

**Concrete Joint Repair  
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
US12 Joint Leveling Evaluation	SD2002-13	<p>The South Dakota Department of Transportation (SDDOT) has an aggressive crack routing and sealing program to help minimize the moisture ingress but sometimes these cracks may undergo significant subsidence in the asphalt concrete pavement adjacent to the cracks even with the sealing. The depressions that form result in an unacceptably rough ride due to dips at each crack. To potentially solve this problem on US12 near Selby, SD, four test sections using three different materials and two different processes will be constructed. Deery Level and Go, Deery Recessed Repair, and Crafcoc PloyPatch will be used to fill and level the depressions. The products will be tested in milled and non-milled sections, which will provide ample opportunity for testing and evaluating of their effectiveness. The Deery and Crafcoc products are similar forms of hot pour mastic material containing aggregate. This research will evaluate the products and will help to determine whether either product will be successful.</p>	Active	07-May-02	30-Jun-03	South Dakota DOT	South Dakota DOT	South Dakota DOT	\$10,000
Evaluation of A Precast, Post-Tensioned Bridge Paving Notch		<p>Approach pavement settlement at the end of the bridge has been observed on a number of Iowa bridges. The failure of the bridge paving notch has been documented through previous investigation by the Iowa DOT as a contributing factor in this settlement. The conventional repair procedure for this problem consists of removing the deteriorated paving notch concrete while preserving as much of the existing reinforcing as possible. Wood forms are constructed, and a cast-in-place concrete paving notch is placed. Following sufficient curing of the new concrete, a replacement approach slab pavement is constructed. The conventional replacement method requires that the bridge be taken out of service for an extended period of time, which disrupts the traveling public. The large number of bridges that exhibit the failing paving notch problem and, more importantly, their location on highly traveled roadways necessitate the development of a much more quickly-installed replacement method. A rapid paving notch replacement is proposed</p>	Active	01-Jun-05	N/A	Iowa DOT	Iowa State University	Iowa State University	

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Rehabilitation Procedures for Longitudinal Cracks and Joints Separation in Concrete Pavement	0-5444	This study will survey districts to determine the extent of the problem, repair methods that have been used, and the performance of these repairs. Selected other states, paving contractors, and other experts will be consulted on the best methods to prevent and to repair these failures. Guidelines will be prepared and tested in field trials, and the results will be evaluated and modifications to the guidelines will be made as required. The final result will be guidelines, recommendations and specifications for repair and for new construction.		01-Sep-05	31-Aug-07	Texas DOT	Texas DOT	Center for Transportation Research - University of Texas	