

## Trends in Use of Millings in Pavement Maintenance

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**Abstract :** While milling materials from old pavement surface can be an important component of cost effective maintenance operation, their use in maintenance projects are not uniform and well documented. This study documents the different maintenance practices followed by four transportation districts of New Mexico Department of Transportation (NMDOT) in an attempt to find whether millings are being used in maintenance projects by those districts. Based on existing literature, a questionnaire was developed related to six common maintenance practices. NMDOT district personal were interviewed face to face to discuss and get answers to that questionnaire. It revealed that NMDOT districts mainly use chip seal and patching. Other maintenance procedures such as sand seal, scrub seal, slurry seal, and thin overlay have limited use. Two out of four participating districts do not have any documents on chip sealing; rather they employ the experiences of the chip seal crew. All districts use polymer modified high float emulsion (HFE100P) for chip seal with an application rate ranging from 0.4 to 0.56 gallons per square yard. Chip application rate varies from 15 to 40 lb/ square yard. State wide, the thickness of chip seal varies from 3/8" to 1" and life varies from 3 to 10 years. NMDOT districts mainly use three type of patching: pothole, dig-out and blade patch. Pothole patches are used for small potholes and during emergency, dig-out patches are used for all type of potholes sometimes after pothole patching, and blade patch is used when a significant portion of the pavement is damaged. Pothole patches last as low as three days whereas, blade patch lasts as long as 3 years. It was observed that all participating districts use millings in maintenance projects.

**Keywords :** chip seal, sand seal, scrub seal, slurry seal, overlay, patching, millings

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