

1. Report No. ND 94-12	2. Report Date November 1996	3. Contract No. N/A	4. Project No. H-8-999(004)
5. Title and Subtitle Evaluation of Polycarb's "MARK-55 Series" Epoxy Pavement Marking		6. Report Type <i>Click on link to open report.</i> Work Plan <input type="checkbox"/> Construction <input type="checkbox"/> Evaluation <input type="checkbox"/> Final <input checked="" type="checkbox"/>	7. Project No. 8. Project No. 9. Project No. 10. Project No.
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12. Performing Organization Name and Address NDDOT M+R <input checked="" type="checkbox"/> North Dakota DOT NDDOT OTHER* <input type="checkbox"/> Materials and Research Division NDSU <input type="checkbox"/> 300 Airport Road UND <input type="checkbox"/> Bismarck ND 58504-6005 UGPTI <input type="checkbox"/> OTHER* <input type="checkbox"/> *see supplementary notes		13. Sponsoring Agency Name and Address North Dakota DOT Materials and Research Division 300 Airport Road Bismarck ND 58504-6005	
14. Supplementary Notes			
15. Abstract <u>Purpose and Need</u> While striving to meet EPA guidelines, the North Dakota Department of Transportation must find a pavement marking system that will also withstand our severe winters, snow plow operations, high traffic volume, and maintain an effective reflectivity over time. <u>Objective</u> The objective of this experimental project is to evaluate the effectiveness, durability, and reflectance over time of Polycarb's "MARK-55 Series" epoxy pavement marking. <u>Scope</u> The marking system was place on I-29 in Fargo, North Dakota. This location represents a high traffic area and an ideal location to evaluate the MARK-55 series marking system. There were two types of glass beads used on this project, "Visibeads", a trademark of Potters Industries, and Minnesota Specification Epoxy Beads. The markings were evaluated annually. This evaluation included a nighttime visual inspection, a daytime visual inspection, and a "Retroreflectivity Inspection". <u>Summary</u> During the following two years the marking system has lost some of its effectiveness due to snow plow damage. Exposure to merging traffic and lane switching caused wear to the marking system. The sections of roadway where the "Visibeads" are used were registering a larger retroreflectivity reading throughout the evaluation period and also appeared brighter in all hours of the day from a driver's point of view. The differences between the retroreflectivity readings for the first and second annual evaluations are not appreciable. During the two year evaluation period the "MARK-55 Series" epoxy marking system has performed to an acceptable standard. <u>Recommendation</u> The "MARK-55 Series" epoxy marking system is more expensive to apply. The current price for Polycarb's MARK 55.1 formulation is approximately \$22.50 per gallon, which equates to approximately 7¢ per linear foot. The current price for Polycarb's MARK 55.4 formulation is approximately \$35.00 per gallon, which equates to approximately 11¢ per linear foot. These prices are for leaded material and will increase approximately 35% if unleaded material is specified. These prices reflect the cost of the material only and are based on the application of a 4" strip laid 15 mils thick and 320 feet long.			
16. Key Words Traffic Lane Lines Control Epoxy	17. Distribution Statement No restrictions. This document is available to the public from: 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 25 19. File type/Size Pdf/4.1 MB