RD&T Technology Facilitation

Product Action Plan

Product - Visual Bridge Inspection Methods Evaluation

Description of Product - Final report from a study entitled "Reliability of Visual Inspection for Highway Bridges". It is envisioned that this 800-page report will help define the accuracy of normal bridge inspection practices, and help bridge owners allocate and utilize bridge inspection resources more effectively.

Intended User - Primary users include CBU administration; State, local, and contract bridge inspection managers.

Distribution methods - Reports will be distributed to interested parties in hard copy and/or CD-ROM format. Significant extractions from the final report will be developed for publication on the World Wide Web (WWW).

Delivery Date - Draft final report delivered June 30, 2000. Subsequent to final review, final report should be available for distribution in hard copy format by September 29, 2000. Publication to WWW and on CD-ROM will be available shortly thereafter.

Future Actions Needed / Planned - Technical review by and subsequent presentation to an International Industry Expert Panel.

Program/Product Support -

R&D Contact(s) - Glenn Washer and Brent Phares, Infrastructure Inspection and Management Team (HRDI-10)

CBU Contact(s) - Ray McCormick
John Theil (Federal Lands Highway Division)

Outreach -

Conference Presentations - (1) American-European Workshop on Nondestructive Inspection Reliability and (2) Structural Materials Technology / Nondestructive Testing Conference.

Publications - (1) A Public Roads article that describes the study goals and methodologies used, (2) 800-page final report, (3) 8-page executive summary, (4) NDEVC News article, and (5) articles in various other publications.

Other Outreach Activities) - (1) Visual Inspection display as part of NDE Validation Center TRB booth, (2) Visual Inspection display as part of the NDE Validation Center booth at SMT/NDT conference, and (3) Seminar to CBU bridge engineers.

Future Actions Needed / Planned - (1) Meeting of international Industry Expert Panel for technical review and goal formulation, (2) Present three papers at 2001 annual meeting of TRB, (3) Preparation of four papers for publication in national journals, (4) Continued representation in national conferences, (5) A Public Roads article presenting the study results and conclusions, (6)Follow-up NDEVC News article, and (7) Support CBU on NBI policy issues related to inspection.

Training -

Materials Needed - Potential for: (1) Training video/manual on proper inspection techniques and practices, (2) Updated Bridge Inspector's Training Manual to reflect study findings, and (3) Seminar with National Bridge Inspection Program administration to summarize and discuss the study findings and the implications they have.

Schedule of Training / Workshop / Briefing - Would Require: (1) Updated Bridge Inspector's Training Manual can be incorporated into current NHI training programs and (2) Seminar can be included in upcoming CBU efforts regarding revision of NBI condition rating definitions.

Intended Audience(s) - (1) Managers who need to understand the impact that the study findings have on the implementation of nationwide bridge inspection programs, (2) State and local DOT bridge inspection managers, and (3) Bridge inspectors at all levels.

Future Actions Needed - (1) Determine the level of input needed by CBU regarding revision of NBI Condition Rating definitions and (2) Update group overseeing Bridge Inspector Training Courses.

Program Integration -

CBU Contact(s) - (1) Maintain an active role in the effort to revise NBI Condition Ratings and (2) Provide additional FHWA representation in current inspection training efforts.

Research Contact - (1) Continue Visual Inspection related research including defining the specific sources of Condition Rating inaccuracies, study the types and sizes of defects that should typically be identified during In-depth Inspection, and conduct additional research into factors influencing bridge inspection reliability in order to establish useful guidelines in support of SBU's programs, and (2) Assist CBU in implementation of additional training as needed.