

RESEARCH PROJECTS

NCHRP Synthesis 381 Falling Weight Deflectometer Usage

STE developed a Falling Weight Deflectometer (FWD) Usage Synthesis for the National Cooperative Highway Research Program (NCHRP). These devices are used to measure pavement deflections in response to a stationary dynamic load, similar to a passing wheel load. The data obtained are used to evaluate the structural capacity of pavements for research, design, rehabilitation, and pavement management purposes.

[Study Website](#)

Ride Specification Review for Montana Department of Transportation (MDT)

The purpose of this project was to review the Montana Department of Transportation (MDT) asphalt pavement ride specification and compare it with current literature and state of practice. STE developed a detailed work plan, reviewed MDT existing ride specification, conducted a literature review, surveyed agencies across the country, provided recommendations to improve MDT specification, and developed an implementation plan. STE also developed a new ride specification and manuals/procedures for MDT inertial pavement profilers.

[Study Website](#)

Highway Project Cost Estimating and Management (HPCE) for MDT

Cost overrun of infrastructure projects has become a common problem for transportation agencies. Federal, state, regional, and local transportation agencies are searching for ways to mitigate the discrepancy between budgeted costs and actual costs of projects they sponsor. The overall purpose of this project was to provide recommendations on how to enhance the existing MDT highway project cost estimating practices.

[Study Website](#)

Vehicle Miles Traveled Fee Study, Phase I, for NDOT

Nevada Department of Transportation (NDOT) is conducting the Vehicle Miles Traveled Fee Study to explore and evaluate a replacement source of revenue for the current fuel taxes. An alternative revenue source is needed to efficiently and effectively operate, maintain and improve the roads and highways in Nevada.

[Study Report](#)