Bob Cullen: “Welcome the Transportation Librarians Roundtable (TLR) for Thursday, July 12, 2018: “Introducing AASHTO re:source”.

Kim will give an overview of the services offered by AASHTO re:source and focus on various types of information (their newsletter, other documents, data) that are available for librarians and others via their recently revamped website (http://www.aashtoresource.org/). This promises to be a helpful non-technical presentation on technical sources that many in our community will find readily applicable for themselves and those whom they serve.

Our speaker today is Kim Swanson. She is the Communications Manager for the AASHTO: resource program (previously known as AMRL), which is based in Frederick, Maryland. AASHTO: resource is a part of AASHTO’s Engineering and Technical Services division. The program provides assessments and other types of information for construction materials testing laboratories.

Kim Swanson has been the Communications Manager at AASHTO re:source for the last 5 years. She started her career with AASHTO re:source as an Administrative Assistant, where she learned the ins and out of the organization and its programs.
As Communications Manager, Kim works to enhance AASHTO re:source’s image and position within the construction materials industry and facilitates internal and external communication. She manages the organization’s marketing efforts and social media presence. She also is project manager for the AASHTO re:source In Focus newsletter.

Kim has a bachelor’s degree from Central Michigan University in Broadcasting and Cinematic Arts. Prior to working with AASHTO, Kim was a newscast director for a local television station. “
Kim Swanson:
“Hello and thanks for joining me today. I’m Kim Swanson; I have been a part of the AASHTO team for eight years and have been AASHTO re:source’s Communications Manager for just over 5 years.”
Introducing AASHTO re:source

- Who we are, who we serve, and what we do
- Summary programs
- Accessing public data
- AASHTO re:University
- Technical Exchange

Today I’m going to tell you a little more about AASHTO re:source and the types of information we have available to the public. What I discuss today is available to anyone without needing to be a registered customer. Customers do have access to more individualized information and data that we legally are unable provide to everyone.
You are most likely not familiar with AASHTO re:source. We are one of the many Technical Service programs of AASHTO. In 2016, we changed our name from AMRL, or the AASHTO Materials Reference Laboratory. Our former name did lead to a lot of confusion, where people (even within AASHTO) thought we were a laboratory. We have a laboratory, but we are not a laboratory. Oddly, we’ve also had people think the “L” in AMRL stood for library. I’m not really sure where that one came from.
Some people can also get confused because our staff is actively involved in the AASHTO and ASTM standards development process. We work closely with the standards, but we can’t help you with purchasing or accessing the standards. If you need assistance with that, you should contact the publication departments directly.
Our customers

Test the materials used in the construction and preservation of roads, bridges, and vertical infrastructure.

Our primary customers test the materials used in the construction and preservation of roads, bridges, and vertical infrastructure.
We have been evaluating construction materials testing laboratories for over 50 years and have been accrediting labs for decades.

Participants in our programs include:
- state DOT’s and other government laboratories,
- universities,
- research facilities,
- material producers, and
- commercial testing laboratories.
We were established in 1965 and have been working to encourage quality and conformity in the construction materials testing industry.

The scope of our services were pretty limited in the beginning, but we now offer a full range of services that primarily include AASHTO Accreditation, laboratory assessment, and proficiency samples.
The AASHTO Accreditation Program is our main program.

Many project owners and DOTs require laboratories to maintain AASHTO Accreditation in order work on their projects. Accreditation is a good way for a laboratory to show their commitment to quality, and for project owners to have confidence in a laboratory’s testing results.
Findings from our Laboratory Assessment Program and our Proficiency Sample Program feed directly into the AASHTO Accreditation program. The programs of the Cement and Concrete Reference Laboratory, or CCRL, also feed into AASHTO Accreditation.
AASHTO Accredits testing laboratories for over 650 AASHTO, ASTM, state, and industry standards in the following fields of testing:

- aggregate
- asphalt binder
- asphalt mixtures
- concrete
- emulsified asphalt
- hydraulic cement
- iron and steel
- masonry
- pavement preservation
- pozzolan
- slag cement
- soil
- sprayed fire-resistive materials (SFRM)

AASHTO accredits testing laboratories for over 650 standards in 13 fields of testing. As you can see, there is a wide range of materials covered.
Our interactive AASHTO Accreditation Directory allows the project owners and the public to search for an accredited laboratory by name, location, or standard.

We currently have over 1,900 accredited laboratories throughout North America, with one in Europe and two in Guam.

This directory allows anyone to see the complete and current accreditation status of any AASHTO Accredited facility. It is easily accessed from the homepage of our website.
The Laboratory Assessment Program sends assessors into laboratories around the world to audit and evaluate them.

Our staff performs a thorough review of their Quality Management System and other records, and actually watches technicians as they do testing.

An assessment report will show the areas where the lab is not in conformance to the standards.

To gain AASHTO Accreditation, a laboratory will need to go through a corrective action process to address the nonconformities that were found.

All of the findings and information within a laboratory’s on-site assessment report is private information. A laboratory may choose to share this information with project owners, but we are not able to provide this type of information to the public.
The assessment program covers 7 types of construction materials. This is a more limited scope than what’s included in the AASHTO Accreditation Program. The materials not listed here, are covered by our counterparts at CCRL.
Through the Proficiency Sample Program, we basically send boxes of rocks, and other materials, to testing labs around the world. The labs test the material and send us their results for analysis.

Our Proficiency Sample Program is the largest of its kind. Last year we became an ISO/IEC 17043 accredited proficiency testing provider. With this recognition we are able to grow our program even more internationally.
Our staff creates and designs the samples, then prepares and packages raw material in-house.
We then ship the samples to laboratories who test it according the specific standards and instructions.
After laboratories submit their data, we analyze it and report back their results.
Each laboratory receives specialized reports, showing how their results compare to their peers.
We are able to make some of the proficiency sample data information available to the public. People may use this data for:

- research,
- precision estimates, or
- in various other ways when writing or proposing changes to testing standards.

I’m going to briefly go over how to access this information from our website. Fair warning, the details of this data go way over my head. So if you, or anyone else, want help interpreting the data on our site, the best person to contact is Program Manager, John Malusky. He lives and breathes this stuff and would be happy to help.

For help interpreting data, contact
John Malusky, Proficiency Sample Program Manager
jmalusky@aashtoresource.org
The types of data we have available to the public are the Sample Round Analysis and the Compilation of Statistics. This information is available for each of the samples types covered in by the program. Honestly, not many people go looking for this information, so bare with me as I walk you though how to access it.

The first step is to go to our website, AASHTOresource.org, and click on the Proficiency Samples link in the upper left side of the homepage.
You can then access the Reports link in the left column of the page.
From the Reports page, use the links for either the Sample Round Analysis or the Compilation of Statistics. We’ll first take a look at the Sample Round Analysis.
Sample Round Analysis

AASHTOresource.org/psp/sample-round-analysis

You will need to select the sample type and round you wish to view from the dropdown menus.
This is an example of a Coarse Aggregate analysis. It shows information for all participating labs. The second column is the test property, and the columns to the right has results and information for that specific test.
You can click the icon in the far left column to see the Youden diagram for a particular test property.
The link to access the Compilation of Statistics can be found back on the Reports page.
Again, you will want to select the sample type from a dropdown menu.
Compilation of Statistics

<table>
<thead>
<tr>
<th>Test</th>
</tr>
</thead>
<tbody>
<tr>
<td>Viscosity Graded Asphalt Cement</td>
</tr>
<tr>
<td>Penetration of Bituminous Materials</td>
</tr>
<tr>
<td>Penetration of Original Sample at 25 °C, 100 g, 5 s</td>
</tr>
<tr>
<td>Penetration of Bituminous Materials</td>
</tr>
<tr>
<td>Penetration of Original Sample at 4 °C, 200 g, 60 s</td>
</tr>
<tr>
<td>Flash Point by Cleveland Open Cup</td>
</tr>
<tr>
<td>Corrected Flash Point</td>
</tr>
<tr>
<td>Specific Gravity of Asphalt Cement</td>
</tr>
<tr>
<td>Specific Gravity (Relative Density) at 25/25 °C</td>
</tr>
<tr>
<td>Kinematic Viscosity of Asphalts</td>
</tr>
<tr>
<td>Kinematic Viscosity of Original Asphalt at 135 °C</td>
</tr>
<tr>
<td>Viscosity by Vacuum Capillary</td>
</tr>
<tr>
<td>Viscosity of Original Asphalt at 60 °C</td>
</tr>
<tr>
<td>Rolling Thin-Film Oven Test</td>
</tr>
<tr>
<td>Change in Mass: use a negative number to report a loss</td>
</tr>
<tr>
<td>Penetration of RTFO Residue</td>
</tr>
<tr>
<td>Penetration of RTFO Residue at 25 °C, 100 g, 5 s</td>
</tr>
<tr>
<td>Penetration of RTFO Residue</td>
</tr>
<tr>
<td>Penetration of RTFO Residue at 4 °C, 200 g, 60 s</td>
</tr>
<tr>
<td>Viscosity by Vacuum Capillary RTFO</td>
</tr>
</tbody>
</table>

Clicking the test name, will show you all of the stats for that specific test.
You can get even further into the weeds, with all of these statistics...honestly this many numbers on a screen is overwhelming and I personally can’t tell you what all this information actually means. But, I can tell you, if you click on the sample numbers in the left column, it will take you to that particular Sample Around Analysis.

### Compilation of Statistics

**Viscosity Graded Asphalt Cement**

<table>
<thead>
<tr>
<th>Sample No</th>
<th>No. Labs</th>
<th>1st Sample</th>
<th>2nd Sample</th>
<th>1st SMPL</th>
<th>2nd SMPL</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>MULTILABORATORY PRECISION</td>
<td>MULTILABORATORY PRECISION</td>
<td>SINGLE OPERATOR PRECISION</td>
<td></td>
</tr>
<tr>
<td>251/252</td>
<td>151</td>
<td>Avg.</td>
<td>IS</td>
<td>D2S</td>
<td>15%</td>
</tr>
<tr>
<td></td>
<td></td>
<td>83.9</td>
<td>3.1</td>
<td>8.8</td>
<td>3.69</td>
</tr>
<tr>
<td>249/250</td>
<td>168</td>
<td>58.0</td>
<td>3.0</td>
<td>8.4</td>
<td>5.14</td>
</tr>
<tr>
<td>247/248</td>
<td>146</td>
<td>118.2</td>
<td>4.0</td>
<td>11.4</td>
<td>3.41</td>
</tr>
<tr>
<td>245/246</td>
<td>148</td>
<td>67.0</td>
<td>3.2</td>
<td>9.0</td>
<td>4.74</td>
</tr>
<tr>
<td>243/244</td>
<td>143</td>
<td>52.5</td>
<td>2.3</td>
<td>6.5</td>
<td>4.36</td>
</tr>
<tr>
<td>241/242</td>
<td>133</td>
<td>80.8</td>
<td>3.0</td>
<td>8.6</td>
<td>3.77</td>
</tr>
<tr>
<td>239/240</td>
<td>142</td>
<td>80.4</td>
<td>3.1</td>
<td>8.8</td>
<td>3.67</td>
</tr>
<tr>
<td>237/238</td>
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<td>8.0</td>
<td>5.22</td>
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<tr>
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<td>15.5</td>
<td>4.58</td>
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<tr>
<td>233/234</td>
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<td>63.8</td>
<td>3.3</td>
<td>9.4</td>
<td>5.18</td>
</tr>
<tr>
<td>231/232</td>
<td>141</td>
<td>55.2</td>
<td>3.2</td>
<td>9.0</td>
<td>5.74</td>
</tr>
<tr>
<td>229/230</td>
<td>137</td>
<td>55.5</td>
<td>2.4</td>
<td>6.8</td>
<td>4.35</td>
</tr>
</tbody>
</table>
Bulk Data and Interpretation

John Malusky, Proficiency Sample Program Manager
jmalusky@aashtoresource.org
240.436.4825

Our website only allows the public to view this data, if you want to export it you will need to contact the program manager. Again, John is happy to provide you with the data and help you interpret it, if needed.
Now, moving away from the scary numbers...

The AASHTO re:University section of website is where we house a verity of educational resources for our customers and the public. A lot of my responsibilities focus on this section of the website.
The re:University is home to our document library, newsletter archive, video gallery, and more.

You can access this section of the website, from the upper left side of our homepage.
This is a quick-access view of the different resources accessible through the re:University. On this page, you can click on the icon, or associated text link, to see the complete section.
Our document library is geared to current and potential customers, and the documents they need to participate in our programs. Currently we have about 60 documents in the library that are broken into 4 categories, policy, forms, assessment prep, and informational. You can see a glimpse of the Policy section here. We’ve recently begun breaking the lengthy AASHTO Accreditation Procedures Manual, up into smaller, more digestible documents. So, look for this section to continue to grow.
Our In Focus Newsletter has over 100 articles in its archives. Topics range from programmatic insights and core concepts of testing, to detailed explanations and guidance on how to perform an aspect of a specific standard.
The default newsletter archive view is by date, but you can also view the list by topic.
This view helps you find articles related to a topic more easily. You can see we have a wide range of topics covered. You can also use the search feature on the website to quickly look for articles and documents containing your key words.
In the articles themselves, we try to include images and graphics whenever possible.
Most articles also have a printer friendly version that allows customers to more easily share the content within their laboratories.
Another good resource in our re:University is the Video Gallery. We frequently add videos to our YouTube channel and this gallery. Topics range from promotional and informational to specific guides and tutorials. The “Becoming AASHTO re:source” video at the bottom of the list was a fun announcement we did when we changed our name. But we also have videos that show the complete preparation and packaging process of a couple proficiency samples, as well as a guide for on how to best find an accredited calibration agency. We do add videos regularly so make sure to check back periodically.
A good way to stay connected to us is through social media. We are most active on Twitter, and routinely tweet links to the documents and articles we have in the re:University. If you want to subscribe to the In Focus newsletter, send an email to subscribe@aashtoresource.org to be added to the list.
The final thing I’m going to briefly touch on is the AASHTO re:source Technical Exchange. This is our in-person meeting, conference, and workshop.
The event is a great place 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. Attendees have a chance to provide input into our programs and interact with their peers in workshop settings. At this year’s event, we had over 200 attendees from both DOTs and private companies. Attendees do not need to be registered customers of AASHTO re:source to attend.

We currently don’t provide event materials or presentations after the event. But attendees are able to walk away with workbooks, handouts, and other resources to share with their organization.

You can search the Twitter hashtag “resourceTechEx” to get a feel for the event. You can also go the Events page on our website for more details and to see past programs.

We will be announcing the date and location of next year’s event in the next few weeks. I can say, it will be held in the Southeast region of the US.
Thank you for taking time out of your day to learn more about AASHTO re:source. We’ll be taking some of your questions next, but here’s my contact information. Feel free to reach out to me directly if you need anything, or want to know more about AASHTO re:source.
Questions and Discussion
Bob Cullen:
Please join us August 9, 2018, at 2:00 pm Eastern, for our annual “TLR Open Discussion”