

Heater Scarification and Crack Repairs Before Hot Mix Overlay
List of Pavement Preservation Research
January 2008

Title	Contract / Grant No.	Shortened Abstract	Current Status	Start Date	End Date	Sponsor Organization	Source Organization	Performing Organization	Total Budget
Heater scarification and crack repairs before hot mix overlay	NEPT KS-7701E	None	Complete	1977	1986	KDOT	KDOT	Kansas Dept. of Transportation.	N/A
A performance comparison between a conventional overlay and a heater-scarification overlay		The heater-scarification technique has become one of the most commonly accepted forms of pavement surface recycling in use today. This has been due primarily to the record of successful performance exhibited by these projects over a relatively long period of time. The performance characteristics of a typical heater-scarification overlay project are analytically examined and compared with those of a conventional overlay. The comparison examines fatigue cracking caused by wheel loadings and thermal-fatigue cracking caused by daily temperature cycles. The results are presented for one combination of aged asphalt and recycling agent and one overlay type. The results show that for this combination the commonly held statement that a 19- to 25-mm (0.75- to 1.0-in) depth of heater scarification with 38-mm (1.5 in) of overlay will perform as well as 89 mm (3.5 in) of conventional overlay has some validity.	Complete	1977	1981	TRB	TRB	Carpenter, Samuel H.	N/A
Analyze existing fog seal asphalts and additives	0-5091	Fog and rejuvenating seals have the potential to reduce and reverse the aging of asphalt pavements, reduce cracking and raveling, and provide a better, longer-lasting pavement. Pavements sealed within the last few years and new treatments will be tested each year of the 2- year study to determine the impact of these treatments on permeability, strength, binder viscosity, and depth of penetration. Guidelines on the best practices, selecting appropriate candidates, pre-treatment work, application rate and treatment type, application suggestions, curing time, and performance will be summarized in a small, pocket sized pamphlet that will be easy to carry, will be provided.	Active	Sep-04	Aug-06	TxDOT	TxDOT	TTI	N/A