit movements. Improved access road connections gave PennDOT and Delaware River Port Authority (DRPA) maintenance vehicles better turn-around access and eliminated a maintenance U-turn on the DRPA approach.

The design team met with emergency responders, as well as members of both project and corridor Sustainable Action Committees (SAC) on a semi-annual/quarterly basis. The SAC included over 30 key stakeholders to coordinate major design input items. During construction, public meetings were held for nearby neighbors and community groups. From these meetings, special provisions were incorporated into the project, addressing construction vibrations, noise, air quality and dust. This included a screening wall to protect adjacent homes from dust and debris. Three lanes of traffic along I-95 helped maintain the economic vitality of the corridor during construction.

PennDOT expects its design firms to have an eye toward future asset management and maintenance of the proposed infrastructure. As part of the alternative analysis studies, concepts were developed that eliminated bridge structure wherever possible. The earlier BR0 section of the construction project piloted two geotechnical engineered embankments to replace low-level structures over poor soils and urban fills within the interchange. These solutions will be applied to future construction sections on the mainline.

As part of the BR2 project, areas were identified where ramp structures could be replaced with roadway on fill. Since these areas were in locations of more supportive underlying soils, the team oversaw the construction and monitoring of a test embankment to determine settlement rates within the project area. This gave them critical design information so they could properly size and configure embankments, retaining walls and bridges within the interchange. The suggested configurations contributed to significant reductions of proposed bridge deck area and included a 50-foot embankment and retaining wall design. A total 690,000 square feet of bridge deck area within the interchange will be eliminated, resulting in initial construction cost savings of over $160 million and almost a two percent reduction of total bridge deck area within PennDOT District 6.

Originally scheduled to open in October 2023, BR2 opened to traffic in November of that year, and the project was substantially completed in February 2024. Its budgeted cost was $93,634,911, and actual cost was $96,964,161.

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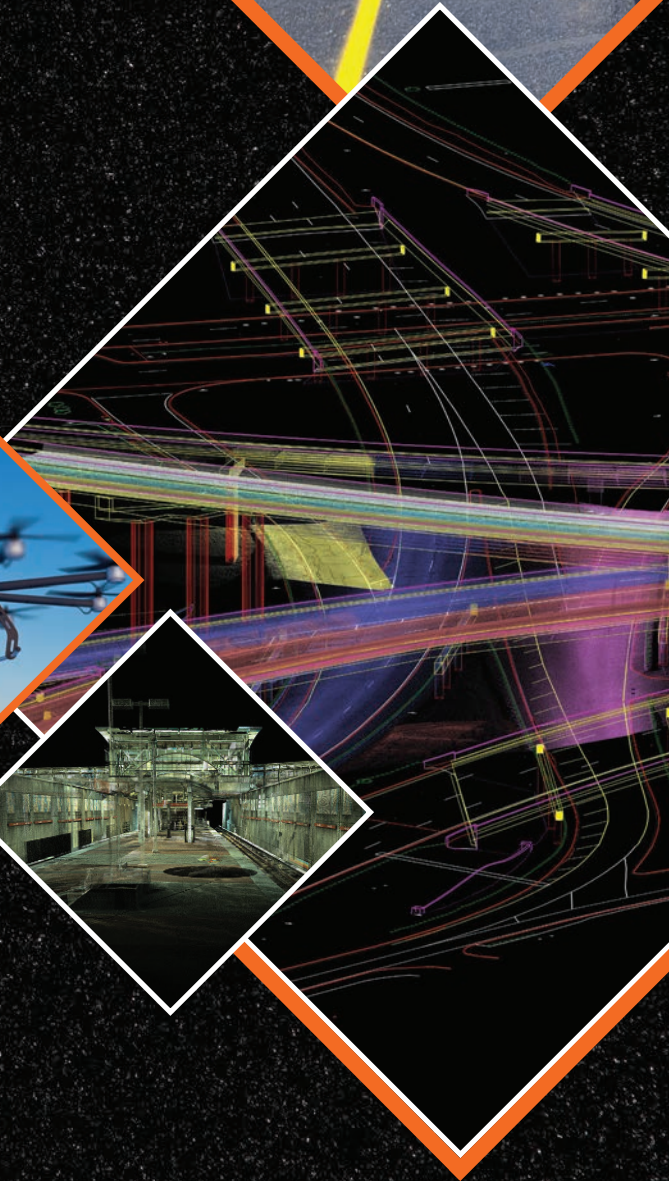

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Enhancing Mobility for More Viable Communities

by Eithel Sierra, PE, Project Team Leader, Senior Principal Engineer, CHA Consulting, Inc., **ASHE South Florida Section**

This pedestrian ramp provided transit connectivity to the Utopia Drive Linear Park.

Communities across the United States are collaborating with multiple partners to enhance and promote pedestrian and bicycle usage along their major transportation routes. There are many compelling reasons and tangible benefits for accommodating these alternative modes of mobility. Walking and biking can improve both physical and mental health and foster community by making neighborhoods more livable and connected.

Other benefits range from reducing traffic congestion to lessening an impact on the environment. These include reducing carbon emissions and creating a cleaner environment while fostering economic growth. When communities bustle with pedestrian traffic, they can attract new businesses, such as restaurants and retailers.

When safety for biking and walking becomes a priority, with amenities such as dedicated bike lanes, pedestrian paths and ADA-compliant curbs, biking and walking become a way of life in a community. These mobility enhancements open transportation routes to people of all abilities, encouraging families to explore their communities and all they have to offer.

South Florida's Broward County, the second most populous in the state, encompasses several major metropolitan areas, including Fort Lauderdale, Miramar and Hollywood. The Broward County Metropolitan Planning Organization (MPO) has placed a high priority on enhancing mobility along the county's major transportation routes. One example is the range of improvements implemented on SR 817 and University Drive from Riviera Boulevard to SR 824/Pembroke Road in Miramar.

CHA Consulting, Inc., guided a range of enhancements for the MPO mobility project on this route. These were designed to boost pedestrian, bicycle and traffic safety and improve transit operations along the route. Construction on this project began in February 2022.

One of the key improvements included the addition of bicycle lanes, achieved by milling, resurfacing and widening the existing road. The project also involved installing new drainage systems, curbs and gutters. Enhancements to improve the route for pedestrians included widening the sidewalks and installing ADA-compliant curb ramps. While wider sidewalks can accommodate more pedestrians, they are also more welcoming to wheelchairs, strollers and other mobility aids. Wider sidewalks reduce the risk of bottlenecks, encourage smoother flow and make a community safer and more comfortable for everyone.

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Enhancing Mobility for More Viable Communities

(continued from page 35)

Use of conflict striping helped increase safety for bicyclists along the route.

The project also upgraded signage and pavement markings and installed pedestrian countdown signals at all signalized intersections. To further improve pedestrians' experience through this busy area, an overpass bridge was constructed near the intersection at Miramar Boulevard, which spans the South Broward Drainage District Canal 1. This bridge provided pedestrians with a safe crossing over the canal.

Adequate lighting is essential for enhancing mobility and improving visibility and safety for drivers, pedestrians and cyclists. As part of the project, the team replaced all the light poles affected by the road widening and improved overall lighting along the sidewalks. Good lighting can reduce crashes after dark and encourage pedestrians to stay active in the evening hours. This effort also included adding new bus shelters at existing bus stops to improve overall mobility throughout the area. Improving transit facilities along a busy transportation route can boost transit ridership and help reduce congestion.

Creating a safe, accessible urban transportation route for everyone required careful attention to detail and extensive coordination with stakeholders and project sponsors, including the MPO and the City of Miramar. Construction on the project was completed in February 2024. Ultimately, this resulted in a safer, healthier community and a better future for all.

The transition from the bicycle lane to the shared use path at the ramps to the Florida Turnpike

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News From Across ASHE-Miles

ASHE Tennessee Valley Section Awards Its First Scholarships

Congratulations to **ASHE Tennessee Valley Section's** first scholarship recipients. Members of the Section's Board attended the Chattanooga E-Week Social to present the scholarships to three students who are ready to make an impa ct. Shown with their awards: Macy Kesley, University of Tennessee at Chattanooga and Grace Pippin, University of Tennessee at Chattanooga. Not pictured: Ella Colvard, Tennessee Tech University.

ASHE Old Dominion Section Scholarships Aid Students

ASHE Old Dominion Section partnered with Brightpoint Community College Foundation and J. Sargeant Reynolds Community College Educational Foundation to provide each school with a $6,000 scholarship. The scholarships were funded by ASHE Old Dominion Section's annual golf tournament, as well as a personal donation from an ASHE member in honor of the Section's late Region Chair and Past President, John Midyette. Both scholarships, awarded on a merit basis, will provide students with financial assistance for tuition and books.

TRANSPORTATION

CONSTRUCTION MANAGEMENT & INSPECTION SERVICES

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Agencies: Philadelphia Industrial Development Corporation, for Philadelphia International Airport

Construction Cost: $20.5M

Duration: 2022-2024

Tectonic Services: Construction Management & Construction Inspection

Location: Philadelphia, PA

RIDGE PIKE SECTION A

Agencies: Montgomery County and Pennsylvania Department of Transportation District 6-0

Construction Cost: $43M

Duration: 2025-2028

Tectonic Services: Construction Inspection

Location: Plymouth Meeting, PA

MARIO CUOMO BRIDGE

Agencies: NYS Thruway Authority / NYS Department of Transportation

Construction Cost: $3.9B

Duration: 2013-2019

Tectonic Services: Construction Inspection & Third Party Quality Control Materials Testing

Location: Tarrytown, NY

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As The Wheel *Turns*

ASHE Members on the Move!

Craig R. Johnson Receives Lifetime Achievement Award

In recognition of his 43-year career in the engineering profession, **Craig R. Johnson, PE**, received a Lifetime Achievement Award from the American Council of Engineering Companies of New Jersey (ACECNJ). Johnson, a **member of ASHE North Central New Jersey Section,** received the honor during ACECNJ'S Engineering Excellence Awards Banquet in March. He is an Executive Vice President for Dewberry, having joined the firm in 1981. During his career, he advanced to Operations Unit Manager, where he oversaw more than 500 employees who served clients across the commercial, federal and state/local markets. In his current role, he serves as operations officer for the firm's Northeast division. Johnson earned his Bachelor's degree in Civil Engineering from Lafayette College. He is a director of the New Jersey Chapter of ACEC.

Urban Engineers, Inc., Welcomes Paul Archibald, PE, PTOE

Philadelphia, PA—Urban Engineers, Inc., announced that **Paul Archibald, PE, PTOE,** has joined the firm as Traffic Department Manager. Archibald, a **member of ASHE Delaware Valley Section** and **ASHE East Penn Section**, has over 30 years of experience as a transportation industry expert. He has worked with public sector clients across Pennsylvania, New Jersey, Delaware, Maryland and Virginia. His experience spans a variety of infrastructure projects, from designing new transportation facilities to roadway reconstruction and intersection/interchange improvements. He has managed multiple open-end agreements, leading multidisciplinary teams for local, state and tolling authority clients. Archibald is a licensed Professional Engineer in Pennsylvania, New Jersey, Delaware, Florida and North Carolina. He earned a Bachelor of Science degree in Civil Engineering from Penn State. He is a member of the Mid-Atlantic Section of the Institute of Transportation Engineers and involved with the American Council of Engineering Companies of Pennsylvania and New Jersey, serving on the Delaware River Port Authority Subcommittee.

Kearney Elected to French & Parrello's Board of Directors

Wall Township, NJ—French & Parrello Associates announced that **Matthew Kearney, PE,** Vice President and Discipline Manager for Construction Engineering, was elected to the company's Board of Directors. Kearney, **a member of ASHE Southern New Jersey Section** with more than 20 years of experience in civil engineering and construction management, brings a proven record of leadership to the Board. Throughout his career, he has managed a diverse range of infrastructure projects, including bridge rehabilitation, roadway reconstruction, pedestrian and bicycle facilities and federally funded transportation improvements. Kearney is a licensed Professional Engineer in New Jersey and Pennsylvania, and a graduate of Drexel University with a Bachelor of Science in Civil Engineering. He is also an active member of the American Society of Civil Engineers and serves on the American Council of Engineering Companies/New Jersey Delaware River Port Authority Committee.

A Safer Walkway to Class for Kilgore Students

by Brian Lopas, ME, **ASHE Dallas-Fort Worth Section**

In April 2019, a pedestrian bridge spanning busy Texas Department of Transportation's (TxDOT) US 259/ Henderson Boulevard was struck by a passing semitruck hauling an oversized load. Personnel from TxDOT and the City of Kilgore determined that the bridge sustained major structural damage and was unusable. The only solution was to demolish and replace the bridge, which was owned by Kilgore College. The original bridge opened to the public in April 1970, becoming one of Kilgore's most recognizable landmarks.

As a temporary solution in July 2019, a crosswalk was installed. By the latter half of 2020, Kilgore College's board members worked with Halff Associates, Inc.(Halff), a Tyler-based engineering firm, to review proposed designs for a new bridge. It needed a fresh design not only to comply with the Americans with Disabilities Act but also to avoid future vehicular collisions.

During the planning phase, the team contacted Contech Engineered Solutions to present design options for the new pedestrian bridge. After weighing the options, they selected a 102-foot by 12-foot Continental® Pedestrian Truss for its ability to meet the project's requirements.

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Sunrise on the new pedestrian bridge

Photo courtesy of Halff

Demolition of existing bridge and ramps in 2019

A Safer Walkway to Class for Kilgore Students

(continued from page 42)

Erection day for new pedestrian bridge, August 2023

Photo courtesy of [illegible] General Contractors

The project bridge committee, composed of Kilgore College, City of Kilgore, City of Longview and Kilgore College Foundation, was interested in the unique, Vierendeel-style option. Even though this form and its added features were a custom design, the cost still fell within the project's budget. To meet one of the most important requirements, the new bridge was designed with an increased clearance of 18 feet, six inches, as opposed to the 16-foot, five-inch clearance of the previous structure.

Due to the COVID-19 pandemic, there were global shortages of construction materials leading to a delay in their delivery and the project's completion date. Despite rising prices of material, the project's cost remained within the original budget estimate while meeting the design intent for the project. Designing the unique Vierendeel bridge style, first proposed as a truss style idea in 1896, proved to be a challenge. The combined expertise and engineering capabilities of all involved provided the necessary resolution while supporting and maintaining the original design intent.

After much anticipation from the city and college residents, the new pedestrian bridge officially opened March 26, 2024, with a ribbon-cutting celebration. "This bridge will be an icon and a symbol of Kilgore College," said Kilgore College President Dr. Brenda Kays. "It's a bridge from the past to the future." Kilgore College's president and the city's mayor, along with other attendees, were the first to walk across the new, fully enclosed structure. The bridge provides safe, seamless and weatherproof access across US 259. The $4.4 million project was paid for by insurance and Kilgore College's reserve funds.

"Our new pedestrian bridge is built for … our students," Dr. Kays said in a statement to The Henderson News. "It is completely ADA-compliant, with elevators on both sides, in a state-of-the-art design that really blends seamlessly with our architecture. It will be a landmark not only for Kilgore College but the City of Kilgore. We are most excited for the extra layer of security it will provide our students, faculty and staff who cross US 259 on a regular basis."

Kilgore College student Kaitlyn Williams commented about the new bridge, "A bridge, to me means community—people reaching out and coming together to form a family … A bridge is not merely a structure of concrete, steel or wood. It is a symbol for connection, unity and the relentless human spirit to overcome obstacles."

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News From Across ASHE-Miles

ASHE First State Section Honors Inductees and College Grads

ASHE First State Section held its annual Hall of Fame Banquet in May at The Executive Banquet and Conference Center in Newark, DE. Then-President Chris Walsh conducted the Annual Member Meeting, and ASHE National Director Rob Prophet inducted the officers for 2025-26. Natalie Barnhart, PE, (AECOM,) was inducted into the Hall of Fame and introduced by Bruce Kay (AECOM). Inductee Philip Horsey, PE, DBIA, (Pennoni), was introduced by Jim Satterfield, PE, (Century Engineering, a Kleinfelder Company). Following the awards, Chris Walsh passed the gavel to Mark DeSantis, new ASHE First State Section President.

Chloe Gerstenbacher, Nicole Mnych and Georgia Angeletakis, officers of ASHE First State Section's Student Chapter, recently graduated from the University of Delaware. These three stepped up when their group struggled after the pandemic. Their leadership built back a sustainable officer corps, underscoring a vital part of their legacy. Thanks to funding from the Delaware Center for Transportation, the Section commissioned graduation stoles for the graduates.

ASHE New York Metro Section Awards 2025 Scholarships

ASHE New York Metro Section hosted scholarship recipients at its Technical Meeting in March. Along with representatives of Member Firm Sponsorships, the Section presented the following scholarship awards to these college students in New York: **AECOM Scholarship $2,500** to Ritika Talwar, City University of New York (CUNY), New York City of Technology; **Arora and Associates Scholarship $2,500** to Tony Zheng, CUNY City College of New York (CUNY City College); **GPI Scholarship $2,500** to Taha Akhlaq, The Cooper Union for the Advancement of Science and Art; **ASHE New York Metro Section Scholarships $2,500 each** to Aidan Mathew, CUNY City College, Arafat Shafi, CUNY City College, Chaw Nandar, CUNY City College and Amer Baker, Manhattan University; **ASHE New York Metro Section Scholarships $1,500 each** to Aminata Drame, CUNY City College, Ana Mateo-Jerez, Columbia University, Natalie Gulan, New York University Tandon School of Engineering, Siguel Hidalgo, CUNY, City College and Talha Akhlaq, The Cooper Union for the Advancement of Science and Art.

AMERICAN SOCIETY OF HIGHWAY ENGINEERS
610 Radcon Street
Johnstown, PA 15904

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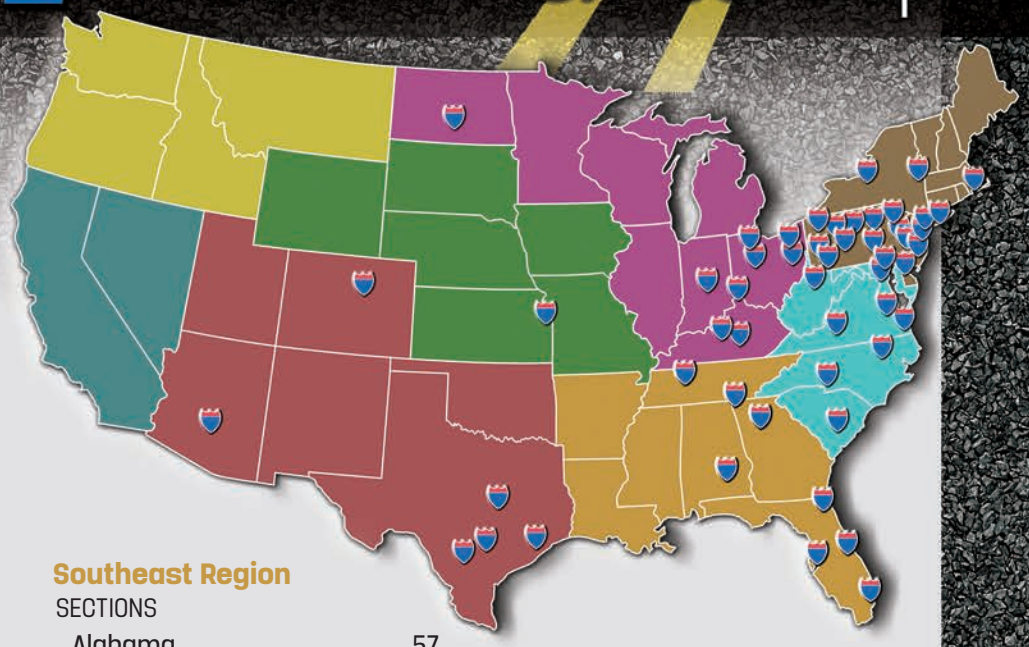
ASHE® National Membership



Regions *and* Sections

Northeast Region

SECTIONS	
Albany	85
Altoona	201
Central New York	48
Clearfield	193
Delaware Valley	340
East Penn	125
First State	233
Franklin	103
Harrisburg	421
Long Island	34
Mid-Allegheny	94
New York Metro	180
North Central New Jersey	120
North East Penn	155
Pittsburgh	544
Southern New Jersey	200
Southwest Penn	242
Williamsport	71
Subtotal	**3,439**

Mid-Atlantic Region

SECTIONS	
Blue Ridge	50
Carolina Piedmont	52
Carolina Triangle	223
Chesapeake	290
Greater Hampton Roads	72
North Central West Virginia	51
Old Dominion	79
Potomac	172
South Carolina	68
Subtotal	**1,057**

Southeast Region

SECTIONS	
Alabama	57
Central Florida	128
Georgia	685
Middle Tennessee	293
Northeast Florida	225
South Florida	47
Tampa Bay	64
Tennessee Valley	152
Subtotal	**1,651**

Great Lakes Region

SECTIONS	
Bluegrass	148
Central Dacotah	70
Central Ohio	211
Circle City	62
Cuyahoga Valley	108
Derby City	99
Lake Erie	249
Northwest Ohio	43
Triko Valley	152
Subtotal	**1,142**

Southwest Region

SECTIONS	
Central Texas	74
Colorado	46
Dallas-Fort Worth	85
Houston	97
Phoenix Sonoran	148
San Antonio	38
Subtotal	**488**

National Total	**7,777**
Professional Status	56%
Government	12%
Consultant	75%
Contractor	5%
Other	8%

Want to join and don't see a Section near you?
Visit our website to see how to start a new Section. www.ASHE.pro

Emerging Section locations:
Carolina Coastal
Illinois
Kansas City