Draft Meeting Minutes Expert Task Group on Pavement Preservation

Asheville, North Carolina Holiday Inn Sun Spree Resort Saturday, August 2, 2003 8:00 a.m. - 5:00 p.m.

Present:

Members. Mark Ishee, Wouter Gulden, Delmar Salomon, John Vance, Colin Franco, Ed Denehy, Lita Davis, Janice Williams, Todd Thomas, Shakir Shatnawi, Jim Sorenson, Dennis Jackson, Bill O'Leary, Steve Mueller, Chris Newman, Gary Hildebrand, Larry Galehouse, Steve Varnedoe, Keith Herbold, Luis Rodriguez, Jeff Forster, Jerry Geib, Bill Ballou, Scott Watson.

Guests. Mohammed Memon - Hudson Asphalt Group, Todd Hoerner for David Peshkin - Applied Pavement Technology, Brockton (Brocky) Brown - Uretek USA.

Introductions and Welcome:

The meeting began at 8:05 a.m.

Jim Sorenson, ETG Co-Chair, extended appreciation to the participants for attending a Saturday meeting and challenged each member to present their most recent contribution for advancing pavement preservation. Self introductions were then made by the attendees. Some noteworthy developments include:

- **Delmar Salomon** gave two presentations to the First Regional Congress of Highway Trust (Fondos Viales) in San Salvador, El Salvador, Central America, on July 24 & 25, 2003. The topics were "Pavement Preservation" and "Quality in the Asphalt Industry." Delmar also shared preservation information with DOT's in the Northwest Region on the United States.
- **Ed Denehy** made a presentation to the Executive Program Committee (EPC) of the New York State DOT on "Goal Oriented Program Review." During the presentation he advocated full funding for preventive maintenance even considering the fiscal crisis facing New York. The Executive Deputy Commissioner received the information with interest and requested a more detailed presentation at a future EPC meeting.
- Lita Davis stated that despite a funding decrease in the State of California, which impacts all levels of government, the County of San Diego Department of Public Works (DPW) continues to budget their pavement preservation program at \$7 Million annually, a consistent level of funding. The DPW remains pro-active by developing pavement preservation shelf projects in anticipation that addition funds are received. The shelf projects have realized an additional several million dollars each year to the existing program. Lita reports that the DPW's chip seal over fabric program was published in the "GFR" trade paper in June 2003.
- **John Vance** has been working to implement a preventive maintenance program for the Mississippi DOT.

- **Mohammed Memon** developed a thin overlay for maintenance using recycled rubber. Known as "Hot Mix Maintenance Membrane (HM³)," the product is being used by the Rhode Island DOT. He has also developed a new crack sealant using a reduced viscosity asphalt that is effective and successful.
- Colin Franco has initiated a white topping project in Rhode Island. He has also been instrumental in pushing new materials in thin life overlays used in the state.
- **Dennis Jackson** carried pavement preservation information to highway agencies as an instructor in two National Highway Institute (NHI) Pavement Preservation courses. He provided insight to the advantages and benefits of a strong preservation program through course work.
- **Todd Thomas** lead the effort to incorporate Cold In-Place Recycling (CIR) into a pavement preservation program. When interviewed by local newspapers on recycling projects, he always mentions that road preservation is good public policy.
- Luis Rodriguez conducted pavement preservation training to local highway agencies in Florida and presented information about pavement preservation programs in the United States at the Southeastern States Pavement Management and Design Conference in Louisville, Kentucky.
- Shakir Shatnawi stated that the micro-surfacing pooled fund study contract, previously delayed for several years for a variety of reasons, was executed. Caltrans is the lead-state for the study and was instrumental in resurrecting, financially supporting, and implementing the project. Shakir coordinated a seminar on Pavement Warranties, held in Sacramento, and developed a one-year pavement preservation warranty specification. Currently, he is finalizing the "Caltrans Maintenance Technical Advisory Guide and Training Modules," and is involved in a study that looks at the relationship between the pavement surface and noise.
- **Steve Mueller** recently coauthored a paper entitled, "The Federal Role in Pavement Preservation." The paper will appear in the September/October issue of TR News.
- **Bill Ballou** announced that the Foundation of Pavement Preservation recently signed an agreement with Michigan State University to create a National Center for Pavement Preservation. This represents a major milestone for pavement preservation, and was only possible with the support of industry, FHWA, and the Midwestern Pavement Preservation Partnership.
- **Jeff Forster** reported that North Dakota DOT held a Pavement Preservation Workshop in Fargo. Currently activities are moving ahead to establish consistent pavement preservation methods to be implemented across the state.
- Larry Galehouse organized experts from the United States and Canada to contribute articles for the September/October issue of TR News. This issue will be devoted entirely to preservation activities, and represents acknowledgment by the transportation community of the importance of infrastructure preservation.
- **Keith Herbold** has lead the effort of organizing the Midwestern Pavement Preservation Partnership (MP³) an organization that comprises thirteen State DOT's, local agencies, industry and academia. The group's purpose is to identify and solve common pavement preservation issues. The MP³ bylaws have been

- distributed to the various states and now a funding mechanism is being reviewed.
- **Janice Williams** has been planning the Louisiana Transportation Engineering Conference, held in Baton Rouge on February 15-18, 2004. Janice has invited several speakers to present topics about pavement preservation.
- Steve Varnedoe continues to move new pavement preservation initiatives forward in North Carolina. The NCDOT has been successful in growing support and securing funding from the legislature for preserving the infrastructure. Steve continues to raise the awareness of state maintenance engineers across the country about the benefits of implementing a pavement preservation program. He has introduced research problem statements and resolutions through the AASHTO Subcommittee on Maintenance supporting action through the Standing Committee on Highways (SCOH) for increased pavement preservation funding.
- **Jerry Geib** stated he is the new Pavement Preventive Maintenance Engineer for the Minnesota DOT, which is evidence that preservation is slowly becoming institutionalized around the country. Jerry as already updated specifications for the ultra-thin bituminous wearing course (UTBWC), micro-surface, macrosurface, chip seals, and cold in-place recycling.
- **Gary Hildebrand** and Scott Draytrow have completed a thirteen-year report on the performance of the Strategic Highway Research Project (SHRP) California SPS-3 test sites. The results conclude that thin surface treatments provided outstanding performance.

Jim Sorenson recognized new members to the ETG including Ed Denehy, Colin Franco, John Vance, Shakir Shatnawi, and Emily McGraw, saying that each brings a unique perspective to the task group. Matt Zeller, Concrete Paving Association of Minnesota, has also been contacted to join the Pavement Preservation ETG.

The FHWA Office of Pavement Technology is interested in providing information to the Division Offices on pavement preservation. Matt Corrigan is the contact person for this initiative.

Five Year Strategic Plan Task Force Reports:

Denny Jackson outlined the agenda and discussed the strategic plan developed in Whitefish, Montana, during the September 2002, meeting. There are five task forces formed:

- 1. Pavement Preservation Acceptance & Implementation
- 2. Research Programs
- 3. Identify and Address Customer Needs
- 4. Support Pavement Preservation Centers, Regional, and State Organizations
- 5. Integration of Pavement Preservation into Pavement Management Systems

Each task force addresses specific issues relating to activities of the ETG. Task force reports followed.

1. Task Force Report on Pavement Preservation Acceptance & Implementation

Jerry Gieb, Task Force Chair, explained the task force charge was to develop strategic methods to obtain acceptance form industry and transportation agencies for pavement preservation. There are a number of initiatives in progress and reports were shared with the group.

<u>AASHTO SOM Pavements Task Force.</u> Steve Varnedoe discussed the importance of a coordination between the ETG, TRB, and AASHTO to move issues forward. One example of a coordinated approach is the submission of problem statements. In order to move problem statements forward, support much be tendered from numerous sources including FHWA and State DOT's.

A need exists for a dedicated staff position in AASHTO for pavement preservation. The initiative is gathering steam and is supported in concept. A similar position was created to endorse snow and ice programs implementation.

Efforts of the Pavements Task Force have been successful in promoting the NHI training courses and showcasing success stories such as given by Dean Testa, Kansas DOT. Kansas established realistic goals and worked on a long-term strategy to improve network condition. By integrating a comprehensive approach of reconstruction, rehabilitation, and preventive maintenance, the pavement condition went from 40% poor in 1982, to 5% poor in 2002.

<u>Action:</u> Kirk Fredrichs will work with Dean Testa and gather information for a technical writer to develop a fact sheet showcasing the Kansas story. It is critical to document the amount and percentage of funds used in pavement preservation to implement a successful strategy.

<u>AASHTO SOM Resolutions.</u> Jim Sorenson presented resolutions forwarded by the Subcommittee on Maintenance from the 2003 annual meeting held in Duluth, Minnesota. Steve Varnedoe championed Resolution 01-03 "Resolution Regarding the National Support for the Center for Pavement Preservation." The Pavement Task Force has been successful in previous years passing a resolution for creation of a national center for pavement preservation.

Pavement Preservation Definition and Eligibility. On July 3, 2003, an FHWA memorandum addressed the need to consolidate and clarify existing eligibility criteria for preservation activities. A Transportation System Preservation (TSP) team was established to develop a consolidated policy and update technical guidance documents for preservation. Chris Newman will lead the team.

One objective of the team is to muster more support within the FHWA that encourages states to endorse a formal preservation program. The FHWA Division Offices must advocate and champion awareness within State DOT's that promotes preservation as a cost-effective solution for improving the conditions of the Nation's infrastructure.

Chris Newman cited that clear definitions for pavement preservation are necessary to determine federal funding eligibility. For example, the distinctions between minor

rehabilitation, preventive maintenance, and routine maintenance must be defined. Issues regarding safety and the Americans with Disabilities Act (ADA) regulations further complicate eligibility concerns and trigger actions similar to the past "3R" Program. The FHWA needs to develop a means that ties funding categories and philosophies together. One suggestion offered by Larry Galehouse is to link preservation categories to pavement life. This can be stated as a minor rehabilitation project has a design life expectation, preventive maintenance has a life extension, and routine maintenance doesn't significantly add life, but only maintains serviceability at the current level.

<u>Action:</u> Contact Christopher Newman with any thoughts or concerns at (202) 366-2023 or by e-mail at christopher.newman@fhwa.dot.gov

<u>Technical Advisory for FHWA Division Offices' Role in Preservation Programs.</u> The purpose of this technical advisory (TA) is conveying information about the state-of-the-practice for developing a pavement preservation program. In this case, how to put a program together. A draft TA is under development by Jerry Geib. The TA is not regulatory, but rather more philosophical and giving the best advice of the time.

<u>Action:</u> Review the draft Technical Advisory on Pavement Preservation and contact Jerry Geib with ideas at (651) 779-5616 or by e-mail at gerard.geib@dot.state.mn.us

<u>Transportation System Preservation.</u> The FHWA has received numerous inquiries from State DOT's and Division Offices concerning transportation system preservation. In response a team is being assembled to provide guidance (refer to the topic on Pavement Preservation Definition and Eligibility). The team will consist of 15 members headed by Chris Newman.

Transportation Curriculum Coordination Council (TCCC). The TCCC is working with Sam Carpenter, University of Illinois, to develop technician training in areas of pavement preservation. The training is a web-based curriculum scheduled for release in Fall 2003. The TCCC is an excellent connection for DOT's for meeting training needs. Formal instruction programs are established, complete with a course hierarchy for guiding state training officers.

There are a few training programs currently underway that should encourage technician certification. The International Slurry Surfacing Association (ISSA) and the Texas Associated General Contractors (AGC) conference routinely sponsors training courses that should be offered to State DOT's. Other training opportunities exist in the concrete area, such as a short certification course on dowel bar retrofit. Certification courses, with continuing education credit, will dramatically improve the quality of preservation treatments.

2. Task Force Report on Research Programs

Keith Herbold, Task Force Chair, provided the status of research projects currently underway.

There remains an urgent need to formulate a strategic direction for pavement preservation research. An NCHRP 20-07 funded study would address both fundamental and applied research issues involving quality control, mix design, acceptance procedures, etc. A formal request will be resubmitted to the Standing Committee on Highways in September.

NCHRP 14-14. Jim Moulthrop relayed status on the project. A draft final report, including a CD on the Optimal Preventive Maintenance Timing Analytical Tool (OPT-AT) was submitted to NCHRP in mid-June and sent to the panel for review. Review comments were due back to NCHRP by July 14. Review comments will be transmitted to the contractor Applied Pavement Technology (APT) and they will have approximately 30 days to revise the report and submit the final to NCHRP. It is expected the final report will be available after September 1, 2003.

It appears the project produced two important products: An Excel-based program that practitioners can use to determine optimal timing for their system with or without actual data; and, an experimental plan for states to use to conduct experiments to obtain performance data. There will be a need for workshops to be held to demonstrate the software and explain the operating characteristics. Workshops were not in the original scope of work so perhaps this can be championed by the ETG.

Due to the lack of performance data, the scope of the study was reduced from the original allocation of \$500,000 to about \$250,000.

Performance Guidelines for the Selection of Hot-Poured Bituminous Crack Sealants.

Steve Mueller reported on a consortium project between the Canadian and American members. The study was initiated because standard testing methods for bituminous crack sealants do not correlate will field performance and sealant durability. The objective of the research project is to develop performance guidelines for hot-poured bituminous crack sealant selection and to produce a simple and effective testing protocol to simulate field conditions.

The co-principal investigator is Imad L. Al-Qadi, Professor, at Virginia Polytechnic Institute and State University in Blacksburg, Virginia. Steve stated the project must complete five distinct tasks before setting the performance guidelines. This study represents a \$1 Million effort and is open to new State participants for field implementation. Contact Kevin McGee, Virginia DOT, for additional information.

Slurry Seal and Microsurfacing Pooled-Fund Mix Design. This pooled fund study, which began life as a project with Kansas DOT, moved to Michigan DOT, finally landed at Caltrans. A Request for Proposal (RFP) was issued in September 2002. Proposals were submitted on November 13, 2002, with oral presentations in January. Caltrans issued notice of intent to award in mid-January. Because of lack of funding [amount of funds available versus the amount of the contractor's cost proposal] the award was delayed until June 2003, which gave Caltrans and the pooled-fund participants the opportunity to find more money. The contract was signed by Caltrans and delivered on July 11, to the contractor. Notice to proceed with the work was received on July 21, 2003.

The prime contractor is Fugro-BRE, Inc. with MACTEC, Applied Pavement Technology, and Consolidated Laboratories, as subcontractors. A project kick-off meeting with all the parties is scheduled for July 29, 2003, in Sacramento, after which work will commence. Project is 4.5 years in duration and the first milestone will be the Phase I report, due in January 2004, that will contain the literature review. Future laboratory studies will be Phase II and field trials will be Phase III.

Evaluation of Pavement Surface Texture and Friction as Inputs to Pavement

<u>Preservation</u>. Portable devices, such as the Circular Track (or Texture) Meter and the Dynamic Friction Tester, are available to evaluate pavement texture and friction values and to develop an International Friction Index. They are stationary devices that require lane closures for testing but provide a relatively quick comparison of existing surfaces. The equipment is currently in use by the Arizona Department of Transportation, the National Center for Asphalt Technology, and others for a variety of research studies.

Evaluation of Emulsified Sealer/Binders for Extending the Life of Asphalt Pavements.

The oxidative aging of pavements begins at the time of construction and continues throughout a pavement's life. However, most oxidative aging occurs within the first two to fours years of service life. This results in the top ½ inch of the pavement surface becoming more brittle than the underlying material due to the oxidative actions of water, ultra violet, and environmental forces. This can result in raveling and/or premature cracking, which often begins at the pavement surface. One method of preventing this or mitigating its impact is through the use of sealers/rejuvenators applied as fog seals by at the proper time in the pavement life.

Larry Scofield is the principal investigator of a \$400,000 study to evaluate the effects of spray applied sealers/ rejuvenators on the long-term performance of asphalt pavements. This study is designed to evaluate the effectiveness of this preventive maintenance strategy. Test sites are being studied in Arizona, California, Minnesota, and Michigan. An interim report of the preliminary findings is expected in the Fall 2003.

<u>Action:</u> Contact Larry Scofield for more information at (602) 712-3131 or by e-mail at lscofield@dot.state.az.us

Recycling Research Initiative. Todd Thomas reported that a problem statement was submitted through TRB-NCHRP by Roger Olson, Chair of A2B04 - Pavement Rehabilitation Committee, for a cold in-place recycling (CIR) mix design study.

Considerable interest exists for implementing a pooled-fund study through the National Center for Pavement Preservation that would develop National standards for CIR mix design and placement procedures. Minnesota DOT is likely to initiate the pooled-fund study concept if the problem statement is not selected by NCHRP.

A question of interest was raised about creating a broader definition of preservation. For

example, preservation of the environment, reuse of non-renewable natural resources, and energy conservation should be captured in an overall preservation definition. Considerable discussion followed this comment. It was concluded that a clear and more concise definition are needed for pavement preservation.

3. Identify and Address Customer Needs.

Steve Varnedoe, Task Force Chair, observed that for the ETG to be successful, we must meet the customer's needs. Both the FHWA and the Foundation of Pavement Preservation have provided resources to move preservation forward.

FHWA Pavement Preservation Products Update. Steve Mueller distributed checklists for six treatments that are currently available, including Crack Seal Application, Chip Seal Application, Thin Hot Mix Asphalt Overlay, Fog Seal Application, Microsurfacing Application, and Joint Sealing PCC Pavements. There will be a series of 10 treatment checklists, including five for asphalt and five for concrete. Checklists in draft include, Dowel Bar Retrofit, Full Depth Repair, Partial Depth Repair, and Diamond Grinding. There will be 20,000 copies of each checklist. Soon to be released will be 10,000 copies of the "Preservation Toolbox" and of the "Pavement Preservation Forum" on a CD format.

A "Pavement Preservation Compendium" a collection of selected published articles will be available in the near future. The compendium will incorporate important topics of interest into a single source.

Steve informed the ETG that certain Focus articles, relevant to Pavement Preservation, will be reprinted for distribution. Many meaningful articles could be missed unless it is reprinted.

<u>Action:</u> Steve Mueller stated a need exists for high quality pictures of preservation treatments. You're encouraged to forward photos immediately to steve.mueller@fhwa.dot.gov or telephone (202) 366-9981 for more information.

Foundation for Pavement Preservation Products Update. A new Pavement Preservation CD is being released containing various work efforts and studies conducted by highway agencies around the country. The release, known as CD-2, will be a comprehensive source of ongoing pavement preservation activities.

Bill Ballou reported that there is substantial demand for the preservation tool boxes. The tool box is a small reference library of pavement preservation topics, designed to provide the reader with reliable information. Due to the size and bulkiness of each tool box, consideration is being given to place the information on CD media.

Steve Varnedoe provided a status report on the "Glossary of Terms" which was delayed for numerous reasons through the AASHTO review process. The document is currently being reviewed by several AASHTO subcommittees, a process that can last indefinitely.

Although AASHTO is favorable to the concept of common definitions, there is a pressing need to get the glossary into the hands of the maintenance practitioner. Fundamental information, such as the understanding the difference between functional and structural condition needs, is crucial for proper use of preservation applications. Most likely the glossary of terms will be published by the AASHTO Subcommittee on Maintenance for use by maintenance people.

A report was prepared by Jim Lilly entitled, "Summary Findings of a Survey on Pavement Preservation Research." The survey tracked the work being done by AASHTO member agencies on 22 research projects created by a panel of experts in Sacramento, California, on June 21-22, 2001. The survey received response from forty-nine states and four Canadian Provinces. The report concluded that there was no research problem statement that had not received some degree of work.

4. Support Pavement Preservation Centers, Regional, and State Organizations. Denny Jackson, previous Task Force Chair, transferred leadership responsibilities of the task force to Lita Davis. Denny was appointed as the ETG Co-Chair position in September 2002.

National Center for Pavement Preservation. Larry Galehouse reported that thanks to the support of many companies and individuals with a strong commitment to pavement preservation the new National Center opens on August 18, 2003. The Center will be prepared to accommodate the needs for pavement preservation by specializing in services for both governmental agencies and the private sector. It will serve as a leader in a collaborative effort among government, industry and academia participants to advance and improve pavement preservation practices through education, research and outreach. The objectives of the National Center for Pavement Preservation will be to:

- Serve as a resource and advisor for pavement preservation activities.
- Educate others about the benefits of pavement preservation in partnership with the Foundation for Pavement Preservation (FP²) and MSU.
- Enhance pavement preservation knowledge through research.
- Advise and assist others to establish a pavement preservation program.

The Center will reside at Michigan State University Engineering Research Facility. The address is: National Center for Pavement Preservation, 2857 West Jolly Road, Okemos, Michigan 48864. The telephone number is (517) 432-8220, fax (517) 432-8223. The Center will soon establish a web site: www.pavement-preservation.org

Midwestern Pavement Preservation Partnership. Keith Herbold informed the members that bylaws for the Midwestern Pavement Preservation Partnership (MP³) were mailed to the states of Illinois, Indiana, Iowa, Kansas, Michigan, Minnesota, Missouri, Montana, Nebraska, North Dakota, Ohio, South Dakota, and Wisconsin. The purpose of the partnership is to provide an ongoing regional forum for Pavement Preservation by sharing and exchanging improvements in research, design, specifications, materials and construction practices, and by promoting the benefits of Pavement Preservation through education and application.

The key to future success of MP³ is the support of States for a pooled-funded project to be used to fund conferences and workshops that address issues common to the region. The administrative functions of the Partnership will be located in the National Center. The meetings will be open to agencies from around the country. The MP³ is considered a starting point to form other regional groups facing common issues.

5. Integration of Pavement Preservation into Pavement Management Systems.

Todd Hoerner substituted for David Peshkin, Task Force Chair, reporting on the status of the Pavement Preservation Training Courses.

Course #1 - NHI 131054, "The Preventive Maintenance Concept." This course targets management and decisions-makers responsible for setting pavement policies. In particular, it is aimed at those who are interested in developing or improving a preventive maintenance program, and much of the course material builds on the experiences of those agencies that have been practicing preventive maintenance for some time. To date, the course has been taught 36 times.

Course #2 - NHI 131058, "Selecting Pavements for Preventive Maintenance." The course addresses issues such as project selection, timing, and identifying feasible preventive maintenance treatments, and provides extensive guidance on how to use locally available experience to customize an appropriate preventive maintenance program. It has been presented 50 times since being introduced.

Course #3 - NHI 131103, "Design and Construction of Quality Preventive Maintenance Treatments." The course focus is on preventive maintenance treatments. It is designed to teach those who are involved in the specification, construction, and inspection of preventive maintenance treatments. Standalone materials are being developed for each preventive maintenance treatment, and they include guidance on design, material selection, construction techniques, and troubleshooting. The first pilot course will be taught in Jackson, Mississippi.

The course is being developed by Applied Pavement Technology (APT) and will feature seven training videos of specific treatments. A proposal is being prepared for LTS Productions to develop and complete the videos by year end. Further discussion continued regarding the industry responsibility to assure the timely completion of the videos.

<u>Course #4 - NHI 131104, "Integrating Pavement Preservation Practices and Pavement Management Systems."</u> Emphasis is placed on the importance of integrating pavement preservation practices with existing pavement management systems. The course focuses on the design, maintenance, and rehabilitation decisions made at various levels within an organization and how pavement management information can be used to support the different decision-making processes. The first pilot will be taught in Raleigh, North Carolina.

Old Business:

<u>FP² Headquarters Move.</u> Bill Ballou announced McCartney & Company, an accounting firm located in Okemos, Michigan, is the new home for the Foundation. The move was precipitated by the establishment of the National Center in nearby East Lansing, Michigan. The Foundation will transfer the web-site and streamline past business practices. The Foundation's new business address is at 2121 University Park Drive, Ste. 150, Okemos, Michigan 48864. The mailing address is:

Foundation for Pavement Preservation P.O. Box 23093

Lansing, MI 48909-3093

The new telephone number is (517) 381-0549. The web site remains as: www.fp2.org

FHWA International Scouting Tour. Luis Rodriguez briefed the members about an information gathering trip to Australia during the Fall 2002. The participants included Mark Ishee, Jim Moulthrop, Larry Scofield, Steve Varnedoe, Zane Webb, Katie Zimmerman and Luis. A particular point of interest included chip seal construction methods, using single size aggregate on pavements with 40,000 to 60,000 ADT.

An implementation team was formed with Mark Ishee, Lita Davis, and Joe Huerta, for developing a scope of work, mix design and selecting project test sites. Interest to host a test site was expressed by North Carolina, Texas and Arizona. Each site will be approximately 1000 feet in length, including portions with a single chip seal, geo-textile fabric, and control section. Work is set to begin in September 2003.

<u>College Preventive Maintenance Course.</u> Bill Ballou will send a report to the ETG members detailing the course.

Performance Related Specifications (PRS) on Thin Surface Treatments. A Technical Working Group (TWG) was formed to foster the development and application of Performance Related Specifications. At the second meeting of the TWG the original scope was expanded to include the formation of expert task groups in various technical disciplines. The ETG for thin surface treatments has met once and the status of the work is not known at this time.

ODOT Pavement Preservation Short Courses. Special thanks is extended to Bob McQuiston for his work on developing a series of short courses on pavement preservation. The courses are complete with a video that depict road conditions necessary for suitable treatment application.

<u>Action:</u> Todd Herner will contact Bob McQuiston to learn more about the Ohio courses and incorporate training concepts into future NHI courses.

Development of FY 2004 Work Plan for Pavement Preservation ETG:

Denny Jackson separated the ETG into designated Task Forces to develop the strategic plan for

next year. The updated strategic plan is attached to the meeting minutes.

New Business:

<u>Planning for "Preservation 2004" Conference.</u> Jim Sorenson announced for the first time three industry trade associations in the area of pavement preservation are planning a National level joint conference. The conference will be held February 25 - 28, 2004, at Loews Coronado Bay Resort, San Diego, California. A "Blue Ribbon Steering Committee" is being formed to solicit attendance of top-level transportation officials.

A program committee will need to be formed from local agency groups and Caltrans to review the technical content of a training session that "piggybacks" on the meeting. Considerable discussions followed and Jim stated he will soon select volunteers for a program committee.

<u>Specification web site.</u> Jim Sorenson informed the members that a new web site contains a comprehensive listing of standard and supplemental specifications of all 50 States. The States will deposit any new specification within three days of adoption. The web site is: www.specs.fhwa.dot.gov

Presentation of Rhode Island's Pavement Preservation Program. Colin Franco explained the steps taken by Rhode Island DOT to institute a preservation program. Develop began in 1995 when the Department looked at four different types of pavement classification by traffic. Workshops were held to launch a crack sealing program. In 1997, micro surfacing was placed on Block Island with tremendous success. This was the first time micro surfacing was used in the State. Nova Chip was introduced in 1998, using a PG 70-40 asphalt using crumb rubber into the mixture.

There were two major bridges in the State that were experiencing a delaminating desk. To solve the problem a Nova Chip and a rubberized chip seal were applied, respectively. After several years the treatments are performing perfectly.

Colin remarked that Rhode Island used a step by step approach to implement a preservation program. The single toughest barrier is to sell the concept to the Department staff. The program has grown from \$600,000 in the first year to \$3.5 Million in 2003.

<u>California's Pavement Preservation Program.</u> Shakir Shatnawi, stated that Caltrans is finding that applying thin surface treatments makes a difference in noise abatement. Using the GM noise measures, Caltrans learned that improving surface texture characteristics with thin treatments' significantly lowers sound decibels. A graph was distributed showing tire/pavement noise sound intensity for various highways in California and Arizona. Another advantage to surface treatments is the reduction of water spray from tires.

NCHRP Synthesis Topic 35-02 - Chip Seal Best Practices. Steve Mueller commented

that a synthesis will be conducted through NCHRP to find the resulting best practice for chip seals. The first panel meeting will be August 25, 2003, in Washington, D.C.

New Modules for Course #3 - NHI 131103. New improved treatments have been introduced within recent years that should be included into a new module for Pavement Preservation Training Course #3. The added module will give highway agencies a greater understanding of new technologies available for use.

Considerable discussion followed regarding the acceptance of new products before the ETG signed off on the acceptability of the treatment.

<u>Action:</u> A web page will be developed for new innovative products. The page will be posted on the National Center web site.

<u>Use of Mn/Roads Facility for Research.</u> With recent changes at MnDOT, the future of Mn/Roads is uncertain. Most preservation treatments impact the environment effects of the existing pavement, not structural deterioration caused by traffic. Mn/Road is an idea facility to perform research that should not be ignored.

The Mn/Road facility has been used for previous studies that impacted preservation, such as finding that water infiltration into the base was reduced by 85% by sealing edge joints. Another study determined that micro-surface slowed water infiltration into base materials by an 80-85% reduction. Considerable discussion followed about future studies for Mn/Road. The most plausible immediate could be to validate the findings of NCHRP Project 14-14.

Future Activities:

The next Pavement Preservation ETG meeting is scheduled for Sunday, February 22, 2004, in San Diego, California. The meeting will coincide with the Preservation 2004 Conference.

Meeting adjourned at 5:20 p.m..

Respectfully submitted, Larry Galehouse, Recorder

Attachments:

ETG Strategic Plan for 2004