High Friction Surface Treatment Highway Safety Improvement Program Funded Pilot Project Maricopa County D. O. T.

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Abstract : The Federal Highway Administration's Everyday Counts (EDC) initiative is designed to identify and deploy innovations, enhancing the safety of our roadways. According to and as referenced in FHWA everyday counts (2) website, High friction surface treatment (HFST) is an emerging surface application that has been proven to reduce crashes. High Friction Surface Treatment involves the application of Calcined Bauxite, very high-quality aggregate to the pavement using a polymer binder to restore and maintain pavement friction at existing or potentially high crash areas. Bauxite is a byproduct of manufacturing aluminum resulting in very hard aggregate and is abrasion and polish resistant. HFST is an approach that has been recognized nationally and internationally and has provided considerable increases in friction for curves and intersections spot applications. Maricopa County qualified and received HSIP (Highway Safety Improvement Program) funding that was applied towards HFST application on 2 locations in Maricopa County. The project was successfully completed in December 2019. Four years later MCDOT continues to conduct wet and dry ABS and Non-ABS friction coefficient testing in pursuit of after studies evaluation of HFST application.

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