

www.AsphaltAlliance.com

ASPHALT PAVEMENT ALLIANCE

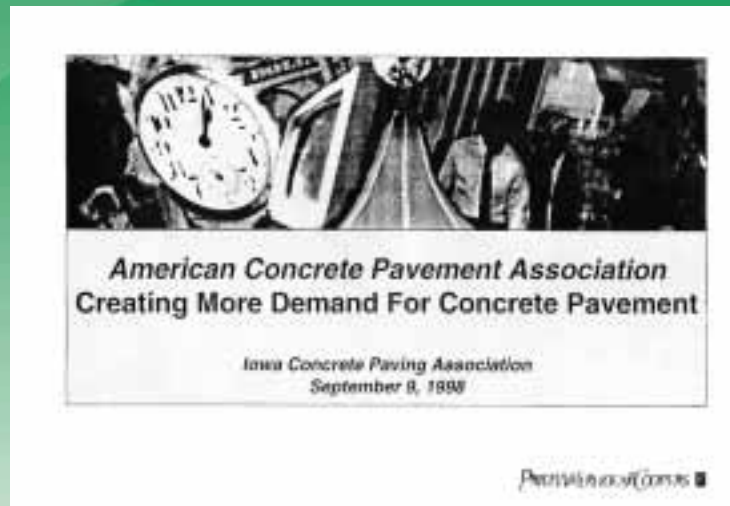
2004

Roger Sandberg

Vice President

Technology & Market Development

National Asphalt Pavement Association



Who is the Alliance?



Mission Statement



**The Asphalt Pavement Alliance
is a coalition of the Asphalt Institute,
the National Asphalt Pavement Association,
and the State Asphalt Pavement Associations.**

**The Asphalt Pavement Alliance's mission
is to further the use and quality of
Hot Mix Asphalt pavements.**

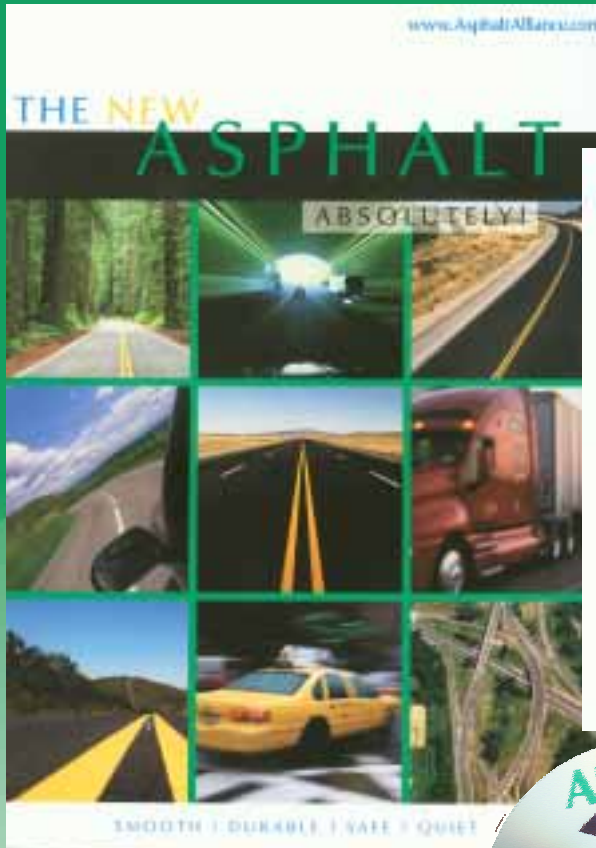
**The Alliance will accomplish this through
research, technology transfer,
engineering, education and innovation.**

What has the Alliance been doing?



- ◆ Tool kits in eight technical areas
- ◆ Assistance to State APA's
- ◆ Representing the industry at meetings
- ◆ Technical papers
- ◆ Ads and job stories in industry publications
- ◆ Research funding
- ◆ Web Site - www.AsphaltAlliance.com
- ◆ Product Showcases
- ◆ Producing Product Video's
- ◆ Asphalt Pavement Conference at World of Asphalt®
- ◆ Seminars and regional meetings

Tool Kits



THE NEW ASPHALT, ABSOLUTELY!

SMOOTH | DURABLE | SAFE | QUIET

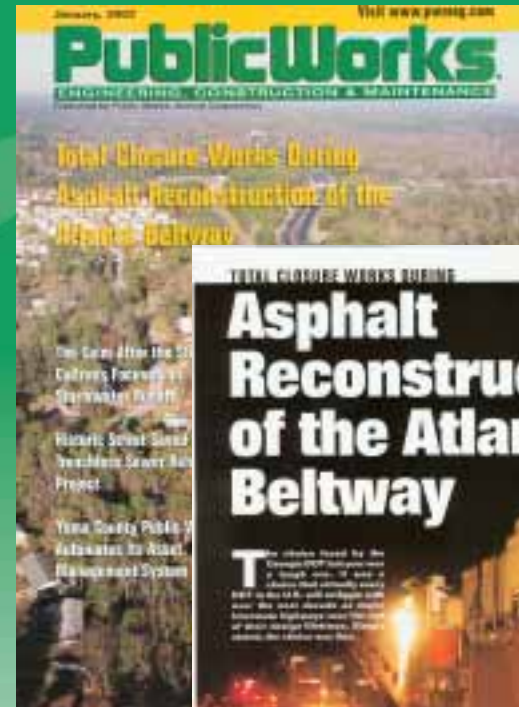
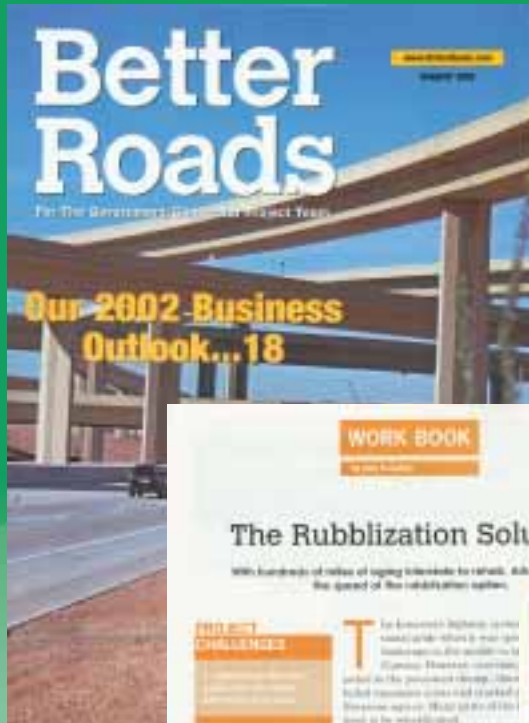
Showcases



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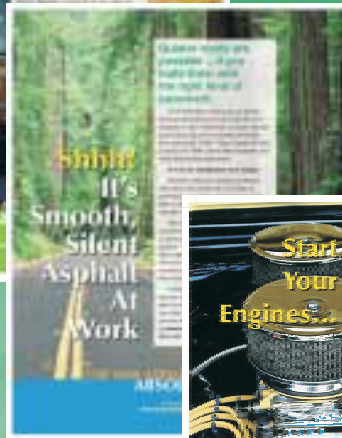
Job Stories



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Magazine Ads



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Promotional Literature



PERPETUAL PAVEMENT:

Structured for the Future



Just imagine it: total pavement reconstruction, the massive and expensive option, is rendered virtually obsolete. The only pavement rehabilitation needed would be surface replacement of about 20-year intervals.

With the new Asphalt (HMA), we have the technology to achieve just that. We call it Perpetual Pavement. The concept is not a new one. In fact, high-strength and long-strength asphalt pavement structures have been built since the 1960s. Today, recent breakthroughs in materials selection, mixture design, performance testing, and pavement design offer a methodology to create pavements exceeding 50 years from asphalt pavement structures, while periodically replacing the pavement surface and recycling the old pavement material.

Perpetual Pavements have three distinct features: a well-graded and well-compact surface layer, a not-compact, stable intermediate layer, and a combination of adequate asphalt thickness and flexibility to resist long fatigue cracking.

"Perpetual Pavement is engineered so that any distress that occurs is confined to the upper pavement layer," explains David Rosenblatt, vice president for research and technology at the National Asphalt Pavement Association. "At some point in time, say at about 10-year intervals, we go back and mill out the surface and replace it with a new surface."

Maintaining a Perpetual Pavement can be compared to maintaining a house or any other structure. The owner may choose to paint it, put a new roof on it, or add to it. With Perpetual Pavement, maintenance can improve and costs reduce as aging pavement, rather than breaking it up and hauling it away to a landfill, because the original structure is still sound and has great value.

In addition, the process is environmentally friendly because the pavement material that is milled off is 100 percent recyclable. Recent research has shown that the asphalt pavement industry is the nation's number one recycler.

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Source: www.apa.org | 800-333-3333



ASPHALT WINS!

Maryland Intersection Contest Results In Clear Winner: ASPHALT

It is faster-to-build pavement competition that started in 1994, the asphalt solution is still going strong, but the concrete one has been completely defeated and replaced with asphalt.

By Ken Cline

While independent agencies make their best bet that the new asphalt (HMA) pavement is high-strength pavement solution, there were agencies before that building high-strength pavement using Portland Cement Concrete (PCC) to the only solution was to remove the problem. A head-to-head competition between the HMA industry and the PCC industry, initiated by the Maryland State Highway Administration in 1994 has demonstrated that there is only one winner in this contest.

A comparison of the performance of asphalt and concrete pavements — at different intersections in U.S. Route 40 in Baltimore, Maryland, carried on maintenance (MDO), after two and one-half years of service, the resulting PCC pavement had to be completely removed and replaced with HMA. The HMA pavement, which was installed prior to the construction of the PCC, remains that has spent less than 2 to 3% of its cost, and is still in excellent condition.



The reason for the success of this road intersection was not in developing an innovative construction design, which includes:

- Combining a flexible analysis of the existing intersection to determine the appropriate pavement design and thickness.
- Using the Superpave system (which is used for proper mix design and HMA pavement) to produce asphalt binder and
- Building the project as it was designed.

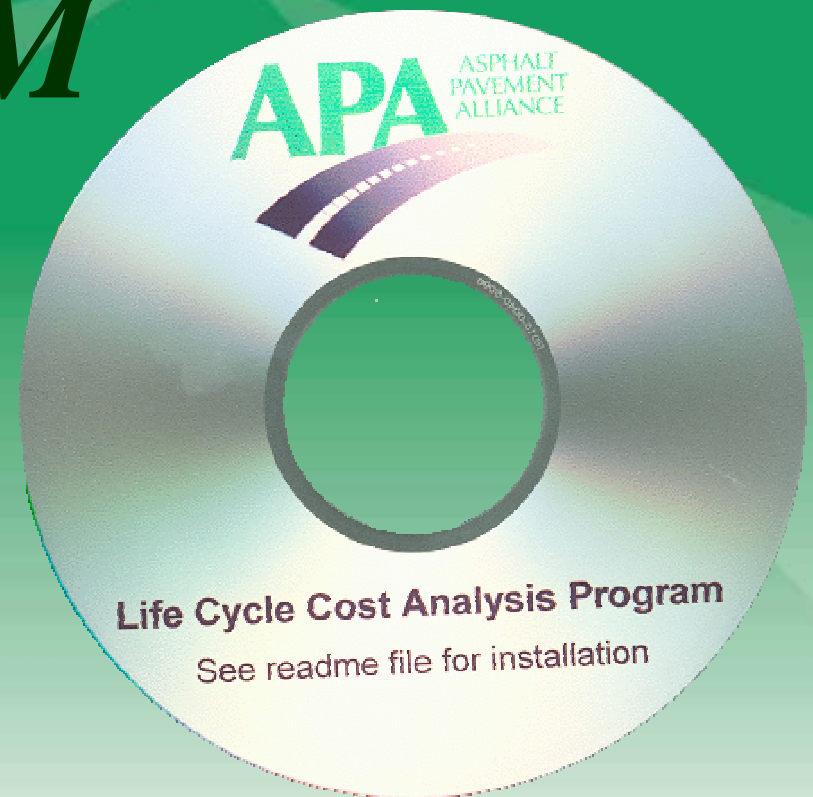
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Source: www.apa.org | 800-333-3333

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Life-Cycle-Cost Computer Program CD-ROM

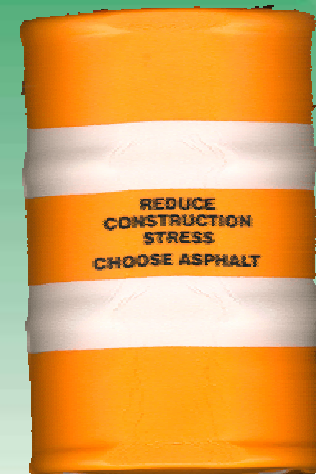


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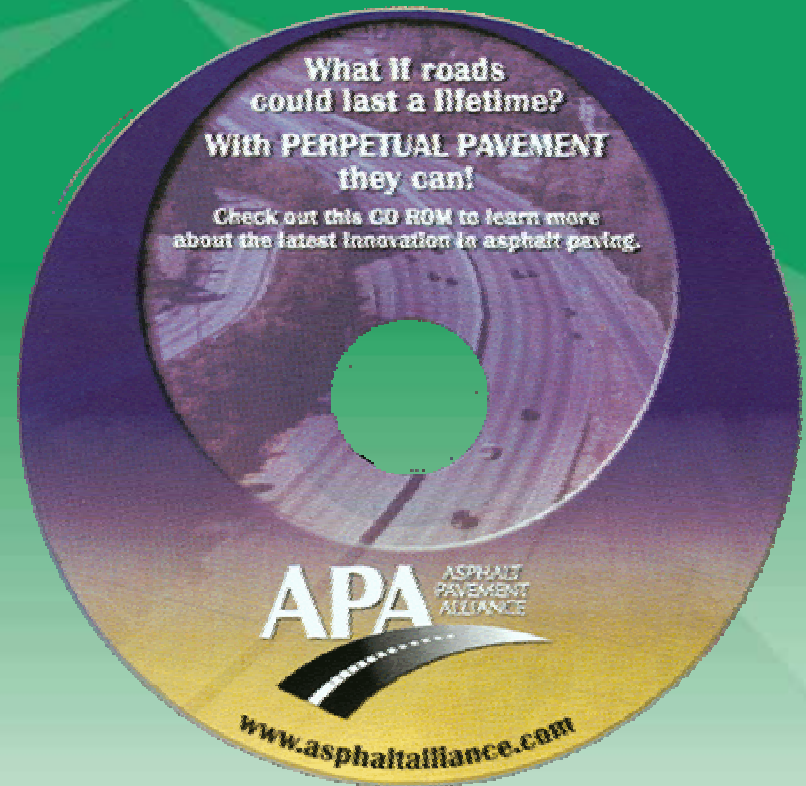
Promotional Items



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Interactive CD's



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Web Site



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Trade Shows



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Eight areas of Pavement Comparison

- ◆ Smoothness
- ◆ Recyclability
- ◆ Pavement noise
- ◆ Speed of construction
- ◆ Rubblization
- ◆ Versatility
- ◆ Pavement life
- ◆ Life-Cycle-Cost



Smoothness



- ◆ #1 issue with the traveling public
- ◆ Measure of quality
- ◆ Hidden benefits



Recycle



- ◆ Hot-Mix Asphalt is # 1
- ◆ 80.3 million tons per year



Pavement Noise



- ◆ Major emerging issue
- ◆ U.K. is overlaying pcc pavements with HMA
- ◆ Neighborhood issue
- ◆ Arizona DOT



Speed of Construction



- ◆ #2 issue with the public
- ◆ “Get in - Stay in / Get out - Stay out”
- ◆ Atlanta Beltway



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Rubblization

- ◆ Excellent technique for pavement rehab
- ◆ Major technique in Arkansas and Louisiana
- ◆ Proven in several States



Versatility



- ◆ Wide variety of application
- ◆ Ability to design for specific application



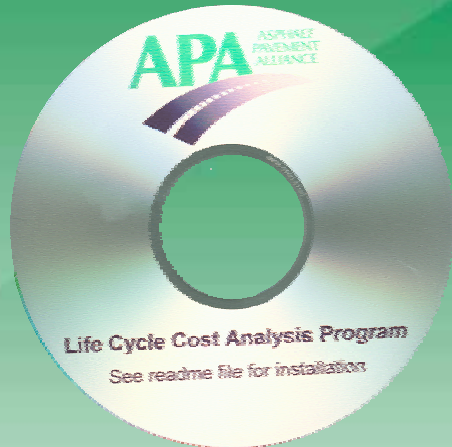
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Life Cycle Cost



- ◆ New LCC cost program from Alliance
- ◆ Kansas Study



EVALUATION OF EXPENDITURES ON RURAL INTERSTATE PAVEMENTS IN KANSAS

Executive Summary

by

Stephen A. Cross, P.E.
Associate Professor
University of Kansas
Lawrence, Kansas

and

Robert L. Parsons, P.E.
Assistant Professor
University of Kansas
Lawrence, Kansas

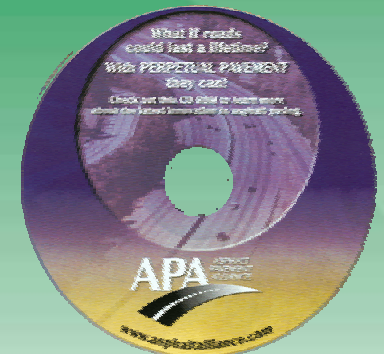
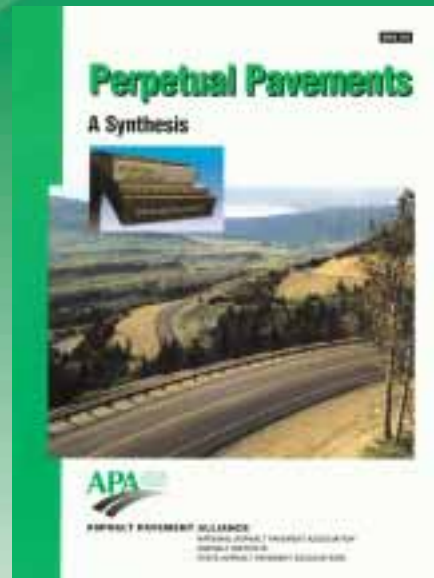
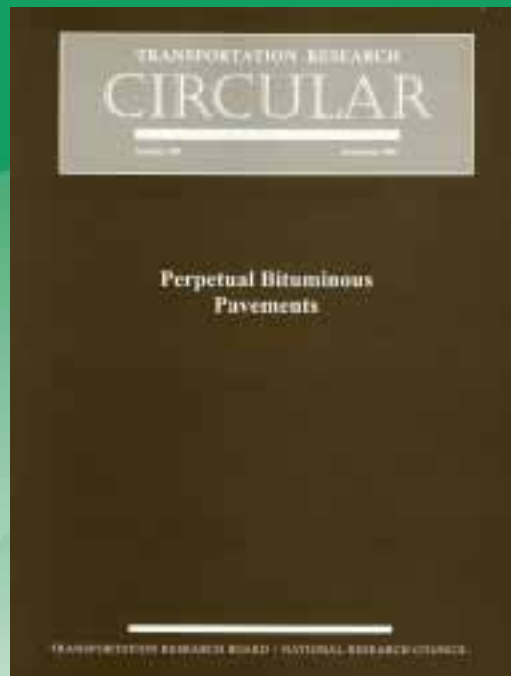
Kansas University Transportation Center
University of Kansas
Lawrence, Kansas

August 2001

Pavement Life



Perpetual Pavements



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PERPETUAL



PAVEMENT AWARD















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WHO WINS?



	<u>HMA</u>	<u>Concrete</u>
◆ Smoothness		
◆ Recyclability		
◆ Pavement Noise		
◆ Speed of Construction		
◆ Rubblization		
◆ Versatility		
◆ Life-Cycle-Cost	?	?
◆ Pavement Life	?	?

ASPHALT WINS!



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Alliance Activities

Three showcases

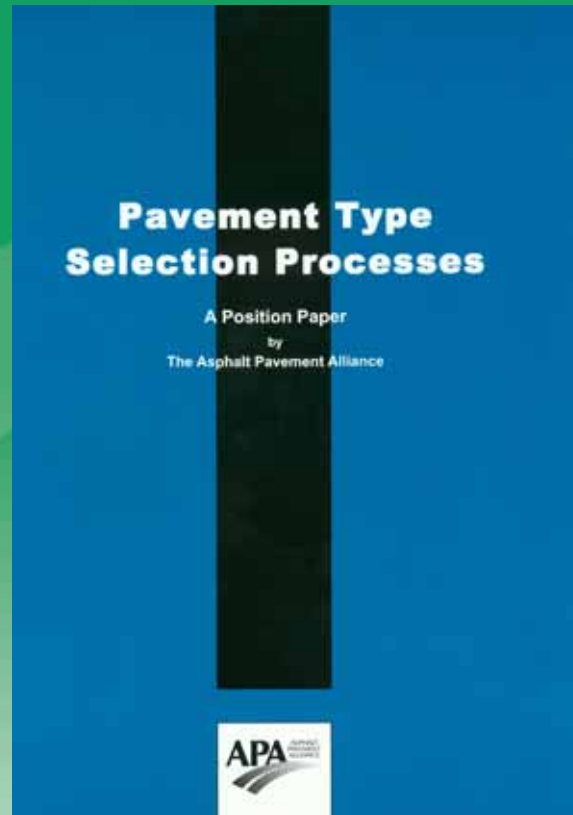
Perpetual Pavement

Kansas Rubblization — I-295 in NJ
Pavement Noise — San Antonio, TX

Pavement Type Selection Process



New
Publication



Local assistance and regional meetings

MARK YOUR CALENDARS



World of Asphalt® Show & Conference
March 15 - 18, 2004

NCAT International Symposium
June 7 - 9, 2004



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