

TRANSPORTATION RESEARCH RECORD

Journal of the Transportation Research Board, No. 2154

Contents

Foreword	ix
<hr/>	
PART 1—RIGID PAVEMENT DESIGN	
Mitigating Transverse Joint Faulting in Jointed Concrete Pavement with Polyurethane Foam Kevin Gaspard and Zhongjie Zhang	3
<hr/>	
Simulation of Crack Propagation in Concrete Beams with Cohesive Elements in ABAQUS Temesgen W. Aure and Anastasios M. Ioannides	12
<hr/>	
Test Method and Model Development of Subbase Erosion for Concrete Pavement Design Youn su Jung, Dan G. Zollinger, and Andrew J. Wimsatt	22
<hr/>	
Evaluating Effectiveness of Dowels in Jointed-Concrete Pavements with Faulting Data from Rapid-Travel Profilers Christopher R. Byrum	32
<hr/>	
Time-Dependent Behavior of Posttensioned Concrete Pavements Under Environmental Loading Seongcheol Choi and Moon C. Won	44
<hr/>	
Behavior of Tied Multiple-Lane Portland Cement Concrete Pavement: Effects of Environmental Loading and Dowel Bar Use Soojun Ha, Seongcheol Choi, and Moon C. Won	57
<hr/>	
PART 2—FLEXIBLE PAVEMENT DESIGN	
Expert System for Design of Low-Volume Roads over Expansive Soils Yaqi Wanyan, Imad Abdallah, Soheil Nazarian, and Anand J. Puppala	81
<hr/>	