

CONCRETE PAVEMENT PROGRESS



Historical Pavement Reaches 125 Years of Service



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TO COMMEMORATE THE 100TH ANNIVERSARY
OF THE 1ST CONCRETE STREET IN AMERICA

ALSO IN THIS ISSUE:

Concrete Selected for
General Aviation Project
after Life-Cycle Cost Analysis

Concrete Headlines
Major Interchange
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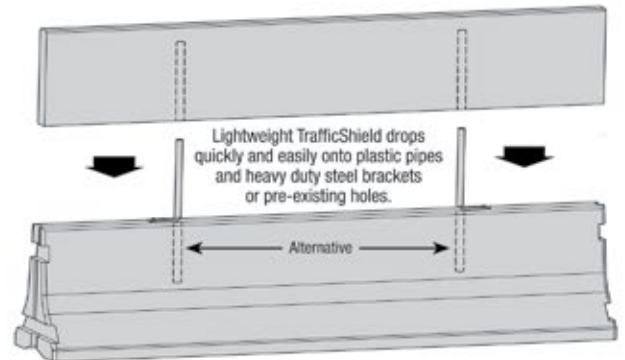
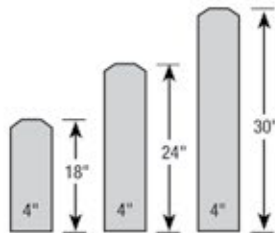
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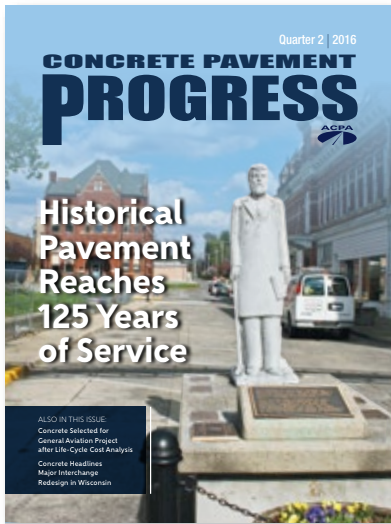
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Celebrating the First Concrete Pavement



IN THIS ISSUE OF *CONCRETE PAVEMENT PROGRESS*, we are pleased to present a story about a commemoration of the oldest concrete street in America. Held in Columbus and Bellefontaine, Ohio, the event celebrated the construction of the first concrete section placed in 1891 on Main Street in Bellefontaine.

According to an event flyer prepared by the Task Force on the Preservation of Artifacts from Historical Concrete Pavements, it all started when George Bartholomew, founder of Buckeye Portland Cement, settled in Bellefontaine in 1886. Bartholomew established a laboratory in the rear of Butler's Drug Store, where he experimented with limestone and clay from local sources.

Several years of lobbying the city to approve the use of "artificial stone" followed. Finally, city officials accepted his proposal to construct a short, experimental section, provided that he submits a \$5,000 bond and that he warrant it for five years. Bartholomew, along with J.C. Wonders, Bellefontaine City Engineer, and W.T.G. Snyder, a principal road builder in Bellefontaine, "opened the doors to a new product and a new era of paved surfaces," according to the task force flyer.

After success with the original test section of Main Street, the city paved all four streets surrounding the Logan County Courthouse between 1893 and 1894. The approximately 7,700 SY of pavement attracted a lot of positive publicity, as well as attention from engineers throughout the United States.

A slab from the 1891 concrete section was exhibited at the 1893 Chicago World's Fair (officially, the World's Columbian Exposition), where it was

awarded first place for Engineering Technology Advancement in Paving Materials.

This commemorative event on April 25 was the perfect opportunity for ACPA to unveil its new Historic Concrete Pavement Explorer, also featured in this issue. The explorer is a web-based resource that will chronicle concrete pavements that have been in place 75 years or more, as well as those that represent "firsts" in type of facility, use of new technologies, etc.

The common thread that connects the Bellefontaine pavement with the other concrete pavements both old and new is that these and other pavements represent the bold spirit of innovation and commitment to quality that is prevalent among the dedicated contractors, materials and equipment suppliers, consultants, and of course, the agencies/owners.

These pavements are also much more than highways, airports, streets, roads, and industrial facilities—they are the links to business and commerce, personal mobility, and the quality of life so many people enjoy. From the humble beginnings in Bellefontaine, the original test strip launched an industry; a national trade association that is today singularly focused on concrete pavements; and many technological improvements that have followed over the years.

The Bellefontaine pavement and those to be featured in the ACPA Historic Concrete Pavements are not just reminders of our past—they also serve as a guidepost to the quality, technological advancements, and excellence that can be found in concrete pavements now and in the years ahead.

Bill Davenport
Vice-President of Communications
American Concrete Pavement Association

P.S. The story about the Bellefontaine event was written just prior to the event. For additional information, please visit www.acpa.org/bellefontaine125.

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Concrete Selected for General Aviation Project after Life-Cycle Cost Analysis

By Sheryl S. Jackson

A 5,700-FOOT BY 75-FOOT RUNWAY, taxiways, hangars, aprons and an access road at the new Bowman Regional Airport in North Dakota is all concrete after the Federal Aviation Authority (FAA) and the North Dakota Aeronautics Commission allowed for a 12 percent Life-Cycle Cost Allowance in the bid process.

In the end, a 6-inch-thick concrete bid was only 6.8 percent higher than the asphalt bid alternative, which consisted of 4 inches of asphalt and 2 inches of additional base course.

“Concrete is not an option for many general aviation airports due to the thinner pavement sections, even with Life-Cycle Cost Analysis and alternate bid processes,” said Gary Brennan, PE, senior project engineer with Brosz Engineering. “We had a rare opportunity with this project because the cost of oil had risen, which closed the gap between the cost of asphalt and concrete.”

There were several welcome advantages to building a new facility versus renovating or expanding an existing airport, explained Brennan. “The overall project had to be bid in multiple contracts to fit the available budget, which allowed for the surfacing improvements to be bid separately,” he said. “This made it easier to complete the surfacing improvements in a single construction season.”

Because the subgrade and base work was completed in the construction season prior to paving, the subgrade went through a winter exposure to deep frost. “This exposure allowed us to discover frost impacted soils and repair them prior to paving operations,” explained Brennan.

While working at a new airport does not carry the same security concerns as an operating airport, Brennan noted that he would recommend more access control. “A security fence around



the perimeter would have been cost prohibitive during construction, but some temporary access control would have limited the number of ‘windshield inspections’ we experienced as people drove by,” he said. “We had no major problems, but everyone had to be cautious of cars and people who came onto the site to just have a look at what we were doing.”

One of the key challenges of the project was related to the FAA specifications that require alkali-silica reactivity (ASR) testing of the aggregates

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BOWMAN REGIONAL AIRPORT

PROJECT SNAPSHOT

- » 5,700-foot long runway—longest general aviation runway in North Dakota
- » Project started May 1, 2014
- » 38 inches of rain—three times normal—during construction period
- » Project completed September 29, 2015—two days earlier than scheduled
- » Total cost: \$6,606,440
- » 94,227 square yards of concrete used in total project





Gold Award Winner

Bowman Regional Airport received the Gold Award in the Reliever & General Aviation Airports category of the American Concrete Pavement Association's 26th Annual "Excellence in Concrete Pavement" awards in December 2015.

» Aviation Project, cont.

and cementitious products, explained Steve R. Schmidt, vice president and concrete paving division manager at Northern Improvement Company, the project's paving contractor. "The locally available aggregates are reactive and therefore we had to mitigate ASR. Substituting fly ash for Portland cement reduced the ASR but was not sufficient to meet the FAA specifications," he said.

FAA standard specifications also utilize flexural strength for acceptance, pointed out Schmidt. "Although the locally available aggregates are excellent in compression, they would not meet the specifications for flexural strength regardless of the amount of cementitious material used."

Ten mix designs were completed before a mix design meeting both the ASR specification and the flexural strength specification was found. "We tried various water reducers, various dosage rates, and increased cementitious material but none of these solutions would produce a mix meeting the flexural specifications," said Schmidt. "We changed aggregate sources and the strengths improved but not enough to meet the specification."

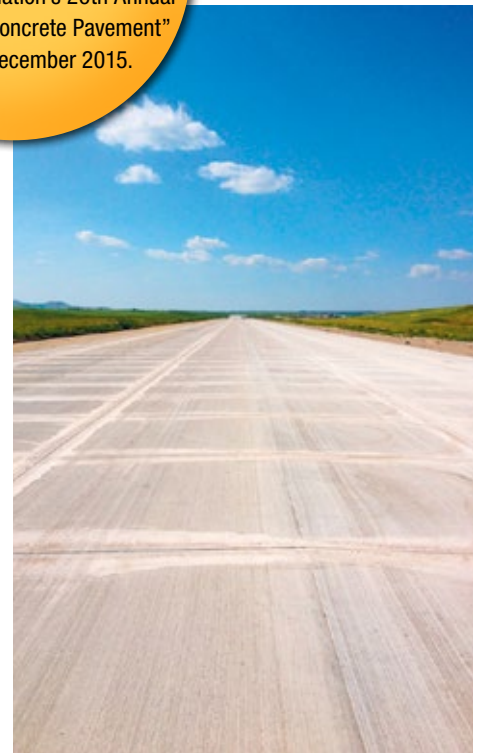
After meeting with the technical experts from Terracon, which completed the mixes and trials; Braun Intertec, which completed the quality control testing; Lafarge, the cement and fly-ash supplier; and GCP Applied Technologies (formerly Grace Construction Products), the admixture supplier, a change to the water reducer along with new aggregates finally produced a mix meeting the FAA's specifications. "The new aggregates, which we imported from Wyoming, were also non-reactive, which eliminated the

need to mitigate with special admixtures," pointed out Schmidt.

For the volume and type of aircraft using the Bowman airport, a 6-inch concrete pavement was more than enough but that thickness proved to be a challenge, said Brennan.

There were a lot of factors that contributed to the success of the project, including the ability to work over several construction seasons, a team that worked together to solve problems, and the use of alternate bids and LCCA to take advantage of concrete's price advantage at the time.

"The concrete pavement will not only extend the service life of the airport by supporting greater volume and weight, but it will also reduce maintenance costs," said Brennan. "As the lieutenant governor said at the grand opening: Selection of concrete for this project means that the Bowman Airport will allow aircraft three times heavier and last three times longer compared to other pavement products." ✦



Tech Tour Tackles Airport Pavement Issues

A three-day whirlwind tour of North Dakota by Gary Mitchell, vice president of Airports & Pavement Technology for the American Concrete Pavement Association (ACPA), and Dave Sethre, executive director of the North Dakota Chapter—ACPA, gave airport pavement designers and owners' representatives an opportunity to learn more about FAA airport pavement specifications—particularly those related to processes and local materials that have caused issues in the state.

Mitchell said they also spoke with officials at North Dakota Aeronautics Commission and FAA's district office officials with the goal of modifying specifications. He added the FAA officials pledged to advance the information through channels with the expectation of modifying specifications that have been problematic for contractors, consultants and owner's representatives. ✦



WISCONSIN INTERCHANGE

PROJECT SNAPSHOT

- » Work completed by Trierweiler Construction & Supply Co.
- » Over 320,000 square yards of concrete planned for full project
- » \$280 million total project cost
- » 180,000 vehicles travel through construction site daily
- » Construction began in 2014 with completion set for 2020
- » 3,000 Facebook followers; 2,600 on email list for regular updates
- » Project website: www.VeronaRoadProject.wi.gov



Concrete Headlines Major Interchange Redesign in Wisconsin

By Sheryl S. Jackson; Photo(s) courtesy of Wisconsin Department of Transportation

ORIGINALLY BUILT IN 1957, the Madison Beltline (U.S. 12/14) and Verona Road (U.S. 18/151) interchange in Madison, Wisc., is a major route for commuters, freight, and regional traffic from Dubuque, Iowa, and southwest Wisconsin to elsewhere in the state. The original concrete pavement handles approximately 120,000 vehicles per day on the Beltline and about 60,000 vehicles per day on Verona Road.

This multi-year project includes two newly-designed single-point urban interchanges, a diamond interchange, a jug-handle intersection, and two roundabouts to improve traffic flow and enhance access to local businesses and neighborhoods. The project also includes a pedestrian underpass and a newly-replaced bridge to improve safety for pedestrians.

The 2.5 miles of Verona Road and the two miles of Beltline construction are paved with concrete. About 202,000 SY of concrete will be used in Stage 1 of the project, said Chris Fredrick, Wisconsin DOT (WisDOT) construction project manager. “Concrete was chosen based on the Life-Cycle Cost Analysis for this project. Also, Verona Road

and the Beltline are heavily-used truck routes warranting the use of concrete pavement.” Although the project design is not yet complete, Fredrick anticipates the use of about 126,600 SY of concrete for Stage 2.

Several new approaches to construction of concrete barriers were necessary in the Wisconsin project, said Fredrick. The barrier wall height varies on the Beltline, between Whitney Way and Seminole Highway, and the contractor, Trierweiler Construction Company, used slipform paving to adjust to these elevation changes. “The footer was poured simultaneously with the barrier wall,” he said. “Crews also used a slipformed wall over a pre-formed rebar cage.” Trierweiler successfully handled multiple transitions for the concrete barriers, such as near sign structures, he added. “Some of these transitions were over 7 ft high, which required the contractor to use a belt placer to place the concrete in the forms.”

The other major challenges faced by WisDOT and contractors was the expedited construction schedule, the need to keep traffic moving

continues »



» Interchange Redesign, cont.

throughout the construction period, and the public’s need for up-to-date information about construction and lane closures.

Two lanes in each direction remained open on the Beltline during daytime hours and there were only periodic nighttime lane closures. “Since the beginning of this project, there has been an extensive public outreach and awareness campaign to inform area residences, businesses, commuters, media and the general public,” said Steve Theisen, WisDOT project communications manager. “Email notifications, as well as weekly construction updates that include upcoming lane and ramp closures as well as other traffic-impacting activities, are sent to a distribution list of more than 2,600 elected officials, businesses, media, and the general public.” Project staff also update and maintain a project Facebook page with more than 3,000 followers to engage the public through photos, videos and other pertinent project information, he adds.



In spite of the confusion and frustration that any construction project can create, proactive communications throughout the project to explain the contract and keep people informed about access through the work zone have improved the public perception and awareness of the project, said Theisen.

Open, ongoing communication among all members and the timely decision-making process of WisDOT enabled project staff and contractors to resolve issues in an efficient manner to keep the project on schedule, Fredrick said. “Communication channels with the contractor remain open throughout the remainder of the project, which demonstrates a partnership committed to successfully deliver the project.” ✦





Wisconsin DOT Recognized by ACPA

The Verona Road/Madison Beltline project is one example of the Wisconsin DOT's use of concrete pavement to construct quality highways and roadways. In fact, the agency received the American Concrete Pavement Association (ACPA) Harold J. Halm Presidential Award in December 2015, in recognition of its long standing life-cycle cost and pavement type selection policies that recognize the importance that healthy industry competition has on creating higher quality pavements at a lower overall cost.

"For more than 50 years Wisconsin DOT has proactively managed their pavement network using a variety of solutions involving both concrete and asphalt pavement. Their policies have resulted in some of the highest quality pavement and one of the most well-maintained pavement networks in the United States," said Jerry Voigt, CEO and president of ACPA.

The Harold J. Halm Presidential Award has been presented for "distinguished achievement" selectively since 1994. It is not an annual award, but one presented solely at the discretion of the current President & CEO of the American Concrete Pavement Association (ACPA). The award was named in honor of Harold J. Halm, who served with distinction as ACPA's first President from ACPA's first year of operation in 1964 until his passing in 1985.

The "selective" presentation of the award signifies the extraordinary accomplishments—or body of work—that are the legacy of each of the award

recipients. The award has been presented only 12 times in our history, and the recent presentation to the Wisconsin DOT represents only the third time that a state Department of Transportation has been presented the award. (Most of the other awards have been presented to individuals or contractors. One and was presented to a team comprised of an owner and contractor.)

The 2015 award also marks only the second time ACPA has commissioned artwork to present as the award. Previous awards have been plaques or glass awards. The presentation media (artwork, plaque, or award) is not based on comparisons or contrasts of the recipients; instead each award is created to impart unique aspects, which symbolize the exclusivity of the award.

Rarified Honors

The criteria for presenting the award are based solely upon the deliberation and selection of the ACPA President/CEO, and while the awards themselves have been presented for different reasons, there is a common thread that links them all. The awards historically have been presented to individuals and organizations that have demonstrated peerless service, dedication, demonstrated quality, or other attributes that make these organizations and individuals truly exceptional.

About the 2015 Award

The 2015 award was produced from a special commissioned painting created by Brad Burns,



an artist who specializes in fine art inspired by photographs of construction scenes. This is only the second time ACPA has commissioned original artwork, and the first time a finished pavement vs. a construction scene was used as the basis for the artwork.

The photograph that inspired this painting was selected by Kevin McMullen, President of the Wisconsin Concrete Pavement Association. It depicts a view of East Washington Road in Madison. The resultant painting is a powerful image that depicts the Capitol building in late afternoon. It also signifies the longevity and enduring quality of the concrete roadway, as well as transformative power of the roadway, which was reconstructed as a boulevard, complete with special lighting, sidewalks, plants, and other cityscape features.

The roadway once divided the community, with low-income residents virtually isolated by a lack of lighting and sidewalks and other impedances that restricted access. Now, this roadway not only serves as an important and scenic route to and from the Capitol, but also unites the community by allowing equal access to pedestrians, motorists, and bicyclists. ✧



One of several informational plaques describes the placement of the original concrete, as well as other details about the project.

CONCRETE STREET IN AMERICA

Historical Pavement Reaches 125 Years of Service ▶

Historical Pavement Reaches 125 Years of Service

By Sheryl S. Jackson

HARD, DUSTY DIRT ROADS that become impassable in the rain are not conducive to conducting business in a growing community. This was, however, the reality of life for small towns in the late 1800s.

All that changed in the city of Bellefontaine, Ohio, where a group of visionaries, including George W. Bartholomew, founder of Buckeye Portland Cement; J.C. Wonders, Bellefontaine City Engineer; and W.T.G. Snyder, a contractor in Bellefontaine, revolutionized roadbuilding with the placement of the first concrete pavement in the United States.¹

On April 25, officials from industry, the public sector, and academia gathered together to celebrate the 125th anniversary of the placement of the first concrete pavement, as well as the profound changes that have stemmed from that accomplishment.

George Bartholomew moved to Bellefontaine after learning about cement production in Germany and at the San Antonio Cement Company of Texas. He founded the Buckeye Portland Cement Company in 1886, selecting Bellefontaine as the home of his new company because he found almost pure sources of limestone and clay—the main ingredients needed for production of cement—in mid-Ohio, and he hoped to bring the newest concrete technology to the midwestern United States.²

continues on page 16 »



Close up view shows a portion of the first concrete pavement placed in 1891.

□ A core sample was on display at the 125th anniversary of the first concrete pavement.





Presenters at the anniversary celebration in Columbus, Ohio, included (L–R) **Roger Larson**, FHWA; **Mike Darter**, ARA, Applied Research Associates, Inc. and Emeritus Professor, University of Illinois; **David Howard**, Koss Construction Co., Inc.; **Gerald F. Voigt**, American Concrete Pavement Association; and **Gordon Smith**, Iowa Concrete Paving Association. Other presenters included Dan Miller, Ohio Department of Transportation; Kurt Smith, Applied Pavement Technology, Inc.; and Mark Pardi, ACPA Ohio Chapter. A site visit in Bellefontaine later in the day included a welcome by Bellefontaine Mayor Ben Stahler and a welcome by Todd McCormick, Curator/Director of the Logan County Historical Society.

BELLEFONTAINE

PROJECT SNAPSHOT

- » First concrete pavement in the United States
- » Featured two-lift construction
- » Surface included V-shaped indentions to provide footing for horses
- » Mixing performed by hand and tamped into forms

» Historical Pavement, cont.

Although it took approximately two years for Bellefontaine city officials and citizens to approve his plan to build American's first concrete pavement adjacent to Bellefontaine's Courthouse Square, the 8-foot wide "artificial stone" surface was an immediate success. Local business owners saw the value of reliable, all-weather access to and from their establishments, and they petitioned to have the entire block around the square paved. Court Avenue and Opera Street were paved in 1893, with Columbus Avenue, and the remainder of Main Street paved in 1894.³

Because the concrete technology was untested as a roadbuilding material, Bellefontaine officials required Bartholomew to donate all of the materials and to post a \$5,000 performance bond and guarantee that the pavement would last five years. In today's dollars, that performance bond would be worth \$131,578.95.

This first concrete city street was also the first documented two-lift concrete pavement in the United States, the first warranted concrete pavement, and the first concrete pavement to be recognized with an award for innovation.

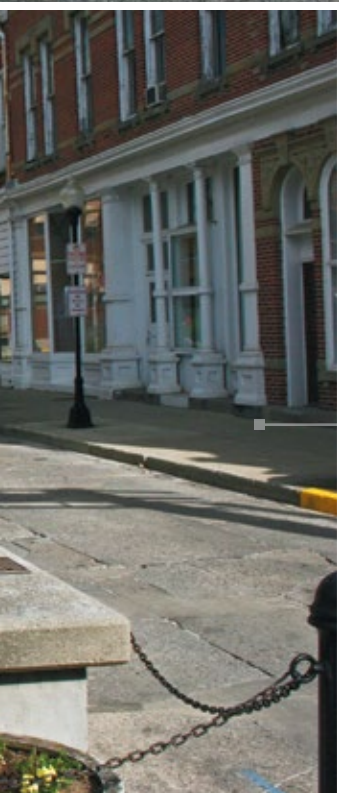
News of the new pavement technology spread and Bartholomew was awarded First Place for Engineering Technology Advancement in Paving Materials by the Chicago Columbian Exposition of 1893, also known as the Chicago World's Fair. Not only was Bartholomew awarded the honor, but blocks of the original pavement were exhibited at the Fair.

Currently, only the 1893 pavement on Court Street remains in service as an exposed surface concrete pavement. With only periodic rehabilitation performed in 1962, the early 1990's, and in 2008, the pavement stands as an example of the durability, quality, and innovation that is synonymous with concrete pavements today. ✧

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Statue of George Bartholomew stands on the first concrete street in America.

A plaque commemorates the first concrete pavement street, constructed in Bellefontaine, Ohio. The plaque was presented on the streets' 50th anniversary in 1941.

ACPA Launches Historic Concrete Pavement Explorer

ACPA HAS LAUNCHED ITS HISTORIC CONCRETE PAVEMENT EXPLORER (<http://explorer.acpa.org/explorer/>), a web-based resource dedicated to preserving the history of concrete pavements. The website is a work in progress, but at this writing, includes 13 projects.

“The website presents historically significant concrete pavement projects throughout the United States,” said Andy Gieraltowski, ACPA’s VP-Operations and IT. “A compelling story about each pavement is provided, along with technical details and photos from our archive.”

“The website represents ACPA’s commitment to the Task Force on Preservation of Artifacts from Historical Concrete Pavements,” said ACPA President & CEO Jerry Voigt. “The task force is working to document concrete pavements and collect photographs and other artifacts for concrete pavements that are 75 years or older and/or which represent ‘firsts’ and other significant

milestones throughout history.” Voigt added that ACPA will serve as a repository for information and photographs, also as a commitment to the work of the task force.

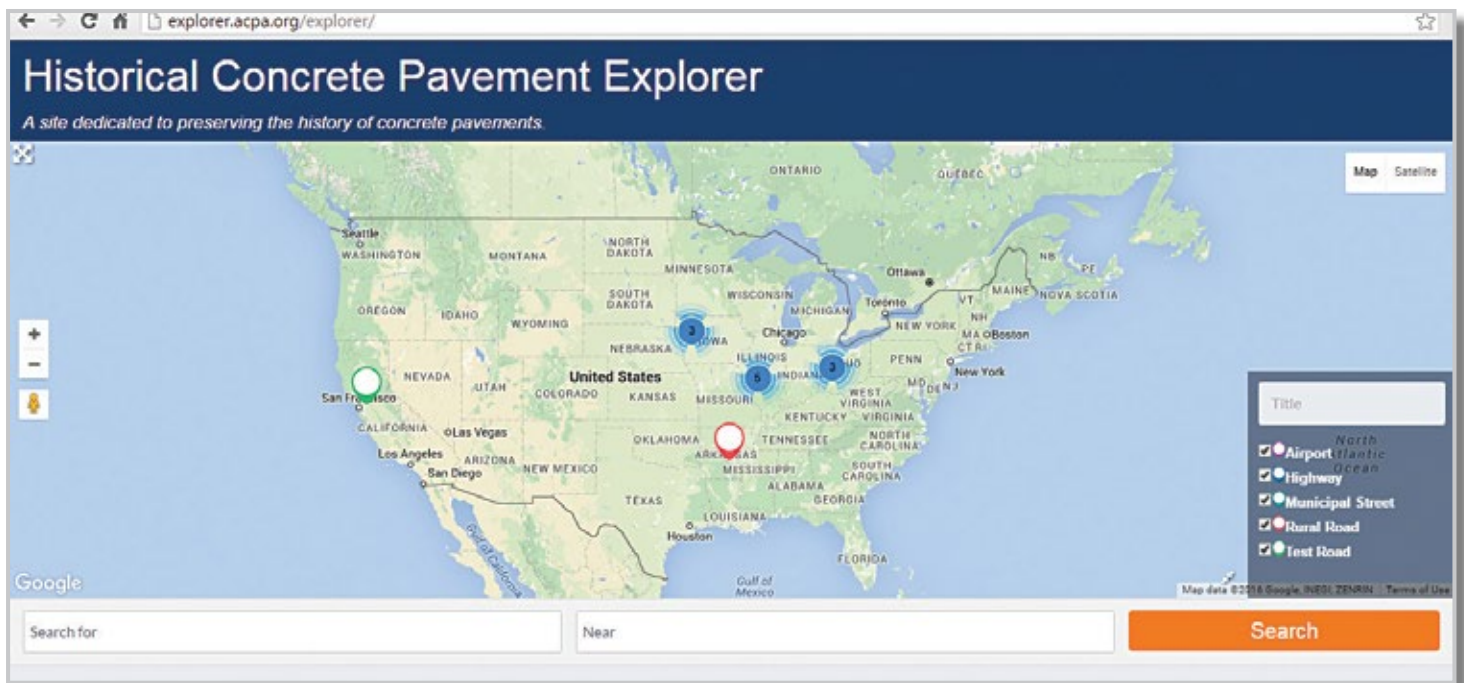
About the Historic Concrete Pavement Explorer

The website features:

- Modern, mobile-friendly design.
- Google-map based interface to quickly locate projects.
- Search options to locate projects by keyword or those nearby various cities/towns.
- Filter options to narrow down projects by pavement category.
- A page for each pavement, which includes a profile story highlighting historical significance, technical details, gallery of photos, map location, and related listings

- Social media integration, which allows users to share pavement project details via their social media networks.
- Authorized users can easily and immediately add historical pavements and photos to the website.
- Authorized users can easily return to the site and add/edit details for their submitted pavements.

ACPA announced the launch of the website during the 125th Anniversary Celebration for the Oldest Concrete Street in America. The event commemorated the 1891 placement of the first concrete pavement in Bellefontaine, Ohio. ACPA will provide user accounts and distribute submission instructions for members and affiliates interested in submitting projects. For more information, please contact Andy Gieraltowski at 847-423-8707 or andyg@acpa.org. ✧



Register Today for the ACPA Mid-Year Meeting

ACPA IS ENCOURAGING MEMBERS, affiliates, and others with an interest in concrete pavements to register soon for the ACPA Mid-Year Meeting (<http://midyear.acpa.org/>). This important event is where the concrete pavement industry gathers to discuss current events and topics that have the greatest impact on the business opportunities and threats; industry best practices; specifications and standards; and more.

The event will kick-off with an Asset Management Workshop and Task Force Meeting on Tuesday, June 21. For the morning portion of the workshop (10 a.m. to noon), there will be several Department of Transportation and other agency speakers providing an overview on Pavement Management Systems (PMS). During the afternoon portion (1 p.m. to 3 p.m.), the following topics will be covered: 3D Automated Data Collection Systems, Processes for Developing PMS Models/Performance Curves for State Agencies, Analysis Types, and Survey Results of State Practices. The workshop will conclude with an interactive discussion session.

Task Force meetings and the Strategic Advisors Committee meeting (open to all) continue on Wednesday, June 22. The ACPA Board Meeting (by invitation only) closes out the week on Thursday, June 23. Please check the agenda before making travel plans.

The event will be held at the Palomar Chicago – A Kimpton Hotel. ACPA has secured a discounted group rate of \$259 per night. ACPA strongly recommends making hotel registrations (and also registering for the event) as soon as possible. Hotel room availability is limited and rates are subject to change without notice.

Complete information, including details, schedules, and hotel registration information are available online at <http://midyear.acpa.org/>. ✧

ACPA Calls for Paving Award Submittals

ACPA ANNOUNCED IT IS currently accepting submittals for the 27th annual “Excellence in Concrete Pavement Award” program.

All submittals must be for projects completed in the calendar year 2015. To submit a project for award consideration or to view complete program details, including eligibility requirements, please visit <http://www.acpa.org/excellence-in-concrete-pavement-awards/>.

There’s good news for many members who already submitted a 2015 project for a Chapter/State awards program, using our online system. If your project won locally, the submittal will automatically be entered into our system for the National program and can be edited up until the deadline.

Submitting Projects Online

Projects must be submitted to ACPA on or prior to the submission deadline of Friday, July 15. We will formally recognize award winners at the ACPA 53rd Annual Meeting Awards Banquet on the evening of Thursday, December 1. The

banquet will be held at the Hyatt Regency Austin in Austin, Texas.

About the Paving Awards Program

Each year for the past quarter century, the ACPA “Excellence in Concrete Pavement” awards have honored quality concrete pavements constructed in the United States and Canada. The awards program encourages high-quality workmanship in every concrete pavement project and serves as a forum for sharing information about highly successful projects.

The awards program recognizes contractors, engineers, and project owners who completed outstanding projects. Winning an Award for Excellence in Concrete Pavement provides the contractors, engineers, and owners with a level of prestige that can assist them in the development of future projects.

For questions or additional information, please contact Andy Gieraltowski at andyg@acpa.org or 847-423-8707. ✧

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Workshop on Airport Pavement Design, Construction & Rehab Best Practices

THE AMERICAN CONCRETE PAVEMENT ASSOCIATION will present a three-day national workshop on best practices used in the design, construction, and rehabilitation of concrete pavements used for airport applications.

The workshop program will feature industry best practices, presented by subject matter experts with practical experience in the topic areas. This comprehensive course will include classroom-style discussions, as well as a field trip to see the reconstruction of Detroit Airport's runway 4L/22R.

When and Where?

The workshop will be held July 12–14, at the Marriott Detroit Metro Airport, 30559 Flynn Dr., Romulus, MI 48174. The program will be held from 8 a.m. to 5 p.m. (EDT) the first day

and second days, and from 8 a.m. to 4 p.m. the third day. (Continental breakfast will begin at 7:30 a.m. all three days.)

Who Should Attend?

The workshop is intended for owners' representatives/engineers, contractor personnel, and others with an interest in concrete pavement design, construction, and rehabilitation for airport applications.

PDH Credit

Participants may earn up to 21 professional development hours for this training and technology transfer event. ACPA awards professional development hours with the assumption of their use in self-reporting states and provinces. Reporting is done on an honor basis, and participants are responsible for maintaining their own

records and for determining the applicability and acceptance with their respective licensing/certification organization.

Event Registration

Registration is available through ACPA's online system. The cost of the three-day workshop is \$750 for members and government employees, and \$925 for non-members. For event registration, please visit <http://www.acpa.org/airportworkshop/>.

Room Reservations

The workshop will be held at the Marriott Detroit Metro Airport. A discounted rate of \$159 per night is available for workshop participants. For room reservation information, visit <http://www.acpa.org/airportworkshop/> and follow the link marked, "Reserve Your Room Online." ♦



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2015 Awards

- ⇒ ACPA CO/WY Award for Excellence: Quality Control – Pena Boulevard
- ⇒ ACPA CO/WY Award for Excellence: Quality Control Hospital Road Reconstruction
- ⇒ ACPA CO/WY Award for Excellence: Quality Control I-76 Reconstruction
- ⇒ ACPA National Award for Excellence in Concrete Pavement Design and Construction (GOLD) I-76 Reconstruction
- ⇒ ACPA National Award for Excellence in Concrete Pavement Design and Construction (SILVER) Hospital Road Reconstruction

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