Improving HMA Committee, Virtual – April 2, 2026
Meeting Agenda

Present	Name	Company	Present	Name	Company	Present	Name	Company
X	Anderson, Taj	Poe	X	Durrani, Akmal	WSDOT	X	Pederson, Chris	CTL
X	Anderson, Cooper	Am. Rock		~~Fishel, Greg~~	~~Miles~~	X	Pedroza, Jared	CalPortland
X	Beier, Spencer	WSDOT	X	Gent, Dave	WAPA		Schofield, Jake	CWA
X	Bender, Riley	WSDOT		Habbouche, Jhony	Asphalt Inst.	X	Schofield, Kim	WAPA
	Benson, Ed	Interstate C&A	X	Hill, Kentin	Granite	X	Schultz, Brett	Miles
X	Carlie, Karen	WSDOT	X	Huang, Shin-Che	FHWA	X	Swearingen, Shawn	Inland
X	Chapman, Josh	CWA	X	Johnson, Torrey	Tucci & Sons		~~Terrill, Keith~~	~~Road Science~~
X	Christensen, Chris	AAR Testing		Kull, Spencer	CalPortland	X	Waligorski, Kevin	WSDOT
	Clayton, E. J.	Granite	X	McLaughlin Sean	WSDOT		~~Webster, Garrett~~	~~WSDOT~~
X	Crouse, Jeff	Lakeside		~~Methvin, Dave~~	~~Central Pre-Mix~~	X	Wilbanks, Sean	CWA
X	Davis, Steve	WSDOT	X	Nelson, Laura	Lakeside	X	Williams, Chris	ICON

OLD BUSINESS Roll call/Introductions: New SW Region Materials Engineer is Michael Chen who came to WSDOT from Western Federal Lands. Other attendees included from WSDOT Materials Kristi Olsen, Jason Zimmer, Kyler Carlson, WSDOT Research/Pavement Design Jay Jeong, WSDOT Training Jeff Gubbe, Matt Christy, and from AAR Testing Robin Radach.

14-16 Concerns with SAM

- October 31, 2019 – Dave Gent,
  - October Construction Manual update: Dyer
    - Prepave meeting – discuss process of notifying mixture and compaction results
    - Prepave meeting – timely results needed to keep track of CPF
    - Inspector roles and responsibilities – OK to provide unofficial results at time of testing
  - Data on timeliness of data entry: Kurt Williams
- June 9, 2020 - The lab has pulled data from SAM regarding the time to post test data in SAM and has shared the data with the regions. In general the turnaround times are good for compaction and mix. Mineral Aggregate tests tend to lag behind. Contractors should contact the Project Office if this issue continues.
- November 5, 2020: We did have instances of untimely SAM data entry this season primarily tracked to one area. While this doesn't appear to be a systemic issue it does warrant continued effort. WSDOT is proposing pull SAM data entry reports annually and submit to region management.
  - Granite pointed out some project hey had issues with Timely SAM Data entry, Timely Challenges, Timely Min Agg data entry, and accuracy of Challenges.
    - Requesting time limit for Min Agg, and Min Agg samples run per mix design and not combined together (is this a new topic?).
  - Dave Schofield noted need to check accuracy of data entry and calculations and communication.
- April 29, 2021 – Kurt Williams pulled the SAM entry data and is being reported to the region construction engineers. Continues to be a focus and was discussed at the WAPA Joint training and Construction Engineer meetings. COVID telework certainly didn't help the issue, will continue to monitor. Contractors brought up question about testers double checking data prior to entering into the system. Always a best practice to double check not only data entry, but also that SAM is using the correct spec version.
- October 28, 2021 – This is an ongoing issue and will continue to be with staffing shortages and turnover. WSDOT will continue to pull SAM data entry data annually and provide to the regions and timely and accurate data entry will continue to be reinforced during trainings. Inconsistencies with compaction sublot sizes was pointed out. Should we consider adding language allowing irregular areas

(intersections, turn lanes, etc.) not completed during the main paving operation to be broken out into a separate lot with varying sublot sizes?

- April 28, 2022 – SAM data discussed at WAPA/WSDOT Joint Training held 3/3/2022. Team brought up looking at adding a maximum timeframe for SAM Data? (example - can't get below 1.0 if not entered into SAM within 7 days?) including min. agg. Also mentioned to CN manual language emphasizing timely and accurate data entry. (This is already covered in the CM chapter 5-04.1, 5-04.2, 5-04.3(9)B3, and 5-04.3(10)C, reference note from 10/31/19). Original test data on retests? The original test data is accessible if the contractor requests.
- November 3, 2022 – Accurate and timely data continues to be problematic on smaller paving projects where paving may be done before getting data and jobs with GEC or consultant testers. An example of a project where resistance to sharing test data was noted. Sharing unofficial test results is addressed in the Construction Manual GEN 5-04.2 Inspector Roles and Responsibilities.
- April 13, 2023 – This topic was emphasized at the WAPA/WSDOT joint training and at 2 WSDOT Documentation trainings with 200 plus attendees.
- October 19, 2023: This is an ongoing internal issue. Continues to be problematic particularly with GEC's and Design Build. Steve noted WSDOT looking at separate training or inclusion into current WSDOT training for GEC's on material documentation including SAM data. WAPA volunteered to help.
- March 28, 2024: Some discussion in the Joint Training first of March. Covered in the internal Materials Quality Assurance Training held 3/20/24. Update on external training? Idea to expand certification to not only gauge operation and test procedure, but also review specification, construction manual, SAM/MATS
- October 31, 2024:
- March 27, 2025: SAM data discussed at the WAPA/WSDOT Joint training the week of March 10th, and also a topic in the WSDOT 2025 Materials Quality Assurance Training held March 19th and involving over 440 WSDOT employees, also on the agenda for the Construction Academy April 14-16.
- October 9, 2025: Working on putting "guardrails" into SAM so that outlier test data is flagged when entered into SAM as an indicator that there is an acceptance limit concern with the data. Look into automatic notifications from SAM when new test data entered.
- April 2, 2026: Guardrails have been programmed into SAM to flag the person entering data when the data is outside normal expected ranges. An email will be generated and sent to the PE and the RME. Also, SAM has been updated to send out an email to the contractor each day at midnight if any new data was entered into SAM that day.

21-06 Indirect Tensile Strength Requirement – This item has morphed into IDEAL-CT Implementation

- October 28, 2021 – Request by Kentin to eliminate IDT until IdealCT implemented. Has there been any failures from IDT? Steve Davis noted the IDT is a test run that is counter to the Hamburg to ensure the mix is not too stiff. Verification compared back to the design. Need to keep this test. A question was raised about increasing the spec when different binder grade mixes are tested.
- April 28, 2022 – Steve noted IDT test will remain in place while research is being performed by WSU to determine appropriate limits for IDEAL CT. Update aging process based on results, expected in about a year. For IDT Logan noted need different IDT number depending on binder grade.
- November 3, 2022 – Update on the WSU study which is another year out from completion. An IdealCT spec will not be ready for at least a couple of years.
- April 13, 2023: Steve Davis noted cores just sent over to WSU yesterday. WSU's work is planned to be complete end of June with paper to follow. May see spec update about 1.5 years later.

- October 19, 2023: Steve to give update. Report coming out soon, how do we take the information and use in a way that works for our setup? Looking at putting together a **subgroup** in January '24. Logan has some aging data on IDEAL CT and will send over. Kim to follow up with Steve on the subgroup.
- March 28, 2024: This was discussed in the Mix Design Subcommittee. Steve to give an update on the WSU study. WSDOT materials starting to run some IDEAL-CT testing on MD Samples to start comparing data.
- October 31, 2024: Steve Davis to update progress. Running parallel testing, have completed 30 to date with another 20 in the works. Working on settling on a protocol and getting the methodology streamlined and worked out to achieve more consistent repeatability.
- March 27, 2025: Update from Sean on parallel testing. Using AASHTO R 121 for conditioning mixture, 6 hrs. at 135^{o} C. Collecting and analyzing quality of data and reviewing national data. Working with Pavement Management to correlate testing data with field performance for long term investigation. Currently not getting repeatable results but making progress. Kim noted she is aware of a spreadsheet being put together that discusses variabilities that affect test results, will share when ready. Anyone else have the equipment to do this testing? Would be good to compare notes. Both Chris Pederson and Kentin Hill noted they have the equipment and are running tests. Riley Bender offered to help with data analysis.
- October 9, 2025: Update from the Lab. Sean McLaughlin is a member of the NAPA BMD Implementation Working Group. WSDOT continues performing parallel testing and narrowing in on repeatability which is an issue nationwide. NCAT putting together some guidelines. Chris Pederson also noted he's doing some Ideal CT testing but using a different aging procedure.
- April 2, 2026: Update from the Lab. Are following some AASHTO changes. Working on 2025 data continuing to validate data and performance testing. Data not ready to share yet, still working on repeatability.

22-05 Density Accuracy

- November 3, 2022 – Logan brings up a couple of things on accuracy. One topic is that he's noting more often than not the agency test is testing low theorizing an unlevel surface or rock propping the gauge up. Recommends switching to Method A of 2 1-minute tests under AASHTO T 355 (currently not recognized by WSDOT. Also, would like ability to retest high shots, 100 plus. And proposing an adjustment to 5-04.3(10)C4 which limits retest request to noon the day following the sublot test result provided or made available and only allowed when the lot is running below 1.0. Proposing to remove the timing requirement allowing retest requests when the lot falls below 1.0 if at a later time. Method A was the old procedure, WSDOT worked with Troxler to change to the current procedure which is more accurate. Could be some training to ensure gauges are not rocking or sweep prior to initiating the test. WSDOT will touch bases with WAQTC training. WSDOT will also review the current specifications for coring low tests in lots at or above 1.0 and will look at how to handle very high test results.
- April 13, 2023: Continued discussion on the 1 four-minute test vs. 2 one-minute tests at 90 degrees (this was discussed in FHWA review of WSDOT specs 5/12/23). Also requests to allow retest of sublots exceeding 100% and allowing retests on low sublots when CPA for lot is 1.0 or above.
- October 19, 2023: Based on latest FHWA spec review recommendations and to address concerns with DBB and DB contracts WSDOT is looking at expanding coring for density acceptance as an additional density tool on certain projects. The goal is not to replace the nuclear density gauges at this point, but to develop a working GSP that would allow WSDOT an additional density tool for possible use on certain projects. Would like to work together with WAPA to develop a trial spec and test it out on a couple of projects. Initial considerations include changing the sublot size to reduce the number of cores required,

contractor provided traffic control and contractor obtain the core then transfer to WSDOT inspector for testing by WSDOT.

This topic generated lots of discussion with general disagreement in the idea from WAPA members and Region Materials Engineers. Comments include (a **subcommittee** will be assembled to investigate):

- Added time for coring impacts work hour restrictions reducing paving time and exposing contractors to LD's
- Cooling cores noting only 1 shot at getting a core due to no retest/challenge option
- Delayed test results
- Reduced ability to correlate contractor QC gauges
- Increased staff and equipment requirements
- Local Agencies who rely on WSDOT spec's, although they can keep APWA spec's
- Coring is a destructive test
- Chain of custody concerns with sampling and testing
- Reduced sampling results in less data for statistical analysis
- Why deviate from the accepted AASHTO T355 standard?
- Would be better off trying to fix the Nuclear Gauge/SAM issues, ideas include:
  - Go to Two 4-minute tests at 90 degrees and reduce the tolerance
  - Use thin lift gauges exclusively 3450's or 4640's?
  - Follow through on training, including GEC's
  - Require Nuclear Gauge documentation from GEC's and DB QA firms.
  - Continue to look at new technologies, RDM etc.

- March 28, 2024: This topic was touched on in the Compaction Subcommittee and was a topic in the Joint Training.
- October 31, 2024: Instruction Sheets added to gauge boxes including language regarding "Erroneous or Suspect Gauge Readings" (attached). Focusing on training and ensuring testers are qualified. Looking at a couple of trial Design/Build projects using Cores instead of Nuclear Gages for densities.
- March 27, 2025: Reviewing template updates for Design Build jobs, looking at requirement to submit calibration documentation for QC gauges. Review gauges and correlations during pre-paving meetings. Chris Christiansen noted a number of DB jobs they are involved with are using cores.
- October 9, 2025: Adding requirement for Design Builders to submit annual calibration documentation for their gauges to the DB Templates. This is in line with the testing requirements for the testing requirements for T310 (soil densities) and T355 (HMA densities). Are the GEC's required to meet the same requirements to provide calibration data? (IAI covering GEC's?). Discussion regarding cores vs. nuke gauge for Design Build. Karen Carlie mentioned her review of nondestructive testing other than Nuke gauges. Not ready for QA but could be helpful if roller mounted, can sense differences in density but not able to calibrate to a percentage very reliably. FHWA does not allow non-nuke testing, prefers cores for acceptance, WSDOT not ready to make that step at the moment.
- April 2, 2026: There has been some discussion surrounding gauge placement along a joint. The proposal shows the gauge edge 12" from the pavement edge which conflicts with T-355 and SOP-735.

22-09 Sample Splitting Protocol

- November 3, 2022 – New topic for the next meeting
- April 13, 2023: Concern is that the current process is subject to some variability, looking to tighten up so it's more consistent. One area is for contractor and WSDOT testers to coordinate methods and use same methods throughout the job. Dave S. and Kentin to put something together for a recommendation. Steve Davis will also look at WAQTC training.

- October 19, 2023: Steve did not find any existing videos. Kim will take the lead on working with WAQTC to put a video together showing best practices and how different methods can result in different results.
- March 28, 2024: Kim to put together a video in coordination with trainers.
- October 31, 2024: Nothing new on this topic.
- March 27, 2025: Nothing new
- October 9, 2025: Kim getting some videos put together.
- April 2, 2026: Kim and Matt Christy to look at new updated training videos.

24-01 GEC/Design Build QA

- March 28, 2024: GEC/Design Build QA. Discussed in the GEC Subcommittee on 3/8/24 (see attached notes), also a topic at the Joint Training.
- October 31, 2024: HQ materials has hired a new position: Materials Quality Oversite Engineer dealing with Design/Build, SAM, F & t analysis for QV, Quality
- March 27, 2025: Noted that PEO's need to set up SAM before GEC's can populate which is causing delays on some jobs. Also noted that for DB jobs with DB doing QA and WSDOT doing QV there needs to be additional burn bags put together to calibrate the additional ovens. Look at bumping from 16 to 20?
- October 9, 2025: DB jobs are requesting additional oven calibration burn bags, may situationally go to 20. CTL and AAR can batch up additional bags too.
- April 2, 2026: There has been significant discussion about WSDOT taking QA back for Design-Build HMA. One project has already made the switch, looking at making the change permanent in the DB Templates.

25-01 Improving Mixture by adjusting D/A:

- March 27,2025: 2023 FHWA asphalt specification review (attached) recommended considering lowing the upper spec limit for D/A from 1.6 down to 1.2 to align with AASHTO M323 guidance for fine-graded mixtures. It was pointed out that the majority of the mix designs on the QPL are considered coarse-graded and thus do not qualify for the reduction per AASHTO. WSDOT to verify.
- October 9, 2025: After reviewing the majority of the mix designs are considered coarse graded and meet the current D/A standards. There are currently 7 fine graded designs. Of the 7, three exceed the D/A in their MD submittal. WSDOT is considering adopting M323 D/A for Fine Graded mix. Continuing to monitor.
- April 2, 2026: This topic will be removed from the next agenda. This is no longer under consideration.

25-02 What's the future for EPD's:

- **Climate Challenge** – 4 contractors have volunteered to participate in the study. Tucci, CWA, Granite, and Poe. Investigation to be completed this paving season.
- March 27, 2025: This study is wrapping up at the end of next month, Karen Carlie provided an update. UW has put together 9 YouTube videos on the topic. Stakeholder meetings ongoing to look at potential spec changes. The LCTM Grant is on hold. There remains lots of discussions to be had before moving forward.
- October 9, 2025: The LCTM Grant is gone. There has been some discussion about applying the State of Washington Buy Clean Buy Fair requirements (provide EPD's) to horizontal construction. Currently only vertical.
- April 2, 2026: There is nothing new for this item. This item will be removed from the next agenda. If/when there is movement again we can pick it back up. Kim noted there is some great information out there, contact her for more information if needed.

25-03 Performance Graded Binder Spec Change - Jnr:

- March 27, 2025: Kentin brought up some concerns with a spec change made in the 2025 book in section 9-02.1(4) regarding Jnr requirements for high RAP mixtures. This was mentioned briefly in the RAP Reset item and RAP subcommittee. The spec was implemented by WSDOT materials to address a gap in the requirements when we switched to the MSCR method for grading asphalts. Some high RAP binder blends were not grading out at the specified grades but were passing MSCR.
- October 9, 2025: This topic only affects a few Granite High RAP mix designs. There is some ongoing discussion offline between Granite and WSDOT.
- April 2, 2026: Nothing new to report at this time, continuing with offline discussions.

25-04 Proposed Edits to QC2 Std Practice for Asphalt Suppliers:

- October 9, 2025 – Section 7 add-on stipulates that multiple formulations of the same grade of binder from the same supplier are not allowed. Only one formulation per grade per supplier is allowed on the QPL.
- April 2, 2026: QC2 has been updated and discussed at the Asphalt Suppliers Meeting, this item will be removed from the next agenda.

> 7.7 Multiple formulations of the same grade of binder are not allowed. Once the supplier determines the Performance Grade, per AASHTO M 332, for each asphalt binder grade that they are approved on the WSDOT Qualified Products List, the supplier must deliver the same formulation for each binder grade listed to all Hot Mix Asphalt Producers who purchase their product.

25-05 Aggregate Source Approval Spec Update 1-06.1(3):

- October 9, 2025 – Aggregates imported from another source for blending or other purposes must have a separate ASA from the original source where the imported material was mined/excavated prior to use. Other ASA concerns with delayed testing and testing requirements. A question was raised about "replacement" ASA tests similar to MD's?
- April 2, 2026: See attachment for proposed spec change regarding source blending. Nothing new on "replacement" ASA's

25-06 Improving Mixture by reducing Va for production (3.5?):

- October 9, 2025 –WSDOT is putting together a small workgroup to take a closer look at this. Discussion surrounding just designing to 3.5% Va in the MD process, or regressing the voids by designing to 4.0% but accepting during production at 3.5%, would have to adjust Pb too. A question was also raised regarding keeping the Control Point GSP allowing the #8 & #200 to extend beyond the control point. Steve will look into how other states are handling this.
- April 2, 2026: Still under discussion. There has been a Va subgroup meeting to discuss. Looking at 0.1-0.2% binder increase with 0.5% reduction in Va.

25-07 HiMA:

- October 9, 2025 – Riley Bender discussed some research he has been looking into on Highly Modified Asphalt pavements (HiMA). Utah has been implementing and Riley is looking into applying in Washington. Would include bumping asphalt grades and potentially reducing Va. Utah is seeing SMA type performance but rather than 25%-30% more cost than standard mixes closer to 10% more cost.
- April 2, 2026: Looking for a pilot project for 2027 and working on special provision language.

New Items:

26-01 Hydrated Lime Marination Spec Adjustment:

- April 2, 2026: Proposed Spec Adjustment for the Percent Lime for fine aggregate from 2% to 1% in 5-04.3(3)A Mixing Plant section 8 Hydrated Lime Marination Treatment. (see attachment)

26-02 Specific Gravities for Mix Designs

- April 2, 2026: A new "old" item was raised again regarding GSB differences between WSDOT/Contractor/3rd Party Testing Labs. Sean noted WSDOT pauses and works with contractors if issues arise tied to GSB's, doesn't happen often but some sources are squirrely. Josh Chapman asked about making a video of GSB testing. Sean to work with trainers to put something together.

Other:

Materials Lab Business Process: Update.

- October 9, 2025 – New invoicing going well, still catching up on the older invoices. Feel free to reach out if you have any questions about your company's situation. Cost estimates to cover MD reviews have gone up to cover nominal WSDOT COLA. There have been some discussions about possibility of doing agreements with larger paving companies that would cover multiple MD reviews. – Potential to do Biennium or FY agreements however the MD# would not be tied to the Billing. Kim asked about a master agreement with task orders for different MD's?
- April 2, 2026: Haven't heard any feedback on doing larger agreements to cover multiple MD's. Is there interest here? Is it possible to do a master agreement with different task orders for each MD number?

Partnering:

October 9, 2025 – Kevin discussed WSDOT's updated Partnering Manual and the interest in including Partnering on smaller projects. One outcome would be Escalation ladders for contractors and PEO's to be able to define and include contacts for escalation of issues.

April 2, 2026: Partnering was a topic at the WAPA/WSDOT Joint Training. There is regular Partnering Training put on by WSDOT. This topic will be removed from the next agenda. Partnering field guide can be found here:
https://wsdot.wa.gov/engineering-standards/all-manuals-and-standards/manuals/partnering-field-guide

SET DATE FOR NEXT MEETING –
Date: October 8th, 2026
Time: 9:00 – 12:00
Location: Ellensburg Library? – Kim to Verify

8. **Hydrated Lime Marination Treatment:**

a. Wet cure the ~~coarse~~ aggregates with lime at a minimum rate of 1.00% of the mass of the dry aggregate. ~~Wet cure the fine aggregate with lime at a minimum rate of 2.00% of the mass of the dry aggregate.~~ Marinate (wet cure) the aggregate in stockpiles for a minimum of 48 hours. Fine aggregate stockpiles shall be defined as to have a minimum of 50% passing the No. 4 sieve. All other stockpiles shall be defined as coarse aggregate. Marinate stockpiles individually. Do not use the marination treatment process to combine stockpiles. Use the wet cured aggregate in stockpiles within 60 days. Protect stockpiles from weather events such as, but not limited to; rain, wind, and other weather events that will compromise the activated lime coating.

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1-06.1(3) Aggregate Source Approval (ASA) Database

The ASA database contains the results of WSDOT preliminary testing of aggregate sources ~~as well as the results pertaining to the review of the aggregate source Quality Control Programs~~. Aggregate sources ~~evaluated after January 1, 2021~~ shall be evaluated in ~~have~~ accordance with WSDOT Standard Practice QC 12 in the WSDOT Materials Manual. ~~Quality Control Program compliant with QC 11 and QC 12.~~

The ASA~~is~~ database is used by the Contracting Agency to indicate the approval status of these aggregate sources for applications that require preliminary testing as defined in the Contract. The ASA '*Aggregate Source Approval* Report' identifies the currently approved applications for each aggregate source listed and applies only to the original source location identified in the ASA database where the aggregate is mined and excavated. If an aggregate source imports material from other sources for blending or other purposes, the imported aggregate materials require a separate Aggregate Source Approval prior to use. The acceptance and use of ~~these~~ aggregates is contingent upon additional job sampling and/or documentation. The ASA database can be accessed online at the Contracting A~~a~~gency website.

Aggregates approved for applications on the ASA '*Aggregate Source Approval* Report' not conforming to the Specifications, not fulfilling the acceptance requirements, or improperly handled or installed, shall be replaced at the Contractor's expense.

Aggregate materials that are not approved for use in the ASA data~~-~~base may be sampled and tested by the Contracting Agency, for a specified use on a project, from the source or from a processed stockpile of the material and all cost for the sampling and testing will be deducted from the Contract.

The Contractor agrees to authorize the Engineer to deduct the sampling and testing costs from money due or coming due to the Contractor.

Regardless of the status of the aggregate source, whether listed or not listed in the ASA database the Contractor shall provide toxicity test results on the aggregate source in accordance with Section 9-03.21(1) upon request from the Engineer.