- Phone Line: 877-336-1286
  - Access Code: 6279722

- Maintenance Extranet Site:
  - http://wisconsindot.gov/Pages/doing-bus/eng-consultants/cnslt-rsrces/strct/maintenance-policy-memos.aspx

- Send presentation/Q&A questions to:
  - Ben.Koeppen@dot.wi.gov

- Contact Information: Dave Genson david.genson@dot.wi.gov

Wisconsin DOT Bridge Inspection Quality Control

Presented by:

Dave Genson

Ben Koeppen

Agenda

- Need
- Definitions
- Components
- Creation-Completion Timelines
- Quality Control Best Practices
- Quality Control DT Form

The need for documentation

The need for documentation

- Federal Highway Administration's Metric 20 calls for each program to have their Quality Control and Quality Assurance programs documented

What are Quality Control and Quality Assurance?

Definitions

- WisDOT established definitions for Quality Control and Quality Assurance based on the "Recommended Framework for a Bridge Inspection QC/QA Program"

Link: http://www.fhwa.dot.gov/bridge/nbis/nbisframework.cfm

Definitions

- Quality Control
    - Qualified inspectors certified through approved training courses
    - Data error identification and resolution procedures
    - Review and validation of inspection reports and data

- WisDOT's Definition:
    - Measures taken to ensure inspection completeness, uniformity, accuracy, and timeliness prior to signing the inspection report

Definitions

- Quality Assurance
  - Validation of Quality Control procedures
  - In-field review of bridge inspection reports
  - Disqualification/Requalification procedures

- WisDOT's Definition:
  - <u>Reviewing a sample of completed inspection reports</u> to assure that Quality Control practices are producing quality inspections

Quality Control

What makes up the WisDOT Quality Control Program?

QC Components

- Formal Inspection Training

QC Components

- Formal Inspection Training
- Qualification Records
  - DT 2001

QUALIFICATIONS RECORD
Structure Inspection Program
Wisconsin Department of Transportation
DT2001   2003   s.84.17 Wis. Stats.

Applicant Name	Area Code - Telephone Number - Home	
Address	Area Code – Telephone Number - Work	
City	State	ZIP Code
E-Mail Address	Employer	

Refer to the Wisconsin DOT Structure Inspection Manual for required qualifications. Forward two completed copies of this form to the Statewide Structure Inspection Program Manager via the District Program Manager or directly at 4802 Sheboygan Ave., Room 601, PO Box 7916, Madison, WI 53707-7916. One copy will be returned to you with an assigned number if deemed qualified.

PART I - REGISTRATION/TRAINING - Complete All Information

Wisconsin Registered Professional Engineer - Yes Reg. No.:   - Emphasis: Structural
NICET Level III or IV - Yes Reg. No.:   If Yes, Attach Copy of Certificate
NHI Based 80-Hour Training Course - Yes   Date: If Yes, Attach Copy of Certificate

Pertinent Inspection Related Training Courses Completed

Additional Specialized Certifications

APPROVAL: FOR WISDOT PROGRAM MANAGER USE ONLY!   DO NOT WRITE BELOW THIS LINE.

☐ Visual Acuity Certificate Attached   ☐ Experience Reviewed/Verified
☐ NHI Based 80-Hour Training Course Certificate Attached   ☐ Reference Letter Attached

Qualified As   ☐ Program Manager
                    ☐ Team Leader

Reviewed By	Date
, Program Manager	
☐ Central Office ☐ District ☐ County	

Assigned Number	Assigned By
Assigned Date	Date Copy Returned to Applicant

QC Components

- Formal Inspection Training
- Qualification Records
- Data Management System

QC Components

- Formal Inspection Training
- Qualification Records
- Data Management System
- Inspection Operations

QC Components

- Formal Inspection Training
- Qualification Records
- Data Management System
- Inspection Operations
- Inspection Frequency Compliance Procedure

QC Components

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- Inspection Meetings

QC Components

- Formal Inspection Training
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- Quality Control Best Practices
- Quality Control DT Form

3 Main Topics of Discussion

- Creation-Completion Timelines
- Quality Control Best Practices
- Quality Control DT Form

Creation-Completion Timelines

- Inspection Report Creation:
  - Inspection Type
  - Inspector Name
  - Inspection Date

- Inspection Report Completion:
  - Entering all inspection data
  - Resolving on-complete issues
  - Clicking the "e-sign" button

Creation-Completion Timelines

- Inspection Report Creation:
  - Needs to be created within 28 days after the month the inspection was due
  - Example: I have a structure due for inspection in the month of May. I went out and inspected it on May 5th. I would need to get this inspection created in HSIS by June 28th.

- Inspection Report Completion:
  - Needs to be completely filled out and digitally signed within 30 days of inspection report creation
  - Example: I created my inspection report on June 14th. I would need to get it filled out and sign it by July 14th.

Creation-Completion Timelines

- For any inspection report not created per the Creation Timeline, WisDOT will utilize the Inspection Frequency Compliance Procedure
  - A process set up to ensure open lines of communication between numerous players within each inspection program and WisDOT Bureau of Structures
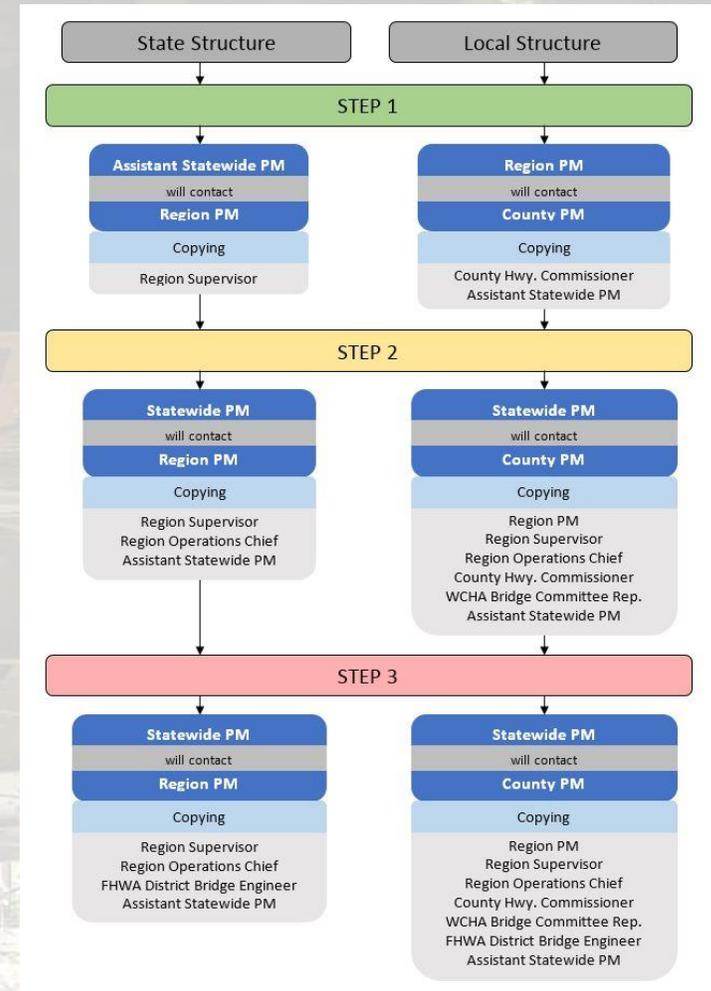
Quality Control Best Practices

- Definition:
  - Methods used to satisfy the review and validation of inspection reports

- Methods:
  - Collaborative Inspection
  - Quality Control Inspection
  - Inspector Rotation
  - Independent Entry
  - Inspection Report Review

QC Best Practices – Collaborative Inspections

- Definition:
  - An inspection performed in a team of 2 or more in which all inspectors are working together to cooperatively inspect the structure in its entirety
  - Does NOT include inspections performed by a team of 2 or more in which inspection duties are divided among the team

- Inspection Team includes a Team Leader and any of the following:
  - Regional Program Manager
  - County Program Manager
  - Another Team Leader
  - Team Member
  - Bridge Owner/Highway Commissioner

QC Best Practices – QC Inspections

- Definition:
  - An inspection performed by a Team Leader under the supervision of another Team Leader
  - The additional Team Leader is present simply to observe and comment on the practices and process of the Team Leader

- Supervision can be provided by any of the following individuals:
  - Regional Program Manager
  - County Program Manager
  - Another Team Leader

QC Best Practices – Inspector Rotation

- Definition:
  - Accomplished by alternating Team Leaders on a per structure basis
  - Does NOT need to be an inventory wide practice

- Acceptability of Method:
  - Any case in which the current Team Leader is different from the previous Team Leader for the inspection of any given structure

QC Best Practices – Independent Entry

- Definition:
  - Having another individual enter an inspection for the Team Leader that performed the inspection

- The individual entering the inspection must meet the two following minimum criteria:
  - Successfully passed the NHI "Safety Inspection of In-Service Bridges" course
  - Cannot have participated in the same inspection he/she is entering

QC Best Practices – Inspection Report Review

- Definition:
  - An independent review of an inspection report by a qualified individual prior to signing the inspection

- Qualified individuals under this QC Best Practice include:
  - Program Manager
  - Bridge Owner/Highway Commissioner

Quality Control Best Practices

- Each program shall have some form of review and validation of inspection reports

- While every inspection report does not need to be reviewed under a Best Practice, **each program shall review enough reports during a cycle to ascertain that inspection reports being submitted are of sufficient quality**

Quality Control DT Form – DT 2002

- 8 pages down to 2 pages

- In those two pages we need you to tell us a little more about the specifics of your program and what you do for Quality Control

Quality Control DT Form

- Example

Questions?