An Evaluation of Dynamic Curve Warning Systems in the Sacramento River Canyon Final Report

Prepared by

Lani Tribbett, Research Assistant Patrick McGowen, Research Associate

John Mounce, Senior Research Engineer

of the

Western Transportation Institute Montana State University 416 Cobleigh Hall Bozeman, MT 59717

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ABSTRACT

Five dynamic curve warning systems were installed by CALTRANS for advance notification to motorists of alignment changes and speed advisories in the Sacramento River Canyon. The individual sign systems included a Changeable Message Sign (CMS) to display both text and diagrammatic curve warnings. The CMS sign systems were also coupled with a radar measurement and display so that both the advisory speed and operating speed of the approaching vehicles would be identified.

Measures of effectiveness were utilized to evaluate these systems including frequency of crashes/erratic maneuvers, operating speeds, public acceptance and response, and maintenance requirements. Preliminary results indicate reductions in both accidents and operating speeds at selected sites based upon assessment of limited data available and evaluation time period. Motorist acceptance of these systems and desired response is favorable with few maintenance difficulties. It is recommended these systems continue to be monitored for more conclusive results.

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