**Smart Work Zone Deployment Initiatives**

(Pooled Fund Project)

(Prior Project: TPF-5(081))

**Objectives:**

This program represents an on-going effort among cooperating states’ DOTs, the FHWA, universities, and industry to evaluate new products and conduct related research focused on the enhancement of safety and mobility in highway work zones. Over 80 studies and evaluations have been completed since the inception of the SWZDI and final reports are posted in the Smart Work Zone Deployment Initiative web site at [www.intrans.iastate.edu/smartwz/](http://www.intrans.iastate.edu/smartwz/).

**Background:**

The Midwest Smart Work Zone Deployment Initiative (MwSWZDI) was initiated in 1999 as a Pooled Fund Study intended to coordinate and promote research related to safety and mobility in highway work zones. The Iowa DOT has been the lead state since 2004.

The program is an ongoing cooperative effort between State Departments of Transportation, universities, and industry. Commercial products are provided by private vendors for evaluation, although this is not the only focus of contracted projects. State DOTs provide funds, prioritize products with respect to the anticipated benefits to their construction and maintenance activities, and cooperate with researchers to identify test sites and conduct the evaluations

For the 2013 program, the Board of Directors (BOD, a.k.a. Technical Advisory Committee, TAC) collected and/or created thirteen problem need statements. Subsequent requests for proposals were developed and distributed to potential researchers at research institutions in contributing states. Researchers submitted a total of twenty-two proposals. Partner State DOTs reviewed, discussed and ranked the proposals. Four projects were selected for award (in addition to the Administrative Agreement).

**Structure and Funding:**

The BOD is comprised of voting representatives from cooperating states and non-voting members from the FHWA and other partners. The BOD is responsible for collecting and/or developing problem statements that describe high priority issues related to work zone safety and mobility. Members of the BOD, vendors, and researchers are invited to submit ideas for proposed research study for each program year. In addition, selected vendors are invited to submit products or processes for evaluation studies. Following a review of the submitted topics and products by the BOD, Request for Proposals (RFPs) are distributed to interested university researchers in DOT partner states. Researchers then submit proposals and work plans to the BOD for prioritization and selection of projects to be included in the next year’s work plan based on anticipated benefits and available funding as provided by member states contributions.

The Program Process and BOD Project Approval Process are detailed in the 2013 Evaluation Plan document. These processes are annually reviewed by the Board.

Funds support projects and administration. Projects are selected by voting. Votes are made by active participating state partners and are weighted based on state member contribution that year.

The Iowa Department of Transportation has assumed the lead for this pooled fund program and has requested program management assistance from InTrans at Iowa State University in administering and supporting the activities of this pooled fund program.

**Scope of Work:**

1. Board of Director (BOD) members solicit and develop problem statements.
2. BOD prioritizes problem statements.
3. Program administrator prepares Request for Proposals and collects proposals from researchers in partnering states.
4. BOD prioritizes proposal topics.
5. BOD reviews, discusses, and prioritizes submitted proposals.
6. Proposal are scored and ordered based on priorities collected in item 5 and weighted values that are based on state partner commitments that year.
7. Annual work plan is prepared by the program administrator who also facilitates contracts between the selected researcher(s) and the Iowa DOT.
8. State DOTs form and lead the individual project TACs for projects awarded to a university or entity in their state (other members can request to serve on the TAC).
9. Projects are tracked quarterly.
10. Draft final reports are reviewed by the home state as well as by the BOD.
11. Final reports are posted to the program webpage and sent to national research report repositories.
12. Implementation and technical transfer opportunities are discussed by the BOD.

Research Implementation and Technology Transfer Benefits: The benefits from the SWZDI pooled fund include a wide variety of products including completed research reports, technical transfer documents, potential presentations and training, safety equipment evaluations, support toward other research, as well as development and/or implementation of research results in areas of mutual interest and benefit to pooled fund members and others in the industry.

**Requested Funding:**

A minimum of 4 contributing states is desired. The typical commitment amount is $50,000 per state, per year, although a commitment range from $10,000 to $80,000 per year is allowed. Project votes are weighted based on commitment in any given year. A minimum total of $200,000 per year in commitments is desired.

**Additional Information:**

Current active and proposed future URL: <http://www.intrans.iastate.edu/smartwz/>