Fog Seals in Maine

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What is a Fog Seal?

- A fog seal is a preventive maintenance surface treatment designed to preserve and extend the life of a road.
- It protects an aging pavement surface and seals up the small cracks to keep water out of the pavement.
- The process consists of spraying a very thin layer of specialized emulsion on the existing pavement surface.
Fog Seal Use in Maine

• Used since 2009 on shoulders
  – Primarily mill & fill projects (mainline only)
  – Shoulders that have not been treated in over 15 years
  – Instead of replacing pavement, crack seal and fog seal application (no cover sand)

• SS-1 used for an emulsion in most cases at first

• Successful in shoulder applications of slowing aging and limiting water intrusion

• Desire to apply to mainline travelways as well but significant concerns about lack of skid resistance (especially with non-dilute emulsion)
After One Year – Shoulders
After One Year – Shoulders
Pilot Projects - 2014

• Identified roadways that are highly oxidized – recently constructed yet showing distress

• Two contracts put out to bid in 2014 for mainline travelway fog seal
  – Wallagrass Rte. 11 - 2.36 miles & Fort Kent Rte. 1 - 4.11 miles
  – North Yarmouth Rte. 115 – 8 miles

• First contract initially bid with no cover coat material
  – Concerns with skid resistance led to the addition of cover sand to contract
Pilot Projects - Test Strip
Pilot Projects - Test Strip
Concerns with Skid Resistance
Concerns with Skid Resistance
Adjustments May Be Necessary
Immediately After Application
Finished Surface