



HOT-MIX ASPHALT



Having Trouble Getting Your Asphalt Plant Accepted by the Community? *Maybe it ought to be a Diamond.*

All around the country, opposition to the siting and permitting of all types of industrial facilities has grown. The hot mix asphalt industry has not been immune. As you well know, activists tend to point to the worst examples of hot mix plants when making their case against expansion of an existing facility or a proposed new plant. Now a new process has been devised by the National Asphalt Pavement Association (NAPA) to improve the industry's image by recognizing

serve as a signal to neighbors that an HMA facility is a good neighbor. It begins with a self-assessment of a plant/site, which addresses six aspects: appearance, operations, environmental facilities, safety, permitting and compliance, and community relations. A minimum score in each category plus a minimum overall score is required to qualify for the award.

If every asphalt plant in Ohio qualified for the Diamond Achievement Award, we wouldn't have

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production facilities that operate in an exemplary manner. The process, which is voluntary, is open to all in the industry whether they are NAPA members or not.

For those who qualify, it results in a Diamond Achievement Commendation for Excellence in Hot Mix Asphalt Plant/Site Operations. Earning the Diamond Achievement Commendation will

half the problems we do with permitting and siting. It may be a long journey to that goal, but the longest journey begins with the first step. That first step is your facility.

For information on how to obtain a Diamond Achievement Commendation for Excellence, contact the FPI office or NAPA.

TAFT FILLS FINAL CABINET POST, NAMES NEW ODOT DIRECTOR



Gordon Proctor

Governor Bob Taft completed his cabinet selections with the appointment of Gordon Proctor to serve as director of the Ohio Department of Transportation. Proctor has served as interim director since January and served as ODOT chief of staff from 1996 to January, 1999.

"ODOT is one of the most challenging departments to run and Gordon understands this first-hand. He has a good knowledge of all areas of the department's operations and his background in planning gives him the long-term view needed to guide our transportation policy into the next century," said Taft. "He's an asset to our Administration and I'm pleased to welcome him to the team on a permanent basis."

As chief of staff, Proctor oversaw creation of the new objective project ranking system and the creation of the Transportation Review Advisory Council. He also worked with Ohio's congressional delegation last year to help secure the additional federal funds in the new highway authorization bill.

Proctor received his bachelor's of science degree in journalism from Ohio University and his master's degree in public administration from The Ohio State University. He has worked as a newspaper reporter and editor for the Rocky Mountain News and the Associated Press, as well as a Peace Corps volunteer. Proctor has worked for ODOT since 1991.

ODOT DELIVERS RECORD BREAKING CONSTRUCTION PROGRAM FOR 3RD YEAR IN A ROW

**\$1.3
Billion
For
Fiscal
2000**

For the fiscal year ending June 30, 1999, ODOT awarded a total of 918 projects totaling \$1.013 billion. This represents the third year in a row that ODOT's construction program has shown significant growth. In 1996, 798 projects totaling \$874 million were awarded. In 1997, 777 projects totaling \$929 million and in 1998, 807 projects totaling \$949.3 million were awarded. In addition to the 918 projects awarded by ODOT in fiscal 1999, an additional 56 projects worth \$140.1 million were awarded locally through the Department's Local Public Agency Process Program, bringing the grand total of projects awarded to 974 for \$1.153 billion. This program included: \$99 million to improve 1,232 centerline miles of two-lane highways, \$141 million to improve 240 centerline miles of four-lane highways, \$98 million to improve 183 centerline miles of interstate highways, and \$230 million in major/new capacity adding projects on 36 centerline miles of highway.

ODOT originally identified 811 projects to be delivered within fiscal year 1999. Of these, 582 were ODOT sponsored and 229 were local sponsored. ODOT delivered 523 of their planned projects, for a 90% delivery rate while locals delivered 108 of their planned projects for a 78.6% rate. This gives a combined delivery rate of 86.7%. All of these rates set new records! In addition to the projects delivered that were originally identified, 271 projects worth \$253.4 million were substituted or added to the original program to yield the above totals. ODOT is certainly to be congratulated on producing last year's construction program.

Plans are for fiscal year 2000, which starts July 1, 1999, to contain the largest construction program ever. \$1.3 billion worth of projects are to be awarded. ODOT Districts 3, 8 and 12 will each have over \$200 million worth of work with Districts 4, 5, 6 and 7 not far behind with about \$150 million each. The major emphasis will be on pavements, with approximately 1/3 of the program for resurfacing interstate, 4-lane and 2-lane pavements, and 1/3 for major/new and multi-lane reconstruction.

The Ohio Department of Transportation Rolls Out 5-Year and 7-Year Warranty Specifications for Hot Mix Asphalt Pavements

HMA Warranty Specs First Out Of ODOT

ODOT's assembly line for rolling out warranty specifications is in high gear. In response to a mandate from the Ohio General Assembly, specifications are feverishly being developed for everything from paving to painting. And the man pulling the lever stamping out all these specifications is Dave Powers, the head of ODOT's Asphalt Materials Section. Jokingly referred to as the "warranty czar" by his colleagues within the DOT, Dave has formed a series of subgroups to work with representatives of each of the various industries to develop their respective warranty specifications. To no one's surprise, the first warranty specification to roll off the line was the asphalt specification. The existing 5-year specification has been restyled, given more horsepower and is now also available in a new 7-year model.

The 7-year warranty specification is to be used on new construction, removal and replacement projects and rubbilization type projects. These projects will have a 20-year design life. The warranty covers rutting, cracking, disintegration and flushing. In general, it allows the contractor to determine the materials and construction methods used, however there are some minimum requirements that have to be met.

First is the requirement that polymer modified asphalt cements have to be used in the top three inches of the pavement. Second is virgin aggregates, which have to meet minimum quality requirements as specified in ODOT's Construction and Materials Specifications. Third is a limitation on the amount of RAP (reclaimed asphalt pavement) used to 10% in the surface, 30% in the intermediate and 50% in the base course. Since base courses are designed to last well beyond the warranty period, many of ODOT's existing specifications for bases

apply to new pavements with warranties.

The 5-year warranty is to be used on rehabilitation and reconstruction type projects with a 12-year design life. Examples would be saw and seal projects and joint repair with thick overlay projects. The warranted items are rutting, flushing, and disintegration. Like the 7-year warranty, there are minimum requirements for polymer modified binders, quality of virgin aggregates and amounts of RAP. There are no requirements for base courses because these pavements have a 12-year design life and will not have thick bases.

Both the 5-year and 7-year warranties make provisions for using a mutually agreed upon arbitrator to settle disputes between ODOT and a contractor over the applicability of the warranty.

In the design stage now is the surface warranty, which must be in all the showrooms for the 2001 model year. This may be a scaled down version of the 5-year warranty or be a complete redesign and take the form of a short term unconditional guarantee. In either case, it will be applied to overlay or inlay type projects (i.e., mill-n-fill).

Also off the assembly line in June was the polymer modified chip seal warranty specification. Warranty specifications for micro surfacing and concrete are due out in July with others to follow shortly.

FPI will be holding a school in August (see Educational Opportunity on page 6) to explain all the warranty specifications developed to date, however, major emphasis and detail will be on the asphalt warranty specifications. This will be the best place to get detailed information and copies of the specifications. Be sure to mark your calendar and sign up now, as space will be limited.

**Joint
Event
with
NAPA and
NSA
Planned**

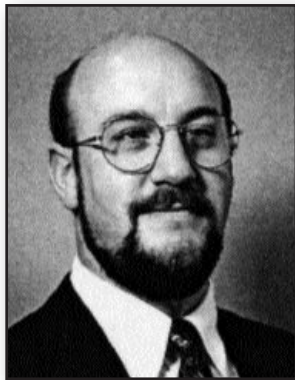
FPI Legislative Fly-in to Washington, DC Scheduled for September 15th

FPI's Annual Legislative Fly-in to Washington is planned for September 15th. This year, as in the past, the event is being scheduled to be part of the nationwide fly-in organized by the National Asphalt Pavement Association (NAPA). This year's event is also being combined with the fly-in sponsored by the National Stone Association (NSA). Since all the organizations have an agenda with many common items, combining them will make a bigger event and have more impact.

In previous years, this event has been extremely successful. We have been able to contact all of our 21 congresspersons by having 4 or 5 two-man teams line up visits with 4 or 5 members of Congress. This has been coordinated through FPI who will shortly be sending out information concerning detailed arrangements for this year's event. Everyone who has ever gone, although somewhat reluctant to volunteer at first, has said what a great experience it is, that it is really worthwhile and accomplishes a great deal. Having each state do this at the same time really makes an impact on Capitol Hill.

Please respond by saying "yes" when asked to be part of the fly-in. After all, the future of your business depends on it.

New Director Named To Head Ohio EPA



Christopher Jones

Governor Bob Taft has appointed Christopher Jones Director of Ohio EPA. In that capacity, he is responsible for the protection of Ohio's air, land and water resources.

Prior to being appointed Director of Ohio EPA, Jones was the Chief of the Environmental Enforcement Section at the Ohio Attorney General's Office for four years. He has been responsible for the management and implementation of the environmental enforcement program representing Ohio EPA, the Ohio Department of Natural Resources and the Bureau of Underground Storage Tank Regulations in federal, state and administrative enforcement proceedings. Prior to joining the Attorney General's Office, he was in private practice focusing on environmental regulation and litigation.

He served as Legislative Director under Congressman Michael DeWine for four years where he was responsible for oversight of the legislative staff. Director Jones also served under State Senator Michael DeWine for two years where he assisted in the development of Ohio's drunk driving law.

Jones is a graduate of Ohio Wesleyan University and the Georgetown University Law Center. He currently co-chairs the environmental law committee of the Columbus Bar Association.

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Model 6000 is the only compact roller with a clear view of the road. The Model 6000's 22" view of the road is clear of the roller's frame, wheels and drive shafts.

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EDUCATIONAL OPPORTUNITY

OCAPE (Ohio Center for Asphalt Pavement Education) presents:

WARRANTY SPECIFICATIONS

A half-day educational opportunity to learn about the legislation requiring the use of warranties and the specifications developed by the Ohio Department of Transportation to meet that legislation.

ODOT will be requiring warranties on everything from asphalt to guardrail to highway lighting. This school will focus primarily on the warranties developed by ODOT for use in asphalt paving. These include a 5 and 7 year warranty, and a surface warranty. An overview of all warranty specifications will also be provided as well as copies of all warranty specifications developed to date.

When: The school has been scheduled for Tuesday, September 21st beginning at 8:30 AM. Registration and a Continental Breakfast will be provided beginning at 8:00 AM.

Where: The location of the school is the Holiday Inn - Columbus West, 2350 Westbelt Drive (I-270 & Roberts Road), Columbus, 614/771-8999.

Cost: FPI Members and Government Agencies \$45.00 / All others \$65.00.

✂-----

REGISTRATION FORM

WARRANTY SPECIFICATIONS

Tuesday, September 21, 1999

Please print the full name of each seminar registrant on this form.

	First Name	Initial	Last Name
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2.	_____	_____	_____
3.	_____	_____	_____
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Positive Experience with Rubblization of Rigid Pavement

by Alan Rommel, Wisconsin DOT South Project Team 3 Leader

This past year, we in the Waukesha district of the Wisconsin DOT had a real positive experience with rubblization of a severely distressed concrete pavement on the USH 12 project. The project turned out to be successful in terms of cost to deliver, time to design and construct and overall quality of the constructed project. We were also able to minimize delays to the heavy amount of tourist traffic that uses this route. The key to the success of the project was a design team effort by DOT that included input from contractors, maintenance personnel, and other DOT offices.

The project had its beginning in 1997 when our staff managed the rehabilitation of a small section of one of the worst pieces of USH 12 that consisted of a half mile of crack and seat with HMA overlay. The biggest concern with the project was knowing where to stop. The county had been doing concrete joint repairs for the last several years and seemed to be fighting a losing battle. Both longitudinal and transverse joints showed severe deterioration all the way from the Illinois State Line to Lake Geneva, an 8.6 mile stretch of 4 lane divided highway. Along with the breakup of the joints there was a "shattering" of the surface that was taking place indicating that much of the reinforcing mesh in the concrete was too near the surface of the pavement. This shattering was not only causing problems but was creating safety concerns as chunks of concrete were becoming dislodged from the pavement.

The cross section of the existing road consisted of 9 inches of mesh reinforced concrete pavement with 60 foot joint spacing over the top of 6 inches of crushed stone aggregate over a 6 inch granular subbase course. The pavement, constructed in 1965, had an average daily traffic (ADT) in 1997 of 6800 vehicles. Due to the low traffic volume and competition with other projects for funding, this project was planned and stopped on several occasions. Maintenance had been increasing over the last several years and consisted primarily of concrete joint repair.

We went into this project planning to do crack and seating and to overlay the deteriorated pavement. As cracking and seating on the subsequent resurfacing project proceeded, we discovered some problems. The combination of temperatures associated with paving and some hot weather reacted with the pavement and caused some of the joints to tent up shortly after laying the first layer of HMA. At that time we discussed this with our contractor, B. R. Amon, and decided to do some asphalt base patching to remedy the situation. That worked, and we were able to finish out this job with no more problems. However, after some discussion among some of our DOT staff, we concluded that the mesh in the pavement was contributing to pavement stress and we needed to somehow eliminate this residual stress. If we could only come up with a method of totally disintegrating the pavement — RUBBLIZING!!!!

We had heard about rubblizing, but we were not entirely convinced it was the solution. We needed to find out more about this technique and whether it was a suitable application. At this point we hit the Internet, talked with several contractors, the Wisconsin Asphalt Pavement Association and other DOT offices. We were very fortunate to find a lot of good information and folks willing to meet and discuss what they knew about rubblizing. The more we looked, the more optimistic we became. We talked with George Meyer from DOT, District 1, Madison and he explained their experiences and what he thought were some keys to making it work, especially the importance of having a good subgrade.

About this time, we put the job on the fast track. It was November, 1997 and we found there was an opening in our construction funding program for May of 1998. If we could get this 8.6 mile stretch of road designed by March of 1998, 4 months, we could take care of our pavement problems on USH 12. Next the design team was formed consisting of Bob Wazniak, Project Manager, and Terry Sossaman, Design Leader, who would also lead the construction of the project.

Positive Experience , *continued from page 7*

The design team went to work immediately, and the first order of business was to put together a constructable plan that would minimize delay to the traveling public. At this point we obtained help from Gerald Waelti, WAPA, who facilitated putting together meetings where we could discuss issues like traffic control, production rates and the constructability of preliminary plan concepts. We received input from Payne and Dolan, B. R. Amon & Sons and Antigo Construction who offered their opinions on key concepts of milling, and rubblizing that we had no experience in.

When it was all complete, we put together a plan involving underdrain, rubblization and an asphalt overlay that would address the pavement concerns on the US 12 roadway. The project was let on time and at a cost of \$7.5 million. During construction, the road was open to 4 lanes on weekends minimizing delays to tourist traffic. The prime contractor, B. R. Amon & Sons, started construction in July of 1998 and the entire 8.6 mile roadway was open on surface in September of 1998, three

months later. Antigo Construction performed the rubblizing with a multi head breaker and put in extra efforts to keep the job on schedule. Profilograph specs were used on this job and a ride quality index of 2" per mile was obtained by Amon. To date there has been no reflective cracking and the new 5.5" surface is performing well. The job came in at one percent for design engineering costs and enabled the DOT and the Waukesha District to meet the increased transportation program at a reduced cost. We feel that the rubblizing technology enabled us to achieve a superior rehabilitation job in the most cost and time effective manner. The rest of the project success is attributable to a cooperative team effort that allowed this job to be designed and constructed in a very short time frame with minimum road use cost, maximizing the benefit to the taxpayers and drivers in Wisconsin.

Editor's note: The above article was reprinted from the March 1999 Newsletter of the Wisconsin Asphalt Paving Association, Inc. (WAPA)

Willis Gibboney Recipient of the 1999 William W. "Bill" Baker Award



Willis Gibboney, better known as "Gib" to most of us, was awarded the 1999 Bill Baker Award at the Annual Meeting and Equipment Exhibition on March 24 & 25. Gib is the sixth person to receive the award, which is the Association's highest honor.

Gib spent most of his career with the Ohio Department of Transportation. For much of that time he was the Bituminous Pavements Engineer in the Bureau of Construction and later ODOT's Interstate Pavements Engineer in the Bureau of Maintenance. Upon his retirement from ODOT, Gib did consulting work for the asphalt industry. He was the author of FPI's Asphalt Pavement Design and Construction Manual, which was first published in 1985. Gib has just finished an update of that manual to include newer specifications and mixes such as Superpave. (See Second Edition of FPI Asphalt Pavement Design and Construction Guide Marks Its Debut on page 23.)

Baker Award , *continued on page 19*

Second Time the Charm for Youngstown State University In FPI's Asphalt Mixture Competition



YSU Winners

Youngstown State University drove away with first place in the third annual FPI Asphalt Mixture Performance Competition. Last year's YSU team took second place and vowed they would be back this year to take home the first place trophy. And that is just exactly what they did! Using last year as a learning experience, Frank Obhof, Nathan Stanislaw and Josh Boone came up with the best performing mix, as determined by the Georgia loaded wheel tester. Combining this with their score from written and oral presentations, nailed down first place for YSU entitling them to individual and school plaques. They were also the guests of FPI during the Annual Meeting & Equipment Exhibition.

Second place went to Ohio Northern University and Ohio University finished in third place.

The competition has been well received by Ohio's academic community as it provides a real hands on learning experience for the students. Researching information on various additives and then experimenting with these, along with various aggregate gradations and mix designs, makes a lasting impression on the participants. The knowledge learned from the competition and the HMA courses now being taught in many of Ohio's engineering schools has helped several students land jobs in the HMA industry.

Next year's competition will involve a national championship. The Wisconsin Asphalt Pavement Association has also started a similar competition and Ohio's winner will face off against them in the year 2000 competition. Other states such as West Virginia and Florida are also looking at starting competitions.

Correction to March 15th Issue of *Current News*

In an article in our last newsletter listing Ohio contractors who had won NAPA Quality in Construction Awards, we inadvertently left out one.

S.E. Johnson Companies, Inc. provided a five-year warranty on the Superpave pavement it designed to resurface four-lane US Route 30 in Van Wert County, Ohio. More than 190,000 tons of HMA were required for the 7-mile project: a 6" base, 2-5/8" 19-mm binder, and 1-3/8" 12.5-mm surface course using a PG 70-22 polypave.

All courses were paved with a grade reference system consisting of a double beam aluminum bridge, a 30' ski front and a 30' wheel beam on the back of paver. A joint compactor was attached to the paver to ensure density in longitudinal joints.

We apologize for the oversight.

Competitors Join Forces to Smooth Road for Boy Scouts of America

An event more rare than a snowstorm in the summertime recently occurred at the Woodland Trails Scout Reservation just north of Camden, Ohio.

Three major southwestern Ohio asphalt paving contractors set aside fierce competition and joined forces to support the Miami Valley Council of the Boy Scouts of America.

Barrett Paving Materials, Inc., John R. Jurgensen Company, and L.P. Cavett Company worked together to resurface approximately 3,400 lineal feet of roadway at the Scout camp. Woodland Trails is the primary camping area for Scouts in Darke, Miami, Montgomery, Preble and Shelby counties, but also serves Scouts in the neighboring states of Indiana and Kentucky. Over 8,000 people utilize this facility each year.

It all started with a letter to Barrett in May 1998 from David Troutman, development director with Boy Scouts of America, requesting Barrett's assistance with repaving the deteriorated entry road at the camp. Barrett wanted to share the spotlight and prestige (along with the cost) with others in the industry; Cavett and Jurgensen readily agreed to participate, and a pact was made.

Even though all parties were willing, it still took over a year to bring the dream of Scout administrators Jack Norman and David Troutman to reality.

On June 10th, the roadway was swept and prepared for paving and on June 11th, at 7 a.m., the asphalt trucks began rolling. A short 11 hours later, the roadway was blanketed with two inches of new asphalt concrete. The 802 tons of asphalt were placed in two lifts, a leveling course followed by a surface course.

The cost of the approximately \$33,000 project was borne evenly by the three contractors with no cost to the Scouts. Paving was completed just a week before the first groups of boys arrived for summer camp.

Why did three contractors band together and spend the money? They believe it is important to the success of the industry as a whole to be known for more than just orange barrels and traffic delays. They also believe in giving something back to the communities, in which they live and work.

If you missed seeing Jurgensen trucks dumping Cavett asphalt into a Barrett paver...well, you can always wait for the next summer snowstorm.



"Pulling together" for the benefit of the Boy Scouts of America are Barrett Paving Materials, Inc., John R. Jurgensen Company, and the L.P. Cavett Company. Woodland Trails, primary camping area for Scouts in Darke, Miami, Montgomery, Preble and Shelby Counties receives a free paving job.



3,400 lineal feet of roadway were paved as part of the cooperative effort between Barrett, Jurgensen and Cavett Companies.

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1999 HOT MIX ASPHALT SCHOLARSHIPS



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The Ohio State University

The Shelly Company



Michael Thomas Likavec
The Ohio State University

Erie Blacktop, Inc.



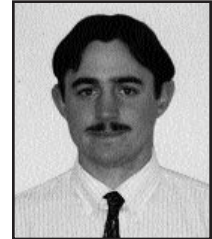
Michael Frederick Obert
The Ohio State University

Erie Blacktop, Inc.



Santi Sopraseuth
The Ohio State University

Barrett Paving Materials, Inc.



Ronald Scott Lech
University of Cincinnati

S.E. Johnson Companies, Inc.



Anthony DeLong Neff
The Ohio State University

Flexible Pavements, Inc.



Jarrod Austin Holtzapfle
Ohio Northern University

Burgett Family/Kokosing Construction Co., Inc.



Susan Louise Liston
Ohio Northern University

Flexible Pavements, Inc.



William Earl Ruggles
Youngstown State University

Gerken Paving, Inc.



Nicholas W. Young
Bowling Green State University

Martin Marietta Aggregates



Gregory Russell Hirt
Bowling Green State University

John R. Jurgensen Co./Valley Asphalt



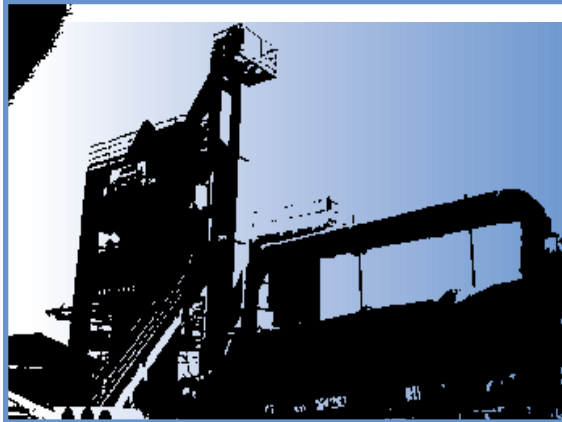
Alan Pierce Moran
Ohio University

The Ohio CAT Dealers, Holt Company of Ohio, Ohio Machinery Co. and Caterpillar, Inc.



Joshua Earl Kipp Boone
Youngstown State University

Member Spotlight



Apache Aggregate's hot mix asphalt plant near Coshocton.

A stone's throw from historic Roscoe Village where visitors are transported to the days of the horse and buggy lies a company, which earns its livelihood paving roads for the horseless carriage. Apache Aggregate and Paving Co. is nestled in the quiet community of Coshocton, Ohio, and prides itself on being a "small localized operation," according to Matt Ross, grandson of Apache's founder.

Apache Aggregate was founded in 1981 when Ed Ross purchased the existing W.P. McCarren Co. with his brother and business partner. At the time, Ed and his brother were already in the construction business, having started the Ross Bros. Trucking Co. and the now defunct Valley Concrete Co. When his brother died, Ed purchased his shares and now serves as Vice President of Apache. Ed's wife Charlene Ross is President of the company, while Bruce St. Clair acts as Secretary and Treasurer. Matt, who over the years "has done just about everything in the company" recently assumed the duties of bookkeeper. Job foreman Bob Wright and Kris Kohnman, plant foreman, supervise the 20 to 30 employees who work during the peak season.

Apache consists of an asphalt plant, a concrete plant, and two sand and gravel pits, all located in the Coshocton area. Together they accounted for about \$5 million in sales last year, with the plants producing about 85,000 tons of asphalt and about 15,000 yards of concrete. In addition, 10,000 tons of sand and gravel were produced in 1998. Apache does most of its paving work in Coshocton and Muskingum Counties, but has also sent crews to neighboring Tuscarawas, Knox, and Licking Counties, and occasionally to Columbus, to lay asphalt.

The company does one large state job a year and about three to four county jobs, according to Matt. The bulk of their work consists of parking lots, industrial driveways, tennis courts, railroad crossings, and what "seems like hundreds and hundreds of residential driveways." The company has also paved runways at the Coshocton airport as well as the streets in nearby Roscoe Village. Last year the company paved an eight-mile stretch of St. Rt. 662, using about 20,000 tons of asphalt on the \$85,000 project. Another large project completed in 1998 was an industrial park in Zanesville, a project Matt said was challenging because of the inclement weather.

Matt says the company strives to keep its customers happy and aims at being viewed as "customer friendly." Apache relies more on word of mouth than media advertising to attract new customers and recognizes the importance of being community friendly. When it comes to community involvement, the company doesn't "pick one person or team" to sponsor, preferring to support a variety of activities, such as donating sand for high school track and field events and topsoil for Little League ballfields.

The Ross involvement in Apache Aggregate skipped a generation from Ed to grandson Matt,

Continued on page 22

THE 1999 ANNUAL MEETING



ANNOUNCING THE RECIPIENTS OF OHIO'S QUALITY PAVING AWARDS!

"Over 94% of our Country's paved roads are paved with HMA. This fact shows that Hot Mix Asphalt has become America's 'Pavement of Choice.' Economy, durability and plain 'ol' good value are the reasons why specifiers choose HMA for their paving jobs."

"In Ohio we have enjoyed healthy markets for our product. Thanks to the diligent efforts of those paving companies whom, by their commitment to building high quality pavements, and the efforts of FPI, the future demand for our product looks bright. Our continued striving to raise the quality level of HMA will ensure that future demand will come to fruition."

"We salute those companies who have lifted high the quality standard, winning awards for superior workmanship and riding quality."

With these words from Jim Tharp, Chairman of the FPI Board of Directors, the Awards Ceremony of the 37th Annual Meeting & Equipment Exhibition was kicked off. Awards were presented by the Ohio Department of Transportation (ODOT) and Flexible Pavements, Inc. (FPI). Fourteen awards were presented for work ranging from roadways to runways to bikeways. FPI's prestigious Ecological Award was also presented.

Ohio Department of Transportation Awards were presented for three categories of pavement construction. These were: Rehabilitation with Multiple Course Overlay, Major Reconstruction Using Asphalt Concrete, and New Full Depth Asphalt Pavement.

Winning the award for the Rehabilitation with Multiple Course Overlay Category was the Kokosing Construction Company of Fredericktown, Ohio. The Award was presented for the rehabilitation of Interstate Route 70 in Guernsey and Muskingum Counties. The project number was 93(1998) and required the use of Superpave asphalt mix design technology. Receiving honorable mention for this award category was Shelly & Sands, Inc. for work performed on IR 77 in Noble County.

Rehabilitation with Multiple Course Overlay Category-Winning Contractor: Kokosing Construction Co.-Pictured

(left to right) are: Doug George and Steve Smith of ODOT District 5, Dave McGomery, Wayne Brassell, Jim Woltz and Russ Krock of Kokosing.



S. E. Johnson Companies, Fort Wayne Division, laid hold of ODOT's award for Major Reconstruction Using Asphalt Concrete. This award was given for the major reconstruction of U. S. Route 30 in Van Wert County. The project, number 15(1998), was also a warranty job. As part of the project requirements the contractor, S. E. Johnson Companies, had to provide a 5 year warranty against defects which might occur in the pavement surface. This project also received an award from the National Asphalt Pavement Association for its high quality construction. Receiving Honorable Mention for this award category was Kokosing Construction Co. for the paving of U. S. Route 36 in Coshocton County.

Major Reconstruction Using Asphalt Concrete Category-Winning Contractor: S. E. Johnson Companies, Ft. Wayne Division.

Pictured are (left to right): Mic Dwyer and Dick Sprinkel of S. E. Johnson Cos., Bruce Merry and Norman Redick, Deputy Director for ODOT District 1, Terry Muhlenkamp, Larry Houchins, Neal Orsbon, and Denny Kreisler of S. E. Johnson Companies.



U. S. Route 35 in Fayette and Ross Counties, ODOT District 9, was the winning pavement for the New Full Depth Asphalt Pavement Award Category. The contractor responsible for obtaining this superior workmanship was the Kokosing Construction Company, Fredericktown, Ohio. The project requirements included the use of ODOT's Smoothness Specification. This specification has consistently resulted in improved ride quality. Honorable Mention went to S. E. Johnson Companies, Elyria Division, for the construction of U. S. Route 36 in Coshocton County.

New Full Depth Asphalt Pavement Category-Winning contractor: Kokosing Construction Co.

Pictured are (left to right): Victor Picciano and Robert Blaschak of ODOT District 9, Dave McGomery, Ken Lee and Wayne Brassell of Kokosing Construction Co.



Awards presented by Flexible Pavements, Inc. were for paving work performed on roadways, commercial parking facilities, airport runways and various special use pavements. The Local Road or Street Category had three winners. Awards were presented for new pavement construction, minor and major rehabilitations. Winning the award for minor rehabilitation was Erie Blacktop, Inc. for the paving of Milan Road and Camp Streets in the City of Sandusky. The award for major rehabilitation was won by the L. P. Cavett Company. The project called for the

rehabilitation of Cincinnati-Dayton Road, from SR 63 to Oxford State Road, Butler County, ODOT District 8. The final award in the Local Road or Street Category was presented to Barrett Paving Materials, Midwest South Region. This award was for the newly constructed Irwin Simpson Road Extension, located from Mason Montgomery Road to existing Irwin Simpson.

Local Road or Street, Minor Rehabilitation Category-Winning contractor:

Erie Blacktop, Inc.
Pictured are (left to right): Michael Lutes and Dean Wikel, President, Erie Blacktop, Earl Wilkinson of the City of Sandusky, and Mario Barone, Erie Blacktop, Inc.



Local Road or Street, Major Rehabilitation Category- Winning contractor: L. P. Cavett Company.

Pictured are (left to right): Dave Mollenkamp of L. P. Cavett, Steve Wood of ODOT District 8, Dean Foster, Butler County Engineer, and Jim Rodgers of the Butler County Engineer's Office.



Local Road or Street, New Construction Category-Winning contractor: Barrett Paving Materials,

Midwest South Region.
Pictured are (left to right): Steve Jodrey, Mark Barnes and Mike Thompson, Barrett Paving Materials, Neil Tunison, Warren County Engineer, Ron Campbell and Wayne Breitenstein also of Barrett Paving Materials.



Awards for work performed on commercial parking facilities were also presented. These awards were for the newly constructed facility at the General Motors Truck Group, Moraine Assembly Plant, and the rehabilitated facility at the R & L Transfer, Norwalk Truck Terminal. The General Motors facility was GM's Product Overflow Parking Lot. It was constructed by Barrett Paving Materials, Midwest Central Region. The R & L Transfer project was constructed by Erie Blacktop, Inc. The scope of that work involved an expansion and modernization of the Norwalk, Ohio, transfer facility.

Numerous awards were presented this year for "Special Use Pavements." The John R. Jurgensen Company picked up an award for building the Ohio to Erie Biketrail from Xenia to Cedarville in Greene County. A 400 meter all-weather running track constructed by Erie Blacktop, Inc. for the Lakota High School in Kansas, Ohio also received an award for excellent workmanship. The last project winning an award for Special Use Pavement was the City of Columbus' intersection of Roberts and Walcutt Roads. This project, built by the Decker Construction Company, utilized paving mixtures designed to resist the high stresses encountered at traffic intersections.

**Commercial Parking Facility, New Construction
Category-Winning contractor: Barrett Paving
Materials, Midwest
Central Region.**

Pictured from Barrett are (left to right): Jerry Bushelman, Don Rosenbarger, Ken Wilson, Doug Thompson, Jeff Miller, and Jeff Sebring.



**Special Use Pavement
Category-Winning contractor: John R. Jurgensen Co.**

Pictured are (left to right): Jim Schneider of Greene County Parks, and Jim Jurgensen, Jr., John R. Jurgensen Company.



**Commercial Parking Facility, Rehabilitation
Category-Winning contractor: Erie Blacktop,
Inc.**

Pictured are (left to right): Rod Downing and Chris Schaeffer of Erie Blacktop, Greg Sands of R & L Transfer, and Larry McGee, Erie Blacktop, Inc.



**Special Use Pavement
Category-Winning
Contractor: Erie Blacktop,
Inc.**

Pictured are (left to right): Chris Walters of Erie Blacktop Inc., and Tom Tucker, Lakota High School



**Special Use Pavement
Category-Winning
contractor: Decker
Construction Company.**

Pictured are (left to right): Ron Allemang, City of Columbus, and Roger Apple of the Decker Construction Company



Awards , continued from page 17

The Airport Pavement Category saw two winning pavements this year. The first, constructed by Gerken Paving, Inc. for the Toledo Lucas County Port Authority, was Runway 7-25 located at the Toledo Express Airport. This project involved a widening of the runway and a subsequent multiple course HMA overlay. The second project was constructed by Erie Blacktop, Inc. for the Sandusky County Regional Airport Authority. Required was the construction of a new runway (runway 6-24) with Hot Mix Asphalt.

Shelly Materials Inc. mixing facility, Plant number 94, located in Reynoldsburg, Ohio, wins Ecological Award.



Airport Pavement, Rehabilitation Category- Winning contractor: Gerken Paving, Inc. Pictured are (left to right): Dan Pape of Crawford, Murphy & Tilly, Inc., and John Helberg of Gerken Paving, Inc.



The final award presented was the Flexible Pavements, Inc. Ecological Award. This prestigious award was presented to Shelly Materials Inc. for their mixing facility, Plant number 94, located in Reynoldsburg, Ohio. The award was presented for Shelly Materials' commitment to the quality of life of the local community and the practice of responsible environmental stewardship. Honorable mention was given to Erie Materials, Inc., Parkertown Asphalt Plant, located in Sandusky, Ohio.

Airport Pavement, New Construction Category- Winning contractor: Erie Blacktop, Inc. Pictured are (left to right): Larry McGee and Mario Barone of Erie Blacktop, Inc., John L. Fork, President, Sandusky County Airport Authority, Fred Bengel and Marc A. Skillman of R. W. Armstrong Associates



Baker Award , *continued from page 8*

One of Gib's most significant works was a comparison study on the actual life cycle cost of all of Ohio's flexible interstate pavements. The study, which used actual ODOT data, showed that in every case, the flexible sections had the lowest original construction cost and the lowest cost for maintenance over their life when compared to the adjacent rigid section. This study gained national attention and was written up in numerous construction industry trade magazines.

FPI extends its congratulations to Gib on receiving this honor.

Mark Your Calendar

Asphalt enthusiasts should mark their calendars for the Ohio Transportation Engineering Conference (OTEC). The annual mega-meeting for persons involved in the transportation industry is scheduled to take place November 16th and 17th. Several of the sessions will draw the interest of persons involved in the HMA industry. The Asphalt Session, Session 14, is scheduled for Tuesday, November 16th. Titled "Next Millennium HMA Focuses on Happy Customers" the session presents

the United Kingdom's Pavement Design for Longer Life, Rapid Rehabilitation of PCC Pavements, and the Do's and Don'ts for Nighttime Paving. Topics contractors as well as specifiers will find interesting. Also in the line-up is Design/Build in Sessions 6 and 13, Work Zone Safety in Session 20, and a discussion of Warranty Implementation in Ohio in Session 21.

Mark your calendars for OTEC 99.

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For registration or exhibitor information, please contact
Michelle Von Ville at 614-292-4815 or von-ville.1@osu.edu

Paving Shifts into High Gear on Butler Regional Highway

In July of 1998 in this newsletter we reported the start of construction of the 92 million dollar Butler regional highway project. Now, one year later, paving of the mainline pavement with asphalt treated, free draining base (ATFDB) and 302 (big rock) base is continuing at a rapid pace by project prime contractor and FPI member, Kokosing Construction Company and subcontractor and FPI member, Valley Asphalt Corporation.

According to FPI associate member, Resource International's project engineer, Joe Cron, work is now approximately 72 percent complete and on schedule for completion by the end of 1999. Redesign for the addition of toll collection facilities is still under consideration as of June 11, 1999. Cron says that biweekly estimates have often been in the realm of 4 to 5 million dollars, with a total of 67 million dollars worth of construction completed in 13 months.

This phenomenal rate of construction continues to give rise to innovations for speeding and improving the quality of construction. On June 9, 1999, Kokosing's project paving superintendent, Dave Montgomery, launched the first use of Kokosing's specially modified 38' wide Roadtec paver. Kokosing's shop specially modified the RB 185-10R paver to place the full width of the mainline pavement in a single 38 foot wide pass without joints. The unit is using 3 mobile string lines to maintain grade, superelevation and cross slope. While the initial use revealed some bugs in the equipment modifications, Kokosing plans to continue their experimentation. If successful results are obtained, Kokosing plans to place the final base, intermediate and surface courses with the 38' wide paver. Otherwise, they will pave 28' wide with the one machine and the 10' wide shoulder with another.

As previously reported, the project incorporates a premium pavement design, with a high type subdrainage system (8 longitudinal runs of pipe underdrains under the ATFDB). The surface and intermediate courses will be designed and selected by the contractor to meet the requirements of the 5-year warranty specification.

We'll revisit the project this winter for the opening of the facility to traffic and to see the final results obtained in such a short time.



Butler Regional Highway construction is 72% complete in 13 months.



Kokosing experiments with paving full width of 38 feet with their modified paver.

Conference Notifications

Seventh Annual United States Hot Mix Asphalt Conference Sheraton World Resort, Orlando, Florida October 27-29, 1999

Co-sponsored by the National Asphalt Pavement Association, the State Asphalt Pavement Associations and the Asphalt Institute, this conference will focus on experience with innovative contracting, safety, construction for quality and building Superpave. The information is delivered in easy-to-understand terms in an interactive give-and-take atmosphere, all designed for practical workplace implementation. Registration fee is \$150; \$200 on-site.

Contact Flexible Pavements or NAPA at:

Phone – (888) 468-6499

Fax – (301) 731-4621

Online – www.hotmix.org

Early Lessons from the SHRP SPS-1 and SPS-2 Pavements Holiday Inn-Worthington, Columbus, Ohio November 2-3, 1999

50 years ago, a conference was held in Columbus, Ohio to initiate planning for an experimental test road to evaluate the effects of heavy trucks on highway pavements. This later became known as the American Association of State Highway Officials (AASHO) road test and is the basis for most pavement design done today.

As part of the Strategic Highway Research Program (SHRP), a Long Term Pavement Program (LTPP) was established which will monitor specific pavements in 21 states and collect data to eventually update design equations from the original AASHO road test. This conference will provide a sharing of information from these states that has been collected to date. The conference, which is sponsored by ODOT, FHWA and Ohio University, will also include optional tours of Ohio's SHRP test road on US 23 in Delaware County and OU's Accelerated Load Testing Facility in Lancaster. Registration fee is \$125 prior to October 1st; \$175 after October 1st.

Contact Flexible Pavements or Ohio University for registration information at:

Phone – (740) 593-2476

Fax – (740) 593-0625

Email – orite@bobcat.ent.ohiou.edu

Ohio Transportation Engineering Conference Greater Columbus Convention Center, Columbus, Ohio November 16-17, 1999

The theme of the 53rd Annual OTEC is "Moving into the Next Millennium." Twenty-seven separate sessions cover all aspects of transportation for asphalt pavements to intermodal freight planning. Sponsored by ODOT and The Ohio State University, this is Ohio's premiere transportation conference and is attended by 1,500 people. It also features an accompanying trade show.

Contact Flexible Pavements or The Ohio State University at:

Phone – (614) 292-4815

Fax – (614) 292-3780

Email – von-ville.1@osu.edu

Highway Appropriations and Aviation Funding Bills Moving Through Congress

Firewalls Still Intact

It appears the funding limits established in TEA-21 are still being honored by Congress' Appropriations Committees. The House overwhelmingly approved legislation providing \$27.7 billion for the core highway program. This is the same guarantee that was established by TEA-21 for fiscal year 2000.

On the Senate side, the Appropriations Bill has cleared the Senate Appropriations Committee and is awaiting action by the full Senate. The Senate version contains exactly the same amount as the House version. Hopefully the Senate will take action soon, rather than rolling it into an overall-spending bill some time this fall.

On the Aviation side, the House has approved the Aviation Investment and Reform Act for the 21st Century, better known as AIR-21. Copying TEA-21, it guarantees that all aviation tax revenue be used for aviation and takes the Trust Fund off budget. It also provides for doubling the amount spent on runways to \$4 billion annually.

The Senate version, which has cleared the Commerce Committee and awaits action by the full Senate, does not take the Aviation Trust Fund off budget, however. The existing airport improvement fund is set to expire on August 6th.

Member Spotlight , *continued from page 13*

who has worked for the company since "he was a kid" and full time for the last ten years. While Matt is the only one of his generation currently working at Apache, other members of the family are indirectly involved. Matt's father Jim, with his two brothers, now owns and operates Ross Bros. Trucking Co. Apache uses the Adam's Mill Co. to haul all of its limestone and most liquid asphalt and cement.

Since 1981, the company updated and computerized its asphalt plant and has expanded by adding a ready-mix concrete plant. While Apache has never done any concrete paving, the company has talked about expanding its concrete work. Matt says he "doubts the company would actually buy a concrete paver," but adds they are considering "putting together a concrete crew to do residential hand work." Buying another asphalt plant is another option for future growth that the owners are considering. "Moving a plant to the south and west," Matt says, "would allow the company to be more competitive and get our foot in the door in that area."

Matt describes the industry as "very competitive," noting, "it seems like a lot of larger companies are running smaller companies out of business. That's a constant, on-going battle, with them taking all the big jobs." But Apache prefers to focus on the fact that they are "a local company, serving local people. Even though our price may be a tad higher than the competition," Matt says, "everyone that works here, lives here and the money stays here. That's a big point that we always try to get across to people."

And so while tourists wander through the basket shop, craftsman's house, and bakery of a quaint village of the early 1800's, few, if any, realize that nearby is a company that not only boosts the community's economy but also paved the way for them to visit a part of Coshocton's history.

Second Edition of FPI Asphalt Pavement Design and Construction Guide Makes Its Debut

Orders Now Being Accepted

FPI's Asphalt Pavement Design and Construction Guide, first published more than 10 years ago, has been updated and will be available August 31st.

Updates to the revised manual include the performance graded system for classifying asphalt cements, Superpave asphalt mixtures, using hot mix asphalt for high stress locations, metric equivalents, and current mixture specifications being used by the Ohio Department of Transportation.

The manual is a guide to the design and construction of hot mix asphalt pavements in Ohio for: roads and streets, driveways, parking lots, commercial and industrial uses, walkways and recreational uses. Although it is intended primarily for architects, engineers, and local governments, the manual will be helpful to owners or others having an interest in pavement construction.

The purpose is to present and encourage good design and construction practices taking into account Ohio's environmental conditions, foundation soils, readily available paving materials, and local experience.

The contents reflect many procedures and specifications of the Ohio Department of Transportation (ODOT). These are well known throughout the State and are used by most local governments and in private work as well.

Section 1 contains general information about hot mix asphalt, the performance of hot mix asphalt

pavements, and recent technical and operational developments, which should be taken into account in pavement design.

Section 2 provides technical designs, recommendations and suggestions for a number of specific pavement uses. Design and construction factors appropriate to each type of project are discussed.

Section 3 contains sample specifications for reference.

Section 4 covers design procedures commonly used in Ohio including subgrade soil classification, traffic analysis, thickness design, selection of paving materials, and drainage. Design examples are included.

Section 5 includes procedures and recommendations for using hot mix asphalt in resurfacing and rehabilitation of all types of pavement.

There have been more advancements in the HMA industry over the last decade than there have been in the previous 40 years making revision of the manual a top priority for FPI. New materials such as polymer modified binders, new products such as stone mastic asphalt (SMA), and new mix designs such as ODOT's 302 large stone mix are all included.

Manuals may be ordered by sending in this form below or downloading a form from FPI's web site (www.flexiblepavements.org). Cost is \$20.00 for FPI members and government agencies and \$35.00 for all others.

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