The 2012 International Symposium on Asphalt Emulsion Technology (ISAET), now a matter of record was successful and well attended. 125 participants from 15 different countries, enjoyed two full days of technology exchange and networking. The ISAET roster of 28 speakers delivered outstanding, quality, educational and informative presentations from emulsion technologist worldwide.

Topics included social media, environmental issues, emulsion manufacturing, and testing, as well as design and applications. Thanks to the attendees, authors, and presenters for helping make ISAET 2012 a success. Additional thanks to the scientific committee for a well rounded informative program; such technology exchange provides further support and success in the asphalt emulsion industry.

The reception and breaks gave our attendees a chance to mingle and ask further questions of the presenters of that day.

This is valuable to both the presenters and attendees. We would like to extend our gratitude to our generous sponsors, who gave us the opportunity to provide the forum for this type of exchange of ideas and information. Special thanks to Colas Solutions, Inc., Ergon Asphalt & Emulsions, Inc. and FP2, Inc. The Symposium simply would not be possible without the support of our sponsors.

We would also like to thank the Asphalt Institute and the International Bitumen Emulsion Federation, for their continuing support of the ISAET.

Planning for ISAET 2016 will begin before we know it,

Continued on page 10
CRACK SEALING IS THE MOST COST EFFECTIVE WAY TO PRESERVE PAVEMENT
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Notes from Headquarters

Tim Harrwood, (Vance Brothers), Brian Horner (Etnyre), Chuck Ingram (Slurry Pavers), and Larry Tomkins (Ergon), are ISSA’s official SMEs (subject matter experts) for the new FHWA-funded project to develop web-based training for slurry/micro and chip seals. The project began last January with the contract finally let in August for three approximately 90-minute modules to cover Constructing High Quality Slurry/Micro Projects Part 1 & Part 2, and Constructing High Quality Chip Seals. The curriculum will be largely based upon the ISSA Inspectors Manual for High Performance Slurry Systems, and adapted for the Chip Seal module. The target audience is agency personnel, contractors, consulting engineers, and others having an interest in performing quality work. ISSA will post complete details as they become available via email, Facebook, and the newsletter, and will feature presentations about this training at the 2013 Slurry Systems Workshop and the 2013 Convention. The program is set to debut in mid-February.

GHG Calculator for Construction Emissions - FHWA’s Environmental Office is working on the development of a greenhouse gas calculator for construction emissions. This project is expected to develop: 1) basic and detailed planning level construction and maintenance energy and greenhouse gas emissions estimates; 2) cost estimates for construction and maintenance techniques that may be less greenhouse gas/energy intensive than common practice, focusing on incremental costs of these alternative practices; and 3) a tool/calculator for developing system level estimates of energy consumption and greenhouse gas emissions from planned construction and maintenance activities. Questions should be directed to John Davies of FHWA at JohnG.Davies@dot.gov.

FHWA has also completed the development of a new training course through the National Highway Institute on Asphalt Pavement In-Place Recycling Techniques (Course No. FHWA-NHI-131050). The training course was developed by FHWA in partnership with ARRA and examines three principal recycling techniques: hot in-place, cold in-place, and full depth reclamation.

Participants will learn about selecting a technique, materials consideration and mix design, construction specifications, and project control considerations for each technology. The course combines Web-based training modules with 2 days of classroom instruction. The classroom session focuses on project and technique selection and justification, materials considerations and mix design, construction specifications, and project control considerations during construction.

Manuel Bada

Headquarters has received word from Elpidio Sánchez Marcos that ISSA’s 31st President, Manuel Bada passed away from a sudden heart attack at the end of September.

Manuel Bada (Elsamex, S.A., Madrid, Spain) was installed as the 31st President of the International Slurry Surfacing Association during the 1993 Annual Convention held at the Wyndham Hotel in Palm Springs, California

Our condolences to Manuel’s family and friends.

Continued on page 12

Asphalt Emulsion Manufacturers Association
www.aema.org
Asphalt Recycling & Reclaiming Association
www.arra.org
International Slurry Surfacing Association
www.slurry.org

#3 Church Circle, PMB 250
Annapolis, Maryland 21401
USA
Telephone (410) 267-0023
Fax (410) 267-7546

Mike Krissoff, Executive Director
krissoff@krissoff.org

Lisa Cerone, Director of Member Services
cerone@krissoff.org

Mike Dougherty, Online & Social Media Marketing Manager
dougherty@krissoff.org

Diana Long, Newsletter
long@krissoff.org

The Associations do not endorse products, services or manufacturers. Trade or manufacturers’ names appear herein solely within context and because they are considered essential to the object of the article or reference.
AEMA President’s Message

Bucky Brooks, Asphalt Materials, Inc.

I don’t have the faintest idea of whether 2012 is the Chinese year of the cat, dog, parakeet or some other creature but I am officially declaring 2012 the year of the yoyo filled with highs and lows.

2012 started out on a high with things going well at work and another hugely successful AEMA-ARRA-ISSA Annual Meeting in Bonita Springs. After getting home from Bonita Springs, I had an appointment for my annual check-up with my cardiologist, which is normally a routine check of my aortic valve which up to this point had been replaced twice, once with a pig’s valve and once with a cow’s valve. I have probably never said this out loud before but thank you to the pig and cow. This time the routine appointment turned into anything but routine. X-rays found that I had an aneurism in my aortic root, where the aorta is attached to the heart, and, as luck would have it, was up to the size that required surgery.

While I was trying to get my arms around my third open heart surgery, doctors found a tumor in my wife Roxanne’s thyroid. Biopsies were performed to try to determine benign or cancerous and the results were inconclusive. Now she has to prepare for thyroid surgery and the worry of whether the tumor was cancerous.

To make a long story short, on June 12th Roxanne had the left half of her thyroid removed, the tumor was benign and the other half is fully functional. Great news! Then on June 18th I had successful surgery and now have a piece of Kevlar-type tubing replacing a section of aorta and a carbon fiber aortic valve that are both functioning beautifully. The other good news is that no other animals were sacrificed so that I could have their aortic valve.

We are both healed up now and I would like to thank everyone for the well wishes that we received. I would also like to thank Mark McCollough for taking the time to write the last President’s Message that appeared in the newsletter. I also thank the Board of Directors for carrying on a successful June Board meeting and Mike Krissoff, Lisa Cerone and Diana Long for all of their hard work at AEMA world headquarters.

I have to give a special thank you to everyone at Asphalt Materials, Inc., my employer, for their support and consideration during this time.

Another high this year was MAP-21 and its inclusion of Pavement Preservation. Thanks to all of those who worked hard, contributed, campaigned and lobbied in order to get this done. GREAT JOB!!

The 2012 International Symposium on Asphalt Emulsion Technology (ISAET) held in Washington D.C. in October, was an overwhelming success with attendees and presenters from all over the world sharing their experiences and technology of asphalt emulsions and applications. Thank you to Gaylon Baumgardner for once again being the champion and Chair of this event, and to your assistants Jean-Claude Roffe and Etienne LeBouteiller.

In September, AEMA Vice President Mark McCollough, Secretary/Treasurer Archie Reynolds, and I traveled to Lexington, Kentucky, to meet with the Asphalt Institute’s President Pete Grass, Director of Engineering Mark Buncher, Director of Research Mike Anderson and Vice Chairman Dave Blackburn. We meet at least annually to explore possible synergies between AEMA and AI. This year our primary discussion revolved around education and in particular creating curriculum that can be used in engineering schools as a tool for professors to educate students about the properties and uses of asphalt and asphalt emulsions.

The AEMA Board meeting held at ISAET was very productive. Bryan Cawley and Richard Duval with the Federal Highway Administration (FHWA) joined us to discuss synergies. Discussions included funding for educational opportunities including aid to agencies to enable them to send employees to PPRA seminars, aid and assistance with creating curriculum, webinar and web-based training and information, and other opportunities with AEMA and our International Technical Committee (ITC).

Planning is moving ahead for the PPRA World Congress in 2015 in Paris, France. This conference promises to be an informative international event. We’ll provide more details as they become available.

I look forward to seeing everyone at the AEMA-ARRA-ISSA Annual Meeting in February, 2013, in Indian Wells, California.

Thank you for the opportunity to serve as AEMA President.
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President’s Message
Patrick Faster, Gallagher Asphalt Corporation

From the President’s Desk:
I assemble this next work of literary genius and inspiration from 35,000 feet, as I return from FHWA/ARRA In-Place Recycling Conference in California. More on this later.

My previous message made reference to at that time the upcoming National Pavement Preservation Conference in Nashville in late August and I predicted it to be a great little splash. I was wrong…it emptied the pool.

The quantity and quality of attendees there was tremendous. The organization or I should say orchestration was very well done, and certainly time well spent for all who attended. Larry Galehouse and his crew genuinely put together a great outing. Thanks Larry and staff. Great job and thank you to all your supporting sponsors as well.

A few short weeks later, I find myself in Ontario, CA at the ARRA – FHWD In-Place Recycling Conference from which I am now returning. A great outing as well. Well-attended and again time well spent.

Before I go another syllable my thanks to Pavement Recyclers Inc. who put forth a tremendous effort in terms of time, organization, and dollars spent.

The in-place demonstrations were great and the agency people who attended were satisfied with their take-always. Accolades to Don Matthews and his crew. Thanks Don. And again, to the sponsors as well.

By the time you read this, the ARRA Semi-Annual Meeting in St. Louis will be part of history.

Those of you attending in St. Louis met Jenelle Strawbridge our new Cold Planing Chair-person. She is an Engineer for Caterpillar and absolutely brings something to the party.

To the new people stepping up, it’s great to see and it has to happen. I try to keep a little of that catholic guilt complex I was raised under plugged in all the time. Maybe it’s starting to work a little. We need new faces doing new things.

If you weren’t in Nashville, Tennessee or Ontario, California, I hope you made it to St. Louis for that quick 2-day event. Ryan Essex worked hard and it showed as we had a great meeting.

MAP 21, the new highway bill is chock full of preservation and recycling language. The likes of which have not been seen before.

The 2002 FHWA Recycle 1st Statement I have seen at the last 4 or 5 gatherings I’ve been at. Prior to that I haven’t seen it in years.

I will be speaking at a sustainability conference in Dubuque, Iowa next week and the following week at the Ohio chapter of APWA, both on behalf of ARRA. Look around at some of these upcoming events and see if you can’t get yourself on the docket. It will enhance your business as well as help move the recycling/preservation ball down the field.

Momentum is generally building in the preservation and recycling community. Agency budgets are slow to replenish and roadways continue to deteriorate. It doesn’t take a genius to see that Recycling and Pavement Preservation are here to stay and become standard practice as well.

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ISSA PRESIDENT’S MESSAGE

Doug Ford, Pavement Coatings Company

I was watching the Weather Channel and looking at how much of the US is in a drought. Yet within our industry the term, “When it rains it pours” could never be more accurate. In March, the Feds passed MAP-21 with $109 billion and it was done in bipartisan fashion and includes wording for pavement preservation. In July, ISSA, and a few very involved members, supported and participated in the application of ISSA-supported processes for the NCAT fifth cycle Pavement Test Track, including an expanded test area on Lee Road 159. The three-year study will target service life extensions of various preservation techniques as they relate to existing surface conditions. In August, FP2 was instrumental in putting on the 2012 National Pavement Preservation Conference in Nashville, Tennessee. This conference marked one of the best combined attendances between agency and industry I have ever witnessed, as well as hosting a very successful set of field demos that were nothing short of completely professional. Tie this together with FHWA accepting the ISSA Web-Based Training proposal for High Performance Slurry Systems and Chip Seal Best Practices and the efforts moving forward to complete them, and the Slurry and Micro Surfacing Committee’s progress in Field Testing of Slurry Surfacing, the drought is over and we are approaching flood stage.

Yet in a time of such activity, rather than recent what has been happening, of which most can be researched in more detail than I am able to provide in this message, I would like to take the time to discuss a common occurrence within our industry. Specialty products are an ever-expanding benefit, but if we don’t pay attention, we can lose the underlying message.

All of us are working in a competitive market. Therefore, finding a way to gain an edge is, and will always be, important to the survival of a business. Even while gaining an edge, the challenge to stay focused and continue to promote an overall philosophy becomes difficult. Believe it or not, I do not have an agenda, I have not been hurt or upset by a specialty product. The advancement in technology as it relates to pavement preservation is interesting and exciting. However, what I have witnessed is some confusion of those that we, ISSA, are trying to educate. The painful site for me was to watch a small city get hit with so many different options that they chose to do nothing at all. This agency will now miss a year of preservation and possibly two. How much will it cost to recover?

ISSA was founded to support a very singular product, slurry seal. It remained focused for many years and was successful in providing recommended test methods, material requirement and application practices. Contractor, supplier or agency alike, all knew where to find information on slurry seal.

The expansion of the association to include chip seal and crack seal was an important decision, one that I supported and still do today. The few that did not support, or at least voiced some concern, were worried that ISSA would lose its focus. This concern is as valid today as it was then. We as members need to remain focused and remember that the industry supports us far more than we support the industry. While our focus is no longer just slurry seal, it is still Pavement Preservation utilizing slurry seal, micro surfacing, chip seal and crack treatment. As outlined in the opening paragraph, we have a flood of positive things occurring within our industry. So many have worked very hard to achieve the momentum that has built up, so stay focused on the message and allow the industry’s growth to support everyone’s needs, even those that are special and unique.

I still need to plug a few important upcoming events for ISSA. The 2013 Slurry Systems Workshop is January 22-25 and again in Las Vegas. Please take advantage of this program; there can never be too many educated in Pavement Preservation. The 2013 ISSA President’s Award deadline is November 30, 2012. If you have a project you are proud of, please let us know; we love to see good project stories. The date for the Annual Convention in Paris, France, will sneak up on us all quickly. Start your planning today for 2015. Lastly, be prepared for the completion of the WBT in 2013. While I do not put many names in this message, I want to thank Chuck Ingram, Larry Tomkins, Tim Harrawood, Mike Krissoff, Brian Horner of FHWA and Harpers Enterprise for the work they have provided and continue to provide. The joint effort between ISSA and FHWA will no doubt create some very useful educational tools.

In my last message I closed with a small story about a drawing from my daughter. A number of people said that they too had something similar in their past and how great it would be to see it. I have included the picture this time, and hope it allows some of you to think back to years past. I am proud to say, “I still do slurry.”. Stay busy and stay safe.
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2012 International Symposium on Asphalt Emulsion Technology - Continued from page 1

building on the success of ISAET 2012 and previous symposia. Please make plans to submit papers for review and block your calendars for this beneficial experience.

Presentations from the ISAET 2012 are available at www.aema.org - the following are in pdf format and downloadable:

**Emulsions In The World 2012**  
Etienne LeBouteiller, IBEF

**Implications of IARC Monograph 103 for the Asphalt Emulsion Industry**  
Tony Kriech, Heritage Environmental

**Emulsified Asphalt Mixes In France**  
Bernard Eckmann, Eurovia

**Dense Cold Mix With 100 Percent RAP**  
Eric Jorda, Arkema

**A Novel Design Method for Slurries and Microsurfacing in South Africa**  
Morne Labuschagne, Colas South Africa

**Bitumen Emulsion In Sprayed Seals**  
Johan Muller, Sasol

**Communication, Social Media and Roads**  
Siobhan McKelvey, Nynas

**UK Emulsion Market Overview**  
Siobhan McKelvey, Nynas

**Favorite Road Dot Com Asphalt Institute Experience**  
Pete Grass, Asphalt Institute

**EAM-Common Points Advantages Drawbacks**  
Jean Pierre Serfass, SFERB

**EAM-Emulsified Asphalt Concrete Assessment And Design**  
Abdeltif Belkahia, Colas

**EAM-Grave Emulsion Assessment And Design**  
Frederic Delfosse, Eurovia

**EAM-Proposed Mix Design Method And Performance**  
Jean Pierre Serfass, SFERB

**Formulation Of Emulsions For Micro-Surfacing**  
Bernard Eckmann, Eurovia

**Aggregate Properties For Micro Surfacing**  
John D’Angelo, Ergon Asphalt & Emulsions Inc.

**Micro Surfacing For High Traffic in Thailand**  
Michel Lenfant, Tipco Asphalt

**Emulsion Residue Recovery by Vacuum Oven Method**  
Gerald Reinke, MTE Services, Inc.

**A Simple Field Test to Determine Return to Traffic**  
Robert Hill, University of Arkansas

**Thermal and Visco-Elastic Analysis of Various Asphalt Grades**  
Irina Cotiuga, Latexfalt bv

**Measuring Surface Tack of Modified Asphalt Binders and Emulsion Residues**  
Christine Gorsuch, Akzo Nobel Surface Chemistry

**Manufacture and Application of Bitumen Emulsions In Bulgaria**  
Alexander Nikolov, Patribor OOD

**Mechanistic Evaluation of Tack Coat Materials**  
Dr. Louay Mohammad, Louisiana State University

**Specialty Bituminous Emulsions and Sustainable Pave- ments**  
John Lysenko, Fulton Hogan Industries

**Versatile Bitumen Emulsions From A Variety of Emulsi- fiers**  
Marcela Balige, YPF, SA

**A Review of Full-Depth Reclamation Asphalt Emulsion Mixtures**  
Robert Hill, University of Arkansas

**Blending of Binder from Reclaimed Asphalt Pavement with Virgin Binder**  
Everett Crews, MWV Asphalt Innovations

**A New Preservation Technology for Porous Asphalt**  
Bert Jan Lommerts, Latexfalt bv

**Particle Stabilized and Particle Modified Bitumen Emul- sions and Their Residues**  
Alan James, Akzo Nobel

Gary Houston, Valley Slurry Seal; Joe Platt, and Andrew Clayton, Western Emulsions; Aaron Walker, and Adam Mahaney, Western Asphalt Products
From the ISAET 2012 Album

...see more photos from this meeting on AEMA's Facebook page at facebook.com/aema.social
For more information, visit www.nhi.fhwa.dot.gov or nhicustomerservice@dot.gov or call NHI @ 877-558-6873. Contact your local DOT’s for scheduling the training course. The FHWA contact for questions on the training course is Lee Gallivan who can be reached at victor.gallivan@dot.gov or @ 317-226.7493.

Here’s a link to a very well produced 3 minute video by the Virginia Department of Transportation on the I-81 In-Place Recycling project that was completed last year. http://www.youtube.com/watch?v=FF0JQub86E0&feature=youtube_gdata_player

SHRP2 has released a new Report for Expedited Planning and Environmental Review of Highway Projects. Delay in delivering new transportation projects is a national concern because it increases costs, prolongs congestion, and denies the nation the economic and mobility benefits of added transportation capacity. SHRP 2 Report S2-C19-RR-1, Expedited Planning and Environmental Review of Highway Projects, will be of interest to practitioners in the areas of long-range planning, corridor planning, programming, and environmental review. It describes constraints on expediting project delivery and useful strategies for achieving expedited delivery. While the strategies and constraints are associated with planning and environmental review, many of the strategies are applicable to design and construction. The results of this project are also available on the SHRP 2 website Transportation for Communities-Advancing Projects through Partnerships (TCAPP). TCAPP provides a series of self-evaluation questions organized around the constraints to help determine whether an agency is structured to regularly deliver projects in an expedited manner. This report is available as an Adobe PDF and in hardcopy through the TRB bookstore. Contact Patrick Zelinski, Communication/Media Associate, 202-334-1916 or visit: www.TRB.org/SHRP2

In the trade press:

Asphalt Magazine
http://www.asphaltmagazine.com

High performance emulsion applications extend pavement life
By Dwight Walker, P.E.
Posted 06/20/2012
http://www.asphaltmagazine.com/news/detail.dot?id=2cea1c03-0264-45f3-9ee3-8dc2c10ffbdba

Notes from Headquarters - Continued from Page 3

DuBose Tuller
March 20, 1968 - August 4, 2012

William Porcher DuBose Tuller COLUMBIA - William Porcher DuBose Tuller died at his home Saturday, August 4, 2012 following a two-year battle with cancer. He was the son of William Henry Tuller Jr. and Virginia DuBose Tuller. DuBose attended Episcopal High School in Alexandria, Virginia and later graduated from Hammond Academy in Columbia, S.C. He received his Bachelor of Arts in Political Science from the University of South Carolina where he was a member of the Kappa Alpha Order and an avid Gamecock fan.

DuBose served as President of Seaco, Inc., an AEMA member since 1999. He was the fourth generation to lead the family company. DuBose’s generous spirit and desire to help others impacted all who knew and worked with him. He served in his church, as a member of the Vestry as well as on the Building Committee. This past April, DuBose was named Community Servant of the Year by the Souper Bowl of Caring Foundation. He was also an advocate and supporter of Homeworks, a mission that provides home repairs to those in need.

He is survived by his wife, Elizabeth Richmond Tuller; three children, William Porcher DuBose Tuller Jr., Elizabeth Austin Tuller, Virginia Grace Tuller; his parents; and his sister, Virginia Beverley Allen Tuller.

Services for DuBose were held August 7th, at the Church of the Apostles in Columbia, South Carolina.

For more information, visit www.nhi.fhwa.dot.gov or nhicustomerservice@dot.gov or call NHI @ 877-558-6873. Contact your local DOT’s for scheduling the training course. The FHWA contact for questions on the training course is Lee Gallivan who can be reached at victor.gallivan@dot.gov or @ 317-226.7493.

Here’s a link to a very well produced 3 minute video by the Virginia Department of Transportation on the I-81 In-Place Recycling project that was completed last year. http://www.youtube.com/watch?v=FF0JQub86E0&feature=youtube_gdata_player

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Asphalt Magazine
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High performance emulsion applications extend pavement life
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http://www.asphaltmagazine.com/news/detail.dot?id=2cea1c03-0264-45f3-9ee3-8dc2c10ffbdba

Continued on page 14
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Notes from Headquarters - Continued from page 12

Asphalt Magazine
http://www.asphaltmagazine.com

Talking Asphalt: Full Depth Reclamation - June 2012
By Dwight Walker, P.E.
Posted 06/01/2012
http://www.asphaltmagazine.com/news/detail.dot?id=d1127ed2-ddc8-45f9-83c5-0b3d476f0c0a

Asphalt Contractor – Pavement Preservation Section
www.asphalt.com

Dustrol Gains Momentum through Hot In-Place Recycling
By Lisa Cleaver, Editor
September 2012

NCAT Tests Preservation Techniques
Myriad preservation methods, including slurry, micro surfacing, chip sealing and more, will be researched during the three year study
October 2012

Midwest Stabilization Uses Full Depth Reclamation for 15 Percent Savings
Reducing labor, materials and trucking
By Kimberley Schmitt, Associate Editor
October 2012

Slurry Sealing 3.8 Million Square Yards
American Pavement Preservation completes the largest slurry project of Las Vegas
By Kimberley Schmitt, Associate Editor
November 2012

What You Need to Know about Updates to Milling Machines
Experts from Roadtec, Wirtgen America and Terex Roadbuilding discuss silica issues
By Kimberley Schmitt
Created: December 2, 2012 online at forconstructionpros.com

Asphalt Pavement Magazine
‘Because We Could Do Better’
By Kirk Landers
The Silica/Milling Machine Partnership seemed to reach a triumphant conclusion in 2010, but data analysts discovered the potential for even more effective and more consistent systems. See the ref. for this article on page 37.

Better Roads - Special RoadScience section
The Second Time Around
By Tom Kuennen
Recycled materials need analysis, characterization
September 2012

California Asphalt Magazine – 2012 Equipment Guide
Full-Depth Reclamation is tested at U.C. Pavement Research Center
By Russell W. Snyder

Thank you for letting us know...

Amarjeet Benipal with Caltrans, was kind enough to send this note via email recently:

Subject: Western States In-Place Recycling Conference
Hello all,
As a host State and on behalf of Caltrans, we appreciate the many hours of dedication and planning that the In-Place Recycling Planning Committee endured to make this a successful conference. Please accept my gratitude and appreciation for the job well done. Specifically, Thanks to Patte Hahn, Don Matthews, Hamid Moussavi and Jason Dietz for going above and beyond in providing an informative and educational conference.

I will look forward to notes from the conference, so we can share it with staff members across the state, who were not able to participate in person.
Thank you all again!

Amarjeet S. Benipal
State Pavement Engineer
California Department of Transportation (Caltrans)

If you have any questions, please reply or call. Thanks.

See the article about this conference on page 31.
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*Recommended Performance Guidelines for Aggregate Seal Coats (Chip Seals) A-165*
*Recommended Performance Guidelines for Crack Treatment A-175*

Final versions are available now from ISSA Technical Director Bob Jerman. Just as ISSA has made available *Recommended Performance Guidelines for Emulsified Asphalt Slurry Seal Surfaces* and *Recommended Performance Guidelines for Polymer Modified Micro Surfacing*, these new Guidelines are posted on [www.slurry.org](http://www.slurry.org) – available as a FREE download in pdf format.

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<td>Recommended Performance Guidelines for Crack Treatment A-175</td>
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I’m Michael Dougherty, the Association’s Online & Social Media Marketing Manager, and I wanted to take a moment to introduce myself. I bring over fifteen years of experience in fields of marketing and social media, I plan to help bring awareness and attention to the work you do as well as help connect the Association to new potential members.

I am coming to this industry from a completely unique perspective. To give you a little background, prior to starting in this position, I helped build the Chesapeake Bay Foundation’s social media from zero to over nine thousand active followers in nine months on Facebook. I did this by getting the community involved by sharing their stories, photos, and get their comments on things within the community. It was very much a two way street.

Most recently I worked for National Wildlife Federation and helped bring their websites to a mobile platform and get them started in the app world by being the technical lead on the creation of a few games. So I am entering this position completely green (not in the environmental sense) and able to look at what you do with fresh eyes to find the best way to tell the story of what you do.

Technology, social media, and marketing are not just things I do for a living. They are things I am completely passionate about. I created a feature length film and leveraged social media, and word of mouth marketing, to distribute it globally as well as donating over $117,000 for charity in one year in the process. I did all of this with just a laptop, an internet connection, and tons of great stories.

Part of my responsibilities will be to collect your job stories. I will be sharing them via the e-newsletter which will be coming out, at least, once a month. This is where I could use your help. Drop me an email to Dougherty@krissoff.org with a brief description of your job and any photos you may have. With so many stories out there, I’ll do my best to include them as we go along.

Periodically, I will be sharing some information or insights on how you can help your company tell their story using the tools that social media offers. I do my best to stay away from the geeky and techy talk and break this down to help you get the most out of each of these posts. If those geeky type of terms do pop up, as they may from time to time, I’m going to find easily understandable comparisons to put them in plain speak for you. Please don’t get me wrong. I’m not saying this is going to be the “See Spot Run” articles in this genre, but I want you to have some fun while you do it. These articles should feel like a conversation with someone over a cup of coffee and not something you need to jump up and grab a dictionary for at every paragraph.

I look forward to connecting with you, whether online or in person, and learning more about what you do.
One Family Proves That Necessity Results In Over Forty Years Of Innovation

By Michael Dougherty

To fully understand the impact TYMCO has had on the asphalt industry you have to go back nearly fifty years to three brothers who worked together building roads at Young Brothers Construction.

B.W., Raymond (first president and founder of ISSA), and F.M. Young learned that if the base of asphalt roads were solidly built, then the surface could be repaired inexpensively without having to repave. The team came up with a truck mounted process of resealing asphalt roads with a layer of emulsified asphalt and sand called “Slurry Seal”. The key for the emulsion to stick was that the road needed to be cleaned. If the emulsion was not able fill the cracks, the weather would cause those cracks to reappear. The mechanical brooms available at the time would only clean off the top surface, but not get in the cracks.

After experiencing the slow and arduous process for cleaning the roads, B.W., with the help of his brothers, invented a machine which would help make the process faster, a Regenerative Air Sweeper. The new sweeper blasted air into the cracks and then vacuumed it up without refilling the surface imperfections with debris. Simply working together to solve a need, B.W. and his brothers created a machine with multiple applications for improving the existing technology of cleaning paved areas, instantly changing the market.

Learning that the machine was even more valuable as a standalone product, in the late sixties the brothers parted ways and formed three separate companies. F.M. retained the family construction business that spawned the idea, Raymond created Slurry Seal International, and B.W. incorporated and federally registered TYMCO, The Young Manufacturing Company, focusing on the machine he created.

When B.W. passed in 1973, Kenneth, B.W.’s son, left school to work at TYMCO. Gary, Kenneth’s brother, came to work for the family business in 1977 after graduating from Texas A&M University with a Mechanical Engineering degree. At 91 years old, Sophie, B.W.’s wife, is not involved in the day to day activities at TYMCO, but she still comes in every week to sign the paychecks and keep watch over her husband’s legacy.

Today, TYMCO makes eight models of street sweepers that are used on surfaces ranging from parking lots to airport runways. They may be different sizes and shapes, but they are all based on B.W.’s initial vision of the Regenerative Air System.

For more information on TYMCO visit their website www.tymco.com.
ARRA Semi-Annual Meeting

Lisa Cerone, Program Director

The 2012 ARRA Semi-Annual Meeting, held October 29-30, 2012 at the St. Louis Union Station Hotel, in St. Louis, Missouri, was another success in technology transfer.

The first day of the program was committed to the ARRA Board meeting, followed by the committee meetings, all with full agendas. (See committee reports on page 25). The Monday night reception, thanks to Committee Chair Ryan Essex (Miller Paving, Ltd.) was far beyond our normal reception. We boarded busses and headed to the Anheuser-Busch Brewery, where everyone enjoyed a tour of the brewery, and got up close and personal with some of the Clydesdales and the Budweiser Dalmatian. After the tour, the group sampled the beers brewed fresh at the plant. The reception gave attendees an opportunity to network and mingle before Tuesday’s program, packed with informative presentations on current topics of interest.

Special thanks to all of the speakers, the sponsors who help keep our registration costs down, and the program committee, chaired by Ryan Essex, which did an outstanding job developing a comprehensive selection of hot topics.

Copies of the presentations can be found on the ARRA website, www.arra.org.

- Cold In-Place Recycling – A History of Success in Illinois
  Mike Pedigo, Mason County Illinois
  John Anderson, Tazewell County, Illinois

- Utilizing Hot In-Place Recycling to Extend Your Pavement Life
  Roy Rissky, Rissky Consulting

- Comparing Lime Treatment to Remove & Replace for Construction Site Soil Improvement
  Larry Cole, Carmeuse Lime

- Milling for Smoothness & the Use of Production Curves
  Eric Baker, Roadtec Inc.

- Full Depth Reclamation – What is Going On Around the World
  Mike Marshall, Wirtgen America

- North American Research Initiatives Involving ARRA Processes
  Trevor Moore, Miller Paving, Ltd.

- Incorporating In-Place Recycling Methods into High Volume Road Design
  Salman Bhutta, Exp

- Asset Management Incorporating ARRA Processes
  Stephanie Drain, S. Drain Engineering of IL, LLC

- Utilizing Value Engineering Proposals to Incorporate ARRA Processes
  Don Matthews, Pavement Recycling Systems

- Sustainability Calculators – How to Use Them to Grow Your Business
  Marc Proteau, Eurovia

ARRA Semi-Annual Meeting information continues with photographs from St. Louis (more photographs can also be found on the ARRA Facebook page at facebook.com/arra.social).

Committee Reports begin on page 22.
ARRA Semi-Annual Meeting Wrap-Up

From the Board Room/Committee Meeting Room to the Classroom and all the rooms in between...

CORE Executive Committee meeting

Tuesday’s General Session

Hot In-Place Committee meeting

Full Depth Reclamation/Soil Stabilization meeting

Cold Planing Committee meeting

Reception
ARRA Semi-Annual Meeting Wrap-Up

The ARRA Semi-Annual Meeting was filled with opportunities to share knowledge and learn new things.

Our generous sponsors deserve the recognition

Attendees enjoying the reception

Rich Ferron and Stephanie Drain meet “Mike” the Clydesdale

ARRA CORE Chairman, Don Matthews makes a new friend.

ARRA Semi-Annual Meeting Committee Chairman, Ryan Essex

ARRA President Patrick Faster
Committee On Recycling Education (CORE) 
Executive Committee Meeting 
Don Matthews, Chairman

Present:
Todd Thomas, CORE Vice Chairman, Technical Review Chairman
Trevor Moore, CR Chairman
Jenelle Strawbridge, CP Chairman
Kimbel Stokes, FDR Chairman
Jonathan Pease, FDR Vice Chairman
Stephanie Drain, Affiliate Member Chairman
Dale Cronauer, Director
Pat Faster, President, HIR Chairman
Donn Johnson, Director
Michael Dougherty, Staff
Andrew Fox, Vice President
Ryan Essex, Treasurer

Technical Review Committee (TRC) - Update
Thomas indicated that he was finishing compiling the ARRA list of comments on the NCHRP 421 Synthesis. He planned to address each committee at this meeting to give one last chance to review prior to summarizing and completing at the 2013 Annual meeting.

Pavement Preservation Expert Task Group – Update
Thomas reported that not much activity had occurred. FHWA has tentative plans to meet in April or May of 2013.

NHI Course – Matthews reported that the NHI Asphalt Pavement In-place Recycling Techniques course is complete and available. Information for ordering can be found on the ARRA website and in the newsletter.

2012 FHWA/ARRA Western In-place Recycling Conference
– Matthews reported that the California conference was very successful with positive reviews. FHWA has indicated a desire to continue support. The ARRA Board determined that the 2013 conference will likely be held in the Chicago area. Matthews directed the committees to determine where a good location for 2014 would be. Suggested the Northeast or Southeast. ARRA members who sponsor will have to be on several conference calls, construct the field trip project and help coordinate sponsors for the event.

ARRA Regional Seminars – Matthews reported that the recent one held in Effingham, Illinois was a success, with over 115 people in attendance. Right now all workshops are being coordinated through the Supplier member committee with Tom Kiernan talking the lead. Everyone is reminded that this is a value for ARRA members and if they want to put one on they need only ask. ARRA has a template and people who will help in its organization. Committee chairman are to ask the committees: Do you want to have one? Where is a good place to have it? Andrew Fox, Annual Meeting Program Committee chairman suggested that he would look into the possibility of providing a session to help the members understand the value and impact a regional one-day seminar can provide. Dale Cronauer indicated that in November or December, he and Kim Stokes are doing a presentation on FDR at LTAP in GA.

Review ARRA Wish List Training and Research Needs – Matthews requested the committees review the ARRA Wish List and add to, or prioritize, the research or training needs. With the interest of several universities focusing on ARRA disciplines, ARRA needs to come up with a priority.

Special Recognition Awards – Don reported that ARRA received a strong list of nominations for Cold Recycling and FDR individual awards, but nothing for Cold Planing or Hot In-place Recycling. Everyone is reminded to nominate worthy individuals. The new ARRA social media outreach might help to keep in front of members the deadlines for submission. November 19th is the deadline for submittal of nominations for the ARRA/Roads and Bridges Recycling awards. The ARRA Awards recognize individuals (champions). The ARRA/Roads and Bridges Awards recognize projects.

ARRA Guidelines – Each committee chairman gave an update on the status of its guidelines. It was reported that some are complete, others are in the final review stage or, as in the case of Cold Planing, others still need to be written. It was determined that small task groups will be assigned to finalize the guidelines by the Annual Meeting. It is desired to put them on the website. Then at the 2013 PPRA fall meeting, which corresponds with the ARRA Semi-Annual Meeting next year at this time, it is the goal that the guidelines will be presented in detail. The list to be completed is as follows:

**Cold Recycling Guidelines**
- Construction using bituminous recycling agents
- Preconstruction sampling and mix design
- Quality assurance sampling and testing

**Full Depth Reclamation Guidelines**
- Construction using bituminous stabilizing agents
- Construction using cementitious stabilizing agents
- Construction using lime stabilizing agents
- Preconstruction sampling and mix design
- Quality assurance sampling and testing

**Cold Planing Guidelines**
- Standard cold planing construction.
- Milling for smoothness for thin overlays
- Micro Milling
BARM 2nd Edition – After the review of the committee-submitted revisions, the final review committee consisting of Todd Thomas, Don Matthews, Steve Cross and Lee Gallivan, determined that there was more work to be completed, especially on making sure the terminology is consistent. It expected that the committees will get revised chapters to make their second review beginning at the Annual Meeting.

School Competition and Sponsorship – Matthews reported there were preliminary discussions with respect to ARRA supporting a student competition using recycled pavements and possibly pavement preservation seals. It is a goal to spearhead pavement design, recycling and pavement preservation in universities, something like ASCE does with concrete canoes. He will report back when there is a formal proposal put forth.

The Meeting was adjourned at 12:00 pm

Cold Planing Committee
Jenelle Strawbridge, Chairman
Tom Chastain, Vice Chairman

Present:
Jenelle Strawbridge
Tom Chastain
Eric Baker
Andy Pujats
Donn Johnson
Barry Stoughton
Lee Newton
Rob Hannan
Doug Jones
Ron Wilson
Don Mouthaan
Jeff Wiley
Edgar de Leon Izeppi

Decisions Made:
• Co-Chair named: Tom Chastain from Wirtgen America
• Subcommittee on the BARM
• Subcommittee for the development of guidelines/specification on cold planing.
• BARM common terminology:
  ▪ Cold Planer (CP): mill, cold mill, planer, profiler, and/or milling machine
  ▪ Cutting Tools: teeth, carbide tools, diamond teeth
  ▪ RAP: reclaimed materials, millings
  ▪ Standard cold planing (milling): 5/8” line spacing
  ▪ Fine cold planing (milling): ¼ - 5/8” line spacing
  ▪ Micro-cold planing (milling): 1/4” or less line spacing

Action Plan/Committee Assignments:
• Update presentation on ARRA website on Cold Planing – Strawbridge
• Subcommittee for the review of the BARM: Jones, Hannan, Baker, and Chastain (to take the lead on this)
  ▪ Will have something submitted to the committee before Thanksgiving
  ▪ Updating through the terminology as outlined above
• Subcommittee for the development of Guidelines/Specs on Cold Planing: Jones, Johnson, Baker, and Strawbridge (to take lead on this)
  ▪ Johnson to provide Colorado cold planing specification
  ▪ Develop a standard cold planing guideline, fine cold planing guideline, and micro-cold planing guideline.
  ▪ Develop a guideline to measure smoothness behind a cold planer

Next Meeting/other important dates or deadlines:
• Strawbridge and Chastain to meet the week of November 5th to discuss an action plan
• BARM chapter 4 & 5 review by Thanksgiving and completed by Christmas
• Guidelines developed and sent out to the committee for review by Thanksgiving

Other recommendations and miscellaneous:
• Requested by the group that we do not hold all the committee meetings at the same time. There are members of ARRA that would like to be part of multiple committees and right now with the way the meetings are structures this is not possible. The benefit to ARRA would be that there would be more attendance in each discipline.

General discussion:
• Discussed the CORE meeting from earlier that day
• Development of guidelines
  ▪ Standard cold planing
  ▪ Fine Milling
  ▪ Micro milling
  ▪ Smoothness
• Review of the BARM: 1. Chapter 4:
  ▪ Clean up and use terminology outlined (and agreed to by the committee) above throughout the chapter
  ▪ NIOSHA website to be included on 4-7
  ▪ 4-8 last sentence on the last paragraph to be removed

Continued on page 24
4-10 some additional attention needed
4-11: change 8.3 to 4.3 (for Preparation and Planning)

2. Chapter 5:
- Clean up and use terminology outlined (and agreed to by the committee) above throughout the chapter

- ARRA Awards: discussion outline above
- Job success stories: looking for everyone to submit, manufactures might have some good job stories. Please send in.

Cold Recycling Committee
Trevor Moore, Chairman

- CORE Meeting Action items
  - Reminded committee of ARRA/Roads and Bridges Award submission deadline of Nov 19, and if interested in ARRA Regional Seminar, advise ASAP.

- Current business
  - NCHRP 421 Submission review – Thomas. Thomas to send comments to Moore. Moore, Coughlin, and Schwarz to review and respond.
  - CR201 - Preconstruction Sampling and Mix Design Guidelines for Cold Recycling – sub group established consisting of Drain, Garren, Tom Johnson, Hammon and Schmitz to review current draft. Garren to summarize and provide comments to Moore by November 16.
  - CR301 - Quality Assurance Sampling and Testing Guidelines for Cold Recycling – sub group established consisting of Matteson, Wielinski, Schroer, and Flintsch to review current draft and provide comments by November 16. Wielinski to summarize and provide comments to Moore by November 16.
  - ARRA proposed enhancement programs – subgroup of Coughlin, Marshall, and Schwarz reviewed. Marshall to provide comments to Moore by November 16.

Core Meeting Update from Don Matthews
- Feedback on NCHRP 21
- Handout to be sent to committee from Don

Regional Seminar Update
- Effingham Success
- Existing Framework & ARRA Support to encourage members to take advantage of the opportunity

FHWA Regional Seminar
- 2013 Meeting to go in Chicago
- 2014 Committee discussed other Areas
- Virginia Area discussed, no other areas discussed

BARM II Updates
- Should be ready for final review by the annual meeting

Special Recognition Award
- Committee voted unanimously to approve the winner
- Reminded members to get there submissions in for next year winner and take advantage of the opportunity to nominate worthy individuals

NCAT Virginia Test Strip
- Ferron, general overview
- Hot Mix vs. Pavement Preservation
- General discussion of challenges of competing with traditional HMA Market

Standardizing Compressive Strength/Structural Coefficient for FDR/Soil Stabilization
- General discussion on how to implement a range for value engineering purposes
- Mechanistic vs. Structural Coefficient discussion (value or non value of each)

Non-conventional Stabilizers
- Pease discussed work being let with non-conventional stabilizers in North Dakota, and the lack of testing and/ or use of recommended guidelines to place the nonconventional stabilizers
- Todd Thomas discussed some reports showing non-conventional stabilizers failing (Todd was going to forward reports to committee)
- Discussion of pros and cons for ARRA listing non approved stabilizers
- Andrei offered to review reports or test nonconventional stabilizers
• FDR (LKD, Cementitious, & Bituminous) Recommended Construction Guidelines
  ▪ Discussed and voted to have separate specifications for Mix Designs
  ▪ Discussion of having an ARRA list of approved materials that should be used as stabilizers
  ▪ Discussion regarding referencing any other materials to be recommended by ARRA to be heavily tested to ensure like results of traditionally approved stabilizers
  ▪ FDR Checklist - Andrei discussed pocket checklist

• Discipline Groups
  ▪ Separated to discuss and review current revision of Recommended Construction Guidelines
    ▪ Lime (L)
    ▪ Cementitious (C)
    ▪ Bituminous (C)
  ▪ Subcommittees to finish via email

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**Hot In-Place Recycling Committee**
*Pat Faster, Chairman*

Present:
- Pat Faster
- Tim Flanagan
- Todd Thomas
- Paul Denkler
- Steve Cross
- Roy Rissky
- Brian Hansen
- Lee Smith
- Mike Smith
- John Rathbun
- Tom Flowers

• NCHRP Adjustment on Traffic Count Inquiry from Todd Thomas. Clarified his questions and answered Dynamic Modulus Study on HIR being done by Gallagher Asphalt.

• Explain the possibility of assembling a new HIR brochure at the association level.

• Last look at HIR Section of the BARM.

• If we continue or start university studies, the HIR group would like to see research in the strength or structural numbers side.

• Rathbun will compile old brochures.

• Miscellaneous marketing conditions and marketing affect what we are doing.

• Again, encouragement to assemble 1 day seminars.

• Discussed FHWA Chicago 2013, who will be supportive.

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**Supplier Members Committee**
*Chairman Tom Kiernan*

Meeting started at 10:00 AM sharp with twenty supplier members in attendance.

Chairman Kiernan opened the meeting with a quick review of the Action Items from the previous Supplier’s meeting in Bonita Springs.

Job story creation and Regional Seminars continue to be part of the focus of the Supplier’s group. In review of those action items from Florida’s meeting, Kiernan provided a copy of the feature article from the February 2011 edition of *Asphalt Contractor* magazine; a feature on two FDR success stories in the northern Illinois area. The slant of the article mentioned the participation of three ARRA member companies that worked on the projects.

The other review item discussed was how the use of Stabilization Workshops in the Chicago area have benefited local and state agencies in the design and development of soil stabilization and FDR projects within their jurisdiction.

To date, two of the workshops have been sponsored by Midland Standard Engineering & Testing, Inc (MSET), McCleary Engineering, Inc., and Lafarge North America.

There are four more workshops that will be scheduled during the off season at the MSET facility in East Dundee, IL.

The members were asked if the Regional Seminar updates were helpful and if they were inspired to plan one on their own. Kiernan offered help from the Illinois ARRA group in assisting any of them to develop their own venue. A template is available to help members form a committee and plan their own Regional Seminar.

Note- As the semi-annual meeting came to a close, Regional Seminars for Q1 in 2013 were being planned for Springfield, IL and Chicago.

Going forward, all ARRA Supplier Members will be updated by email on any Regional Seminar Event in the planning stage.

Also worthy of mention was the interest by Darren Coughlin (Coughlin Company, Inc) to put a seminar together in the Utah area.

Other discussion items included how ARRA supplier members attempt to promote their products and the recycle disciplines with state and local agencies. Terry McCleary (McCleary Engineering) sat in for the two IDOT speakers that were not in attendance for Monday’s Supplier meeting, and provided insight how the ARRA members can take the correct Industry approach with the state agencies and accomplish mutually beneficial goals. Terry was an IDOT (Illinois DOT) Materials Engineer for twenty years and then went in
to private practice. He gave many good examples of how effective the Regional Seminar concept and the hands-on Stabilization Workshop’s in Chicago, work to promote the recycle disciplines that ARRA supports. A special thank-you goes out to Terry for making the trip to St. Louis to fill in for Mike Short and Kevin Burke of IDOT.

Other talking points included the following:

- Bruce Wehr (AMI) made the comment that there is such a disparity of course offerings related to Asphalt and the Recycle disciplines at the university level. He suggested an effort be made to contact certain schools that have strong engineering curriculums and “enlighten” them as to what the ARRA seminars can do for their undergrad programs.
- John Irvine (Roadtec) reviewed the current Membership Drive to recruit new Contractor members and if there were questions concerning how to best proceed with signing new candidates for membership in ARRA.
- Eric Baker (Roadtec) suggests looking into having LTAP, FHWA, and APWA co-sponsor ARRA regional seminars

I-81 Project Wins Award

AASHTO President Kirk Steudle presents the Virginia Department of Transportation with an award for the I-81 Pavement Recycling Project. This $9.75 million project by Virginia Department of Transportation used innovative pavement recycling methods to rehabilitate a 3.7 mile span of heavily-traveled interstate in order to save taxpayer dollars while reducing construction time by two-thirds. The award was presented on Aug. 28, 2012, during the SASHTO Conference in Charleston, SC.
First National Conference on Pavement Preservation Held in Nashville, Tennessee

By R. Gary Hicks, CP2 Center

Over 500 attendees participated in the First National Conference on Pavement Preservation held August 27-30, 2012. The conference was sponsored by FP2 Inc and was organized by the National Center for Pavement Preservation (NCPP). The conference not only consisted of meetings with the four regional AASHTO pavement preservation partnerships, but also presentations by preservation experts throughout the United States as well as field demonstration of selected pavement preservation treatments. Over 40 exhibitors participated in the conference.

The opening session included presentations from the Tennessee DOT, TRB, NACE, TAI, FHWA, and AASHTO in which the importance of pavement preservation to state and local agencies was discussed. The new federal highway bill, MAP-21, was discussed. The bill includes pavement preservation in the language, mentioning it over 60 times. FP2 and its members were instrumental in getting preservation language into the bill. This was followed by presentations on accomplishments and future directions from each of the AASHTO TSP2 Pavement Preservation Partnerships. A few of the highlights of these sessions included discussions on:

- Success stories with existing treatments and monitoring their performance
- Development of pavement preservation guides
- Marketing pavement preservation and communicating the need for preservation to the public and elected officials including the need to keep the message simple
- Innovations in pavement preservation
- Cost effectiveness of preservation treatments

More can been found on the accomplishments at the website www.tsp2.org.

AASHTO Partnership chairs, Pat Kennedy, Geoff Hall, Jerry Geib, and Eric Pitts

The second day included field demonstrations on slurry surfacings, cape seals, and scrub seals as well as pre-staged demonstrations on fog seals, chip seals, dowel bar retrofit, and more. This was considered by many to be the highlight of the conference. Industry did an outstanding job with the demonstrations. This session included a number of widely used tools for pavement preservation and was extremely well received by the attendees. Industry followed up with discussions on the importance of pavement preservation to their groups.

Representatives of of ACPA, IGGA, ISSA-ARRA-AEMA and NAPA made presentations at this session.

Tim Harrawood (Vance Brothers) and Mark Ishee (Ergon), demo on Micro Surfacing

Continued on Page 28
Concurrent sessions on the following topics ended the second day of the conference:

- Flexible pavement surface treatments
- Achieving long term goals
- Implementing a local agency program, and
- Implementation issues

The third day of the conference consisted of concurrent sessions on:

- Effective education programs and delivery methods
- Treatment selection
- Hot in-place recycling
- Asphalt material properties
- Quantifying the benefits of pavement preservation
- Integrating pavement preservation into pavement management

All the sessions included excellent presentations, but unfortunately, it was difficult for one to attend all sessions. All the presentations can be found on the conference website at http://nationalpavement2012.org/. The results of these sessions led to considerable discussion on all topics.

A major highlight on this day was the presentation of the James B. Sorenson Pavement Preservation awards for 2011 and 2012. The 2011 award was presented to Tennessee DOT while the 2012 Award was presented to Bexar County (San Antonio), Texas for distinguished work on pavement preservation. Prior winners of this award can be found on the FP2 website located at www.fp2.org.

In addition to these awards, Gene Arnold of Ergon and Jay Norris of Tennessee DOT were recognized for their role in the demonstration projects conducted earlier in the conference. Finally, James Moulthrop, Executive Director of FP2, was recognized for his contributions to pavement preservation by being elected to the “Pavement Preservation Hall of Fame”.

DBR demo by John Roberts of IGGA

Skidabrader demo to improve surface texture

Jim Moulthrop being inducted into the Hall of Fame by Pete Grass (left) and Mike Buckingham (right)
He joins a group of distinguished individuals including James Sorenson (FHWA deceased), Bill Ballou (FP2), Mike Buckingham (FP2) and Larry Galehouse (NCPP).

The conference concluded with meetings of the regional partnerships followed by the closing session which focused on driving the message for change. Guides for delivering the message to the media, the public, and elected officials were presented including:

- Relate the benefits of preservation to jobs, the economy, and to the public pocket book. Fixing and maintaining pavements are not acceptable or interesting messages.
- Doing more with less is a good message, as well as those on the “greenness” of presser
- Keep the message simple, and provide something the media can easily use.
- Need to educate reporters and others that fixing good roads prevents further distress and preserves their values.
- Media is interested in “Gee Whiz” and not “how to” discussions.

Judith Corley-Lay of NC DOT wrapped up the conference by identifying important takeaways. Some of them are identified below.

- New Federal legislation, MAP 21
- Pavement preservation studies at NCAT and planned by LTPP
- Cost effectiveness of preservation treatments
- Pavement preservation guides from various states
- Information on in-place pavement recycling
- Sustainability issues
- Asphalt rubber
- Treatment selection
- Best practices on preservation
- Innovative materials and equipment

Presenters from California included:

- Gary Hicks, CP2 Center, “Treatment Selection for Flexible Pavements”
- Theresa Rommel, MTC, Bay Area “Sustainability Issues”
- Irwin Guada, UCB, “Tire Pavement Noise”
- Phil Demery, Sonoma County, “Sonoma County’s Pavement Preservation Program”
- Marlene Demery, City of Napa and Jim Emerson, Pavement Recycling Inc, “Experience from California’s Climate Initiative Innovation Program”
- Shakir Shatnawi, Shatec Engineering, “Dowel Bar Retrofit using Polyester Polymer Concrete”
- Craig Hennings, ACPA, “Urban Slab Replacement”

Over 20 people from California attended this conference representing industry, academia, FHWA and local agencies, Caltrans could not participate because of travel restrictions.

The conference offered an opportunity for all to see what others are doing in the pavement preservation arena. The attendees came away feeling good about the conference. If you did not attend, you missed a great conference.

The 2nd International Conference is planned for Paris France in 2015. It will be organized by FP2 with the assistance of Mike Krissoff, the Executive Director of the Pavement Preservation and Recycling Alliance. Plans for a second national conference are in the discussion stages.
Another Perspective
Talking Asphalt: Pavement Preservation

Dwight Walker, from www.asphaltmagazine.com

I just got back from the National Pavement Preservation Conference in Nashville. The interest in pavement preservation is absolutely amazing! More than 500 people from all over the U.S. (and beyond) attended.

For those of you who did not attend the conference, here are some of the things that I learned or found interesting:

• Highway agencies are making a significant shift in their approach to pavement preservation. They are really getting into it. They are putting money in their budgets for pavement preservation treatments, developing specifications, evaluating technologies, even allowing alternate bids of treatments (e.g., thin-lift overlays vs. micro-surfacing).

• MAP-21, the newly passed and signed federal highway funding authorization bill, contains language regarding pavement preservation and clearly makes preservation eligible for federal funding.

• One of the biggest challenges facing pavement preservation is finding the optimal way to explain to the public, politicians and agency management why we want to spend money and work on “good” roads. It’s basically “spend a little now to avoid a bigger problem later.” The analogy was given of dental care, “a $75 dental cleaning now vs. a $1,000 root canal later on.” It’s a matter of education; a media campaign may be needed.

• Most of one day was devoted to field demonstrations of various pavement preservation techniques. These demonstrations and displays were extremely well done and informative. Live placements of chip and scrub seals, micro-surfacing and cape seals were done. Also two proprietary treatments, FiberMat and Skidabrader were demonstrated. Additionally, five highly specialized surface sealers were shown. These sealers were formulated with various additives to provide oxidation and weathering protection. The additives included polymer, fibers, ground tire rubber, Gilsonite, and rejuvenating agents. Examples of crack sealing techniques were also shown.

• There was much of discussion of thin-lift hot mix (or warm mix) as a pavement preservation technique. In fact, thin overlays are currently the most widely used preservation approach. But, some adjustments from conventional overlays may be needed, such as reduced top-size of the aggregate, awareness of reduced time to roll (because the thin mat cools quickly), etc.

The conference was a huge success. It was shown that pavement preservation techniques have mostly moved from an “art” to a “science” status. Better specifications and characterization tests are available or under development, although much work remains to be done. New materials and techniques are coming. And, the familiarity from gaining experience will lead to even more improvements.

In my simplistic view, pavement preservation is getting the longest pavement life for the lowest practical cost. Pavement preservation uses the mantra, “the right treatment, to the right pavement, at the right time.”

And, with the interest demonstrated at the conference, it is clear that the time is right now for pavement preservation.

For more detailed information, visit these websites:

• www.pavementpreservation.org  National Center for Pavement Preservation
• www.fp2.org  FP² Inc. (formerly the Foundation for Pavement Preservation)
• www.aema.org  Asphalt Emulsions Manufacturers Association (AEMA)
• www.slurry.org  International Slurry Surfacing Association (ISSA)
• www.arra.org  Asphalt Recycling and Reclaiming Association (ARRA)

www.asphaltmagazine.com
Ontario, California hosted the 2012 Western States Regional In-Place Recycling Conference – September 11 – 13. This forum of pavement professionals represented State Agencies, Contractors, Suppliers, Consultants, Academia, Local, MPO’s and Federal Government Officials, all working together to take advantage of the synergy to be gained from sharing information and identifying common issues for further investigation. The Conference provided a forum to share and publicize information describing improvements in research, design, specifications, materials and construction practices, and to promote the cost benefits of In-Place Recycling through education and application.

Many of the presentations from the conference are available for download from the National Center for Pavement Preservation (NCPP) or type in http://www.pavementpreservation.org/conferences/regional-in-place-recycling-conferences/2012-workshop/

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Day two of the Western States Regional In-Place Recycling Conference was highlighted by site visits and demonstrations, this year’s “Field Trip” included:

1st Site Visit - Cold In-place Recycling (CIR) on Van Buren Boulevard City of Riverside

Van Buren Boulevard is a major arterial in the City of Riverside. ADDT is estimated at over 35,000 vehicles per day with less than 5% trucks. Cold In-place Recycling depth is 3”. After proper cure, the CIR will be capped with a 1.2” thick gap graded asphalt rubber overlay. Prior to CIR, manholes were lowered below the recycle depth. This allows continuous operation of the train. Utility covers will be adjusted back up to match the final overlay. Major challenges for this project include: quarter crowns built via years of overlays; major traffic coming from all directions; curb and gutter in all areas with median curbs in several areas; an irregular existing section with some patching that had to be accounted for in the CIR mix design; the requirement by the City to skip some areas where full digouts were installed and variable width passes requiring a supplemental mill.

The mix design requires 3.0% PASS R emulsion from Western Emulsions and 0.25% Type II Portland cement. PASS R is an engineered rejuvenating recycling emulsion using a special solvent-free formula used for CIR and for treating stockpiled millings. The chemistry allows the recycling emulsion to reactivate the existing asphalt binder, while enabling the emulsion to coat and form a strong bond with the milled asphalt to create a smooth compacted mat. This product can also be formulated for use in Cold Central Plant Recycling, Hot In-place Systems and Full Depth Reclaiming.

The CIR equipment train consists of a Caterpillar PR1000, full lane milling machine. The PR1000 has a reverse loading conveyor belt and 12.5’ wide cutting drum pulling a recycling unit with an integrated screening, crushing and pugmill. The recycled mix is placed in a windrow and supplied to the paver via a Caterpillar supplied Weiler Model E560 Windrow Elevator. The windrow elevator deposits the mix into a Vogele Super 2100-2 paver. The 242 Hp 2100-2 paver has a maximum paving width up to 42ft can pave up to 1100 tons per hours and has a max lift thickness of 12”. This paver has a high compaction screed with both a tamping and a pressure plate combination. Additional compaction is accomplished via a 27 ton pneumatic roller and 11 ton vibrating double drum steel roller.

Cold Central Plant Recycling (CCPR) with emulsified asphalt recycling agent and cement additive

As an alternative to CIR, Cold Central Plant Recycling can be used in urban and rural projects when large quantities of RAP are available or when the asphalt pavement needs to be removed for some grade correction or treatment such as stabilization with cement or lime. It particularly works well when the existing roadway structure must be replaced in kind. Stockpiles of RAP can be crushed and graded and then an engineered emulsion can be added to the RAP. For this demonstration Ergon Asphalt & Emulsions’ CIR-EE emulsion is being combined at 3.0% by weight with 1” minus crushed RAP. A small amount (0.25%) of Type II Portland cement is being added to aid in cure. Ergon manufactures the CIR-EE emulsion through a network of plants throughout the US. The solvent-free engineered emulsion can be optimized for Central Plant Processing, Cold In-place Recycling or Full Depth Reclaiming. Mixing is being conducted in a Wirtgen KMA220 175 Hp mobile cold mixing plant at a production rate of 220 tons per hour. The KMA220 is a self-contained unit mounted on a semitrailer for ease of mobility. This plant allows metered water at 210 gal/min and has both a metered emulsion system and metered foamed asphalt system. The material is paved with a conventional paver at 3” thick. After a 2 day cure and reroll, the CCPR section is to be sealed with a protective seal coat.

2nd Site Visit – Pavement Recycling Systems’ Reclaimed Aggregates Facility, Colton, CA

Full Depth Reclaiming (FDR) with a cement stabilizing agent

This demonstration is of full depth reclaiming (FDR) using a high performance WR2500S cold recycler/reclaimer. The WR 2500S has a 670 Hp engine, 8’ cutter width and 20” cutter depth. A short section of a distressed pavement to be pulverized to a depth of 6” while moisture is added through a metered proportional controlled water system. Type II Portland cement at 4% by weight will then be spread and blended in a separate mixing pass. This FDR system could also allow for metered proportional controlled emulsion or metered proportional controlled foamed asphalt. Normally after blending the cement, the blended material would be initially compacted with a double drum or pad foot roller then shaped with a motor grader and final compacted and cured. Due to the short duration of this demonstration, full grading, compaction and curing will not be shown. FDR has been successfully used on small projects such as this to major streets and highways. There is no limitation to its use due to traffic.
Cold Central Plant Recycling (CCPR) of a crushed miscellaneous base with cement stabilizing agent

A central plant alternative to FDR with cement, this demonstration shows a clean crushed miscellaneous base mixed with 5% Type II Portland cement. Again mixed with the Wirtgen KMA220 and paved with a conventional paver. When placed with a paver, compacted with a double drum steel roller and sealed with fog seal this system provides a hard durable surface for heavy truck and storage areas. Typically a thin asphalt concrete layer (CCPR or HMA), chip seal, micro surfacing or cape seal is provided to provide abrasion resistance from truck tires. Two days after placement, the cement treated surface will be micro cracked and the final surfacing applied.

Processing of RAP Surry and RAP Chip

RAP slurry is the process where crushed and graded RAP is used in place of aggregate for a slurry seal. The RAP functions as a pre-coated aggregate which aids in coating, mixing and end color of the slurry. Ergon Asphalt & Emulsion’s Fontana plant supplied the optimum polymer modified emulsion used in this RAP slurry demonstration. Pavement Recycling Systems’ Reclaimed Aggregates plant demonstrates how the Type II RAP slurry as well as the 5/16” RAP chip aggregate (also available in 3/8”) is produced.

RAP chip seal is where the crushed and graded RAP is used in place of aggregate for chip or scrub seals. Unlike typical chip seal aggregate 100% RAP aggregate does not require washing. The “dust” on the aggregate is actually asphalt fines that help lock the aggregate to the binder. The surface is darker and upon traffic and sunlight molds into a pleasing surface texture. For this demonstration a RAP chip seal was preinstalled using a polymer modified rejuvenating emulsion (PMRE) from Western Emulsions. A quality PMRE emulsion is forgiving and works effectively with different aggregates, including this 100% RAP aggregate. Quality PMRE products use a high-performance, fuel resistant polymer that enhances the ductility of the wearing surface and aid in resisting reflective cracking. When used with a broom attached to the distributor truck the application is called a scrub seal and serves a dual purpose, providing the benefits of a high-performance chip seal and rapid crack-fill in one single application.

In this demonstration project part of the RAP chip is covered with RAP slurry in a cape seal fashion. The route back to the conference hotel includes a RAP chip seal installed 5+ years ago and still performing well.

Micro Milling

Micro milling is similar to standard milling but with the intent on leaving a much smoother surface by correcting longitudinal profile. A micro mill drum is spaced at 2/10” where a standard drum is spaced at 5/8”. The smoother surface allows agencies to combine the benefits of milling, improved ride, restoring curb line and stripping away the upper bleeding or oil stained surface without removing very much of the underlying pavement structure. The trend is to combine micro milling with thin surface preservation treatments for the added benefits of a smoother ride and some cost savings since the smoother surface requires less material to fill ruts and grooves. In this demonstration, a Wirtgen W200 cold planer with a 7’ 3” micro milling drum is being used. The micro milling is being conducted near a standard spaced milling drum pattern for comparison.

Texture Seal

Texture Seal is a safer and more effective treatment for rejuvenating and extending pavement life of good roads at a low cost. While agencies are often reticent to fog seal busy arterial and collector roads due to the temporary loss of skid numbers, the Texture Seal process mitigates this concern by adding a micro texture finish all in one quick and convenient pass. In this demonstration Western Emulsion is using a polymer-modified rejuvenating emulsion and a jet black, hard, angular sand. Texture Seal seals, penetrates and restores oxidized surfaces, but does not clog the void structure of pavements. It can be used for open or gap-graded pavements, including rubberized (RAC) roadways.

Site visit demonstration photographs on pages 34 and 36.
Day two of the Western States Regional In-Place Recycling Conference was highlighted by site visits and demonstrations.

A Wirtgen WR 2500 S Full Depth Recycling (FDR) Machine was demonstrated on a construction yard access road.

Lee Galligan and Butch Wlaschin, FHWA Headquarters, participated in the conference and the field demonstrations.

The field demonstration included a visit to a Cold In-Place Recycling (CIR) Project on an urban arterial in Riverside, CA. This photo shows the Vogele paver placing the recycled materials, and the attendees viewing the action from across the busy street.

Another angle showing attendees viewing the demonstration out of harm’s way along this busy route.

Field demonstration, CIR Paving on an urban arterial in Riverside, CA.
All types of surface cracking and distress can be fixed with CIR technology from Roadtec. A rule of thumb is that CIR costs 50% less than rehabilitating with hot mix, and a CIR pavement will possess 80% of the strength of a hot mix pavement.

Roadtec has been developing and refining its CIR technology over many years and offers a number of equipment configurations to help you meet your goals.

To find out how Roadtec can assist you with your CIR questions and equipment needs, contact us at the number below, or see our website www.roadtec.com.

*Because CIR is the Future of Road Rehabilitation.*
Don Matthews, Pavement Recycling Systems, Inc. gave an overview of the field demonstrations.

Demonstration of Full Depth Reclamation (FDR) with cement.

Cold Central Polant Recycling at the yard of Pavement Recycling Systems, Inc.

Demonstration of RAP Slurry (slurry seal that uses Reclaimed Asphalt Pavement instead of virgin aggregate).

Milling demonstration

*Photographs courtesy of Don Matthews, Pavement Recycling Systems and Dragos Andrei, Technical Director, Pavement Recycling & Reclaiming Center
Silica/Milling Machine Partnership Achieves Goals

The Silica/Milling Machine Partnership reports significant progress in meeting the goals set for 2012. Four manufacturers have completed tracer-gas testing and optimization of evacuation systems with the assistance of NIOSH scientists. Another manufacturer has field tested its unique cutter drum design. A final phase of testing, based on a NIOSH-designed process, is now under way to confirm that each manufacturer’s evacuation system protects workers in typical asphalt milling operations.

Data compiled by NIOSH over a period of years provides confidence that the partnership is accomplishing its mission of taking every reasonable step to enhance and ensure worker protection. You may read a more detailed update on the Silica/Milling Machine Partnership from the September/October issue of Asphalt Pavement magazine at the link below:

Link: http://www.nxtbook.com/nxtbooks/naylor/NAPS0512/index.php#/38
JEAA Bulletin

Japan Emulsified Asphalt Association (JEAA) Journal

Mr. Yoshitsugu Onishi (President of Toa Road Corporation), Chairman of JEAA
Questions should be directed to:

Ichiro IIDA
Secretary General
Japan Emulsified Asphalt Association
Pine Central Bldg. 4F
2-11-5 Kyobashi, Chuo-Ku
Tokyo 104-0031
JAPAN
Telephone 81-3-5159-8096
Fax 81-3-5159-8097
E-mail info@jeaa.or.jp

Japan Emulsified Asphalt Association (JEAA) Journal #187

The Episode of Developing Various Asphalt Emulsions
Akira Ito, Senior Advisor, Nichireki Co., Ltd.

The author has been involved in research and developing asphalt emulsion for 30 years. Looking back on his career, he introduces the episodes of developing the following various types of asphalt emulsions and their uses:

- Micro Surfacing
- Cement and asphalt mortar for Shinkansen slab track
- Cold In-Place Recycling
- SBS modified asphalt emulsion for thin porous asphalt pavement
- SBS modified asphalt emulsion for surface treatment
- Trackless tack coat

Introduction of Papers on 5th World Congress on Emulsion (4)
Overseas Documents Working Group, Technical Committee, JEAA

This is a series of brief introductions of papers from 5th World Congress on Emulsion. In this issue, the following paper is introduced: “Improvement of Formulation Methodology to Optimize Cold Bituminous Mixes” by Lionel Odie (LRPC ST BRIEUC)

Introduction of Papers on 5th World Congress on Emulsion (5)
Overseas Documents Working Group, Technical Committee, JEAA

This is a series of brief introductions of papers from 5th World Congress on Emulsion. In this issue, the following paper is introduced: “An Extensive Research on the Design Methodology and Site Performance of Bitumen Emulsion Treated Materials” by J. Pierre Serfass, Chantal De la Rouche, Louisette Wendling, Vincent Gaudefroy

Article from AEMA Newsletter

This is a Japanese translation of the article “AEMA-ARRA-ISSA Members Participate in World of Asphalt 2012 Training Program”, which was originally published by AEMA Newsletter No. 1 in 2012.

Base Stabilization and Cold In-Place Recycling in the Philippines
Kohei Kobayashi, Yasutsugu Kanamori, Ryosuke Watanabe, Sakai Heavy Industries, Ltd.

This is a test construction report of base stabilization on gravel road, and cold in-place recycling on existing asphalt pavement in Mindanao, the Philippines.

Asphalt Emulsion Course (29)
The glossary of asphalt emulsion and its technology is listed.

Topics and JEAA News

*The 32nd Annual Meeting was held in Tokyo on June 20, 2012.

*The approved activities of JEAA in 2012 are as follows:

1. Research of quality standardization and manufacturing technology of asphalt emulsion.
   1) Mechanical evaluation of asphalt emulsion for tack coat
2. Development and promotion of asphalt emulsion for multidirectional demands.
   1) Promotion of cold mixture pavement
   2) Promotion and enlightenment activities of modified asphalt emulsion for mastic course in porous asphalt pavement
   3) Technical survey to widen the use of asphalt emulsion

   1) Conduct a survey on application of warm mix asphalt low temperature asphalt mix

4. Survey of demand and technical trends of asphalt emulsion. Provide information and research result. Enlighten the user.
   1) Publishing JEAA Bulletin “Asphalt Emulsion” (3,300 copies in January, 3,100 copies in April and August)
   2) Translation of 5th WOE and reprints on JEAA Bulletin
   3) Providing materials for technical seminar. Revise technical publication
   4) Sponsoring and giving plenary session at 91st Asphalt Seminar
   5) Providing technical information for 12th Hokuriku Road Pavement Conference
   6) Communicating with administrators and other associations
   7) Enhancement and renewal of JEAA website

*Asphalt Emulsion production amount by JEAA members in March 2012 is shown below:

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<td><strong>20,004</strong></td>
<td><strong>3,906</strong></td>
<td><strong>3,226</strong></td>
<td><strong>27,136</strong></td>
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</tbody>
</table>
Preliminary Speaker List
subject to change without notice

Wednesday, February 20
- Mary Rausch, Mayor - Indian Wells, California
- Jim Roberts, President - Granite Construction
- Larry Linne, President/CEO - Sitkins International
- Butch Wlaschin, Director, Office of Asset Management - FHWA
- Pete Grass, President - Asphalt Institute
- Larry Galehouse, Director - National Center for Pavement Preservation
- Jim Moulthrop, Executive Director - FP2, Inc.
- Greg Cohen, President & CEO - American Highway Users Alliance
- Michael Dougherty, Online & Social Media Marketing Manager - AEMA-ARRA-ISSA-PPRA

Thursday, February 21
- Don Moors – MWV Asphalt Innovations
- Arlis Kadmas – BASF Corporation
- Chris Lubbers - Kraton Polymers
- Todd Thomas - Colas Solutions, Inc.
- Trevor Moore - Miller Paving Limited
- Ron Wilson - Dustrol Inc.
- Jenelle Strawbridge - Caterpillar Paving Products Inc.
- Tim Harrawood - Vance Brothers, Inc.
- Richard Wenth - MWV Asphalt Innovations
- Roger Hayner – Colas Solutions, Inc.
- Martin Thompson - Colas Solutions, Inc.
- Christine Deneuvillers - Colas S.A.
- Abdellif Belkahia - Colas S.A.
- Doug Ford - Pavement Coatings, Inc.
- Marc Proteau – Eurovia Management
- Eric Reimschissel - American Pavement Preservation

Friday, February 22
- Les Kelemen - Norjohn Limited
- Joe Brandenburg - Asphalt Materials
- Andy Bickford – MWV Asphalt Innovations
- Baxter Burns - Ergon Asphalt & Emulsions, Inc.
- Jean Azoury - Paramount Petroleum
- Bruce Armstrong, President - Canadian Asphalt Industries
- Bill Cooper - Bergkamp Inc.
- John Birchall - VSS Macropaver
- Don Brooks - Crafco
- Tim Shull - Kennametal Inc.
- Randy Tattershall - California Pavement Maintenance
- Mark McCollough - Asphalt Materials, Inc.
- Don Matthews - Pavement Recycling Systems Inc.
- Bob Jerman - MWV Asphalt Innovations
### Preliminary Schedule for AEMA-ARRA-ISSA 2013 Annual Meeting

<table>
<thead>
<tr>
<th>Day</th>
<th>Time</th>
<th>Event</th>
</tr>
</thead>
<tbody>
<tr>
<td>Monday 2/18/2013</td>
<td>1:00 PM - 5:00 PM</td>
<td>AEMA Board of Directors</td>
</tr>
<tr>
<td></td>
<td>7:00 PM - 9:00 PM</td>
<td>AEMA-ARRA-ISSA Board, Past Presidents &amp; Committee Chairmen RECEPTION</td>
</tr>
<tr>
<td>Tuesday 2/19/2013</td>
<td>12:00 PM - 7:00 PM</td>
<td>Exhibit Set-Up</td>
</tr>
<tr>
<td></td>
<td>8:00 AM - 12:00 PM</td>
<td>ARRA Board of Directors</td>
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<tr>
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<td>1:00 PM - 5:00 PM</td>
<td>ISSA Board of Directors</td>
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<tr>
<td></td>
<td>2:00 PM - 8:00 PM</td>
<td>Registration &amp; Information</td>
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<tr>
<td></td>
<td>7:00 PM - 9:00 PM</td>
<td>AEMA-ARRA-ISSA Opening Reception</td>
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<tr>
<td>Wednesday 2/20/2013</td>
<td>7:00 AM - 4:00 PM</td>
<td>Registration &amp; Information</td>
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<tr>
<td></td>
<td>7:00 AM - 8:00 AM</td>
<td>AEMA-ARRA-ISSA Continental Breakfast</td>
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<td>7:00 AM - 4:00 PM</td>
<td>Exhibits</td>
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<tr>
<td></td>
<td>7:00 AM - 8:00 AM</td>
<td>AEMA ITC Executive Committee</td>
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<td>7:00 AM - 8:00 AM</td>
<td>ARRA CORE Executive Committee</td>
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<td>7:00 AM - 8:00 AM</td>
<td>ISSA Past Presidents Meeting</td>
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<td>7:00 AM - 8:00 AM</td>
<td>ISSA Slurry Systems Workshop Committee Meeting</td>
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<td>8:00 AM - 12:30 PM</td>
<td>AEMA-ARRA-ISSA Opening Session</td>
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<tr>
<td></td>
<td>10:00 AM - 11:00 AM</td>
<td>Spouses' Welcome</td>
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<td>12:30 PM - 1:30 PM</td>
<td>AEMA-ARRA-ISSA Luncheon</td>
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<td>ARRA Supplier Members Meeting</td>
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<td>ISSA Supplier Members Meeting</td>
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<td>1:30 PM - 5:00 PM</td>
<td>ISSA Slurry/Micro Committee Meeting</td>
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<td>ISSA Crack Treatment Committee Meeting</td>
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<td>ISSA Chip Seal Committee Meeting</td>
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<td>1:30 PM - 5:00 PM</td>
<td>ARRA Cold Planing Committee Meeting</td>
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<td></td>
<td>1:30 PM - 5:00 PM</td>
<td>ARRA Cold In-Place Recycling Committee Meeting</td>
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<td>1:30 PM - 5:00 PM</td>
<td>ARRA Full Depth Reclamation/Soil Stabilization Committee Meeting</td>
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<tr>
<td></td>
<td>1:30 PM - 5:00 PM</td>
<td>ARRA Hot In-Place Recycling Committee Meeting</td>
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<tr>
<td>Thursday 2/21/2013</td>
<td>7:00 AM - 4:00 PM</td>
<td>Registration &amp; Information</td>
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<tr>
<td></td>
<td>7:00 AM - 4:00 PM</td>
<td>Exhibits</td>
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<td>7:00 AM - 9:00 AM</td>
<td>AEMA-ARRA-ISSA Annual Recognition Breakfast</td>
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<td>9:30 AM - 10:00 AM</td>
<td>AEMA Business Meeting</td>
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<td>ARRA Business Meeting</td>
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<td>9:00 AM - 10:00 AM</td>
<td>ISSA Business Meeting</td>
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<td></td>
<td>10:00 AM - 1:00 PM</td>
<td>AEMA Session</td>
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<td></td>
<td>10:00 AM - 1:00 PM</td>
<td>ARRA Session</td>
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<td></td>
<td>10:00 AM - 1:00 PM</td>
<td>ISSA Session</td>
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<tr>
<td></td>
<td>7:00 PM - 11:00 PM</td>
<td>Theme Party - Food, Drink, Music &amp; Fun</td>
</tr>
<tr>
<td>Friday 2/22/2013</td>
<td>7:00 AM - 12:00 PM</td>
<td>Registration &amp; Information</td>
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<td>7:00 AM - 8:00 AM</td>
<td>AEMA-ARRA-ISSA Continental Breakfast</td>
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<td></td>
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<td>Exhibits</td>
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<td></td>
<td>8:00 AM - 10:00 AM</td>
<td>Safety / Health / Environmental</td>
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<td>8:00 AM - 10:00 AM</td>
<td>Asphalt Quality / Supply / Oil Sands</td>
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<td></td>
<td>10:00 AM - 11:30 AM</td>
<td>Innovation / New Technology</td>
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<tr>
<td></td>
<td>10:00 AM - 11:30 AM</td>
<td>Guidelines / Specifications / Implementations</td>
</tr>
<tr>
<td></td>
<td>11:30 AM - 1:00 PM</td>
<td>Annual Meeting Adjourns</td>
</tr>
<tr>
<td></td>
<td>1:00 PM - 6:00 PM</td>
<td>AEMA-ARRA-ISSA Golf Tournament</td>
</tr>
<tr>
<td>Saturday 2/23/2013</td>
<td>9:00 AM - 12:00 PM</td>
<td>Pavement Preservation &amp; Recycling Alliance Meeting</td>
</tr>
</tbody>
</table>
Annual Meeting General Information

Airports: The Renaissance Esmeralda Resort and Spa is conveniently located near 4 airports. The closest, Palm Springs International Airport, is approximately one half hour from the resort - Ontario Airport, approximately an hour and a half from resort; LAX, approximately 3 hours from the Renaissance Esmeralda Resort and San Diego Airport, approximately 3 hours from the resort.

Hotel Address & Telephone: The Renaissance Esmeralda Resort and Spa is located at 44-400 Indian Wells Lane, Indian Wells, CA 92210. Telephone number, 760-773-4444, the Fax number is 760-346-9308 - http://www.renaissanceesmeralda.com/index.php

Check-in Time: Check-in time is 4:00 p.m. and check-out is 11:00 am.

About the Renaissance Esmeralda Resort and Spa: A four-star sanctuary in the desert, the Esmeralda provides the perfect escape from the demands of everyday life. With first-class service, exquisite accommodations, and luxurious amenities, you’ll find everything you need to experience the ultimate in pampering and relaxation. Spa with lush garden, 2 restaurants, Cafe Biscotti, Pool Bar, Golf Club House, Lounge with live entertainment 5 nights per week, Room Service, Two Ted Robinson-designed Golf Courses, 3 Swimming Pools, Fitness Center, Tennis, Concierge, Valet, Business Center, In-Room movies and Complimentary in-room coffee and newspaper.

Reservations: You may make reservations by telephone by calling the hotel directly at 800-446-9875 or 877-804-4070, Use Group Code AEMAARRAIISSA. Reservations can be made on line by clicking https://resweb.passkey.com/go/aema2013

Babysitters: Babysitting services can be arranged through the hotel’s concierge 760-773-4660. To assure availability, we recommend you contact the hotel prior to the meeting.

Committee Meetings: Working and technical committee meetings are open to all meeting registrants. We invite and encourage the participation of all meeting registrants in these sessions.

Dress: Casual wear is appropriate in the public areas. NO neckties!

Golf: The AEMA-ARRA-ISSA Golf Tournament will be held Friday afternoon at the Indian Wells Golf Resort. The golf fee of $250.00 per person includes greens fees, a box lunch, prizes and a cart. Golfers must sign up for the tournament in advance of the meeting by completing the appropriate portion of the registration form. To make private arrangements apart from the Tournament, please contact the Indian Wells Golf Resort direct at: 760-346-4653, www.indianwellsgolfresort.com

Registration Fee: Your registration fee for the AEMA-ARRA-ISSA Annual Meeting includes not only your actual meeting participation, but also provides you with two continental breakfasts, a delightful Awards Brunch, one luncheon, a heavy reception with food and drink, a spectacular theme party with dinner, and more!

Persons attending any portion of the Annual Meeting will be responsible for the full registration fee.

There will be no partial registration fee for one-day attendance or participation at meal functions only.

Local Palm Springs Attractions convenient to the Renaissance Esmeralda Resort cover just about every category of interest, for all ages. From theatre, art museums and galleries, shopping, nature excursions, a desert wildlife zoo, water parks, observatories, Native American history, nightlife, horseback riding, and more. Talk to the Renaissance Esmeralda’s concierge.
Cold-In-Place and Hot-In-Place Recycling Best Practices
Nick Dibartolo, Ballou Pavement Solutions Inc., and Brian Hansen, Dustrol Inc.

Cold in-place recycling (CIR) and hot in-place recycling (HIR) are cost-effective pavement preservation treatments that improve serviceability for roads and streets. This session will cover the basics on project selection, construction techniques, additive selection, and cost as well as presenting case studies.

Upon completion of this session, you will be able to: Identify suitable candidates for each process; Understand the elements for a successful project; Present typical cost savings that can be realized with these recycling technologies. Have a list of resources for each process.

Best Practices for Milling and Profiling
John Irvine, Roadtec

More than any other pavement property, the traveling public wants a smooth surface on which to drive. This session focuses on milling operations to achieve optimum smoothness and that elusive bonus to the contractor.

Upon completion of this session, you will be able to: Understand milling machine operation and maintenance; Determine the effect of cutter tooth patterns in relation to forward speed; Understand grade slope control. Have a list of resources for each process.

Tack and Bond Coats - Innovation, Competition and Performance
Dale Decker

A wide variety of tack coats are available in the asphalt industry. This session will provide information regarding material characteristics, construction practices, and their effect on the asphalt pavement performance.

Upon completion of this session, you will be able to: Understand the importance of Tack Coat; Understand both traditional and trackless tack technology; Recognize the proper application rate for tack coat; Identify the best Quality Control for tack coat applications. Have a list of resources for each process.

Slurry Systems for Pavement Preservation
Eric Reimschissel, American Pavement Preservation

Pavement Preservation is a critical management issue for all agencies. The asphalt contractor has a variety of tools available to meet various pavement needs. This session will provide the attendee with the latest information on Slurry Systems (i.e. slurry seal and Microsurfacing).

Upon completion of this session, you will be able to: Identify different types of slurry systems; Understand which systems work best for different pavement conditions; Develop Quality control for applications. Have a list of resources for each process.

Combination Treatments for Pavement Preservation
W. Pierre Peltier, Terry Asphalt Materials Inc.

Combining nonstructural surface treatments to address specific levels of distress can be very beneficial to agencies that are confronted with a variety of pavement preservation and maintenance challenges. These tailored treatments provide a durable final surface as well as being a very cost effective approach to improving the pavement condition. This session provides information on how to get the best possible results while using combinations of preservation treatments.

Upon completion of this session, you will be able to: Identify combination treatments (Cape Seals, SAMI, Fog Seal over Chip Seal, etc.); Develop Quality Control during construction; Understand expected performance. Have a list of resources for each process.

There is More Than One Way to Seal a Crack
Wally Smith, Crafco Inc.

As our infrastructure ages and our budgets get smaller, contractors have to be smarter about how public funds are spent. What is the most effective way to extend the life of our roads? What is the relationship between crack sealing and other preservation methods? Properly applied crack sealing can be a cost effective preservation technique.

Upon completion of this session, you will be able to: Understand the type of treatment needed for a specific type of crack; Identify proper applications methods; Show how crack sealing improves all other preservation practices. Have a list of resources for each process.

Everything You Need to Know About Chip Seals
Chuck Dannheim, Heartland Materials Inc. and Cary Brownlee, Ergon Asphalt Emulsions Inc.

This session will provide a broad understanding of all the issues involved in production and placement of chip seals. The first speaker will discuss aggregates and binder products for chip seals. The second speaker will cover construction and proper application to achieve high performance chip seal systems.

Upon completion of this session, you will be able to: Understand how different aggregates related to performance, safety and economy; Recognize how binder properties affect chip seal performance; Understand how different chip seal techniques can be selected to address specific concerns. Have a list of resources for each process.

World of Asphalt Speakers
AEMA, ARRA and ISSA Members to participate in World of Asphalt 2013
APWA
Anaheim Hosts The Best Show in Public Works

The APWA International Public Works Congress and Exposition returned to sunny Southern California as Anaheim hosted the most comprehensive public works education and largest display of public works equipment in North America. From high-tech, to high impact, attendees experienced the latest innovations and solutions that had visitors “Walking on Sunshine!”

The Southern California Host Chapter and APWA worked very hard to make this the best Congress ever. With more than 125 educational sessions and more than 400 exhibitors, everyone had the opportunity to learn, network and see the largest display of public works equipment in North America.

Anaheim is a multi-cultural melting pot with a die-hard passion for living life! Whether meeting up with old friends or kickin’ it in the sun, Anaheim always exceeds expectations and so did this year’s Best Show in Public Works!

Pictured are Hans Ho of Telfer Oil, Blaine Hone and Doug Hogue of VSS Macropaver in the PPRA booth at the APWA show in Anaheim. Agencies showed a lot of interest in our information and all say maintenance is important to them.

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INTERNATIONAL SLURRY SURFACING ASSOCIATION

2013 SLURRY SYSTEMS WORKSHOP
including Chip Seal & Crack Treatment

Registration Brochure

HANDS ON PROGRAM FOR ENGINEERS,
INSPECTORS, AND INDUSTRY PERSONNEL

January 22 - 25, 2013
Texas Station Hotel
Las Vegas, Nevada
WHAT IS THE SLURRY SYSTEMS WORKSHOP?

The Slurry Systems Workshop is a study course offering a challenging and informative program on slurry seal, micro surfacing, chip seals and crack treatments with “hands-on” operation demonstrations and workshop-type discussions. Highly qualified professionals in the field will cover topics on the above listed processes, including materials and equipment, specifications, hand mixes, calibration, quality control, and inspection.

Attendees will also be able to view state of the art slurry, micro surfacing, chip seals and crack treatment equipment, independent of the paving demonstrations.

ISSA encourages all ISSA members, and non-members who are contractors, suppliers, engineers, consultants as well as government agencies to attend this valuable workshop. A certificate of achievement will be awarded to all participants at the completion of the workshop.

In addition to attending the workshop, your company or organization can become a workshop sponsor. Your company name will be listed in the final program as a sponsor, displayed on signage, and you’ll have the opportunity to bring company literature to display.

Please read all of the enclosed information and send in your registration for this valuable and popular workshop. We look forward to seeing you in Las Vegas!

**PRELIMINARY PROGRAM**

*(subject to change without notice)*

**Tuesday, January 22, 2013**
- 7:00am - 1:00pm Registration Desk Open
- 8:00am - 8:10am ISSA Welcome
- 8:10am - 8:15am Presidents Message
- 8:15am - 9:30am Motivation and Kick Off
- 9:30am - 10:00am Pavement Preservation Strategies for Smaller Markets
- 10:00am - 10:15am Break
- 10:15am - 10:35am Marketing for Pavement Preservation Contractors
- 10:35am - 11:00am Presidents Award
- 11:00am - 11:20am Project Showcase
- 11:20am - 12:00pm Emulsions for Pavement Preservation
- 12:00pm - 1:00pm Lunch
- 1:00pm - 1:30pm Aggregates for Emulsion Based Pavement Preservation
- 1:30pm - 2:00pm Safety for Pavement Preservation Professionals
- 2:00pm - 2:20pm FHWA Update/Report
- 2:20pm - 2:40pm What Every Project Inspector Should Know About Slurry Systems
- 2:40pm - 3:00pm Recommended Performance Guidelines for Chip Seal
- 3:00pm - 3:15pm Break
- 3:15pm - 3:45pm Project Selection for Pavement Preservation
- 3:45pm - 4:30pm Intro to Slurry Systems
- 4:30pm - 4:55pm Intro to Crack Treatment
- 4:55pm - 5:00pm Review/Preview/Questions
- 6:00pm - 7:30pm Sponsors Reception

**Wednesday, January 23, 2013**
- 7:00am - 8:00am Continental Breakfast
- 7:00am - 1:00pm Registration Desk Open
- 8:00am - 8:05am Review/Preview/Questions
- 8:05am - 8:50am Mix Designs for Slurry/Micro/REAS
- 8:50am - 10:00am Everything You Wanted to Know About Chip Seals
- 10:00am - 10:15am Break
- 10:15am - 11:00am Slurry Systems Best Practices
- 11:00am - 11:25am Slurry/Micro Surfacing Craftsmanship
- 11:25am - 11:50am Spreader Box/Pugmill Principles
- 11:50am - 12:00pm Preview of Outside Demo
- 12:00pm - 1:00pm Lunch
- 1:00pm - 5:00pm Live Demonstrations
  - Crack Sealing
  - Chip Sealing
  - Slurry/Micro
- 6:00pm - 7:30pm Sponsors Reception

**Thursday, January 24, 2013**
- 7:00am - 8:00am Continental Breakfast
- 7:30am - 4:00pm Registration Desk Open
- 8:00am - 8:15am Demo Review
- 8:15am - 8:45am Troubleshooting Slurry Systems in the Field
- 8:45am - 9:15am Factors Affecting Mix Design/Methodology
- 9:15am - 9:40am Crack Sealing Project Story
- 9:40am - 9:45am Hand Mix Preview
- 9:45am - 10:00am Break
- 10:00am - 12:00pm Group 1 - Slurry/Micro Calibration
- 12:00pm - 1:20pm Lunch
- 1:00pm - 3:00pm Group 2 - Hand Mixes - 20 minutes per session
  - Slurry Seal
  - Laboratory Equipment
  - Micro Surfacing Hand Mixes
  - Micro Surfacing - Troubleshooting
  - Chip Seal/Crack Treatment
- 3:00pm - 3:15pm Break
- 3:15pm - 3:35pm Report on NCAT Test Track and NCPP Nashville
- 3:35pm - 3:55pm Review/Preview/Questions
- 3:55pm - 4:00pm Review/Preview/Questions

**Friday, January 25, 2013**
- 7:00am - 8:00am Continental Breakfast
- 7:00am - 11:00am Registration Desk Open
- 8:00am - 8:05am Review/Preview/Questions
- 8:05am - 8:35am Review of ISSA Technical Bulletins
- 8:35am - 9:10am Overview of Recycling Techniques
- 9:10am - 9:30am Project Story - Combining Recycling & Surface Treatments
- 9:30am - 9:50am Pavement Preservation for Airport
- 9:50am - 10:05am Pavement Preservation Outlook
- 10:05am - 10:25am ISSA/FHWA Webinars
- 10:25am - 10:45am Social Media & ISSA Resources
- 10:45am - 11:00am SSWS Closing Remarks/Adjournment

The Slurry Systems Workshop is made possible by ISSA and the ISSA Workshop Committee.
ISSA 2013 SLURRY SYSTEMS WORKSHOP
January 22 - January 25, 2013
Texas Station Hotel & Casino
Las Vegas, Nevada

REGISTRATION FORM

Please register the following:

Organization ___________________________________________________________
Address ___________________________________________________________
City ___________________________________________________________
State ___________________________________________________________
Zip/Postal Code __________________________________________________________
Country ___________________________________________________________

Attendee 1
Position ___________________________________________________________
Phone ___________________________ T-Shirt Size ___________
E-mail ___________________________________________________________

Attendee 2
Position ___________________________________________________________
Phone ___________________________ T-Shirt Size ___________
E-mail ___________________________________________________________

Attendee 3
Position ___________________________________________________________
Phone ___________________________ T-Shirt Size ___________
E-mail ___________________________________________________________

Attendee 4
Position ___________________________________________________________
Phone ___________________________ T-Shirt Size ___________
E-mail ___________________________________________________________

Attendee 5
Position ___________________________________________________________
Phone ___________________________ T-Shirt Size ___________
E-mail ___________________________________________________________

Total Registration Fees Enclosed $ ___________________________
Sponsorship Enclosed + $ ___________________________
Total Enclosed $ ___________________________

REGISTRATION FEES:

COMPLETE FOUR-DAY WORKSHOP
Fees for the complete four-day workshop include four continental breakfasts, three lunches, two evening receptions, all refreshment breaks, materials and handouts AND a T-Shirt.

BEFORE DECEMBER 17, 2012

<table>
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<th>Registrants</th>
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<td>ISSA Member</td>
<td>$ 525 each</td>
<td>$ 475 each</td>
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<tr>
<td>Government Agency</td>
<td>$ 375 each</td>
<td>$ 375 each</td>
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<tr>
<td>Non-Member</td>
<td>$ 1075 each</td>
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AFTER DECEMBER 17, 2012

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<td>ISSA Member</td>
<td>$ 550 each</td>
<td>$ 500 each</td>
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<tr>
<td>Government Agency</td>
<td>$ 400 each</td>
<td>$ 400 each</td>
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<tr>
<td>Non-Member</td>
<td>$ 1100 each</td>
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SPONSORSHIP

☐ YES, my company would like to be a sponsor of the Slurry Systems Workshop for $750.
☐ YES, we will need a table to display literature at the workshop.
☐ NO, we will not need a table to display literature at the workshop.

Luncheon and Reception Sponsorships also available; please contact ISSA headquarters.

☐ Yes, I need a receipt, please send to:

☐ Fax ______________________________________

Name as it appears on card: ________________________________________________________________________

Please return the completed registration form by December 17, 2012, with a check payable to ISSA for the total registration fees to: ISSA, #3 Church Circle - PMB 250, Annapolis, Maryland 21401. Credit card registrations may be faxed to ISSA headquarters at 410-267-7546.
INFORMATION

REGISTRATION POLICY: ISSA will not process any registration form that is not accompanied by payment, period. What this policy means is that ISSA will not make any related arrangements for any person whose registration form is received without payment.

CANCELLATIONS: Notification must be received in writing by ISSA headquarters if you have registered for the Workshop and subsequently find you will be unable to attend. If registration cancellation is necessary, ISSA will refund registration fees in accordance with the following schedule:

<table>
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<th>Refund:</th>
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<tr>
<td>January 8, 2013</td>
<td>100% minus $25</td>
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<tr>
<td>January 15, 2013</td>
<td>50% of registration fee</td>
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<tr>
<td>January 16, 2013</td>
<td>No Refund</td>
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</table>

"No shows" will be charged the full registration fee. Substitutions may be made at any time by contacting ISSA headquarters at (410) 267-0023.

REGISTRATION DEADLINE: Although ISSA expects to be able to accommodate all meeting registrants, we urge you to complete and return the registration form to ISSA, and contact the hotel, no later than December 17, 2012. After that date, we cannot guarantee hotel reservations at the Texas Station Hotel; space available will apply.

HOTEL: The Texas Station Hotel, 2101 Texas Star Lane, Las Vegas, Nevada 89032. ISSA has negotiated a special room rate of $60.00 + tax (January 21 – 24, 2013.) (Don’t forget to mention the Group Code: TCIIS12 as shown below). *Rates quoted are for Monday – Thursday only. Friday - Saturday rates are $45.00 + tax at the Texas Station.

Reservations Toll Free: 800-654-8888 (or call Group Sales: 800-654-8804, ext. 8356)
Group Code: TCIIS13
Alternate Template Codes:
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• INTLSLURRY13
• ISSA 2013

Register online at: https://rooms.stationcasinos.com/cgi-bin/LANSAWEB?procfun+rn+Resnet+TEX+funcparms+UP(A2560);;TCIIS13;?

In order to assure room availability and to receive the group rate, you must make your reservation by December 17, 2012. After that date, room reservations will be accepted on a space available basis. The first night’s deposit is non-refundable unless reservations are canceled 48 hours before the day of arrival. Check-in time is 3:00 pm and check-out time is 12:00 noon. Facilities at the Texas Station include casino, 60 lane bowling center, 18 screen movie theatre, 6 restaurants and Starbucks, The hotel is just 15 miles from McCarran International Airport.

SPONSORSHIP: For $750, your organization will be recognized on signage at the workshop, listed as a workshop sponsor in the final program, highlighted in the ISSA Report, have opportunity for equipment displayed outside, your company logo will appear on the workshop T-shirt and listed on the workshop CD. As an extra bonus, at your option and at no additional cost, ISSA will provide you with 10 feet of exhibit space outside the workshop classroom. For enhanced value, consider sponsoring a workshop reception, please contact Program Director, Lisa Cerone (410) 267-0023 or cerone@slurry.org for more details.

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Web  www.gardnerville-nv.gov  
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Road Maintenance

City of Houston  
5500 McCarty  
Houston, TX 77013  
Phone  832-395-4707  
Fax  832-395-4723  
Email  raymond.ortiz@houstontx.gov  
Web  www.houstontx.gov  
Raymond Ortiz, Public Works Manager  
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Lewiston, ID 83501  
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Scott Reynolds, President & GM
sreynolds@arscompanies.com

The ARS Companies is a privately held consortium consisting of six separately managed lines of business. The six lines consist of Soils & Recycling Services, Hydro Environmental Services, Sustainable Network Services, Land Development Services, Sand & Gravel Services and Performance Dynamics International.

*MSee page 59 for a photograph of one of ARS Companies specially painted reclaimers.

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AFFILIATE MEMBERSHIP

Braun Intertec
11001 Hampshire Avenue S
Bloomington, MN 55438
Web  www.braunintertec.com
Phone  651-487-7009
Matt Oman, Senior Engineer
moman@braunintertec.com

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6900 Patterson Avenue
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Web  www.vaasphalt.com
Phone  804-288-3169
Fax  804-288-4551
Richard J. Schreck, Executive Vice President
rschreck@vaasphalt.com

VAA is a trade association representing the asphalt paving industry in Virginia. VAA’s contractor members include HMA Producers, CIR and cold central plant recycling.

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Chances are, yours is one of the businesses in the high-way industry that will receive a 2012 Economic Census form from the U.S. Census Bureau in December. Forms go to all but the very smallest businesses in this tally done once every five years.

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Businesses, communities, and governments use Economic Census statistics for planning and market development. Information is published for more than a thousand industries as well as for states, counties, cities and metropolitan areas at business.census.gov.

Federal Reserve Board Chairman Ben Bernanke has called this census “indispensable to understanding America’s economy.”
The right decisions can help you grow your business — especially when those decisions start with good data. If you receive a 2012 Economic Census form, the information you provide can help your business and your community. Find out why your response makes a difference at business.census.gov.

2012 Economic Census
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Instructor: Mark Ishee, Ergon Asphalt & Emulsions, Inc.

Session 4: Emulsion aggregate mixtures
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Asphalt Materials Inc.
940 N. Wynn Road
Oregon, OH 43616
Phone 419-693-0626
bucky.brooks@asphalt-materials.com

Vice President
Mark McCollough
Asphalt Materials Inc.
8720 Robbins Road
Indianapolis, IN 46268
Phone 314-249-0839
mark.mccollough@asphalt-materials.com

Secretary/Treasurer
Archie Reynolds
Norjohn Limited
4365 Corporate Drive
Burlington, ON L7L 5P7 Canada
Phone 905-336-1216
areynolds@walkerind.com

Past President
Barry Baughman
ULTRAPAVE Corporation
1300 Tiarco Drive
Dalton, GA 30720
Phone 706-277-1300
bbaughman@trcc.com

Director
Diane Franseen
H.G. Meigs, LLC
1220 Superior Street
Portage, WI 53901
Phone 608-742-5354
Email dfranseen@asphalttechgroup.com

Director
Hans Ho
Telfer Oil Company
211 Foster Street
Martinez, CA 94553
Phone 925-228-1515 x1329
hansho@telferoil.com

Director
Mark Ishee
Ergon Asphalt & Emulsions, Inc.
PO Box 1639
Jackson, MS 39215
Phone 601-933-3000
mark.ishee@ergon.com

Director
Craig Moore
Cleveland Asphalt Products
PO Box 1449
Shepherd, TX 77371
Phone 800-334-0177
cmcapco@msn.com

Director
Mark Smith
Vance Brothers Inc.
5201 Brighton Ave.
Kansas City, MO 64130
Phone 816-923-4325
msmith@vancebrothers.com

Supplier Member Rep
James Andrews
BASF Corporation
11501 Steele Creek Road
Charlotte, NC 28273
Phone 704-587-8147
james.andrews@basf.com

International Member Rep
Jean Claude Roffe
Colas
7 Place Rene Clair
Boulogne Billancourt Cedex 92653 France
Phone +33-1 476-17380
roffe@siege.colas.fr

ITC Chairman
Mike Hemsley
Paragon Technical Services
390 Carrier Blvd.
Richland, MS 39218
Phone 601-932-8365
mike.hemsley@ptsilab.com

General Counsel
David H. Baker
Law Offices of David H. Baker LLC
1701 Pennsylvania Ave., NW - Suite 300
Washington, DC 20006
Phone 202-253-4347
david.baker@dbhakerlaw.com

Executive Director
Mike Krissoff
AEMA
#3 Church Circle - PMB 250
Annapolis, MD 21401
Phone 410-267-0023
krissoff@aema.org
Asphalt Emulsion Manufacturers Association
2012 - 2013 Committees

Annual Meeting Program Planning
Mark McCollough
Asphalt Materials Inc.
8720 Robbins Road
Indianapolis, IN 46268
Phone  314-249-0839
mark.mccollough@asphalt-materials.com

Asphalt Institute Liaison
Bucky Brooks
Asphalt Materials Inc.
940 Wynn Road
Oregon, OH 43616
Phone  419-693-0626
bucky.brooks@asphalt-materials.com

ASTM Liaison
Andrew Bickford
MeadWestvaco Corporation
255 Virginia Avenue
N. Charleston, SC 29406
Phone  843-746-8156
andrew.bickford@mwv.com

Emulsion Task Force Liaison
Arlis Kadrmas
BASF Corporation
1547 Woodridge Drive
Wichita, KS 67206
Phone  316-200-7326
arlis.kadrmas@basf.com

Finance
Archie Reynolds
Norjohn Limited
4365 Corporate Drive
Burlington, ON L7L 5P7 Canada
Phone  905-336-1216
Fax  905-336-1403
areynolds@walkerind.com

International Bitumen Emulsion Federation
Gaylon Baumgardner
Paragon Technical Services, Inc.
PO Box 1639
Jackson, MS 39215
Phone  601-933-3000
gaylon.baumgardner@ptsilab.com

International Symposium on Asphalt Emulsion Technology 2012
Gaylon Baumgardner
Paragon Technical Services, Inc.
PO Box 1639
Jackson, MS 39215
Phone  601-933-3000
gaylon.baumgardner@ptsilab.com

Membership
Barry Baughman
ULTRAPAVE Corporation
1300 Tiaco Drive
Dalton, GA 30720
Phone  706-277-1300
bbaughman@trcc.com

Pavement Preservation ETG
Mark Ishee
Ergon Asphalt & Emulsions, Inc.
PO Box 1639
Jackson, MS 39215
Phone  601-933-3000
mark.ishee@ergon.com

PPRA
Bucky Brooks
Asphalt Materials Inc.
940 Wynn Road
Oregon, OH 43616
Phone  419-693-0626
bucky.brooks@asphalt-materials.com

Mark McCollough
Asphalt Materials Inc.
8720 Robbins Road
Indianapolis, IN 46268
Phone  314-249-0839
mark.mccollough@asphalt-materials.com

Archie Reynolds
Norjohn Limited
4365 Corporate Drive
Burlington, ON L7L 5P7 Canada
Phone  905-336-1216
Fax  905-336-1403
areynolds@walkerind.com

PPRA 2013 Meeting
Archie Reynolds
Norjohn Limited
4365 Corporate Drive
Burlington, ON L7L 5P7 Canada
Phone  905-336-1216
Fax  905-336-1403
areynolds@walkerind.com

Supplier Members
James Andrews
BASF Corporation
11501 Steele Creek Road
Charlotte, NC 28273
Phone  704-587-8147
james.andrews@basf.com

ITC
International Technical Committee

Mike Hemsley (Chairman)
Paragon Technical Services, Inc.
390 Carrier Blvd.
Richland, MS 39218
Phone 601-932-8365
mike.hemsley@ptsilab.com

Committee on Emulsion Materials
Roger Hayner
Colas Solutions Inc.
7374 Main Street
Cincinnati, OH 45244
Phone 513-313-8548
Fax 513-891-9631
rhayner@colasinc.com

Environmental & Regulatory Issues
Everett Crews
MeadWestvaco Corp.
5255 Virginia Avenue
N. Charleston, SC 29406
Phone 843-746-8470
everett.crews@mwv.com

Committee on Paving Technology
Marty Burrow
Vance Brothers. Inc.
5201 Brighton
Kansas City, MO 64130
Phone 816-923-4325
mburrow@vancebrothers.com

Committee on Maintenance Technology
Arlis Kadrmas
BASF Corporation
11501 Steele Creek Road
Charlotte, NC 28273
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President
Patrick Faster
Gallagher Asphalt Corporation
18100 South Indiana Avenue
Thornton, IL 60476
Phone 708-877-7160
pfaster@gallagherasphalt.com

Vice President
Andrew Fox
InVia Pavement Technologies, LLC
1540 N. 107th E. Ave.
Tulsa, OK 74116
Phone 512-924-9299
andrew@invia-tech.com

Secretary/Treasurer
Ryan Essex
Miller Paving Limited
287 Ram Forest Road
Gormley, ON L0H 1G0 Canada
Phone 905-726-9518
ryan.essex@millergroup.ca

Past President
Bill Garrity
Garrity Asphalt Reclaiming Inc.
22 Peters Road
Bloomfield, CT 06002
Phone 860-243-2300
bill.garrity@garryasphalt.com

Director
Dale Cronauer
Blount Construction Co., Inc.
1730 Sands Place
Marietta, GA 30067
Phone 770-541-7333
dcronauer@blountconstruction.com

Director
John Irvine
Roadtec
800 Manufacturers Road
Chattanooga, TN 37415
Phone 319-431-0594
jirvine@roadtec.com

Director
Donn Johnson
Asphalt Recycling Solutions
6230 10th Street, Suite 310
Oakdale, MN 55128
Phone 651-379-1196
donnJ@asphaltrecyclinginc.com

Director
Tom Kiernan
Lafarge Corporation
20408 West Renwick Road
Lockport, IL 60441
Phone 630-514-5284
tom.kiernan@lafarge-na.com

Director
Terry Sharp
Caterpillar Paving Products Inc.
11601 93rd Avenue
Maple Grove, MN 55369
Phone 763-315-5503
Email sharp_terry_g@cat.com

CORE Chairman
Don Matthews
Pavement Recycling Systems
10240 San Sevaine Way
Jurupa Valley, CA 91752
Phone 951-682-1091
donmatthews@pavementrecycling.com

Legal Counsel
David H. Baker
Law Offices of David H. Baker LLC
1701 Pennsylvania Ave., NW - Suite 300
Washington, DC 20006
Phone 202-253-4347
david.baker@dhbakerlaw.com

Executive Director
Mike Krissoff
ARRA
#3 Church Circle - PMB 250
Annapolis, MD 21401
Phone 410-267-0023
krissoff@arra.org

New ARRA Member - see page 51. In 2011 ARS Companies decided to paint a reclaimer in a patriotic scheme to honor current military as well as veteran employees. Together with the help of local CAT Dealer – Wagner Equipment Company in Denver they decided on the above paint scheme. After a brief tour to CAT Paving Headquarters in Minneapolis and CAT World Headquarters in Peoria Illinois, it was returned to regular duty on jobs throughout the Western United States. This machine has received quite a bit of positive reaction from both passersby and fellow construction people and continues to work daily on customers projects. - Scott Reynolds, President & GM, ARS Companies, Inc.
ARRA 2012 - 2013 Committees

Affiliate Members
Stephanie Drain
S. Drain Engineering of IL
PO Box 805
Charleston, IL 61920
Phone 312-919-9527
stephdrain@sdrainengineering.com

Annual Meeting Program
Andrew Fox
InVia Pavement Technologies, LLC
1540 N. 107th E. Ave.
Tulsa, OK 74116
Phone 512-924-9299
andrew@invia-tech.com

Government Relations
John Rathbun
Cutler Repaving Inc.
921 East 27th Street
Lawrence, KS 66046
Phone 785-843-1524
jrathbun@cutlerepaving.com

Membership
John Irvine
Roadtec Inc.
800 Manufacturers Road
Chattanooga, TN 37405
Phone 800-272-7100
j Irvine@roadtec.com

Pavement Preservation ETG
Mike Polak
E.J. Brenerman
1117 Snyder Road
West Lawn, PA 19609
Phone 610-678-1913
mpolak@ejbrenerman.com

PPRA
Bill Garrity
Garrity Asphalt Reclaiming Inc.
22 Peters Road
Bloomfield, CT 06002
Phone 860-243-2300
bill.garrity@garrityasphalt.com

Andrew Fox
InVia Pavement Technologies, LLC
1540 N. 107th E. Ave.
Tulsa, OK 74116
Phone 512-924-9299
andrew@invia-tech.com

Ryan Essex
Miller Paving Limited
287 Ram Forest Road
Gormley, ON L0H 1G0 Canada
Phone 905-726-9518
ryan.essex@millergroup.ca

Core Technical Subcommittees

Committee on Recycling Education (CORE)

Don Matthews
Pavement Recycling Systems
10240 San Sevaine Way
Jarupa Valley, CA 91752
Phone 951-682-1091
donmatthews@pavementrecycling.com

Core Technical Subcommittees

Cold Planing
Jenelle Strawbridge
Caterpillar Paving Products Inc.
26171 Camden Woods Drive
Fort Mill, SC 29707
Phone 704-840-8689
strawjm@cat.com

Trevor Moore
Miller Paving Limited
287 Ram Forest Road
Gormley, ON L0H 1G0 Canada
Phone 905-726-9518
trevor.moore@millergroup.ca

Kimbel Stokes
The Miller Group Inc.
1715 Nolan Court
Morrow, GA 30260
Phone 770-968-9100
kimbel.stokes@millergroup.ca

Hot In-Place Recycling
Patrick Faster
Gallagher Asphalt Corporation
18100 South Indiana Avenue
Thornton, IL 60476
Phone 708-877-7160
pfaster@gallagherasphalt.com

Technical Review
Todd Thomas
Colas Solutions Inc.
7374 Main Street
Cincinnati, OH 45244
Phone 973-610-2260
thomas@colasinc.com

Cold Recycling
Cold Recycling
Trevor Moore
Miller Paving Limited
287 Ram Forest Road
Gormley, ON L0H 1G0 Canada
Phone 905-726-9518
trevor.moore@millergroup.ca

Hot In-Place Recycling
Hot In-Place Recycling
Patrick Faster
Gallagher Asphalt Corporation
18100 South Indiana Avenue
Thornton, IL 60476
Phone 708-877-7160
pfaster@gallagherasphalt.com

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Todd Thomas
Colas Solutions Inc.
7374 Main Street
Cincinnati, OH 45244
Phone 973-610-2260
thomas@colasinc.com

Full Depth Reclamation/Full Depth Reclamation/
Soil Stabilization
Soil Stabilization
Kimbel Stokes
The Miller Group Inc.
1715 Nolan Court
Morrow, GA 30260
Phone 770-968-9100
kimbel.stokes@millergroup.ca

Technical Review
Technical Review
Todd Thomas
Colas Solutions Inc.
7374 Main Street
Cincinnati, OH 45244
Phone 973-610-2260
thomas@colasinc.com

Full Depth Reclamation/Full Depth Reclamation/
Soil Stabilization
Soil Stabilization
Kimbel Stokes
The Miller Group Inc.
1715 Nolan Court
Morrow, GA 30260
Phone 770-968-9100
kimbel.stokes@millergroup.ca

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Technical Review
Todd Thomas
Colas Solutions Inc.
7374 Main Street
Cincinnati, OH 45244
Phone 973-610-2260
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Donegal Construction Corp.
Dunn Company, Div of Tyrolt Inc
Dustrol Inc.
E.J. Breneman Inc.
Ellis Consolidated Pty. Ltd.
Flex-Tech Resources Ltd.
Fonseca McElroy Grinding Co., Inc.
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Garity Asphalt Reclaiming
Gazzola Paving Limited
George & Lynch Inc.
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Koss Construction Company
Kubricky Construction Corp.
Lanford Brothers Co.
Lavis Contracting Company, Ltd.
Manatt’s Inc.
Maritime Road Recycling Inc.
Midland Asphalt Materials Inc.
Midstate Reclamation, Inc
Midwest Stabilization
Miller Paving Limited
Mt. Carmel Stabilization Group Inc.
Municipal CIP Recycling Ltd.
Pavement Recycling Systems, Inc.
Paveover, Inc.
Payne & Dolan Inc.
Reclamation Inc. of Kingston
Recon Construction Services Inc.
Roadway Management Inc.
Rock Solid Stabilization & Reclamation, Inc.
ROTO-MILL INC.
Ruston Paving Co., Inc.
Sanders Brothers Construction, Inc.
Seeley and Arnill Construction
Slurry Pavers Inc.
Specialties Company, LLC
Tennmile Creek Excavating, LLC
The Lane Construction Corporation

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Essroc Italcementi Group
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Kennametal Inc.
Keystone Engineering & Manufacturing Corp
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MeadWestvaco Corporation
Mintek Resources Inc
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Sollami Company
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Superior Tire & Rubber Corp.
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Wirtgen America Inc.

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American Engineering
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Braun Intertec
Cement Council of Texas
City of Edmonton Transportation Dept.
City of Los Angeles DPW
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Cummins Engineering Corporation
Dakota Asphalt Pavement Association
DBA Engineering Ltd.
Delaware County Engineer
Duval Engineering, LLC
ECS Mid-Atlantic, LLC

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Loudon International
LVM Inc.
Mason County Highway Dept.
McCleary Engineering
Midland Standard Engineering & Testing, Inc.
Missouri DOT
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Ontario Hot Mix Producers Assn
Portland Cement Association
PSI
Road Recycling Council
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Scott County Secondary Road Dept
Stancliffe Services LLC
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Virginia Asphalt Association
Washington State County Road Admin Board
Whitpain Township
WHPacific Incorporated
www.ibuildroads.com

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*Ken Damgaard – Arizona Pavement Profiling
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Luther Hall – Terex Roadbuilding
Bill Heitschmidt
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National Asphalt Pavement Association
Jim Pickett – Pickett Consulting Group
*Jim Sorenson - FHWA
Al Spreuill
Jack Taylor - Consultant
Gordon F. Whitney PE - Whitney Consultants

*Deceased

AFFILIATE MEMBERS - cont.
International Slurry Surfacing Association
2012 - 2013 Board of Directors

President
Doug Ford
Pavement Coatings Company
10240 San Sevaine Way
Jurupa Valley, CA 91752
Phone 714-626-3011
dford@pavementcoatings.com

Immediate Past President
W. Pierre Peltier
Terry Asphalt Materials Inc.
8600 Berk Blvd.
Hamilton, OH 45015
Phone 513-315-6760
ppeltier@terryasphalt.com

Vice President
Christine Deneuvillers
Colas SA
4 rue Jean Mermoz Batiment C
Magny Les Hameaux 78772 France
Phone 33-1-39-30-93-62
deneuvillers@campus.colas.fr

Technical Director
Bob Jerman
MeadWestvaco Corporation
5255 Virginia Ave.
N. Charleston, SC 29406-3615
Phone 843-746-8155
robert.jerman@mwv.com

Secretary
Rusty Price
Intermountain Slurry Seal
1000 Warm Springs Road
Salt Lake City, UT 84130
Phone 801-526-6144
rusty.price@gcinc.com

Director
Rex Ebery
Ballou Pavement Solutions
1841 E. North Street
Salina, KS 67401
Phone 785-825-5303
reberly@balloulosolutions.com

Treasurer
Eric Reimschiissel
American Pavement Preservation
4725 E. Cartier Avenue
Las Vegas, NV 89115
Phone 702-507-5410
ericr@americanpave.com

Director
Scott Bergkamp
Bergkamp Inc.
3040 Emulsion Drive
Salina, KS 67401
Phone 785-825-1375
scottb@bergkampinc.com

Director
Rex Ebery
Ballou Pavement Solutions
1841 E. North Street
Salina, KS 67401
Phone 785-825-5303
reberly@balloulosolutions.com

Director
Rich Francis
Southwest Slurry Seal Inc.
22855 N 21st Avenue
Phoenix, AZ 85027
Phone 623-582-1919
rich.swss@earthlink.net

Director
Doug Hogue
VSS Macropaver
PO Box 178
Hickman, CA 95323
Phone 209-874-2357
doug@slurry.com

Director
Howie Snyder
Vance Brothers, Inc.
5201 Brighton
Kansas City, MO 64130
Phone 816-923-4325
Email hsnyder@vancebrothers.com

Director
Larry Tomkins
Ergon Asphalt & Emulsions Inc.
PO Box 1639
Jackson, MS 39215
Phone 601-933-3000
Email larry.tomkins@ergon.com

General Counsel
David H. Baker
Law Offices of David H. Baker LLC
1701 Pennsylvania Ave., NW-Ste. 300
Washington, DC 20006
Phone 202-253-4347
david.baker@dibakerlaw.com

Executive Director
Mike Krissoff
ISSA
#3 Church Circle - PMB 250
Annapolis, MD 21401
Phone 410-267-0023
krissoff@slurry.org

Asphalt Emulsion Manufacturers Association
42nd Annual Meeting

Asphalt Recycling & Reclaiming Association
39th Annual Meeting

International Slurry Surfacing Association
53rd Annual Meeting

2nd International Conference on Pavement Preservation

International Bitumen Emulsions Federation
6th World of Emulsions

N’oubliez pas!
Winter - 2015
Paris, France

Preliminary plans are well under way and Committees are hard at work with plans to make this meeting productive, informative and memorable!
International Slurry Surfacing Association
2012 - 2013 Committees

Chipseal
Ben Vagher
A-1 Chip Seal & Rocky Mountain Pavement
2001 W. 64th Lane
Denver, CO 80221
Phone 303-464-9267
bvagher@a-1chipseal.com

Crack Treatment
Bryan Darling
Crafco Inc.
420 N. Roosevelt Ave.
Chandler, AZ 85226
Phone 602-276-0406
bryan.darling@crafco.com

Slurry/Micro Surfacing
Rusty Price
Intermountain Slurry Seal
1000 Warm Springs Road
Salt Lake City, UT 84130
Phone 801-526-6144
rusty.price@gcinc.com

Asia Market Development
Songchang Huang
Research Institute of Highways (RIOH)
No. 8 Xitucheng Road
Haidian, Beijing 10008 China
sc.huang@rioh.com

Awards
W. Pierre Peltier
Terry Asphalt Materials Inc.
8600 Berk Blvd.
Hamilton, OH 45015
Phone 513-315-9760
ppeltier@terryasphalt.com

BMG Oversight Committee
W. Pierre Peltier
Terry Asphalt Materials Inc.
8600 Berk Blvd.
Hamilton, OH 45015
Phone 513-315-9760
ppeltier@terryasphalt.com

Doug Ford
Pavement Coatings Company
10240 San Sevaine Way
Jurupa Valley, CA 91752
Phone 714-826-3011
dford@pavementcoatings.com

Bylaws
Doug Ford
Pavement Coatings Company
10240 San Sevaine Way
Jurupa Valley, CA 91752
Phone 714-826-3011
dford@pavementcoatings.com

China Users Conferences
David Wu
MeadWestvaco Hong Kong Ltd.
1 Hongqiao Road
Shanghai 20051 P.R. China
Phone 86 21 6113 0505
delong.wu@vip.163.com

Convention
Rusty Price
Intermountain Slurry Seal
1000 Warm Springs Road
Salt Lake City, UT 84130
Phone 801-526-6144
rusty.price@gcinc.com

Government Relations
Scott Bergkamp
Bergkamp Inc.
3040 Emulsion Drive
Salina, KS 67401
Phone 785-825-1375
scottb@bergkampinc.com

Industry Relations
Doug Hogue
VSS Macpaver
13024 Lake Road
Hickman, KS 65323
Phone 209-874-2357
doug@slurry.com

Information Services
Carter Dabney
Slurry Pavers, Inc.
1277 Mountain Road
Glen Allen, VA 23060
Phone 804-284-0707
cdabney@slurrypavers.com

International Members
Christine Deneuvillers
Colas SA
4 rue Jean Mermoz Batiment C
Magney Les Hameaux 78772 France
Phone 33-1-39-30-93-62
deneuvillers@campus.colas.fr

International Specifications
Marc Proteau
Eurovia Management
3705 Place de Java
Brossard, Quebec J4Y 0E4 Canada
Phone 450-444-1574
marc.proteau@eurovia.ca

Membership
Doug Ford
Pavement Coatings Company
10240 San Sevaine Way
Jurupa Valley, CA 91752
Phone 714-826-3011
dford@pavementcoatings.com

Nominating
W. Pierre Peltier
Terry Asphalt Materials Inc.
8600 Berk Blvd.
Hamilton, OH 45015
Phone 513-315-9760
ppeltier@terryasphalt.com

Past Presidents
W. Pierre Peltier
Terry Asphalt Materials Inc.
8600 Berk Blvd.
Hamilton, OH 45015
Phone 513-315-9760
ppeltier@terryasphalt.com

PPRA
W. Pierre Peltier
Terry Asphalt Materials Inc.
8600 Berk Blvd.
Hamilton, OH 45015
Phone 513-315-9760
ppeltier@terryasphalt.com

Technical Marketing/Webinar
Tim Harrwood
Vance Brothers, Inc.
PO Box 2376
Conway, AR 72033
Phone 501-945-2199
tharrwood@vancebrothers.com

Technical Response Team
Rich Wenthe (Chair)
MWV Specialty Chemicals
5225 Virginia Avenue
North Charleston, SC 29406
Phone 843-636-7531
Email richard.wenthe@mwv.com

Technical Director
Bob Jerman
MeadWestvaco Corporation
5255 Virginia Ave.
N. Charleston, SC 29406-3615
Phone 843-746-8155
robert.jerman@mwv.com

Carlos Mata Ascoli
Asfaltos de Centroamerica S.A.de C.V.
96 Avenue Norte #632
San Salvador, El Salvador
Phone 503-773-0363
Email carlosmata@asfalca.com

Rusty Price
Intermountain Slurry Seal
1000 Warm Springs Road
Salt Lake City, UT 84130
Phone 801-526-6144
rusty.price@gcinc.com

Ben Vagher
A-1 Chip Seal & Rocky Mountain Pavement
2001 W. 64th Lane
Denver, CO 80221
Phone 303-464-9267
bvagher@a-1chipseal.com

Awards
W. Pierre Peltier
Terry Asphalt Materials Inc.
8600 Berk Blvd.
Hamilton, OH 45015
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1 Hongqiao Road
Shanghai 20051 P.R. China
Phone 86 21 6113 0505
delong.wu@vip.163.com

Convention
Rusty Price
Intermountain Slurry Seal
1000 Warm Springs Road
Salt Lake City, UT 84130
Phone 801-526-6144
rusty.price@gcinc.com

Government Relations
Scott Bergkamp
Bergkamp Inc.
3040 Emulsion Drive
Salina, KS 67401
Phone 785-825-1375
scottb@bergkampinc.com

Industry Relations
Doug Hogue
VSS Macpaver
13024 Lake Road
Hickman, KS 65323
Phone 209-874-2357
doug@slurry.com

Information Services
Carter Dabney
Slurry Pavers, Inc.
1277 Mountain Road
Glen Allen, VA 23060
Phone 804-284-0707
cdabney@slurrypavers.com

International Members
Christine Deneuvillers
Colas SA
4 rue Jean Mermoz Batiment C
Magney Les Hameaux 78772 France
Phone 33-1-39-30-93-62
deneuvillers@campus.colas.fr

International Specifications
Marc Proteau
Eurovia Management
3705 Place de Java
Brossard, Quebec J4Y 0E4 Canada
Phone 450-444-1574
marc.proteau@eurovia.ca

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Doug Ford
Pavement Coatings Company
10240 San Sevaine Way
Jurupa Valley, CA 91752
Phone 714-826-3011
dford@pavementcoatings.com

Nominating
W. Pierre Peltier
Terry Asphalt Materials Inc.
8600 Berk Blvd.
Hamilton, OH 45015
Phone 513-315-9760
ppeltier@terryasphalt.com

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8600 Berk Blvd.
Hamilton, OH 45015
Phone 513-315-9760
ppeltier@terryasphalt.com

PPRA
W. Pierre Peltier
Terry Asphalt Materials Inc.
8600 Berk Blvd.
Hamilton, OH 45015
Phone 513-315-9760
ppeltier@terryasphalt.com

Technical Marketing/Webinar
Tim Harrwood
Vance Brothers, Inc.
PO Box 2376
Conway, AR 72033
Phone 501-945-2199
tharrwood@vancebrothers.com

Technical Response Team
Rich Wenthe (Chair)
MWV Specialty Chemicals
5225 Virginia Avenue
North Charleston, SC 29406
Phone 843-636-7531
Email richard.wenthe@mwv.com

Technical Director
Bob Jerman
MeadWestvaco Corporation
5255 Virginia Ave.
N. Charleston, SC 29406-3615
Phone 843-746-8155
robert.jerman@mwv.com

Carlos Mata Ascoli
Asfaltos de Centroamerica S.A.de C.V.
96 Avenue Norte #632
San Salvador, El Salvador
Phone 503-773-0363
Email carlosmata@asfalca.com

Rusty Price
Intermountain Slurry Seal
1000 Warm Springs Road
Salt Lake City, UT 84130
Phone 801-526-6144
rusty.price@gcinc.com

Ben Vagher
A-1 Chip Seal & Rocky Mountain Pavement
2001 W. 64th Lane
Denver, CO 80221
Phone 303-464-9267
bvagher@a-1chipseal.com

AEMA-ARRA-ISSA Newsletter 2012 Issue #4

63
ISSA Members

Go to www.slurry.org to find detailed contact information for all ISSA members.

CONTRACTOR MEMBERSHIP
A-1 Chipseal & Rocky Mountain Pavement
AC Pavement Stripping Company
American Asphalt Repair & Resurfacing Co.
American Pavement Preservation
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West-Can Seal Coating Inc.
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MnDOT
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*C. Robert Benedict - Benedict Slurry Seal
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Darryl Montgomery
Bob Province - APCO
*Jerry Ritschel
Bob Shey
*Jim Sorenson - Federal Highway Admin.
*Ted Van Pelt
*Raymond Young

*deceased
Logo Available to Members

The AEMA Logo is available to AEMA members in an electronic version; we will be pleased to send you one. For an electronic version of the AEMA logo, contact krissoff@aema.org.

ARRA Logo Available to Members

The ARRA logo is available for distribution to ARRA members. This is useful for use in stationery, advertising graphics, brochures, websites, etc. To receive the logo via e-mail, just send a note to ARRA headquarters: krissoff@arra.org

NEW! ISSA Logo Available to Members

The new ISSA logo is available for distribution to ISSA members. ISSA Members may find this useful for stationery, advertising graphics, brochures, websites, etc.

To receive the new logo via e-mail, just send a note to ISSA headquarters: krissoff@slurry.org

Request for Online Educational Videos

We’re still seeking links for online educational videos or presentations. Do you have them on your company website? People contact AEMA, ARRA, and ISSA constantly, seeking more detail about the materials, products, and processes we represent. We know that some of our member companies have gone to great lengths to build informative websites which showcase various pavement preservation, recycling, and reclaiming technologies. We’d like to publish this list but first must give all members the opportunity to be included. If you have such material available online, and if it is purely and generically informative and educational and not a sales pitch, please send an email message including the appropriate links to Executive Director Mike Krissoff at krissoff@krissoff.org. We’ll take a look at what we receive and assemble the appropriate items into a list for publication.

Just have a look at what Ergon has done by visiting www.savemyroad.com

Please check out http://pavinars.uark.edu/Previous_Pavinars.php - This link was sent to us by Andrew Braham, Ph.D., Assistant Professor, University of Arkansas, Department of Civil Engineering. Andrew has uploaded several one-hour presentations on various pavement topics (both flexible and rigid). These presentations are recordings of live presentations.
# MASTER CALENDAR OF UPCOMING EVENTS

## 2013

<table>
<thead>
<tr>
<th>Date</th>
<th>Event</th>
<th>Location</th>
</tr>
</thead>
<tbody>
<tr>
<td>Jan 13 – 17</td>
<td>TRB 92&lt;sup&gt;nd&lt;/sup&gt; Annual Meeting – <a href="http://www.trb.org">www.trb.org</a></td>
<td>Washington, DC</td>
</tr>
<tr>
<td>Feb 10 - 13</td>
<td>58&lt;sup&gt;th&lt;/sup&gt; NAPA Annual Meeting – <a href="http://www.hotmix.org">www.hotmix.org</a></td>
<td>Venetian, Scottsdale, Arizona</td>
</tr>
<tr>
<td>Feb 19 - 22</td>
<td>AEMA-ARRA-ISSA Annual Meeting</td>
<td>Renaissance Esmeralda Resort - Indian Wells, CA</td>
</tr>
<tr>
<td>Mar 19 – 21</td>
<td>World of Asphalt - <a href="http://www.worldofasphalt.com">www.worldofasphalt.com</a></td>
<td>San Antonio, Texas</td>
</tr>
<tr>
<td>Apr 21 – 25</td>
<td>NACE – <a href="http://www.countyengineers.org">www.countyengineers.org</a></td>
<td>Des Moines, Iowa</td>
</tr>
<tr>
<td>Nov 10 - 13</td>
<td>PPRA Fall Meeting</td>
<td>Dallas Marriott City Center - Dallas, Texas</td>
</tr>
</tbody>
</table>

## 2014

<table>
<thead>
<tr>
<th>Date</th>
<th>Event</th>
<th>Location</th>
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</thead>
<tbody>
<tr>
<td>Jan 12 – 16</td>
<td>TRB 93&lt;sup&gt;rd&lt;/sup&gt; Annual Meeting – <a href="http://www.trb.org">www.trb.org</a></td>
<td>Washington, DC</td>
</tr>
<tr>
<td>Feb 24 – 28</td>
<td>AEMA-ARRA-ISSA Annual Meeting</td>
<td>The Fairmont Turnberry Isle - Aventura, Florida</td>
</tr>
<tr>
<td>Mar 4 – 8</td>
<td>CONEXPO – <a href="http://www.conexpoconagg.com">www.conexpoconagg.com</a></td>
<td>Las Vegas, Nevada</td>
</tr>
<tr>
<td>Apr 13 – 17</td>
<td>NACE – <a href="http://www.countyengineers.org">www.countyengineers.org</a></td>
<td>Baton Rouge, Louisiana</td>
</tr>
</tbody>
</table>

## 2015

<table>
<thead>
<tr>
<th>Date</th>
<th>Event</th>
<th>Location</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mar 1 - 4</td>
<td>PPRA World Congress (AEMA, ARRA, ISSA, PPRA, IBEF, ICPP)</td>
<td>Concorde La Fayette Hotel - Paris, France</td>
</tr>
</tbody>
</table>

## 2016

<table>
<thead>
<tr>
<th>Date</th>
<th>Event</th>
<th>Location</th>
</tr>
</thead>
<tbody>
<tr>
<td>Feb 23 - 26</td>
<td>AEMA-ARRA-ISSA Annual Meeting</td>
<td>Hyatt Regency Coconut Point - Bonita Springs, Florida</td>
</tr>
</tbody>
</table>

## 2017

<table>
<thead>
<tr>
<th>Date</th>
<th>Event</th>
<th>Location</th>
</tr>
</thead>
<tbody>
<tr>
<td>Feb 14 – 17</td>
<td>AEMA-ARRA-ISSA Annual Meeting</td>
<td>Westin La Paloma, Tucson, Arizona</td>
</tr>
</tbody>
</table>
When Time Is Money, Speed Is Everything

Kennametal’s new ECO™ Pro tools are specially constructed so you can run your machines faster — with less fuel. That means significantly reduced overall operating costs, making RoadRazor ECO™ Pro an unmatched combination of ultimate service life, efficiency, and productivity.

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- Increased uptime and performance.
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Cold recyclers produce a high-quality and stable subgrade in one single machine pass:
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- Mature milling and mixing rotors from Wirtgen with fast-change toolholder system and mechanical drive
- Microprocessor-controlled systems for the precise metering of binding agents

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