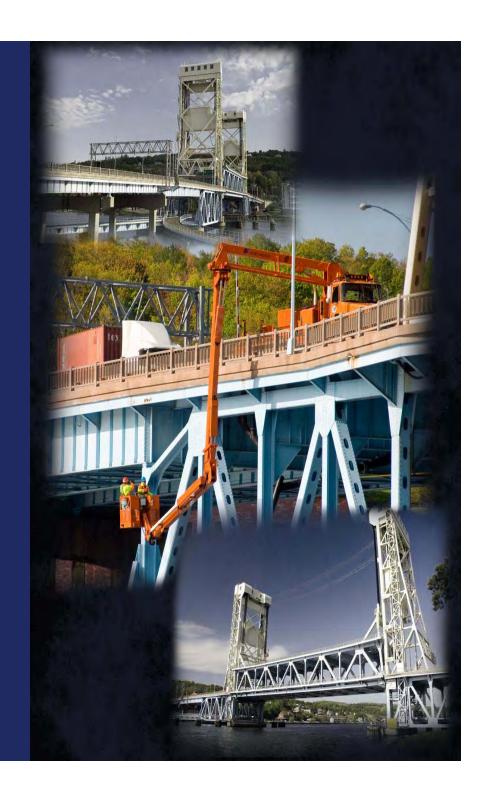
2012 Michigan Bridge Conference Bridge Inspection Workshop

Michigan Bridge Inspection Manual

NHI Training Update

Rich Kathrens

MDOT Bridge Safety Inspection Engineer kathrens@michigan.gov
March 20, 2012







Result of 2011 FHWA NBIP Metric Review

MDOT Committed to Developing a Bridge Inspection Manual

Metrics 15 Bridge Files, M16 Fracture Critical Members, M20 QA/QC, M21 Critical Findings

Date to Complete Manual March 2014

Date for completion of Critical Findings Section August 2012

Date for completing of Bridge Files Section September 2012







Other states have Bridge Inspection Manuals

Vary in Content

Include SIA Coding Guide, Load Rating, Material from AASHTO and BIRM in one Manual.







MDOT's Bridge Inspection Manual

Intent of the Guide:

- Clear up "Grey" areas in the NBIS Rules, AASHTO Manual, and BIRM.
 (Supplement and Reference).
- Document policies and procedures that MICHIGAN is following in regards to bridge inspection. (i.e. Recurrent Training, QA/QC, Critical Findings, etc.)
- Provide a resource for new and existing bridge owners and inspectors to help obtain consistency statewide. (Both MDOT and Local Agency)
- Goal is establish a "live" document that will benefit all that are involved with Bridge Safety Inspections and the Bridge Managements





Format:

3-Ring Bound w/ Specific Appendices
Available Online (Similar to Design Manual)

Sample Table of Content:

Qualifications

Inspection Frequency

Inspection Procedures

Bridge Files

Critical Findings

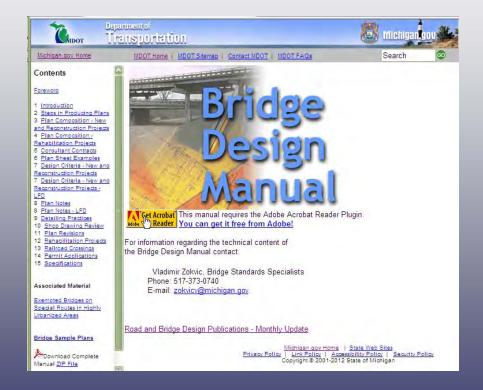
Damage Inspections

Scoping (Detailed Inspections)

Stream Bed X-Sections

QA/QC Procedures

Bridge Inspection Rating Guides







How will the manual be created

Team – MDOT's Structures Management section, Region Bridge Engineers, Local Agency Representatives, and Consultants

Bridge Program Manager will take lead on research and preparing an outline for each section of the Manual, and send out to the Team to review.

» Once Outline is approved, Remaining portion of section will be created and reviewed by team.



- » During the review process Region Bridge Engineers will work w/ the inspectors to have a chance to review.
- » As Sections of the manual are completed they will be published and posted to the web for use.

The general table of content and sections for Critical Findings and Bridge

Files and will be completed first.

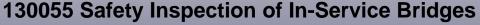






NHI Announces a newly updated course

130055 Safety Inspection of In-Service Bridges Updated course starts March 5, 2012



- Course Based on 2012 BIRM
- (2) Half day Field Trips
- Instruction on Critical Findings
- New AASHTO Element Level Rating









New Prerequisite Requirements (NHI 130055)

All participants must successfully complete one of the following courses:

130054-Engineering Concepts for Bridge Inspectors

5-day Instructor-led Course intended for:

- -Those with limited experience with the inspection of in-service highway bridges
- -Engineers without bridge experience
- Those who need a refresher in basic bridge design concepts

130101-Introduction to Safety Inspection of In-Service Bridges

14-hour, Web-based Training and assessment intended for:

- -Those involved in inspecting bridges or in charge of a bridge inspection unit
- A background in bridge engineering is strongly recommended

130101A-Prerequisite Assessment for Safety Inspection of In-Service Bridges

Web-based Assessment intended for:

- -Those involved in inspecting bridges or in charge of a bridge inspection unit
- Those with significant experience and/or a comprehensive background in bridge inspection or engineering





