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Governor

Wyoming Department of Transportation

"Providing a safe, high quality, and efficient transportation system"

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John F. Cox
Director

Participation in Transportation Pooled Fund Study TPF-5(317) Evaluation of Low Cost Safety Improvements

Problem Statement

WYDOT is moving towards a more predictive model of vehicle crash analysis in accordance with the AASHTO Highway Safety Manual (HSM). A fundamental data requirement is to have accurate, scientifically supportable crash modification factors (CMF). 39 other states have contributed to a pooled fund study that analyses treatments and to post them in a crash modification factor warehouse for traffic professionals to use. With Wyoming's involvement in the HSM methodology it has become obvious of the value of this research, and we should pay our share for the information and to continue the research.

Background

This pooled fund project will encompass safety-effectiveness evaluations of priority strategies from the NCHRP Report 500 Guidebooks, Guidance for Implementation of the AASHTO Strategic Highway Safety Plan. The safety effectiveness of many of the strategies in the guidebooks has not yet been rigorously evaluated. In order to achieve national goals of reducing the fatality rate, these "tried" and "experimental" strategies will need to be appropriately implemented. Data will be collected and before-after safety effectiveness evaluations will be performed at sites where selected safety strategies are being implemented. A steering committee, comprised of pooled fund State DOT representatives, will provide guidance on the strategies selected for evaluation.

Objectives

The goal of this research is to develop reliable estimates of the effectiveness of the safety improvements that are identified as strategies in the National Cooperative Highway Research Program (NCHRP) Report 500 Guides. These estimates are determined by conducting scientifically rigorous before-after evaluations at sites in the U.S. where these strategies are being implemented. Wyoming would benefit from these studies by continuing the research in these treatments, expanding the existing list of CMF to allow for more rigorous evaluation of safety treatment proposals.

Scope of Work

The original scope of work was targeted as a \$4.38 million, and scheduled to proceed through 2017. Currently there are 39 states pledging almost \$3.7 million since 2005, or an average of almost \$95 thousand per state. Most of the participating states have spread the costs out over time. There is an annual meeting of the technical advisory committee to select future treatment studies that WYDOT would have access to.

Study Benefits

This transportation pooled fund study directly supports the reduction of critical crashes using engineering treatments by providing rigorous analysis of the effectiveness of available treatments. The use of these studies will provide information to pick the best remedy for an

identified crash problem area. The study directly supports WYDOT goals of “improve safety on the state transportation system.”

Work Schedule

It is requested that funding be considered to be divided by years and funded through 2017.

Cost Estimate

It is recommended a participation of \$10,000 per year for the remaining three years of the study be made. It is recognized that a lower number may be needed for budget reasons, but it is requested that the RAC comment on if they would consider additional funds during the upcoming fiscal years.

2015	\$10,000
2016	\$10,000
2017	\$10,000
Total	\$30,000

Point of Contact

Wyoming’s point of contact for this project is:

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WYDOT