

## RESEARCH PROBLEM STATEMENT

DATE: 09/20/2019 PROJECT AREA: Construction

TITLE: Effects of Allowing Traffic on Milled Surfaces Prior to Treatment or Overlay **PROBLEM STATEMENT**:

There are many known advantages to milling a surface prior to overlays and certain treatments. Milling results in a cleaner, high-friction surface which also grooves the pavement to increase surface area available for adhesion. For traffic management purposes, the Arkansas specifications for milled surfaces require these surfaces to be able to carry traffic and allow for them to do so; this gives the contractor more flexibility while causing less of a hindrance to the public. However, some Districts have noted that allowing the milled surface to be driven on may be decreasing the effectiveness of the mill. Traffic on the milled surface is thought to decrease the surface friction, increase dust or other small particles, and decrease surface area through the destruction of the grooves. The purpose of this project would be to determine whether allowing traffic on milled surfaces before treatment or overlay affects the overall performance of the surface.

## **OBJECTIVES:**

The objectives of the project would be based around determining how much, if any, detriment is caused to the resulting surface treatment or overlay by allowing traffic onto the milled surface before the treatment or overlay is applied.

## FORM OF RESEARCH IMPLEMENTATION AND RETURN ON INVESTMENT:

Ultimately, the result of the project would be a better understanding of how allowing traffic on a milled surface before an overlay or treatment affects the resulting quality of the overlay or treatment. Ideally, the project would result in better guidelines regarding traffic on milled surface that aim to increase the quality of the resulting treatment or overlay. As monetary savings are partially based on longevity of a roadway, pavements with higher longevity result in savings to the department.

**Estimated Project Duration: 24 Months** 

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Standing Subcommittee Ranking

Advisory Council Ranking

Statement Combined with Statement Number(s)