


SEAUPG East Region Update

NC, SC, VA, & WV




2024 Annual Meeting – Mobile, Alabama

Funding

Is the level of asphalt work set to increase / decrease / hold steady in 2024/2025?

- **NC DOT:**
 - We anticipate both funding and asphalt tonnage to remain steady. Hurricane Helene's impact will impact asphalt work over the next 12 months but to what impact, we won't know just yet.
- **VDOT:**
 - Annual maintenance (resurfacing) increased in 2024 from 2023.
 - Expect similar \$ in 2025 as 2024 with more focus on thinner treatments (micro surfacing, slurry, or surface treatment).
 - May result in less tons of asphalt plant mix resurfacing.
- **SCDOT:**
 - Hold steady.
- **WVDOH:**
 - On par with 2023/2024.




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Asphalt Tonnage – 2023/2024

Tons HMA/WMA placed by DOT: (last 12 months)

- **NC DOT:**
 - Aug 2023 – Aug 2024 ~ 7.62 million tons
- **VDOT:**
 - 2024 – 3.6 Million Tons for 2024 season (through mid-September)
 - Expect ~ 5 Million Tons total by end of year.
- **SCDOT:**
 - 2024 – 4.5 Million Tons (Oct 2023 – Sept 2024)
- **WVDOH:**
 - 2024 – 2.5 Million Tons (as of 11/1/24)



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Funding

Budgetary issues?

- **NC DOT:**
 - Not at this time.
- **VDOT:**
 - No.
- **SCDOT:**
 - No.
- **WVDOH:**
 - No apparent issues heading into the new year.




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Funding

What is the state of the DOT Funding for 2024/2025?


- **NC DOT:**
 - FY 24-25 : Highway Fund = 3.196B
- **VDOT:**
 - Annual pavement maintenance for 2025 is ~ \$715 Million
- **SCDOT:**
 - FY 24-25: ~1.6 B
- **WVDOH:**
 - FY 24-25: Total Budget ~ \$1.2B, Paving ~ 400 Million



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OUTLOOK – Materials Supply

- **Asphalt Binder**
- **Aggregate**
 - **NC DOT:** - Currently working with our Aggregate Association on trying to meet a Type III Micro surfacing gradation specification that more than just a few NC quarries can produce.
 - **SCDOT:** - Starting to see limited supply
 - **WVDOH:** - A few producers are struggling to keep up with higher demand
- **Lime**
- **Polymers**
- **Liquid Antistrip**
 - **WVDOH:** - Very little need for Antistrip in WV
- **Mineral Filler for SMA**
 - **NC DOT:** - We do not currently use SMA in NC
 - **SCDOT:** - Currently looking for additional options
 - **WVDOH:** - No SMA in WV



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OUTLOOK - Asphalt Program Updates

- Do you have any upcoming major specification changes?
Not at this time.
- Are you considering alternate materials for SMA mineral filler?
Not at this time.
- What is the outlook for implementation of Low Carbon materials?
NCDOT submitted an application to participate in - Low-Carbon Transportation Materials Grant Program with an emphasis on utilizing the grant for extensive research into LC materials and processes. Those findings will set us up for future implementation discussions.



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OUTLOOK - Asphalt Program Updates

- Do you have any upcoming major specification changes?
 - Changes to RAP specification on binder availability
 - EPD's for mix designs
- Are you considering alternate materials for SMA mineral filler?
 - WV does not use SMA
- What is the outlook for implementation of Low Carbon materials?
 - WV is working with WVU to identify potential Low Carbon materials and develop a specification for use on certain construction projects.



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OUTLOOK - Asphalt Program Updates

- Do you have any upcoming major specification changes?
Just made a change to our SMA –Special Provision to allow dry process GTR.
- Are you considering alternate materials for SMA mineral filler?
Yes
- What is the outlook for implementation of Low Carbon materials?
SCDOT submitted an application to participate in - Low-Carbon Transportation Materials Grant Program.



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OUTLOOK – Pavement Preservation

1. What is considered as Pavement Preservation (slurry/micro, thin lays, seals, etc.)? In NC, the legislature decided to tell us what Pavement Preservation is: "A roadway improvement practice that improves roadway quality and extends or renews the pavement life."
 - They allow a 14 numbered list of treatments "eligible" for Pavement Preservation funding:
 - (1) Chip Seals, Slurry Seals, Fog Seals, Sand Seals, Scrub Seals, Cape Seals
 - (2) Microsurfacing
 - (3) Profile Milling not covered by resurfacing
 - (4) Asphalt rejuvenators
 - (5) Open graded asphalt friction course
 - (6) Overlays less than 1000 feet in length
 - (7) Diamond grinding
 - (8) Joint Sealing
 - (9) Dowel Bar Retrofit
 - (10) Partial or Full Depth Repairs or Reclamations
 - (11) Ultra-thin White topping
 - (12) Thin Lift and sand asphalt overlays (less than 1.5")
 - (13) Asphalt crack sealing
 - (14) Pavement markers and markings



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OUTLOOK - Asphalt Program Updates

- Do you have any upcoming major specification changes?
Section 211 Base Mix
 - Min. AC 4.6%
 - Design VTM 2.0% Production (0.5-3.5%)
 - Min. VMA 12.0%
 Section 248 SMA (12.5)
 - Gradation band #4 % Passing (22-27%)
- Are you considering alternate materials for SMA mineral filler?
 - Not at this time
- What is the outlook for implementation of Low Carbon materials?



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OUTLOOK – Pavement Preservation

- What Pavement Preservation techniques do you utilize?
Chip Seal, Microsurfacing, Crack Seal, Cape Seal, Fog Seal, Thin Lays.
- How much FDR, CCPR, or CIR are you doing?
FDR: 4-5 projects a year. 10-20 statewide miles per year. I can't locate any recent NCDOT - CCPR or CIR contracts.




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OUTLOOK – Pavement Preservation

- What is considered as Pavement Preservation (slurry/micro, thin lays, seals, etc.)? What Pavement Preservation techniques do you utilize?
 - Crack Seal, chip seal, micro, allow up to 125 psy overlay
- How much FDR, CCPR, or CIR are you doing?
 - 2025: 1000 lane miles of CMRB, 2 CIR projects & just let 2 more CIR projects, 0 CCPR



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Balanced Mix Design


- Have you or do you plan to implement BMD in your state (Issues addressed)?
 - NC DOT:
 - N/A
 - VDOT:
 - VDOT implemented BMD in 2024 for non-polymer modified surface mixes
 - SCDOT:
 - Benchmarking data
 - WVDOH:
 - Still mostly in the research phase. A clear path forward has not been decided.




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OUTLOOK – Pavement Preservation

- What is considered as Pavement Preservation (slurry/micro, thin lays, seals, etc.)? What Pavement Preservation techniques do you utilize?
 - Slurry Seal, Surface Treatment, Latex modified
- How much FDR, CCPR, or CIR are you doing?
 - Since 2008, 36 FDR projects, 6 CCPR projects, 4 CIR projects




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Balanced Mix Design


- What approach has been chosen for your state, and what tests have you adopted for BMD?
 - NC DOT:
 - N/A
 - VDOT:
 - Performance + Volumetric Optimized
 - Producer performs Cantlabro, IDT-HT, and IDT-CT testing in production. APA for design.
 - SCDOT:
 - Likely B – Ideal CT, Hamburg & APA (Currently – Design only)
 - WVDOH:
 - N/A (Likely A or B in the future)




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OUTLOOK – Pavement Preservation

- What is considered as Pavement Preservation (slurry/micro, thin lays, seals, etc.)?
 - Thin lays, micro surfacing, chip seals, SAMI seals, cape seals
- What Pavement Preservation techniques do you utilize?
 - Mostly thin lays and micro surfacing with the occasional chip seal or SAMI seal
- How much FDR, CCPR, or CIR are you doing?
 - Isolated to a few FDR and/or CIR projects per year




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Balanced Mix Design

- Any pilot projects underway or planned? If so, has there been any real-world validation of BMD criteria?
 - NC DOT:
 - N/A
 - VDOT:
 - VDOT's next pilots will focus on mixes with 64E-22 binder
 - SCDOT:
 - Not currently
 - WVDOH:
 - Not currently



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Balanced Mix Design

- Is your state contractor's association on board with BMD?
 - NCDOT
 - NCDOT hosted a joint workshop with NCAT in September 2023 where BMD was discussed in more depth. Our Asphalt Association was present and engaged in those talks. No immediate plans to implement in 2023/2024 but the overall sentiment was interested in continuing to monitor other states implementation and continue discussing it at our joint Industry/Department meetings. Internal discussions are still being had.
 - VDOT:
 - Yes
 - SCDOT:
 - Working with our state contractor's association to benchmark and determine where to go from here.
 - WVDOH:
 - We have a great relationship with our APA and are working together to determine a next move.



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Smoothness

Does your state have a time limit to test final smoothness once job has been completed?

- NC DOT:
 - The contractor has 7 days of receiving authorization to perform IR/I/MRI testing. Raw files handed immediately to onsite inspector, final report and documentation provided by Contractor to NCDOT 10 days after testing.
- VDOT:
 - 30 days from the time of request
- SCDOT:
 - No
- WVDOH:
 - Tested within 30 days of project completion.



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Smoothness

- Has your state had issues with smoothness specifications?
 - NC DOT:
 - No
 - VDOT:
 - Recent discussions about which routes smoothness requirements apply to. VDOT specifies in contracts which routes are tested for smoothness based on guidelines.
 - SCDOT:
 - No, but we currently have an in-house research project.
 - WVDOH:
 - None recently



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Environmental Product Declarations (EPDs)

Has there been any recent buzz around EPDs in your state?

- NC DOT:
 - Yes. We have engaged with Industry partners, contractors, and others over the last few months to better understand so NCDOT and our partners can be educated and well prepared when EPDs become potentially mandated in the future.
- VDOT:
 - We have been working with our research council on proposals for the Federal grant but we are still in an information gathering phase.
- SCDOT:
 - Just a little bit.
- WVDOH:
 - Yes, procedures are currently in development to how to submit EPD's for asphalt mixtures.



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Smoothness

- Any issues with reliability of testing equipment?
 - NC DOT:
 - No
 - VDOT:
 - No
 - SCDOT:
 - No
 - WVDOH:
 - Yes, however, we have just awarded the contract for a new smoothness vehicle.



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Environmental Product Declarations (EPDs)

What about Life Cycle Assessment (LCA)?

- NC DOT:
 - Not as much buzz as EPDs. We have for quite some time, included LCAs in determining/selecting optimum pavement types.
- VDOT:
 - There has been talks but we are still in an information gathering phase.
- SCDOT:
 - Yes, but not as much as EPDs.
- WVDOH:
 - LCAs will be used to develop EPD's for asphalt mixtures.



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2024/2025 Initiatives

- Do you have any new initiatives or specifications coming out in 2024/2025?
 - NC DOT:
 - Our 2024 NCDOT STANDARD SPECIFICATIONS FOR ROADS AND STRUCTURES was just electronically published in September 2023.
 - Our 2025 Asphalt QMS Manual will be published Nov/Dec 2024.
 - No new initiatives.
 - VDOT:
 - 14 Month pilot
 - High Rap pilots
 - BMD pilots with E surface mixes



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2024/2025 Initiatives

- Do you have any new initiatives or specifications coming out in 2024/2025?
 - SCDOT:
 - Yes, our SCDOT 2025 Standard Specifications for Highway Construction was just released. It will be implemented starting with all projects beginning January 2025.
 - WVDOH:
 - E-ticketing will be required for steel and rebar in addition to asphalt, aggregate, and concrete.
 - New Materials Procedure related to RAP binder availability.
 - Continued mix design/BMD research.



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Additional Info

- Is there anything else that you would like to share?
 - Personnel Changes, etc.
 - NC DOT:
 - Clark Morrison, our NCDOT State Pavement Design Engineer retired in early 2024.
 - Shihai Zhang is our new State Pavement Design Engineer. Shihai comes into this roll have served many years as a NCDOT Geotech Engineer and most recently, Shihai has been an NCDOT Pavement Design Engineer III for 8+ years
 - VDOT:
 - N/A
 - SCDOT:
 - Kimberly R. Lyons, Ph.D., P.E. – State Asphalt Materials Engineer
 - WVDOH:
 - N/A



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