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Title

Side Friction Factors for Horizontal Curves and Guidelines for Flattening Horizontal Curves on Rural Two-Lane Highways – Executive Summary

Type of Report

Final

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Supplementary Notes

Abstract

This report describes the findings of a research project which was conducted to determine the amount of side friction demanded and provided for a range of roadway curvatures, vehicle speeds, vehicle types and pavement surfaces. Seven horizontal curves located on rural two-lane highways in Alberta were used as test sites. Investigations into the friction provided by icy surfaces were conducted at a police driver training facility. Maximum values of side friction demanded on dry and icy roadways were determined and used to calculate the margin of safety provided for different vehicle speeds. The report also includes an analysis of the cost effectiveness of curve flattening for Alberta highways.

Key Words

Horizontal curves, side friction factors, curve flattening, margin of safety, economics, icy pavements, two-lane highways

Distribution

Unlimited

Project Co-ordinator

Allan Lo, P. Eng., M. Eng.

ALBERTA TRANSPORTATION AND UTILITIES

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