Humans are creatures of habit. Municipal engineers are no different. However, some intrepid Municipal engineers in Iowa have chosen to take the road less traveled and have started constructing their new streets with full-depth asphalt. They have found that it is making a significant difference in the overall pavement condition index (PCI) of their streets. Iowa cities have a long history of paving new roadways with Portland Concrete Cement (PCC) and utilizing Hot-Mix Asphalt (HMA) as a rehabilitation tool. That approach is changing as more cities across the State of Iowa are embracing the use of full-depth HMA streets.

**Taking a New Road**

“Two roads diverged in a wood and I, I took the one less traveled by, and that has made all the difference” – Robert Frost

Mix Asphalt (HMA) as a rehabilitation tool. That approach is changing as more cities across the State of Iowa are embracing the use of full-depth HMA streets. These engineers are constructing, or reconstructing, their streets with a Perpetual Asphalt Pavement design. Perpetual Pavement is an asphalt pavement designed and constructed to last in perpetuity without requiring structural rehabilitation or reconstruction, and needing only periodic surface renewal to address distresses confined to the top layer of the pavement. The construction of perpetual asphalt streets is fast, economical, and provides a higher ride quality than PCC over the life of the roadway.

**Building a Perpetual Pavement**

The design and construction of a Perpetual Pavement is very similar to thick, full-depth hot mix asphalt pavements, with two distinct differences: first, the Perpetual Pavement is designed thick enough to withstand 100 microstrains at its base layer. This insures that the pavement will not fail due to bottom-up cracking and that the traffic distresses will remain in the surface layer of the pavement. The surface course can be rehabilitated periodically with a simple mill and overlay to provide a smooth, safe driving surface for the traveling public. The second difference of Perpetual Pavements is that the asphalt base course is designed with lower air voids, and higher binder content, to provide a rich, flexible asphalt base. This base course

(Continued on page 5)
transformation of this old mind set – that new construction should be PCC to this new perspective that full-depth asphalt can perform as well, if not better, than concrete, has been transcendent. In this light, the Iowa DOT has adopted a new life-cycle cost analysis (LCCA) model utilizing past DOT pavement performance to predict future pavement performance. The history of full-depth asphalt in Iowa is remarkable. The only remaining three original sections of Interstate 80, constructed as full-depth asphalt between 1962 and 1964 (57-55 years old), prove that asphalt is capable of performing perpetually under Iowa's highest traffic loadings. The recently designed and constructed Perpetual Pavements on Highway 100, the Highway 32 Dubuque By-pass, and the emergency reconstruction of Interstate 29, show the Iowa DOT's faith in how asphalt will perform in the future.

Eastern Iowa Golf Outing
Date: June 25, 2019
Location: Brown Deer Golf Course
Iowa City, IA

2019 Summer Meeting
Date: July 18-19, 2019
Location: AC Hotel by Marriot
Des Moines, IA

2019 NAPA Midyear Meeting
Date: July 21-24, 2019
Location: The Omni Grove Park Inn
Asheville, NC

Western Iowa Golf Outing
Date: August 27, 2019
Location: Majestic Hills Golf Course
Denison, IA

2019 Strategic Asphalt Committee Field Trip
Date: September 24-25, 2019
Location: Southeast Iowa

64th APAI Annual Convention
Date: December 4-6, 2019
Location: To be announced

Iowa DOT has adopted a new life-cycle cost analysis (LCCA) model utilizing past DOT pavement performance to predict future pavement performance. The history of full-depth asphalt in Iowa is remarkable. The only remaining three original sections of Interstate 80, constructed as full-depth asphalt between 1962 and 1964 (57-55 years old), prove that asphalt is capable of performing perpetually under Iowa's highest traffic loadings. The recently designed and constructed Perpetual Pavements on Highway 100, the Highway 32 Dubuque By-pass, and the emergency reconstruction of Interstate 29, show the Iowa DOT's faith in how asphalt will perform in the future.

Iowa's counties have rare opportunities to construct new pavements, however, a strong trend towards alternate pavement type bidding has provided new opportunities for Iowa's asphalt contractors to compete, and win, on these selected projects. The ability for an asphalt road to be maintained over the long term, at a low cost with high ride quality, is attractive to all engineers, but even more so to Iowa's County Engineers with many miles to cover and a notoriously tight budgets.

The largest and most significant change in the use of full-depth asphalt has come in the municipal street construction market. In the past, except for a few select cities (Ames and Waterloo), this market was entirely PCC in Iowa. This year most all of Iowa's largest cities will construct full-depth asphalt streets (see the lead article). These are not low-volume residential streets, but rather, high-volume, major arterials throughout these cities. Many of these cities have traditionally used concrete, but Asphalt’s “coming of age” is sweeping across the State of Iowa. New Municipal Engineers are joining the revolution every day. Asphalt’s ability to withstand salt and brine; maintain a high level of pavement condition utilizing periodic mill and fills; maintain curb lines and ADA ramps; be fast to construct, and economical to maintain, has made Asphalt an innovative and attractive choice for Iowa's cities.

Like Henry at age 12, we are facing our future, THE future of Asphalt in Iowa. Full-depth Asphalt use in Iowa is no longer in its adolescent phase. We, as Iowa's Asphalt contractors, need to embrace the opportunities and excel in our performance when constructing these full-depth Perpetual Pavements. We need to continue to build on our partnerships with the Iowa DOT and Iowa's County, City and Consulting Engineers. I am proud of our Industry's development. I am thankful to the men and women who have believed in our commitment and have chosen Asphalt for their projects. It is our time to continue to work hard, build with quality and integrity; and to reap the rewards of a very bright future.

Smoother is Better,
Bill Rosener
2019 Greater Iowa Asphalt Conference Raises Awareness, Builds Partnerships and Sets Record Attendance

The 2019 Greater Iowa Asphalt Conference (GIAC) was an unmitigated success story. Record attendance, coupled with new sessions and high-quality speakers, set a standard of excellence for this event that will be tough to beat (until next year). “The Greater Iowa Asphalt Conference set attendance records for the fifth straight year with over 730 attendees, but what I’m most proud of is the quality of our programs and the higher message that was delivered by our speakers this year,” said Bill Rosener, Executive Vice President of the Asphalt Paving Association of Iowa. “Our theme this year was “Team Asphalt” recognizing that it takes a team of individuals partnering together to build quality projects. This event was so successful because of our partners at the Iowa DOT, Iowa’s County, City and Consulting engineers and their staff, along with the APAI contractors all came together to learn, share and build relationships that will lead to even higher levels of excellence in our industry.”

The event started on Wednesday, March 6, with a joint-ventured HMA Inspection class that saw attendees from the DOT, along with Iowa county, city, contractors and consulting firms. The “Safety First, Last and Always” session saw record attendance.

The 2019 Equipment Expo opened on Wednesday afternoon with a full-house of the Midwest’s best equipment and service suppliers.

Thursday’s session was highlighted by a heartfelt message delivered by Iowa DOT Director, Mark Lowe, on the importance of partnering for success: a powerful message presented by Officer Dave Lorenzen on Human Trafficking; and the Keynote address delivered by former Navy SEAL and author, Lt. Jason Redman. Lt. Redman’s presentation titled “Lead Always and Overcome All” provided insights on overcoming life’s “ambushes” and “Getting off the X” and brought the standing-room-only crowd to its feet for a minute long ovation.

The 2018 Quality Construction Award Luncheon recognized the men and women who built the smoothest, safest and highest-quality projects during the past construction season. The eight afternoon breakout sessions ran the gamut from best rehabilitation techniques to dealing with multi-generational crews. The Thursday evening “Asphalt Vegas” had high-stakes (fake money) gambling, show girls and a tremendous magic show.

Friday morning’s technical presentations by professors from Iowa State University and the University of Iowa were both interesting and practical. The “Most Interesting Projects in Iowa” did not disappoint with presentations on HiPro Thin Overlays, municipal night paving, the asphalt interlayer and reconstructing the Hilton Coliseum parking lot.

“We took some chances at the 2019 Greater Iowa Asphalt Conference that really paid off. In cooperation with the Iowa DOT, we added the HMA Inspection class that saw over 200 attendees! The Human Trafficking speech did not fit exactly in the theme of the event but the opportunity to enlighten over 700 people to the problem in our society was important to our committee. I heard people talking about it for the next two days. In addition to that, the first ever meeting of the Iowa Chapter of the Women of Asphalt was held at GIAC. I couldn’t be more proud to have these initiatives being part of our event and I want to sincerely thank all the people that made them so successful,” said Rosener.

To view the photos of the 2019 Greater Iowa Asphalt Conference, click here.
APA I Roadshows Focus On Partnering

At the 2019 APAI Road Shows, the APAI staff joined forces with local Iowa DOT, City, County and Consulting Engineers across the State of Iowa at five Asphalt Roadshows to share, discuss and learn what is the state of the practice in Iowa’s Asphalt Industry. One clear message was delivered at each event: “We are all striving for the same outcome on every project,” said Bill Rosener, Executive Vice President for the APAI.

“We all want a quality project that we can be proud of. To achieve that, we have to work in partnership from design through construction.” This message was echoed through the projects that were highlighted by the guest speakers at each location.

Over 225 attendees in Council Bluffs, Storm Lake, Coralville, Ottumwa, and Des Moines listened to their peers on the use of the Asphalt Interlayer, Hi-Performance Thin Overlays (HiPro), pavement evaluation, life-cycle cost analysis, and a multitude of recent project performance reports. “These Roadshows allow an excellent free-flow of ideas and solutions between peers in a relaxed and informative environment,” said Bill Rosener, Executive Vice President of the APAI. “We received tremendous positive feedback from our attendees about the value they received in these one-day events.”
provides extra flexibility to withstand heavy traffic loadings. If these two characteristics are met, the Perpetual Pavement can provide an unlimited life span.

As with any pavement design, a strong drainable base and subgrade is needed for optimum performance. Many of the soils in Iowa do not provide a strong enough foundation for long pavement life. A subgrade with a California Bearing Ratio (CBR) of 5 is recommended as the minimum necessary for a pavement to be considered Perpetual. Since most of the soils in Iowa do not meet this requirement, the use of a chemically stabilized base or a modified subbase under the pavement may be needed. The use of subdrains on all new construction or major rehabilitation is encouraged to keep moisture away from the pavement’s foundation. As mentioned above, the asphalt Base layer needs to be flexible and asphalt-rich to prevent fatigue cracking and infiltration of water. This is accomplished by designing the mix with a target of 3% voids. The Intermediate asphalt layer(s) need to be strong and durable. The mix should feature stone-on-stone contact and a PG binder grade that will provide low temperature cracking resistance. The Surface course should be designed to provide a rut-resistant, durable wearing surface. A polymerized asphalt binder may be needed depending on the traffic loading and traffic signalization.

**Perpetual Pavement Life Cycle**

A Pavement Condition Index (PCI) of 60 to 80 is generally considered “good”. The Iowa Department of Transportation uses a PCI of 60 as their trigger for when rehabilitation of a roadway needs to be considered. Although cities would like to maintain their roadway network in a “good” condition, funding issues typically prevent this from occurring. Most cities try to address their roadways when they reach “fair” condition, a PCI between 40 and 60. For comparison of a PCC roadway and a Perpetual Asphalt Pavement, the I-SAVE Life Cycle Cost Analysis program developed by Iowa State University professor, Dr. Ashley Buss, was utilized. The I-SAVE program uses historical Iowa DOT highway pavement performance data to develop future performance curves for pavement construction and rehabilitation activities. The analysis shown in Figure 1 utilizes a 100 year analysis period and a PCI of 50 as the point at which rehabilitation or reconstruction would need to occur. The Iowa DOT performance curves for new PCC pavement show the first rehabilitation would be required at 35 years at PCI of 50. Similarly, a new HMA pavement would require its first rehabilitation at year 31 if it was allowed to reach the same level. Over the 100 year period, two asphalt overlays of the PCC and a reconstruction at year 82 would be necessary. For the perpetual HMA pavement, three mill and fill resurfacings would be necessary over the same 100 years. The total construction cost for the PCC alternative in today’s dollars would be slightly over $1.3 million versus $1.13 million for the Perpetual Pavement. The I-SAVE life cycle cost analysis program shows that the present value costs of the maintenance and rehabilitation of the Perpetual Asphalt Pavement would be approximately $60,000 less than the PCC pavement over identical 100 year periods. This total, added to the savings of $170,000 for the initial construction, brings the total project savings to $230,000 in today’s dollars for the city. In addition to the 19% savings, the overall pavement condition and quality of ride to the
taxpayers will be higher with the Perpetual Asphalt Pavement.

**The Perpetual Advantage**

The cost of a street reconstruction is typically five to six times more than the cost of pavement rehabilitation. Perpetual Pavement eliminates the need for costly reconstructions and the negative impact that it has on businesses and home owners. Asphalt is fast to construct initially and is easily rehabilitated with a simple 2”-3” mill and replacement of the surface wearing course. The milled asphalt is recycled into the new surface course and provides future value to the owner. The surface rehabilitation can be done at night, or on weekends, to limit the inconvenience to the traveling public. An important benefit of a Perpetual Pavement is that the mill and fill resurfacing never results in a loss of curb exposure and the resulting drainage issues associated with overlaying a PCC street with asphalt. In addition, if the sidewalk curb ramps meet current ADA standards, they will not have to be reconstructed as part of a mill and fill operation. Asphalt is resistant to winter brine and salt and won’t pothole in the spring. These benefits result in significant long-term cost savings for the City.

**Cities Using Perpetual Pavement**

**CITY OF WATERLOO**

The City of Waterloo has been building full-depth asphalt pavements since 1984. Their streets have benefited from a local option sales tax (LOST) that was approved by residents in 1992 and has been reapproved by voters at a 70% approval rate five times since its adoption. “People know where the money is going and they believe in it,” said Jamie Knutson, Waterloo City Engineer. “It brings in approximately $8.5-$9.0 million a year depending on the economy and it all goes towards roads and infrastructure improvements. It is a god send. I’m frightened to think about how bad our streets would be if we didn’t have that money coming in. The town would suffer, the condition of our roads would suffer, and it would directly impact the economic development of this City.”

The fact that Waterloo has been building full-depth asphalt streets for over three decades makes them unique, but what really sets this city apart is that they have also been utilizing alternate pavement type bidding for nearly 30 years. “I love the competition it brings to our city projects,” said Knutson. “I always feel we get the best value for our taxpayers.”

The results of the alternate bidding went back and forth during the 1990’s, but for the past 20 years, the City paving project has gone asphalt. The results of these programs are a case study on how asphalt can perform in a municipal setting in Iowa. “Since the projects have started going asphalt consistently, we have not had to rehabilitate a single asphalt street. We have crack filled and done some light maintenance, but 20+ years in, they are performing great,” said Knutson. “Last year we milled off 2” and overlaid a full-depth street we had constructed in 1988. We did some curb and gutter repair and ADA ramp repairs at the same time. The street looks brand new and it is 30 years old. We will probably have to mill it off again in another 30 years or so and at that time we will probably have to replace all the concrete curb and driveways, but we will still have all the paving intact. We are truly building Perpetual Pavements.”

**CITY OF DUBUQUE**

The City of Dubuque has a history of utilizing full-depth asphalt in the past, but have recently increased the number and frequency of HMA streets. “We utilize both pavement types,” said Jon Dienst, Civil Engineer II for the City of Dubuque. “It depends on the needs of the project and the application that best suits asphalt or concrete. For example, the 17th St. Reconstruction and the 22nd St. Reconstruction are both on very steep grades. By utilizing asphalt, we are capitalizing on the black asphalt melting the snow and ice faster to give our residents a safer street to drive on in the winter. Our Public Works Department was lobbying for asphalt on these projects because they are capable of doing their own maintenance on the street. We have our own paver and could even do a mill and fill of the surface with our own forces in the future.”

When asked about the performance of the city’s existing asphalt streets, Dienst added, “We have a project on W. Locust Street that is over 20 years old and the only maintenance we have done to date is crack seal the street. It is performing extremely well.” Dienst went on to say, “On our new projects, we are building Perpetual Pavements. In the past we might not have put as much effort into getting the subgrade prepared properly. Not anymore. We are building up the subbase with strong aggregate sections and utilizing subdrains to drain the water away. The construction of these projects has been very successful. We have a good working relationship with our paving contractor and we have partnered together very well to build these streets.”

**THE CITY OF DES MOINES**

“It’s all about the speed,” said Dave Kamp, Chief Design Engineer for the City of Des Moines. “Asphalt is fast to construction initially, and it is fast to maintain and to rehabilitate in the future. The quicker the construction occurs, specifically reducing the time residents cannot access their driveway, there is less impact to the residents and business along a construction project.” Des Moines has been shifting toward full-depth asphalt construction over the past five years with an impressive list of streets that have been completed including: Polk Boulevard, 42nd Street, 31st Street, McKinley Avenue, E. Court Avenue, and in 2019, the reconstruction of Fleur Drive. According to Kamp, asphalt had a poor image in the past due to its use in covering up failing PCC or being under-designed due to budget constraints. “It has taken a while (Continued on page 7)
to build up an impressive list of full-depth asphalt projects from the past that have performed exceptionally well. We don’t get asked much anymore on why we chose asphalt for a project, but when we do, we can point to a long history of successes.”

The Fleur Drive Reconstruction Project has been a long time coming and the need to reconstruct the project in a timely fashion weighed heavily in the decision to choose asphalt as the pavement of choice. “The decision first came down to speed. Second, the physical constraints of the project were not conducive to bringing in a concrete paver. Third, all the intersection tie-ins were going to be asphalt so there was an aesthetic consideration and finally, we designed this street as a Perpetual Pavement. When it needs to be rehabilitated in twenty-some years, we can mill off the top two inches and replace it, and have a brand new street with limited impacts to our citizens.”

State of the Practice

The use of Perpetual Asphalt Pavement continues to grow exponentially across the State of Iowa. In 2019, the cities of Des Moines, Council Bluffs, Dubuque, Clear Lake, Waterloo, Davenport, Cedar Rapids, Fort Dodge, Bettendorf, Clinton, Ames and many other smaller communities will all construct full-depth asphalt streets. Some of these will be fully designed Perpetual Pavements, some of them will be strong, traditionally-designed asphalt pavements. The assets that quality-constructed asphalt pavements bring to the table are undeniable: Asphalt is resistant to damage from salt and brine, it is 100% recyclable and it is fast to construct and easy to maintain. The cost benefit to municipalities over the life of the pavement makes Asphalt the clear choice for Iowa’s cities.

For more information on building a Perpetual Pavement in your city, please contact the Asphalt Paving Association of Iowa at 515-233-0015 or apai@apai.net.

Darwin Larson had worked for the City of Des Moines in various departments, including the Engineering Department, Public Work and the City’s Storm Water Utility, for 36 years. He received his Bachelor of Science degree in Civil Engineering from the University of Minnesota in 1976 and became a registered professional engineer in 1980. Darwin has extensive experience in the design and construction of asphalt paving projects. Darwin is presently employed as the APAI Municipal Field Engineer.

## APAI Welcomes New Members

APAI continues to add to our membership rolls. At their last Board Meeting, the Board of Directors elected three Associate Members to the Association. Thank you to those who have helped recruit these new members.

**Brown’s Heavy Equipment, Inc.** is a full service repair business that began in 1980 and is located in Ames, Iowa. They repair and rebuild construction and mining equipment of all brands. They are also a Doosan ADT dealer, a Scania engine dealer and an authorized service center for JLG. They provide shop and field service for repairs and rebuilding of engines, transmissions, and other components. They also do complete rebuilding of equipment along with line boring and painting.

**Cemen Tech** enables their customers to deliver the world’s best concrete one cubic yard at a time with their concrete production solutions.

They have delivered on the promise for 50 years to support their innovative concrete solutions by providing reliability and quality to customers, governments and military in over 60 countries in support their efforts to meet the needs of a changing world. Cemen Tech believes every community around the world should have the infrastructure to access clean water, transport goods and services and reliable housing. Their concrete production solutions provide the foundation for those needs. They have also made a conscious effort as global regulations increase that environmental concerns are addressed with their concrete mixers using less water, having less waste and lower emissions.

Cemen Tech is the world’s largest manufacturer of volumetric proportioning and continuous concrete mixing solutions. Their mission is to develop the most innovative and advanced concrete production solutions based on their cutting-edge technology, customizable products and superior support. As a 100 percent employee-owned company and a global brand for cost-effective on demand concrete solutions, Cemen Tech strives for excellence in every area of engineering, technology and support.

Please welcome this new member and show your support for them, by contacting them and utilizing their services. To find contact information for these members, go to http://www.apai.net/associate-members.aspx.
IOWA ASPHALT REPORT

APAI Awards Scholarships for 2019-2020

Scholarship recipients for the 2019-2020 Academic Year were selected by the APAI Scholarship selection team from qualified applicants at the three Iowa Regent Universities. Scholarships totaling $37,250 were awarded to twenty-five students to date. The awarded scholarship, the recipients, and their universities are shown below.

Iowa State University Scholarships & Recipients:

RONALD D. KENYON SCHOLARSHIP
Scholar in Civil & Construction Engineering
Jay Johnston, Cedar Rapids, IA
Emma Reese, Minnetonka, MN

FRED CARLSON COMPANY SCHOLARSHIP
Allison Slaughter, Cedar Rapids, IA
Rebecca Wilson, Normal, IL

ROBERT & SHERI HORNOR SCHOLARSHIP
Nathan Williams, Ankeny, IA

TOM MANATT MEMORIAL SCHOLARSHIP
Michael Volk, Champlin, MN

HAROLD & MERCEDES CESSFORD MEMORIAL SCHOLARSHIP
Rachel Origer, Adel, IA

ROBERT M. NADY SCHOLARSHIP
Samuel Waid, Ames, IA

ASPHALT PAVING ASSOCIATION OF IOWA SCHOLARSHIP
Logan Angstead, Fairfield, IA
Carter Bohl, Kingsley, IA
Jessica Loudenberg, Bradford, IL
Abby Nissen, Sergeant Bluff, IA
Tristan Sanderson, Hinckley, IL

University of Iowa Scholarships & Recipients:

ROBERT M. NADY SCHOLARSHIP
Geumchan Noh, Coralville, IA

ASPHALT PAVING ASSOCIATION OF IOWA SCHOLARSHIP
Dalton Hart, Iowa City, IA
Xinyu Hu, Shenandoah, IA
Byungkyu (Brian) Moon, Iowa City, IA
Caleb Shudak, Council Bluffs, IA

University of Northern Iowa Scholarship Recipients:

ASPHALT PAVING ASSOCIATION OF IOWA SCHOLARSHIP
Tyler Bucher, Johnston, IA
Tyler Duster, Parkerburg, IA
Bryce Flater, Cedar Falls, IA
Grant Imoehl, Luana, IA
Benjamin Lorenz, Johnston, IA
Ethan Stilson, Eldridge, IA
Joshua Vance, Farmington, IA

Please join in congratulating and encouraging these young scholars in their academic endeavors.

Team Asphalt Polar Plunge Raises Over $10,000 for Special Olympics of Iowa

On a cold morning in early April, five members of Team Asphalt and Herky the Hawk plunged into the icy cold waters of the Coralville Reservoir to raise money for the Special Olympics of Iowa. Thanks to the generous donations of over 100 donors, Team Asphalt raised a record $10,000+ this year for the Special Olympians to compete at the Mid-Winter Tournament held each March. “This was a remarkable year,” said Bill Rosener, EVP for the Asphalt Paving Association of Iowa and Team Asphalt Polar Plunger. “Team Asphalt has been a part of this event for 15 years and I can’t recall during that time the number and diversity of people we had sponsor us for the Polar Plunge. Contractors, DOT, county employees, city engineers, friends and family they all wanted to be a part of this event. It was amazing and gratifying to see all of the support for Special Olympics.”

Team Asphalt would like to sincerely thank all of our sponsors, Chuck Finnegan, Carrie Diaz and the LL Pelling Co. for their support in making this Plunge a HUGE success!
Commercial paving projects are an important part of an asphalt contractor’s work. These awards recognize the highest quality projects as judged by a group of peers and an expert traveling team. Rated on items such as surface appearance, joints, edges, and degree of difficulty, these award-winning projects represent the best commercial projects in the State of Iowa.

**Small Parking Lot (<500 Tons)**

- **ST. AUGUSTIN SCHOOL SITE IMPROVEMENTS, DES MOINES, IA**
  - St. Augustin Catholic Church, Des Moines, IA • Snyder & Associates, Des Moines, IA • Grimes Asphalt & Paving Corp, Des Moines, IA

- **HILTON COLISEUM – PARKING EXPANSION, AMES, IA**
  - Iowa State University, Ames, IA • Shive-Hattery, Inc., Cedar Rapids, IA • Manatts, Inc., Ames, IA

**Large Parking Lot (>500 Tons)**

- **PILOT TRUCK PLAZA, CEDAR RAPIDS, IA**
  - Pilot Travel Center, Cedar Rapids, IA • MacDougall Pierce Construction, Inc., Fisher, IN • Anderson-Bogert Engineers, Cedar Rapids, IA • L. L. Pelling Company, Inc., North Liberty, IA

**Parking Lot / Heavy Industrial**

- **ST. AUGUSTIN SCHOOL SITE IMPROVEMENTS, DES MOINES, IA**
  - St. Augustin Catholic Church, Des Moines, IA • Snyder & Associates, Des Moines, IA • Grimes Asphalt & Paving Corp, Des Moines, IA

- **HILTON COLISEUM – PARKING EXPANSION, AMES, IA**
  - Iowa State University, Ames, IA • Shive-Hattery, Inc., Cedar Rapids, IA • Manatts, Inc., Ames, IA

- **PILOT TRUCK PLAZA, CEDAR RAPIDS, IA**
  - Pilot Travel Center, Cedar Rapids, IA • MacDougall Pierce Construction, Inc., Fisher, IN • Anderson-Bogert Engineers, Cedar Rapids, IA • L. L. Pelling Company, Inc., North Liberty, IA
Athletic Use: Recreational Trail Award

2018 GREENBELT TRAIL HMA RECONSTRUCTION, CLIVE, IA
City of Clive • City of Clive Engineering Services Division, Clive, IA • Grimes Asphalt & Paving Corp., Des Moines, IA

Ray Svoboda, APAI President; Damir Cejvanovic, Grimes Asphalt and Paving; Joshua Burt, Grimes Asphalt and Paving; Scott Dockstader, District 1 Engineer, IDOT

Athletic Use: Running Track Award

LIBERTY HIGH SCHOOL PHASE TWO, NORTH LIBERTY, IA
Iowa City Community Schools District, Iowa City, IA • Larson Construction Company, Independence, IA • MMS Consultants, Inc., Iowa City, IA • L. L. Pelling Company, Inc., North Liberty, IA

Ray Svoboda, APAI President; Wes Knutson, Aspro, Inc.; Kelly Beckler, MMS Consultants; Charlie Purcell, Director, Project Delivery Bureau, IDOT

Athletic Use: Tennis Courts Award

CEDAR FALLS PICKLE BALL COURTS, CEDAR FALLS, IA
City of Cedar Falls • Aspro, Inc., Waterloo, IA

Ray Svoboda, APAI President; Wes Knutson, Aspro, Inc.; Rick Duggan, Aspro, Inc.; Charlie Purcell, Director, Project Delivery Bureau, IDOT

Special / Unique Paving Application

DIAMONDS AND FIELDS – MIRACLE FIELD, PARKERSBURG, IA
Diamonds and Fields, Parkersburg, IA • Heartland Asphalt, Inc., Mason City, IA

Ray Svoboda, APAI President; Augie Wachter, Heartland Asphalt, Inc.; Cody Navratil, Heartland Asphalt, Inc.; Jim Rasing, Heartland Asphalt, Inc.; Scott Dockstader, District 1 Engineer, IDOT
Smooth riding surfaces are recognized by the traveling public as the most important aspect of a paved road. Smooth roads have been proven to perform better, provide better gas mileage and last longer. Each year the Asphalt Paving Association of Iowa, in conjunction with the Iowa Department of Transportation, pay special tribute to those involved in producing the smoothest, high-quality asphalt pavements.

**Municipal Street Resurfacing**

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Ray Svoboda, APAI President; Dan Baker, City of Waterloo; Larry Crain, City of Waterloo; Charlie Purcell, Director, Project Delivery Bureau, IDOT

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Ray Svoboda, APAI President; Brandon Brown, Aspro, Inc.; Rick Duggan, Aspro, Inc.; Don Mintey, Aspro, Inc.; Scott Dockstader, District 1 Engineer, IDOT

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**Municipal Street Rehabilitation**

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Ray Svoboda, APAI President; Roger Boulé, District 6, IDOT; Barry Rhinehart, L. L. Pelling Company, Inc.; Charlie Purcell, Director, Project Delivery Bureau, IDOT

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Ray Svoboda, APAI President; Ricard Brown, Aspro, Inc.; Newman Allen, District 6, IDOT; Marc Leonard, L. L. Pelling Company, Inc.; Mark Dutra, District 6, IDOT; Scott Dockstader, District 1 Engineer, IDOT

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**Municipal Street New Construction**

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Ray Svoboda, APAI President; Dan Baker, City of Waterloo; Larry Crain, City of Waterloo; Charlie Purcell, Director, Project Delivery Bureau, IDOT

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Ray Svoboda, APAI President; Brandon Brown, Aspro, Inc.; Don Mintey, Aspro, Inc.; Rick Duggan, Aspro, Inc.; Scott Dockstader, District 1 Engineer, IDOT

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**Secondary Road Resurfacing**

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Ray Svoboda, APAI President; Cathy Nicholas, Black Hawk County; Wes Knutsen, Aspro, Inc.; Charlie Purcell, Director, Project Delivery Bureau, IDOT

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Ray Svoboda, APAI President; Steve Schneider, Black Hawk County; Chad Wurzer, Black Hawk County; Curt Tallman, Aspro, Inc.; Ryan Hennings, Aspro, Inc.; Scott Dockstader, District 1 Engineer, IDOT
Secondary Road Rehabilitation

FM-C006(111) — 55-06, E-36, BENTON COUNTY, IA
Benton County Engineer’s Office, Vinton, IA • L.L. Pelling Co., Inc., North Liberty, IA

Secondary Road New Construction

STP-S-C048(79) — 5E-48, F-46, IOWA COUNTY, IA
Iowa County Engineer’s Office, Marengo, IA • L.L. Pelling Company, Inc., North Liberty, IA

Airport Runway / Taxiway Smoothness Resurfacing

ROCK RAPIDS AIRPORT, ROCK RAPIDS, IA
City of Rock Rapids • DGR Engineering, Rock Rapids, IA • Knife River Midwest, Sioux City, IA

Photo courtesy of Heartland Asphalt

Photo by Mitch Gilbert of Midstate Reclamation
QUALITY MANAGEMENT ASPHALT (QMA) AWARDS

Building on the success of the Quality Management Asphalt Program, this award recognizes the immense amount of work that goes into building a high-quality pavement on the primary and interstate system. Smoothness, quality control, density, physical appearance and degree of difficulty all go into the overall ratings for the projects submitted in these categories. The winning pavements are considered the best-of-the-best, indicating that they are not only smooth, but exhibit qualities that produce long-lasting hot mix asphalt pavements.

Primary Highway Resurfacing – 2-Lane

MP-28-1(713)19--76-77, IA HWY 28, POLK COUNTY, IA

Primary Highway Rehabilitation – 2-Lane

STPN-175-9(22)--2J-38, IA HWY 175, GRUNDY COUNTY, IA

Primary Highway Paving – 2-Lane

STPN-224-1(12)--2J-50, IA HWY 224, JASPER COUNTY, IA

Primary Highway Paving – 4-Lane

NHSX-141-7(42), (47), (48), (49)--3H-77 , IA HWY 141, POLK COUNTY, IA
**ASPHALT PLANT ENVIRONMENTAL STEWARDSHIP AWARD**

This award recognizes the efforts of a hot mix asphalt production facility that goes above and beyond environmental requirements. By demonstrating safe and responsible environmental practices, this producer is enhancing the positive image of a hot mix asphalt plant, while maintaining a safe, environmentally-friendly, work place.

**Stationary Plant**

**COUNCIL BLUFFS PLANT 3, COUNCIL BLUFFS, IA**

Western Engineering Company, Inc., Harlan, IA

Ray Svoboda, APAI President; Duane Malmberg, Western Engineering Company

**Portable Plant**

**INROADS PORTABLE PLANT, DES MOINES, IA**

InRoads, L.L.C., Des Moines, IA

Ray Svoboda, APAI President; Joe Manatt, InRoads, L.L.C.; Brian Armstrong, InRoads, L.L.C.
COMMUNITY INVOLVEMENT AWARD

This award recognizes companies that are good neighbors and have 'given back' to their community in time, commitment and services.

DES MOINES ASPHALT & PAVING – A CRH COMPANY, ANKENY, IA

CONSULTING ENGINEER OF THE YEAR AWARD

MR. NICK FREDERIKSEN
ISG, Des Moines, IA

METROPOLITAN PAVING PROGRAM (CITIES > 10,000 POP.)

Ray Svoboda, APAI President; Matt Becker, City of Des Moines

CITY OF DES MOINES, IOWA
City of Des Moines Engineering Department

MUNICIPAL PAVING PROGRAM (CITIES < 10,000 POP.)

Ray Svoboda, APAI President; David Jones, City of Atlantic; David Sturm, Snyder & Associates

CITY OF ATLANTIC, IOWA
Snyder & Associates, Inc., Atlantic, IA

CONSULTING ENGINEER OF THE YEAR AWARD

Ray Svoboda, APAI President; Nick Frederiksen, ISG, Des Moines

Ray Svoboda, APAI President; Nick Frederiksen, ISG; Scott Deckstader, District 1 Engineer, IDOT
IOWA ASPHALT REPORT

IOWA COUNTY ENGINEERING DEPARTMENT OF THE YEAR AWARD

Ray Svoboda, APAI President; Vince Kimm, Iowa County; Nick Amelon, Iowa County; Ryan Merck, Iowa County; Scott Dockstader, District 1 Engineer, IDOT

Ray Svoboda, APAI President; Ryan Merck, Iowa County; Nick Amelon, Iowa County; Vince Kimm, Iowa County; Scott Dockstader, District 1 Engineer, IDOT

KOSSUTH COUNTY ENGINEER’S OFFICE
Algona, IA

Ray Svoboda, APAI President; Adam Miller, Kossuth County; Nick Roethler, Kossuth County; Zachary Thompson, Kossuth County; Scott Dockstader, District 1 Engineer, IDOT

Ray Svoboda, APAI President; Doug Miller, Kossuth County

IOWA COUNTY ENGINEER’S OFFICE
Marengo, IA

Ray Svoboda, APAI President; Curtis Thompson, Polk County; Drew Doornenbal, Polk County; Scott Dockstader, District 1 Engineer, IDOT

Larry Mattusch, APAI; Jon Burgstrom, Scott County; Bill Rosener, APAI Executive Vice President

ALL ASPHALT COUNTY ROADS AWARD

SCOTT COUNTY

100,000 TONS AWARD

POLK COUNTY

Kurt Bailey, Polk County; Bill Rosener, APAI Executive Vice President

Ray Svoboda, APAI President; Curtis Thompson, Polk County; Drew Doornenbal, Polk County; Scott Dockstader, District 1 Engineer, IDOT
The Innovation in Construction Award recognizes agencies and contractors for utilizing cutting edge technologies to build exemplary HMA pavements.

**HIGH PERFORMANCE THIN LIFT OVERLAY: “HIPRO”**
IMN-029-3(230)52--OE-78, I-29, POTTAWATTAMIE COUNTY, IA
Iowa Department of Transportation, District 4 Office, Council Bluffs, IA, Resident Construction Engineering Office, Council Bluffs, IA • OMNI Engineering, Omaha, NE
HIGH PERFORMANCE THIN LIFT OVERLAY: “HIPRO”  
NHSN-018-2(120)--2R-21, US HWY 18, CLAY COUNTY, IA  
Iowa Department of Transportation, District 3 Office, Sioux City, IA, Resident Construction Engineering Office, Cherokee, IA • InRoads, L.L.C., Des Moines, IA

PERPETUAL PAVEMENT DESIGN AWARD

EAST SIDE INTERCEPTOR PROJECT, SE 30TH AND VANDALIA ROAD  
DES MOINES, IA

City of Des Moines • Veenstra & Kimm, Inc., West Des Moines, IA

PERPETUAL PAVEMENT DESIGN AWARD

IOWA HIGHWAY 100, CEDAR RAPIDS, IA  
Iowa Department of Transportation District 6 Office, Cedar Rapids, IA
ROBERT M. NADY AWARD OF EXCELLENCE

Robert M. Nady is a legend in Iowa’s asphalt history. His commitment to educating young engineers about the importance of quality asphalt materials and construction inspired generations of young people to excellence in design and construction. This award honors his memory by recognizing the best quality-constructed road in Iowa each year.

STP-S-C083(70)-53-83, M-47, Shelby County, IA

Shelby County Engineer’s Office, Harlan, IA • Western Engineering Company, Inc., Harlan, IA

2018 IOWA ASPHALT HALL OF FAME

Bill Rosener, APAI Executive Vice President; Dennis “Denny” Lehrer, Mathy Construction; Roger Boulet, IDOT District 6

Denny Lehrer

Photo by Rachel Abrens – InRoads

Photo by Jake Mawe (formerly of Des Moines Asphalt Paving)
APA\textsuperscript{I} Members

**CONTRACTOR MEMBERS**
American Milling Services, Cedar Rapids  
Aspro, Inc., Waterloo  
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Blacktop Service Company, Humboldt  
Central Asphalt Paving, Inc.; Des Moines  
Determann Asphalt Paving, L.L.C., Camanche  
Duininck Inc., Prinsburg, MN  
Fort Dodge Asphalt Company, Fort Dodge  
Gee Asphalt Systems, Inc., Cedar Rapids  
Grimes Asphalt & Paving Corp., Grimes  
Hansen Asphalt, Inc., Iowa City  
Heartland Asphalt, Inc., Mason City  
Henningsen Construction, Inc., Atlantic  
IIowa Investment, Inc., Blue Grass  
InRoads, L.L.C., Des Moines  
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Mathy Construction Company, Onalaska, WI  
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Oldcastle Materials Group  
Cessford Construction Company, LeGrand  
Des Moines Asphalt & Paving Company, Ankeny  
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Valley Construction, Rock Island, IL  
Western Engineering Company, Inc., Harlan  
W.K. Construction Co., Middleton, WI

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Jebro, Inc., Sioux City

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Concrete Materials Co., Sioux Falls, SD  
L. G. Everist, Inc., Sioux Falls, SD  
Hallett Materials, Des Moines  
Martin Marietta, Des Moines  
Pattison Sand Company, Clayton  
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Wendling Quarries, DeWitt

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Antigo Construction, Inc., Antigo, WI  
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Bargen Inc., Mountain Lake, MN

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Cemen Tech., Inc., Indiana  
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Construction & Aggregate Products, Des Moines  
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Corrective Asphalt Materials, South Roxana, IL  
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Dynapac (Atlas Copco), Fort Mill, SC  
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Fahrner Asphalt Sealers, Plover, WI  
Flagger Pros USA, L.L.C., Ames  
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Gencor Industries, Inc., Orlando, FL  
Gilson Company, Lewis Center, OH  
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Hawkeye Truck Equipment, Des Moines  
Heartland Outdoor Services, Grimes  
Henriksen Contracting, L.L.C., Grimes  
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Housby Mack & Isuzu, Des Moines  
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Iowa Plains Sign & Design, Slater  
Iowa Speedway, L.L.C., Newton  
Jerico Services, Inc., Indianola  
Jim Hawk Truck Trailers, Inc., Altoona  
Kwik Trip, Inc., LaCrosse, WI  
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Load King, Elk Point, SD  
Logan Contractor Supply, Urbandale  
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Manhole Adjustible Riser Company, Oskaloosa  
Masaba, Inc., Vermillion, SD  
Merchants Bonding Company, Des Moines  
Mid Country Equipment, Inc., Fort Dodge  
Midwest Tennis & Track, Denison  
Missouri Petroleum Products Co., L.L.C., St. Louis, MO  
Ron Monson and Sons, Britt  
Murphy Tractor & Equipment Company, Inc., Waucoma, KS  
National Minerals Company, Hastings, MN  
Nouryon (formerly Akzo Nobel Surface Chemistry), Chicago, IL  
Pacific GeoSource, Drain, OR  
Pine Test Equipment, Grove City, PA  
Purple Wave Auction, Manhattan, KS  
Quality Striping, Inc., Des Moines  
Quality Traffic Control, Inc., Des Moines  
Quick Supply Company, Des Moines  
Rexco Equipment, Inc., Cedar Rapids  
Ritchie Bros. Auctioneers, Medford, MN  
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Roadtec, Inc., Chattanooga, TN  
Save Our Sewers, Inc., Cedar Rapids  
Star Equipment, Ltd., Des Moines  
S.T.A.T.E. Testing, L.L.C., East Dundee, IL  
Tarmac, Inc., Lee’s Summit, MO  
Titan Machinery, Des Moines  
Triexer Electronic Laboratory, Research Triangle Park, NC  
TruBank, Des Moines  
Unique Paving Materials, Cleveland, OH  
Valley Distribution Corp., West Burlington  
Valley Environmental Services, Newton  
Waste Commission of Scott County, Buffalo  
Weiler, Knoxville  
Wells Fargo Bank, Des Moines  
Whitefield & Eddy Law, Des Moines  
Wirtgen America, Inc., Antioch, TN  
Ziegler, Inc., Des Moines  
Zydex, Inc., Morrisville, NC

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Clapsaddle-Garber Associates, Marshalltown  
DGR, Rock Rapids  
FOTH, Cedar Rapids  
Fox Engineering Associates, Ames  
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IIW, P, C., Dubuque  
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Kirkham-Michael, Urbandale  
Knight E/A, Ames  
McClure Engineering, Clive  
Shive-Hattery, Inc., Cedar Rapids  
Snyder & Associates, Inc., Ankeny  
Terracon, Cedar Rapids  
Thiele Geotech, Inc., Omaha, NE  
Veenstra & Kim, West Des Moines

**AFFILIATE MEMBERS**
Scott County Engineering, Davenport