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14. Supplementary Notes		13. Sponsoring Agency Name and Address North Dakota DOT Materials and Research Division 300 Airport Road Bismarck ND 58504-6005	
15. Abstract  <b>Objective</b> The North Dakota Department of Transportation is always looking to improve driving conditions on state roadways for the public. Snow and ice on bridge decks and pavement surfaces can lead to hazardous driving conditions. The objective of this research is to evaluate the effectiveness of both overlay systems in reducing crash statistics. The research will observe the deicing capabilities of the SafeLane™ product. The durability of both products will be evaluated, with a focus on their ability to resist snow plow damage.  <b>Scope</b> Highway safety projects SHE-7-002(081)018 and SHE-1-094(114)154 will include experimental features to evaluate the performance of the SafeLane™ product and highway safety project SHE-8-094(065)337 will include an experimental feature to evaluate the performance of the FLEXOGRID™ product. All three projects will be evaluated bi-annually with a focus on the durability of the products along with how the products resist snow plow damage.  <b>Summary</b> The SafeLane™ product on the Sand Creek Bridge near Williston is showing signs of failure. In the wheel paths, the angularity of the aggregate has continued to deteriorate since installation. Vehicle traffic continues to polish the aggregate and reduce the surface friction. Also, the asphalt portion of this project is in rough shape with some material completely gone and the asphalt itself rutting. Evaluating the deicing capabilities of the SafeLane™ product is difficult because the districts treat the bridge with chemicals the same as other bridges in the district. Since installation two accidents have been attributed to ice build-up on the bridge. The SafeLane™ product on the Missouri Road Bridge near Mandan is showing signs of fatigue. A large area that was terminated due to panels being replaced on the end of the bridge is continuing to deteriorate. In the wheel paths, the angularity of the aggregate has continued to decrease since installation. Vehicle traffic continues to polish the aggregate and reduce the surface friction. Evaluating the deicing capabilities of the SafeLane™ product is difficult because the districts treat the bridge with chemicals the same as the other bridges in the district. Since installation one accident has been attributed to ice build-up on the bridge. The FLEXOGRID™ product on the Maple River Bridge on I-94 is overall performing well after four years. There is a minimal amount of material that has been removed from traffic or snow plows at the beginning of the bridge, but the rest of the material is intact. The epoxy and aggregate is still intact on the main part of the bridge, and most of the angularity of the aggregate is still present. The surface friction has diminished some but does not appear to be completely depleted. Since installation two accidents have been attributed to ice build-up on the bridge.			
16. Key Words Bridge Deck SafeLane Flexogrid Deicing Aggregate	17. Distribution Statement No restrictions. This document is available by <a href="#">clicking this link.</a>  North Dakota Department of Transportation Materials and Research Division: 300 Airport Road Bismarck ND 58504-6005 Office: (701) 328-6900 Fax: (701) 328-0310	18. No. of Pages 78	19. File type/Size PDF