











NCDOT Pavement Preservation Bulletin

Materials and Tests Unit

2023 Wrap-Up, 2024 Look-Ahead

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Our Mission

The Pavement Preservation Team will:

- attend pre-construction meetings
- provide on-site field assistance
- monitor & update our Specifications
- collaborate with industry partners
- investigate new treatments
- host workshops for Maintenance & Construction offices and more.

Use us as a Resource!

2023 PP Workshops

The Pavement Preservation Team hosted 20 Workshops with more than 200 NCDOT attendees.

Spring and Summer: We met with Division Construction offices to educate on AST Inspection before their contractors began work.

Fall and Winter: We met with Maintenance offices to discuss Pavement Preservation route selection, treatment selection, emerging treatments, amongst other topics.



2024 PP Workshops

AST Inspection Workshops: We will visit divisions that are responsible for AST contracts in **Spring 2024** to educate on the inspection of Chip Seals, Mat Seals and Fog Seals.

Microsurfacing Inspection Workshops (NEW!): We are partnering with ISSA to provide workshops in **Spring 2024** across the State focused on the inspection of Microsurfacing.

Pavement Preservation Planning Workshops: We will visit the Divisions in **Fall/Winter 2024** to discuss all things Pavement Preservation: costs, contracts, treatments, funding, legislation, etc.

Updates to PP Legislative Guidance

Per NC Law, Thin Lift Asphalt Overlays are eligible to be funded through the Pavement Preservation Program.

Updated Legislative Guidance as of October 2023 allows overlays **less than 1.5"** using mixes S4.75A, SA-1, or **S9.5B**. (additions are shown in **blue**.)

The memo containing these changes can be found below.

Resources

Click on the icons or text below to view each resource.



Updated Pavement Preservation Guidance



NCDOT Research Project 2024-12¹



ISSA² Design and Inspection Manual

¹ Research project referenced in friction and texture section

² International Slurry Surfacing Association

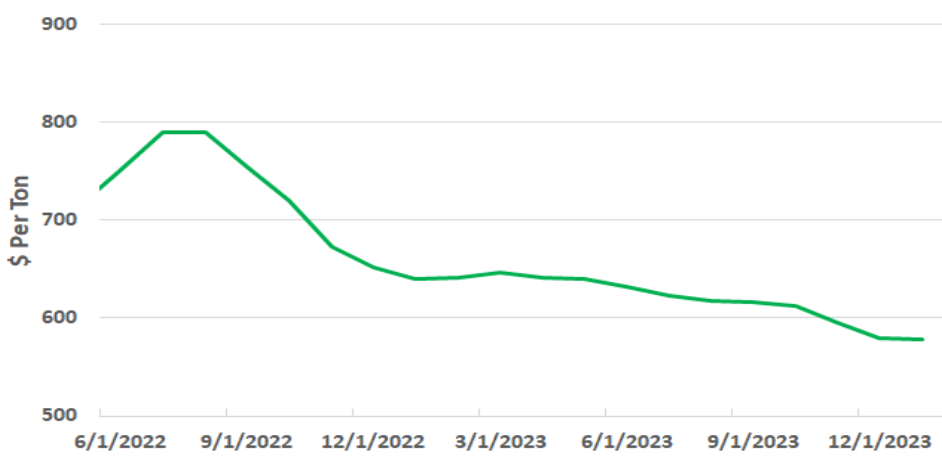
Pavement Preservation Unit Costs

As Asphalt Cement prices have decreased since their peak in 2022, Chip Seal Unit Costs have also decreased. Emulsion-based treatment costs will often mirror Asphalt Cement trends.

Comparing 16 AST Contracts let September 1 to December 31, 2022, to 12 AST Contracts let September 1 to December 31, 2023, **AST unit costs have decreased by 16%.**

While Pavement Preservation funding remains stagnant, we still may be able to reach more miles in 2024 than we were able to in 2023.

Asphalt Cement Terminal Price

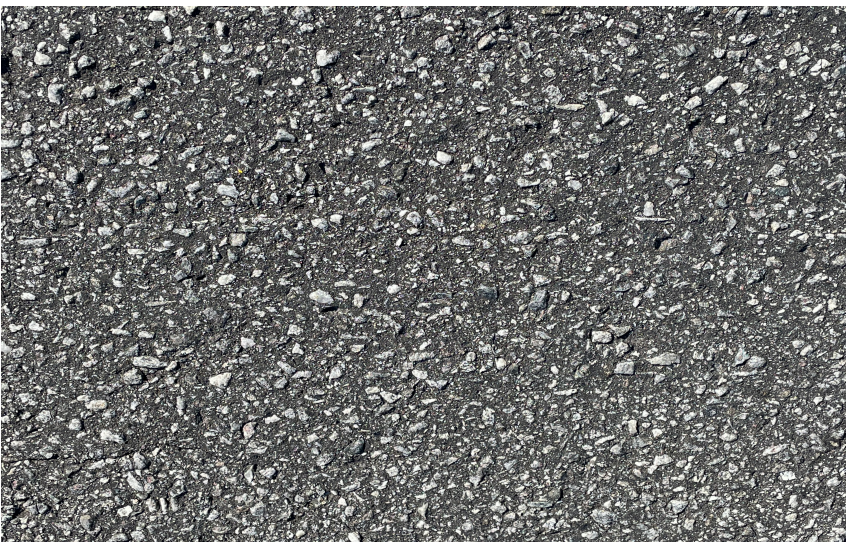


Pictured above: Asphalt Cement Prices per Ton from June 2022 to December 2023.

Innovative Pavement Preservation Treatments in North Carolina in 2024

- Double Course Microsurfacing
- Fog Seal as a Standalone Treatment
- Type II Microsurfacing in Subdivisions
- Double 78M Chip Seals
- Partnership with NCPP and NCAT¹ on a PP project. They will assist in route selection, construction and will study the project over a 5 year period.

¹ National Center for Pavement Preservation and National Center for Asphalt Technology



Pictured above: Microsurfacing texture on US 74 in Scotland County 2 years after paving. Macrotexture improved after application of the Microsurfacing.

Friction and Texture

Since 2019, NCDOT has partnered with NC State to study friction and texture characteristics of our pavements as related to traffic safety. Literature suggests Microsurfacing can improve these metrics, and is one of the treatments being studied in NCDOT Research Project 2024-12. Open Graded Friction Courses, Ultra-Thin Bonded Wearing Courses, Stone Matrix Asphalt Pavements and other treatments are also being studied.



Pictured above: Double 78M Chip Seal with Fog Seal paved in 2023.

NCDOT's Pavement Preservation Team



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