

## In This Issue:

- Page 1**
- APA Announces Winners of 2008 Perpetual Pavement Awards;
  - Attention Newsletter Recipients!
- Page 2**
- APA 2008 Awards, continued;
  - Calendar of Events.
- Page 3**
- Cycles, Cameras, and Cops: Passenger Car Enforcement around Big Trucks.
- Page 4**
- National Center for Asphalt Technology (NCAT) on RAP;
  - University Students Tour HMA Plant;
  - Cycles, Cameras, and Cops, continued.
- Page 5**
- Porous Pavements are Environmentally Friendly;
  - New Software Programs Available on PerRoad & LCCA;
  - Sustainability Update - Smooth Pavement Saves Fuel.
- Page 6**
- Spotlight on Bernie Arseneau, P.E., Mn/DOT Policy, Safety & Strategic Initiatives Division Director
- Page 7**
- Spotlight on Bernie Arseneau, continued;
  - MAPA Contractor Members.
- Page 8**
- MAPA Associate Members.

## APA Announces Winners of 2008 Perpetual Pavement Awards

The Asphalt Pavement Alliance (APA) has announced the winners of its 2008 Perpetual Pavement Awards.

The award is given to owners of asphalt pavements that are at least 35 years old and have never had a structural failure. The average interval between resurfacing of each winning pavement must be no less than 13 years. The road must demonstrate the qualities expected from long-life asphalt pavements: excellence in design, quality in construction and value to the traveling public.

Engineers at the National Center for Asphalt Technology (NCAT) evaluated the nominations for the Perpetual Pavement Award and a panel of industry experts validated the winners. They are:

- The Minnesota Department of Transportation (Mn/DOT) for two



*Perpetual Pavement Obelisk Awards.*

- miles of TH36 in Washington County near Stillwater.

- The Arkansas Department of Transportation for a 1.19-mile stretch of Highway 79 in Quachita County.

- The Maryland Department of Transportation for 3.8 miles of US 50 in Talbot County.

- The Mississippi Department of

*Continued on Page 2.*

## Attention *Paving Progress* Newsletter Recipients!

We understand that receiving the printed *Paving Progress* may have been your preferred delivery method. However, in an effort to be more environmentally friendly and cost-conscious, we are now sending the newsletter notice by email with a link to the newsletter on our web site. Thank you for helping us to conserve.

# APA Announces Winners of 2008 Perpetual Pavement Awards, continued from page 1

Transportation for 10.9 miles of US 90 in Jackson between Ocean Springs and Gautier.

• The Tennessee Department of Transportation for five miles of westbound State Route 1-US 11 in Grainger County.

• The Washington Department of Transportation for 3.7 miles of Interstate 5 between Seattle and Everett.

Each winner will receive an engraved crystal obelisk, a plaque, and will have their name and project added to a permanent plaque, which is kept at NCAT. Presentations will be made on October 1 during a special ceremony at the International

Conference on Perpetual Pavements in Columbus, Ohio, September 30 – October 2, 2009.

“Even though these pavements have been under traffic for over 35 years, motorists are still using the original pavement structure,” said Mike O’Leary, APA Co-Chairman. “The extraordinary performance of these pavements is worthy of attention.”

“Perpetual Pavement is an industry standard that is extremely well represented by these pavements,” added Gaylen Ghylin, APA Co-Chairman. “Long life, durability, and exceptional performance are hallmarks of asphalt. These pavements are testimony to high-performance asphalt as a marriage

of excellent design and quality construction.”

The Asphalt Pavement Alliance is a coalition of the National Asphalt Pavement Association, the Asphalt Institute and the State Asphalt Pavement Associations. The Alliance’s mission is to further the use and quality of asphalt pavements. The Alliance will accomplish this through research, technology transfer, engineering, education and innovation. For more information about Perpetual Pavements, visit [www.asphaltalliance.com](http://www.asphaltalliance.com).

*Re-printed with permission from Tracie Christie, National Asphalt Pavement Association.*

## Calendar of Events

- **MAAPT 56th Annual Asphalt Conference**  
Wednesday, December 2, 2009 • Northland Inn • Brooklyn Park, MN
- **Annual Asphalt Paving Awards Banquet**  
Wednesday evening, December 2, 2009 • Northland Inn • Brooklyn Park, MN
- **MAPA 56th Annual Membership Meeting - *The Magic of Asphalt Pavements!***  
Thursday & Friday, December 3-4, 2009 • Northland Inn • Brooklyn Park, MN
- **NAPA Annual Meeting**  
January 17-20, 2010 • Grand Wailea Resort • Maui, HI
- **World of Asphalt Conference**  
February 15-18, 2010 • Duke Energy Convention Center • Cincinnati, OH
- **AAPT 85th Annual Meeting**  
March 7-10, 2010 • Hyatt Regency • Sacramento, CA

# Cycles, Cameras, and Cops: Passenger Car Enforcement Around Big Trucks

By John Hausladen, Minnesota Trucking Association; Lieutenant Eddie Carroll, Minnesota State Patrol; and Trooper Robert Zak, Minnesota State Patrol.

“When cars and trucks crash, 75 percent of the time, [it] happened because of something the car driver did to start the chain of events,” began John Hausladen. “And, when a car and a truck crash, you know which one usually gets the worst of it.” Hausladen outlined an innovative enforcement program to reduce car-truck crashes. The program, developed by the Minnesota State Patrol in partnership with trucking firms, uses truck-mounted video cameras and patrol officers on motorcycles to enforce traffic laws around big trucks.



A 2006 summary of commercial vehicle (CMV) crashes showed that of 57 fatal crashes, 9 were the fault of CMV drivers, one was caused by a pedestrian, and the remaining 47 were the fault of passenger car drivers. Lieutenant Eddie Carroll and Trooper Robert Zak of the Minnesota State Patrol explained that contributing factors to these crashes included unsafe lane changes, crossing solid white lines, and cutting in front of trucks

on highways. “Semis can’t stop on a dime,” Carroll said. “Truck drivers keep space in front of them to allow braking room, but cars often cut into that space and then hit the brakes.”

The incidence of fatal car-truck crashes is on the rise. The 57 fatal crashes in 2006 were exceeded in 2007 with a total of 80 fatalities. During this two-year period, none of the fatalities were due to mechanical issues. “It’s driver error, so that’s why we’re concentrating on driver behavior,” Carroll said.



The resulting CMV outreach program, a partnership between the Minnesota State Patrol and the motor carrier industry, focuses on four areas: unsafe driving acts of motorists while in the vicinity of trucks; driver fatigue; enforcement in high-volume areas; and a public awareness campaign. Traffic enforcement efforts include officers on motorcycles and in unmarked SUVs. The State Patrol officers pair up with vehicle inspectors, too, to improve enforcement. Airplanes are

sometimes used to monitor traffic violations: pilots pick out passenger cars in violation and enforcement officers on the ground stop the cars and issue tickets. Unmarked cars equipped with radar and cameras are often used in high-volume traffic areas. Officers on motorcycles are equipped with radar, cameras, computers, printers, and GPS.



Trooper Robert Zak explained that targeted violations include speeding, ignoring stop signs and semaphores, careless driving, tailgating, and making unsafe lane changes. “These are the five violations that we can almost guarantee will be the cause of a crash.” Motorcycles work well for enforcement because, according to Zak, they are agile moving through traffic, can go off-road, and get high gas mileage.

The next addition to the CMV outreach program is to put troopers in passenger seats of trucks so they can observe violations and report

*Continued on Page 4.*

# National Center for Asphalt Technology (NCAT) on RAP

Six sections at the NCAT track have been devoted to evaluating the construction and performance of hot-mix asphalt (HMA) with moderate (20 percent) and high (45 percent) recycled asphalt pavement (RAP) contents. Virgin binder grade RAP mixes were also installed to compare performance.

Through a series of testing, including the asphalt pavement analyzer, and performance information at the

NCAT Test Track, the preliminary results indicate that high RAP mixes can perform successfully and that the use of softer virgin binder grades in high RAP mixes is not necessary.

The NCAT Test Track continues to provide practical and cost-effective solutions for the asphalt industry. Results that would require 12-15 years under normal traffic conditions can be obtained at the Track in 2-3 years. Real-world research at the



Track keeps the bottom line in mind for the specifiers' also.

More information can be found at NCAT's web site at [www.eng.auburn.edu/center/ncat/](http://www.eng.auburn.edu/center/ncat/)

## University Students Tour HMA Plant



Several University of Minnesota students with Professor Mihai Marasteanu toured Commercial Asphalt Co.'s hot-mix asphalt (HMA) plant in Blaine on May 1, 2009 as a part of the CE 5253 class.

Donning hard-hats and vests, the group of 12 students toured the HMA plant beginning with the crushed rock, sand, gravel, and recycled asphalt pavement stockpiles while witnessing new supplies of construction materials

being unloaded. Then they watched as the drum plant warmed up and started to produce HMA.

The group then toured the mix design and quality control lab with plenty of samples to see the different types of HMA mixes produced by the plant. Finally, the tour ended with juice, fruit and rolls. Thank you Commercial Asphalt Co., Rob Kuehborn, and Todd Laubis for the educational morning!

## Cycles, Cameras, and Cops, continued from page 3

them to enforcement officers, who will then stop the vehicles and issue citations. Zak would like to see signs placed on trucks to make drivers aware that "the next truck [they] pass may have a trooper in it."

The Minnesota Trucking Association will also help get the word out to the public. "We're a safety organization because our members know you have to deliver the goods safely," Hausladen said.

*Reprinted with permission from the Office of Traffic Safety.*

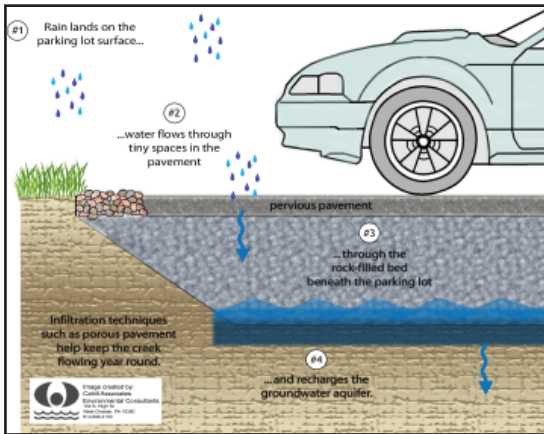
# Porous Asphalt Pavements are Environmentally Friendly

**P**orous asphalt pavements are highly effective in reducing pollution in stormwater runoff from pavements. Cahill Associates have reported a high removal rate for total suspended solids (TSS), metals, and oil and grease (University of New Hampshire Stormwater Center 2007 Annual Report).

Cahill Associates

have also reported that porous asphalt may provide a drastically reduced need for salt (chloride) for winter maintenance. Cahill reported that winter maintenance requires "between zero and 2.5 percent of the salt routinely applied to impervious asphalt to achieve equivalent, or better, deicing and traction."

To find out more about porous asphalt pavements, visit MAPA's web site at [www.asphaltisbest.com](http://www.asphaltisbest.com), or contact MAPA at [info@mnapa.org](mailto:info@mnapa.org).



# New Software Programs Available on PerRoad & LCCA

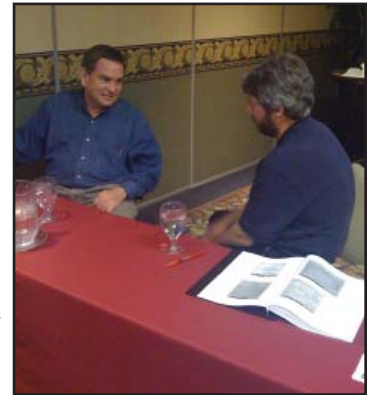


**A** training seminar was held May 18th by MAPA and the Asphalt Pavement Association on new software programs available for Perpetual Pavement design (PerRoad) and life cycle cost analysis (LCCA).

Information was presented by Dr. David Timm, Auburn University (shown above) and Dr. David Newcomb, NAPA (shown below with Joe Thomas, MnDOT).

Attendees were taught Mechanistic-Empirical design principles for pavements and for designing long-life (perpetual) pavements for both high and low volume traffic roadways. Life cycle cost analysis principles based on the Federal Highway Administration guidelines were also presented.

The software programs (including the new user-friendly LCCAExpress software) can be downloaded at [www.asphaltalliance.com](http://www.asphaltalliance.com). Please contact MAPA with any questions on these subjects.



# Sustainability Update - Smooth Pavement Saves Fuel

**A** number of studies have concluded that pavement roughness, not pavement type, is responsible for differences in fuel mileage. A 2000 study conducted at the Westrack Test Facility in Nevada concluded that trucks running on a smooth pavement could save 4.5 percent on fuel consumption. Smoothness also means that truck tires do not bounce on the pavement and deliver the kind of impact loading they would on a

rougher pavement. The Federal Highway Administration has published information that increasing pavement smoothness by 25 percent results in a 10 percent increase in the life of the pavement. Also, the Missouri DOT published a study of the results of their Smooth Roads Initiative. It indicates a 2.46 percent fuel saving on roads that have been smoothed out with an asphalt overlay.

# Spotlight on Bernie Arseneau, P.E., Mn/DOT Policy, Safety & Strategic Initiatives Division Director

An interview by Jill Thomas, P.E., Associate Director, Minnesota Asphalt Pavement Association

**B**ernard (Bernie) J. Arseneau was born and raised in Crystal, MN and is the fourth sibling of seven.

From the suggestion of his future brother-in-law who worked for the Minnesota Department of Transportation (Mn/DOT), Bernie decided to pursue a degree in Civil Engineering. He transferred from St. Cloud State to the University of Minnesota and graduated in 1982 with a Bachelor of Civil Engineering degree.

The early 1980's were a very tough time in Minnesota to find a job, however Bernie was patient and persistent and was hired into Mn/DOT's Engineer Rotation Program in 1983. His two-year rotation included District 9 Detail Design & Construction Administration, and Central Office State Aid. His first year after the rotation was spent in State Aid reviewing construction plans and developing the computer programming used in data base management.

Then Bernie went to District 9 as a Traffic Studies Engineer, investigating traffic operations and legal issues. Bernie really liked the operational side and the versatility of traffic engineering. While in this position, Bernie recalls being mentored by Mike Robinson (District 1 Engineer) and he greatly values this experience today. Over the course of the friendship, Bernie even jumped from a plane alongside Mike, who is

an avid jumper.

To broaden his work experience, Bernie has taken several special assignments or mobility assignments within Mn/DOT. In 1987, he was the Interstate 94 (I-94) Reconstruction Traffic Management Coordinator, where he prepared a traffic and construction staging plan for the complete pavement replacement of I-94 between Minneapolis and St. Paul. High traffic levels have only allowed for portions of this being completed at intermittent times. After this assignment, Bernie returned to District 9 as the Signal & Lighting Design Engineer.

Another mobility assignment Bernie held was as the Regional Airport Engineer in 1990. Here he was responsible for the Airport Development Program for airports in the north region of MN including all aspects of the construction program, airport zoning, hanger construction, and purchasing maintenance equipment.

In 1991, Bernie became the Tort Claims and Standards Engineer. A major responsibility was to coordinate and direct the efforts to maintain the Traffic Engineering Standards for Mn/DOT. He was the representative responsible for all Tort Claims against the Department and made

decisions regarding settlement or denial of these claims.

A mobility in 1996 took Bernie to Rochester as the Area Maintenance Engineer for District 6. Here he managed and provided engineering

leadership including the maintenance and repair of roads, road-sides, bridges, buildings, equipment, and traffic control devices. He also managed the use of State right of way.



His next assignment was in early 1997 as the Legislative Liaison for the Office of Intergovernmental Relations. He participated in monitoring and responding to all transportation related issues being addressed in the legislature. He provided weekly internal updates, attended numerous committee meetings, and met with legislators to clarify the Department's position on various issues. Bernie feels that the politics of this position were highly educational.

Later in 1997, Bernie was the Special Assistant in Engineering Services, where he helped with the

*Continued on Page 7.*

## Spotlight on Bernie Arseneau, continued from page 6

development of new language for the statutory Municipal Consent process. He also assisted in the development of target measures for the Trunk Highway System.

Bernie liked the Rochester area and returned there in 1997 as the Area Maintenance Engineer in Rochester and Owatonna, and the Assistant District Engineer. These positions were related to one another and moving between them over the next five years was a result of what work was needed at the time.

In 2003, Bernie returned to Central Office as the Director of Traffic Operations and then as the Director of Traffic, Safety, and Operations. Traffic and safety are topics that Bernie is very passionate about. He enjoyed working with the different areas including Intelligent Transportation Systems, Signs, Signals, and Torts, Toward Zero Deaths, and the Regional Transportation Management Center.

Most recently, Bernie has been the Division Director for Policy, Safety & Strategic Initiatives for the past year. In this position, Bernie supports the work of the Offices of Policy Analysis, Research & Innovation, External Partnering, Civil Rights, Traffic, Safety & Technology, and Materials & Road Research.

Bernie stated that it is a great time for Mn/DOT and he is excited about Commissioner Sorel's strategic vision (<http://www.dot.state.mn.us/strategicvision/vision.html>) for the Department as there are great opportunities for Minnesota to be leaders in delivering the transportation system.

Bernie shared his appreciation to all of the people he has worked with over the years. He values the Mn/DOT employees and what they bring to the Department, since it is their hard work that is the reason the Department is becoming a global leader in transportation.

Bernie is a Registered Professional Engineer and Professional Traffic Operations Engineer. He is very active in transportation committees and in his community. He holds numerous honors and awards including the MN Government Engineers Council (MGEC) Young Engineer of the Year in 1992.

Bernie and his wife of 27 years, Julie, have three sons. Matthew (the oldest son) has a double major in History and Geography from the University of Minnesota. Michael will be studying Civil Engineering at a Minnesota university. And Stephen just graduated from Rogers High School and plans to study business in the fall at St. Cloud State University. In their spare time, they enjoy family outings including snowmobiling, boating, and fishing.

*Best of luck Bernie, and thanks for helping to build 'em black!*

## MAPA Contractor Members

Anderson Brothers Constr. Co.  
Barton Enterprises, Inc.  
Bemidji Bituminous, Inc.  
Bituminous Paving, Inc.  
Bituminous Roadways, Inc.  
Commercial Asphalt Co.  
DMJ Corporation  
Duininck Inc.  
FPI Paving Contractors, Inc.  
Hardrives, Inc.  
Hawkinson Construction

Knife River Corp. - N.C.  
Knife River Materials  
Mark Sand & Gravel Co.  
McNamara Contracting, Inc.  
Mesabi Bituminous, Inc.  
Midwest Asphalt Corporation  
Minn-Dak Asphalt, Inc.  
North Valley, Inc.  
Northland Paving, LLC  
Northwest Asphalt, Inc.  
Pine Bend Paving, Inc.

Plehal Blacktopping, Inc.  
Rum River Contracting Co.  
Shamrock Enterprises of  
Rochester LLC  
T.A. Schifsky & Sons, Inc.  
Tower Asphalt, Inc.  
Tri-City Paving, Inc.  
Ulland Brothers, Inc.  
Valley Paving, Inc.  
Wm. Mueller & Sons, Inc.  
W W Blacktopping, Inc.

# MAPA's Associate Members

Accurate Test Systems, Inc.  
 Aggregate Industries  
 American Agency, Inc.  
 American Engineering Testing, Inc.  
 American Surface Lines, LLC  
 Anderson Industrial Scales, Inc.  
 Antigo Construction, Inc.  
 Arr-Maz Custom Chemicals  
 Asphalt Surface Technologies Corp.  
 Bomag Americas  
 Braun Intertec Corporation  
 Brock White Company LLC  
 Carlson Paving Products, Inc.  
 Caterpillar Paving Products Inc.  
 Cedarleaf, Cedarleaf & Cedarleaf, Inc.  
 Century Fence Co.  
 Certainteed Corporation  
 Clarence Richard Company  
 Cobb Strecker Dunphy & Zimmermann  
 Construction Bulletin  
 Crysteel Truck Equipment, Inc.  
 Custom Welding & Metal Fab, Inc.  
 Dahl Trucking  
 Dem-Con Companies  
 Dillman Equipment; a Div. of Astec Inc.  
 J.D. Donovan, Inc.  
 Dresser Trap Rock Company  
 Eric J. Anderson, Ind. Agent - AFLAC  
 Erickson Engineering Co.  
 Esch Construction Supply, Inc.  
 Ess Brothers & Sons, Inc.  
 EverCore LLC  
 Fabyanske, Westra, Hart & Thomson, P.A.

T.C. Field & Company  
 Foth Infrastructure & Environment, LLC  
 Gencor Industries, Inc.  
 Grant Thornton LLP  
 Hayden-Murphy Equipment Co., Inc.  
 Highway Technologies  
 HTIF Cameron Filters  
 Humboldt Manufacturing  
 I.R.A.Y. Auction  
 Independent Testing Technologies, Inc.  
 Inspec, Inc.  
 Interstate Engineering, Inc.  
 Intex Corporation  
 Johnson Crushing, Inc.  
 Klein Agency, Inc.  
 Kraemer Mining & Materials, Inc.  
 Laser Control, Inc.  
 Leonard, Street & Deinard, P.A.  
 L.G. Everist, Inc.  
 LHB, Inc.  
 Lubrication Technologies, Inc.  
 Marathon Petroleum Company LLC  
 Martin Marietta Aggregates  
 Max Steininger, Inc.  
 Maxam Equipment, Inc.  
 Minnesota Laborers - Employers Cooperation and Education Trust  
 Minnesota Petroleum Marketers Assoc.  
 Minnesota Trucking Association  
 Murphy Oil USA, Inc.  
 Northern Balance & Scale  
 Northwest Process Equipment, Inc.  
 Nuss Truck & Equipment  
 Olson & Price, Ltd.  
 Partek Supply, Inc.  
 Prinsco, Inc.

R & G Construction Company  
 RDO Equipment Co.  
 Ritchie Bros. Auctioneers (America) Inc.  
 RJ Ahmann Company  
 Road Machinery & Supplies Co.  
 Roadtec, Inc.  
 Rotochopper, Inc.  
 Ruffridge-Johnson Equipment Co., Inc.  
 RB Scott Company, Inc.  
 SPC Engineering & Testing, Inc.  
 STORK Twin City Testing Corporation  
 Swanston Equipment Companies  
 Testquip, LLC  
 TexPar Energy, LLC  
 Town & Country Fence  
 Tricon Metals & Services, Inc.  
 Tri-State Aggregate Machinery  
 Troxler Electronic Lab., Inc.  
 Ulteig Engineers, Inc.  
 Unique Paving Materials Corp.  
 Vance Brothers  
 Volvo Construction Equipment  
 Wenck Associates, Inc.  
 Wheeler Lumber LLC  
 Widseth Smith Nolting  
 Ziegler, Inc.

## Welcome New Associate Members:

- Carlson Tractor & Equipment Co.
- OPR (Quality Pavement Repair)
- Waddell & Reed, Inc.



Minnesota Asphalt  
 Pavement Association

900 Long Lake Road, Suite 100  
 New Brighton, MN 55112  
 (651) 636-4666 • Fax: (651) 636-4790  
 info@mnapa.org  
 www.asphaltisbest.com