

# 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**





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## Adjustments May Be Necessary



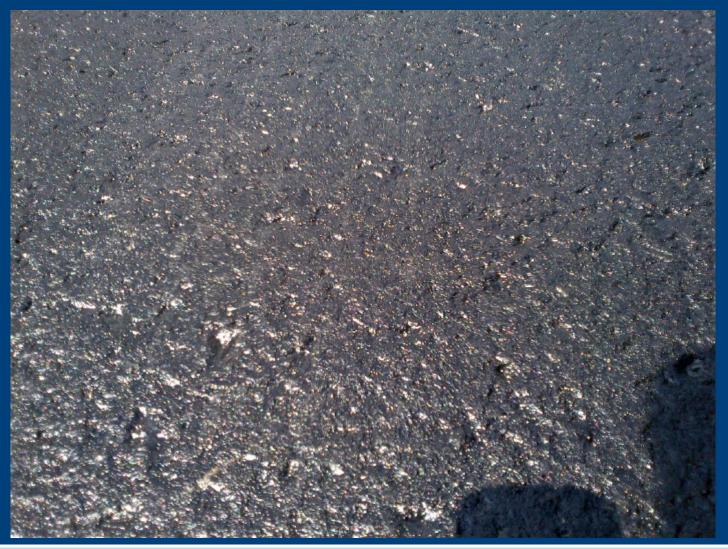


# **Immediately After Application**





#### **Finished Surface**





#### **Finished Surface**

