

SEAUPG Central Region Update - 2011

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Specification Changes

- *Does Your State Have Specification Changes / Updates related to Asphalt Binder or Mix, i.e., use of crumb rubber, modifiers, etc.?*

Central SEAUPG States

- Kentucky
- Tennessee
- Alabama
- Florida
- Georgia

Specification Changes

- Tennessee
 - Provisional density specification replacing one sided specs with target density values and incentives.
 - WMA – MAX temp 300F. Allowing 5 loads at HMA temps to heat equipment.
 - Tightening production tolerances for AC content
 - Raising minimum design AC content for 12.5-mm surface to 5.7%

Basic Survey

- Specification changes
- Annual quantities
- Funding shortages
- WMA
- MEPDG
- Reducing pavement costs
- Performance related tests
- Sampling/testing micro, etc

Specification Changes

- Georgia
 - Allowing crumb rubber in polymer mixes
 - ✦ MSCR spec
- Florida
 - Most significant change is that FL is now cutting cores to identify end-of-load segregation
- Alabama
 - Working on adding GTR now – just a few more questions to answer before implementation.

Specification Changes

- **Kentucky**
 - Specification change for asphalt binder control unit at asphalt mixing plant – Provide calibration tank mounted on load cells for checking accuracy of metering system with a minimum capacity of 250 gallons.
 - Specification change to incorporate reclaimed asphalt shingles (RAS) and to modify binder grade to accommodate the use of RAS.
 - Revise requirements for virgin binder selection when using RAP and RAS.
 - Change from basis of cold feed percentages to effective binder content replacement.
 - Ensure durability of asphalt pavements by limiting portion of asphalt binder contributed by reclaimed materials

Funding Shortages

- *How have funding shortages affected HMA tonnage?*

Annual Quantities

- *How many tons of HMA, Square Yards Chip Seals, etc. of Asphalt Material Have you Placed within the last year?*

Funding Shortages

- **Florida**
 - "Florida's program has been reduced."
- **Georgia**
 - "We have let few paving projects which results in reduced overall annual tonnage."
- **Kentucky**
 - The amount of asphalt mixtures placed this year seems to be on target with last year, but funding for projects have been limited therefore affecting the bid price of asphalt pavement.
 - Contractors are seeking more use of RAP to compete in the bid price market.

Annual Quantities

Agency	HMA (tons)	Misc.
Alabama		
Florida	5.4 million	-
Georgia	6.4 million	11 million yd ² bituminous surface treatments
Kentucky	4 million	-
Tennessee	3.1 million	9,500 tons (agg) chip seal & 20,000 tons agg + 838,000 yd ² micro

Funding Shortages

- **Alabama**
 - "We are definitely placing less tonnage and having less projects."
- **Tennessee**
 - Ditto.
 - Doing our best to keep up in terms of maintaining mileage by means of pavement preservation

WMA

- *Briefly describe your State's experience with Warm Mix, i.e., tons placed.*
- *Describe your State's experience with WMA, i.e., tons placed-specifications – and concerns.*

WMA

- Alabama
 - We currently don't track HMA vs. WMA. The contractor is allowed to place either or. We are working on a method to track WMA at FHWA's request.
 - So far we have not experienced any issues.

WMA

- Tennessee
 - 6 approved processes. 2 pending approval
 - Permitted on any awarded project
 - 12+ projects thus far
- Georgia
 - Has let one project. "Went very well."
 - A number of contractors have elected to use WMA on projects let using conventional HMA.
 - ~65,000 tons.
 - Current WMA spec will be revised to address issues with not being able to achieve anticipated lower temperatures using foam systems.

MEPDG

- *Is your State moving towards or is it implementing the MEPDG with RAP?*

WMA

- Florida
 - Six approved processes.
 - Contractor's decision
 - About 630,000 tons to date.
 - Minor concerns with high RAP %ages, moisture sensitivity, mix designs.
- Kentucky
 - Approx. 3 million tons
 - Has performed at the same level as HMA.
 - WMA is sometimes a challenge to place and handle in the field.
 - No major concerns.

MEPDG

- Alabama
 - We are moving towards MEPDG but have not looked at RAP.
- Kentucky
 - Currently undertaking a calibration study of both flexible and rigid pavements to calibrate the design guide for Kentucky conditions.
 - Actively involved in (FHWA) Design Guide Implementation Team (DGIT), the Southeastern States Design Guide User's Group, etc.

MEPDG

- **Georgia**
 - Moving towards implementing.
- **Florida**
 - Will move to the MEPDG once the models that are under revision have been completed.
- **Tennessee**
 - We intend to migrate in the next few years. Nothing set in stone.

Low Cost / Pvt. Pres

- **Georgia**
 - Thinner pavement surfaces (4.75-mm)
 - Micro-milling open-graded.
 - Chip sealing to address cracking in lieu of reconstruction or deep milling.
 - Has placed several test sections of open-graded interlayer (OGI) in lieu of chip seal for these same issues.
- **Kentucky**
 - Crack sealing pavement in order to extend pavement life.
 - Microsurfacing and Ultrathin (less than 1 inch) HMA surfaces intended to extend pavement life on relatively good pavements at a lower cost than resurfacing (Implementation of these methods have been limited).

Low Cost / Pvt. Pres.

- *What Methods has your State implemented to lower cost for maintenance, preservation or reducing pavement costs?*

Low Cost / Pvt. Pres

- **Tennessee**
 - Chip seals
 - Micro
 - Thin lift (4.75-mm @ 65 lb/yd² & 9.5-mm @ 85 lb/yd²)
 - Cape seals (micro & HMA)
 - Fog sealing shoulders

Low Cost / Pvt. Pres

- **Florida**
 - Reduced the thickness of mill and resurfacing.
 - Exploring P.P. techniques but have not implemented widespread.
 - Allowing RAP in friction course and are researching increased amounts.
- **Alabama**
 - We are doing more surface treatments and looking at more pavement preservation options.

Hamburg

- *We are still collecting data regarding the Loaded Wheel Tracking device (Hamburg) to establish performance related specifications (similar to Texas) into the design of HMA mixtures. Do you have a performance related test for mixtures to use in the design and / or construction of HMA mixtures?*

Hamburg

- **Georgia**
 - Just awarded first Hamburg through bidding, but have not had it delivered yet.
- **Florida**
 - Only research purposes at this time.
 - One district with historical rutting requires APA max rut depths of 4.5-mm during design.
- **Alabama**
 - We don't use the Hamburg device.
- **Tennessee**
 - No Hamburg. No APA.

Sampling Pvt. Pres

- **Florida**
 - Will be implementing 4.75-mm in the next year. Will be accepted like other mixtures with the exception of field density.
- **Alabama**
 - Chips – gradation and liquid tests.
 - Thin lifts (don't do very many yet) – AC, gradation, VMA.

Sampling Pvt. Pres

- *How are you sampling /testing/accepting micros/chips/thin lifts, etc.?*

Special Thanks to!!

- Kentucky – Robert Semones
- Tennessee - Me
- Alabama –Lyndi Blackburn
- Florida – Greg Sholar
- Georgia –Peter Wu

Sampling Pvt. Pres

- **Tennessee**
 - Micro & chip – Full emulsion test. Aggregate gradation.
 - Thin lift – VTM, grad, AC content. No field density.
- **Kentucky**
 - Micro – gradation, sand equivalency, soundness and wear. Emulsion compliance
- **Georgia**
 - “We sample and test all material placed on GDOT projects including surface treatment and thin lifts. We have not let a microsurfacing project in several years.”

???Any Questions???

