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NOTES FROM HEADQUARTERS

Members are invited to visit the AEMA-ARRA-ISSA-FP2 Hospitality Suite in Room 2-038 at the Marriott Marquis in Washington DC, January 11 – 12, 2016, during the Annual Meeting of the Transportation Research Board. For specific times, refer to the hotel directory; we anticipate 5:00 – 7:00 pm both evenings.

We want to help make sure your emails are getting delivered to you! In order to help ensure proper delivery of emails to your inbox, you can add senders of legitimate emails to your whitelist, also called the Approved or Safe Sender list. Visit ppralliance.org/whitelist-instructions to view instructions on how to do so for several popular Internet Service Providers and email companies.

FHWA announces the availability of “Towards Sustainable Pavement Systems: A Reference Document” (FHWA-HIF-15-002). To request a hard copy, contact report.center@dot.gov and include:

Name
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# copies requested

AEMA, ARRA, and ISSA would like to wish Jason Harrington congratulations on his retirement from FHWA on Friday, October 30, 2015. We thank him for all his hard work to move the pavement preservation industry forward and wish him all the best on his future endeavors.

Back in 2014 at the ARRA/FHWA Western States and International In-Place Recycling Conference in Denver, Colorado a special workshop session was held at the end of the conference involving owner agencies, contractors, academia and industry. The workshop was spearheaded by the Texas A&M Transportation Institute. The stated purpose of that workshop was to get the participants together to identify gaps in knowledge and barriers associated with the use of the in-place recycling techniques of hot in-place recycling (HIR), cold in-place recycling (CIR) and full depth reclamation (FDR). From this workshop a white paper was developed summarizing the lessons learned and a providing a list of potential research topics to address the identified gaps in knowledge and barriers to increased implementation. Research needs identified included project selection criteria, improved quality assurance procedures, life cycle cost analysis and life cycle assessment, implementation/education initiatives, mixture and structural design, and compaction monitoring. Two NCHRP research needs statements were developed from this effort that are working their way through the approval process and several more are expected. The white paper will be posted by the Colorado DOT and will be available on the ARRA web site soon.
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AEMA
PRESIDENT’S MESSAGE
ARCHIE REYNOLDS, WALKER EMULSIONS LIMITED

It’s hard to imagine we’re already inside a month to Christmas, a special time of year indeed. As overlay crews continue at a furious pace, particularly in the Northeast, we see this year’s season ending in sight with applications of Bond-coats and winter-mix stockpiles going up. Here at AEMA behind the scenes, there has been progress on a number of fronts.

The recent PPRA Session in Niagara Falls, Canada undoubtedly was a resounding success. Due to a personal family matter, I unfortunately had to miss this year’s program. Many thanks to Vice President Mark Ishee for reaching out and stepping up in my absence.

By all accounts and feedback received our collective program committee from ARRA, ISSA and AEMA did an outstanding job with a solid line-up of speakers and timely issues. To our sponsors, thank you all for the continued support, whom without would be a challenge to operate this level of programming. Since our last writing there has been several new developments and initiatives in action related to our strategic plan. Under the continued guidance of Past-President Mark McCollough the Board has approved development of promotional literature and storylines that will be issued in several strategic trade publications, national and regional throughout 2016. These initiatives will focus on the (5) five core focus areas of growth identified in the June, St. Louis, MI meeting as stated in our last newsletter. The first series will roll out in Q1 of 2016.

Additionally, your Board is working through a comprehensive proposal aimed at growth by repositioning AEMA through research, name re-branding, visual identifiers and case studies. This proposal will be on our Board Agenda at the February 2016 meetings.

Speaking of February a gentle-reminder to all that AGM Planning Committee representing AEMA, ARRA, ISSA have a full slate and exciting program ahead. Looking forward to seeing all in South Florida at Bonita Springs, the week of February 21st, 2016. Registration is now open and in full swing. Lastly, I would like to give a shout-out to Hans Ho from Telfer Oil for his time spent on our Board the past few years. Hans officially steps down December 31, 2016. Thank you Hans and we look forward to your continued commitment behind the scenes through the ITC Committee.

On behalf of your Board, I would like to extend our best wishes to each of you this Holiday Season and hope everyone takes the time to enjoy what really matters, spending quality time with family.

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Welcome to our Fall PPRA newsletter, a great place to find out what is going on within the collective worlds of AEMA, ARRA and ISSA. As your ARRA President I can report that there is a significant amount of activity within our association as we refocus on getting back to basics to ensure we are delivering value to each and every member through content and connections at our meetings while remaining the go to resource for everything related to in-place recycling (both hot and cold), cold planing, micro-milling, full depth reclamation and stabilization. Case in point: there were record-setting numbers in attendance at PPRA Niagara Falls in October. An impressive collection of over 330 industry stakeholders sharing their experiences, exploring new opportunities and tackling challenges together that are faced on a daily basis; both in the field and in the budgetary coffers. PPRA 2015 presentations are available for our members on the ARRA website so please take time to review this excellent material and member benefit. There was also increased attendance to many of the ARRA committee meetings in Niagara Falls and from that a renewed appreciation of the incredible amount of material that is discussed within these meetings. These committees are the lifeblood of our organization and benefited from the spike in participation. I was pleased to hear from many people that attended a committee meeting for the first time in Niagara Falls that they had not realized how valuable it was for them to attend, to participate and to contribute. These committee meetings are open to all and I would encourage you to plan on attending the next scheduled gathering during the AEMA-ARRA-ISSA Annual Meeting, February 23 – 26, 2016 Bonita Springs, FL. Niagara also proved to be an excellent setting to network, socialize and we enjoyed the hospitality and venues provided by our sponsors to experience the Falls up close on the Hornblower and a great evening at a local vineyard. The fact that our sponsors also provided a closing reception that included a decisive game 5 MLB playoff game involving the almost local Toronto Blue Jays was icing on the cake. It may not have been Paris but there were still plenty of great memories made from this meeting. We want to hear from you with regard to the quality of the meeting content, venue, social functions, accommodations, etc… so I urge you to respond to the survey that has been circulated to each attendee (via email) so that we can use your feedback to make certain our future meetings meet or exceed your expectations.

A key takeaway, or maybe it was simply an affirmation of something we already knew to be true was that the majority of markets in the developed world are facing precedent setting infrastructure deficits. More and more, out of sheer necessity, infrastructure agencies are turning to ARRA processes to make use of materials they have already bought and paid for. They cannot afford conventional remove and replace, especially when ARRA processes are time tested, technically sound,
More and more, infrastructure decision makers are impressed by our industry and technological advancements that provide engineering solutions to their deficits with predictable (and favourable) outcomes to manage their road assets.

Offer social, environmental and economical efficiencies over conventional. More and more, infrastructure decision makers are impressed by our industry and technological advancements that provide engineering solutions to their deficits with predictable (and favourable) outcomes to manage their road assets. This predictability, the strong performance of our processes continues to be critical to the growth of our industry and to our ARRA member businesses. This is the real value of ARRA to the overall industry and has a positive impact on our members. But how do we ensure our members are getting the best value out of ARRA?

The AEMA-ARRA-ISSA Annual Meeting, February 23 – 26, 2016 Bonita Springs, FL will deliver on that. This program ensures our members will be the first to know about rule changes, specification changes, equipment innovations and material advantages. The agenda is packed with a focus on providing benefits to our members, real takeaways that each attendee can use and apply in their businesses. These takeaways will be delivered by industry leading professionals and keynote speakers brought in specifically with the purpose of providing thought provoking ideas and techniques to help your business grow and prosper. Attending these sessions will allow you to apply the lessons learned effectively at your place of work. The program will maintain its strong networking opportunities including cross networking with AEMA & ISSA members. There is a line-up of suppliers of equipment & materials as well as associate member companies registered that will be able to relay their worldwide experiences and present the innovative materials and techniques being utilized currently to enhance the customers’ longevity of projects and improve bottom line dollars. Registration and hotel bookings are now open online and I personally hope to see you all there at this great event for our members.

Finally, do not forget to sign up for news from AEMA, ARRA, ISSA, and PPRA by joining our E-Newsletter. Visit ppralliance.org and subscribe on the right side of the page.

To close off, I want to reiterate my message from previous newsletters this year. To all ARRA members, going forward, you have my word and you have my number (905 726-9518) that myself and your ARRA Board of Directors are here to serve you as members of ARRA, here to further grow this association and continue to strengthen it. We have a long history of great people that served as Presidents of ARRA, many whom I have been fortunate enough to get to know and I do not take my new role lightly. Do not ever hesitate to contact me or any of our Board members to discuss how we can better serve you and more importantly discuss how you can engage and help make ARRA an ever stronger association. I thank you for your commitment and participation in our association that contributes to keeping the Asphalt Recycling & Reclaiming Association strong, vibrant and responsive to current and emerging issues and priorities. Have a safe end to the construction season, enjoy the holidays and see you this February in Bonita Springs.
ISSA PRESIDENT’S MESSAGE

RUSTY PRICE, INTERMOUNTAIN SLURRY SEAL

As this newsletter goes to press the weather has changed, snow is falling in some parts of the country and the 2015 construction season has come to an end. I genuinely hope that 2015 was safe and rewarding for everyone. I am sure that more opportunities concerning work would be helpful for everyone.

Some good news is the signing by President Obama of the new highway bill on Dec. 4: Fixing America’s Surface Transportation (FAST) Act. The $305-billion bill is a fully funded five-year reauthorization of federal highway and transit programs. The FAST Act will be funded by gas tax revenue and a $70 billion package sourced from other areas of the federal budget. The bill calls for spending approximately $205 billion on highways and $48 billion on transit projects over the next five years. The FAST Act has now entered the history books as the first highway funding bill to run longer than two years to become law since 2005. There have been 32 extensions and five revenue shortfalls in transportation funding in the past eight years. This bill gives the nation’s infrastructure and its economy “a much needed shot in the arm.” Most lawmakers praise the bill as a major accomplishment because it would assure states and localities they can count on federal highway funding. It’s hard to plan construction projects when availability of federal aid is in doubt. Looking at this optimistically, this should create more opportunities and consistency. The bad news is the current highway bill is not without its challenges and setbacks. The current bill authorizes $325 billion in spending through the 2021 federal budget year. But it provides money for only the first three years because lawmakers couldn’t agree on a way to pay for it all. The measure would continue current rates of spending, adjusted for inflation. It has been estimated that $400 billion over six years is the “minimum” needed to just keep pace, not to mention catching up with what is needed to address years of warnings that the nation’s roads, bridges and transit systems are falling apart. Stay tuned!

The fall PPRA meeting with AEMA and ARRA was held in beautiful Niagara Falls, Ontario Canada October 13-15. The event was well attended, program content and information shared was very well done and overall appears to be a very successful event. The meetings also allowed the ISSA board of directors time for planning and discussion on several things that are of high importance and priority for the association. In fact the entire board traveled to the meetings the day prior and spent over ten hours during the week deliberating and considering the “road ahead” for ISSA. As members should be aware at this point in time, a very difficult and much discussed decision was made to raise dues for 2016. I’m sure the 2016 dues invoice sent out in early November raised some eyebrows as the increase was substantial. A request for proposal (RFP) for an association management company for the 2017 calendar year has been advertised and is currently in the possession of...
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WILLIAM CHARLES “CHARLIE” GAGNON

ISSA Past President William Charles “Charlie” Gagnon, 82, passed away Thursday, Oct. 29, 2015, while in the company of family members at his residence. He was former owner of Ballou Construction Company in Salina, retiring in 1995. He served as President of ISSA from 1991 to 1992. In 2006, Charlie received Honorary Membership and was present a plaque to Gagnon at the 2006 ISSA Annual Convention.

Charlie was born in Salina on July 7, 1933, son of the late Alphonse E. and Regina (LeBlanc) Gagnon. He graduated from Sacred Heart High School in Salina, where he later served as a board member, president of the Endowment Fund and co-founder of the Bishop George Fitzsimons Golf Tournament benefiting the fund. He was recognized as Distinguished Alumni for Outstanding Service to Alma Mater in 1987. Charlie proudly served in the U.S. Army from 1953 to 1955 and received the National Defense Medal. He attended Kansas State University, earning a Bachelor of Science degree in business administration. On May 9, 1964, he was united in marriage to Brenda Zorn at Sacred Heart Cathedral, Salina. Charlie was a member of St. Thomas More Catholic Church in Manhattan and was a 4th Degree Knights of Columbus, Council 601. He was Past President of International Slurry Surfacing Association and received the Distinguished Service Award from the Kansas Contractors Association.

Survivors include his wife, Brenda, of the home; three sons, Tony (Rhonda Reed) Gagnon, of Lenexa, Andy Gagnon, of Manhattan, and John (Monnette) Gagnon, of Andover. He is also survived by three grandsons and one granddaughter. Charlie was preceded in death by his parents, four brothers and two sisters.

Anyone wishing to commemorate his memory may do so with a contribution in his name to Sacred Heart Jr./Sr. High School Endowment Fund, 320 E. Cloud, Salina 67401 or Manhattan Catholic Schools Endowment Fund, 306 Juliette Ave., Manhattan 66502.

For more information, to send an e-mail condolence or a gift for the family, visit the funeral home web site: www.irvinparkview.com.
FHWA HOSTS AEMA-ARRA-ISSA DELEGATION IN SEPTEMBER, AND COMMITTEES GET BUSY IN OCTOBER

MIKE KRISSOFF, EXECUTIVE DIRECTOR

As reported in our last issue, about ten of us visited the FHWA Headquarters Staff in mid-September. We all looked forward to meeting new Director of the Office of Asset Management, Hari Kalla, and renewing acquaintances with other members of his team. Two hours is not much time to lay out the programs and needs of three different associations, but all were attentive, focused, and candid. We were able to provide a quick summary of each group, explain our priorities and our resources, and made clear our invitation to FHWA to provide input, seek our assistance, attend our meetings, and utilize our tools. We came away with some good direction as to how better to try to accomplish our goals within the federal bureaucracy, and how better to make our needs known to groups like AASHTO and various expert task groups and partnerships. The first takeaway was FHWA’s offer to help arrange for up to 20 State DOT officials to attend the 2016 Slurry Systems Workshop. The next was to consider providing input to our newsletter and to perhaps providing a speaker for the Annual Meeting, and to maybe have a few staffers attend and stick around for a few days to network with our combined memberships.

Just two weeks later, seven of AEMA-ARRA-ISSA’s committees met during the PPRA 2015 Fall Meeting in Niagara Falls. Please take a look at their reports elsewhere in this newsletter. You can see from a quick review these committees are where the real work gets done. Our Boards get a lot of work done, too, but much of it is related to the bigger picture concerns, governance, finance, operations, meeting planning….. the committee meetings help to develop and provide input to the industry. More and more detailed guideline specifications, air quality regulatory issues like the National Ambient Air Quality Standard, laboratory concerns like the AMRL certification program, AASHTO mix designs and specifications,
The point I’m trying to make is that our committees are where the action is, as they discuss and make decisions on issues that will affect your company and your business. If you want to have a voice in any of these affairs, you need to participate in the committees most relevant to your company’s interests. Make sure the committee chairman has you on his list of whom to keep informed. Don’t know who the chairman is? Visit the AEMA, ARRA, or ISSA website or send me an email at krissoff@krissoff.org. Don’t know what is going on in advance of a meeting? Contact the chairman and ask for an agenda. And if you have something going on that needs attention, or if you just need some help, make your voice heard, your input known, and your questions asked.

The next opportunity to participate in AEMA’s International Technical Committee, or ARRA’s Cold Planing, Cold Recycling, Full Depth Reclamation/Soil Stabilization or Hot In-Place Recycling Technical Committees, or ISSA’s Slurry/Micro/Chip/Crack Technical Committee will, or the AEMA-ARRA-ISSA Supplier Members Committee will be at the 2016 Annual Meeting in February. We can’t hear you if you don’t speak. The reports in this newsletter will provide an idea of what will be on the table. Need more info? Please contact the chairman or me.

And speaking of committees, a very special thanks to ARRA Affiliate Member Committee Chairman Stephanie Drain for providing the in-depth summary of the presentations in Niagara Falls.

Between Starbucks cups and sugar plum fairies and today’s political correctness concern of the day, I don’t know how to wish you a Merry Christmas anymore, so I will leave it at wishing you the best for the coming weeks with your families, friends, and colleagues. Whether you’re traveling, shopping, hunting, watching football, or just hanging out, be safe, be happy, be healthy, be thankful.
RECAP OF PPRA FALL MEETING

STEPHANIE DRAIN, P.E., AFFILIATE CHAIR – ARRA

For those of you who were not able to attend the meeting in Niagara Falls, your presence was missed. In addition to the picturesque backdrop of the city of Niagara Falls, Day One (1) presented a solid program with a little bit of fun for the mix.

The final registration count set a record for the PPRA conference at more than 330 people from at least six (6) countries. The Morning and Afternoon Sessions were informative and engaging offering ideas and perspectives that represented agencies, contractors, suppliers and the consultants who assist them all.

Throughout the day, the ARRA affiliates were well represented with presentations from Larry Galehouse (National Center for Pavement Preservation), David Peshkin (Applied Pavement Technology) and David Hein (Applied Research Associates). Using the title Social & Economic Impact of Pavement Preservation, Larry reviewed the connections that we often fail to make between pavement preservation and our daily lives. He offered ideas and considerations that could be easily overlooked but are vital to the lifestyles that society has grown accustomed to. Do we see a need for and benefit to greater support of pavement preservation systems? He made some very good arguments. Good job Mr. Galehouse!

Larry’s presentation was followed by Buzz Powell of NCAT. The topic of Buzz’s discussion was NCAT Pavement Preservation Research and Results Part I…. Projects that were detailed in his presentation included an update/recap on the NCAT partnership with MnRoad which focused on seal coat, and the construction of the new CIR and CCPR sections of the test track which were added this summer. These latest additions to the NCAT research docket seem like they will be particularly interesting for our group to follow.

Our second fellow colleague, David Peshkin, presented after Buzz with The Role of Preservation in Managing Pavements. David began with a review of the benefits of integrating pavement preservation into existing pavement management systems. While the immediate and short term benefits of different types of treatments and preservation options are known, the long term performance and benefits have not been readily and consistently identified. Through the addition preservation processes to management systems, we will have the ability to qualify and quantify their long term performance. Additionally, this inclusion could lead to the incorporation of these processes on higher volume roads. This approach could address multiple issues at one time. Sounds very promising Mr. Peshkin, well done!

Another interesting speaker from the morning session was Becca Lane from the Highway Standards Branch of Ontario’s
Provincial Highways Management. With her presentation, A Summary of Performance Data over the Last 25 Years for Recycled Pavements in Ontario, Ms. Lane detailed the history of the use of the recycled processes and their increased use over the past 25 years. The processes identified were CIR, CIREAM (CIR with Expanded/Foamed Asphalt), FDR and FDREAM (FDR with Expanded/Foamed Asphalt). Since the mid 1980’s, there have been 669 projects completed. The project performance and results have been very good with PCI ratings over 85 and minimal rutting. With a 25 year review, this offers perspective that many of us don’t frequently see with recycling data.

The morning session ended with Etienne Le Bouteiller of Colas, Paris presenting PPRS Paris in 30 minutes or Less…. While the discussion was indeed a recap, Mr. Le Bouteiller didn’t come to talk about the fun. His focus was an examination of the benefits of the summit to the global community. With 1,073 participants (118 from the USA), 111 papers, 53 exhibitors, 113 speakers and 17 sponsors, the conference proved to reach wide and attract many. What was learned collectively (or at least reiterated) was that each party represented has a role to play: the traveling public, the politicians, public agencies, contractors and every other hand involved. We also had the benefit, through the conference of hearing how countries and cities with varying socio-economic circumstance manage their roadway systems. It seems that the overall conclusion was that PPRS was successful and that there will likely be another one, perhaps as soon as 2019. There are definite benefits to talking with others to hear various recipes for success!

After lunch, the Afternoon session began with the round table discussion Owner’s, Contractor’s and Equipment Manufacturer’s Perspective on Method vs. Performance Specification. The panel included 6 members, with two (2) representing each of the identified sectors. While the tone of the discussion remained calm, both Method Spec and Performance Spec were well represented and the benefits of each were identified and examined. The overall indication at the end of the discussion seemed to be that what has proved most common to date has been a combination of the specification types and that it is most likely for the immediate future that this practice will remain as such.

Mike Guerin from Suit-Kote presented next and he reviewed his experiences with CCPR in Cold Central Plant Recycling – A Resource Ready & Waiting…. From his background with high float emulsions to the incorporation of his knowledge in their daily practices, Mr. Guerin explained how Suit-Kote can successfully make a variety of materials using
the CCPR process. Using traditional coarse RAP, dense graded blends and even virgin aggregates, successful recycled mixes have been made over the years. With a good understanding of their capabilities and well identified expectations by the customer, materials can be made to address multiple needs and situations.

Our third affiliate that presented for the day, David Hein, followed Mr. Guerin with the topic **Incorporating Recycling into Pavement Design – Where Does it Fit**... David provided a thoughtful review of pavement design that included the history of modern pavement design through its various iterations. He went on to show that through optimizing performance criteria based on the expected conditions and available materials, pavement can be utilized as effective members in structural pavement designs. If we can master this, then there is definitely a place for in-place recycling processes on higher volume roads. **Thank you Mr. Hein for your logical and well researched presentation!**

After the Mr. Birdsall’s presentation, **Crack Seal – New Technology & Best Practices** was presented by Bryan Darling of Crafco. Mr. Darling discussed the newest equipment (routers, etc.) and materials (mastics, meltable packaging) that are making things better and improving processes. He also reviewed the key points to yield the best results in crack sealing. With planning, preparation and the proper equipment a successful job is much easier to attain.

The final presentation for the day was listed on the program as **Positive Impact Certified Labs and Equipment Can Have on Our Industry**... by Bob Jerman of Ingevity (formerly Mead Westvaco), however this topic was presented with a twist. Mr. Jerman briefly spoke of the excitement surrounding the newest partnership that is being proposed between ARRA-AEMA-ISSA and AMRL. This proposed partnership was detailed in the quarterly newsletter (I actually missed it) and is currently being evaluated by the Boards of the respective organizations. Mr. Jerman then introduced Casey Soniera of AMRL to explain the upcoming process. The option will soon be available for laboratories to be certified by AMRL for testing related to the PPRA organizations. The first tests to be included will be those applicable to ISSA. In January of 2016, you can request Accreditation through AMRL and be added to the 2 year tour that will begin in 2016. The cost will be $2020 for the on-site assessment (which will include all tests) and that cost will be billed every 24 months. There will also be the option for inclusion in the Proficiency sample program that will cost $265 and be billed annually. If you have any questions, regarding the process and would like to be added to the AMRL mailing list, you can do so at the website [www.amrl.net](http://www.amrl.net).

That of the AMRL partnership was the final presentation of the day. After a brief recess, our group took a ride on the Niagara Hornblower cruise where we were thoroughly soaked (yes, we wore ponchos, no they didn’t cover everything). Yes, this engineering principle is true, water always wins! After leaving the boats, we boarded buses and headed to the Stratus Winery in Niagara-on-the-Lake for a wine tasting and reception that was equipped with some pretty nice food trucks. All in all, Day 1 proved to be pretty engaging, it was a good day.
The second day of the conference is complete and the agenda didn’t fail to offer the blend of process experience and innovative ideas that we saw on the first.

The program started an hour earlier than on the first day, and since I arrived late, much of the first presentation was missed. The topic was *Importance of Innovation and the Use of Recycling and Preservation* in a $2B Provincial Program delivered by Assistant Deputy Minister Gerry Chaput of the Ministry of Transportation of Ontario. Based on the applause, the discussion was well received.

Terry McCann of Lanark County, ON presented the county perspective of the topic that followed *How Pavement Preservation is Incorporated Into Their Asset Management Program*.... Lanark County has found benefits from incorporating eight (8) different preventive maintenance processes in their pavement management program and has seen a great benefit in the overall conditions of the roadways within the system. He explained how each process was utilized and also that PCI assessments are completed every year to determine the condition of the roadways. From 2004 to 2014, the percentage of the county’s budget that was allocated to pavement management increased from 16% to 50%. Mr. McCann stressed that the interest in trying the different pavement preservation processes came from attending conferences like PPRA. Well Mr. McCann, I’m certain that the organizations of PPRA thank you for the unsolicited endorsement!

Following the Lanark County’s review, Morgan Jones of Markham, ON offered the city perspective on *How Pavement Preservation is Incorporated Into Their Asset Management Program*.... Mr. Jones explained the 5 year rolling program that has been implemented by the city. Three strong components for the program are CIR, FDR and microsurfacing. The projects have consistently performed well and while the performance may be the tangible benefit of the system, another area where the city has found value has been in the area of educating the public on the processes from start to finish. When taxpayers are aware of what we are doing collectively and can understand the social, economic and structural benefits, they become the stronger asset.

Chip Seals & Surface Treatments – A Northern Experience was presented next by Antoine Boucher, Director of Public Works and Engineering for East Ferris. While the northern climates could prove challenging in trying to find ways to apply and maintain chip seals, East Ferris has found a way. Through an approach that utilizes different chip seal “systems” based on the existing conditions, anticipated traffic loading and performance expectations, the municipality has created a program that has successfully endured the harsh winters. Components of their program include RAP emulsion mixes over granular surfaces, implementation of geotextile fabrics and recycled asphalt mixtures. Upon review in 2014, the rehabilitated road surfaces were in excellent condition. It seems that East Ferris has demonstrated that with a little ingenuity and a pressing need, you can create your own success and a system to maintain it.

Stephen Lee of the Ministry of Transportation of Ontario spoke of the *Evaluation Manual on Recycled Pavements – What We Need to Know*. This presentation was intriguing as a manual has been developed to identify and assess the types of distresses associated with HIR, CIR and FDR. The fact that the recycling industry has grown and developed to the point of needing assessment guides specific to the respective disciplines demonstrates the longevity of the processes and a transition to a more mature level... this is encouraging.

Recycling & Preservation Trends Across Canada was the next presentation, given by Allen Mayhew of McAsphalt Industries. Mr. Mayhew delivered a comical explanation of the views and implementation trends of preservation processes across the country. There were some areas of concern, for example pavement preservation projects have been consistently trending downward since 2008, but the overall view was positive. He even identified the trends the CIR and FDR are more widely used in Eastern Canada over Western and that Microsurfacing is more common.
for determination will be a return of the pavement to the pretreatment condition. With US 280, one of the aspects evaluated will be that of CCPR to CIR. For more information and updates on the progress of the track, information can be found on the website: www.pavetrack.com.

Following the Part II Update by Buzz, ARRA Affiliate Dr. Charles Schwartz presented Sustainability of PPRA Processes. With an emphasis on the performance of the FSB (Foam Stabilized Base) processes with a particular focus on CIR and CCPR processes, Dr. Schwartz demonstrated that the strength and durability characteristics of recycled pavements in comparison to HMA. Reviewing multiple tests and varying parameters, we saw that the performance of HMA and FSB materials are comparable when applied using best practices. He further went on to express that based on the premise that the environmental savings are substantial in the areas of greenhouse gas emissions, transportation fuel and processing emissions, Carbon Credits should be considered in the future for the usage of the FSB processes. Creating Carbon Credits could be possibly be used as an incentive in the future to increase the use. Dr. Schwartz has effectively demonstrated that you can utilize recycled processes which will provide environmental and economic savings, without compromising performance. Thank you very much for your contributions Dr. Schwartz!

Randy Dobson from Caterpillar spoke next, presenting Fine & Micro-Milling – High Performance Specifications – A Perfect Pavement Preservation Technique. Mr. Dobson reviewed the places where micro-milling may be most effective within pavement management programs and the benefits that the planing processes provide. Randy gave some informative tips on how to troubleshoot your milling process and gave a list of best practices. If we can understand the process and how it best works, we will have better projects in the future.

While most of us probably believe we have a good grasp on the concepts associated with successful tack coats, Greg Harder of the Asphalt Institute told us a few new things with Pay Attention: Things Have Changes – The Importance of Tack Coats. Mr. Harder provided an overview of practices across the country and some suggestions on what should be done. In addition to listing key factors for tack coat success, Greg also indicated that The Asphalt Institute offers workshops to states. To date, 25 have been completed, 16 additional workshops have been schedules and 9 more have been requested. Contact The Asphalt Institute if you are interested in scheduling a workshop. Understanding the impact that tack coats have on pavement is imperative to the future success and life cycles of bituminous pavements.

The final presentation of the day was by Tom Wood from the Minnesota Department of Transportation. In reviewing the MN DOT Microsurfacing Program, Mr. Wood discussed how MnDOT has implemented microsurfacing in conjunction with micro-milling as a means of repairing pavement inconsistencies and rough rides. The department has found that the cost of the combined system is 60% of that of a 1 ½ inch overlay. Some of the IRI values from the pavements that were treated showed an improvement from 170 inches per mile before any treatment to 65 inches per mile on a pavement 1 year after the combined treat-

Our program for the day ended early as there was a Blue Jays game scheduled and an overwhelming number of baseball fans. The reception began promptly at 4PM (the game started at 4:07) and the group enjoyed an evening of baseball, cold libations and hot hors d’oeuvres.

Thirty-two (32) presentations and two days down… one more to go!

As always, I hope that you are well and that this message finds
Expand your bid opportunities with our truck mounts and continuous pavers.

Diversify your capabilities with the addition of our pothole patchers.

Improve your efficiency with the addition of our electronic monitoring systems.

Bergkamp Paves The Way To Increased Profits
in Western Canada over Eastern. Since he didn’t elaborate on why or research the trend to a greater depth, we are left with a burning question... Why?

Lynn Packer of Sedgwick County, Kansas (US) followed Mr. Mayhew with Hot In-Place Recycling: A Local Government’s Successes. Located in south central KS, with an area of 1,008 square miles, Sedgwick County has had great results with their aggressive 5 year pavement management program. Lynn detailed the anatomy of a successful program which included crack sealing, chip sealing, ultra-thin bonded wearing course, CIR and HIR. The county has been using HIR since 1994 and has found that through primarily two types of HIR processes, they have had very good results managing their program. In 2014, 20% of maintenance budget was allocated to HIR and 34 lane miles were completed. It seems HIR in Sedgwick County is trending upward...

If you were wondering about the state of CIR in New York, then many of your questions would be answered by Gary Foux of Suit-Kote as he presented Cold In-Place Recycling: NYDOT’s Success. Mr. Faux who has a great deal of experience reviewed the practices and applications of CIR and CCPR in the Empire State. He identified how they frequently utilize add rock and the types of emulsions (High Floats) that are commonly used. Mr. Foux also indicated that they have found enhanced mix design testing beneficial. In a year, approximately two (2) million square yards or 200 lane miles of pavement are recycled with these processes.

Just before lunch, Brian Budzynski, Managing Editor of Roads and Bridges magazine presented the 2015 Annual Recycling Award to Greg Kelly of Los Angeles County in California for his Lenox Community Recycling project. The community is located in an unincorporated area between Inglewood and LAX. James Emerson of Pavement Recycling Systems joined him in accepting the award.

After lunch we returned to hear Recycling Around the World including Ayrton Senna Highway Brasil & USA presented by Mike Marshall of Wirtgen America. Mr. Marshall detailed the work on the Ayrton Senna Highway in Sao Paulo, where prior to recycling, the surface had to be replaced as frequently as every 3 (three) months. The problem layer was a cement treated base that went down 14 inches below the pavement surface and with and average daily traffic count of 250,000 the solution had to be capable of supporting the load. Using milling machines, CCPR with Foamed asphalt, multiple lift placements and the successful VA I-81 project as a model, the roadway was completed and returned to grade. Evaluation, 30 (thirty) months after placement (90 million trucks later), showed that the pavement was still performing and the surface was still intact. Through this example we see that even at higher traffic volumes, we can produce pavements utilizing recycling processes at a lower cost without compromising performance.

Buzz Powell of NCAT returned again today to present ...Part II: Amazing Insights of What We Have Learned So Far. While there was indeed continued discussion on the MnRoad partnership, there were also reviews of the Pavement Test Track, Lee Road 159 and US 280 WB outside lane. There has been a renewed interest in the Lee Road project by NACE members as the facility is a county road. The performance of the roadway will be measured using methods similar to crack mapping. The benchmark
you in good spirits. As most of you are aware, there was a third day to the PPRA Fall Meeting. I apologize for my tardiness in submitting this review and wrap up for the final day of the program.

For the most part, the final day consisted of meetings for the Boards and Committees of the PPRA member organizations. With regards to ARRA, the committee meetings were: Cold Planing, Cold Recycling, Hot In-Place and Full Depth Reclamation (AEMA’s International Technical Committee and ISSA’s Technical Committee met as well). The meetings ran concurrently, making it difficult to attend them all. However, it is customary for the individual committees to send copies of the meeting minutes to association headquarters such that they may be published in the upcoming newsletter. I will do my best to forward that information to you at that time.

**Wrap Up**

It seems that the 2015 PPRA Fall Meeting was a great success, one that differed from some of the previous gatherings in several ways. Moving beyond the basic DEFs of the PPRA processes and disciplines (yeah, I think we passed the ABCs a long time ago...), the selected speakers demonstrated how pavement preservation ideas and applications were incorporated into their management systems. With candid reviews about long term project performance, fiscal challenges, socioeconomic responsibility and value determination, the presenters and their topics were deliberate yet insightful. With offerings of experience based practices and new parameters for assessing distresses and performance, the growth and development of our industry/industries was affirmed. The program in its entirety revealed the multi-dimensional value of our preservation and rehabilitation processes and how by using them correctly, agencies can improve the pavements within their systems without compromising quality or performance.

To the Organizers, Presenters and PPRA members that contributed to the 2015 PPRA Fall Meeting... Well done! Conferences that yield such strong validation to our products and efforts are definitely worth attending.
ARE YOU STAYING UP TO SPEED?

SHELLEY ROW, LEADERSHIP DECISION-MAKING EXPERT

It’s time to register to attend the AEMA-ARRA-ISSA 2016 Annual Meeting. Is that a slam-dunk decision or do you pause to debate with yourself. “Should I go?” The meeting is in beautiful Bonita Springs, Florida and you will network with friends and colleagues. Is that enough? Will it be worth the money and time?

All are good questions. And, have you asked yourself if you can afford not to attend?

Disruptive technology is creating an upheaval in transportation. Self-driving cars, connected vehicles and more, are changing the definition of transportation. Apps provide more information to travelers than some agencies own. A data avalanche is starting from location-based services, even Twitter feeds.

Are you staying up to speed on the latest trends in your industry and beyond? Are you making the best use of the resources available through your association whether it is AEMA, ARRA or ISSA?

Here are a few the factors we’ll touch on in the opening session:

- The changing face of the customer. Yes, you have relationships with state, city and county staff today. But, as baby boomers retire there’s a new type of customer in town – Millennials. They gather information differently, they expect digital dialogs and they care about meaningful work. Do they know what to look for in a top-notch paving project? If not, how are you helping them learn?

- Self-driving and connected vehicles have the potential to dramatically change how we view transportation. Transportation may become less about the car you own and more about the app at your fingertips. How does that impact the number of cars on the road and the amount of surface area devoted to parking? How do you position your business for this rapidly approaching and changing future?

- FAST (Fixing America’s Surface Transportation) Act wasn’t fast. There is finally a five-year bill and it does not provide sustainable funding. By the time you learn about the provisions of the Bill it will be time to prepare for re-authorization. This means making the case for pavement in a world of growing environmental pressures and rapidly evolving materials.

…but wait, there’s more! Come to the Annual Meeting and discuss what the future of transportation means to you. We are in a time when business is anything but usual.

Alan Kay, the American computer scientist known for pioneering work in object-oriented programming, stated, “The best way to predict the future is to create it.”

Register now for the AEMA-ARRA-IASSA 2016 Annual Meeting and learn how to leverage your association membership so that you participate in creating a future.
MAKING MUSIC TOGETHER
in Nashville

Tuning Up
Tune up your knowledge at over 50 education courses.

Jam Sessions
Exchange ideas, network with old friends and expand your expertise.

Modern Jazz
See what’s new in equipment and technology in the AGG1 exhibit hall.

To make sure your operation hits a high note in 2016, don’t miss the AGG1 Academy in Nashville, March 22–24, 2016.

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Nashville, TN, USA
Music City Center

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ARRA TECHNICAL DIRECTOR’S UPDATE

STEFHENA. CROSS, ARRA TECHNICAL DIRECTOR

The interest in and work related to in-place recycling on the national and international levels just keeps increasing. I am a little more familiar with the work closer to home so I will provide you with an update of some of these recent efforts. Several research problem statements were submitted to the AASHTO Standing Committee on Research (SCOR) for inclusion in the National Cooperative Highway Research Program (NCHRP). These problem statements are reviewed by NCHRP and FHWA to assess the desirability of the projects for possible funding. This is the first step toward national funding of an in-place recycling project.

As mentioned in another article in this newsletter, a white paper titled In-Place Pavement Recycling: Gaps, Barriers and a Path Forward was developed from the workshop of the same name from the 2014 ARRA/FHWA Western States and International In-Place Recycling Conference in Denver, Colorado. Research needs statements identified in the white paper included project selection criteria, improved quality assurance procedures, life cycle cost analysis and life cycle assessment, implementation/education initiatives, mixture and structural design, and compaction monitoring. From this white paper the first four NCHRP research problem statements listed below were submitted to SCOR. A fifth research problem statement (2017-D-13) was submitted by TERRA and others. The research problem statements are:

• 2017-D-09 In-Place Recycling Project Evaluation and Alternative Selection
• 2017-D-10 In-Place Recycling Performance and Life Cycle Cost Analysis (LCCA)
• 2017-D-11 In-Place Recycling Quality Control/Quality Assurance and Specifications
• 2017-D-12 In-Place Recycling Implementation/Education
• 2017-D-13 Rapid Field Assessment of Recycled Pavements Constructed Using Asphalt-Based Recycling Agents.

All five research project statements received very favorable recommendations and it was suggested that projects 09 and 10 be combined and projects 11, 12 and 13 be combined into two research problem statements for possible funding. All five research problem statements can be found at http://apps.trb.org/NCHRPBalloting/ProblemStatements.asp.

The Virginia DOT is continuing their research efforts related to in-place recycling. We have previously mentioned their efforts on the I-81 project and their test sections at the NCAT Test Track. VDOT just recently announced their Accelerated Pavement Testing Program at the Virginia Tech Transportation Institute. The facility employs a heavy vehicle simulator which applies a heavily weighted wheel load over a 10-foot-wide by 100-foot-long pavement section. Initial test sections include a five inch thick cold central plant recycled (CCPR) mix with a 1.5 inch and three inch asphalt overlay. Each test section contains pressure cells, strain gauges, and thermocouples. These two test sections will complement the VDOT test sections at NCAT Test track that contain thicker asphalt overlays. More information can be found at the VTTI web page, http://www.vtti.vt.edu. Speaking of NCAT, testing continues on the VDOT sections on the test track and on Lee County 159 Road. In addition, new in-place recycling test sections were recently placed on US 280 outside of Auburn.

The 95th Annual Meeting of the Transportation Research Board will be January 10-14, 2016 in Washington DC. Of special interest to those participating are two workshop sessions Sunday morning. Workshop 120, Ensuring Long-Term Performance of Cold Recycled Mixtures includes seven invited presentations covering
Using a rotary mixer just makes more sense. The RM500B grinds up existing pavement and mixes it in place with base materials and any other specified remedial agents.

Costs are saved on pavement removal and/or replacement, plus any existing problems in the base are remedied.

The result is a better road built at a fraction of the time and cost of total reconstruction, with less cost for future maintenance and longer life than an overlay.

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SAVE TIME.  
SAVE THE PLANET.
an international survey of mix designs and performance testing approaches, structural properties, in-place performance, cold recycling with foamed asphalt, a practical overview of construction practices to achieve long-term performance, a life cycle cost assessment and a history of performance.

The second workshop focuses on full depth reclamation, Workshop 129, Full Depth Reclamation: Developing Specifications from Field and Laboratory Testing Experience. This workshop includes five presentations and a question and answer session at the conclusion of the workshop. Presentations include perspectives on FDR specifications from California, Texas, Africa, Canada and Virginia. For those who cannot attend, we will provide a brief summary of what went on at TRB in the next newsletter.

ARRA has been assisting the Transportation Curriculum Coordination Council (TC3) with the development of web based training courses for hot in-place recycling, cold in-place recycling and full depth reclamation. These training courses are designed for local, county and state owner agency technicians/inspectors. They are also useful for individuals who need awareness or basic understanding of these in-place recycling techniques. The training is meant to provide inspectors with a background on when, how and why these methods are selected and used. The courses are intended to provide an overview of the process, an explanation of pre-production, full production and post-production inspection activities.

All TC3 course are now hosted by AASHTO and their web address has changed. TC3 courses can now be found at http://tc3.transportation.org. The final drafts of the hot in-place recycling course and FDR course are complete and should be posted on the above web sites in early 2016. The cold in-place recycling course (NHI No. 134114) has been available for over a year.

Finally, the planning committee for the PPRA Annual meeting February in Florida has put together another excellent meeting. Additional information can be found in the newsletter and on our web page. Hope to see everyone there and come prepared to participate in the ARRA Committees on Research and Education (CORE) working sessions.
The wave is upon us! Over the next ten years, industries across the United States will face an ever-growing crisis of workforce demographics, waves of Baby Boomers retiring with fewer individuals lined up to fill those roles. How large is the gap? There are approximately 12.43 million fewer workers in the succeeding generation as there are in the one that has already begun to retire. The gap being created by this change is not restricted to industry or geography, but will run the gamut across the industrial landscape.


<table>
<thead>
<tr>
<th>Generation</th>
<th>Population</th>
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</thead>
<tbody>
<tr>
<td>Silent Generation</td>
<td>29,907,000</td>
</tr>
<tr>
<td>(Pre-1946)</td>
<td></td>
</tr>
<tr>
<td>Baby Boom</td>
<td>73,942,000</td>
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<tr>
<td>(1946 – 1965)</td>
<td></td>
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<tr>
<td>Generation X</td>
<td>61,510,000</td>
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<tr>
<td>Millennial Generation</td>
<td>84,336,000</td>
</tr>
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<td>(1980-2000)</td>
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What are employers to do? First, companies need to treat the issue like any other strategic core initiative, develop a plan and execute that plan. The businesses that win the talent battle will need to be “employers of choice” to attract the best candidates and to keep them on their team. Are you currently an employer of choice?

There are four key components to developing a plan to overcome the problem, many firms are executing in some of these areas, so there are industry examples to look to for guidance. Companies need to develop a strategic plan for the personnel assets portion of their business, just as they would for any other core issue. Some will refer to the process as succession planning, but that is just one part of the effort, attention needs to be applied to an array of people related issues. Surveys for the past two decades have clearly defined that quality of work life issues are the primary reason individuals leave the company, when identifying action plans building a great place to work is essential to success.

Finding and hiring keepers. Evaluate your current recruitment and hiring practices and build a system that will put your company in front of the best pool of potential team members. Are you languishing in “old school” techniques for finding employees, a recent survey showed 75% of Generations X and Y will start and finish their entire job
search on the Internet? Another step is to survey everyone in your firm you have hired in the last five years; how did they find you, would they recommend the company to a friend, and why are they still here.

**Motivating and Retaining.**
The newest generations of workers are unwilling to toil under the harness of the company with little or no credit for years in hopes of moving up. Employers need to create workplaces that foster open communication and learning, participative leadership and quality of life. Employers of choice must seek to build a work environment that fosters learning; today’s workers begin looking when they stop learning.

**Knowledge transfer.** We’ve all experienced the grizzled veteran leaving the fold of the company, but no one took the time to capture that undocumented knowledge between his or her ears until he or she had two weeks left on the job. Don’t let this trap become the norm in your firm. Try to develop a system where experience and knowledge are transferred to the developing staffers in your organization. A well-planned effort will bring multiple benefits, not only capturing essential corporate knowledge but also accelerating the development of younger team members.

**Recycling the Boomers.**
Boomer’s work ethic is well known; many would say they spent a long career “living to work.” The best firms will take advantage of boomers continued interest in staying active and building a legacy beyond their careers. Part-time or project related roles are excellent methodologies to utilize retired boomers looking for opportunities, build a network of seasoned professionals to supplement your current team. The return-on-investment (ROI) on a retired boomer is quick and requiring them to mentor younger staff is a significant step to enhance the quality of your team. Don’t restrict yourself to someone who has done the job for a career, seek to analyze positions or project needs based on skill sets and you may find a plethora of candidates you never knew were available.

In a recent survey of public works professionals in the United States and Australia, the primary reason cited for not committing to succession planning were other priorities. In the study, published in the American Public Works Association Reporter Magazine, over 76% of senior executives were faced with significant competing priorities taking the focus away from talent development. Successful leaders today must take the steps now to commit time to the effort. The firms of choice in the new marketplace will be those with broad and enthusiastic talent; they will compete more effectively and win the business day. The ease of finding top talent and retaining them will diminish markedly in the next decade as demographics and business models change. Is your firm poised to become an employer of choice?

**Define:** A plan for managing your workforce as demographics force change across all industries.

**Measure:** How you are attracting and retaining top talent, you may find you are not.

**Create:** A strategic plan for personnel management that goes beyond turnover rates, looking to invest in the best and enhance every team member and the company as a whole.
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PPRA FALL MEETING 2015
COMMITTEE REPORTS
PRESENTED VERBATIM FROM CHAIRMEN'S WRITTEN REPORTS

October 15, 2015
8:00 am – 11:00 am AEMA International Technical Committee

Mike Hemsley, Paragon Technical Services, ITC Chairman
Joe Brandenburg, Asphalt Materials, Inc./Heritage Research Group, Vice Chairman

23 members in attendance

1) Regulatory Group – DRAFT Ozone
   a. An email was received in March at AEMA HQ. The email addressed the EPA's desire to lower the National Ambient Air Quality Standard. The letter was forwarded through the channels to our regulatory chair. A response was not provided in time to meet the deadline that was originally provided, however, a response was provided. A copy can be supplied to members upon request.

   a. We were recently made aware of the above document (a copy can be provided to members upon request). As it was explained, this document is very vague and could possibly cover concentrations of hydrochloric acid. It currently lists Anhydrous HCl in its appendix and it is very vague if the new interpretation could also cover aqueous concentrations as well.

3) Recommended Performance Guidelines Update
   a. It is a very slow task. No real progress since the last meeting. We are looking to be through chapter 15 by the annual meeting.

4) Emulsion Task Force/Group update. This group is being active even without the support of FHWA. The micro, slurry and chip seal guidelines are being finished. A cold in-place recycle guideline is being introduced. There was a meeting in Denver in June and Arlis Kadrmas gave an update at the ITC meeting. The PPETG is currently considering where to put the ETF so it can be funded. It will either be housed in the Binder ETG or the PPETG.

5) FHWA’s New PPETG – Update
   a. The FHWA has officially started the Pavement Preservation ETG.
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BARRACUDA® is a trademark of Heatec, Inc, registered in the U.S. Patent and Trademark Office.

Heatec makes a variety of products for emulsion plants, including hot oil heaters, storage tanks, and emulsion mill skids. We also do major mechanical design and electrical engineering work for these facilities in addition to building much of the equipment.
b. We are in the process of identifying the first set of topics to undertake as an ETG to help promote and guide Pavement Preservation activities. This ETG is made up of mostly FHWA and state personnel along with 2 local representatives (city) and 4 association reps along with a rep from FP2. There are approximately 22 members. We were informed that the intent is to keep these meetings closed for the foreseeable future.

6) AMRL Round Robin / Testing
   a. A second round robin is being conducted through AMRL. We encourage full participation.
   b. We hope to be able to share results in February at the Annual Meeting.

7) AEMA ITC Round Robin Groups
   a. These are on hold – it is a better option to use AMRL for this initial work.

8) Asphalt Emulsion – Low Temp Residue Recovery. AASHTO PP-72 Method “B”
   a. Method B is currently considered acceptable for emulsion residue recovery and subsequent DSR testing. ASTM D7497 is in the process of being modified to show the options of PP-72. Initial thoughts are that an ASTM method is approximately 12 months away from balloting. Additionally, PP-72 should be a full method by this time next year and will be given a standardized test method number.

9) Emulsion Residue Solubility in TCE vs Ash Content
   a. The ash content is being looked at as a replacement for solubility for emulsion residues. The issue here is that the polymers in the emulsion residues clog the filter paper that is used in the solubility test due to the polymers not being soluble in the solvent that is used. The un-dissolved polymers are subsequently counted as insoluble material. Since the solubility test is an indicator of the quality of asphalt being used, as well as the Ash content, substitution should not be an issue. It has also been found by the CTAA along with some member companies that the ash content is a suitable replacement for solubility. Data has been gathered and a presentation was made at PPRS. Initial work indicates that a 1% maximum ash content would be acceptable. This is being considered for incorporation into the AASHTO Emulsion specs by the ETF.
   b. A presentation, made by Arlis Kadrmas and brief description is being placed on the members only portion of the AEMA website for use by AEMA members.

10) VOCs in asphalt emulsions.
   a. Contact Arlis for information. He could potentially provide a copy of the work – if you need it in your area.
   b. A presentation, made by Arlis Kadrmas and brief description is being placed on the members only portion of the AEMA website for use by AEMA members.

11) Educational Committee
   a. Barry Baughman gave an update on the progress of contacting professors and getting / providing lecture materials. Cal State Chico has been very helpful. A list of desired schools/universities has been made. Barry is in the process of making these contacts. If there is a school that should be on the list, please let us know along with a professor to contact. We may also need help making the initial contact as it has been hard getting “the old foot in the door”.
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12) Asphalt Institute – AI along with NHI have a vast number of webinars and training modules that currently exist. It has been considered that we would make webinars out of the BAEM. AI already has these available on a pay per view basis. We may want to look into what is available and see if there is anything we can use. The Board would need to work out any financial hurdles.

October 15, 2015
8:00 am – 11:00 am
ARRA Cold Planing Committee

Tom Chastain, Wirtgen America, Chairman

8 members in attendance

1) CP 101/102
   a. Established subcommittee made up of Lee Gallivan and Eric Baker to finalize.

2) NCPP Milling Seminar
   a. Spray Paver vs traditional
   b. Milling pattern vs speed
   c. Surface treatment on milled surface
   d. History/evolution of cold planers
   e. CIR/FDR/milling overview
   f. Milling end results
   g. Tom Wood MnDOT microsurfacing
   h. Sustainability of the milling process
   i. Safety
   j. Live demonstration?

3) ARRA/FHWA In Place Seminar
   a. Getting sponsorship dollars

4) Cold Planing pocket guide/getting sponsorship for printing

5) Milling seminar preliminary talks
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Roadtec’s FXS® dust extraction system increases safety and operator comfort by pulling dust from the primary conveyor and ejecting the particles into a dump truck beside the secondary conveyor.

Guardian™ Telematics allows owners and service technicians to remotely monitor machine activity and production in real time. Roadtec service technicians can make machine adjustments remotely, giving you quick and simple troubleshooting with immediate benefits.

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October 15, 2015
8:00 am – 11:00 am
ARRA Cold Recycling Committee

Jason Wielinski, Asphalt Materials, Inc./Heritage Research Group, Chairman

19 members in attendance

1) Review of ARRA CR Series Guidelines
   a. Edits suggested for CR101 and CR 102
      i. Don Matthews to submit User Note on pump calibration
      ii. Scott Metcalf to provide user note for CR102 on using prime coats
      iii. Jason Wielinski to provide edits to CR 101 and CR 102 paragraphs discussed in meeting
   b. Established a group to review CR202 Mix Design Guidelines for Foamed Asphalt
      i. Jason Wielinski, Don Matthews and Trevor Moore to review CR202 to develop draft for approval at 2016 Annual Meeting
   c. No comments or suggested revisions for CR 201 or CR 301

2) Emulsion Task Force Update Regarding AASHTO Mix Designs and Specifications
   a. Todd Thomas provided update to group on status of CR mix designs and specifications being developed for AASHTO.

3) Suggested Speakers for National Pavement Preservation Conference
   a. List of 9 topics and speakers was developed and sent to Steve Cross for consideration

4) Planning for the Next FHWA/ARRA In-Place Recycling Seminar
   a. The committee discussed nearest ARRA contractors. Summary of our discussion was sent to Steve Cross

5) Cold Recycling Brochure Review
   a. Stephanie Drain provided revised CR brochure for review at the CR committee Meeting
   b. Don Matthews volunteered to revise terminology to match the BARM. Target date is December 1st, 2015 and revised edition will be reviewed by the CR committee. Final draft of text will be approved at Annual Meeting
   c. Darren Coughlin discussed with the ARRA Board on printing with the ultimate goal of having brochures available for the National Pavement Preservation Conference in Nashville, October 2016
   d. Darren Coughlin and Steve Cross to coordinate on selecting updated photographs for the brochure
Two in One: The WR 240i from Wirtgen makes a convincing impression when it comes to soil stabilization and cold recycling. In addition to perfect ergonomics and operation, clever automatic functions and outstanding terrain accessibility, the efficient engine and powerful milling and mixing performance ensure optimal results. You too can benefit from the technology leader’s solutions.
6) Open Discussion on Ongoing Research and Trends in Specifications
   a. Discussed the need for the project selection document.
   b. This topic will be further addressed at the 2016 annual meeting

7) CR Awards Review
   a. CR Committee reviewed and voted on the CR awards nominees. Winner is to be announced at the 2016 annual meeting!

October 15, 2015
8:00 am – 11:00 am
ARRA Cold Recycling Committee

Jason Wielinski, Asphalt Materials, Inc./Heritage Research Group, Chairman

19 members in attendance

1) Review of ARRA CR Series Guidelines
   a. Edits suggested for CR101 and CR 102
      i. Don Matthews to submit User Note on pump calibration
      ii. Scott Metcalf to provide user note for CR102 on using prime coats
      iii. Jason Wielinski to provide edits to CR 101 and CR 102 paragraphs discussed in meeting
   b. Established a group to review CR202 Mix Design Guidelines for Foamed Asphalt
      i. Jason Wielinski, Don Matthews and Trevor Moore to review CR202 to develop draft for approval at 2016 Annual Meeting
   c. No comments or suggested revisions for CR 201 or CR 301

2) Emulsion Task Force Update Regarding AASHTO Mix Designs and Specifications
   a. Todd Thomas provided update to group on status of CR mix designs and specifications being developed for AASHTO.

3) Suggested Speakers for National Pavement Preservation Conference
   a. List of 9 topics and speakers was developed and sent to Steve Cross for consideration

4) Planning for the Next FHWA/ARRA In-Place Recycling Seminar
   a. The committee discussed nearest ARRA contractors. Summary of our discussion was sent to Steve Cross

5) Cold Recycling Brochure Review
   a. Stephanie Drain provided revised CR brochure for review at the CR committee Meeting
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c. Darren Coughlin discussed with the ARRA Board on printing with the ultimate goal of having brochures available for the National Pavement Preservation Conference in Nashville, October 2016.

October 15, 2015
8:00 am – 11:00 am
ARRA Full Depth Reclamation/Soil Stabilization Committee

Kimbel Stokes, The Miller Group, Chairman

18 members in attendance

1) Reviewed FDR101 Construction Guidelines for FDR Using Bituminous Stabilization

2) Several edits to document. Recommended changes will be made to draft document and forwarded to Dr. Cross for review.

3) Reviewed first draft of Recommended Mix Design Guidelines for FDR Using Cement or Cement Kiln Dust
   a. Discussed several issues. Wayne Adaska will edit, forward to Stokes for distribution to current committee members for comments. Edited version to be submitted to Dr. Cross for review.

4) Reviewed first draft of Recommended Mix Design Guidelines for FDR Using Emulsified Asphalt Stabilizing Agent
   a. Discussed several issues. Bruce Wahr to edit, forward to Stokes for distribution to current committee members for comments. Edited version to be submitted to Dr. Cross for review.

5) Discussed FHWA Conference Burlington, VT. Tentative schedule the week after the 4th of July, 2016. Information will be distributed as it becomes available.

6) Mentioned the Rocky Mountain Asphalt Users Group Conferences spring & fall of 2016. Sites undetermined. Information to be distributed as it becomes available.

7) FDR Annual Awards: Due to time restraints and available documents to review, nomination forms will be distributed to committee members by email for review and comments. Committee’s recommendation to be forwarded upon selection.

8) Jonathan Pease discussed FDR Manual Rock Solid is building for a marketing tool.

9) Calculator or app out there to help with the aid in the value of the processes out there and showing the benefit of FDR.

10) Any items to be brought up for future meetings?
October 15, 2015
8:00 am – 11:00 am
ARRA Hot In-Place Recycling Committee

Ron Wilson, Dustrol Inc., Acting Chairman

12 members in attendance

1) Selected recipients of ARRA Recognition Awards to be announced at 2016 Annual Meeting.

2) Discussed agencies using products that prohibit recycling: chemicals, fabrics, rubbers, plastic

3) Identified prospective speakers for October 11 – 14, 2016, NCPP Conference in Nashville
   a. Charles Schwartz, University of Maryland, HIR Update on NCHRP
   b. Jay Norris and Rick Knoll, Tennessee DOT, DOT Experience
   c. Skip Vezzetti, Rockland County DPW, New City, NY
   d. Jim Schmidt, Koch Performance Roads, New Mexico
   e. John Epps, TTI, HIR Specifications

4) ARRA/FHWA In-Place Recycling Conference, tentatively Vermont

October 15, 2015
8:00 am – 10:00 am
ISSA Slurry/Micro/Chip Seal/Crack Treatment Committee

Bryan Darling, Crafco
Debbi Deep, Ingevity
Bob Jerman, Ingevity
Jimmy Kendrick, T.L. Wallace Construction, Inc.

23 in members attendance

ISSA Slurry/Micro/Chip/Crack all met in one meeting. The focus area for the chip seal committee is to get people involved in the committee, and to review the current guidelines (A-165 Recommended Performance Guideline for Chip Seal, available for free download at www.slurry.org). Jerman to provide Kendrick with contacts to assist in review.

1) General Comments
   a. Although ISSA committees are all volunteer groups, the association needs more involvement and active participation from members.

2) FHWA Update
   a. Bryan Cawley offered to send 10 “micro champions” from state DOT agencies to the ISSA workshop.
   b. Addition of new modules for the web-based training is not presently funded, because the contract was not written. That may happen in 2016.
3) Micro Surfacing Survey
   a. Larry was given the completed survey and will send it on to the state agencies.

4) Contractor/State Inspector Certification
   a. We’re partnering with NCPP and AASHTO TSP2 to create a program.
      b. If a state agency wants contractors to be certified, then their inspectors must also take the training so both are “on the same page”.
      c. NCPP will manage the program with respect to mailings and billing.
      d. ISSA will be responsible for the training content.
      e. TSP2 will be the advisory panel and give the “government stamp of approval”.
      f. The training will consist of 3 levels:
         i. Contractor and State representatives:
            1. Both attend either the NCPP training or the ISSA workshop.
            2. Both take a lengthy test.
            3. The contractor will have to provide a QC plan.
            4. The contractor and agency representatives will be required to attend the pre-construction conference and the equipment calibration.
         ii. Operator/Foreman and State Inspectors:
            1. Both attend either the NCPP training or the ISSA workshop.
            2. The training will be more relevant to field issues.
            3. The testing will reflect the different training focus.
         iii. Crew Member:
            1. Will take the ISSA web-based training.
            2. The testing will reflect the different training focus.
   g. The contractor will have to recertify every 3 years and the individuals will have to recertify every 5 years.
   h. ISSA may need sponsor training in pilot states (NV, MS, IL) this spring.
   i. The plan is to roll the program out to the entire country at the PPRA meeting in Nashville in October 2016.
   j. Trying to keep costs minimal.
i. $1000 initially

ii. $100 to renew

5) Suggestions for Committee Projects

a. Quality Management plan

b. Inspector’s Manual revision

c. Revise A143 to include a night-time test strip

October 15, 2015
11:00 am – 12:00 pm
AEMA-ARRA-ISSA Suppliers Committee

Todd Ryne, Akzo, Co-Chair
Mike Marshall, Wirtgen America, Co-Chair
Bill Cooper, Bergkamp Inc., Co-Chair

AEMA Suppliers met separately. ARRA and ISSA Suppliers met together.

The AEMA Suppliers Committee reviewed the agenda with 5 attendees representing 3 member companies. Main topic was PPRS 2019. The Suppliers are suggesting to the Board that we ask the members if they are in favor of PPRS 2019. Suppliers are not sold on the value of the global meeting considering the much higher cost.

The ARRA & ISSA Suppliers Committee met with 8 attendees representing 8 member companies.

- Attract more member from milling industry to increase suppliers customer base at meetings
- Hotel Costs at Meetings, considered too high, not value for money
- Membership fees could be scaled relative to company size/turnover
- Feedback from meetings, “Survey Monkey”
  - Comments on
    - Presentations
    - Costs
    - Hotels
- No Theme Party
- Consider more technical venues such as TTI or NCAT for Fall Meetings
- Re-schedule committee meetings so no overlaps, allowing ability to attend multiple meetings
- Paris no interest to return
- New members should be allowed 10 minute presentation to introduce themselves and their products – Recognition
- Electronic Newsletter, should be 3 times per year, also comment the costs of advertising are the same as the paper issues, - $ value
- Electronic Newsletter format to be as World of Highways format, bullet headline links to articles of interest, easy to find rather than having to scroll through entire Newsletter
- World of Asphalt and Conexpo slots, improve how ARRA selects presenters/subject matter
A toy looks out of place in a study. That is definitely the case in the home, and it is not a common look in the world of academia, either.

Unmanned aerial vehicles (UAVs), part of a hobby trend just a couple of years ago, are at the cusp of graduating into the business world, as state departments of transportation (DOT) begin to explore the benefits of capturing images of varying degrees from a couple hundred feet off the ground. The DOTs in Michigan, North Carolina and Ohio are already building platforms around the potential of UAVs, and many more agencies are sure to follow. So far the devices are passing with flying colors.

“I thought this was a game changer when I first saw the thing flying around,” Steve Cook, who heads the operation and management of UAVs at the Michigan DOT, told Roads & Bridges. “Out of the block, talking about transportation and roads and bridges, this is a game changer. It really is, if we can get over two of the major stumbling blocks.”

The hope is those blocks are not booby-trapped, but you never know when you deal with the federal government and the traveling public. The Federal Aviation Administration (FAA) is currently No. 1 on the obstacle list, as anyone who wants to operate a UAV must now submit paperwork to the federal agency in order to receive clearance—or in this case a Section 333 exemption and/or a certificate of authorization (COA). The operator must be trained to fly UAVs, and the exemptee must explain to the FAA exactly how the apparatus will be used. The approval process can take a while. For the Michigan State Police, it took about eight months. The FAA is in the process of solidifying UAV regulations, so over the course of the next year the picture should be clearer—and possibly a lot more stringent.

Public perception is the second concern. DOT officials are afraid the sight of several UAVs in the air would create massive traffic disruptions and generate a fear that someone is always watching—the Big Brother Effect.

Still, despite the issues, some state DOTs can’t get on board fast enough even though the territory is still an unknown. The approach, however, is still a cautious one.

Gravel roads pave way

Colin Brooks is a senior research scientist for the Michigan Tech Research Institute. His background is in remote sensing and GIS, and his area of expertise is in satellite imagery analysis, aerial imagery analysis and integrating geospatial data.

The U.S. DOT first approached Brooks to do environmental assessments on highway bypasses and look at vehicle crossing times at international borders under the agency’s Commercial Remote Sensing and Spatial Information Program. In 2011, the U.S. DOT became interested in doing remote sensing with UAVs, and Michigan Tech, under Brooks’ leadership, submitted a proposal to evaluate using UAVs and regular fixed-wing
aircraft to assess unpaved road conditions. The U.S. DOT selected the spec, and Brooks' team got to work assessing different platforms to collect extreme high-resolution unpaved road condition data.

“I had a lot of experience with different sensors and platforms from aerial and satellite data,” Brooks told Roads & Bridges. “We started flying some short segments of gravel roads and saw that we were able to collect overlapping stereo imagery where we could create 3-D data with resolution better than 1 cm, which is more than we needed to be able to automatically detect and characterize potholes, ruts, washboarding and crown sufficiency.”

Surveying an unpaved rural road in southeast Michigan with a Bergen hexacopter (six blades) armed with a Nikon D800 digital SLR 36-megapixel camera, Brooks and his team would scan 600-ft stretches with the UAV flying 80-150 ft above the road. Each scan would take about 30 minutes to execute—20 minutes to set up the equipment and 10 minutes of fly time. Brooks prefers the six-blade UAV because it is easier to fly over longer distances and can carry the weight of a professional digital camera.

Steve Cook over at the Michigan DOT heard about Michigan Tech’s work with the U.S. DOT and was eager to discover the dimension UAVs could offer at the state level. So the agency put out a request for proposal calling for a two-year research study on the use of UAVs across various forms of infrastructure. Michigan Tech submitted the winning bid, and went right to work on several different demonstration applications. The biggest and most convincing one involved the 96 Fix project. With the 7-mile stretch of interstate closed to traffic for six months, Michigan Tech was able to scan two of the 37 bridge decks under construction, and also flew the UAVs underneath to check the substructure. According to Brooks, the UAVs also carried a thermal camera and a small LiDAR camera to create a 3-D model.

“This thing flies over, makes a couple of passes [over the bridge deck] and takes very fast pictures. They stitch it together on the back end, and you can use that for current asset management to see how the bridge ages over time, or you can see delaminations and potholes,” said Cook.

“The bridge scanning] was interesting because we tested three different types of sensors,” Brooks said. “This provided an ideal situation for us to demonstrate how UAV technologies could be used in the near future.”

The research project also highlighted a unique situation. The interstate system around Detroit is prone to flooding, so large pumping stations are used to make sure heavy rainfall does not cripple traffic. The pumping stations are in confined areas underneath the interstate, putting workers at risk when the time comes to inspect the pumps. Michigan Tech used a mini-UAV, one that fits in the palm of your hand, to go down and take video of the pumping stations.

“We got some great video and we were able to show how we could take a look around before you put a person in there,” said Brooks. “The opportunity to increase safety was definitely a focus for MDOT.”

Michigan Tech also used a traffic-monitoring blimp to take real-time video on U.S. 23 in Ann Arbor and at Belle Isle during the ITS World Congress, which was held in Detroit last September. The Michigan DOT set up a mini traffic-operations center on the show floor at the ITS World Congress, showing the work of UAV technology first-hand.

Of course, you need a place
to put all of this productivity, and
the amount of data generated
from this new technology has
been a concern for the Michigan
DOT, which is why the agency will
be conducting a second phase
of UAV research. According to
Brooks, scanning a 200-ft-long
bridge would create about 30 MB
of deliverable data to the DOT. The
raw data would probably range 3-6
GB, and if you are doing multiple
bridge scans at one time you are
entering terabyte territory.

“Although the amount of broad
data is very large you need only
a much smaller amount of data to
deliver to the DOT to support the
decisions they need to make,” said
Brooks. “If I am flying over a bridge
and take 400 overlapping pictures
of the bridge deck they don’t need
every single individual picture. They need a GIS layer and a total
of how many square feet of that
bridge deck are spalled or have
delaminations and where [those
areas] are located. If they do want
an image you could create a single
merged image rather than handing
over every single raw image.”

The Michigan DOT is always
fighting for server space with other
departments, and will most likely
use an outside resource to gather
and filter all of the data generated
from UAV work.

“I don’t see DOTs getting into
this business because it is a busi-
ness model for the private sector,” said Cook.

The next big thing?

The North Carolina DOT also
is leaning on a research think tank
to explore the talents of UAVs. The agency awarded a research
and development contract to
North Carolina State’s NextGen
Air Transportation office back in
August 2014, and work is expected
to be completed by the end of this
year.

NextGen is analyzing the
potential use of small UAVs in a
transportation environment such
as assessing rock slides, which
are common in North Carolina,
structural inspections and disaster-response scenarios. The goal
is for the North Carolina DOT
to be able to assess infrastruc-

ture quickly. NextGen is using a
Hexagon Aerobotics X6 UAV and
associated software on a site in
Raleigh.

The state of North Carolina is
taking the lead when it comes to
registering UAVs. In fact, the North
Carolina DOT is currently respon-
sible for administering the knowl-
dge and skills test for UAV use,
although at press time there was
a bill floating in the state Senate
to eliminate the skills test portion.

“We are in the business
of making sure that you have
reviewed the law and can pass
a basic competence test on the
laws for North Carolina,” Bobby
Walston, aviation director at the
North Carolina DOT, told Roads &
Bridges. “And if you are going to go
out and conduct commercial oper-
ations, your business is going to
need to get a permit, so that permit
process is going to be a check box
to make sure you as a company
have a 333 exemption or COA to
operate.”

“Even though the North
Carolina DOT has an adminis-
trative role right now, it does see
the value of using UAVs for the
inspection of infrastructure and in
other areas.

“I see it being in several lines
of business within the department,”
said Walston. “It’s going to be a
technology that is going to have
many applications within the DOT
as well as many other departments
in state government.”

Not far off

UAV application at the DOT
level is just hovering at the moment,
but in the next three years many
agencies could have a program in
place. The Michigan DOT research
is expected to wrap in 2018, and
Cook can certainly see something
in the works by 2019 at the earli-
est. The North Carolina DOT may
be on a similar timetable, or it could
be sooner.

“I would say within the next 1-3
years,” said Walston, “because we
have a contractor that does work for
the photogrammetry depart-
ment right now that has recently
received an exemption from the
FAA, has a UAV and is able to do
aerial acquisition.”

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2016 ANNUAL MEETING

February 23-26, 2016

Bonita Springs, Florida

Hyatt Regency Coconut Point Resort & Spa

Preliminary Program
**GETTING VALUE FROM YOUR INDUSTRY ASSOCIATION**

The Asphalt Emulsion Manufacturers Association, the Asphalt Recycling & Reclaiming Association and the International Slurry Surfacing Association are about to meet together for the 13th consecutive year. The reasons that brought these three associations together still exist today with even more relevance than ever before. This year's program focus is 'Getting Value from your Industry Association'. AEMA, ARRA and ISSA are strongly invested in the maintenance and preservation of our highways in ways that are economically beneficial, soundly engineered, and friendly to the environment at the same time. Through our marketing program, the Pavement Preservation & Recycling Alliance, we are well prepared to meet the challenges ahead with a united front.

Industry speakers and cutting edge topics equal the best in technology transfer. Attendees at this meeting will have the opportunity to enjoy the general sessions and then choose the topics on which they want to focus. This scheduling allows everyone to keep abreast of new developments that may be valuable for future business expansion or simply pertinent for current customer satisfaction.

**One reminder, register your spouse for the AEMA-ARRA-ISSA Annual Meeting.** If your spouse is accompanying you to Florida, we invite you to register her so she can enjoy all the meeting social functions with you. Included in her registration fee are the Opening Reception, the Spouses’ Welcome (with special presentations from the hotel concierge and our keynote speaker), two continental breakfasts and the Awards Breakfast, one luncheon, and the Thursday Night Reception, and the opportunity to sign up for the golf tournament. The spouse registration fee of only $600, until December 18, 2016, and is a bargain for all this fun, food, festivity, and friendship. All registered spouses will be provided a meeting name tag AND tickets which will be required for all social functions.

The information that appears on the following pages represents speakers, both invited and/or confirmed, at present. Between now and the meeting, it may change to some degree. We will keep you abreast of all additions or changes as best we can.

Looking forward to seeing you in sunny Bonita Springs, Florida.

Mark Ishee, AEMA Program Co-Chair, Ergon Asphalt & Emulsions, Inc.
John Irvine, ARRA Program Co-Chair, Roadtec Inc.
Rex Eberly, ISSA Program Co-Chair, Bergkamp Inc.
## Preliminary Schedule

### Monday, February 22, 2016

<table>
<thead>
<tr>
<th>Time</th>
<th>Event</th>
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<tbody>
<tr>
<td>9:00 AM - 5:00 PM</td>
<td>Registration Set-up</td>
</tr>
<tr>
<td>1:00 PM - 5:00 PM</td>
<td>AEMA Board of Directors Meeting</td>
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### Tuesday, February 23, 2016

<table>
<thead>
<tr>
<th>Time</th>
<th>Event</th>
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<tbody>
<tr>
<td>8:00 AM - 5:00 PM</td>
<td>Exhibit Set-up</td>
</tr>
<tr>
<td>8:30 AM - 12:00 PM</td>
<td>AEMA-ARRA-SSA Board of Directors Meeting</td>
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<tr>
<td>1:00 PM - 5:00 PM</td>
<td>ISSA Board of Directors Meeting</td>
</tr>
<tr>
<td>2:00 PM - 6:00 PM</td>
<td>Registration and Information</td>
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<tr>
<td>5:30 PM - 6:30 PM</td>
<td>AEMA-ARRA-SSA Boards, Past Presidents &amp; Committee Chairman Reception</td>
</tr>
<tr>
<td>6:30 PM - 8:00 PM</td>
<td>AEMA-ARRA-SSA Opening &amp; Closing Reception</td>
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### Wednesday, February 24, 2016

<table>
<thead>
<tr>
<th>Time</th>
<th>Event</th>
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<tbody>
<tr>
<td>7:00 AM - 5:00 PM</td>
<td>Registration and Information</td>
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<tr>
<td>7:00 AM - 5:00 PM</td>
<td>Exhibits</td>
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<tr>
<td>7:00 AM - 8:00 AM</td>
<td>AEMA-ARRA-SSA Continental Breakfast</td>
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<tr>
<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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<tr>
<td>8:00 AM - 1:00 PM</td>
<td>AEMA-ARRA-SSA Opening Joint General Session</td>
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<tr>
<td>8:00 AM - 8:15 AM</td>
<td>Association Welcome</td>
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<tr>
<td>8:15 AM - 8:25 AM</td>
<td>Florida DOT Welcome</td>
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<tr>
<td>8:30 AM - 9:25 AM</td>
<td>Shelley Raw Keynote Presentation “Getting Value from your Industry Association”</td>
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<tr>
<td>9:25 AM - 10:15 AM</td>
<td>Washington and Legislative Report</td>
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<tr>
<td>10:15 AM - 10:45 AM</td>
<td>Break</td>
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<tr>
<td>10:45 AM - 11:15 AM</td>
<td>FP1</td>
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<tr>
<td>11:15 AM - 11:45 AM</td>
<td>NCAT</td>
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<tr>
<td>11:45 AM - 12:15 PM</td>
<td>FHWA Impression of New Bill Related to PP</td>
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<tr>
<td>12:15 PM - 1:00 PM</td>
<td>Working Regulations and Concerns</td>
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<tr>
<td>1:00 PM - 2:00 PM</td>
<td>Luncheon</td>
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<tr>
<td>2:00 PM - 3:00 PM</td>
<td>AEMA Session</td>
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<tr>
<td>2:00 PM - 2:30 PM</td>
<td>AEMA Strategic Plan Update</td>
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<tr>
<td>2:30 PM - 2:55 PM</td>
<td>Emulsion Task Force</td>
</tr>
<tr>
<td>2:55 PM - 3:15 PM</td>
<td>Environmental Issues Affecting Members - Update/Comments</td>
</tr>
<tr>
<td>3:30 PM - 4:00 PM</td>
<td>Residue Recovery – State of the State</td>
</tr>
<tr>
<td>4:00 PM - 4:30 PM</td>
<td>Asphalt Emulsions VOCs</td>
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<tr>
<td>4:30 PM - 5:00 PM</td>
<td>Rejuvenating Chip Seal Specifications – Using the Bendix Beam Rheometer</td>
</tr>
<tr>
<td>5:00 PM - 5:30 PM</td>
<td>ARRAR Session</td>
</tr>
<tr>
<td>5:30 PM - 6:30 PM</td>
<td>Best Practices in Sprayer Technology</td>
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<tr>
<td>6:30 PM - 7:00 PM</td>
<td>Milling for Better Profit</td>
</tr>
<tr>
<td>7:00 PM - 7:30 PM</td>
<td>Milling with Diamonds – Reducing Your Number 2 Cost</td>
</tr>
</tbody>
</table>

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February 23 - 26, 2016 | Bonita Springs, FL
## PRELIMINARY SCHEDULE

### WEDNESDAY, FEBRUARY 24, 2016 - CONTINUED

<table>
<thead>
<tr>
<th>Time</th>
<th>Event</th>
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<tbody>
<tr>
<td>4:00 PM</td>
<td><strong>DIR</strong></td>
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<tr>
<td>4:30 PM</td>
<td><strong>Fibar Mat FOR Study in Texas</strong> Speaker: Terry Jackson, VM Fiber Feeders</td>
</tr>
<tr>
<td>2:00 PM</td>
<td><strong>ISSA Technical Session</strong></td>
</tr>
<tr>
<td>2:00 PM</td>
<td><strong>President's Award</strong></td>
</tr>
<tr>
<td>2:30 PM</td>
<td><strong>Promoting Multiple Techniques</strong> Speaker: Scott Dysart, Tellor Gil</td>
</tr>
<tr>
<td>3:00 PM</td>
<td><strong>Contractor Certification Review</strong> Speaker: Rex Ebeling, Bergkamp inc.</td>
</tr>
<tr>
<td>3:30 PM</td>
<td><strong>Project Story - Contractor Certification in Practice</strong> Speaker: Carter Dabney, Slurry Pavers</td>
</tr>
<tr>
<td>4:00 PM</td>
<td><strong>Fiber Mat Micro</strong> Speaker: Terry Jackson, VM Fiber Feeders</td>
</tr>
<tr>
<td>4:30 PM</td>
<td><strong>Closing Comments</strong></td>
</tr>
<tr>
<td>4:30 PM</td>
<td><strong>AEMA-ARRA-ISSA Suppliers Committee Meeting</strong></td>
</tr>
<tr>
<td>4:30 PM</td>
<td><strong>ISSA Slurry Systems Workshop Committee</strong></td>
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</tbody>
</table>

### THURSDAY, FEBRUARY 25, 2016

<table>
<thead>
<tr>
<th>Time</th>
<th>Event</th>
</tr>
</thead>
<tbody>
<tr>
<td>7:00 AM</td>
<td><strong>AEMA-ARRA-ISSA Recognition Breakfast</strong></td>
</tr>
<tr>
<td>9:00 AM</td>
<td><strong>Work Force Issues 2016</strong> Speaker: Keith Roester, Reaster &amp; Associates, LLC</td>
</tr>
<tr>
<td>10:00 AM</td>
<td><strong>Break</strong></td>
</tr>
<tr>
<td>10:15 AM</td>
<td><strong>AEMA Annual Business Meeting</strong></td>
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<tr>
<td>10:15 AM</td>
<td><strong>ARRA Annual Business Meeting</strong></td>
</tr>
<tr>
<td>10:15 AM</td>
<td><strong>ISSA Annual Business Meeting</strong></td>
</tr>
<tr>
<td>11:15 AM</td>
<td><strong>PPRA Annual Meeting</strong></td>
</tr>
<tr>
<td>11:30 AM</td>
<td><strong>Bus to Golf Outing</strong></td>
</tr>
<tr>
<td>12:30 PM</td>
<td><strong>Golf Tournament</strong></td>
</tr>
<tr>
<td>6:00 PM</td>
<td><strong>Special Event/Cocktail Reception</strong></td>
</tr>
</tbody>
</table>

### FRIDAY, FEBRUARY 26, 2016

<table>
<thead>
<tr>
<th>Time</th>
<th>Event</th>
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<tbody>
<tr>
<td>7:00 AM</td>
<td><strong>AEMA-ARRA-ISSA Continental Breakfast</strong></td>
</tr>
<tr>
<td>8:00 AM</td>
<td><strong>AEMA-ITC Meeting</strong> Speaker: Dr. Amy Epps Martin &amp; Dr. Y. Richard Kim</td>
</tr>
<tr>
<td>8:30 AM</td>
<td><strong>ARRA Cold Planing Committee</strong></td>
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<tr>
<td>8:00 AM</td>
<td><strong>ARRA Cold Recycling Committee</strong></td>
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<tr>
<td>8:00 AM</td>
<td><strong>ARRA Full Depth Reclaimation / Soil Stabilization Committee</strong></td>
</tr>
<tr>
<td>8:00 AM</td>
<td><strong>ARRA Hot In-Place Recycling Committee</strong></td>
</tr>
<tr>
<td>8:00 AM</td>
<td><strong>ISSA Chip Seal/ Crack Treatment / Slurry/Micro Meeting</strong></td>
</tr>
<tr>
<td>11:00 AM</td>
<td><strong>Break</strong></td>
</tr>
<tr>
<td>11:15 AM</td>
<td><strong>AEMA-ARRA-ISSA Joint Session</strong></td>
</tr>
<tr>
<td>11:15 AM</td>
<td><strong>Low Noise Micro – Chinese Microsurfacing Market</strong></td>
</tr>
<tr>
<td>11:45 AM</td>
<td><strong>Micro-Milling</strong></td>
</tr>
<tr>
<td>12:15 PM</td>
<td><strong>Public Private Partnerships - A Case Study</strong></td>
</tr>
<tr>
<td>12:45 PM</td>
<td><strong>Meeting Review - Survey Speaker: Scott Harris, Sluit Kole</strong></td>
</tr>
<tr>
<td>1:00 PM</td>
<td><strong>2016 ANNUAL MEETING ADJOURNS</strong></td>
</tr>
</tbody>
</table>

* Schedule subject to change.
AEMA, ARRA, and ISSA count on proceeds from the annual meeting to help with their program budgets throughout the year, so the overall financial success is vital. Please remember a major benefit of the combined meeting is not having to go to three separate meetings; you can reach more people at one time in one place, and not have to spend more time and money at two other meetings. We humbly ask you to consider applying some of that savings towards sponsorship of the AEMA-ARRA-ISSA 2016 Annual Meeting, and we encourage you to bring more people from your company.

**SPONSORSHIP LEVELS**

**GREEN SPONSORSHIP - $10,000**
- Company logo on the meeting give away materials
- Recognition on signage, meeting program, and newsletter
- Display two pieces of equipment in the outdoor display area
- 10’ of indoor exhibit space for a pop-up or tabletop display
- Distribution of product literature in the display area

**GOLD SPONSORSHIP - $7,500**
- Recognition on signage, meeting program, and newsletter
- Display two pieces of equipment in the outdoor display area
- 10’ of indoor exhibit space for a pop-up or tabletop display
- Distribution of product literature in the display area

**SILVER SPONSORSHIP - $5,000**
- Recognition on signage, meeting program, and newsletter
- Display one piece of equipment in the outdoor display area
- 10’ of indoor exhibit space for a pop-up or tabletop display
- Distribution of product literature in the display area

**BRONZE SPONSORSHIP - $2,500**
- Recognition on signage, meeting program, and newsletter
- 10’ of indoor exhibit space for a pop-up or tabletop display
- Distribution of product literature in the display area

Sponsorship of individual meeting events is also available in accordance with the schedule below, with recognition granted corresponding to the levels above:

- **OPENING RECEPTION - $15,000**
- **WEDNESDAY CONTINENTAL BREAKFAST - $5,000**
- **WEDNESDAY MORNING BREAK - $5,000**
- **WEDNESDAY LUNCHEON - $10,000**

- **WEDNESDAY AFTERNOON BREAK - $5,000**
- **AWARDS BREAKFAST - $15,000**
- **FRIDAY CONTINENTAL BREAKFAST - $5,000**
- **FRIDAY MORNING BREAK - $5,000**
SPONSORSHIP

This year’s AEMA-ARRA-ISSA Annual Meeting Golf Tournament takes place at the Raptor Bay Golf Club - ranked among the top 10 favorites by Gary Van Sickle, senior writer for Sports Illustrated.

Each hole was carefully crafted to blend with the environment, leaving a beautiful course with natural surroundings. Under the guidance of Audubon International, Raptor Bay Golf Club has developed an ecological design that preserved the most valuable habitats on-site and restored nearly 25 acres of wetlands. With no residential sites on the property, the natural surroundings encourage the appearance of protected wild creatures including the American Bald Eagle, Great Blue Herons, Snowy Egrets and even the very shy Whooping Crane.

We encourage you, your spouse, and fellow coworkers to take part in the tournament to enjoy the wide fairways with one height of cut throughout and five sets of tees to give players of every skill level a memorable outing.

Even if you do not join us in the tournament, there are still ways your company to be involved. Consider sponsoring the tournament with one of these great opportunities.

AEMA-ARRA-ISSA GOLF TOURNAMENT SPONSORSHIP OPPORTUNITIES

- GOLF TOURNAMENT TITLE SPONSORS (MAXIMUM OF 1 AVAILABLE) - $5,000
  Receive maximum recognition throughout the day, including exposure out on the golf course. All print material and on-course signage will incorporate your logo as well as that of the tournament.

- BEVERAGE CART SPONSOR (MAXIMUM OF 2 AVAILABLE) - $2,500
  Receive logo recognition prominently displayed on both sides of the beverage carts.

- CONTEST HOLE SPONSOR – (MAXIMUM OF 4 AVAILABLE) - $2,000 each
  This sponsor will receive recognition on one of the four contests either on the front nine or back nine.

- GOLF TOURNAMENT LUNCH SPONSORS (MAXIMUM OF 2 AVAILABLE) - $2,500
  Sponsors receive special recognition during the golf tournament lunch. All signage at the lunch will incorporate your logo as well as that of the tournament.

Golf tournament lunch naming rights are available.
BOOK YOUR ROOM TODAY

Surrounded by tropical landscapes and Estero Bay, with over 75,000 square feet of flexible function space, a full service business center, championship golf course and world class spa, Hyatt Regency Coconut Spa & Resort is the ideal Florida Gulf Coast destination for work or play. We offer a collection of resort shops, on-site car rental and tour services for your convenience. Our knowledgeable Concierge is available to assist you with arrangements for everything from a massage at Stillwater Spa to dinner reservations, a shopping excursion or tee times at Raptor Bay Golf Club. Set out for an unforgettable escape near Naples FL.

Please contact the Hyatt Regency Coconut Point Resort & Spa to make your hotel reservations.

MAKE YOUR RESERVATIONS EARLY! AEMA-ARRA-ISSA-PPRA has negotiated a special room rate of $319 US per night (subject to applicable occupancy tax and sales tax). In order to receive the group rate, you must make your reservation by January 18, 2016. Subject to availability.

Hotel Name: Hyatt Regency Coconut Point Resort & Spa  
Hotel Address: 5001 Coconut Road, Bonita Springs, FL 34134, US  
Phone Reservations: (1)(239) 444-1234  
Online Reservations: https://resweb.passkey.com/go/aemaarraissa2016  
Web: http://http://coconutpoint.hyatt.com/
## Registration Information

### Early Bird Registration
- **November 4, 2015 - December 18, 2015**

<table>
<thead>
<tr>
<th>Category</th>
<th>Fee</th>
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<tbody>
<tr>
<td>AEMA-ARRA-ISSA Member</td>
<td>$1,200</td>
</tr>
<tr>
<td>Governmental/Agency/Educational</td>
<td>$500</td>
</tr>
<tr>
<td>Non-Member</td>
<td>$1,700</td>
</tr>
<tr>
<td>Spouse</td>
<td>$400</td>
</tr>
<tr>
<td>Non-Member Spouse</td>
<td>$600</td>
</tr>
<tr>
<td>Golf Tournament</td>
<td>$275</td>
</tr>
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</table>

### Registration
- **December 19, 2015 - January 31, 2016**

<table>
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<th>Fee</th>
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<tr>
<td>AEMA-ARRA-ISSA Member</td>
<td>$1,500</td>
</tr>
<tr>
<td>Governmental/Agency/Educational</td>
<td>$600</td>
</tr>
<tr>
<td>Non-Member</td>
<td>$2,000</td>
</tr>
<tr>
<td>Spouse</td>
<td>$500</td>
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<tr>
<td>Non-Member Spouse</td>
<td>$750</td>
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<tr>
<td>Golf Tournament</td>
<td>$275</td>
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### Late Registration
- **February 1, 2016 - February 15, 2016**

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<th>Category</th>
<th>Fee</th>
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<tbody>
<tr>
<td>AEMA-ARRA-ISSA Member</td>
<td>$1,800</td>
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<tr>
<td>Governmental/Agency/Educational</td>
<td>$700</td>
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<td>Non-Member</td>
<td>$2,300</td>
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<td>Spouse</td>
<td>$600</td>
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<tr>
<td>Non-Member Spouse</td>
<td>$900</td>
</tr>
<tr>
<td>Golf Tournament</td>
<td>$325</td>
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</tbody>
</table>

### Meeting Cancellations

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

### Cancellation Received By:

<table>
<thead>
<tr>
<th>Date</th>
<th>Refund</th>
</tr>
</thead>
<tbody>
<tr>
<td>February 9, 2016</td>
<td>100% minus $25</td>
</tr>
<tr>
<td>February 16, 2016</td>
<td>50% of registration fee</td>
</tr>
<tr>
<td>February 16, 2016, or later</td>
<td>No refund</td>
</tr>
</tbody>
</table>

"No shows" will be charged the full registration fee.

Substitutions may be made by February 12, 2016, by contacting AEMA-ARRA-ISSA-PPRA headquarters at (410) 267-0023.
**REGISTRATION INFORMATION**

**REGISTRANT INFORMATION**

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<th>First Name:</th>
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<th>Title:</th>
<th>Company:</th>
<th>Address</th>
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Member Of:  
- [ ] AEMA  
- [ ] ARRA  
- [ ] ISSA  
- [ ] None

**ADDITIONAL REGISTRANT INFORMATION**

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<tr>
<th>First Name:</th>
<th>Middle Initial:</th>
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Please fill out payment, and sponsorship if interested, information on page 10 & 11 of this document.
**REGISTRATION INFORMATION**

**ADDITIONAL REGISTRANT INFORMATION CONTINUED**

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**SPouse Registrant Information**

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REGISTRATION

CHECK YOUR REGISTRATION TYPE:

<table>
<thead>
<tr>
<th></th>
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</thead>
<tbody>
<tr>
<td>AEMA-ARRA-ISSA Member</td>
<td>$1,200 QTY: ___</td>
<td>$1,500 QTY: ___</td>
<td>$1,800 QTY: ___</td>
</tr>
<tr>
<td>Governmental/Agency/Educational</td>
<td>$500 QTY: ___</td>
<td>$600 QTY: ___</td>
<td>$700 QTY: ___</td>
</tr>
<tr>
<td>Non-Member</td>
<td>$1,700 QTY: ___</td>
<td>$2,000 QTY: ___</td>
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<tr>
<td>Spouse</td>
<td>$400 QTY: ___</td>
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<tr>
<td>Non-Member Spouse</td>
<td>$600 QTY: ___</td>
<td>$750 QTY: ___</td>
<td>$900 QTY: ___</td>
</tr>
</tbody>
</table>

SELECT, AND ENTER, YOUR GOLF TOURNAMENT INFORMATION:

<table>
<thead>
<tr>
<th>Early Golf Tournament Registration 11/4/2015 - 1/31/2016</th>
<th>Golf Tournament Registration 2/1/2016 - 2/16/2016</th>
<th>Player Name</th>
<th>Handicap</th>
<th>Rental Clubs Required?</th>
</tr>
</thead>
<tbody>
<tr>
<td>$275</td>
<td>$325</td>
<td></td>
<td></td>
<td>Yes ($75)</td>
</tr>
<tr>
<td>$275</td>
<td>$325</td>
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<td>Yes ($75)</td>
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<tr>
<td>$275</td>
<td>$325</td>
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<td>Yes ($75)</td>
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</tbody>
</table>

PLEASE SELECT THE LEVEL OF SPONSORSHIP* YOU WOULD LIKE:

<table>
<thead>
<tr>
<th></th>
<th>Awards Breakfast</th>
<th>Friday Continental Breakfast</th>
<th>Friday Morning Breakfast</th>
<th>Golf Tournament - Contest Hole Sponsors</th>
<th>Golf Tournament - Lunch Sponsors</th>
<th>Golf Tournament - Beverage Cart Sponsor</th>
<th>Golf Tournament - Title Sponsor</th>
<th>Wednesday Luncheon</th>
<th>Wednesday Afternoon Break</th>
</tr>
</thead>
<tbody>
<tr>
<td>Green</td>
<td>$10,000</td>
<td></td>
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<td>$15,000</td>
<td>$5,000</td>
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* Sponsorships are only available AEMA, ARRA, and/or ISSA Members.
PLEASE TOTAL YOUR REGISTRATION, GOLF TOURNAMENT, & SPONSORSHIP FEES:

<table>
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<th>Amount</th>
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<td>Total Golf Tournament Fees Enclosed:</td>
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*Sponsorships are only available to AEMA, ARRA, and/or ISSA Members.

PAYMENT INFORMATION

☐ Check Payment: Check number: __________

Mail checks to: AEMA-ARRA-ISSA, #3 Church Circle - PMB 250, Annapolis, Maryland 21401

Credit Card: ☐ Visa ☐ Mastercard ☐ American Express

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Card Holder Name: _______________________

Authorized Signature: _______________________

Please return the completed registration form by February 12, 2016, for the total registration fees to:

Mail: AEMA-ARRA-ISSA, #3 Church Circle - PMB 250, Annapolis, Maryland 21401. Phone 410-267-0023
Fax: 410-267-7546
Email: kennedy@krissoff.org
2016 SLURRY SYSTEMS WORKSHOP

JANUARY 18 - 21, 2016
TEXAS STATION HOTEL & CASINO
LAS VEGAS, NEVADA

ROLL UP YOUR SLEEVES & GET READY FOR SPRING TRAINING!
WHAT IS THE SLURRY SYSTEMS WORKSHOP?

Roll up your sleeves and get ready for ISSA’s Spring Training with the 2016 Slurry Systems Workshop at the Texas Station Hotel & Casino in Las Vegas, Nevada.

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 Pavement Preservation Specialists 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 seal and crack treatment equipment, independent of the paving demonstrations.

This year, we have included four individual breakout sessions focused on the ISSA disciplines. Attendees can choose to attend the technical breakout sessions to get a more in-depth understanding of each of these applications or technical aspects.

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.
MONDAY, JANUARY 18, 2015

8:00 AM - 5:00 PM  Registration Desk Open
6:00 PM - 8:00 PM  Opening Cocktail Reception

TUESDAY, JANUARY 19, 2016

8:00 AM - 8:10 AM  ISSA Welcome Spring Training Theme  Joe Brandenburg
8:10 AM - 8:20 AM  Presidents Message  Rusty Price
8:20 AM - 12:00 PM  SESSION A  Moderator: TBD
8:20 AM - 9:00 AM  Safety  Ken Olsen
9:00 AM - 9:40 AM  Pavement Preservation Treatment Overview  Gary Houston
9:40 AM - 10:00 AM  2015 Presidents Award  Rusty Price
10:00 AM - 10:15 AM  BREAK
10:15 AM - 10:45 AM  Intro to Micro/Slurry  Stephanie Hegondoorn
10:45 AM - 11:15 AM  Intro to Chip Seal  Brian Horner
11:15 AM - 11:40 AM  Intro to Crack treatments  Jim Allison
11:40 AM - 12:00 PM  Web Based Training  Larry Tompkins
12:00 PM - 1:00 PM  LUNCH
1:00 PM - 5:00 PM  SESSION B - Agency Presentations  Moderator: Ivann Harnish
1:00 PM - 1:30 PM  FHWA Update  Brian Cawley/FHWA
1:30 PM - 2:10 PM  DOT Perspective on Preservation  Richard Turner
2:10 PM - 2:40 PM  NCAT Test Track Review  Buzz Powell
2:40 PM - 3:15 PM  Pavement Preservation ETG  Chris Lubbers
3:15 PM - 3:30 PM  BREAK
3:30 PM - 4:00 PM  Contractors Working with Agencies  Eric Reimchiissel
4:00 PM - 4:15 PM  AMRL Accreditation  Bob Jerman
4:15 PM - 4:30 PM  Field Testing for Micro/Slurry  Bob Jerman
4:30 PM - 5:00 PM  Complete Pavement Management  Stephen Lander
5:30 PM  Bowling sponsored event

(subject to change without notice)
## Preliminary Program

### Wednesday, January 20, 2016

<table>
<thead>
<tr>
<th>Time</th>
<th>Event</th>
<th>Presenter</th>
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<tr>
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<tr>
<td>7:00 AM - 8:00 AM</td>
<td>Continental Breakfast</td>
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</tr>
<tr>
<td>8:00 AM - 12:00 PM</td>
<td><strong>SESSION C - Breakout Session</strong></td>
<td><strong>Moderator: TBD</strong></td>
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<tr>
<td>8:00 AM - 8:05 AM</td>
<td>Welcome</td>
<td>Joe Brandenburg</td>
</tr>
<tr>
<td>8:05 AM - 8:15 AM</td>
<td>Intro to Breakout Sessions</td>
<td>Brandenburg &amp; Galehouse</td>
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<tr>
<td>8:15 AM - 12:00 PM</td>
<td>Micro/ Slurry - Trouble Shooting, Guidelines, &amp; Application</td>
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<tr>
<td>8:15 AM - 12:00 PM</td>
<td>Chip Seal - Trouble Shooting, Guidelines, &amp; Application</td>
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</tr>
<tr>
<td>8:15 AM - 12:00 PM</td>
<td>Crack fill Treatments - Trouble Shooting, Guidelines, &amp; Application</td>
<td></td>
</tr>
<tr>
<td>8:15 AM - 12:00 PM</td>
<td>Technical - Chemistry, Manufacturing of Emulsions, Testing, Mix Designs, Particle Size/Storage and Handling</td>
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<tr>
<td>10:00 AM - 10:15 AM</td>
<td>Break</td>
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<tr>
<td>12:00 PM - 1:00 PM</td>
<td>Lunch</td>
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<tr>
<td>1:00 PM - 5:00 PM</td>
<td><strong>SESSION D - Breakout Session &amp; Demo</strong></td>
<td><strong>Moderator: TBD</strong></td>
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<tr>
<td>1:00 PM - 1:30 PM</td>
<td>Demo Preview</td>
<td>Chuck Ingram</td>
</tr>
<tr>
<td>1:30 PM - 2:45 PM</td>
<td>Contractor Showcase</td>
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<tr>
<td>2:45 PM - 4:45 PM</td>
<td>Demo</td>
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<tr>
<td>4:45 PM - 5:00 PM</td>
<td>Demo Wrap Up</td>
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### Thursday, January 21, 2016

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<td>Continental Breakfast</td>
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<td>8:00 AM - 10:00 AM</td>
<td><strong>SESSION E</strong></td>
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</tr>
<tr>
<td>8:00 AM - 8:10 AM</td>
<td>Welcome &amp; Review</td>
<td>Chuck Ingram &amp; Joe Brandenburg</td>
</tr>
<tr>
<td>8:10 AM - 8:40 AM</td>
<td>Spreaderbox Maintenance</td>
<td>Randy Tattershall</td>
</tr>
<tr>
<td>8:40 AM - 9:00 AM</td>
<td>Latin America Perspective on Preservation</td>
<td>Fabio A. Mendez</td>
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<tr>
<td>9:00 AM - 9:30 AM</td>
<td>Highly Polymer-Modified Micro Surfacing</td>
<td>Ryan Proctor</td>
</tr>
<tr>
<td>9:30 AM - 9:55 AM</td>
<td>Fiber Enhanced Slurry Surfacing</td>
<td>Terry Jackson</td>
</tr>
<tr>
<td>9:55 AM - 10:00 AM</td>
<td>Hand Mix Preview</td>
<td>Rich Wenthe</td>
</tr>
<tr>
<td>10:00 AM - 10:15 AM</td>
<td>Break</td>
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</tr>
<tr>
<td>10:15 AM - 1:45 PM</td>
<td><strong>SESSION F - Calibration and Hand Mixes</strong></td>
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**THURSDAY, JANUARY 21, 2016 - CONTINUED**

<table>
<thead>
<tr>
<th>Time</th>
<th>Session</th>
<th>Speaker/Company</th>
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<tr>
<td>10:15 AM - 12:05 PM</td>
<td>Group 1 - Slurry/Micro Calibration</td>
<td>Bergkamp</td>
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<tr>
<td>12:05 PM - 12:35 PM</td>
<td>Group 1 - Daily Material Reports and other recordkeeping</td>
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</tr>
<tr>
<td>10:15 AM - 1:45 PM</td>
<td>Group 2 - Mix Tables - 6 tables</td>
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</tr>
<tr>
<td>10:20 AM - 10:35 AM</td>
<td>Slurry Seal Hand Mixes</td>
<td>Road Science</td>
</tr>
<tr>
<td>10:40 AM - 10:55 AM</td>
<td>Laboratory Equipment</td>
<td>Benedict Slurry Seal</td>
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<tr>
<td>11:00 AM - 11:15 AM</td>
<td>Micro-Surfacing Hand Mixes</td>
<td>AMI, HRG, PMS</td>
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<tr>
<td>11:20 AM - 11:35 AM</td>
<td>Micro-Surfacing Troubleshooting</td>
<td>Ingevity (MWV)</td>
</tr>
<tr>
<td>11:40 AM - 11:55 AM</td>
<td>Chip Seal</td>
<td>Ergon</td>
</tr>
<tr>
<td>12:00 PM - 12:15 PM</td>
<td>Crack Seals</td>
<td>Crafco</td>
</tr>
<tr>
<td>12:20 PM - 12:35 PM</td>
<td>Bonus Round</td>
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</tr>
<tr>
<td>12:45 PM - 1:45 PM</td>
<td>Lunch</td>
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</tr>
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<td>1:45 PM - 5:00 PM</td>
<td>SESSION G</td>
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<td>1:45 PM - 1:50 PM</td>
<td>Hand Mix Preview</td>
<td>Richard Wenthe</td>
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<td>Group 2 - Slurry/Micro Calibration</td>
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<td>3:35 PM - 4:05 PM</td>
<td>Group 2 - Daily Material Reports and other recordkeeping</td>
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<td>Group 1 - Mix Tables - 6 tables</td>
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<tr>
<td>1:50 PM - 2:05 PM</td>
<td>Slurry Seal Hand Mixes</td>
<td>Road Science</td>
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<td>2:00 PM - 3:30 PM</td>
<td>ISSA &amp; NCPP Recognized Pilot Certification Program EXAM</td>
<td>NCPP</td>
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<tr>
<td>2:10 PM - 2:25 PM</td>
<td>Laboratory Equipment</td>
<td>Benedict Slurry Seal</td>
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<tr>
<td>2:30 PM - 2:45 PM</td>
<td>Micro-Surfacing Hand Mixes</td>
<td>AMI, HRG, PMS</td>
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<tr>
<td>2:50 PM - 3:05 PM</td>
<td>Micro-Surfacing Troubleshooting</td>
<td>Ingevity (MWV)</td>
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<tr>
<td>3:10 PM - 3:25 PM</td>
<td>Chip Seal</td>
<td>Ergon</td>
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<tr>
<td>3:30 PM</td>
<td>Crack Seals</td>
<td>Crafco</td>
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<td>3:50 PM - 4:05 PM</td>
<td>Bonus Round</td>
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<td>4:05 PM - 4:20 PM</td>
<td>Break</td>
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<td>4:20 PM - 4:45 PM</td>
<td>Panel Discussion</td>
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<td>4:45 PM - 4:55 PM</td>
<td>Closing Remarks</td>
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<td>5:00 PM</td>
<td>Closing Reception</td>
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Early Bird Registration – July 17 - October 22, 2015

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<td>$ 195</td>
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<td>Non-Members</td>
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Registration – October 23 - December 18, 2015

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Late Registration – December 19, 2015 - January 8, 2016

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<tr>
<td>Members</td>
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Meeting Cancellations

Notification must be received by ISSA headquarters if you have registered for the meeting 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:

Cancellation received by:

<table>
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<th>Refund</th>
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<tr>
<td>December 17, 2015</td>
<td>100% minus $25</td>
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<tr>
<td>January 7, 2016</td>
<td>50% of registration fee</td>
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<tr>
<td>January 8, 2016, or later</td>
<td>No refund</td>
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“No shows” will be charged the full registration fee.

Substitutions may be made by January 8, 2016, by contacting ISSA headquarters at (410) 267-0023.

Hotel Reservations

Hotel Reservations are made directly through Texas Station in North Las Vegas, NV.

MAKE YOUR RESERVATIONS EARLY! ISSA has negotiated a special room rate starting at $65 US per night (subject to applicable occupancy tax and sales tax). In order to receive the group rate, you must make your reservation by Friday, January 1st, 2016. Subject to availability.

Hotel Name: Texas Station
Hotel Address: 2101 Texas Star Lane, North Las Vegas, NV, 89032
Make your reservation by calling 800-654-8888 and use group code TCJIS16
ISSA prides itself on conducting good meetings with lots of bells & whistles at a very reasonable fee. It is the generosity of our sponsoring member companies that allows us to do so. These bells & whistles (high quality meal functions, exciting receptions) help keep our registrants engaged and present, which further enhances the opportunities for networking and technology transfer. The more they stay together, the more they talk. The more they talk, the more they learn. The more they learn, the more our market grows. On behalf of our members, we extend our thanks and appreciation to those member companies that go the extra step to support our industry and give back to the Association that grows our businesses.

**GENERAL SPONSOR $750**

For $750 your company will be recognized at the meeting, listed as a meeting sponsor in the meeting program, and highlighted in the event emails and association newsletter. Sponsor exhibits must be confined to a 10’ x 10’ space. A 6’ draped table and two chairs will be provided.

**LUNCHEON SPONSOR $2,500**

For $2,500 you can be a Luncheon Sponsor which includes General Sponsorship, enhanced recognition throughout the meeting, and recognition during each luncheon. Exclusive Luncheon Sponsorship with naming rights are available at $10,000. Please contact AEMA-ARRA-ISSA Headquarters for more details.

**SSWS 2016 INTERNET SPONSOR $2,500 (LIMIT 1)**

For $2,500 you can be the SSWS 2016 Internet Sponsor which includes General Sponsorship and enhanced recognition throughout the meeting by having your company’s logo appear with “Conference Internet Provided by” in the program and rotating on the display in the conference room.

**EVENING RECEPTION SPONSOR $2,500**

For $2,500 you can be an Evening Cocktail Reception Sponsor which includes General Sponsorship, enhanced recognition throughout the meeting, and exclusive recognition during the Evening Reception.

Evening Reception Sponsorship with naming rights are available. Please contact AEMA-ARRA-ISSA Headquarters for more details.
# Registration

**Check Your Registration Type:**

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<th>Early Bird Registration</th>
<th>Registration</th>
<th>Late Registration</th>
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**Government Agency**

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**Non-Members**

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**Please Select the Level of Sponsorship You Would Like:**

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<tr>
<td>Luncheon Sponsor</td>
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<tr>
<td>SSWS 2016 Internet Sponsor (Limit 1)</td>
<td>SOLD OUT</td>
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<tr>
<td>Reception Sponsor</td>
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**Please Total Your Registration & Sponsorship Fees:**

- Total Registration Fees Enclosed: _____________
- Sponsorship Amount Enclosed: _____________
- Total: _____________

**Payment Information**

- Check Payment: Check number: _________

Mail checks to: ISSA, #3 Church Circle - PMB 250, Annapolis, Maryland 21401
Make checks payable to: International Slurry Surfacing Association

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Authorized Signature: __________________________________________

Please return the completed registration form by January 8, 2016, for the total registration fees to:

**Mail:** ISSA, #3 Church Circle - PMB 250, Annapolis, Maryland 21401. Phone 410-267-0023
**Fax:** 410-267-7546
**Email:** kennedy@slurry.org
**REGISTRANT INFORMATION**

<table>
<thead>
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<th>Middle Initial:</th>
<th>Last Name:</th>
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<tbody>
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<td></td>
</tr>
<tr>
<td>Company:</td>
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**Address**

<table>
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<th>State:</th>
<th>Zip:</th>
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</table>

**Phone:**

Fax

**Email:**

Check One That Applies:
- Member
- Non-Member
- Government Agency

---

**ADDITIONAL REGISTRANT INFORMATION**

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<th>Middle Initial:</th>
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<tr>
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Please fill out payment, and sponsorship if interested, information on page 8 of this document.
6th International Symposium on Asphalt Emulsion Technology

SECOND ANNOUNCEMENT AND CALL FOR PAPERS

ISAET '16
Manufacturing, Application, and Performance
November 1 - 4, 2016
The Hyatt Regency Crystal City
Arlington, Virginia

THE CONFERENCE

Organized under the auspices of the International Bitumen Emulsion Federation, this symposium, spawned by the "First World Congress on Emulsions" held in Paris, France, in 1993, will be the sixth of a series of symposia dedicated to the international asphalt emulsion industry. As with the World Congress on Emulsions, these symposia are held at four year intervals.

SCOPE

The symposium will embrace research and practice with respect to manufacturing, use and performance of asphalt emulsions. The 2016 conference will provide a forum for discussion of leading research work, encourage presentation of case studies demonstrating the implementation of research into practice, and foster discussion on producing better performing and cost effective asphalt emulsions.

PROGRAM

The technical program will last three days and will build on the strong traditions established by the previous five World Congresses on Emulsions and the previous five International Symposiums on Asphalt Emulsions, held in Washington in 1996, 1999, 2004, 2008, and 2012.
CALL FOR PAPERS

The success of the symposium will depend on the quality of papers presented and published in the proceedings. Authors are now invited to submit synopses of their proposed papers. Topics may include but are not limited to the following:

MANUFACTURING
- Emulsion Analysis
- Material Performance
- Non-Bituminous Additives
- Developments in Chemical Systems
- Equipment: New or Innovative Developments
- ISO Compliance
- Quality Control/Assurance
- Binder Analysis

USE
- Analysis
- Design Criteria
- Material Properties/Developments
- Mixture Design
- Rehabilitation Design
- Characterization of Soils, Granular Materials, and Asphalt
- Laboratory Field Testing
- Influence of Construction on Design and Performance
- Quality Control and Assurance/Quality Initiative
- Advances in Technology for Mixing and Applying Materials
- Use of End Product Specifications/Innovative Contracts
- Recycling Issues

SUBMISSION OF SYNOPSIS

Authors are invited to submit by e-mail a one-page synopsis (in Microsoft Word) describing the scope, findings, and status of the work and identifying the subject area (either manufacturing, use or performance) under which the paper should be considered. Include authors’ names and affiliations, and provide the address, telephone number, fax and e-mail address for the corresponding author.

The synopsis submission deadline is January 15, 2015.

Language for the conference will be English, and units will be metric only.

The conference Technical Advisory Committee will complete the synopsis review process by March 15, 2015 and invite authors to prepare papers. Draft copies of papers, by e-mail or cd, are due by April 1, 2016. Draft papers will be reviewed by the technical committee by July 1, 2016 and authors will be asked to prepare a final manuscript and PowerPoint presentations by August 1, 2016.

All electronic submissions should be sent to Program Chairman Gaylon Baumgardner at gaylon.baumgardner@ptsilab.com and copied to AEMA Executive Director Mike Krissoff at krissoff@aema.org.

PEER REVIEW AND EDITORIAL PROCESS

All papers will be subject to peer review. Authors will be notified of the acceptance of their paper for publication and provided with instructions for preparation of the final manuscript and PowerPoint presentation by April 1, 2016. Final manuscripts and PowerPoint presentations will be due by August 1, 2016. All electronic submissions should be sent to Program Chairman Gaylon Baumgardner at gaylon.baumgardner@ptsilab.com and copied to AEMA Executive Director Mike Krissoff at krissoff@aema.org. ISAET ’16 Proceedings will be produced as a cd and will include both papers and PowerPoint presentations if available.

Inquiries should be addressed to:
ISAET ’16
Asphalt Emulsion Manufacturers Association,
#5 Church Circle — PMB 250
Annapolis, MD 21401, USA
Telephone (410) 267-0025
Fax (410) 267-7546
Web www.aema.org
Email krissoff@aema.org

AUTHOR’S SCHEDULE

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<tr>
<td>Submission of Synopsis</td>
<td>October 1, 2015</td>
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<tr>
<td>Invitation to Prepare Papers</td>
<td>December 1, 2015</td>
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<td>Submission of Draft Paper</td>
<td>April 1, 2016</td>
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<td>Notification of Acceptance for Publication</td>
<td>July 1, 2016</td>
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<td>Final Manuscript Due</td>
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Synopsis submission to: gaylon.baumgardner@ptsilab.com copy. krissoff@aema.org