www.apai.net

# **Building Permanent Perpetual Pavements**

hat defines a Perpetual Pavement? A perpetual pavement is a mechanistic/empirical designed asphalt pavement built to diffuse the vertical strain of traffic loading along a wide horizontal strain. This is accomplished through constructing a highly-flexible, asphalt-rich base course, a high-aggregate, ultra-strong intermediate course with a rutresistant, high friction surface course. This revolutionary Perpetual design eliminates pavement failure in the base course and allows for periodic reconditioning of the surface

course with no need to ever completely reconstruct the pavement.

The National Asphalt Pavement Association defines their Perpetual Pavement Award Winners as fulldepth asphalt pavements that are a minimum of 35

years old and have not been overlaid more often than once every 15 years. Iowa was recognized in 2005 for three sections of Perpetual Pavement on Interstate 80 in Jasper, Iowa/Johnson and Cedar Counties. These sections were originally constructed in 1960-61 and have never been reconstructed (although the rest of the interstate has been).

Thinking that there might be a few more long-lived full-depth sections in Iowa, the IDOT was asked to check their database for any other pavements that would meet these criteria. 160 sections of US Highways in Iowa meet those criteria. Ages for these pavements range from 82 years old for Hwy 64 in Jackson Co. to a 64 year old Hwy 146 in Marshall Co. to a 44 year old Hwy 6 in Pottawattamie Co. along with every age in

These 160 highway sections in Iowa were not constructed as perpetual pavements, yet

> many have achieved the pavement longevity of what we expect from today's perpetual pavements. For the sake of discussion. let's call these long-lasting, neverreconstructed roads Permanent Pavements. The premise of these

roadways was to first establish the road. Many of these sections of highway, and untold miles of county roads were originally gravel or sealcoat roads where traffic volumes increased. These roads eventually warranted a 2"-3" asphalt layer, or maybe they utilized 4" of asphalt treated base (Continued Page 9)





#### "Off the Top Rope"

believe everyone needs to have something to be passionate about wrestling. We have long drawn out debates on whether the wrestlers from my era could defeat modern day wrestlers. Could "Rowdy" Roddy Piper beat The Rock? Could Andre the Giant body slam The Big Show? He is passionate about practicing his moves. When I walk in the door at wrestle and is it going to be "shirts on" or "shirts off"? I love his passion. It burns bright within him. I also have

I have been in love with asphalt since my first day holding a flag on Highway 83 at age 17. It wasn't the asphalt at first, it was the crew. The ten guys that I was suddenly a part of made me feel like a man. I was a construction worker. I was part of a crew. When we left a location there was a beautiful black ribbon of asphalt as a monument to the men who had been there and constructed it. To this day, wherever I am in this state, as a construction worker. Our crew was at a bar in southern Iowa when

(Continued Page 2)

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### Upcoming Events

**Updated - Accessible Sidewalks and Curb Ramps:** Design to Install

Date: May 21, 2012
Location: Best Western Plus SteepleGate Inn
100 W. 78th Street

Location: Gateway Hotel & Conference Center 2100 Green Hills Drive

Location: Stoney Creek Inn 300 3rd St.

You must register before the event. Click here for information and to register.

2012 1st APAI Golf Outing

Date: June 26, 2012 Location: Amana Colonies Golf Course

**Board of Directors' Meeting** 

Date: June 28, 2012 Location: APAI Conference Room 116 Clark Ave., Ste C

NAPA's Midyear Meeting

Date: July 16-18, 2012 Location: The Drake Hotel

2012 "Mexican Riviera" Summer Meeting & Golf

Date: July 19-20, 2012 Location: Honey Creek Resort Moravia, IA 52571

2012 2nd APAI Golf Outing

Date: August 29, 2012 Location: Carroll Country Club Carroll, IA

APAI 57th Annual Convention

November 28-29, 2012 West Des Moines Marriott West Des Moines, IA

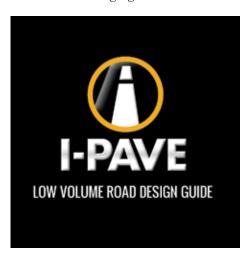
2012 County Engineers Conference

December 4-6, 2012 Scheman Building, Iowa State University

### **Introducing I-PAVE** the NEW Low-Volume Pavement Design Guide

he Asphalt Paving Association of Iowa (APAI) in cooperation with the Iowa State University Civil Engineering Department is proud to introduce I-PAVE, the pavement design guide for low volume roadways. This program utilizes empirical design to come up with design thicknesses for full-depth reconstruction and new construction of low volume PCC and asphalt pavements. In addition, I-PAVE then utilizes the FHWA Life-Cycle Cost Analysis program with current IDOT Bid-Express numbers to show equivalent uniform annual cost for both pavement options. ISU Graduate Student, Joseph Podolsky designed the program and said, "We created an easy-to-use design guide that allows the engineer to try several construction methods and material thicknesses to find the best design for the most economical cost." The future of the I-PAVE program will see rehabilitation methods incorporated into the program. "This is an exciting time in the Iowa Asphalt Industry", said Bill Rosener, Executive Vice-President of the APAI, "the use of warm-mix asphalt (WMA), high RAP mixes, recycled asphalt shingles (RAS) and now the introduction of I-PAVE just solidifies that asphalt is the pavement choice on the rise in Iowa."

Click on the I-PAVE logo to open the new I-PAVE design guide.



(Tales from the Road – Cont. from Page 1)

another crew with concrete on their boots came in. Words were exchanged, mothers were disparaged, asphalt was used as a derogatory word. I suddenly felt anger that "my asphalt" was not getting the respect that it deserved. I was proud of what we did, I was proud of the crew that I worked with, and I am still proud to be an asphalt man to this day.

The passion for asphalt gets me out of bed every day. I still take offense to those who do not give our product the respect it deserves. Concrete has held the Heavyweight title for a long time in the State of Iowa, but the young Asphalt upstart, with his smooth good looks, quiet demeanor, durable personality, and

youthful "green" outlook will soon be wearing the belt.

As the new season begins, find that passion within yourself, and your coworkers, to continue to pave with the pride that has made the Iowa Asphalt Industry the best in the nation.

On a personal note, I would like to tip my hat to my ever-classy opponent, Gordon. Glad to see you back in the ring.

Have a safe summer out there.



### **PROJECT SPOTLIGHT:**

### Dickinson County Projects: A-43, A-48/M-54, A-48/A-31

o you need proof that asphalt roads are the best value? If you do, then just ask Dickinson County Engineer, Dan Eckert about the performance of his roads in this Northwest Iowa County. Eckert has four roads being resurfaced totaling eighteen miles that were all originally constructed in the early 1960s. These roads were



constructed using either an asphalt treated base and a chip seal or a two or three-inch Type B asphalt layer. An additional asphalt overlay of 2"-3" was then added in 1983-84.

These roadways have utilized a total of five inches of asphalt for 47-51 years of life. The best part? They aren't

done performing yet.

"These roads are in need of rehabilitation," says Eckert, "but it's surprising how well they still ride." Eckert plans on placing 3.5" overlays over the existing 5" asphalt base with level/



strengthening courses to be done at 32 locations. He is also exploring using warm-mix asphalt and Recycled Asphalt Shingles (RAS) for this very environmentally conscious county. "We considered looking at PCC or a whitetopping, but I

didn't want to go with 4" PCC and the 6"+ was too expensive" Eckert went on to say. "Besides, with the performance we've had with the existing asphalt, why not just resurface with 3.5" of asphalt and get another 30+ years of life out of it?" Why not indeed?

### Perpetual Pavements for Local Agencies Draws Crowds to APAI Regional Meetings

he Asphalt Paving Association of Iowa (APAI) held five regional meetings across the State of Iowa over a two week period in March and April. Over 180 attendees interested in designing and building Perpetual Asphalt Pavements for state, county, and municipal roadways came to the meetings that were held in five locations across the state.

APAI staff, county engineers, city engineers, APAI contractors and an IDOT engineer all presented on innovative design and construction practices for long-life asphalt pavements. "I learned, I laughed, I loved it!" wrote one attendee. For more information on attending a conference near you, please click here.















# Innovation Propels 2012 Greater Iowa Asphalt Conference to Record Attendance

Innovative paving techniques, cutting edge environmental seminars, and forward-looking research initiatives drew record crowds for the 2012 Greater Iowa Asphalt Conference (GIAC). Nearly 600 people attended the two-day seminar held February 29-March 2 at the Des Moines Airport Holiday Inn. The theme for the 2012 Greater Iowa Asphalt Conference was Asphalt: Smoother. Faster. Smarter.

"We are thrilled, but not surprised." said Bill Rosener, Executive Vice President for the Asphalt Paving Association of Iowa regarding the record-setting attendance. "Asphalt is becoming the pavement of choice in Iowa and the Greater Iowa Asphalt Conference is the premiere asphalt conference in the Midwest. By partnering with the Iowa Department of Transportation, the Institute of Transportation Local Technical Assistance Program, and Iowa State University Civil Engineering Program, we have an opportunity to educate state, county, municipal and consulting engineers, as well as, the APAI contractors on the latest techniques, research, and innovations in the asphalt industry."

The 2012 GIAC began on Wednesday afternoon with two Pre-conferences that attracted 150 attendees on Safety and Asphalt Pavement Design. The pavement design class was highlighted by the release of the new I-PAVE Low-Volume Road Pavement Design program. The I-PAVE program will compare asphalt and concrete

pavement design for low-volume roadways and provide life cycle cost analysis for the suggested pavement designs.

Thursday's session was highlighted by an inspiring message from Keynote Speaker Aaron Thomas whose father, Ed Thomas, was murdered by a mentally deranged former student. Innovation in

"Asphalt is becoming the pavement of choice in Iowa and the Greater Iowa Asphalt Conference is the premier asphalt conference in the Midwest."

- Bill Rosener

Asphalt was the theme throughout the day including the "Next Generation of Asphalt" by Randy West, Director of National Center for Asphalt Technology (NCAT )and "It's Not Your Grandpa's Asphalt" by Michael J. Kvach, Executive Director of the Asphalt Paving Alliance.

The APAI Smoothness Awards Luncheon was highlighted by an address from John Adam, Director of the IDOT Highway Division. Mitch Dillavou, Director of the Engineering Bureau, John Smythe, Director of Statewide Construction, and Duane Hassebrock, 2012 APAI President, presented the awards to the men and women who designed and built the best asphalt paving projects in Iowa.

The afternoon breakout sessions were equally compelling with topics on Percent

Within Limits (PWL), Innovative Pavement Rehabilitation, Leadership, Quality Paving Best Practices, and Building Environmentally Sustainable Pavements. "The biggest complaint of the whole conference," said Rosener," was that it was too hard to choose between the breakout session topics."

The evening celebrated the camaraderie ever present in the asphalt industry with a reception and dinner sponsored by the show's 18 exhibitors.

Akzo Nobel Surface Chemistry **American Highway Products** Astec, Inc. / Roadtec, Inc. Ballou Pavement Solutions, Inc. Clarence Richard Company Elite Flagging, Inc. Humboldt Mfg. Co. Iowa Plains Signing, Inc. Logan Contractors Supply, Inc. MeadWestvaco Corp. Midstates Equipment & Supply Quality Traffic Co. / Quality Striping **Quick Supply Company** Rotochopper, Inc. Star Equipment, Ltd. **Unique Paving Materials** 

Friday's session was started by eight students representing the University of Iowa and Iowa State University presenting

Whelen Engineering Co., Inc.

(Cont. Page 11)

To view the conference in pictures, click here.

# Quality Paving Award Winners Recognized at GIAC

t the 2012 Greater Iowa Asphalt Conference (GIAC) Awards Luncheon held at the Airport Holiday Inn in Des Moines on Thursday, March 1, 2012, awards were presented to those who had been involved with the projects that were deemed the "Best-of-the-best" asphalt paving projects in Iowa. APAI contractors, IDOT, County, City and Consulting Engineers were recognized for their part in constructing Iowa's best projects.

#### 2011 QUALITY PAVING AWARD WINNERS

#### Parking Lot / General Commercial Paving

ROCKWELL COLLINS LOT #120 – CEDAR RAPIDS

L.L. Pelling Company, Inc. North Liberty, IA

Rockwell Collins Cedar Rapids, IA



Mitch Dillavou, Engineering Bureau Director, Iowa DOT; Paul Jamieson, L. L. Pelling Co.; Wayne Wood, L. L. Pelling Co.; Seth Finnegan, L. L. Pelling Co.; Duane Hassebrock, APAI President



#### Parking Lot/Heavy Industrial Paving

UPS DISTRIBUTION CENTER - AMES, IA

Manatts, Inc. Ames, IA

United Parcel Service Ames, IA

Clapsaddle-Garber Associates, Inc. Ames, IA



Mitch Dillavou, Engineering Bureau Director, Iowa DOT; Alisha McGinn, Clapsaddle-Garber Associates, Tim Peterson, Manatts, Inc.; Matt Skyberg, Manatts, Inc.; Craig Kalinay, Manatts, Inc.; Duane Hassebrock, APAI President



#### Trails & Paths Paving

W912EK-09-0101; NEAL SMITH TRAIL, SAYLORVILLE LAKE, IA

Grimes Asphalt & Paving Corp.
Des Moines. IA

U.S. Army Corps of Engineers Johnston, IA



Mitch Dillavou, Engineering Bureau Director, Iowa DOT; Dave Gardiner, Grimes Asphalt & Paving Corp.; Robert Carey, Grimes Asphalt & Paving Corp.; Justin Rishel, Grimes Asphalt & Paving Corp.; Duane Hassebrock, APAI President



#### **Special Paving Application**

2011 ASPHALT RESURFACING PROGRAM – DOWNTOWN DRAG STRIP, SIOUX CITY, IA

Knife River Midwest, L.L.C. Sioux City, IA

City of Sioux City



Mitch Dillavou, Engineering Bureau Director, Iowa DOT; Tom Monell, Knife River Midwest; Amos Parr, Knife River Midwest; Howard Wagenaar, Knife River Midwest; Duane Hassebrock, APAI President



#### Athletic Use Paving

CEDAR RAPIDS COUNTRY CLUB TENNIS COURTS, CEDAR RAPIDS, IA

L.L. Pelling Company, Inc. North Liberty, IA

Cedar Rapids Country Club Cedar Rapids, IA

Shive-Hattery, Inc. Cedar Rapids, IA



Mitch Dillavou, Engineering Bureau Director, Iowa DOT; Paul Jamieson, L. L. Pelling Co.,: Wayne Wood, L L. Pelling Co.; Bill Knapp, L. L. Pelling Co.; Duane Hassebrock, APAI President



#### Athletic Use Paving

SPIRIT LAKE HIGH SCHOOL TRACK, SPIRIT LAKE, IA

Tri-State Paving, Inc. Estherville, IA

Spirit Lake School District Spirit Lake, IA

Beck Engineering, Inc. Spirit Lake, IA



Mitch Dillavou, Engineering
Bureau Director, Iowa
DOT; John Hight, Beck
Engineering; Jason
Eygabroad, Beck Engineering;
Stacy Tegtmeier, Beck
Engineering; Jason Pergande,
Tri-State Paving; Jason
Wagenaar, Tri-State Paving;
Russ Schroeder, Tri-State
Paving; Duane Hassebrock,
APAI President



#### 2011 SMOOTHNESS AWARD WINNERS

#### Airport Runway Resurfacing

AIP #03-19-0048-07: IOWA FALLS MUNICIPAL AIRPORT — IOWA FALLS, IA

Heartland Asphalt, Inc. Mason City, IA

Iowa Falls Municipal Airport Iowa Falls, IA

McClure Engineering Co. Fort Dodge, IA



Mitch Dillavou, Engineering Bureau Director, Iowa DOT; Walter Wachter, Heartland Asphalt, Inc.; Dan Nixon, McClure Engineering Co.; Justin Jensen, McClure Engineering Co.; Todd Dooley, McClure Engineering Co.; Jim Rasing, Heartland Asphalt, Inc.; Duane Hassebrock, APAI



#### Municipal Street Resurfacing

796: KIMBALL AVENUE, WATERLOO, IA

Aspro, Inc. Waterloo

City of Waterloo



Mitch Dillavou, Engineering Bureau Director, Iowa DOT; Ryan Hennings, Aspro, Inc.; Jeff Strong, Aspro, Inc.; Curt Tallman, Aspro, Inc.; Duane Hassebrock, APAI President



#### **Municipal Street Paving**

N-2010: SPRINGDALE DRIVE, CLINTON, IA

Determann Asphalt Paving, L.L.C. Camanche, IA

City of Clinton

McClure Engineering Associates, Inc. East Moline, IL



Mitch Dillavou, Engineering Bureau Director, Iowa DOT; Kevin Saiter, Determann Asphalt Paving, L.L.C.; Joe McGinnis, Determann Asphalt Paving, L.L.C.; Randy Starr, Determann Asphalt Paving, L.L.C.; Duane Hassebrock, APAI President



#### Secondary Resurfacing

FM-C041(102) -- 55-41 / FM-C041(103) -- 55-41, R-18 / B-63, HANCOCK COUNTY, IA

Manatt's, Inc. Newton, IA

Hancock County Engineering Office Garner. IA



Mitch Dillavou, Engineering Bureau Director, Iowa DOT; Bill Waddingham, Hancock County; Curt Chambers, Manatts, Inc.; Dennis Pfantz, Manatts, Inc.; Steve Armstrong, Manatts, Inc.; Duane Hassebrock, APAI President



#### **Secondary Paving**

LOST-12(01) -- 73-28, X-15 / 180th Avenue, Delaware County, IA

River City Paving Dubuque, IA

Delaware County Engineering Office Manchester, IA



Mitch Dillavou, Engineering Bureau Director, Iowa DOT; Scott Kueter, River City Paving; Denny Lohrer, River City Paving; Rob Ostwinkle, River City Paving; Duane Hassebrock, APAI President



### 2011 QUALITY MANAGEMENT ASPHALT (QMA) AWARD WINNERS

#### Primary Resurfacing – 2-Lane

STP-141-5(015) -- 2C-39, IOWA HWY 141, GUTHRIE COUNTY, IA Manatts, Inc. Newton, IA

Iowa Department of Transportation District 4 Office, Atlantic, IA Resident Construction Engineering Office, Creston, IA



Mitch Dillavou, Engineering Bureau Director, Iowa DOT; Marcia Buthmann, Iowa DOT Dist. 4; Curt Chambers, Manatt, Inc.; Dennis Pfantz, Manatts, Inc.; Steve Armstrong, Manatts, Inc.; Duane Hassebrock, APAI President



#### Primary Resurfacing – 4-Lane - Rural

STP-13-1(51) -- 2C-57, IOWA HWY 13, LINN COUNTY, IA River City Paving Dubuque, IA

Iowa Department of Transportation
District 6 Office, Cedar Rapids, IA
Resident Construction
Engineering Office, Cedar Rapids, IA



Mitch Dillavou, Engineering Bureau Director, Iowa DOT; Denny Lohrer, River City Paving; Chad Lohrer, Dist. 6 Iowa DOT; Scott Kueter, River City Paving; Rich Starks, Dist. 6 Iowa DOT RCE-Cedar Rapids; Steve Rauen, Dist 6 Iowa DOT RCE-Cedar Rapids; Rob Ostwinkle, River City Paving; Duane Hassebrock, APAI President



#### Primary Resurfacing – 4-Lane - Urban

NHSX-018-2(101) -- 3H-21, US HWY 18, CLAY COUNTY, IA Tri-State Paving, Inc. Estherville, IA

lowa Department of Transportation District 3 Office, Sioux City, IA Resident Construction Engineering Office, Cherokee, IA



Mitch Dillavou, Engineering Bureau Director, Iowa DOT; Tony Babcock, Iowa DOT, Dist 3 RCE - Cherokee; Jason Pergande, Tri-State Paving; Todd Smith, Tri-State Paving; Dan Brotherson, Tri-State Paving; Duane Hassebrock, APAI President



#### Interstate Resurfacing

IMX-035-2(347)33 -- 02-20, I-35, CLARKE COUNTY, IA Norris Asphalt Paving Co. Ottumwa, IA

Iowa Department of Transportation District 5 Office, Fairfield, IA Resident Construction Engineering Office, Chariton, IA



Mitch Dillavou, Engineering Bureau Director, Iowa DOT; Frank Williams, Norris Asphalt Paving Co.; Barry Kinsey, Iowa DOT, Dist. 5 RCE-Chariton; Josh Fredrick, Norris Asphalt Paving Co.; Oscar Vaal, Jr., Norris Asphalt Paving Co.; Shane Fetters, Iowa DOT Dist. 5; Duane Hassebrock, APAI President



#### INNOVATION IN TECHNOLOGY ASPHALT PAVING AWARD

(For the use of high percentage of recycled asphalt pavement mix featuring speed of construction in the rehabilitation of a perpetual asphalt pavement.)

This award recognizes the **unique** use of paving materials in paving projects which exhibit HMA paving advantages, e.g., design, rapid construction, quality, smoothness, and impact on traffic, residences, and businesses.

LFM-HMA(4)-11: SE 32ND AVENUE, POLK COUNTY, IA

Des Moines Asphalt & Paving Co. Ankeny, IA

Polk County Engineering Office Des Moines, IA



Mitch Dillavou, Engineering Bureau Director, Iowa DOT; Ryan Horn, Des Moines Asphalt & Paving Co; Kasin Beckwith, Polk County, Ted Huisman, Des Moines Asphalt & Paving Co.; Drake Rector, Polk County, Gene Baloun, Des Moines Asphalt & Paving Co.; Duane Hassebrock, APAI President



(Building Perpetual Permanent Pavements - Cont. from Page 1)

(ATB), a coarse graded aggregate mixture with approximately 4% asphalt cement. The engineer would add a two-inch overlay every 15-25 years as traffic levels increased. This "staged" construction worked well in keeping the pavement equal to the traffic load as well as keeping the cost of construction amortized over many years. This method is still viable today.

The underlying premise of both the permanent and perpetual pavements is that neither pavement will need to be fully reconstructed. The surface layers of the asphalt can be strengthened with today's newer stronger asphalts, or can be recycled with a "mill and fill" operation, or revitalized with emulsions or foamed asphalt with cold-in-place recycling.

A recent review of the IDOT Pavement Management System (PMS) found that the previous belief that PCC lasts 40 years with no maintenance and asphalt lasts 40 years with an overlay at year twenty is false.

As you can see from Chart 1, low-volume and medium volume truck traffic roadways are lasting 29 and 30 years or longer before needing rehabilitation. High truck volume roadways are lasting 25 years on average before rehabilitation. PCC pavements are nearly identical in their performance. The service lives of flexible and rigid pavements are statistically the same for all traffic levels.

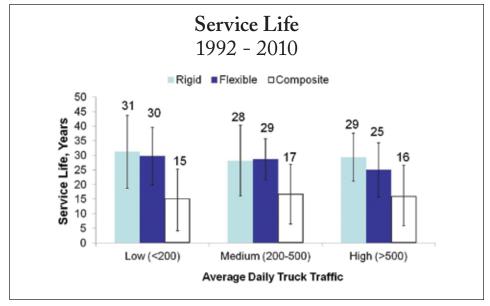
Conventional wisdom has theorized that maintenance is higher on asphalt roadways – IDOT data proves a different theory.

Perpetual and Permanent pavements differ in their design methods. Permanent pavements utilize empirical designs derived from the AASHO 1958 Road Tests where more traffic equaled more thickness. Perpetual pavements utilize mechanistic/empirical design and are better utilized for high-volume designs over 3M ESALs to prevent over-designing pavement thicknesses.

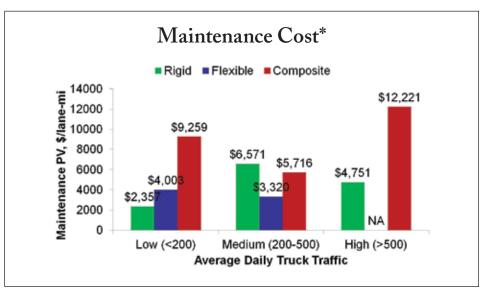
The APAI, in cooperation with ISU, has developed I-Pave, a program that utilizes empirical design (AASHTO 93) to provide comparable sections of asphalt and concrete (Click here to

experience I-PAVE) on low volume roadways. The Asphalt Paving Alliance (APA) offers a perpetual pavement design guide for higher volume roadways called PerRoadXpress (click here to open PerRoadXpress) developed by Dr. David Timm of Auburn University. These two design guides will allow you to design low-volume and high-volume full-depth permanent perpetual asphalt pavements.

Although the design parameters for the Permanent and Perpetual designs are different, the overriding theme is that both work. Iowa asphalt contractors have been building long-lasting, full-depth asphalt pavements for at least 82 years. The long-held belief that PCC pavements last longer, with less maintenance, has been proven false with IDOT records. It's time to let go of the fallacies and adopt the realities. Asphalt is just as durable as PCC but it's faster to construct, smoother to drive on, and, if built perpetually, will never need to be reconstructed.



**CHART 1** 



#### CHART 2

\*Reflects all contract maintenance costs within the right of way

Information from IDOT Pavement Management System (PMS)

# **APAI Welcomes New Members**

PAI continues to add new members. At the first full Board Meeting of 2012, the Board of Directors elected one Contractor/Pavement Recycler Member and one Associate Member to the Association. Thank you to those who have helped recruit these new members.



Ballou Pavement Solutions Inc. is a merger of Ballou Construction Co., Inc. and Hall Brothers Resurfacing and Recycling Company (formerly Brown and Brown Construction) in 2009, both founded and located in Salina, KS. Both Ballou Construction and Brown & Brown Construction Co. were founded in the 1950s. Ballou Construction was primarily engaged in the micro-surfacing process,

while Brown & Brown Construction was engaged in cold in-place recycling, base stabilization and central plant work. Brown & Brown Construction was one of the leaders in developing the cold in-place recycling "trains" that provided a superior preservation tool for the pavement.

With the merger of these two companies, Ballou Pavement Solutions has become a diversified road construction company expanding services and addressing customers' pavement preservation needs. Ballou is continuing the past tradition of leading within the industry and remaining active in the associations that represent and promote pavement preservation. They work in all states from the Mississippi River west to the Rockies and from Texas to North Dakota.



Clarence Richard Company is APAI's newest Associate Member. Clarence Richard has built a multi-faceted business that offers online education for asphalt plant operators, safety directors, QC/QA techs and more through actual courses and quizzes you can take anytime, anywhere. In addition to on-site consulting, the business also manufactures and installs continuous weigh scales that solve QC issues at the plant. Watch the June/July issue of AsphaltPro Magazine to see how Clarence Richard Co. solved an industrywide RAS-handling problem for our own Henningsen Construction.

Please welcome these new members and show your support for them, by contacting them and utilizing their services. To find contact information for these members, go to <a href="https://www.apai.net/members.aspx">www.apai.net/members.aspx</a>.

# **2012 Golf Outings Coming Soon**

he first of this year's APAI Golf Outings will be held at Amana Colonies Golf Course in Amana, IA (451 27th Avanue) on Treader Ive



Avenue) on Tuesday, June 26.



The second open outing of the year will be held once again at the Carroll Country Club (20069 Olympic Avenue, Carroll) on

Wednesday, August 29.

Registration will begin at 8:00 a.m. with a 10:00 a.m. shotgun start for the 4-Man Best-Ball Tournament. Pre-registration for your four-person teams is now open. The cost per person golfing is \$75. This cost includes golf, cart, practice balls, and lunch. All are welcome to join us in these events.

There will be contests to test your skill as we will once again have our Difficult Putt for Scholarship 50/50 competition, as well as the skill events out on the course. And if you feel that you need an extra edge, Scholarship Mulligans may also be available.

You are encouraged to sign-up early as spaces will be limited to 36 teams at each venue. You may access the registration page by clicking here.







# **APAI Awards Scholarships for 2012-2013**

cholarship recipients for the 2012 - 2013 Academic Year were selected by the APAI Scholarship selection team from qualified applicants at the three Iowa Regent Universities and the Des Moines Area Community College. Scholarships totaling \$16,950 were given to nineteen students. 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

BRANDON HORBACH, TOLEDO, IA MICAH MAKAIWI, PEYTON, CO GAVIN WALHOVD, ADAIR, IA

Fred Carlson Company Scholarship

TYLER MUHLBAUER, MANNING, IL DAVID PHILLIPS, PROLE, IA

Robert & Sheri Horner Scholarship Undergraduate Scholarship

KEN COLLIS, OSCO, IL PAUL SAUTER, MELBOURNE, IA

**Tom Manatt Memorial Scholarship** NICHOLAS CLOBES, HUTCHINSON, MN

Harold & Mercedes Cessford Memorial Scholarship

JACOB WEISS, JEFFERSON, IA

#### **UNIVERSITY OF IOWA SCHOLARSHIPS & RECIPIENTS:**

Tom Henningsen Memorial Scholarship

TYLER BEDUHN, SUN PRAIRIE, WI BRYAN DOSCH, NAPERVILLE, IL

Asphalt Paving Association of Iowa Scholarship

TAHA AHMED, ASSIUT, EGYPT RYAN POSLUSZNY, ROUND ROCK, TX

University of Northern Iowa Scholarship Recipients:

Asphalt Paving Association of Iowa Scholarship

TAYLOR CALHOUN, COLO, IA MICHAEL MARTIN, HARTFORD, IA

JOSH PATIENCE, EARLHAM, IA

DES MOINES AREA COMMUNITY COLLEGE SCHOLARSHIP RECIPIENTS:

Asphalt Paving Association of Iowa Scholarship

AARON COLLINS, DES MOINES, IA BEN CRAWFORD, PERRY, IA

ANDREW REYNOLDS, CEDAR RAPIDS, IA

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

(Innovation Propels 2012 Greater Iowa Asphalt Conference to Record Attendance – cont. from page 4)

the very latest in ongoing asphalt research in Iowa. The final session "The Most Interesting Projects in Iowa," was just



Conference
Awards Lunches

that, four county and city engineers and their contractors highlighted the use of innovative asphalt construction techniques to pave and rehabilitate their agencies' roadways.

The 2012 Greater Iowa Asphalt Conference was an unmitigated success. Special thanks to Keith Knapp and James Musal of LTAP, Minnie Coree of APAI and the members of the GIAC Committee.



# **APAI** Members

#### **CONTRACTOR MEMBERS**

Aspro, Inc., Waterloo Ballou Pavement Solutions, Inc., Salina, KS Blacktop Service Company, Humboldt Determann Asphalt Paving, L.L.C., Camanche

Duininck Inc., Prinsburg, MN
Fort Dodge Asphalt Company, Fort Dodge
Gee Asphalt Systems, Inc., Cedar Rapids
General Asphalt Construction Company,
Davenport

Grimes Asphalt & Paving Corp., Grimes Heartland Asphalt, Inc., Mason City Henningsen Construction, Inc., Atlantic Illowa Investment, Inc., Blue Grass Kluesner Construction, Inc., Farley Knife River Midwest, L.L.C., Sioux City Koss Construction Company, Topeka, KS Manatt's, Inc., Brooklyn

Mathy Construction Company, Onalaska, WI

River City Paving, Dubuque McCarthy Improvement Company, Davenport

MidState Reclamation, Inc., Lakeville, MN Norris Asphalt Paving Company, Ottumwa Oldcastle Materials Group

Cessford Construction Company, LeGrand

Des Moines Asphalt & Paving Company, Des Moines

Tri-State Paving, Inc., Estherville Pate Asphalt Systems, Marion

L. L. Pelling Company, Inc., North Liberty Shamrock Construction Company, L.L.C., Coralville

Shipley Contracting Corp., Burlington Western Engineering Company, Inc., Harlan

W.K. Construction Co., Middleton, WI

#### **SUPPLIER MEMBERS**

Bituminous Material & Supply Company, Inc., Des Moines Flint Hills Resources, Dubuque

Jebro, Inc., Sioux City

#### AGGREGATE SUPPLIER MEMBERS

BMC Aggregates, L.C., Elk Run Heights Concrete Materials Co., Sioux Falls, SD L. G. Everist, Inc., Sioux Falls, SD Great River Materials, L.L.C., Burlington
Hallett Materials, Des Moines
Kuhlman Construction Company, Colesburg
Martin Marietta Materials, Des Moines
Schildberg Construction Company, Greenfield
Wendling Quarries, DeWitt

#### ASSOCIATE MEMBERS

Accurate Test Systems, Inc., Richfield, MN
Accurate Test Systems, Inc., Richfield, MN
Advanced Drainage Systems, Stuart
Ahrold Fay Rosenberg, Inc., Des Moines
Akzo Nobel Surface Chemistry, Chicago, IL
Altorfer, Inc., Cedar Rapids
Antigo Construction, Inc., Antigo, WI
Asphalt Materials Technology, L.C., Ames
Astec Industries, Chattanooga, TN
Avello Bioenergy, Boone
Barnhill & Associates, West Des Moines
James W. Bell Company, Inc., Cedar Rapids
Bituminous Insurance Company, West Des
Moines

BOMAG Americas, Kewanee, IL
Bonnie's Barricades, Inc., Des Moines
Burroughs Consulting Group, Hiawatha
Central Service & Supply, Inc., Ankeny
Clarence Richard Company, Minnetonka, MN
Coleman-Moore Company, Des Moines
Construction & Aggregate Products, Des

Moines Construction Materials Testing, Des Moines Cryogenic Engineering, Cedar Rapids Custom Welding & Metal Fabricating, Inc., Waite Park, MN

Cylosoft, Inc., Ames
Dahl Trucking, Inc., Elmore, MN
Denco Highway Construction, Mingo
J.D. Donovan, Inc., Rockville, MN
Edwards Contracting Ltd., Hampton
Elite Flagging, Inc., Cedar Rapids
Flagger Pros USA, L.L.C., Ames
Gencor Industries, Inc., Orlando, FL
Glendandy Marketing & Advertising, Ames
Hawkeye Consulting Service, Inc., Cedar
Rapids

Heuss Printing, Inc., Ames Holmes Murphy & Associates, West Des Moines

Housby / VOCON, Des Moines Humboldt Manufacturing Company, Schiller Park, IL

Innoventor, St. Louis, MO

Iowa Parts, Inc., Cedar Rapids
Iowa Plains Signing, Slater
Jim Hawk Truck Trailers, Inc., Altoona
La Mair-Mulock-Condon Company, West Des
Moines
Logan Contractor Supply, Urbandale
Manhole Adjustable Riser Company, Oskaloosa

MeadWestvaco Corporation, North Charleston,

Merchants Bonding Company, Des Moines Modified Asphalt Solutions, Inc., West Des Moines

Ron Monson and Sons, Britt Murphy Tractor & Equipment Company, Inc., Wichita, KS

Quality Striping, Inc., Des Moines
Quality Traffic Control, Inc., Des Moines
Quick Supply Company, Des Moines
R2R Recycling, L.L.C., West Des Moines
Road Machinery & Supplies, Des Moines
Road Science, Juaniata, NE
RoadSafe Traffic Safety, Inc., Des Moines
Roadtec, Inc., Chattanooga, TN
Sakai America, Inc., Adairsville, GA
Save Our Sewers, Inc., Cedar Rapids
Star Equipment, Ltd., Des Moines
3M Company, Omaha, NE
Tarmac, Inc., Blue Springs, MO

Titan Machinery, Des Moines Unique Paving Materials, Cleveland, OH Valley Environmental Services, Newton Walker Construction Company, Emporia, KS Waste Commission of Scott County, Buffalo

Tennis Services of Iowa, Marion

Weiler, Knoxville

Terex Roadbuilding, Cedar Rapids

Wells Fargo Bank, Des Moines Whitfield & Eddy, P.L.C., West Des Moines Wirtgen America, Inc., Antioch, TN Wynne Transport Service, Inc., Omaha, NE XL Specialized Trailers, Inc., Manchester Ziegler, Inc., Des Moines

#### **CONSULTING ENGINEERS**

Anderson-Bogert Engineers & Surveyors, Inc., Cedar Rapids Foth Infrastructure & Environmental,

LLC, Lake Elmo, MN
Fox Engineering Associates, Ames

Debra S. Haugen, LLC, Minneapolis, MN Terracon, Cedar Rapids