



Asphalt Tonnage

Virginia - 5.3 Million tons of HMA last year.

North Carolina - 7.2 Million tons of HMA placed so far this year.

South Carolina - 2.9 million tons

West Va. - TBD

2020 State of DOT Funding

Virginia - Approx. \$6.4 Billion for FY2020
(about \$4.4 Billion for Highway construction and maintenance)

North Carolina - Approx. \$2.5 Billion.
(Down from \$2.65 Billion in previous fiscal year)

South Carolina - Increase gradually until 2023.

- Resurfacing up to 4X by 2023, compared to 2017
- End of tax increase 0.12. (0.02 /yr. for 6 years)

West Va. - TBD

2020 Forecast - tonnage

Virginia – Expect slight decrease in 2020.

North Carolina - Decrease due to cash-flowing future projects in FY2018 & FY2019.

South Carolina – Increasing with \$\$ increase gradually until 2023.

West Va. - TBD

Major Specification changes?

Virginia - Implementing a new Non-Tracking and Hot-Applied tack spec. Moving to BMD.

North Carolina – none for 2020

South Carolina - SC-M-400 – update in 2020

- (Tolerances – Bonus for two or more test on binder and gradation)
- SMA – 9.5 and 12.5 options on select rural Interstate Projects

West Va. - TBD

Spec changes - Recycled Materials?

Virginia – No spec. changes for 2020. Some mixes with 40% RAP in our BMD pilot sections.

North Carolina – No spec. changes for 2020

- 2018 Specifications implemented %RBR limits for recycled materials.

South Carolina – No spec. changes for 2020.

Still using SC-M-407 for the RAP / RAS requirements.

- Some HMA Contractors concerned over our use of CMRB (limits RAP in their stockpiles)

West Va. - TBD

Asphalt Binder – trends ?

Virginia - Noticing more failures for samples at the asphalt plants. (PG 64E-22 and HP binders)

North Carolina - None observed or tracked.

South Carolina – None; however, some concerns over changing of sources and blending. Especially with emulsions.

West Va. - TBD

MSCR & Other Binder Testing

	Virginia	North Carolina	South Carolina	West Virginia
Do you specify Binder by AASHTO M320 and grade bumping for increased traffic or AASHTO M332?	M332 (MSCR)	M320	M320 + Grade bumping for RBR% M332(MSCR) for PG16-22 only (6.4.V)	TBD
Are you planning to implement AASHTO M332 in the future?	Using it currently	No	No	TBD
Do you use the X1 Curve in the specification?	Yes, AASHTO R92	No	Yes, AASHTO R92	TBD

Pavement Durability

	Virginia	North Carolina	South Carolina	West Virginia
Is pavement durability (cracking and raveling) an issue in your state?	Yes – cracking in general	Fatigue cracking - minimal Raveling – improved w/ COAC OGFC – better durability w/ added fines using Cantabro test	Yes – cracking in limited areas	TBD
To what degree is durability an issue in your pavement network?	Uncertain Maybe 20-25 %	Not tracked	Not tracked	TBD

Binder Testing and ΔTc				
	Virginia	North Carolina	South Carolina	West Virginia
Do you have plans for implementation of the ΔTc parameter into your specifications?	Not yet – but monitoring	We are currently studying the parameter and possible implementation.	No – But interested	TBD
What are the proposed limits and aging requirements for ΔTc being considered?	N/A	20-hour aging	N/A	TBD

Ground Tire Rubber				
	Virginia	North Carolina	South Carolina	West Virginia
Do you allow or specify use of ground tire rubber (GTR) to produce modified asphalt binders or mixtures?	No, but we have pilot projects going on this year.	Yes. We have a pilot spec. but not yet used.	Yes	TBD
If so, how is GTR specified, recipe or performance graded specifications?	AASHTO M332, ASTM D6114, along with VDOT special provisions.	AASHTO M320, M57, and T27 along with NCDOT special provisions.	Min of 7% or Hybrid permitted	TBD
What is the most common type of GTR used, (Wet, Dry, or Terminal Blend?)	One with Wet and another with Dry for pilot projects	Terminally blended, PG grade-modification is not allowed at the HMA plant.	Wet only <i>considering dry again</i>	TBD

Balanced Mix Design				
	Virginia	North Carolina	South Carolina	West Virginia
Have you implemented or plan on implementing a Balanced Mix Design Method into your specifications?	We have a plan to implement within next 3-4 years	Exploring the possibilities	No – Validating current designs with the crack tests (SCB & Ideal) in 2020.	TBD
If so, where are you in your implementation process?	Pilot specs & research projects + research Formed technical committee with industry	In the initial process of taking inventory of the necessary equipment.	Currently procuring the cracking test equipment	TBD
Which tests are you using/considering?	IDEAL-CT, APA, Cantabro	IDEAL-CT, J-Fit, ???-Overlay, and/or Hamburg.	SCB (LA/IL) and Ideal CT (most likely)	TBD

Pavement Design				
	Virginia	North Carolina	South Carolina	West Virginia
Do you use or plan on using the Mechanistic Empirical Pavement Design Guide Method (MEPDG)?	Yes – Adopted MEPDG on January 1, 2018	Yes – Currently shadow on Select projects. Still use AASHTO 1993 as default.	Yes – SCDOT working on local calibration of HMA and FCC modules, new location only, 2 years out.	TBD
If so, where are you in the implementation process?	Currently used for new designs on high volume highways; working rehab models now.	Plan to start updating local calibration in January 2020.	Also developing catalog designs for new location, based on perpetual pavement concepts	TBD

Non-Tracking Materials				
	Virginia	North Carolina	South Carolina	West Virginia
Do you allow specialized non-tracking materials to be used for tack and underseal on paving projects?	Yes – Non-tracking tack required between May - October	Yes	Yes – Contractor option on most projects. OGFC – Require Hot Applied Non track or PG 64-22.	TBD
If so, what is your experience with these types of materials?	Still see some tracking issues maybe due to poor practice or materials?	They tend to work as intended when handled, stored, and applied properly.	Good, but still need to use best practices, some other emulsions are difficult to break at night.	TBD

Cold Mix				
	Virginia	North Carolina	South Carolina	West Virginia
Are specialized cold mix products allowed and used in your state?	Yes – One contract with 'regular' cold mix and another with 'water-activated' cold mix.	Yes – But, only for pothole patching.	No - usual patching materials, some with Portland cement, water activated.	TBD
If so, what is your experience with these types of materials?	Water-activated cold mix is popular and has good reputation in general.	Use of different products up to maintenance, based on their needs & satisfaction.	Good, but patch preparation is not always done due to safety concerns and equipment availability.	TBD

Additional Info


