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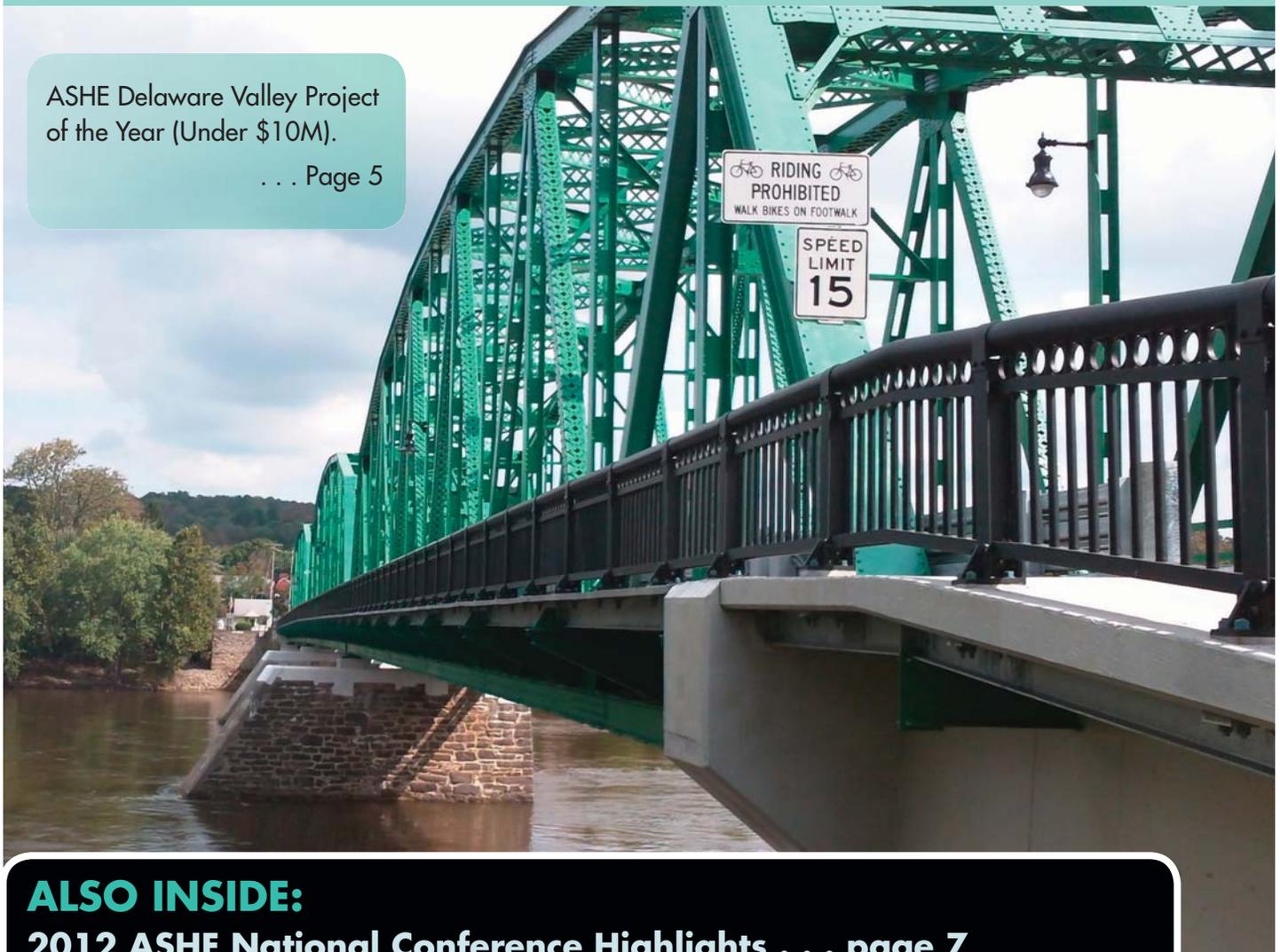
Fall 2012

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Toll-Supported Bridge Rehabilitation

ASHE Delaware Valley Project
of the Year (Under \$10M).

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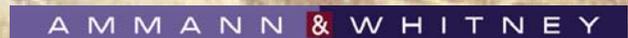
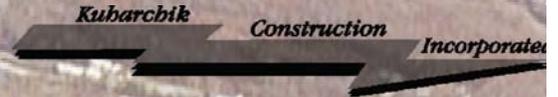
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ASHE National Membership Database Upgrade

ASHE is excited to roll out our new web-based membership database. Each member can access and maintain his or her own membership data. National's goal is that this database will become the common database that both National and the Sections use to maintain all membership information.

To access the database, go to www.database.ashe.pro. You must input your personal ID number which is an eight digit number located on the *SCANNER* mailing label. This will be your ASHE ID number for as long as you are a member of the Society. Your initial password is the zip code (including the dash if it is a nine-digit code) also on the mailing label. **Change your password after your initial login to ensure the security of your data.**

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President's Message

*Frank O'Hare, P.E., P.S.
ASHE National President 2012-2013*



What a scorching summer!! With temperatures reaching over 100 degrees in various parts of the country and a wind storm of epic proportions in July, I hope the coolness of autumn has arrived to your locale. (Several of us need to make sure the snow blower is ready.)

At our National Conference at Seven Springs in June, I had the opportunity to meet with representatives of First State's Student Chapter. The students from the University of Delaware set up and exhibited at the Conference in order to discuss the success of their student chapter. My 40-minute discussion with them in the basement of the lodge was a rewarding experience. We discussed the various reasons they joined the student chapter and what value they received from their membership.

First a little background about the First State Section; they take student participation seriously. First State, an average sized Section has awarded \$91,000 in scholarships to 52 students since 1997. They plan to award six scholarships totaling \$7,000 for the 2012-2013 school year, bringing the Section's total to \$98,000.

First State's efforts must be commended. The Student Chapter benefits both the student and ASHE's future. "What value does the undergraduate and ASHE gain from establishment of a student chapter?" was the question I presented to the Delaware students? With complete honesty, they informed me that ASHE was the only organization on their campus that actually presented them the opportunity to meet the "real people" in their selected profession. They went on to say how they believed that their four years of being a member of the First State Student Chapter presented them with the opportunity to have a four-year interview with potential employers. This vetting process became beneficial to both the student and the potential employer. It was heartwarming to hear that all of the students in attendance were going to be employed, several with the direct contacts they had through ASHE participation.

On the other side the coin; what did ASHE gain? ASHE has not only gained members, but we have gained ambassadors who understand our purpose and mission. As several of them leave the academic setting and enter different arenas, including the transportation industry, they take with them invaluable experiences from their Student Chapter and the First State Section. I believe in a few years many of these students will be leaders for sections, regions and the National Board.

The First State Student Chapter has told me repeatedly that if other sections are interested in forming a student chapter, they are more than willing to assist. I look forward to seeing other student chapters.

Our 2013 National Conference is going to take place in a wonderful location; Lake Placid, NY, home of the Miracle on Ice. Make sure you put the dates of June 5-8, 2013 on your calendar. Our family has fond memories of hiking, biking, canoeing, boating, swimming, bear sightings and taking in the fresh air of the Adirondack Mountains that surround Lake Placid. I hope to see you there.

As we look forward to celebrating the holidays in the next few weeks, I want to say thank you to all of our dedicated Section, Region and National officers and directors. Without your dedication and even some tenacity, ASHE continues to move forward. Thank you.

Happy Holidays!!! ■

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The projects below provide a brief sampling of our recent successes. If you'd like to know more, please give us a call.



Lake Champlain Bridge Replacement between Crown Point, NY, and Chimney Point, VT
Owner: New York State Department of Transportation, Region 1

Erdman Anthony was selected to provide erection engineering support in the initiative to replace the Lake Champlain Bridge—developing structural calculations to ensure safe, step-by-step steel erection, and preparing plans for the multi-girder approaches, delta frames, and tied-arch span.



Mills Road Pedestrian Bridge, Montgomery County, PA
Owner: Pennsylvania Department of Transportation

Erdman Anthony provided preliminary engineering, final design, and construction services for the rehabilitation of a 130-foot, two-span steel truss bridge over Skippack Creek that provides a pedestrian/equestrian link in the Evansburg State Park trail system.



SR A1A, Ft. Lauderdale
Owner: Florida Department of Transportation, District 4

Erdman Anthony provided roadway design and land surveying services on this one-mile, 3R project. Services included milling and resurfacing, sidewalk/ADA construction, signing and pavement marking, street lighting, signalization, and landscaping.

For more information, visit our website or call our Transportation Engineering Services Core Business Leader Richard E. Stees, PLS, at (717) 766-1741.

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ASHE Delaware Valley
Project of the Year - Under \$10M

Upper Black Eddy - Milford Toll-Supported Bridge Rehabilitation

Bucks County, Bridgeton Township, Pennsylvania
Hunterdon County, Milford Borough, New Jersey

Project Overview

This project involved the rehabilitation of an existing 675-foot long, three-span Warren truss bridge over the Delaware River that connects Upper Black Eddy, Bridgeton Township, Pennsylvania to Milford Borough, Hunterdon County, New Jersey. The Upper Black Eddy-Milford Toll-Supported Bridge (UBEMTSB) was constructed in 1933 utilizing stone masonry abutments and piers from a previous bridge that was originally built in 1842.

The bridge is owned and maintained by the Delaware River Joint Toll Bridge Commission (DRJTBC). The UBEMTSB is the only non-load posted crossing of the Delaware River between I-78 (20 miles to the north) and Rt. 202 (25 miles to the south). The bridge is also a "toll-free" span that is maintained through tolls collected at other DRJTBC bridge crossings. The goal of the project, as defined by the DRJTBC, was to rehabilitate the UBEMTSB to preclude the need for major repairs and long-term closures for a minimum of 15 years. The project was designed by Erdman Anthony

and constructed by Road-Con, Inc, with CM/CI services provide by Johnson, Mirmiran & Thompson (JMT). AECOM provided project management support for the DRJTBC

Having never undergone a comprehensive rehabilitation in its 75-year life, the UBEMTSB was showing signs of deterioration, including: moderate corrosion of the truss members; heavy corrosion and vertical heaving of sections of the concrete filled inverted T-beam deck; significant corrosion and section loss in some members of the floor system; and cracking and spalling of the pier and abutment bridge seats and backwalls.

Rehabilitation included blast cleaning and repainting of the truss, complete replacement of the floor system, installation of a new bridge deck and sidewalk, installation of new bearings, masonry repairs, bridge seat and backwall reconstruction, placement of rip rap in the river around the piers, and upgrades to the lighting system. The 20 foot clear roadway width between the existing trusses was maintained in the rehabilitation. Design of

the project began in 2008. Construction began in January 2011, and the bridge was open to traffic by Memorial Day 2011.

Located in communities that rely heavily on tourism to support their economy, the public's interest played an important role in the rehabilitation. Construction for this rehabilitation was originally proposed to begin in early 2010 utilizing staged construction and part-time bridge closures. With construction scheduled to start during the national economic recession, the residents and business owners voiced their concerns of how the rehabilitation would impact their livelihood if the bridge were under construction during their peak tourism months.

The affects of three major floods in the past five years and a series of other transportation projects that diverted traffic away from the area had already put a burden on the local economy. During the planning process of the project, the DRJTBC conducted stakeholder meetings and open-houses with the communities on both sides

"Rehabilitation" continued p. 13

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Photo courtesy of Washington State DOT

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2012

ASHE National Conference

Seven Springs Mountain Resort

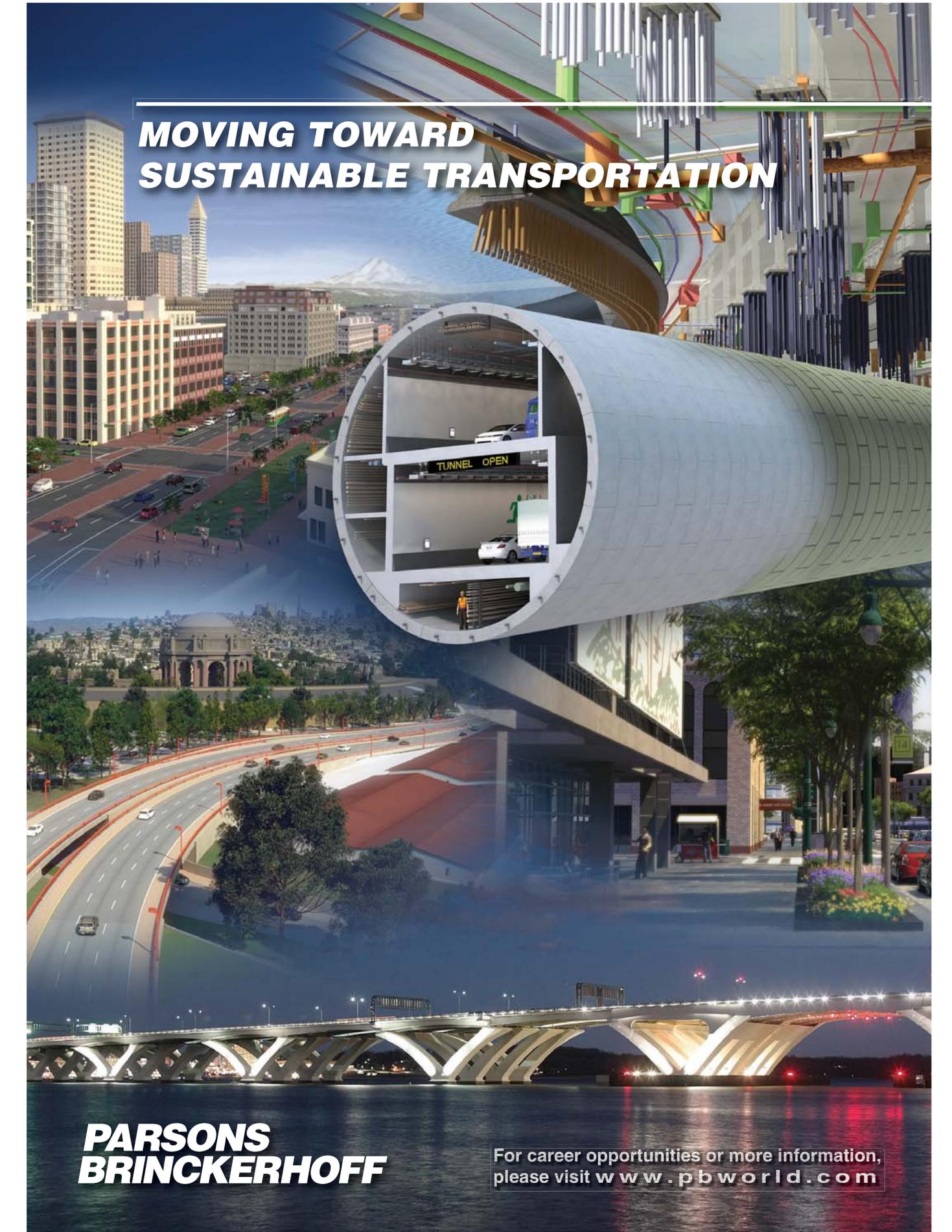
The Southwest Penn Section was honored to be the host for the **2012 ASHE National Conference** at Seven Springs Mountain Resort June 7th through June 10th. The Conference Committee, under the leadership of Perry Schweiss and Clayton Stahl, brought their planning to a close as the Conference convened. The team then managed the numerous details needed to present a comprehensive professional Conference, while providing ASHE members and their families lasting memories. Five hundred and sixty-two Conference attendees, comprised of highway professionals and their families, converged on the Laurel Highlands, arriving with varied interests, needs, and expectations. It is hoped that no one left disappointed -- the weather was spectacular, complementing the array of activities enjoyed at the conference and the surrounding region.

Attendees representing owners, consultants, constructors and suppliers reunited with colleagues from around the nation and found the exhibitor hall a place of opportunity for networking, learning of state-of-the-art services and products, and reviewing recent highway projects. Fifty-one companies and agencies supported the Conference by setting up exhibit booths that presented professional displays. ASHE is grateful to the exhibitors for their continued support. No exhibitor's hall would be complete without a little gamesmanship and this Conference was no exception. In addition to a variety of exhibitor sponsored skills completions, the Conference Highway Crossword Challenge kept attendees moving around and awarded IPADS to two lucky winners. The Icebreaker Reception was attended by 282 attendees who came to relax with old friends, catch up on life and enjoy a great barbeque dinner and live music.



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June 7-10, 2012



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2012 ASHE National Conference

Seven Springs Mountain Resort

The 2012 Opening Session and Annual Business Meeting raised the banners on the Sections in attendance, and applause greeted the Pittsburgh Section members who had the greatest number during roll call. We thank the Pittsburgh Section for their commitment, but also acknowledge the representatives from Sections making their way from farther reaches in the nation. The Opening Session offered us a timely opportunity to be updated by distinguished leaders including Victor Mendez, Federal Highway Administrator; Kenyon Gleason, ARTBA Vice President of Development and Operations; and Scott Christie, PennDOT Deputy Secretary for Highway Administration.



Two hundred and seventy-seven attendees participated in the Past Presidents Luncheon. It was also a special time of well deserved recognition of ASHE leaders who have contributed time, energy and talent to the lasting success of the ASHE organization. New and veteran members are always blessed to be in the company of these distinguished professionals, and inspired and moved to accept their place as leaders in the future. Those attending the luncheon also were addressed by President Washington who brought insight into the history of the nation's infrastructure, mixed with good natured rib poking and laughter. Well done, Mr. President!



On Friday night, 269 people enjoyed the famous Seven Springs seafood buffet. The selection and quality of the buffet exceeded expectations for all seafood lovers. Another meal shared with family and friends, while the exhibitor's hall was transformed into a Las Vegas style casino for the entertainment of hundreds of "**players.**" All good fun as no one left broke, but scored big on laughs and memories!!



Saturday night's President's Reception and Annual Gala Banquet brought the Conference to a close with 207 in attendance. In fine ASHE tradition, another great meal was

June 7-10, 2012



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2012 ASHE National Conference

Seven Springs Mountain Resort

served followed by a show with hypnotist, Erick Känd. The Brass Knuckles Band then took the stage and entertained well into the evening.

The Conference showcased a solid technical program delivered by a host of industry experts hailing from around the region and nation. A total of 747 persons registered for three different technical tracks, taking advantage of the opportunity to expand their professional development. The array of seminars covered current and state-of-the-art highway topics, owner perspectives and needs, materials technologies, research trends, the latest design advances, and contractor's insights. Seven hundred and eighty Professional Development Hours were issued; a testament to the quality of the program and ASHE's commitment in meeting the needs of the highway professional's continuing education requirements.

ASHE-sponsored Conference programs were well attended with a total of 232 venturing out to explore regional attractions such as the Stone Villa Winery, Frank Lloyd Wright's Fallingwater and the Flight 93 Memorial, as well as on-site activities such as the cooking demonstration by Elements of Taste and the guided outdoor walking tour of Seven Springs. Ninety golfers emerged early Saturday morning to play in the golf outing and were greeted by excellent weather complementing the beautiful rolling scenery of Seven Spring's top-rated golf course.

The Southwest Penn Section is thankful to the conference and program book sponsors and conference attendees for their support in making the 2012 National Conference a success. Our sincere hope is that everyone returned home safely and took with them lasting and enjoyable memories from the Laurel Mountains of western Pennsylvania. **Life is a Highway** and we look forward to the next time we find ourselves together again. We also extend our best wishes to the New York Metro Section during their planning and delivery of the 2013 National Conference. Warm up your bobsled, and we'll see you in Lake Placid next year!!



June 7-10, 2012

Save the Date



ASHE

the peak of perfection

Lake Placid
2013

"It's Calling You"



**June
5 - 9,
2013**

Crowne Plaza
Resort and
Conference Center,
Lake Placid, NY



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“Rehabilitation” continued from p. 5

of the Delaware River. Project aspects such as staging, schedule and construction techniques were discussed during the meetings and residents were able to voice their opinions before the DRJTBC made any final decisions.

Taking the public’s interests into consideration, the DRJTBC decided to postpone the bridge rehabilitation until 2011, one year later than originally planned. Furthermore, it was determined that construction during the winter months, using a complete bridge closure to expedite the construction schedule, would cause the least negative impact on the communities. The bridge shutdown was initiated on January 11, 2011, and the Commission made a commitment to have the bridge re-opened to traffic by Memorial Day 2011.

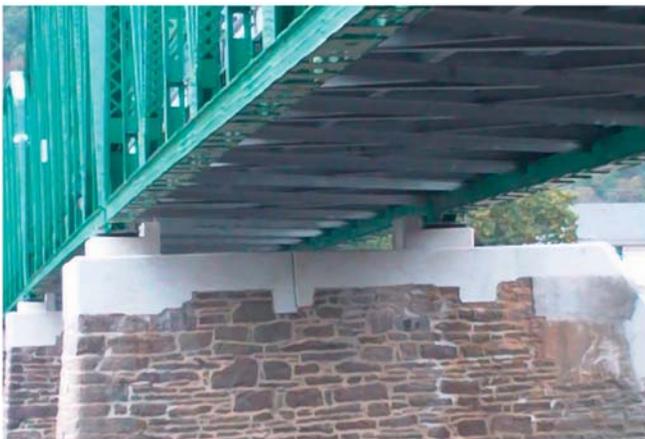
Since the UBEMTSB is the only non-load restricted bridge over the Delaware River between I-78 and Rt. 202, trucks were forced to run a 40 mile detour during construction while cars were able to use adjacent crossings with only a 12 mile inconvenience. Although there were several schedule impacts due to severe winter weather, such as snow, rain, high winds and high river levels, the bridge was reopened on May 20, 2011, just prior to Memorial Day weekend. The four-month-long bridge shutdown came to an end with an impromptu parade of vehicles crossing the reopened bridge on the evening of May 20.

Roadway noise from vehicles on the bridge was a concern raised by the public, specifically from proprietors of bed-and-breakfast inns located immediately adjacent to the bridge. In the original design concept for the rehabilitation, a steel open-grid bridge deck was recommended for its rapid installation (no time

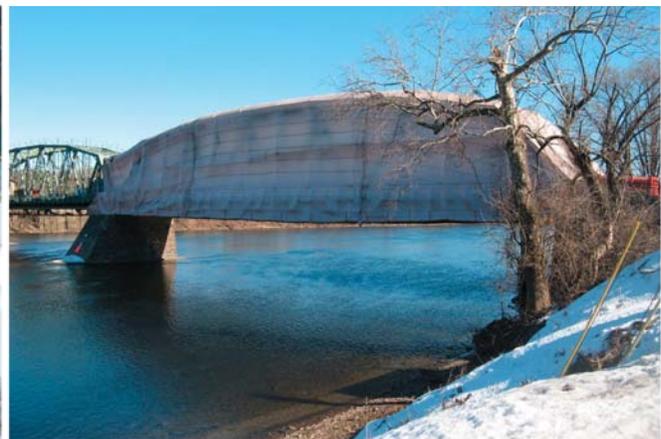
needed to cure deck concrete) and its cost. Using an open grid deck, the deck could be installed in sections using night-time or weekend bridge closures and the bridge could be re-opened to traffic between construction stages. With the public’s willingness to endure a full-time bridge closure to expedite construction, the design team opted to use a concrete half-filled steel grid bridge deck that was over-filled with a 1 ½” thick concrete wearing surface. To the satisfaction of the public, the solid surface of this deck type produces much less roadway noise as compared to vehicles traveling on an open-grid bridge deck. At the same time, this deck type better protects the steel floor system of the bridge from water and provides for a smoother ride quality.

Aesthetics was also an important aspect in the design decisions associated with the bridge rehabilitation. The UBEMTSB plays a significant role in the economy and culture of the region and is an iconic feature of the adjoining river communities. The design team strived to preserve and enhance the overall appearance of the bridge while at the same time upgrading details that improved safety for the travelling public, including pedestrians and bicyclists. The choice of lighting fixtures and sidewalk railings were two specific areas where aesthetics was considered. The style of both of these items was chosen to mimic the 1930’s vintage of the existing bridge. In addition, the semi-gloss green paint (the actual color is antique bronze) used on the truss was chosen to match the color of the existing bridge.

The rehabilitation of the UBEMTSB is part of the Commission’s more than \$1 billion Capital Improvement Program that has been ongoing since 2001. The UBEMTSB was rehabilitated at a construction cost of \$7,824,948.81. ■



Pier



Containment

Managed Lanes in Atlanta

Rob Dell-Ross, PE (City of Roswell) and Mindy Sanders, PE (Hatch Mott MacDonald)



Managed lanes opening day

One thing that anyone who has ever driven in Metro Atlanta can attest to is that traffic can be, well, let's just say it, downright lousy. One of the most distinct examples of such congestion is its I-85 corridor north of the I-285 "Perimeter". This corridor boasts traffic volumes close to 300,000 vehicles per day within its 14 lanes connecting Atlanta to its several northeastern suburbs. Over the years, more lanes have been added to combat this issue, including HOV2+ lanes. The HOV lanes have encouraged carpools and reduced the number of vehicles using the road. However, the number of vehicles using these lanes had steadily increased so that these HOV lanes were regularly congested during peak periods. Travel speeds averaging only 36 mph were common, making it no more of an advantage to be in those lanes compared with the general purpose lanes and will continue to worsen.

Rather than construct new lanes and take on the burdens of environmental, societal, and high costs, the solution provided by Georgia's State Transportation Board was to implement a managed lane system similar to those already established in other areas of the United States. Their solution was to convert 16 miles of existing HOV2+ lanes to HOV3+ lanes. This would create excess capacity in those lanes, which could then be used for toll-paying single and double occupant vehicles. Drivers of Alternative Fuel Vehicles and transit would be able to use the HOT3+ lanes without paying. The State Transportation Board passed this resolution in March 2009 to establish these managed lanes in what is now referred to as the I-85 Express Lanes.

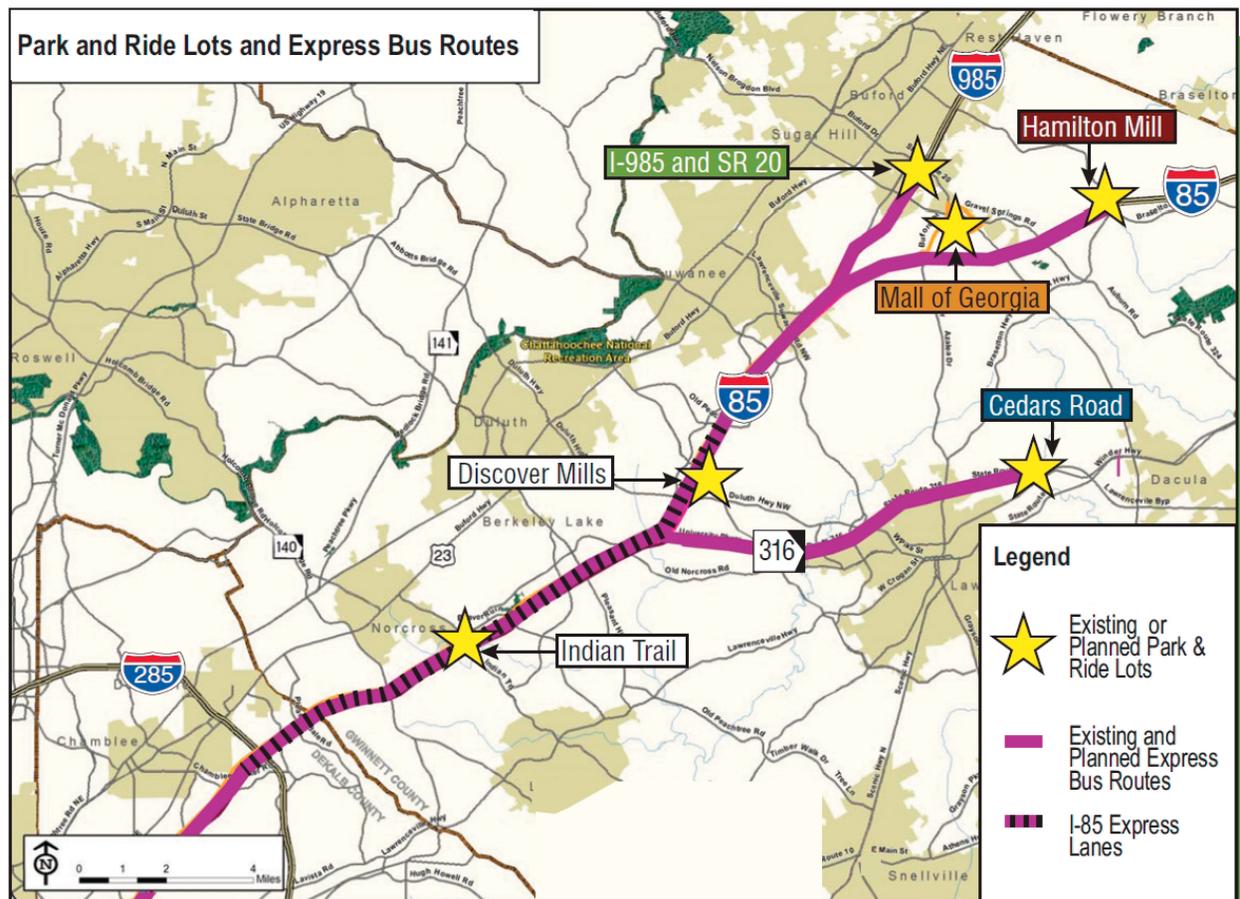
EXPRESS LANE		
	 Pass ONLY	
TO	 Jimmy Carter Blvd	\$ XX.XX
TO	 Lawrenceville Suwanee Rd	\$ XX.XX

This managed lane project was largely funded by a \$110 million grant, awarded to the Atlanta region from the USDOT to support regional transit enhancements. Combined with state funds, this grant expanded park-and-rides and purchased new passenger busses, in addition to converting the I-85 Express Lanes. Converting these lanes took approximately seven months, with a construction cost of approximately \$60 million.

These lanes are considered to be “managed” by the way demand and available capacity is controlled through real-time operational strategies in an effort to provide a continuous free-flow option for the commuter throughout the day. This is done by varying the Express Lane tolls in real-time. Drivers are informed of the cost before they get into the HOT lane so that they can make informed travel choices. Higher tolls will attract fewer drivers and lower tolls will justly attract more. Tolling is implemented electronically through the use of the PeachPass, a thin electronic sticker, which adheres to a vehicle’s windshield. The PeachPass is connected to an account established with the State Road and Tollway Authority (SRTA) and is required to use the toll facility.

The I-85 Express Lanes opened in October 2011 to an enormous public outcry and low ridership. Much of the resentment toward the project was due to the fact that existing lanes were used, which drivers regarded as taking away lanes from the corridor. There were those who saw the tolls as another tax, stubbornly refusing to use it. There were those arguing that their use was unfair and these “Lexus Lanes” would only serve higher income drivers. There were also those who simply weren’t prepared and hadn’t purchased their PeachPass and were thus forced to travel in the now even more congested general purpose lanes. Governor Nathan Deal has capped the maximum peak rate at \$0.90/mile to quell some of the criticism.

The managed lanes have now been open for ten months. Within this time, the complaints have lessened and ridership has nearly tripled. While it is unknown whether or not all of the naysayers have changed their minds, it is apparent that public acceptance, if not appreciation, has been obtained. What is also apparent is that the “managed lane” concept has done what it was supposed to do: provide a continuously free-flowing travel lane option for the commuter. With continuously increasing traffic volumes throughout the country and fewer dollars to fund road widening projects, this concept is bound to be a part of the transportation planner’s toolbox for many years to come. ■



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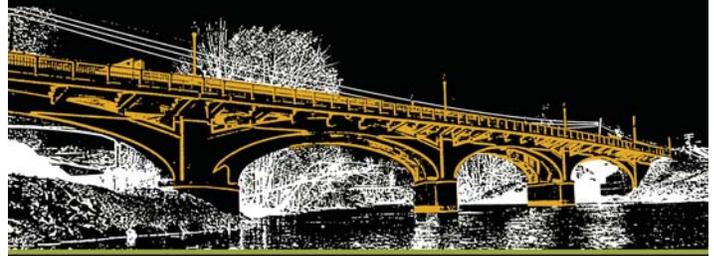


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Cuyahoga Valley

Ohio's Cuyahoga Valley Section Outstanding Project Winners

The ninth annual award lunch and presentations was held March 7, 2012, for the Cuyahoga Valley Section Outstanding Project Winners. Projects must have a substantial completion within the last two years and be located in the Cuyahoga Valley Section (Akron area.)

Editor's Note: This announcement first appeared in the Summers 2012 SCANNER, but the photo captions were incorrect.



Over \$3M: South Main Street Roadway Improvements; L-R Jim Weber, City of Akron; Scott Cook, KCI Associates; Ben Jones, Cioffi Construction Company; and Kevin Kehres, Vice President ASHE Cuyahoga Valley Section.



Under \$3M: Seasons Road Reconstruction; L-R Kevin Kehres, Vice President ASHE Cuyahoga Valley Section; Jim McCleary, City of Stow; John Chiarappa and Bob Baker, Karvo Paving Company; and Tony Avolio, City of Stow.



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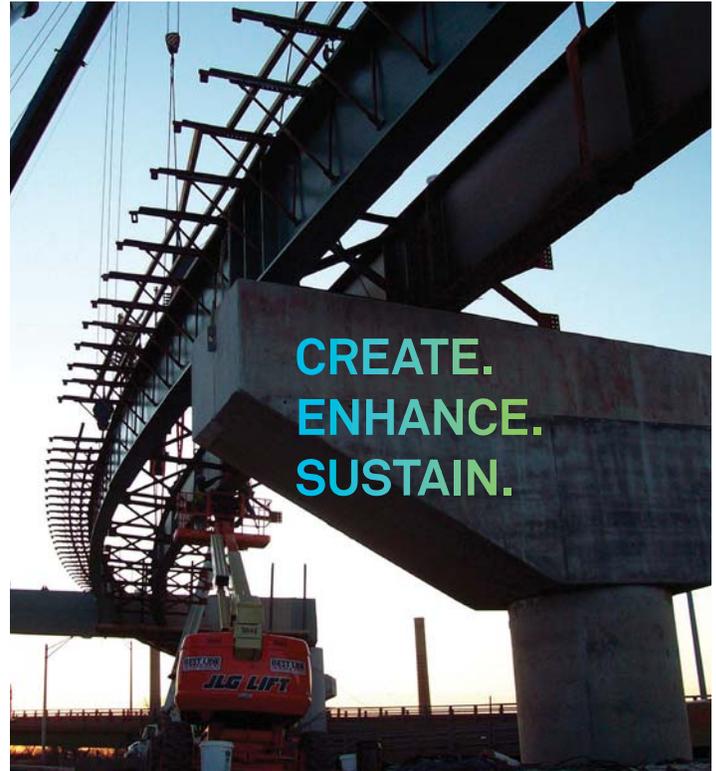


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Crossing the Connoquenessing at Harmony Junction

Richard B. Kauffman, P.E.

Background

The previous Harmony Junction Bridge was an 11-span pre-stressed concrete box beam bridge founded on reinforced concrete piers and abutments carrying S.R. 3027 (Hartmann Road) over the Connoquenessing Creek and Buffalo and Pittsburgh Railroad in Jackson Township, Butler County, Pennsylvania. The Harmony Junction Bridge replacement was just one among the many American Recovery and Reinvestment Act (ARRA) projects that took place in Pennsylvania in 2010, but to the Pennsylvania Department of Transportation (PennDOT), District 10-0, the Seneca Valley School District, and daily commuters (estimated 3,067 vehicles), it was a vital connection to the Seneca Valley Schools, businesses, and homes that could not be taken for granted. The project began in 2008 as a bridge rehabilitation project. However, an inspection of the bridge structure revealed additional problems that increased the scope of the project, thereby effectively making the project a full structure replacement.

Project Description

SAI Consulting Engineers, Inc. provided the alternatives study and preliminary and final roadway and structure design for the S.R. 3027-250 Harmony Junction Bridge replacement project that included a six-span, 684' continuous haunched steel multi-girder bridge over the Connoquenessing Creek and Buffalo and Pittsburgh Railroad. In addition to the bridge and roadway work, there was an eight-foot concrete crested dam 300' downstream on the Connoquenessing Creek that was removed. The dam had created a higher than normal pool of water extending back through the bridge area, and because FEMA purchased a large number of properties located within the 100-year floodplain just downstream of the bridge, the design process and overall construction process was impacted.

Complexity

Alignment – In order to maintain traffic through the corridor during construction, various offline alternatives were evaluated during preliminary design. PennDOT selected the online alternative, which was the least costly, had the fewest right-of-way impacts, and resulted in the least amount of environmental impacts while meeting all of the project objectives.

Span Configuration – Numerous factors were considered in establishing the six-span arrangement:

Existing Pier Locations – In order to eliminate the expensive construction costs of removing the 10 existing foundations, the span arrangement was established to avoid the existing pier foundations. Moreover, a few of these were pile foundations that needed to be considered to eliminate pile interference.

Existing Abutment Locations – The proposed abutments were set slightly behind the existing abutments to eliminate the cost of removing the existing foundations.

“Crossing” continued p. 21



Previous Harmony Junction Bridge



Harmony Junction Bridge Replacement

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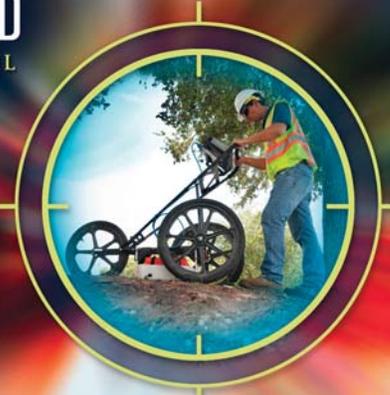
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“Crossing” continued from p. 19

Buffalo and Pittsburgh Railroad – The railroad required additional width for the future placement of a second track as well as arrangements for a maintenance road, which impacted pier locations.

Hydraulic Opening – A detailed H&H evaluation determined that a superstructure significantly deeper than the existing bridge met the site hydraulics. Therefore, the low chord of the bridge was lowered from the existing since the profile could not be raised. Utilizing the longer more economical span lengths resulted in substantial cost savings to the Department.

Continuous Structure – The six-span continuous steel bridge provided an economic solution for the project and improves the long term performance of the bridge by eliminating the expansion dams from the bridge. The previous bridge had 12 expansion dams; the new bridge has one at Abutment 1 and one at the end of the approach slab at Abutment 2.

Vertical clearance over Railroad – The girder web was haunched from 57” to 28” to provide the required 23’- 0” vertical clearance over the railroad while still maintaining a continuous bridge structure. The old bridge provided approximately 22’- 0” vertical clearance over the railroad tracks.

Structure Skew – The previous bridge had been constructed on a 60 degree skew. This appears to have been done to place the solid pier shafts parallel to the Connoquenessing Creek. By utilizing single shaft circular pier stems above the 100-year flood elevation, the bridge was constructed at a 90 degree skew, which reduced construction costs and, consequently, improved the site hydraulics.

Pier Construction – The piers within the Connoquenessing Creek were constructed with single-shaft caissons supporting a reinforced concrete hammerhead cap. The same pier design and dimensions were used for all of the pier caps, which resulted in more conformity and construction savings. To eliminate the need for costly cofferdams to construct footings in the creek, a single-shaft reinforced concrete caisson and rock socket were designed and constructed.

Use of New Tooth Dam Details – PennDOT Standard BC-762M was utilized at the Abutment No. 2 location so that the tooth dam was constructed at the end of the approach slab, eliminating potential leakage problems at the end of the bridge. A conventional strip seal application was used at Abutment No. 1 because of the shallow superstructure required over the railroad.

Bridge Barrier Placement – PennDOT permitted slip forming of the bridge barriers that resulted in construction cost savings and a high-quality finished product.

Downstream Crest Dam Removal – According to historical records, for the last 200 years, some type of dam (timber or concrete) had been located about 300 feet downstream of the bridge. The

concrete crest dam was approximately 8 feet high measured from the streambed to the top of the dam. This resulted in a higher normal pool of water extending back through the bridge area. Throughout design, the Wild Waterways Conservancy stated they were planning to remove the dam; however, they had insufficient funds to perform the demolition, and it was not scheduled. During bridge construction the general contractor, Mekis Construction Corporation assisted them with the removal of the dam; this resulted in a significant reduction in the normal pool at the bridge. Consequently, the size of the construction causeway required decreased significantly, and Mekis provided a small temporary construction bridge that met the site requirements. The Wild Waterways Conservancy stated that the removal of the dam will make the Connoquenessing Creek cleaner and will add greater recreational possibilities to the area.

100-Year Floodplain – In 2008, FEMA purchased the majority of the properties within the 100-year floodplain just downstream of the bridge. Once the houses were removed, FEMA then turned the property over to Jackson Township, who identified the area as a future park with recreational facilities. During construction, this area was necessary for access and staging. At the design stage, trees were designated to remain, and only certain areas were permitted to be used for construction. The area was returned to its original state to be further developed by Jackson Township.

Bridge Aesthetics – The project resulted in an aesthetically pleasing finished bridge (see photos p. 19.) This was accomplished by reducing the number of spans, removing the box-like piers from the creek and replacing them with single column piers, and by replacing the concrete box beams with the unpainted weathering steel girders. The removal of the downstream dam allows for a more natural, free-flowing creek. The purchase of the properties by FEMA/Jackson Township and the proposed construction of a park with recreational facilities and a boat launch along the far approach will further enhance the use of this area.

Outcome

In conjunction with PennDOT District 10-0, SAI and all project partners provided the public a successful completion to a well-designed and constructed bridge replacement project. During the construction process, Len Keller, Jackson Township Police Chief, was quoted by the General Contractor Mekis Construction Corporation as saying, “Traffic has been flowing better than anticipated, thanks to a lot of planning. The problems and inconvenience have been kept to a minimum.” In the end, the goals established by PennDOT were met, and the local stakeholders, including the the Seneca Valley School District, were delivered a new state-of-the art Harmony Junction Bridge and a safer, more reliable transportation facility. ■

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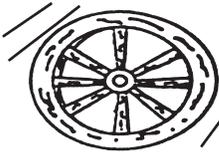


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As the Wheel Turns



Frank O'Hare, PE, PS, is now the senior business developer for the Columbus, OH, branch of S&ME, Inc. Besides Columbus, O'Hare's work encompasses business development, and client relations for S&ME's Cincinnati and Cleveland offices, as well as regional marketing in Ohio and surrounding states.

O'Hare has consulted for private, local, state and federal clients in project management, preliminary and final design, transportation corridor studies and project planning, development of design criteria, and contract management and construction administration. O'Hare is a registered professional engineer in Ohio, Indiana, Michigan, Kentucky and West Virginia, where he has managed large civil engineering projects, including dams, bridges and highways, flood walls, airports and railways.

Notable projects include the Norfolk Southern Railroad, Heartland Corridor Project in Southern Ohio; the Louisville/Southern Indiana Ohio River Bridges Project, East End Kentucky Approach – Tunnel Segment; the award winning Soo Locks Conceptual Design, U.S. Army Corps of Engineers, Detroit District, Sault St. Marie, Michigan; and the West Columbus Local Floodwall Protection Project, Phase IIB, IIIC, IIE U.S. Army Corps of Engineers, Huntington District, Franklin County, Ohio.

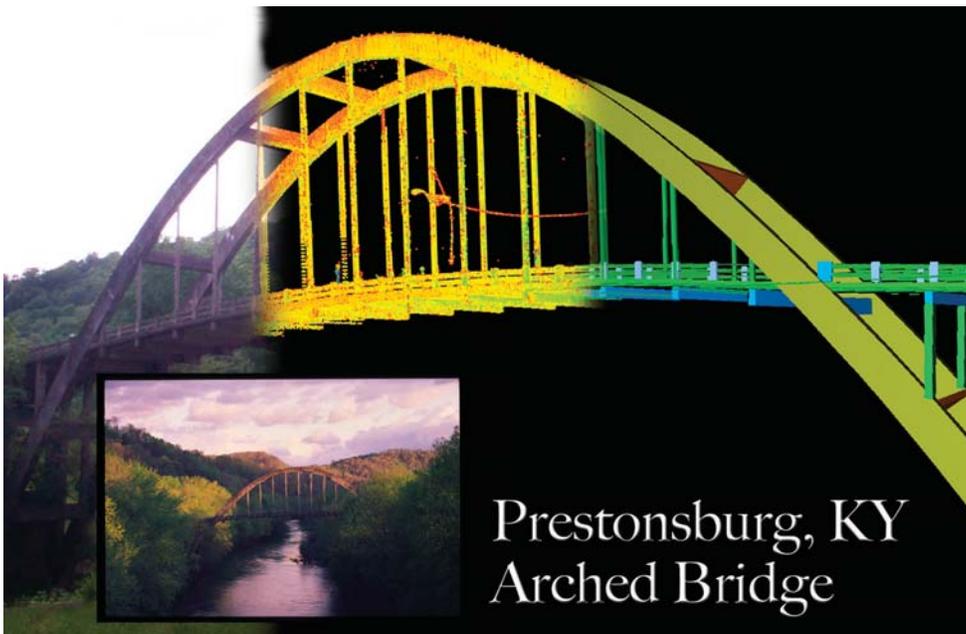
O'Hare was installed as the 54th National President of the American Society of Highway Engineers (ASHE) on June 9. ASHE is a nationwide organization, consisting of more than 6,000 members from the highway industry and employed by federal, state and local governments, suppliers, contractors and consultants.

O'Hare received his Bachelor of Science degree in Civil Engineering from Purdue University in 1974. He has been a member of the Columbus Engineers Club since 1985, was active in the Society of American Military Engineers and is a past chairman of the Transportation Committee of the American Council of Engineering Companies (ACEC) of Ohio.

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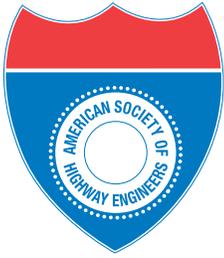
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