

Quarter 3 | 2017

CONCRETE PAVEMENT PROGRESS



Concrete Overlay Sets the Pace for Colorado Highway

ALSO IN THIS ISSUE:

All Concrete Roads Lead
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Concrete Pavement Progress is the official magazine of the American Concrete Pavement Association (ACPA). ACPA is the national trade association for the concrete pavement industry. The primary mission of the ACPA is to lead the promotion of concrete paving and align its members, chapters/state paving association affiliates and partners for effective and valued concrete pavement promotion, advocacy and technical support on behalf of the concrete pavement industry.

In Praise of Concrete Pavements New and Old



Photo by Casey Peter,
Project Manager/Inspector, HDR, Inc., Denver.

IN THIS ISSUE, WE TAKE A TRIP BACK TO BELLEFONTAINE, OHIO, for a view of a newly constructed replica of the first test strip constructed in advance of the placement of the first concrete road in America. Last year, we visited to commemorate the 125th anniversary of the first concrete roadway, an event that prompted the idea of building a replica of the first test strip there.

The idea came to fruition, thanks to the efforts of the Task Force on Preservation of Historical Concrete Pavement Artifacts and the generous support of the City of Bellefontaine, many industry members and organizations, and several individuals, all of whom made the project and the event possible.

A ribbon-cutting ceremony marked the official dedication of the test strip (now part of Main Street). It also reminds us that the City of Bellefontaine, the concrete pavement industry, and the descendants of George Wells Bartholomew Jr.—the accountant turned inventor who is credited with the first concrete pavements—have a lot of pride in those early concrete pavements, and of course, the new concrete section, too.

That same pride can be seen in the other projects highlighted in this issue of the magazine. In Colorado, for example, a concrete overlay project underscores equal measures of innovation and cost-effectiveness. The resultant pavement is one that will provide excellent service for many years to come.

In Toronto, officials turned to an innovative solution repair for a high-volume highway. A first for the Ministry of Transportation of Ontario (MTO) was the use of precast concrete panels for repair of distressed asphalt pavement. With this project, MTO officials are testing three different support systems, which will present the agency and the contractor with insights into using this technology in other applications, too.

Finally, in Jasper County, Iowa, officials sought a solution to a 40-year-old concrete road that needed to be repaired. County officials turned to concrete, and at this writing, the concrete overlay project is being constructed. Thus far, the project has shown the value of innovation, hard work, and the advantages of outreach and communications with the local community.

In writing about these and other concrete pavement projects, we are happy to see the pride and dedication of so many people who work so tirelessly throughout the industry. That pride and dedication results in high quality concrete paving projects, which we are pleased to present as concrete pavements new and old!

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Photo by Casey Peter, Project Manager/Inspector, HDR, Inc., Denver

Concrete Overlay Sets the Pace for Colorado Highway

COLORADO SH13

PROJECT SNAPSHOT

- » Construction Contract: \$5.2 million
- » Length of Project: 6-mile, 2-lane highway
- » Rock and Sand Mined: 47,000 tons
- » Total Concrete Pavement: 131,000 square yards
- » Construction Management Consultant: HDR
- » Contractor: Castle Rock Construction Company

Low-cost Concrete Overlay is a First for Area

By Sheryl S. Jackson

THE CONCRETE OVERLAY ON STATE HIGHWAY 13 (SH 13) north of Craig, Colo., is a positive example of innovation and cost-effectiveness, and although it's also a recent first for the area, is already earning some positive attention.

Pavement alternates for the bidding process called for a 6 in. concrete overlay on existing asphalt or 6 in. of asphalt on full-depth reclamation. A total of nine bids were received by the Colorado Department of Transportation (CDOT)—four concrete and five asphalt proposals.

Although CDOT applies a life cycle cost adjustment factor of \$660,180 to all asphalt bids for evaluation purposes, Castle Rock Construction Company, an ACPA member, was the low bidder prior to application of the cost adjustment factor, thus allowing concrete to break into a traditionally asphalt market for secondary roads in western Colorado.

"SH 13 is a major connector between I-80 and I-70, which means high truck traffic," explains Clint Moyer, P.E., resident engineer for Colorado

Department of Transportation (CDOT) Region 3. The \$7.5 million project included the concrete overlay as well as work on culverts, repair of road base where deterioration was extensive, and repair and replacement of guardrail, he explains.

Innovative Approaches

A number of innovative approaches were used in the project. "The existing asphalt was milled to smooth the profile and cross slope, and to produce a good bond with the 6-in concrete overlay," says Gary Ungerman, manager of business development for Castle Rock Construction Company. "The milled material was used as a base for the shoulder, which meant that we did not have to haul any material away."

In addition to reducing truck traffic needed to remove milled material, Castle Rock's production of the aggregate close to the project not only reduced costs and construction time but also reduced truck traffic with longer haul distances from other aggregate pits in the area, thereby reducing the carbon foot print of the project.

“The mined aggregates were produced close to the project cutting down on the trucking from other pits in the area,” explains Ungerman. “The challenge to producing our own aggregate was the aggressive paving schedule,” he admits. “Initially, we had trouble staying ahead of the paving, but we moved to a seven-day-a-week aggregate production schedule, which worked well.”

The 6-mile, two lane road was paved one lane at a time, with traffic alternating through the project in one direction at a time. Flaggers and a pilot car were used to move traffic through the work zone at a controlled speed. Keeping traffic moving through the project was a challenge because there were no detours available.

There were a few tie bars missing in the longitudinal joints in the southbound lanes, and they were retrofitted into the hardened concrete. “We used two different types of repair—cross-stitching and slot-stitching,” says Moyer. “We tried both techniques to evaluate which is best to use in the future.”

The mix design for this project was a mix of four aggregates—#4 coarse aggregate, #7 coarse

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aggregate, #9 aggregate and concrete sand—blended together to produce a consistent mix that maintained a coarseness factor of 60 and a workability factor of 35.

“We used a four-bin feeder to provide the right proportions of the aggregates to the pug mill, which mixed the aggregate into a single aggregate that was fed to the batch plant,” explains Ungerman. “There was a lot of quality control in the project, with checks on the mix every two to three hours to make sure the blend was correct.”

Attention to detail throughout the project resulted in the construction of the smoothest concrete road in Colorado, says Ungerman. “The initial HRI was 45.1 and after minimal corrective action it was 44.9. This is the smoothest concrete road paved in Colorado in 2016 and approaches the best asphalt road which had an HRI of 35.”

Moyer agrees and adds, “We couldn’t be happier with the finished product. It held up well after the spring thaw and is the smoothest section of SH 13. We have received positive feedback from everyone.”

This innovative project was a recent award-winner in the Colorado-Wyoming Chapter concrete paving awards program. ✧



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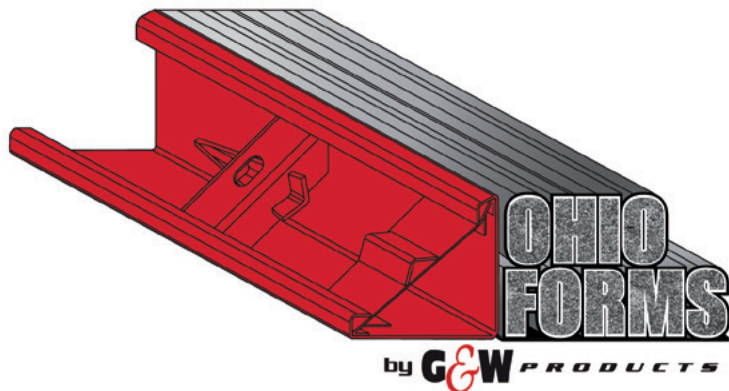
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All Concrete Roads Lead to Bellefontaine

New Pavement Replicates Original 1891 Test Strip

By Bill Davenport, ACPA

“ALL CONCRETE ROADS LEAD TO BELLEFONTAINE,” proclaimed Jerry Voigt, P.E., President and CEO of the American Concrete Pavement Association, as he spoke to a crowd gathered along the city’s Main Street for a special ceremony in mid-July.

Local public officials, industry representatives, family members of George Wells Bartholomew Jr., and local citizens were on hand to witness a ribbon-cutting ceremony marking the completion of a replica of the test strip constructed

ahead of the construction on the first concrete street in America.

The replicated section is part of a project to revitalize the downtown area with a new outdoor patio expansion to a popular brick oven pizzeria. The new 11-foot section of pavement features a dimpled section of concrete, to replicate the texture of the original test section, which was originally used as a horse hitching post.

Voigt thanked Bellefontaine Mayor Ben Stahler and the City of Bellefontaine for their commitment to preserving their heritage, which is also important to the concrete pavement industry’s heritage. The impressive concrete super-highways of this nation are descendants of the first concrete pavements in the nation, including Bellefontaine’s new replica of the original test section and Court Avenue, which was constructed in 1893.

continues »



Kate Quickel, television host of "Broad & High" in Columbus, and great-great granddaughter of George Bartholomew prepares to cut the ribbon celebrating the special day. She also presented remarks on behalf of the Bartholomew family. (Photo by Reuben Mees, Bellefontaine Examiner.)

Temporary plaque depicts the wording that will be used on the brass plaque to be placed adjacent to the replicated test strip.

The First Concrete Street
In America
This pavement is a replica
of the original test strip
placed in 1891 by
George W. Bartholomew.



Descendants of George W. Bartholomew gathered for the event. Among them were Nancy Bartholomew (center), wife of the late grandson of George Bartholomew, as well as Ellie Bartholomew Bates, the first member of the sixth generation (second from right).



A view of the replicated test strip, which was built with in-kind and cash contributions from people interested in preserving and celebrating the history of the first concrete street in America.



Bellefontaine Mayor Ben Stahler welcomes guests and kicks off the dedication ceremony and ribbon-cutting event.



ACPA's Jerry Voigt describes the significance of the replicated test strip, as well as the original concrete pavements built between 1891 and 1893.



Mark Pardi, Ohio Chapter-ACPA, describes why the concrete pavement industry regards George Bartholomew as a hero.



Ribbon cutting caps the celebration of the dedication of the replica of the first test strip, which was placed prior to the construction of America's first concrete street.



Recognizing the First Concrete Pavement

ACPA, as part of its efforts to chronicle and collect artifacts of concrete pavements that are 50 years old or older, now is home to a piece of the original concrete pavement placed in Bellefontaine, Ohio, in 1891.

“This is important because it represents an opportunity to preserve the heritage of concrete pavements,” says ACPA President & CEO Jerry Voigt, P.E. “One of the hallmarks of concrete pavement is its longevity, and this sample represents is a reminder of what’s possible.

“As our industry and the surface transportation construction community have evolved, we now consider sustainability in many of the decisions we make about pavements,” he said, adding, “One of the most impactful ways of demonstrating the sustainability of pavement than its longevity.”

In related news, petrographic analysis of the original concrete pavement was conducted earlier this year by Larry Sutter, Ph.D., Professor of Materials Science & Engineering at Michigan Technological University,

Houghton, Mich., in partnership with Gerard Moulzolf, PG, Vice President/Petrographics Manager of American Engineering Testing, Minneapolis. Results of this testing will be reported in a special session at ACPA’s 54th Annual Meeting in San Diego. The meeting is scheduled for November 28 through 30 at the Hard Rock Hotel.



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“Thank you, Mayor Stahler, for not forgetting the historical significance of your concrete streets to the nation and to the industry born from the nation’s first concrete pavement,” he said.

“The test strip first placed by George Bartholomew was the trial product,” Voigt said, reflecting on the risk taken by Bartholomew and the City of Bellefontaine more than 125 years ago. The original pavement holds the distinction of being the first two-lift concrete construction and the first warranted pavement. Bartholomew believed so strongly in the product that he posted a personal bond of \$5,000 (the equivalent of more than \$146,850 today).¹

In addition to the Mayor, the City of Bellefontaine, and the Bartholomew family, Voigt also thanked the sponsors who made both the replicated test strip and the event possible.

Mayor Stahler presided over ceremony, including a ribbon-cutting, and also thanked members of the Bartholomew family, public works officials, and representatives of the cement and concrete industries.

Kate Quickel, the great-great-granddaughter of George Bartholomew on behalf of other family members, including Nancy Bartholomew, wife of George Bartholomew’s late grandson; Susan Bartholomew Manecke (great-granddaughter); and Ellie Bartholomew Bates, the first member of the sixth generation of the family.²

“It’s a privilege to be here to celebrate the replica of the first concrete test strip,” Quickel said, adding, “I’m proud of my great-great-grandfather for his intelligence and inventiveness.”

The test strip was an idea developed during the 125th anniversary celebration of the first concrete street in April 2016, according to Mark Pardi, Field Engineer/ACPA Ohio Concrete Chapter Representative.

Addressing the descendants of George Bartholomew, Pardi credited the development of the first paved roads with “rapid commercial and industrial progress” in the United States. He reminded participants of a Golden Jubilee held in 1941, at a time when World War II was dominating newspaper headlines. The same year brought 30,000 people to the town square to celebrate the first concrete road. He also said that in 1991, the Ohio Ready Mixed Concrete Association [along with the Ohio Valley Chapter-ACPA] led a centennial celebration of the first concrete pavement.

“Every generation should be made aware of the importance of the first concrete street in Bellefontaine, Ohio, made possible by Mr. Bartholomew,” he said, adding, “Under the leadership of Mayor Stahler and his staff, the next page is written, and now this generation has a new reminder, a replica of the nation’s first concrete pavement.”

Pardi also said that the fundraising effort also allowed the development of a commemorative brass plaque, as well as a planned restoration of the original vellum/canvas plan that resides at the Bellefontaine City Office. ✧



Mayor Stahler accepts a proclamation delivered by an Ohio General Assembly staff member.

References

- 1) Source: Federal Reserve Bank of Minneapolis: <https://www.minneapolisfed.org/community/teaching-aids/cpi-calculator-information/consumer-price-index-1800>.
- 2) Source: “Replica of 1891 concrete work dedicated in city,” by Reuben Mees, *Bellefontaine Examiner*, July 13, 2017.

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Successful Concrete Overlay Leads to New Project

Challenges Include Providing Update and Property Access to Homeowners

By Sheryl S. Jackson

WHEN A MORE THAN 40-YEAR-OLD CONCRETE ROAD STARTED NEEDED TO BE REPAIRED, the solution chosen was a concrete overlay.

The 5.4 mile section of Highway F-36 in Jasper County, Iowa, handles 700 vehicles per day, with 20 percent of that volume being truck traffic. Jasper County's Engineer Office turned to a concrete overlay with interlayer fabric.

"We repaired a road with the same technique about two years ago, and received positive feed-

back on the results, which led to selection of the same approach for this project," explains Pam Olson, assistant to the engineer for Jasper County. "To prepare for the road construction that will be completed in September 2017, we installed subdrains throughout the length of the new overlay to improve drainage."

"The highway section being repaired is a 22-foot wide concrete pavement with a lot of curves," says Tim Tometich, project estimator and manager for Manatts, Inc., an ACPA member. "In addition

to placing a 7-inch overlay, we are widening the road to 26 feet," he explains. "This will increase the depth of the overlay at the outside edges to nine inches."

A fabric interlayer will provide the bond breaker between the old and the new pavement, says Tometich. "Use of the fabric means a faster construction process."

Another way to speed construction was a full road closure at the point of construction.



“It is challenging to communicate to people why a full closure versus a half-road closure is necessary, but it is the most cost-effective way to handle the project,” says Olson.

There are detours around the five mile section to allow trucks and thru-traffic to reach the nearby interstate highway, but homeowners on the road cannot use the road in front of their homes for the 48 to 72 hours that the construction is at their property and the concrete cures. “We’ve sent letters and built email group lists, so I can send daily alerts to homeowners to let them know where we are working and what properties are affected each day,” she says. “This gives them time to plan ahead to park their cars on a side street.”

Manatts also goes door-to-door once construction starts to make sure people understand the schedule and the short periods of time that they won’t have direct access to their property via car.

“This is a rural area so many people have ATVs, but we will provide a golf cart for their use on the days that they need to park away from their homes,” says Tometich. “In some cases, we offer to put them in a hotel for a night or two if the situation requires it.”

“Use of a fabric interlayer for concrete overlays is a less expensive way to provide a bond breaker between the two layers of pavement, and it does not require special equipment for the contractor

continues »





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compared to a bonded overlay,” says Tometich. “Additional labor is required, which means maybe six to eight more people, to lay the fabric, but the process is simple,” he adds. “Stringless paving is also required when using a fabric interlayer, but that is standard for us.”

One change from the previous project is the use of a lighter-colored fabric rather than a dark fabric, says Tometich. “We did have to use water to cool the dark fabric as we paved, and we will be paving in hot weather this time,” he says. “For that reason, we will use a white fabric.”

In past projects, Manatts has attached fabric with nails and washers, but adhesive will be used for the Jasper County project, says Tometich. “There will be an additional material cost, but it will be offset by a savings in labor.” ♦



“It is challenging to communicate to people why a full closure versus a half-road closure is necessary, but it is the most cost-effective way to handle the project.”



IOWA OVERLAY

PROJECT SNAPSHOT

- » Project Cost: \$2,863,000
- » Length of Project: 5.4 miles of two-lane highway
- » Technologies Used: 7-inch concrete overlay, fabric interlayer, stringless paving
- » Contractor: Manatts, Inc.



Precast Concrete Inlay Strategy Takes Aim at Asphalt Pavement Failures

Pilot Project Evaluates Three Different Support Systems

By Sheryl S. Jackson

REPAIRING HIGH-VOLUME HIGHWAYS AND ROADWAYS CAN PROVE ESPECIALLY CHALLENGING, but the project becomes even more complex when the repair window is limited to eight hours.

On Highway 400 between Highways 88 and 89 in the greater Toronto area, an asphalt repair project was scheduled to address early rutting failures in the design lives of flexible pavements. On this section of highway, average daily traffic counts exceeding 150,000 vehicles—including a high percentage of truck traffic. All lanes of this heavily trafficked highway were also required to be open to traffic between 6 a.m. to 10 p.m., so speed of construction and durability of the repair solution also were important.

The Ministry of Transportation of Ontario (MTO) planned to repair the asphalt pavement, and as part of the plan, decided to use an innovative pilot program to evaluate the use of concrete panels. Precast panels, using three different support systems, were placed on existing hot mix asphalt pavement milled to a design depth in a 325 ft. (100-meter) section of the highway.

The MTO has used precast concrete panels to repair deteriorated concrete slabs since 2004, but this was the first time the agency used the panels as inlays to repair distressed asphalt pavements.

Stephen Lee, head of the pavements and foundation section of the Materials Engineering and Research Office for MTO, said the project will help evaluate the use of precast slabs as a rehabilitation technique that can be staged at night to avoid daytime road closures. He outlines five hallmarks of the pilot program:

1. The precast panels were placed to provide deep-seated rut and deep-crack mitigation, while leaving much of the rutted or cracked asphalt in place.
2. The precast panels were placed as the surface wearing course with a prefinished longitudinal texture.
3. The pilot program used three different slab support systems (as noted below).
4. The project used a short, temporary (and reusable) precast slab at the end of each night's work, as well as temporary steel tubes in longitudinal joints on both sides of the panels to provide a safe transition between newly placed slabs and existing asphalt pavement until permanent grout material is installed.
5. The project also helped the owner and contractor assess staging and production of the different support methods adapted for night construction closure.

continues »



ONTARIO TEST SECTION

PROJECT SNAPSHOT

- » Length of Test Section: 100 meters
- » Number of Panels: 22
- » Supplier: Fort Miller Company
- » Contractor: Dufferin Construction



The Fundamentals of Precast Concrete Pavements

Jointed Precast Concrete Pavement (JPrCP)

JPrCPs are reinforced concrete panels that act like cast-in-place jointed concrete pavements once installed. Jointed precast concrete pavements used in the United States incorporate load transfer devices at transverse joints and longitudinal joints.

An advantage of precast concrete pavement is that the panels are either reinforced or prestressed. As a result, if cracking develops prematurely or due to traffic loading, the panels can be expected to perform well because the cracking will be held tightly and not contribute to deterioration.

Special thanks to Bill Nickas, Managing Director of Transportation Systems at Precast/Prestressed Concrete Institute, an ACPA member, for his review of this section.

Prestressed Precast Concrete Pavement (PPCP)

PPCPs concrete pavements are typically pre-tensioned transversely and longitudinally post-tensioned. These systems incorporate longer post-tensioned sections and only a few expansion joints between 200 feet or longer sections. The post-tensioning of the series of panels induces compressive stress in the connected panels, which allows for reduction in the panel thickness by 2 to 4 inches compared with an equivalently designed cast-in-place jointed concrete pavement or jointed precast concrete pavement.



» continued

“The majority of rutting on Toronto’s urban arterials occurs on the truck lane, so we placed a total of 22 reinforced precast concrete slabs in that lane for a total length of 100 meters,” explains Peter Smith, vice president of market development and product engineering for The Fort Miller Company, an ACPA member. “Not only are we testing the use of precast concrete for repair of asphalt, but we are also testing three different support systems for the slabs.”

Three Support Systems

As noted above three different support systems were used for the concrete panels:

1. **Grade-Supported**—Graded and compacted, cement-treated bedding material is placed between the slab and underlying asphalt. Once the slab is in place, it can support traffic and be opened to traffic, however, dowel, edge and bedding grout must be installed the following construction shift.
2. **Grout-Supported**—These slabs are fabricated with integrally cast leveling screws for the trial section, and then placed directly on the milled asphalt surface. The leveling screws are deployed until the surface of slab has the correct elevation and cross-slope characteristics. The slab cannot support traffic while resting on the leveling screws so dowel, edge and rapid-setting bedding grout must be installed the same night before opening to traffic.



3. Asphalt-Supported—Precast slabs are placed directly onto the milled asphalt surface, which has been milled to within a ± 3 mm surface tolerance. Slabs can support traffic on this surface as soon as placed, and grouting can take place on the following night.

Because of the three different support systems were used, Smith says the project became three “first nights” of construction for the contractor, Dufferin Construction, an ACPA member. “The most critical part of the installation of all three systems is to ensure the remaining asphalt in the asphalt- and grout-supported systems, and the bedding material surface in the grade-supported system provide accurate, uniform slab support until bedding grout is installed,” Smith says.

Even with a new technique each of three nights, milling existing asphalt in preparation for placement of the slabs became more efficient, says the

MTO’s Lee. “Milling operation time was reduced from 210 minutes to 120 minutes, then to 75 minutes for the three consecutive nights,” he says. “The average time to place a slab was nine minutes for asphalt-supported slabs, 13 minutes for grade-supported slabs and 12 minutes for grout-supported slabs with leveling screws.”

“There will be a cost premium for using precast slab technology for rehabilitation of pavement in comparison to conventional asphalt repair,” Lee says. “The expectation is that the slabs will provide a longer life than the short-term mill and overlay, which does not address the underlying distresses. Another advantage of the precast slab technology is that the repair work can be staged within tight nightly construction closures while maintaining full lanes available for day-time traffic.” In this case, the cost to supply the precast panel for the test section was about \$500 Canadian per square meter, he adds.

The test section was completed in September 2016 and no major issues have been detected, says says Daniel Pickel, researcher and PhD candidate at University of Waterloo. “We monitor moisture and temperature beneath the slabs to see how many freeze-thaw cycles occur and how the pavement performs,” he says. “There have been a few issues at the transverse edges between asphalt and concrete, but they were expected.”

Pickel commends MTO for testing a new technology. “This pilot project is a good example of an agency investing in innovation.” ♦

References

Pickel D, et al. “Using Precast Concrete Inlay Panels for Rut Repair on High Volume Flexible Pavements.” Presented at the International Conference on Concrete Pavements. San Antonio, Texas. September 2016.

Tayabji S, et al. “Precast concrete pavements: Technology overview and technical considerations,” *PCI Journal*, Winter 2013.

ACPA's Emerging Leaders Group

Congratulations go to the winners of the ACPA Emerging Leaders Group (ELG) photo competition. Here are the exceptional photos taken by members of the ELG.



Round 1

An 8-in. unbonded concrete overlay project on Route 390 in Wayland, N.Y., the first of its kind in the region. (Photo by Jeff Borden, Cold Spring Construction.)

Round 2

Handwork at a roundabout in Johnston, Iowa in the fall of 2016. (Photo by Drew Manatt, Mannats, Inc.)



Round 3

Slipforming a concrete roundabout. (Photo by David Sciuolo, Golden Triangle Construction.)



Round 4

A freshly poured concrete road, winding through the Rocky Mountains. (Photo by Matt Fonte, Castle Rock Construction Company.)

ACPA Opens Annual Meeting Registration

"PAVING GLEAMING NEW LANES OF CONCRETE" is the theme of ACPA's 54th Annual Meeting, the Association announced as it opened event and hotel registration recently.

Scheduled for November 28 through 30, the annual meeting is the premier event for technology transfer, business updates, and peer exchanges for the concrete pavement industry.



The three-day event promises a robust and high-quality, information-packed agenda, as well as opportunities for fun, relaxation, and networking with friends and colleagues. The venue for the annual meeting is the Hard Rock Hotel in San Diego. Located in the heart of downtown San Diego and the Gaslamp Quarter entertainment district, the hotel offers convenient access to nearby attractions, entertainment, dining, and nightlife.

The event will begin on Tuesday, November 28 with the semi-annual ACPA "Chapter/State Committee Meeting, an ACPA/IGGA Buffet Luncheon, ACPA's Golf Tournament (optional), a Workshop on ACPA's "PavementDesigner" web-based pavement design platform, a tour of the USS Midway (optional), and a Chapter/State Committee reception (by invitation).

On Wednesday, November 29, the day begins with a breakfast buffet or alternatively, an Emerging Leaders Group breakfast and meeting, by invitation. Open meetings will be held for the ACPA Jointing Task Force and Asset Management Task Force, or alternatively, a meeting of the RCC Promotion Council meets (by invitation). The ACPA Design Task Force, Airport Task Force, and Roller Compacted Concrete Task Force meetings will be held concurrently.

Following the morning meetings, a luncheon and annual meeting of the members takes center stage. In the afternoon, a strategic issues forum, hosted by the ACPA Strategic Advisory Committee, will take a look at timely topics, challenges, and opportunities. A Rock 'n' Roll Theme Reception will cap of the early evening, creating a fun-filled networking and social event, while also leaving time for guests to enjoy the numerous entertainment and dining options in the area.

Thursday, November 30 begins with ACPA's "Distinguished Service Awards" breakfast. Immediately after the awards presentations, the Concrete Pavement University (CPU) general session begins, followed by the first two breakout sessions for the industry's tech transfer and education program. Following a buffet luncheon, breakout tracks continue concurrently throughout the afternoon. (For Board of Directors, the quarterly board meeting will be held from 10:30 to 1 p.m.) Following the CPU tracks, ACPA's 28th Annual Awards Gala Reception and "Excellence in Concrete Pavements" dinner and program will begin in the early evening.

To view the full program, reserve a hotel room, and register for the event, please follow this link: <http://2017meeting.acpa.org/>. ♦

ACPA Encourages Civil Engineers to Support the Grand Challenge

ACPA IS ENCOURAGING ALL CIVIL ENGINEERS TO TAKE THE "GRAND CHALLENGE" INITIATIVE, which is aimed at reducing the life cycle cost of infrastructure projects by 50 percent by 2025. The initiative also fosters innovations and promotes optimization of infrastructure investments.

Sponsored by the American Society of Civil Engineers (ASCE), the initiative has been formally endorsed by ACPA. To get started, ACPA is encouraging all civil engineers to visit the dedicated website, at <https://ascegrandchallenge.com/>.

Taking the challenge is quick and simple. From the home page, users can learn why their support is needed, then take the pledge by clicking the "I'm In" tab and completing a simple online form. Users also have the option of sharing stories about how they are helping achieve the goal, as well as communicating about the initiative through social media channels.

After taking the Grand Challenge, or if you've taken it already, please take a moment to send

ACPA an email confirmation to education@acpa.org (with the message, "I took the Grand Challenge").

Why is This Important?

The goal of the program is to encourage civil engineers to rethink what is possible, and to transform the way they plan, deliver, operate, and maintain the nation's infrastructure. At the core is the goal of closing a gap between available funding and infrastructure needs.

"Our policy and funding advocacy are no less important than in the past. However, they cannot close the gap alone," says Leif Wathne, P.E., ACPA Executive Vice President. "We must do what our profession alone is uniquely qualified to do. We must lead the significant improvement in the delivery and life cycle performance of infrastructure investments through innovation spurred on by performance based standards; increased focus on life cycle performance, especially through life cycle cost analysis, and enhanced resilience.



He emphasizes that advocacy for increased funding, a solution to the Highway Trust Fund issue, and fair and equitable policies (including competition) are still important, but adds that the Grand Challenge is an important process for civil engineers to make a profound impact by raising awareness, controlling life-cycle costs, and optimizing investments in highways, airports, and other infrastructure. ♦

ACPA Forms Legislative Issues Committee

ACPA HAS FORMED THE LEGISLATIVE ISSUES COMMITTEE (LIC), which replaces the association's Legislative Issues Task Force.

The LIC held its inaugural meeting on June 14. The first order of business was to transition the task force (typically formed for limited time periods to address specific topics) to a standing committee.

The committee's purpose is to, "engage individual members of the Association in activities for the purpose of exchanging information and making recommendations to the ACPA Board of Directors on legislative and regulatory matters affecting the Association and the concrete pavement industry."

The LIC elected Dan Rozycki, The Transtec Group, as Committee Chairman, and John Cunningham,

Iowa Concrete Paving Association, as Vice Chairman. As prescribed, by the operating guidelines, the LIC Chairman will serve as a voting member of the ACPA Board of Directors. In addition to covering other business and hearing updates on activities related to the current administration and occurring on Capitol Hill, the LIC also recognized and thanked Peter Deem, CarbonCure, and Gerry Krozel, St Marys Cement, for leading the LITF since its establishment in 2008.

Reflecting the formation of the new committee, the Association has also relaunched a legislative issues web page, which features news, background information, and useful resources for ACPA members and affiliates to use in their advocacy efforts. To view the page, please visit: <http://www.acpa.org/acpa-advocacy-legislative-resource-centers/>. ✦



Elwell Named FAA Deputy Administrator



FAA Deputy Administrator Dan Elwell. (Photo courtesy of Stangarone & Associates.)

Dan Elwell has been appointed as Federal Aviation Administration (FAA) Deputy Administrator, according to an FAA press release. Appointed by President Donald J. Trump, Elwell is the second highest-ranking official at the agency responsible for ensuring aviation safety and air traffic control services for the nation.

Elwell returns to the FAA during what the agency calls an "historic period of safety and change as air traffic control reform is being considered to speed airspace modernization and new entrants like unmanned aerial vehicles and commercial spacecraft are integrated into the airspace system."

"Dan's insight and experience will serve the FAA and public well," said FAA Administrator Michael P. Huerta. "He has a strong background as a military and civilian pilot, as well as holding key leadership positions within the aerospace industry."

Elwell previously served as FAA Assistant Administrator for Policy, Planning and Environment from 2006 to 2008. Most recently, he has been serving as the Senior Advisor on Aviation to U.S. Secretary of Transportation Elaine L. Chao.

Before returning to public service, Elwell was President and Managing Partner of Elwell and Associates, an aviation consulting firm. Elwell also was Senior Vice President for Safety, Security and Operations at Airlines For America and Vice President at the Aerospace Industries Association. Elwell graduated from the United States Air Force Academy. ✦

FHWA Appoints Senior Officials

THE FEDERAL HIGHWAY ADMINISTRATION (FHWA) ANNOUNCED it has appointed two senior officials recently. The Honorable Brandye Hendrickson was appointed as Deputy Administrator and the Honorable Mala Krishnamoorti Parker was appointed Associate Administrator for Policy, according to FHWA Executive Director, Walter C. (Butch) Waidelich Jr.

Deputy Administrator Parker leads the daily operations of 2,900-person federal agency, which spans six time zones. She oversees the agency’s \$44 billion annual budget, directs execution of the “Fixing America’s Surface Transportation Act” (FAST Act), and co-chairs the U.S.-Canada Transportation Border Working Group and U.S.-Mexico Joint Working Committee, according to the FHWA.

Hendrickson has a background in transportation, including two years serving as the Commissioner of the Indiana Department of Transportation, where she oversaw all aspects of its operations. This included 3,400 employees, a \$400 million annual operating budget, and a billion-dollar annual construction budget. She has nearly 20 years of business experience, according to the FHWA.

She previously served as Deputy Commissioner of Indiana’s Greenfield District (the Hoosier State’s largest transportation district) from 2007-2015. In this role, she managed an annual construction budget of approximately \$250 million and an annual operating budget of \$48 million. She has a Bachelor of Arts in Communications from Indiana University and is a professional in Human Resources, the FHWA reported.

In other personnel news, Mala Krishnamoorti Parker was appointed FHWA’s new Associate Administrator for Policy. She previously served with the American Trucking Associations, where she served as their Vice President for Coalitions. She also served with Transportation Secretary Elaine Chao at the U.S. Department of Labor from 2002 to 2009. She has a Bachelor of Arts in Political Science from University of Puget Sound, Waidelich said in a recent announcement. ✧



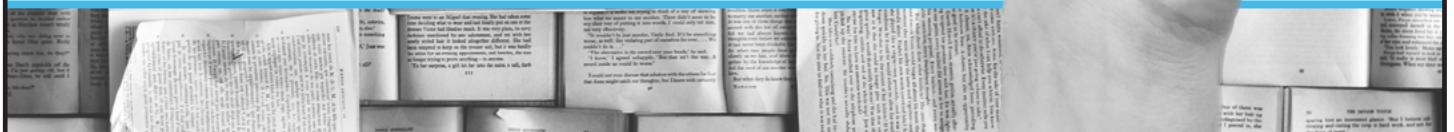
The Hon. Brandye Hendrickson was appointed as FHWA Deputy Administrator. (Photo courtesy of the FHWA.)

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