

Central Region Update - 2014



SEAUPG
Southeastern Asphalt User/Producer Group

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Changes - Updates to Binder Specifications

Alabama

- No changes to the binder specifications this year.

Georgia

- No changes to the binder specifications this year.

Changes/Updates to Binder Specifications

Florida

FDOT is using a Jnr Max 4.5 for RTFO neat binder tested at grade temperature.
 Moved to trackless tack exclusively
 Allow the use of pelletized rubber
 Performance Graded rubber binder (PG 76-22 (ARB)) with MSCR (Jnr and %R)

Kentucky

- No changes to specifications this year.

Tennessee

- TDOT is considering implementation of the MSCR PG grading system. Specification is only a draft at current. In the early stages, we plan to maintain the current nomenclature (PG 70, PG76, etc instead of S, H, V)

Asphalt Mixtures Specification Changes

Alabama

- Have Increase the minimum Asphalt content by 0.2 for all mixes containing RAS.
 - Design Air Voids are 3.5% for these mixes.
- Continue with pilot projects with the Inertial Profiler

Georgia

- Section 828 has recently been updated to include a Corrected Optimum AC content for 9.5 mm SP Type 1 and 4.75 mm mixes containing RAP.

Asphalt Mixture Specification Changes

Florida

Specification language and testing to address end of load segregation.

Kentucky

- No changes to specifications this year.

Tennessee

Now permits the use of RAS. Max 5% (no one uses that much) maximum binder replacement 20% in surface and 35% in base and binder.

Number of tons of HMA and WMA

STATE	HMA 2013	WMA 2013
AL	We do not track HMA vs. WMA but the estimated Percentage is 50%WMA. Total Tonnage approximately 7 million.	
FL	WMA 1,192,547 tons between 3/2006 and 7/2014	
GA	3,162,224	167,604
TN	2,510,980	~ 5-10% of statewide program
KY	6,000,000	Estimates 50%

Preventative Maintenance

State	Treatment Type	Square Yards 2013
FL	3.7 lane miles micro-surfacing (Spring 2014) 3 Fog Seal Test Sections	
GA	Surface Treatments/ Chip Seals	5,800,000
TN	10% of Resurfacing is spent on PM	
KY	Microsurfacing	160,000
	Thin Lift Overlays	15,000 (tons)

Funding

Alabama

- Tonnage still down about 30% from peak in 2007. Steady for last few years.

Georgia

- Placed 1 million tons less of Asphaltic Concrete this year due to funding shortages.

Florida

No Funding shortages
Funding diverted from resurfacing to capacity

Funding

Tennessee

- Not this year. Tonnage the same.

Kentucky

- HMA tonnages have not been significantly affected by funding shortages in recent years.

Methods implemented to lower costs

Alabama

- Change is slow – are seeing some more preservation type projects .

Georgia

- Using micro-milling for replacing the Pavement Friction Course only on appropriate interstate projects.
- Doing test sections with Fog Sealing.
- Used special crack mitigation applications such as chip seals and an Open Graded Interlayer.
- One state route project using thin lift asphalt pavement (4.75 mm) and are in the process of revising our mix type selection guidelines to allow the more frequent use of this mix type.

Methods implemented to lower costs

Florida

- Not much with regard to pavement preservation. We are focused on increasing the life span of our HMA pavements, i.e. lowering the life cycle cost.

Kentucky

- Crack sealing,
- Thin-lifts
- Microsurfacing
- Experimental Project - to test several preventative maintenance treatments.

Tennessee

- Recently developed Standard Operating Guidelines for the resurfacing program, defining objectives and options for maintaining remaining surface life of existing routes.

WMA Experience

Alabama

- RAS and WMA has not really worked all that well.
- Overall no difference is seen with the WMA and HMA.

Georgia

- Currently has five asphalt plants approved in the state for foaming WMA and are in the process of developing a project in south Georgia using WMA additives.

WMA Experience

Florida

- Open specification, but minimal usage. However, with newer WMA additives incorporating anti-strip additives, usage should increase. Contractors state that local government resistance is holding them back.
- No construction or performance problems observed.

WMA Experience

Tennessee

- Permits the contractor option for WMA on all projects,
- Mixture performance has been satisfactory so far. Hoping for increasing contractor buy-in.
- Would like to see WMA use increase without having to mandate it or pay a premium.

Kentucky

- Has a permissive specification on WMA so it can be used at the contractor's discretion.
- The majority of the WMA is produced using the "foaming" method.
- Has also reduced the minimum production and placement temperatures for WMA.
- Now seeing some chemical processes.

Performance Related Testing

Alabama

- APA is required for all surface mix types prior to approval of the mix design
- Are somewhat participating in the AMPT pooled fund – implementation by the Department is currently being held up due to budget constraints in obtaining the extra equipment.

Georgia

- Currently use the APA, Moisture Susceptibility Testing, and Permeability Testing for Asphaltic Concrete Mix Design Acceptance.
- Working with a Georgia University in developing a research project to help establish testing criteria for the Hamburg Wheel Tracking Device.

Performance Related Testing

Florida

The APA is used for certain areas of the state.

- Max 4.5mm
- 100 lb load, 100 psi hose pressure
- 64°C
- 4% air void gyratory specimens

Kentucky

- Tensile Strength Ratio. Perform this testing on new Class-4 mixtures in the design phase.
- Has an AMPT but currently only intends on using it as a research tool

Tennessee

- Does not currently use a performance related test

Sampling and Testing

Alabama

- Thin lifts are tested/accepted in the same way as other dense graded mixes
- For microsurfacing and chip seals, constituent materials are pretested and approved

Georgia

Chip Seals are accepted based on spread rates collected during construction. Thin lift pavements are accepted using conventional Asphaltic Concrete Acceptance Testing criteria. However, density tests are not required for asphaltic concrete placed at 90 lbs/yd² or less, 4.75 mm mix and OGFC, PEM and leveling mixes.

Sampling and Testing

Tennessee

- Micros/ chips: gradation every 500 tons, weekly emulsion verification samples.
- Thin lifts: Gradation/ AC content twice daily.

Kentucky

- Tests the gradation of the aggregate and the emulsion for Microsurfaces.
- Thin-lift overlays are sampled and tested in the same way as a traditional overlay.
 - Except no density cores are taken.

Status of MEPDG Implementation

Alabama

- Has a traffic research project underway
- Moving slowly – would like to see how AASHTO is going to address RAP and overlays before really implementing.

Georgia

- We are in the process of implementing MEPDG with all asphaltic concrete mixes.

Status of MEPDG Implementation

Florida

- FDOT has not adopted MEPDG for asphalt pavements

Kentucky

- Currently performing E* testing on RAP and Virgin asphalt mixtures for MEPDG calibration.

Tennessee

- Has not adopted MEPDG for asphalt pavements

Other Questions

- How are states handling end of load segregation?
- Is anyone using >20% RAP in Friction (wearing courses)?
- Does anyone have experience with Recycled Engine Oil Bottoms (REOBs)?
- Are there any issues or states that are Sampling at the Paver?

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