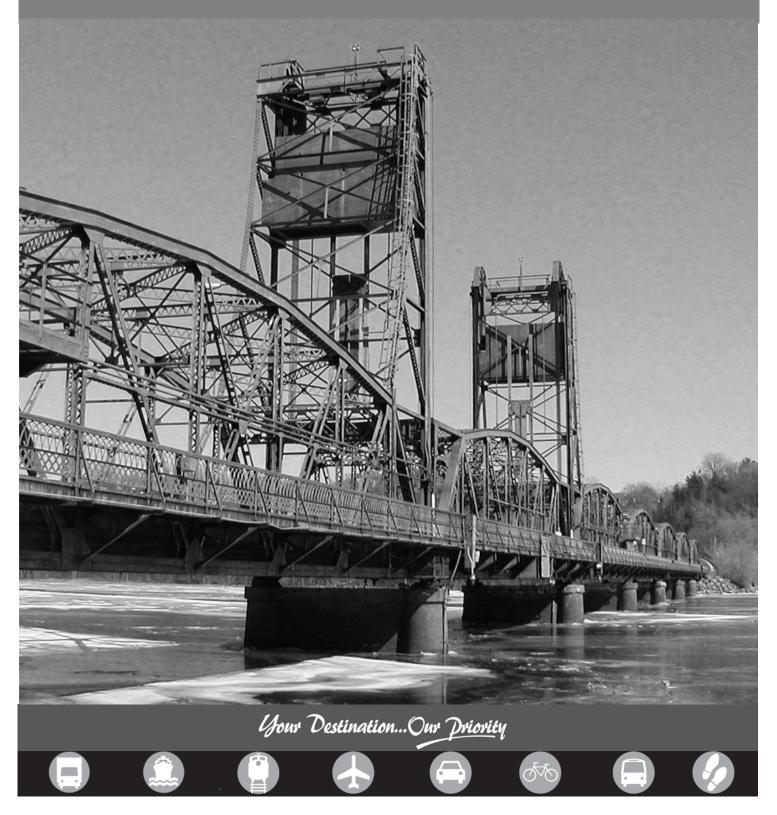
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Biennial Report on Bridge Inspection Quality Assurance

February 2013



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INTRODUCTION

This 2011-2012 biennial report on bridge inspection quality assurance was completed in response to the requirements specified in Minnesota Statute, Section 165.03, Subdivision 8.

Minnesota Statute 165.03 Subdivision 8 – Biennial Report on Bridge Inspection Quality Assurance

By February 1 of each odd-numbered year, the commissioner shall submit a report electronically to the members of the Senate and House of Representatives committees with jurisdiction over transportation policy and finance concerning quality assurance for bridge inspections.

At a minimum, the report must:

(1) summarize the bridge inspection quality assurance and quality control procedures used in Minnesota;

(2) identify any substantive changes to quality assurance and quality control procedures made in the previous two years;

(3) summarize and provide a briefing on findings from bridge inspection quality reviews performed in the previous two years;

(4) identify actions taken and planned in response to findings from bridge inspection quality reviews performed in the previous two years;

(5) summarize the results of any bridge inspection compliance review by the Federal Highway Administration; and

(6) identify actions in response to the Federal Highway Administration compliance review taken by the department in order to reach full compliance.

The estimated cost to prepare this report is less than \$5,000.

EXECUTIVE SUMMARY

MnDOT's Bridge Inspection Program continuously strives to conform to all state and federal laws and regulations. The National Bridge Inspection Standards, revised in December 2009, is the most comprehensive bridge inspection document available and is the basis for the Federal Highway Administration's annual evaluation of MnDOT's Bridge Inspection Program.

MnDOT wrote an extensive Quality Control/Quality Assurance plan for its bridge inspection program in 2008. Primarily a compilation of current practice assembled into a formal document, it added new processes to comply with changes to the NBIS and more directly address quality assurance. The plan defines and delegates responsibilities for the statewide inspection programs to 201 districts, counties, municipalities and other agencies throughout the state. It also describes the certification and training program for qualified bridge inspectors and sets up a process for quality assurance reviews of state and local agency inspection programs. One significant change is the addition of a process for the review of fracture critical bridge inspection reports by a structural engineer from MnDOT's Bridge Office prior to sending the report to the district or local program administrator. The review includes a written assessment that states whether the bridge is functioning as designed, a new load rating is warranted or any important structural repairs should be made.

MnDOT's Bridge Office also changed its Bridge Inspection Manual, which standardizes how inspections are done by each inspecting agency. A new section has been added to help inspection staff better identify conditions that could lower the load-carrying capacity of a bridge. Additional changes to the manual are made, as needed, in response to recommendations from the FHWA during its annual review of MnDOT's bridge inspection program.

Three technical memoranda have been issued to establish policy with regard to frequency of routine and special inspections and for reporting and addressing critical bridge inspection findings. MnDOT requires an annual inspection of bridges with fracture critical elements and bridges that are in poor condition. Other bridges must be inspected every 24 or 48 months in accordance with NBIS requirements and Minnesota state law.

Currently, 399 of MnDOT's bridges are inspected annually, 4,038 bridges are inspected on 24-month frequency and 339 on a 48-month frequency. MnDOT also provides fracture critical and in-depth inspections for 76 MnDOT and 89 locally owned bridges, and administers contracts to perform underwater inspections for 301 MnDOT and 177 locally owned bridges.

In 2010, three critical deficiencies were reported on a MnDOT-owned structure; in 2011, there was one. Critical deficiencies are conditions that threaten public safety and, if not promptly corrected, could result in the collapse or partial collapse of a bridge. All critical deficiencies have been resolved.

There are currently 80 MnDOT employees and 264 local agency employees and consultants who are certified to perform bridge inspections. Certification requires either an engineering degree or five years' experience performing bridge inspections, along with two weeks of training in an FHWA-approved course and a field proficiency exam. Certified inspectors are also required to attend a one-day bridge inspection refresher seminar twice in a four-year period. MnDOT's Bridge Office presented inspection seminars at six locations statewide in 2011 and at seven locations in 2012. In addition to these seminars, the Bridge Office coordinated the delivery of two comprehensive inspection classes in 2011 and three in 2012. These classes are one to two

weeks in length and are required for certification as inspection team leader or to perform fracture-critical inspections.

In response to findings by the Legislative Auditor in 2008, MnDOT created new performance measures to document the timeliness of bridge inspections and follow-up maintenance actions. In 2010, 97 percent of all routine bridge inspections and 100 percent of fracture critical Inspections were completed on time. In 2011, 95 percent of routine bridge inspections and 100 percent of fracture critical inspections were completed on time. In 2011, 95 percent of routine bridge maintenance items are scheduled to be completed within one year of being identified. In 2010, 89 percent of high-priority maintenance items were completed on time, while99 percent were in 2011. This represents a significant improvement over the 66 percent completed on time in 2009.

MnDOT's Bridge Office evaluated the bridge inspection programs of 20 percent of Minnesota's local agencies in 2010 and 2011. In 2010, three agencies were determined to be out of compliance with the NBIS. In 2011, zero agencies were determined to be out of compliance. MnDOT worked with each agency to bring them back into NBIS compliance and followed up with agencies that were late in submitting requested information. Important findings from these local agency reviews are also reviewed with state and local bridge inspection staff who attend annual bridge inspections seminars. Additionally, each agency has electronic access to a MnDOT website listing custom reports the agency can use to review the current status of its bridges. In addition to those agencies that received a formal program evaluation, many other agencies were asked to provide additional information concerning out-of-date bridge ratings, plans to monitor scour and late or incomplete inspections.

FHWA annually assesses the management of the statewide bridge inspection program. It found MnDOT's statewide bridge inspection program to be in substantial compliance. However, it also made a number of recommendations for how MnDOT could improve state and local bridge load ratings and postings, data quality, manuals and other items. MnDOT has responded in writing to each recommendation. Changes that address recommendations have been made to inspection manuals. MnDOT's ratings staff has resolved most bridge rating issues by consultant contract. Seminar training has been used to promptly address statewide issues.

1. BRIDGE INSPECTION QUALITY ASSURANCE AND QUALITY CONTROL PROCEDURES

MnDOT's quality assurance and quality control procedures governing its statewide inspection program are described comprehensively on the MnDOT website in the document, "MnDOT Quality Assurance and Quality Control Procedures for Bridge Inspections," which is available at:

http://www.dot.state.mn.us/bridge/documentsformslinks/inspection/qcqaprocedures1211.pdf

Below is a summary of the major components of the program.

Quality Control Responsibilities

Specific responsibilities of MnDOT's Bridge Inspection Program Manager are described along with those responsibilities delegated to district and local agency Program Administrators and inspection Team Leaders.

Qualifications

MnDOT maintains a program to certify bridge inspectors as team leaders and approves the appointment of program administrators who meet NBIS minimum experience and training requirements. Program administrators are required to be registered professional engineers. Inspection team leaders are required to be engineers or have five years of bridge inspection experience and to have completed an FHWA-approved two-week bridge inspector training course. In addition, MnDOT certification requires inspection team leaders to pass a field proficiency test. All program administrators and team leaders are required to attend two days of refresher training every four years and must submit documentation that they have competently performed their duties and responsibilities. Failure to maintain qualifications can result in decertification or denial of appointment, making the person ineligible to perform bridge safety inspection or program administrative activities.

As of December 2012, Minnesota's state and local bridge inspections are conducted by 201 different entities (MnDOT districts, counties, cities and other agencies). Within these agencies, there are 151 appointed program administrators and 344 certified bridge inspection team leaders. Of the 344 inspection team leaders, 80 are MnDOT employees.

Training

MnDOT offers several Inspector training classes and seminars each year. An introductory, one-week "Engineering Concepts for Bridge Inspectors" class is required for new inspectors who do not meet the experience or education requirements for team leader. Prior to certification as a team leader, inspectors must take the two-week course titled "Safety Inspections of In-Service Bridges." The course is taught by instructors from the National Highway Institute and is an FHWA-approved comprehensive bridge inspection training course. Other National Highway Institute courses on advanced topics are scheduled periodically.

Attendance for classes taught in 2011 and 2012 is shown below:

Course	2011 Attendees	2012 Attendees
Engineering Concepts for Bridge Inspectors	36	25
Safety Inspections of In-Service Bridges	28	32

In addition to these courses, MnDOT staff annually conducts refresher training seminars for program administrators and inspection team leaders. The seminars are held at various locations throughout the state to facilitate attendance. Topics typically include review of deficiencies and best practices found during inspection program quality reviews, FHWA compliance review findings, load rating issues and inspection manual updates. MnDOT conducted 13 training seminars around the state in 2011 and 2012.

Compliance and Quality Reviews

FHWA performs an annual review of MnDOT's Bridge Inspection Program. The purpose of the review is to evaluate whether the policies, procedures and operating practices meet requirements of the NBIS. It typically consists of a review of functions performed by MnDOT's Bridge Office and one or more district offices. The focus of the review varies from year to year, but typically will include a review of inspector qualifications, timeliness of bridge inspections and load ratings, and fracture critical and bridge scour documents. Formal findings from the review are reported in the form of recommendations summarized in a letter from FHWA to the Commissioner of Highways.

Similarly, MnDOT reviews the bridge inspection programs of all 201 Minnesota agencies each year. A series of database queries is used to estimate the level of compliance for each of the agencies. A combination of poor performing agencies and agencies that haven't been visited in five years are then selected for an in-depth review. The in-depth review involves a sit-down meeting with the bridge inspection program administrator and a field review with the bridge inspection team leader(s). Agencies selected for the in-depth review and the agencies reviewed solely by database queries are sent a report of their compliance for the year. MnDOT then annually follows up with the agency.

2. RECENT CHANGES TO QUALITY ASSURANCE AND QUALITY CONTROL PROCEDURES

Most of the quality control and quality assurance processes used by MnDOT were not modified in the past two years. Substantive changes are described in this section.

Bridge Inventory Management System Change

During the past two years, MnDOT purchased and further developed a new database system for inventory and management of the bridge and culverts in the state. For approximately 15 years, MnDOT used the PONTIS system. New technologies, with enhanced features, are in the marketplace today. MnDOT's new system is called SIMS (Structure Information Management System). This system will work with the old PONTIS system, but will be the primary working system that inspectors and program administrators use for entering inspections and managing their structure inventory.

QA review processes

Beginning in 2011, the FHWA retooled its quality assurance compliance review process as a national effort to enhance and better evaluate bridge inspection programs across the country. The FHWA developed 23 metrics, which affected how MnDOT performed compliance reviews of the various bridge owners in the state. Further details of this compliance review process are discussed in Sections 3-6 of this report.

Added Equipment

NBIS changes increased the frequency of Fracture Critical Bridge Inspections. The increased number of inspections also required the purchase of additional inspection equipment. Prior to 2007, MnDOT operated four under-bridge inspection vehicles. Since then, five new UBIVs were purchased to accommodate the more frequent inspection mandate. The fracture critical bridge inspection fleet currently consists of:

Vehicle	Reach	Purchased	Comments	
UB50	50 feet	1988	May be sold or dedicated for bridge maintenance use.	
UB50	50 feet	1991	Waiting to be sold	
UB75	75 feet	2000	Complete Factory Rebuild in 2012	
UB30	30 feet	2000	Scheduled for Rebuild in 2015	
UB62	62 feet	2007		
UB62	62 feet	2008		
UB62	62 feet	2011		
UB62	62 feet	2012		
Moog	15 feet	2009	Lighter Weight Platform for Posted Bridges	

3. SUMMARY OF FINDINGS FROM BRIDGE INSPECTION QUALITY REVIEWS

MnDOT's Bridge Office Inspections Unit each year conducts NBIS Compliance Reviews of local agency inspection programs. A new process for evaluating agencies began in 2012. The review now aims to mirror the FHWA's metric evaluation of Minnesota and apply the same appraisal to local agencies. The review annually assesses a compliance level for all agencies statewide based on seven of the 23 metrics using a series of database queries. Listed below are the seven metrics assessed with this method:

- #2: Qualifications of personnel Program Administrator
- #3: Qualifications of personnel Team Leader(s)
- #6: Routine inspection frequency Lower risk bridges
- #7: Routine inspection frequency Higher risk bridges
- #12: Inspection procedures Quality Inspections
- #13: Inspection procedures Load Rating
- #14: Inspection procedures Post or Restrict

In-depth reviews are scheduled with 40 agencies per year. Agencies are selected for an in-depth review based on poor performance with the seven metrics or because the agency has not had an in-depth review in the past five years. In-depth reviews incorporate the assessment of four additional metrics which require a field review and an office meeting. Listed below are the four additional metrics assessed during an in-depth review:

- #15: Inspection procedures Bridge Files
- #18: Inspection procedures Scour Critical Bridges
- #21: Inspection procedures Critical Findings
- #22: Inventory Prepare and Maintain

During 2012, in-depth reviews were performed for the following agencies:

MnDOT District 7	DNR	Lyon County	Lincoln County
MnDOT District 8	City of Cottage Grove	City of Montevideo	Brown County
Marshall County	City of Hugo	Renville County	Meeker County
Pipestone County	City of St. Louis Park	Lake of the Woods	Murray County
Rock County	City of Afton	County	City of New Ulm
Beltrami County	City of North Branch	Red Lake County	Watonwan County
Houston County	U of M Transit	Redwood County	City of Litchfield
Chippewa County	Nobles County	Kandiyohi County	Faribault County
City of Edina	Lac Qui Parle County	City of Redwood Falls	Sibley County
Cook County	City of Hutchinson	City of Delano	Cottonwood County
		City of Maplewood	

In 2012, one agency was found to be out of compliance with Title 23 of the Code of Federal Regulations, 650.313(a) – Inspection Quality. The agency is now required to create a Plan of Corrective Action to direct itself back into compliance with the NBIS. Once this corrective action plan is submitted, reviewed and accepted, MnDOT will schedule a follow-up review to ensure the agency is working toward compliance.

4. ACTIONS TAKEN IN RESPONSE TO FINDINGS FROM BRIDGE INSPECTION QUALITY REVIEWS

Quality Assurance Review Findings and Follow-up

MnDOT's Bridge Inspections Unit follows up on quality review findings by sending a letter to each agency to notify it of areas where improvement is needed. Agencies falling grossly out of compliance are subject to additional review and may need to provide a Plan of Corrective Action. MnDOT's State Aid Division may withhold funding from agencies that are repeatedly found to be out of compliance with NBIS rules or with the AASHTO Manual for Bridge Evaluation.

In addition to notifying agencies regarding levels of compliance with the NBIS, the letters list the individual performance for each metric and the data that was used to compute compliance level. This allows the agency to see which areas to improve compliance and which to contest level of compliance if there is any incorrect data. Agencies selected for the in-depth review were generally accepting of the need for improvement and indicated they will take steps to do so. Agencies that do not improve enough by the next cycle can get selected again for an in-depth review, and then may need to provide a PCA to ensure improvement of the program.

Findings Discussed at Bridge Inspection Seminars

Since each agency receives an in-depth review only once every five years, it's important that MnDOT develop other methods to more frequently communicate some of the more common problems found during agency reviews. MnDOT uses the annual bridge inspection seminars for that purpose. Agendas for the seminars are designed to address the deficiencies found during agency reviews.

Reports Available Electronically to All Agencies

In 2011, MnDOT implemented a new interface (called SIMS) to input inspection data. SIMS offers many substantial improvements when compared to the previous interface. Inspectors can now upload photos, bridge documents and inspection data to a web-based program that can be accessed anywhere with an Internet connection. SIMS then feeds this data into an AASHTO-developed bridge management system called PONTIS. Data from PONTIS is used to generate the compliance scores and identify deficiencies in an agency's inspection program or data. PONTIS also allows MnDOT to offer several standard reports that access recent data to help agencies better understand the overall condition of their bridge inventory and identify bridges needing inspection, missing data, or that may need new load ratings. These and other reports are continuously available to agencies that log on to the PONTIS Reports tab located on MnDOT's Bridges and Structures website. A few of the reports used during local reviews include:

- Bridge Inspections Due Lists inspections that are due and overdue.
- Bridge Inspection Frequency Lists the bridges on a one- or two-year inspection frequency and those eligible to be changed.
- Bridge Scour FGJ Lists bridges that have not been evaluated for scour, have unknown foundations or require further evaluation.

- Bridge Scour Plan of Action Lists whether bridges that are susceptible to scour have written plans of action guiding agency response during flood events.
- Bridge Rating and Posting Lists bridges with capacity ratings, posting signs and those that are missing rating sheets or are in poor or serious conditions, which may require a new rating.
- FC-UW-PA Lists bridges that are coded to require fracture critical, underwater or special pinned assembly type inspections.

5. SUMMARY OF FINDINGS FROM FHWA BRIDGE INSPECTION COMPLIANCE REVIEWS

FHWA is responsible for evaluating the overall quality and conformance to the NBIS of each state's bridge inspection program. MnDOT is evaluated on the management and inspection of its trunk highway bridges as well as its management and oversight of local agency bridge owners. Typically, the FHWA meets with the Minnesota State Bridge Engineer and staff to discuss findings and provide additional information and access to inspection files as requested. Following the review, the FHWA Division Bridge Engineer submits a letter to the Commissioner of Highways stating whether MnDOT was found in compliance with the NBIS and lists findings in the form of recommendations to improve the program based on its review. In 2011, the review process changed significantly. In the past, a state's program was given one overall determination of compliance. The new program is a data-driven and risk-based system which establishes 23 metrics for review and evaluation. The program strives to clearly define terms and processes to better establish national consistency in program reviews between states.

2010 Annual National Bridge Inspection Standards Compliance Review

MnDOT was found in substantial compliance with National Bridge Inspection Standards. The following is a summary of recommendations made to improve MnDOT's Bridge Inspection Program:

- Regarding the 2009 Focused Review on the subject of Bridge Load Rating and Posting, MnDOT has done well in addressing the 16 opportunities for improvement with one item needing further attention. FHWA requested MnDOT to contact the owners of all bridges that have been deemed to need a new load rating. Further, MnDOT was asked to request that each owner provide a preliminary response on the status of needed load ratings and to submit a plan for completion of the needed reratings.
- 2. FHWA recommended MnDOT emphasize the condition of post-tensioning systems on all bridges in Minnesota with such systems.
- 3. FHWA recommended MnDOT continue to encourage local agencies not to inspect bridges in the dead of winter.

2011 Annual National Bridge Inspection Standards Compliance Review

The 2011 program review accessed 23 metrics. Minnesota was found in Compliance for 14 metrics, in Substantial Compliance for two metrics and in Conditional Compliance for five metrics. Two metrics were not applicable.

Substantially Compliant

Inspection Procedure – Team Leader Inspection Procedure – Bridge Files

Conditionally Compliant

Inspection Frequency – Routine Inspection Procedures – Load Ratings Inspection Procedures – Post of Restricted Bridges Inspection Procedures – Scour Critical Inventory – Update Data

6. ACTIONS TAKEN IN RESPONSE TO FHWA COMPLIANCE REVIEW FINDINGS

The following is a summarized MnDOT response corresponding to each of the compliance reviews listed in Section 5:

2010 Annual National Bridge Inspection Standards Compliance Review

- All Trunk Highway bridges identified in the report were reviewed and received new load ratings if needed. Letters were sent on March 15, 2011 to all agencies who owned bridges requiring a load rating review. To assist local agencies in addressing their load rating needs, MnDOT administered two substantial engineering contracts to perform load ratings. At the completion of these contracts, more than 1,200 local agency bridge load ratings will have been updated.
- MnDOT is engaged with several efforts to educate the four post-tensioned bridge owners in Minnesota (MnDOT, Minneapolis, St. Paul and Brooklyn Center) on potential issues that may arise with that structure type.
 - **a.** The Plymouth Avenue Bridge case study was highlighted at each of the six bridge inspection refresher workshops conducted in spring 2011.
 - **b.** MnDOT has conducted a two-phase research effort to improve the state of box girder inspection technology.
- 3. MnDOT emphasizes the need for complete and accurate safety inspections to all its program administrators, team leaders and assistant inspectors. This fundamental concept is stressed during basic inspector training and is reiterated annually at the Bridge Inspection Refresher Seminars. Additionally, MnDOT emphasizes the importance of thorough inspections each year at district and local agency compliance reviews. MnDOT will continue to promote complete and thorough inspections in training and communications.

2011 Annual National Bridge Inspection Standards Compliance Review

No follow-up action was needed by MnDOT for any of the 14 metrics that were found to be in Compliance. MnDOT developed Improvement Plans to address the two metrics where it was in Substantial Compliance.. To address the five Conditionally Compliance metrics, MnDOT developed Plans of Corrective Actions. The IPs and PCAs are described below:

IP: Inspection Procedures – Team Leader

Goal: Reduce number of inspections performed per day per team leader, notwithstanding the type of structure inspected.

- Action Item 1: Educate PAs and TLs at the 2012 inspection refresher seminars and through the Bridge Office State Aid Newsletter.
- Action Item 2: Revise the Bridge Inspection QC/QA Plan to establish a best practice of limiting inspections by an individual team leader to a reasonable number of structures per day.

IP: Inspection Procedures – Bridge Files

Goal: Improve bridge files regarding documentation of bridge maintenance and repairs.

- Action Item 1: Educate PAs, TLs and bridge maintenance workers at the 2012 inspection refresher seminars and the 2012 Bridge Worker's Safety and Training Conference.
- Action Item 2: Include a section on bridge file content in the Bridge Inspection QA/QC Manual.
- Action Item 3: Implement a maintenance module within SIMS to integrate condition assessment and maintenance tracking.

PCA: Inspection Frequency – Routine

Goal: Perform all routine inspections according to the required frequency.

- Action Item 1: Develop an e-mail alert system within SIMS that notifies PAs of bridges that will come due within 30 days.
- Action Item 2: Develop an e-mail alert system within SIMS that notifies PAs of bridges that are past due by 30 days, 30-90 days, 90-180 days, and 180+ days.
- Action Item 3: Develop a monthly e-mail summary report of Action Items 1 and 2 for the FHWA division Bridge Engineer and MnDOT Bridge Asset Management Unit.
- Action Item 4: Follow up with delinquent agencies during annual compliance reviews based on the summary e-mail alerts.
- Action Item 5: Educate PAs and TLs at the 2012 inspection refresher seminars regarding Action Items 1-4.

PCA: Inspection Procedures – Load Rating

Goal: Have a valid, accurate load rating (consistent with the Structure Inventory and Appraisal data) for all bridges.

- Action Item 1: Develop an e-mail alert system within SIMS that notifies PAs of bridges that meet certain criteria that may indicate that a new load rating is needed.
- Action Item 2: Develop a biannual e-mail summary report of Action Item 1 notifications for the FHWA division Bridge Engineer and MnDOT Bridge Asset Management Unit.
- Action Item 3: Follow up with agencies biannually as necessary based on summary e-mail alerts.
- Action Item 4: Continue to implement the action item from the 2009 Load Rating and Posting Focus Review (Specialized Hauling Vehicle rating contracts).
- Action Item 5: Revise Form RC-CL and RC-TH (load posting reports) to add an Assigned Rating Option to the Method of Rating box, consistent with 9/29/11 FHWA Memorandum.
- Action Item 6: Revise Form 90 for assigning load ratings to culverts, consistent with 9/29/11 FHWA Memorandum.

PCA: Inspection Procedures – Post or Restrict

Goal: Have a valid, accurate load posting (consistent with the SI&A data) for all bridges.

- Action Item 1: Revise the Bridge Inspection Field Manual (Element 981) to include advance warning signs in the Condition State 5 descriptive language.
- Action Item 2: Develop an e-mail alert system and summary e-mail system as noted in Metric 13, Action Items 1-3.
- Action Item 3: Educate PAs and TLs at the 2012 inspection refresher seminars and through the Bridge Office State Aid Newsletter with regard to Action Item 1.
- Action Item 4: Revise the Bridge Inspection QA/QC Manual to include information on load posting, such as current references, standards and state laws.

PCA: Inspection Procedures – Scour Critical Bridges

Goal: Have implementable scour Plans of Action and supporting documentation for all scour critical bridges.

- Action Item 1: Educate bridge owners through direct mailing, newsletter or in-person visits.
- Action Item 2: Educate PAs and TLs at the 2012 inspection refresher seminars.
- Action Item 3: Update the bridge scour website with current POA templates, cross-section measurement templates and instructions for using the XS tool, as well as other scour monitoring resources.
- Action Item 4: Update the MnDOT Bridge Inspection Field Manual with current cross-section requirements.

PCA: Inventory – Update Data

Goal: Update inventory data regarding inspections, bridge modifications, load restrictions and closure status within required time frames (state – 90 days, local agency – 180 days).

- Action Item 1: Develop an e-mail alert system within SIMS that notifies PAs of bridges that are past due for inventory updates.
- Action Item 2: Develop a monthly e-mail summary report of Action Item 1 for the FHWA division Bridge Engineer and MnDOT Bridge Asset Management Unit.
- Action Item 3: Follow up with delinquent agencies during annual compliance reviews based on the summary e-mail alerts.
- Action Item 4: Educate PAs and TLs at the 2012 inspection refresher seminars and through the Bridge Office State Aid Newsletter.