

Concrete for Life NEWS



Spring 2009

John Donahue, Pavement Engineer for the Missouri DOT showed us how MoDOT uses concrete overlays.

Our noon Paving Awards Banquet recognized outstanding *paving projects completed in 2008*. Even though we missed presenting the award for Best Local Road or Street Project under 30,000 square yards at the banquet, we were able to make the presentation at the Ord City Council Meeting on March 2. Pictures of the award winners appear elsewhere in the newsletter.

In the afternoon we learned more about concrete overlays, LEED Design, When to Pave, and what is new with paving equipment and concrete materials.

We started the second morning off with breakfast, and Dr. **Chip Anderson's** presentation, "Understanding Latino Culture". **Steve Wobken** from Ashgrove Cement showed us some of the basic concepts for producing good concrete pavement. **Pete Sobetski** from BASF Construction Chemicals explained the importance and advantages of modern concrete admixtures.

The final presentation by **Lieska Halsey** of NDOR's Materials and Research Division reviewed the research into a new concrete mix using all gravel aggregates.

More **30th ANNUAL WORKSHOP** ... page 4



William E. "Bill" Cook
Pavement Engineer

Hello again!

Spring has finally arrived, and I'm really tired of winter.

Once my foot healed well enough to allow driving, I've been travelling around the state visiting government officials and making presentations on concrete overlays. In addition to my normal PCC overlay presentation, Jereme Montgomery and I have been offering a Friday Afternoon Concrete seminar at different locations. So far we have been in North Platte, and are planning more. Topics include whitetopping parking lots, roads and streets; thickness design; joint considerations; substrate considerations; resources; and the how bonded, unbonded, and partially bonded overlays differ. If anyone wants to learn more about concrete overlays of parking lots, streets, and roads, contact either Jereme or me.

In this issue, we also have an article on US 77. Mr. Dick Middendorf wrote a letter to the Omaha World Herald praising the concrete pavement on US 77 between Oakland and Lyons. See the letter, and then realize when it was written. And then look at the pictures of this section of US 77 taken this year. Another over-50 year-old concrete pavement still serving the travelling public.

More **BILL COOK** ... page 2



We held another successful Workshop January 7-8, 2009 at the Cornhusker Marriott in Lincoln, with almost 270 people in attendance. For a day and a half we gained knowledge and renewed old acquaintances. And probably ate too well.

With **Jereme Montgomery** emceeding the general sessions and the Awards Banquet, the speakers informed us of what their crystal balls showed. **John Craig**, Nebraska Department of Roads Director, **Joe Werning**, Nebraska Division Administrator for the FHWA, and Anna Lannin, Nebraska Department of Aeronautics Planning & Programming Director gave us a preview of what we could expect for the coming year. **Steve Maraman** from the NDOR filled us in on the financial status of the highway construction program.

And, some photos of Washington County Road 15 and 38, paved in 1980. And looking great!

The price of asphalt cement seems to be holding at about \$600 per ton. Portland cement prices appear pretty stable right now.

This issue includes pictures of our 2009 Concrete Paving Workshop, including the Paving Awards recipients. All but one of the awards was presented at the Workshop. A special thanks to Jereme Montgomery for being Master of Ceremonies at the Awards Banquet and the Workshop.

The award for Best Local Road or Street Under 30,000 sy was presented to the City Of Ord, and JEO Consulting Group on March 2nd at the City Council Meeting in Ord. The contractor for this project was A & R Construction of Plainview, Nebraska.

Please enjoy this edition of the "Concrete for Life News". And thank you for your support as we work to increase the use of durable concrete pavements in Nebraska.



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Cement industry capacity can support aggressive infrastructure stimulus

February 9, 2009--Portland Cement Association chief economist Edward J. Sullivan testified before the United States House of Representatives Transportation and Infrastructure Committee that the United States cement industry has more than enough supply potential to feed even the most optimistic infrastructure spending program.

During the hearing, members of the Transportation and Infrastructure Committee explored the ability of government agencies and administrations to initiate infrastructure projects quickly, and the ability of private enterprise to meet the demand that will be quickly actualized by a swift and aggressive infrastructure stimulus program.

Source: *Better Roads' eRoadPro* [BetterRoads@replycentral.com]

Construction Price Index *Moderates*

The chart below shows some moderation in construction material prices from late last summer. Asphalt cement still is in a range comparable to spring of 2008. In June of 2008 prices were at the \$700 per ton area. The Nebraska Department of Roads recent lettings indicate asphalt cement still in the upper \$500 to middle \$600 per ton range. Concrete Paving is only fractionally higher, or maybe leveling off.



(p) = Preliminary data
Base Year: 2002 = 100
Source: Bureau of Labor Statistics

Washington County Road 15 and 38

To see this almost 30-year old pavement, go west of Blair on US 30 about twelve miles, and head south on County Road 15.

Long-lived concrete pavements are not limited to State Highways. Washington County opened the concrete pavement shown below in 1980, and it's still going strong!

Cheryl Parsons, Washington County Highway Superintendant tells me that Washington County's concrete roads generally cost less to maintain than other surfaces.



Here is an article from The Chicago Tribune.

Note that while the headline names Asphalt the winner, the subtitle tells something else:

Asphalt the winner for most Illinois roads

But concrete lasts longer

By Jon Hilkevitch

January 19, 2009

As regularly as the same streets undergo the same repairs year after year, drivers cannot be blamed for assuming that the policy in Illinois is aimed at shoveling up endless business for the road-building industry. A pothole repair may rupture in less than a day, requiring crews to return to the same locations again and again.

“An asphalt road that is resurfaced lasts eight to 15 years on average before major repairs are needed, according to the Illinois Department of Transportation.”

“The Illinois State Toll Highway Authority is more conservative, estimating the normal life of an asphalt overlay at five to eight years.”

Officials at both agencies agree that the time frame is shorter on roads that get a lot of traffic and, especially, a lot of trucks, which describes most areas in the Chicago area. Building roads with concrete, a practice mostly limited in Illinois to expressways and toll highways, yields at least 30 years of use before requiring a major rehabilitation, authorities said.

The Edens Expressway (Interstate Highway 94), more than a half-century old, is the leading example of a highway that was built to last with

More **ILLINOIS ROADS** ... page 8

We want to give a special thanks to our sponsors, The Workshop Planning Committee members, our exhibitors, and the presenters for their hard work and support.

Presenters

John Craig
Joseph Werning
Anna Lannin
Steve Maraman
John Donahue
Dr. Chip Anderson
Steve Wobken
Pete Sobetski
Lieska Halsey
Kerry Sutton
John Winters
Wally Heyen
Dr. James Cable
Charles Cox
Tim Hegeholz
Jim Witt

Workshop Planning Committee Members

Andy Dearmont
Wally Heyen
Rob Davis
Steve Weidenhammer
Russ Gasper
Dave Neill
Scott Delgado
Phil White
Bill Herr
Tim Hegeholz
Ernie Peterson
Joel Sedlacek
Mick Cristelli
Norm Nelson
Terry Rogers
Dave Wacker
Tim O'Bryan
Dennis Smith
Jim Witt
Mike Owen
Nick Gaebel
Jereme Montgomery
Steve Mika

And a very special thanks to [Jereme Montgomery](#) for emceeding the general sessions and the Paving Awards Banquet. And also to [Tim Hegeholz](#) and [Chuck Cox](#) for filling in on short notice when other presenters were unable to be present.

The Workshop went pretty well, even if the Pavement Engineer was in a wheel chair.



Bill Cook and Jereme Montgomery

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HWS Consulting Group

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Logan Contractors Supply
Olsson Associates
The Schemmer Associates
Kirkham Michael



Steve Weidenhammer, Thiele Geotech and Wally Heyen, NDOR

More Presenters' Photos on Page 5



John Craig, NDOR



*Anna Lannin,
NE Dept. of Aeronautics*



Steve Maraman, NDOR



*Joseph Werning, Federal
Highway Administration*



*John Donahue, Missouri
Dept. of Transportation*



*Kerry Sutton,
Michigan Concrete
Paving Association*



*John Winters,
Oklahoma Dept.
of Transportation*



*Dr. James Cable,
ISU, Retired
Cable Concrete
Consultation, LLC*



*Dr. Chip Anderson,
The Pearl Group*



Lieska Halsey, NDOR



*Steve Wobken,
Ash Grove Cement Co.*



*Pete Sobetski, BASF
Construction Chemicals*

Award Winners

visit www.nebrconc.org for complete descriptions of the award categories and recipients

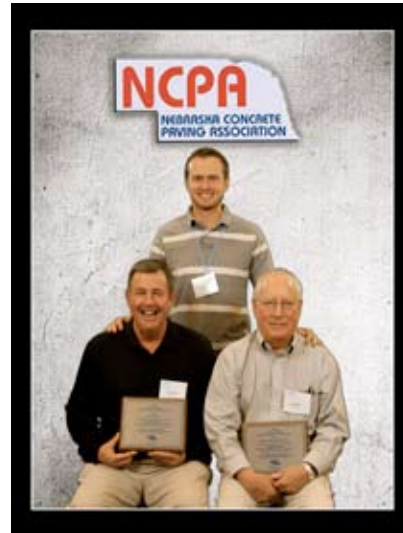
Interstate Highways & Expressways *I-80, West of Mahoney to Ruff Road*



NDOR District 1 / Hawkins Construction Co.

Hura Ngega; Dan Ore; Kevin Keller; Dewaine Knutson;
Tom Crockett; Jason Lee; Brian Johnson; Ed Burton

Airports *Miller Field, Valentine*



City of Valentine

Paulsen, Inc.

HWS Consulting Group, Inc.

Tracy Thorell
Dave Neill
Ray Delka

Concrete Pavement Rehabilitation *I-80, Darr to Overton*



NDOR District 6 / Kirk Barns Construction Pavement Design Section of NDOR M&R Division

Eric Hageman; Brady Dresselhaus; Chad Garcia; Matthew Bouwens; Ken Tuma; Paul Gibbs;
David Hansen; Jeremy Weigel; Toby Thomsen;
Linda Masek; Tami Evans; Sherri VanDiest

Secondary State Highways & County Roads *Washington County, Road P35A Cargill Road Construction*



*Washington County
Roads Department*

Cargill, Inc.

*Charles Vrana & Son
Construction*

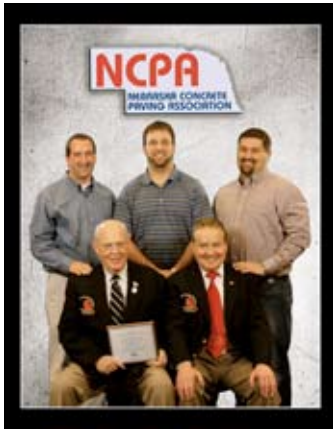
*The Schemmer
Associates*

Cheryl Parsons
Kevin Hall

Award Winners

Urban Streets

Dakota Avenue Bonded Overlay So. Sioux City



City of South
Sioux City

Sioux City
Engineering Co.

Olsson Associates

Chad Kehrt
Justin Stark
Rod Hanson
Al Bengtson
Dan Bousquet

Urban Streets

Minden Municipal Paving Dept.



City of Minden

Paulsen, Inc.

Olsson Associates

Jesse Hurlbert
Roger Jones, Mayor
Dennis Sandrock
Matt Rief
Denny Deal
Brent Lewis, City Mgr.
Glen Bomberger

Recreational Trails

Riverway Hike & Bike Trail, Grand Island



City of Grand Island

The Diamond
Engineering Co.

Olsson Associates

Fred Goering
Steve Paustian
Matt Rief
Kent Redwine
Doug Beran
Tim Kolbet

Parking Lots & Other Misc. Paving Grand Island Northwest High School Parking Lot Improvements



Northwest Public
Schools

Stephens & Smith
Construction

Olsson Associates

Dirk Egger
Terry Brown
Noah Seim
John Patterson

Best Local Paving Project Under 30,000 Sq. Yds.

Downtown Improvements, City of Ord City of Ord, Nebraska

JEO Consulting Group

A&R Construction Company

Steve Parr
Rick McKenney
Mike Schultes
Randy O'Brien, Mayor



ILLINOIS ROADS ...continued from page 3

relatively infrequent repairs over the years. The decision of whether to use asphalt over a concrete base or all concrete—and determining the thickness of the layers—primarily comes down to cost and the amount of vehicle traffic on a roadway. The track record in Illinois has been to spend less money upfront when a road is first built, yet exponentially more dollars over time on upkeep.

The cost to construct one lane mile of an asphalt-topped arterial street averages about \$200,000, according to IDOT. The cost to build one lane mile of a concrete expressway ranges from \$285,000 to \$400,000, IDOT said. Costs in both categories vary depending on numerous factors, including the local price of materials near the work site, officials said. Last year, IDOT spent more than \$27 million patching and resurfacing roads in the Chicago area.

The Illinois tollway spends about \$5 million on average annually patching pavement that has not been recently rebuilt. “When you are in a cycle of intermittent repairs, you know that you are just buying time,” said Paul Kovacs, the toll authority’s chief engineer.

Illinois, which has stumbled from year to year without passing a capital funding program in almost a decade, has generally not made the financial commitment to build stronger roads that don’t require constant maintenance.

With many of the Chicago region’s roads being well beyond their design life, taxpayers pay more in the long run to keep roads passable.

Drivers pay in the form of travel delays caused by lanes being shut down for mostly superficial construction that doesn’t last long. As a result, travel delays caused by lane closings due to construction are everywhere and they occur in every season—time lost that costs commuters and the region’s economy billions of dollars annually.

jhilkevitch@tribune.com

NEBRASKA CONCRETE PAVING ASSOCIATION

GOLF EVENT



Save the Date!
Keep June 30th open

for the NCPA Golf Outing to be held at Quarry Oaks
Golf Course located southeast of Exit 426 on I-80
between Lincoln and Omaha.

Tee Time: 11:00 am

Watch your email and mailboxes for more information

The American Recovery & Reinvestment Act

The Nebraska Department of Roads began letting Stimulus Projects with the March 2009 letting. So far about \$55 million has been let, mostly structural, miscellaneous and HMA work.

The NDOR letting for the projects that are predominantly PCC Paving begins with the May 21 letting. That letting includes a four-lane reconstruction project on US 30 in Kearney. The June and July lettings contain most of the major PCC paving work for the NDOR. Total bid amounts have been averaging from ten to twenty percent below the Engineer’s estimates for the NDOR lettings.

The Governor’s website, www.Governor.Nebraska.Gov lists Stimulus projects in the previous letting, and in the next letting.

Some lettings for Stimulus projects on the local system will begin occurring, but most will be in late summer or later. A list of at least some of those projects is on the Governor’s website also.

Another Over- 50 Year-Old Concrete Pavement

Here is a article from the February 24, 1986 edition of "Paving News":

Mr. Dick Middendorf, a rural mail carrier at Lyons, NE recently wrote this letter to the Editor of the Omaha World-Herald:

Dear Editor:

I started as a rural mail carrier in October 1955 and will retire at the end of this year. Highway 77 between Oakland and Lyons, seven miles, was just completed when I started and was part of my mail route.

It is still in like-new condition, has needed little repair, and with all this heavy traffic. Actually, it has stood the 30 years better than I have. I wish design engineers would examine such a road, determine why it has lasted so long, and decide why so many of the newly built highways do not last equally long.

(s) *Dick Middendorf*

Mr. Oliver Johnson responded to Mr. Middendorf as follows:

Dear Mr. Middendorf:

As a lifelong highway engineer, I read with interest your letter to the Omaha World-Herald commenting on the high performance of the concrete pavement between Oakland and Lyons on US Highway 77.

This concrete pavement is 8 inches thick 22 feet wide and was quality constructed by the firm of Booth and Olson, Sioux City, Iowa. It cost \$48,619 per mile and we estimate has carried about 25,344,000 vehicles, including 4,752,000 trucks in the 30 years since 1955!

As you pointed out, this concrete pavement "is still in like-new condition, and has needed little repair".

I am sure that it has lasted so long because it is concrete pavement. Although it may be slightly higher in initial cost per mile, well designed and quality constructed concrete pavement will last much longer, serve better, and with lower annual cost than will other types of surfacing. Thank you for the most observant, well-written letter.

(s) *Oliver W. Johnson*

Here are some pictures of this stretch of US 77 today. The pavement has been diamond-ground, but otherwise looks very good, and is still serving the travelling after 54 years of use.



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The Diamond Engineering Company
Diamondvantage
Diamond Surfacing Inc.
Dobson Brothers Construction Co.
E&A Consulting Group, Inc.
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Hawkins Construction Co.
Headwaters Resources, Inc.
HDR Engineering, Inc.
Holcim (US) Inc.
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Logan Contractors Supply
Lyman-Richey Corp.
Martin Marietta
Mid-State Engineering
Murphy Tractor & Equipment
Nebraska Truck & Equipment Co., Inc.
Nebraska Ash
North Central Cement Association-PCA
Nebraska Machinery Co.
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