





Eastern Region Update - 2016





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Survey of SEAUPG states Eastern Region

North Carolina	
South Carolina	
Virginia	
West Virginia	

Changes - Updates to Specifications

North Carolina

- No major changes
- Working on draft of 2018 Standard Specifications
- Changes include going to binder contribution specification in lieu of by percentage by total weight.

South Carolina

- 2016 Binder Spec - VTE/REOB along with LASA and PPA – Suppliers must disclose use in their QC Plans and ensure compatibility-compliance to M-320.
- PG 64-22 and PG 76-22
- (SBS / PPA – 0.5% max / 7.0% GTR used as modifiers)
- Mix Durability – Starting to use COAC on RAP/RAS mixes

Changes - Updates to Specifications

Virginia

- New tack specification in 2016 – application rate verified by plate and paid as a separate bid item.
- Surface mixes - gyration change from 65 down to 50.
- Very minor changes expected in 2017.

West Virginia

- 2017 MSCR testing will be required for modified binders
- PWL will be full adopted as the standard
- New (SAMI) Stress Absorbing Membrane Interlayer Specification



Number of tons of HMA and WMA

STATE	~ Tons
SC	2,700,000
NC	6,700,000
VA	5,800,000
WV	1,000,000

How have funding shortages affected asphalt mixture tonnage this year?

North Carolina

- No shortages
- FY 2016-2017
- Contract Resurfacing: \$498M (2015-2016 - \$408 M)
- Pavement Preservation: \$85M (2015-2016 - \$65M)

South Carolina

- Yes; the show must go on.....
- Most roads in fair –good condition; doing FDR on poor condition roads (20 % FDP threshold)
- Really need a gas tax increase for re occurring funds (1986)

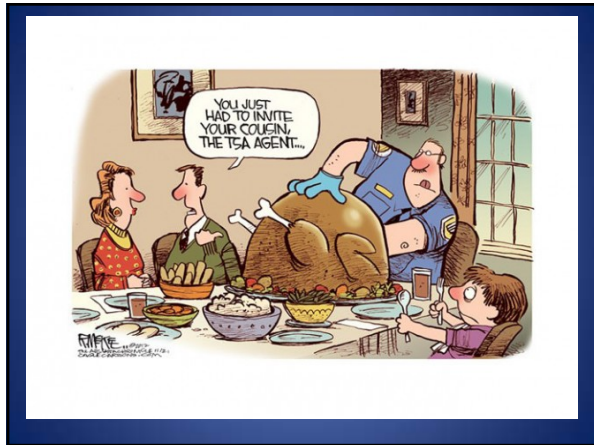
How have funding shortages affected asphalt mixture tonnage this year?

Virginia

- Not much...
- Production has increased but still not enough
- Still placing surface treatments on minor roads that may need a full structure if there was enough money..

West Virginia

- Placing more thin lifts – doing more preservation work
- Ultrathin overlays, Cape Seal (micro over chipseal)



Experiences with WMA

North Carolina

- WMA is a contractor option, slight decrease in the WMA use.
- Many contractors use the WMA with the LASA benefits, and often run the mixes into the conventional hot temp zone.

South Carolina

- WMA Specification – Allowed in all mixes with unmodified binder (64-22)
- Use chemical WMA additives and lower temps for 100% of OGFC mixtures w/o fibers
- Special projects on I-85 where major rehab was done with placing 8-9" of intermediate mix in two lifts in same night prior to rush hour traffic.

Experiences with WMA

Virginia

- Contractor option
- Slightly decrease in WMA 1.6 Mil to 0.92 Mil ton thus far in 2016.
- Contractors use more chemical WMA additives (with LASA) than other methods like foaming.

West Virginia

- Foaming Only
- Permissive Spec, mostly used as a compaction aid for long hauls rather than lowering temps.

What is your experience thus far (if any) using the AMPT or other performance tests?

North Carolina

- APA is required on all surface mixtures during the design.
- TSR – required on the mix design and during field production.
- AMPT – Materials and Testing continues to battle staffing issues with the AMPT, plan to use on any high risk projects in conjunction with pavement design-ME.

South Carolina

- APA required on high volume surface and intermediate mixes during design process.
- AMPT - initial values are being generated through a research project, OMR will procure the AMPT once first phase has been completed in 2017.

What is your experience thus far (if any) using the AMPT or other performance tests?

Virginia

- Using research data collected from VTRC
- Continue gathering more production data

West Virginia

- Research being done at WVU

Describe your State's experience with mixtures containing high percentages of recycled materials (RAP/RAS, etc.)

North Carolina

- 6.2/6.7 million tons of mix used RAP
- 1.9 /6.7 million tons of mix contained RAS
- Continue to monitor use of RAS in colder parts of the year. Made some specification changes to address air temperature minimums when paving with RAS mixes.

South Carolina

- RAS – manufacturing waste and post consumer waste RAS, 5% max, which is about 20% binder replacement.
- Average around 25% aged binder replacement.
- No grade dumping yet.

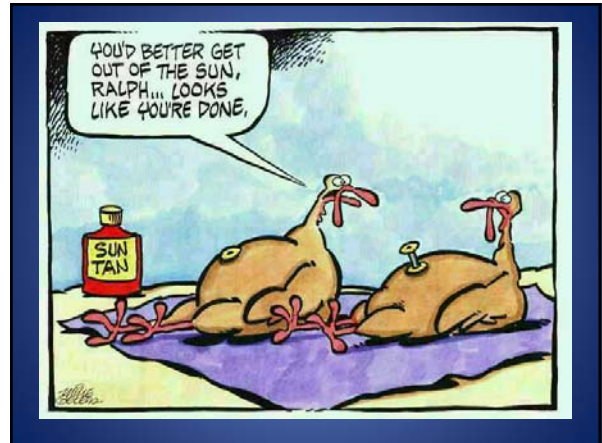
Describe your State's experience with mixtures containing high percentages of recycled materials (RAP/RAS, etc.)

Virginia

- Average around 25% RAP
- 1.5 million tons of RAP used in 2015, 0.95 million tons used to date in 2016.
- Starting to see some limited use of RAS (less than 10,000 tons for 2016.
- Concerns over cracking and QC of RAP-RAS

West Virginia

- 25% in Base Mixtures
- 15 in Surface Mixtures
- Fractionation is required for RAP > 15.0%
- No RAS



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

North Carolina

- Recent developed a new 4.75mm thin lift mix, close to NCAT's latest version, an replacement for old sand asphalt version.
- Still using 9.5mm SF9.5A placed around 1" for years now on low volume secondary routes (< 300,000 EASL).
- Micro-Surfacing growing as a preservation tool in NC, more contractors performing work within state.
- Surface Treatments – using polymer modified emulsions and lite-weight aggregates.
- Fog Seals have increased in NC, including applications on Interstate Shoulders.

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

South Carolina

- PMTLSC – Paid by the SY (3/4" thickness)
- Micro-Surfacing, Single, Double, Triple Treatments
- FDR

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

Virginia

- Use Surface Treatments.
- Trying to use more Cold Recycling, but not easy.
- Project selection -Short Term- Vs. Long-term cost savings

West Virginia

- Alternate bids for preservation work with Micro Surfacing and Ultra-Thin Overlays

Any other interesting topics to mention.....

North Carolina

- Continue to see some isolated issues with poor application rates and de-bonding. Tack rate is one of main focus points for the Industry and NCDOT.
- NC State completed research on analyzing the properties of common tack products used in NC. One finding was the field test apparatus for determining in-place application rates during laydown. Expanding on this research by looking at rates involving surface treatments.

South Carolina

- Pilot Projects of CIR/CCPR/HIR upcoming in 2017
- Polymer Modified Fog Seal on OGFC - preventative maintenance measure to help with top down raveling.

Any other interesting topics to mention.....

Virginia

- Tracking determination for non-tracking tack.. Currently VDOT has lab and field tests, but they are visual tests using white paper or temporary marking tape.
- Participating in FHWA In-Place Demo Project – Focus is on obtaining more in place density on mat and joints, VDOT uses the nuclear gauge to density acceptance based on control strip density values.

West Virginia

- No comment

Thank You!



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