URETEK USA

URETEK Injection Process™ for Pavement Preservation Projects
VDOT I-81 Botetourt County 5 year Update

URETEK USA

The Problem

- Composite Pavement on karst topography.
- Original concrete slabs were over 65 feet long and started to exhibit transverse cracking within 4 years of use.
- Asphalt overlays were experiencing reflective cracking within two years of being milled and overlaid.
- Concrete was continuing to deteriorate and flexing under heavy loads.

The URETEK Solution

- The URETEK Deep Injection Process™ was utilized for a minimally disruptive, zero excavation stabilization of the subgrade and base material.
- Injection was done on each side of the faulted joints and cracks during 13 weeks in 2009, over 18 lane miles were stabilized from mm 151.6 – 156.3, both lanes , NB & SB.
- The work was accomplished at night, well in advance of the mill and overlay operation.

Support

- URETEK offers an engineered solution for various pavement, soil, and moisture conditions.
- The URETEK Team consists of their own unique material, equipment, and injection process; engineering staff; and, most importantly, their own experienced crews.
- Small Energy Footprint: No excavation or spoils/no heavy construction equipment.
- URETEK repairs the problem, not just addresses symptoms.

Outcome

- On the I-81 project URETEK USA successfully worked two more stretches of roadway over the next year for a total of over 32 lane miles, lengthening life of the pavement.
- **The shot above was taken in January of 2015, over 5 years since the first section of I-81 was injected then milled and overlaid. There is not one transverse crack showing in the asphalt along the 18 lane miles.**