



Update on Activities NESMEA 2016

Robert Lutz
Manager, AASHTO re:source

We changed our name...

Effective August 22, we became a re:source.



Change
Just Ahead

re:

AASHTO re:source

- The “AASHTO Accreditation Program” will retain its name.
- The website changed to [AASHTOresource.org](https://www.aashtoresource.org).
- Email addresses changed to @AASHTOresource.org.

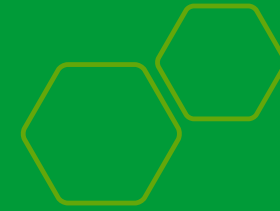
The screenshot shows the AASHTO re:source website homepage. The header features the logo "re:source" (formerly AMBL) and a "Log in" button. A navigation menu includes "About Us", "AASHTO Accreditation", "Laboratory Assessments", "Proficiency Samples", "Falling Weight Deflectometer", "re:source University", and "Specifiers". A search bar is located in the top right corner. The main content area has the tagline "The gold standard for laboratory accreditation in the construction industry" and three buttons: "Submit Proficiency Sample Data", "Request Services", and "Events". Below this is a section titled "AASHTO ACCREDITATION" with the headline "Our standard of excellence works for you" and a quote from Scott Miccassano, CWI, Vice President, Quality at Atlantic Testing Laboratories. The quote states: "Nobody ever questions us when we submit our accreditations for a project based on procedures, proficiency sampling or lab audits. It gives us a good feeling that every time we do an audit, it will meet the minimum standards that are accepted in the Northeast." Below the quote is a link to "more" information. The bottom of the page features a row of four video thumbnails.



re:

Promotional Video

- Why did we change our name?



AASHTO re:source Technical Exchange

Coming in March 2017
to Annapolis, Maryland

SAVE
THE
DATE



www.aashtoresource.org

2017 AASHTO re:source Technical Exchange



March 27 through 29, 2017
The Westin Annapolis, Annapolis, MD
Registration Opens Fall 2016

AMERICAN ASSOCIATION
OF STATE HIGHWAY AND
TRANSPORTATION OFFICIALS
AASHTO

The **2017 AASHTO re:source Technical Exchange** is a unique opportunity for laboratory managers, quality managers, supervisors, and technicians to learn about pertinent industry topics from AASHTO re:source staff, and guest speakers. The agenda will allow for ample opportunity to learn from the experience of your peers, as well as, influence AASHTO re:source's programs through a roundtable session.

Preliminary Agenda Topics Include

- AASHTO R 18-16
- Lab Manager 101
- Calibration and measurement uncertainty
- Common errors in asphalt and concrete mix designs
- Internal auditing

Visit AASHTOresource.org/events for more information and program details!

Interested in being a sponsor or exhibitor?

Previous AASHTO sponsors and exhibitors, please contact Ernie Cochran at 512.413.5969 or ernie@housmanandassociates.com. First time AASHTO sponsors and exhibitors, please contact Mary Michalik at 312.265.9650 or mary@corcexpo.com.

AASHTO re:source • 4441 Buckeystown Pike, Suite A • Frederick, MD 21704 • 240.436.4900



Technical Exchange Tentative Agenda

Time	Tuesday (March 28, 2017)			Time	Wednesday (March 29, 2017)		
7:00-8:00 am	Continental breakfast, Conference registration			7:00-8:00 am	Continental breakfast, Conference registration		
8:00-8:45 am	Opening remarks – Steve Lenker (10 minutes) Keynote speaker (James Williams, MS DOT) (30 minutes) ALL ATTENDEES			8:00-9:45 am	Application of Calibration Data (Bob Lutz, Maria Knake)	Technician Certification (Amy Ridenour & another QA)	Lab Manager 101
8:45-10:15 am	AAP overview/Q&A (Brian Johnson) ALL ATTENDEES			9:45 – 10 am	BREAK		
10:15-10:30 am	BREAK			10:00-noon	Thermometry (Maria Knake)	AASHTO R 18 (Brian)	Quality Manager 101 (Benjamin Trujillo)
10:30-noon	LAP & PSP overview/Q&A (Maria Knake, John Malusky) ALL ATTENDEES			Noon – 1:00 pm	LUNCH		
Noon – 1:00 pm	LUNCH			1:00 – 3:00 pm	Customer Roundtable / Q&A (moderated by AASHTO re:source staff)		
1:00-2:45 pm	Introduction to Measurement uncertainty (Henrik Nielsen)	Making the Most of Your QMS (Tracy Barnhart)	Common Errors in Asphalt Mix Design (Asphalt Institute)	Monday (March 27, 2017): Conference registration and booth set-up (1 p.m. - 7 p.m.?) AASHTO Executive Council meeting (8 a.m. – noon) AASHTO ATG meeting (1 p.m. – 4 p.m.) AASHTO re:source Customer Council meeting (4 p.m. – 5 p.m.) Evening reception/icebreaker (5:30 p.m. – 7 p.m.)			
2:45-3:00 pm	BREAK						
3:00 - 5:00 pm	Introduction to Measurement uncertainty (cont.)	Internal Audits, Management Review, & Corrective Action (Tracy Barnhart)	Common Errors in Concrete Mix Design 				

- About Us
- AASHTO Accreditation
- Laboratory Assessments
- Proficiency Samples
- Falling Weight Deflectometer
- re:source University
- Specifiers

The gold standard for laboratory accreditation in the construction industry

SEARCH FOR AN ACCREDITED LAB

Laboratory Name

State City

Select a scope...

Select a standard... [Search](#)

[Submit Proficiency Sample Data](#)

[Request Services](#)

[Events](#)

AASHTO ACCREDITATION

Our standard of excellence works for you

"Nobody ever questions us when we submit our accreditations for a project based on procedures, proficiency sampling or lab audits. It gives us a good feeling that every time we do an audit, it will meet the minimum standards that are accepted in the Northeast."

Atlantic Testing Laboratories

Scott McCasland, CWI, Vice President, Quality

The AASHTO Accreditation Program formally recognized the competence of over 1,800 testing laboratories to perform specific tests on construction materials, enhancing customer confidence. [\[more\]](#)



AASHTO re:source Rebranding



AASHTO re:source Overview



AASHTO Accreditation



AASHTO Accreditation Process

Becoming AASHTO

re:source

Overview

Contact Us

Careers

Directions

Events

Standards

Submit Feedback

General FAQs

[Events](#) / 2017 Tech Exchange



Save the Date

Mark your calendars for the 2017 AASHTO re:source Technical Exchange on March 27-29, 2017 in historic Annapolis, Maryland, home of the U.S. Naval Academy! Please continue to check back regularly for updates on program, special events, travel and lodging.

Registration Information

Registration will open in the fall of 2016! If you are not on our email list and would like to be alerted when registration opens, please send an email to khendrickson@aaashto.org.

Overview

The 2017 AASHTO re:source Technical Exchange is a one-of-a-kind event. It is an excellent opportunity for laboratory managers, quality managers, supervisors, and technicians to learn about pertinent industry topics presented by AASHTO re:source staff and other subject matter experts. You will also have a chance to provide input into AASHTO re:source's programs and interact with your peers through a roundtable session. The tentative agenda also includes calibration, quality management system, and technical tracks. Possible session topics include:



50 years of experience

3,000+ PSP participants

22,000+

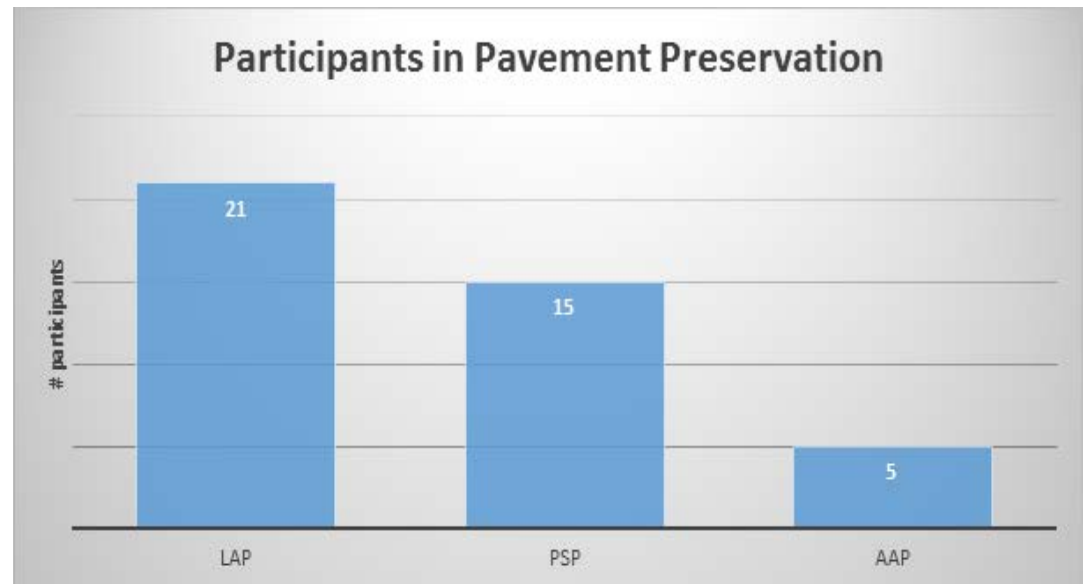


Pavement
Preservation

re:

Pavement Preservation Progress

- Casey Soneira and John Malusky worked closely with the International Slurry Surfacing Association (ISSA) Board of Directors and other key industry contacts in order to make this new scope of accreditation a reality.
- The first assessments for pavement preservation tests were performed in late 2015.
- The tests are the methods for laboratory mix design.
- Eight labs currently accredited by AASHTO, including Vestal Asphalt in New York.



The background image shows a construction site. On the left, there is a large, light-colored concrete structure, possibly a bridge pier or a large wall. To the right, a crane is visible, with its boom extending upwards. The scene is somewhat overcast, and the overall tone is industrial and busy.

Working with PennDOT



re:

We tailored a program for PennDOT.

- For PennDOT's Hands-on Local Acceptance (HOLA) Program: We have been performing assessments at hot mix plants where testing of local acceptance samples will be performed.
- We evaluate the laboratory's conformance to AASHTO and Pennsylvania test methods.
- Following the assessment, the laboratory must submit corrective action to AASHTO re:source for any findings noted in their assessment report.
- After everything has been resolved, we provide a summary report to PennDOT.
- **Conformance to AASHTO R 18 is not required so this does not result in accreditation.**

How can we help you?



The AASHTO Accreditation Program

Together we've built
the best accreditation
program.



re:

Administrative Task Group (ATG)

- James Williams (Chair of ATG) – Mississippi DOT
- Rick Bradbury – Maine DOT (Region 1)
- Merrill Zwanka – South Carolina DOT (Region 2)
- Lisa Zigmund – Ohio DOT (Region 3)
- Scott Andrus – Utah DOT (Region 4)
- Moe Jamshidi – Nebraska DOR (SOM Chair)
- Curt Turgeon – Minnesota DOT (SOM Vice Chair)
- Jack Springer – FHWA (SOM Secretary)



re:

We're beyond observant.

An example of how AAP goes the extra mile for you.

- A laboratory owner submitted certifications for a technician in order to obtain accreditation for ASTM C1077. (ASTM C1077 requires certified personnel.)
- The Quality Analyst recognized the name of that technician from working with another laboratory.
- When asked whether that technician really was employed at his company, the owner gave ambiguous answers.
- The owner eventually admitted that he had intentionally misrepresented the facts in order to attain accreditation for ASTM C1077.



Accred re:port

re:source (formerly AMRL) Log in New customer? [Register here](#) Search

- About Us
- AASHTO Accreditation
- Laboratory Assessments
- Proficiency Samples
- Falling Weight Deflectometer
- re:source University
- Specifiers

The gold standard for laboratory accreditation in the construction industry

SEARCH FOR AN ACCREDITED LAB

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State City

Select a scope...

Select a standard... Search

[Submit Proficiency Sample Data](#) [Request Services](#) [Events](#)

AASHTO ACCREDITATION

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"Nobody ever questions us when we submit our accreditations for a project based on procedures, proficiency sampling or lab audits. It gives us a good feeling that every time we do an audit, it will meet the minimum standards that are accepted in the Northeast."

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Scott McCasland, CWI, Vice President, Quality

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- [AASHTO re:source Rebranding](#)
- [AASHTO re:source Overview](#)
- [AASHTO Accreditation](#)
- [AASHTO Accreditation Process](#)




Accred re:port for Specifiers

re:source (formerly AMRL) New customer? [Register here](#) Menu

Manage the performance of testing labs

"We recognize they're very effective at what they do and they pretty much lead the pack in that regard, so that's why we lean on them."

California Division of the State Architect
Eric France, Construction Supervisor II



- [Overview](#)
- [Specifier Request](#)
- [Specifier Home](#)

[AASHTO re:source](#) / Specifier Overview

AASHTO re:source Specifiers

What is a Specifier?

A Specifier is an entity that requires the materials testing on their projects to be performed by (a) laboratories accredited by the [AASHTO Accreditation Program \(AAP\)](#), (b) laboratories that receive an [on-site assessment](#) by AASHTO re:source, or (c) laboratories that participate in the AASHTO re:source [Proficiency Sample Program \(PSP\)](#).

Specifiers can include departments of transportation, state and local authorities, or quality managers that oversee multiple branch laboratories. Some of AASHTO re:source's current specifiers include the Federal Aviation Administration (FAA), the California Division of the State Architect (DSA), and the United States Army Corps of Engineers (USACE), private testing agencies and various local authorities.

AASHTO re:source Tools for Specifiers

We have developed tools on our website that allow "Specifiers" to easily monitor the performance of the laboratories working on their projects.



50 years of experience

3,000+ PSP participants

00 000 .



Accred re:port Laboratory Management

- [Laboratory Management](#)
- [Laboratory Search](#)
- [View Alerts](#)
- [Alert Preferences](#)
- [Laboratory Overview](#)

Search Laboratories

Use this search box to find and select laboratories that you would like to monitor. **Please keep in mind that private information will not be shared unless the laboratory agrees to release it.**

Laboratory Name

State

Specifier Laboratory Management

This page allows you to select the laboratories that you would like to monitor, and view pending permissions from laboratories that you have selected.

Monitor List

These are laboratories that you currently monitor.
Count: 92

Accura Engineering & Consulting Services, Inc. Atlanta, Georgia USA	<input type="button" value="Remove Public"/> <input type="button" value="Remove Private"/>
Allied Material & Supply Company - Inactive Perry, Georgia USA	<input type="button" value="Remove Public"/> <input type="button" value="Remove Private"/>
AMEC - Inactive Savannah, Georgia USA	<input type="button" value="Remove Public"/> <input type="button" value="Remove Private"/>
Amec Foster Wheeler Environment & Infrastructure Inc. Atlanta, Georgia USA	<input type="button" value="Remove Public"/> <input type="button" value="Remove Private"/>

Your monitor requests

These are laboratories that have not yet accepted your request to monitor them.
Count: 4

Allied Material & Supply Company - Inactive Perry, Georgia USA	<input type="button" value="Requested..."/> <input type="button" value="Remove"/>
Argos - Inactive Atlanta, Georgia USA	<input type="button" value="Requested..."/> <input type="button" value="Remove"/>
CEMEX - Inactive Clinchfield, Georgia USA	<input type="button" value="Requested..."/> <input type="button" value="Remove"/>
NOVA Engineering & Environmental, LLC - Inactive Acworth, Georgia USA	<input type="button" value="Requested..."/> <input type="button" value="Remove"/>

re:

Accred re:port Alerts

[Laboratory Management](#)

[Laboratory Search](#)

[View Alerts](#)

[Alert Preferences](#)

[Laboratory Overview](#)

Alerts

This page allows you to view AASHTO Accreditation alerts about laboratories that you have selected. Alerts will remain on this page for 30 days from the effective date. You can also change your alert preferences, and select the laboratories that you would like to monitor, by clicking the links under Specifier Options in the left column.

[REDACTED] - Marietta, Georgia, USA had the following accreditation changes:

Accreditation Granted For:

Quality Management System: D3740 (Soil), E329 (Soil)

Effective date: **10/12/2016.**

[REDACTED] Georgia, USA had the following accreditation changes:

Accreditation Suspended For:

Entire Accreditation

Effective date: **10/3/2016.**

[REDACTED] Georgia, USA had the following accreditation changes:

Accreditation Granted For:

Concrete: C31 (Cylinders)

Accreditation Withdrawn For:

Concrete: C31, C78

Effective date: **9/30/2016.**

The following laboratory has either received low ratings or did not submit results for **Soil California Bearing Ratio (CBR)** sample report **173/174**. Click on the laboratory name to view its rating sheet.

[REDACTED] Georgia.

Effective date: **9/28/2016.**



re:

Accred re:port Email Alerts

- Sent: Friday, May 11, 2012 2:01 AM
- To: Specifier
- Subject: Specifier Email Alerts for 5/10/2012

- You have received this alert because you are enrolled in the automated email notification system for the AASHTO Accreditation Program. This email provides you with important updates for the AASHTO-accredited laboratories you have elected to monitor through the Specifier functionality (also available to you on the AMRL website, www.amrl.net). If you require more details, please contact AMRL at aap@amrl.net or 240-436-4900.

- [Lab X in USA, had the following accreditation changes:](#)
- **Accreditation Suspended For:**
- Quality Systems: C1077 (Concrete)
- Concrete: C31, C39, C78, C138, C143, C172, C173, C231, C511, C617 (7000 psi and below), C1064, C1231 (7000 psi and below)
- _____
- If you are a specifying agency and no longer wish to receive these emails, please log in to your account on www.amrl.net and adjust your specifier preferences.

Updates to AASHTO R 18

re:

Management Reviews

What is a management review?

The laboratory's top management shall review the quality manual and ensure it is continuing adequacy and effectiveness in satisfying the relevant requirements, including the requirements of R 18.

Interval requirement:

12 months



re:

Management Reviews

The following must be included in the review:

- Results of Internal and external audits
- Proficiency sample performance
- Status of corrective actions
- Personnel staffing changes
- Training needs
- QMS policies and procedure updates
- Address customer complaints



re:

Customer Complaints

- ...shall be addressed.
- Prior to this, there just had to be a policy, but it was not specific about actually addressing them.



Turn that frown upside-down!

re:

Section 6.2.1.3 – General Equipment Procedures

Laboratory Move Records

After a laboratory move, the laboratory must calibrate, standardize, and check equipment and measurements standards that may have been affected by the move.

- Balances
- Compression Machines
- Mechanical Compaction Equipment
- Sensitive Measurement Equipment





re:

Section 6.2.1.5 – General Equipment Procedures Accreditation Requirements

- All measurement standards are to be calibrated by an ISO/IEC 17025 - accredited calibration provider.
- Measurement uncertainty for reference equipment and testing equipment (if required by the standard) is required on all calibration records.
- Accreditation information for the calibration agency must be included in the calibration record.

re:

New Calibration Requirements

Table A1.2—Aggregate Testing Equipment

Equipment	Test Method (AASHTO/ASTM)	Requirement	Max. Interval (months)
Unit Weight Measures	T 19M/T 19/ C29/C29M	Standardize	12
Sulfate Ovens	T 104/C88	Check Rate of Evaporation	12
Sulfate Soundness Sample Containers	T 104/C88	Check Physical Condition	12
L.A. Machines	T 96/C131	Check RPM and Critical Dimensions	24
Steel Balls	T 96/C131	Check Individual Weight and Charge Weight	24
Conical Molds, Tampers	T 84/C128	Check Critical Dimensions	24
Specific Gravity Flasks	T 84/C128	Standardize Volume	12
Uncompacted Void Measures	T 304/C1252	Standardize Volume	12



New Calibration Requirements

Table A1.2—Aggregate Testing Equipment

Equipment	Test Method (AASHTO/ASTM)	Requirement	Max. Interval (months)
Unit Weight Measures	T 19M/T 19/ C29/C29M	Standardize	12
Sulfate Ovens	T 104/C88	Check Rate of Evaporation	12
Sulfate Soundness Sample Containers	T 104/C88	Check Physical Condition	12
L.A. Machines	T 96/C131	Check RPM and Critical Dimensions	24
Steel Balls	T 96/C131	Check Individual Weight and Charge Weight	24
Conical Molds, Tampers	T 84/C128	Check Critical Dimensions	24
Specific Gravity Flasks	T 84/C128	Standardize Volume	12
Uncompacted Void Measures	T 304/C1252	Standardize Volume	12



New Calibration Requirements

Table A1.4—Asphalt Mixtures Testing Equipment

Equipment	Test Method (AASHTO/ASTM)	Requirement	Max. Interval (months)
Mechanical Compactors	R 68	Standardize	36
CA Kneading Compactors	T 247/D1561	Standardize	24
Follower, Calibration Cylinders	T 246, T 247/ D1560, D1561	Check Critical Dimensions	12
Manual Compaction Hammers, Breaking Heads	T 245/D6926, D6927	Check Critical Dimensions, Check Mass of Hammer	12
Plungers	T 167/D1074	Check Critical Dimensions	12
Gyratory Compactors	T 312/D6925	Standardize Ram Pressure, Frequency of Gyration, LVDT	12
Gyratory Compactors	T 312	Standardize Internal Angle of Gyration	12
Gyratory Compactors	D6925	Standardize External or Internal Angle of Gyration	12
Ram Faces, Base Plate Faces	T 312/D7115	Check Critical Dimensions	12
Ignition Oven Internal Balances	T 308/D6307	Standardize	12
Specific Gravity Flasks, Pycnometers	T 209/D2041	Standardize	12



New Calibration Requirements

Table A1.5—Soil Testing Equipment

Equipment	Test Method (AASHTO/ASTM)	Requirement	Max. Interval (months)
Mechanical Compactors	T 99, T 180/D698, D1557	Standardize	12
CA Kneading Compactors	T 190/D2844	Standardize	24
Manual Hammers	T 99, T 180/D698, D1557, D4829	Check Mass and Critical Dimensions	12
Liquid Limit Devices	T 89/D4318	Check Wear and Critical Dimensions	12
Grooving Tools	T 89/D4318	Check Critical Dimensions	12
Hydrometers	T 88/D422	Check Critical Dimensions	24
Straightedges	T 99, T 134, T 135, T 136, T 180/D558, D559, D560, D698, D1557	Check Planeness of Edge	12
Weighted Foot Assemblies	T 176/D2419	Check Mass	12
CBR Annular and Slotted Weights	T 193/D1883	Check Mass	12
CBR Penetration Pistons	T 193/D1883	Check Diameter and Length	12
Standard Metal Specimens	T 190/D2844	Check Outside Diameter	12
Metal Followers	T 190/D2844	Check Diameter	12
One-Dimensional Consolidation Devices	T 216/D2435, T 236/D3080, D4546	Standardize Deflection	12
Standard Weights	T 216/D 2435, T 236/D3080, D4546	Standardize	12
Vertical Loads	D4829	Standardize	12
Specific Gravity Flasks	T 100/D854	Standardize	12



New Calibration Requirements

Table A1.6—Portland Cement Concrete Testing Equipment

Equipment	Test Method (AASHTO/ASTM)	Requirement	Max. Interval (months)
Unit Weight Measures	T 121M/T 121/ C138/C138M	Standardize	12
Air Meters (pressure type)	T 152/ C231/C231M	Standardize	3 ^a
Air Meters (volumetric type)	T 196 C173/C173M	Standardize	12 ^a
Capping Materials	T 231/C617	Check Strength	3
Retainers (Retaining Rings)	C1231	Check Planeness	12
Slump Cones	T 119M/T 119/ C143/C143M	Check Critical Dimensions	12
Metallic Reusable Molds	T 23/C31	Check Critical Dimensions	12
Single Use Molds	T 23/C31	Check Dimensions of Each Shipment	—
Recording Thermometers	M 201/C511	Standardize	6
Bearing Blocks	T 22/C39	Check Planeness	12

^a The individual test methods specify conditions that require restandardization, such as changes in elevation and rough handling.

re:

New Calibration Requirements

Table A1.8—Masonry Testing Equipment

Equipment	Test Method (AASHTO/ASTM)	Requirement	Max. Interval (months)
Micrometer	C67	Standardize	12
Air Content Measures	T 137/C185	Standardize ^a	30
Flow Tables	M 152M/M 152/ C230/C230M	Standardize Flow Results	30
Water-Retention Apparatus	C91	Check Critical Dimensions	30
Water Retention	C91	Standardize Vacuum	12
Cube Molds and Tampers	T 106M/T 106/ C109/C109M	Check Physical Condition and Critical Dimensions	30
Bearing Blocks	T 106/C109, C780	Check Planeness	12
Flexural Bond Apparatus	C1072	Standardize	12
Mixers	T 162/C305	Check Paddle to Bowl Clearance	24
Recording Thermometer(s)	M 201/C511	Standardize	6



New Equipment Maintenance Requirements

Table A1.9—Equipment Maintenance

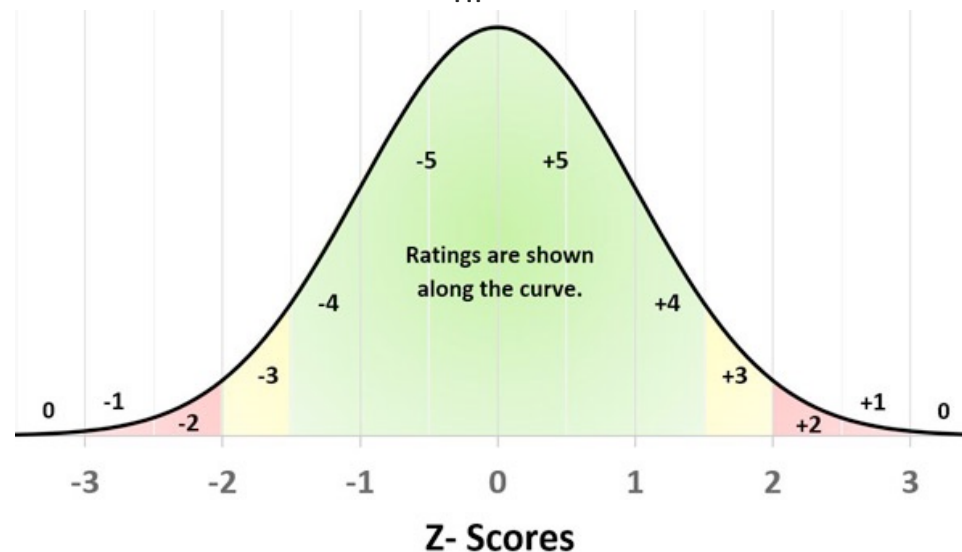
Equipment	Test Method (AASHTO/ASTM)	Max. Interval (months)
Rolling Thin-Film Ovens	T 240/D2872	12
Mechanical Marshall Compactors	T 245	12
California Kneading Compactors	T 190, T 247/D1561, D2844	12
Gyratory Compactors	T 312/D6925	12
Mechanical Compactors	T 99, T 180/D698, D1557	12
Compression Machines	Where Applicable	12
Mechanical Shakers	Where Applicable	12
Curing Tanks/Curing Facilities	M 201/C511	12

**Evaluation of Laboratory Performance in MSCR
Testing (AASHTO T 350 / ASTM D7405) Using
AASHTO re:source Proficiency Sample Data**

re:

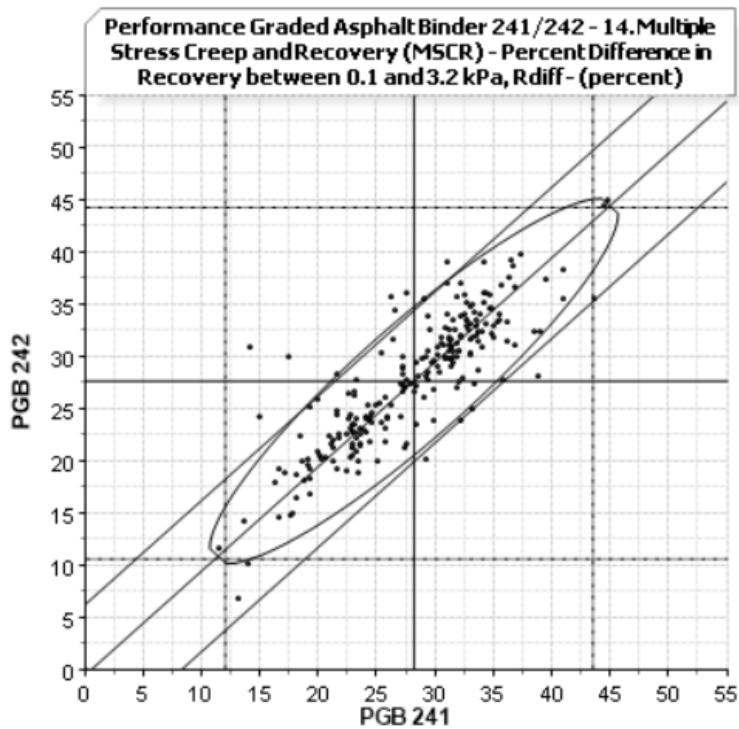
The Issue

- Laboratories are receiving satisfactory ratings (3,4,5s) on percent recovery and J_{nr} values at 0.1 and 3.2 kPa, but receiving low ratings (0, $\pm 1s$, $\pm 2s$) on the percent differences (recovery and J_{nr}).



re:

Evaluation



- Updated PSP Data sheet for PGB rounds to provide DSR Manufacturer and Software information.
 - Discussed at SOM in Pittsburgh.
- One round of PGB 241/242 (Fall 2015) data has been collected and the data has been analyzed.



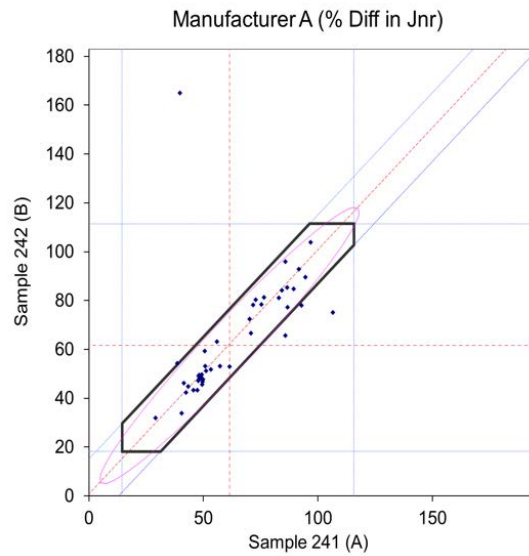
re:

Looking for Bias or Something

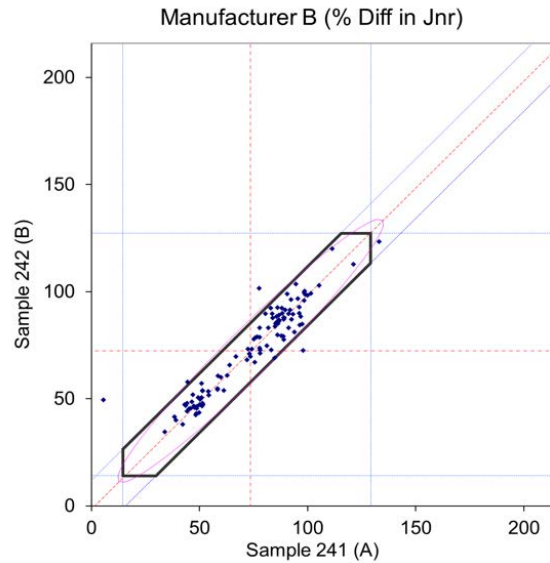
- Regardless of the manufacturer, all data appears to be normally distributed.
 - Individually or grouped together
 - Evaluation of normal probability show r^2 values > 0.9 .
 - Indication that manufacturer bias is not present (no skewness)
- “Welch’s t” test was conducted to check for statistical significance (difference) between manufacturers (“Big Three”).
 - Statistics indicate there is a difference between some of the manufacturers for some of the test parameters.



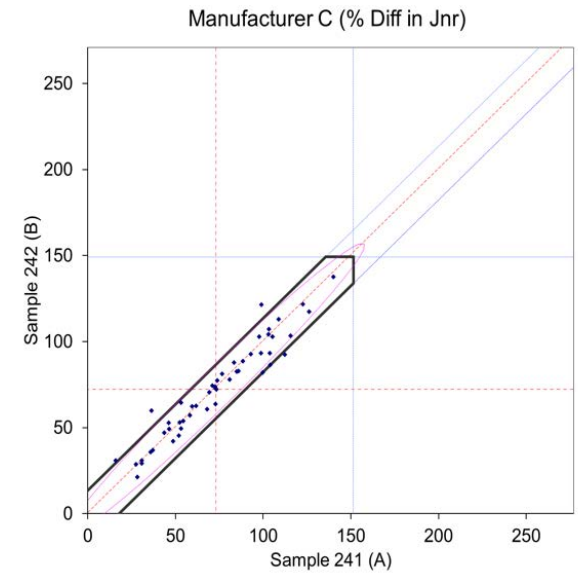
Statistical Significance



Average Results	
Odd	Even
61.41	61.62



Average Results	
Odd	Even
73.6	72.41



Average Results	
Odd	Even
72.99	72.31



re:

Statistically Significant Differences

- Out of the six reporting parameters statistical differences exist between manufacturers (A, B, & C) for these four test parameters:
 - % Recovery at 0.1 kPa (A – B)
 - % Difference in Recovery (A – B)
 - J_{nr} at 0.1 kPa (A – B)
 - % Difference in J_{nr} (A – B – C)



DSR Software Versions

- Out of 240 participants, over 40 different software “versions” were reported.

DSR/MSCR Software Versions ???			
1.00	R6.50.5.7	RheoPlusTP70V6.56	MSCR+
1.15	5.7.0	r space 1.7	PheoCompass pro
1.60	5.7.13	r Space 1.61.1968	REHOPLUS 132
1.61	6.51.0.3	Star	Bohlin R6.51.0.3
1.70	9.00	TRIOS	Advantage V 5.7.0
1.72	11.00	Bohlin Software: CVO ADS 100	Rheology Advantage 5.8.2
3.40	Multi 6 V3.61 Recovery 9	DHR Navigator	Rheology Advantage Navigator v.5.7.1
4.00	Rheopave	350-14-ULv1.61-3.0 03.15.15	Malvern 2-27-2008
5.00	Rheoplus	FAST TRACK	Rehoplus/32 Multi3 V3.62
7.00	Rheoplus V 9	Fasttrack version 3.3.1.4668	VII
5.5.20	RHEOPLUS/32 V3.60	MSCR(V2)	Bohlin software v06.50



MSCR Discussion

Contacted DSR manufacturers to cross reference the reported versions.

- Communication indicates that laboratories are not certain on what type of software they have.
- DSR manufacturers are reaching out to customers to ensure that software is being updated to the most current versions.

re:

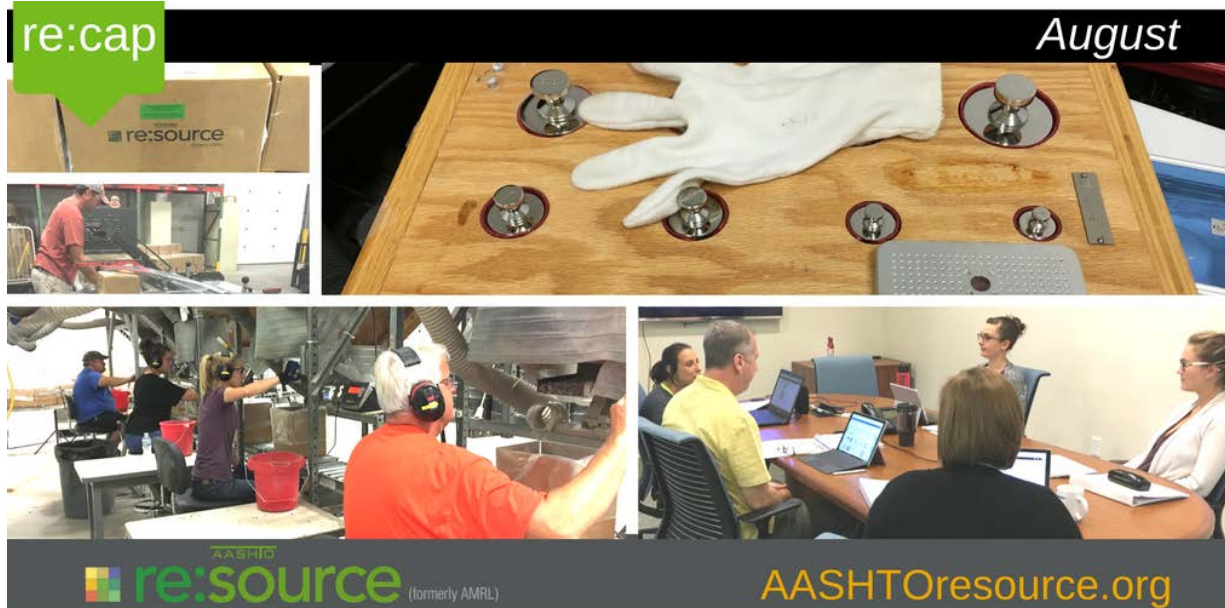
Looking Ahead

- We will continue to solicit all reporting parameters in the MSCR.
- The AASHTO Accreditation Program will not evaluate % difference in recovery and % difference in J_{nr} for accreditation purposes.
 - Still evaluate data for % recovery and J_{nr} values at 0.1 and 3.2 kPa, respectively.
- We will continue to evaluate the data after each proficiency sample round and look for issues (check model and software version).
- Feedback from you?
 - John Malusky (jmalusky@ashtoresource.org)

Closing

re:

Keep up with us on Twitter. @aashtoresource



AASHTO re:source @aashtoresource · Aug 31

Our August photo re:cap shows training, packaging coarse aggregate samples, and verifying our kit standard masses.



- Proficiency sample production
- Assessor training

SAVE
THE
DATE



2017 AASHTO re:source Technical Exchange



March 27 through 29, 2017
The Westin Annapolis, Annapolis, MD
Registration Opens Fall 2016

AMERICAN ASSOCIATION
OF STATE HIGHWAY AND
TRANSPORTATION OFFICIALS
AASHTO



re:

Questions?

Robert Lutz

- 240-436-4801
- rlutz@ashtoresource.org

www.ashtoresource.org