
PAPER 124

Comparative Field Testing of Asphalt and Concrete Pavement Preservation Treatments in Oklahoma

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ABSTRACT

This paper reviews and discusses the interim results from the first year of a three-year pavement preservation research project. The project builds on research done in Australia and New Zealand by conducting a long-term study of 23 methods to restore pavement skid resistance by retexturing the existing surface with either a surface treatment, chemical treatment, or a mechanical process and furnish the Oklahoma Department of Transportation (ODOT) with the technical engineering data for each treatment coupled with an economic analysis of the costs and benefits associated with each treatment. The project is designed to furnish ODOT pavement managers the required information to make rational engineering decisions based on both physical and financial data for the use of potential pavement preservation tools, evaluated in the field under identical traffic and environmental conditions, over the same period by an impartial investigator. The paper concludes that the combination of skid resistance, macrotexture, and financial data provide a powerful tool to assist pavement preservation engineers in selecting the appropriate treatment for a given road.

INTRODUCTION

With the decline in the condition of the nation's transportation infrastructure, pavement preservation has become an essential component to every state Department of Transportation's (DOT) program. Small states, like Oklahoma, have annual construction budgets that far less than larger states and as a result, preserving the state's infrastructure is doubly important. Unfortunately, true pavement maintenance/preservation research