

Wisconsin Highway Research Program

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Research Implementation & Project Closure

Project Information

(To be completed by WHRP staff when draft report is received) **Date completed:** May 17, 2006

Project Title: Non-Destructive Testing of Highway Bridge Structures for Purposes of Structure Evaluation	Project ID: 0092-00-15
Technical Oversight Committee: Structures	TOC Chair: Stanley Woods
Project Start Date: December 22, 1999	WisDOT Project Manager: Bruce Karow
Project End Date: June 14, 2005	Approved Contract Amount: \$ 49,745.00
Final Report Dated: March 2003	Actual Project Expenditures: \$ 49,745.00
Principal Investigator: Al Ghorbanpoor Organization: University of Wisconsin-Milwaukee	Co-investigators (including research assistants) and Organizations: Neal Benish, UW-Milwaukee

Implementation / Further Research Recommendations

(Information provided by TOC and WisDOT project manager when final report is approved) **Date completed:** May 17, 2006

1. What WisDOT policy or practice does this research project pertain to? Please identify the specific section(s) of the Facilities Development Manual (FDM), Construction and Materials Manual (CMM), Standard Specifications, other manual, or accepted practice to which this research pertains.

This research provides the bridge maintenance engineers with a guide for methods and techniques to test highway bridges for structural evaluation.

2. Based on the results of this research, the following steps are recommended. (Please select either A, B or C, and provide detail in Items 3 to 7, below.)

A. No further activity is necessary. (Please skip to Item 7.)

B. Revisions to WisDOT policy or practice are not appropriate at this time. However, to gain further value from this research, we recommend follow-up research and/or validation activities as detailed in 3 through 6, below.

C. The Technical Oversight Committee recommends implementing changes to the following WisDOT policies or practices. (Please identify specific section(s) of specific manuals, where applicable):

3. Describe the scope and objectives of follow-up research or implementation of specific changes to WisDOT procedures.
 N/A

4. Details of Follow-up Research or Implementation Activities:

Task	Person responsible	Target completion date
1. N/A		
2.		
3.		
4.		

5. Estimated cost, if any, for equipment, training, printing, etc.:
 N/A

6. Expected benefits and how they will be measured (dollar savings, time savings, etc.):
 N/A

7. Reasons for terminating activities related to this research project:

Study produced a guidebook that has been distributed to bridge inspectors; inspectors may use as a resource in bridge inspection. No changes to Bridge Inspection Manual at this time.

Project Closure

(Information provided by principal investigator and WisDOT project manager when final report is approved)

Date completed: September 10, 2006

Timeline and budget

1. Was the project completed on time (i.e., per the original contract between WisDOT and the performing organization)?

- Yes
 No

1a. If not, what additional time was needed to complete the project?

Extension granted from 11/30/2001 to 6/30/2005.

What were the reasons?

- Data access Reporting/revision delay
 Testing delay Research subcontractor delay
 Construction delay Work plan modification
 Administrative delay

2. Was additional funding sought for this project?

- Yes
 No

2a. If yes, how much?

Was the funding approved? Yes No

For what purpose?

Partnerships and facilities

3. Did this research effort include partnerships with other universities, agencies, or other stakeholders?

- Yes
 No

3a. If yes, please list. Include the locations of any out-of-state institutions.

4. Indicate the location of facilities used:

- University
 Wisconsin DOT
 Other:

4a. Please describe the type of laboratory and testing facilities used.

N/A

Student involvement

5. Were graduate students employed for this study?

- Yes
 No

5a. If yes, how many? 1

Number male 1

Number female

6. Did any of the graduate students use this research project in a published thesis or article?

- Yes Not sure
 No N/A

6a. Citations of published theses or articles:

Methods of Non-Destructive Evaluation for Wisconsin Highway Bridge Structures, M.S in Engineering Thesis, May 2005.

7. Were undergraduate students employed for this study?

- Yes
 No

7a. If yes, how many? 1

Number male

Number female 1

8. If known, please list the graduate students' current occupations or affiliations (e.g., continuing graduate education, employed at a public agency or private firm, etc.) and completed degrees and awarding institutions.

Employed at a private firm
M.S. in Civil Engineering, UW-Milwaukee, May 2005.

9. If known, please list the undergraduate students' current occupations or affiliations (e.g., continuing graduate education, employed at a public agency or private firm, etc.) and, where applicable, completed degrees and awarding institutions.

Not known.