

**State of Wisconsin/Department of Transportation**  
RESEARCH PROGRESS REPORT FOR THE QUARTER ENDING: Sept. 30, 2006

| <b>Program: SPR-0010(36) FFY99</b>  |  | <b>Part: II Research and Development</b>   |  |
|---|--|--|--|
| <b>Project Title:</b> Investigation of Vertical Members To Resist Surficial Slope Instabilities |  | <b>Project ID:</b> 0092-05-09              |  |
| <b>Administrative Contact:</b> James McDonnell  |  | <b>Sponsor:</b> WHRP                       |  |
| <b>WisDOT Technical Contact:</b> Bob Arndorfer  |  | <b>Approved Starting Date:</b> Nov 4, 2004 |  |
| <b>Approved by COR/Steering Committee:</b> \$29,714   |  | <b>Approved Ending Date:</b> June 4, 2006  |  |
| <b>Project Investigator (agency &amp; contact):</b> Hani Titi: UW-Milwaukee                     |  |  |  |

**Percent Complete: 80%**

**Project Description:**

The study will be conducted over 18 months, and be completed in 5 phases:

- Task 1: Conduct a Comprehensive Literature Search and Review of Methods for Stabilizing Surficial Slope Failures Using In-Situ Short Structural Members
- Task 2: Conduct a National Survey to Obtain Information/Data on Methods of Stabilizing Surficial Slope Failures Using In-Situ Short Structural Members
- Task 3: Synthesize the Literature Materials on Methods of Stabilizing Surficial Slope Failures Using In-Situ Short Structural Members
- Task 4: Conduct Cost-Benefit Analysis of Methods that have Potential Implementation for Stabilizing Surficial Slope Failures in Wisconsin
- Task 5: Conduct Comprehensive Slope Stability Analysis using Wisconsin Data to obtain Parameters for Methods of Stabilizing Surficial Slope Failures by In-Situ Short Structural Members
- Task 6: Select Future Project for Implementation in Wisconsin
- Task 7: Prepare and Submit Final Report

**Progress This Quarter:**

(Includes project committee mtgs, work plan status, contract status, significant progress, etc.)

1. Continued the literature search, review, and reduction of collected information
2. Continued synthesizing literature information and data
3. Submitted paper to the First North American Land Slide Conference on Evaluation of Shallow Slope Failures and Repairs along Wisconsin Highways
4. Acquired slope stability analysis software (Slope/w)
5. Started collecting data about cost
6. Started preliminary analysis on using data from different slopes

**Work Next Quarter:**

1. Continue literature review and collection.
2. Continue analysis of data on slope failures
3. Continue cost benefit analysis
4. Start a draft of the final report

**Circumstances Affecting Progress/Budget:**

None