

2nd National



Jennifer Brandenburg, PE

AASHTO Subcommittee on Maintenance
Monterey, California
July 15, 2008

What is Maintenance Quality Assurance?



- Relates maintenance operations to performance targets
- Combines sound maintenance management principles with outcome-based maintenance performance measures
- A process that uses quantitative quality indicators to document the relationship between dollars spent and outcomes

What is Maintenance Quality Assurance?



“A Rose by Any Other Name...”

States have various names for their programs:

- MCAP – North Carolina
- TxMAP - Texas
- MQA - Ohio
- MMQA - Utah
- MAP - Washington

1st National MQA Peer Exchange

MQA

- October 2004
- Madison, Wisconsin
- 74 attendees
 - 35 states & provinces
 - Counties
 - FHWA
 - US Forest Service

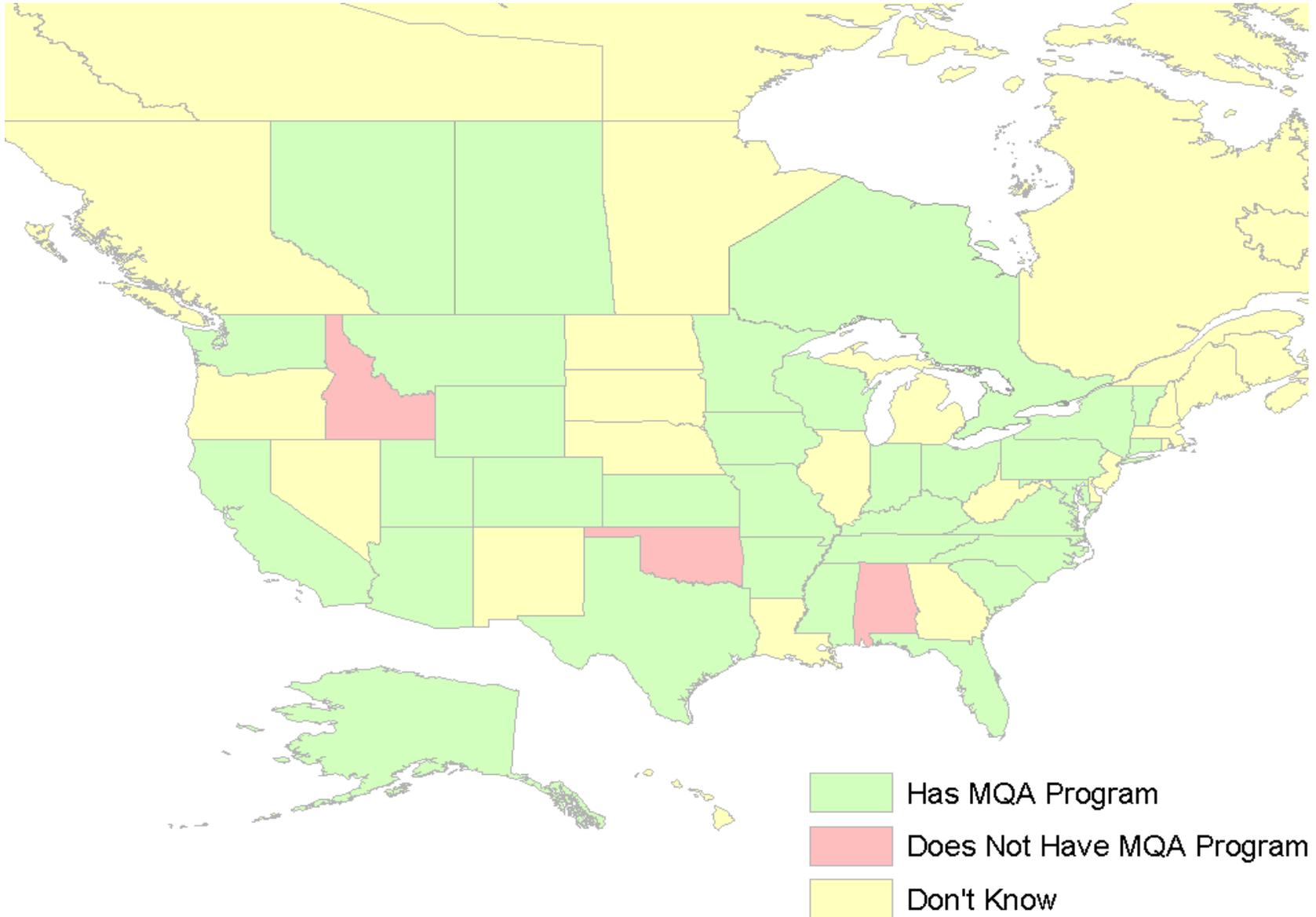


1st National MQA Peer Exchange

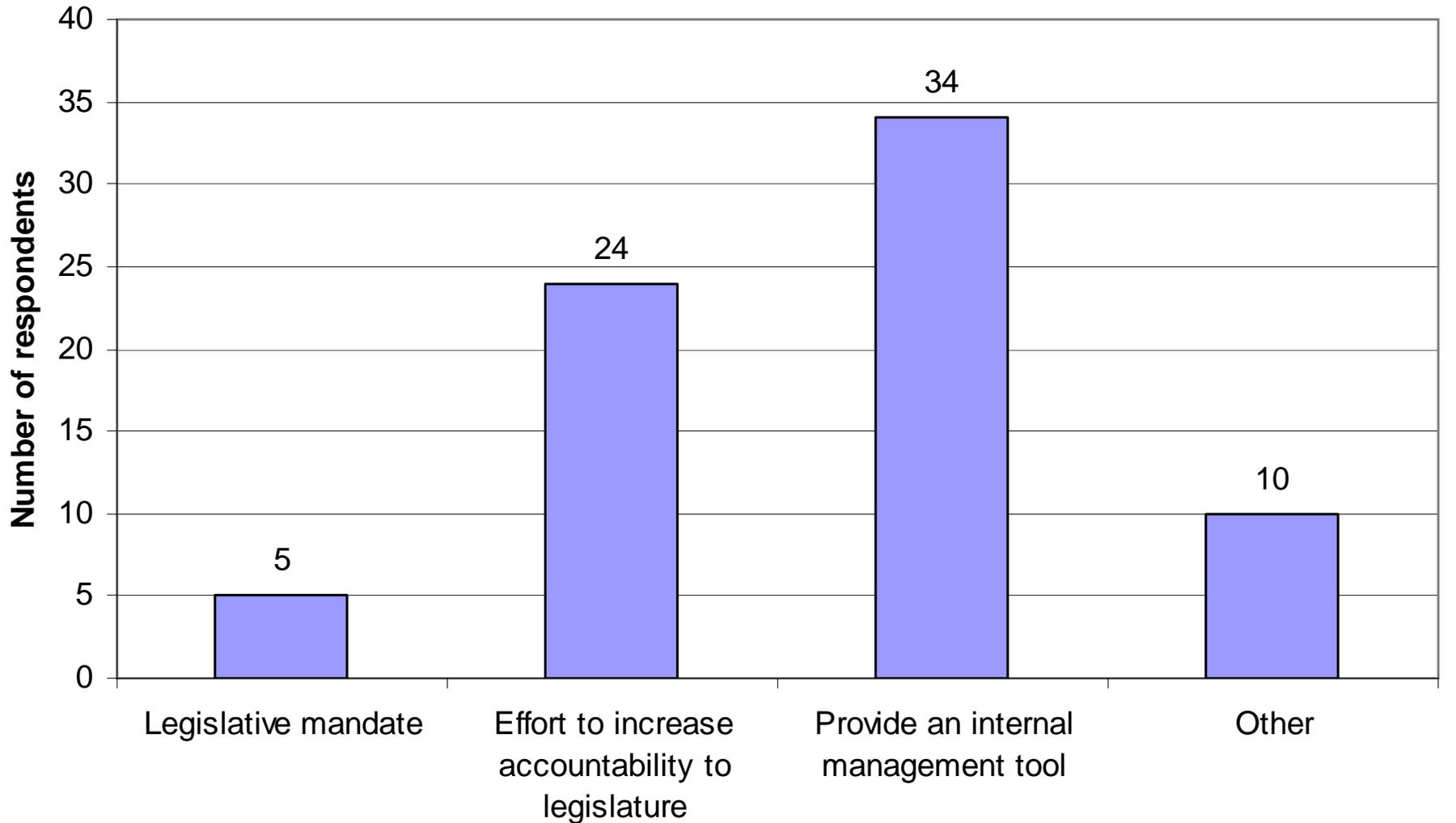
MQA

- A “peer-exchange,” where participants learned from each other
- Included facilitated breakout discussions
 - aimed at fine tuning existing programs
 - providing tools for state’s to begin programs
- Collected and disseminated information on current programs and best practices

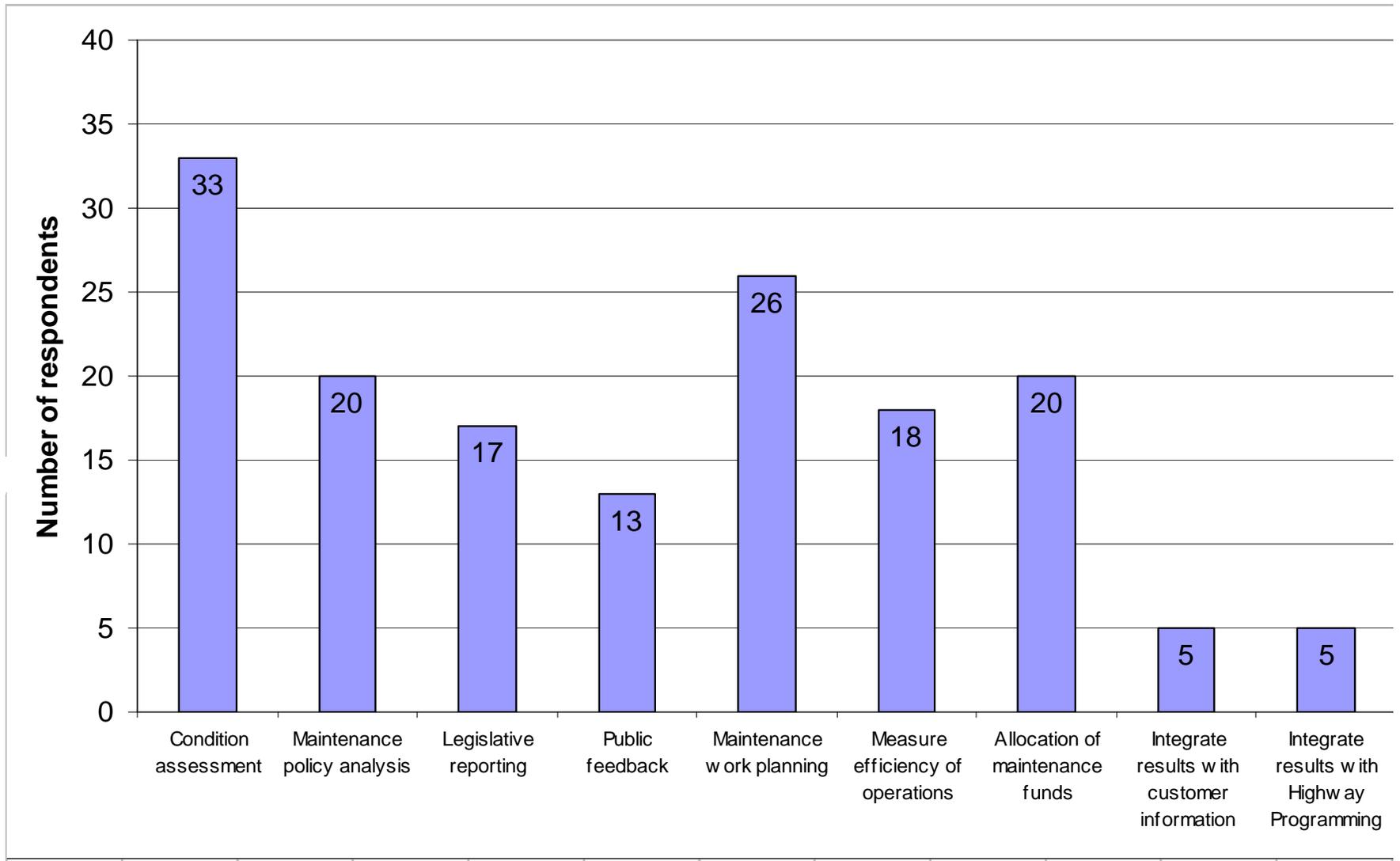
Who Had MQA Programs in 2004?



Why have a MQA program?



How are MQA programs being used?



With regard to feature data...

My agency:	% reponding "Yes"			
	maintains an inventory	regularly inspects the entire inventory	measures the condition	has a process for identifying deficiency
Bridges	93%	88%	78%	75%
Pavement	85%	80%	90%	65%
Rest Area Buildings	83%	65%	50%	50%
Signals	78%	60%	33%	55%
Rest Area Grounds	73%	58%	45%	45%
Regulatory/Warning Signs	68%	58%	70%	58%
Paved Shoulder	65%	48%	68%	45%
Guide Signs	63%	53%	58%	58%
Lighting	60%	45%	48%	55%
Cross Culverts	60%	43%	65%	50%
Unpaved Shoulder	55%	43%	65%	43%
Guide / Guard Rail	53%	45%	68%	55%
Centerline Pavement Markings	50%	45%	78%	53%
Edgeline Pavement Markings	48%	43%	75%	53%
Mowing (operational zone turf height)	40%	38%	60%	40%
Drainage Ditches	30%	35%	63%	43%
Surface Drainage	30%	30%	55%	43%
Snow and Ice Control	28%	35%	53%	40%
Closed Drainage (Storm Sewer)	23%	18%	35%	33%
Litter and Debris	15%	30%	63%	38%
Woody Vegetation	13%	30%	58%	40%

Lessons Learned

MQA

- Approx. two thirds of states have MQA programs
- Seven main categories
- There has been evolution since Scottsdale workshop (2000)
- MQA programs have both outcome & output related measures
- Terminology exists and can be defined
- MQA programs are important to agencies and are driven by need for accountability

Accomplishments

MQA

- Better understanding of State's MQA programs and practices
- Developed a national agenda of next steps for the progression of MQA programs
- Developed a report on the synthesis of consistently-used maintenance measures
- Developed on-line library of State's manuals, reports and other MQA documents

4 Years Later...

MQA

- States are using MQA programs to...
 - Understand asset condition
 - Set financial and operational priorities
 - Document the relationship between dollars and outcomes
- National climate shift:
 - Away from construction and toward operations & maintenance.
 - Toward using performance measures as a management tool
 - Toward making government accountable
 - Toward making government more outcome-oriented

2nd National Maintenance Quality Assurance Peer Exchange



- 1 ½ day MQA Peer exchange
- Raleigh, North Carolina
- September 23 and 24, 2008
 - State DOTs
 - Maintenance Contractors
 - National Organizations
 - Consultants





Goals for The Peer Exchange

- Develop analysis procedures to support decision-making and reporting
- Identify a list of consistently-used measures
- Map the continued evolution of MQA programs
- Update the national agenda of next steps for MQA programs
- Update the MQA online document library

Planning Committee



- Steven Lund - Minnesota
- Jim Carney – Missouri
- John Swartz - Montana
- Jennifer Brandenburg - NCDOT
- Rhonda Johnson – NCDOT
- Steve Wilcox – New York
- Brad Allen – New York
- Rico Baroga – Washington
- Scott Bush - Wisconsin
- Teresa Adams – U. of Wisconsin
- Jason Bittner – U. of Wisconsin
- Will Beatty – FHWA
- Celso Gatchalian – FHWA
- Lee Smithson – AASHTO
- Frank Lisle - TRB



Agenda

Tuesday, September 22

- 8:00 am Welcome & Overview
- 9:00 am Presentation on NHRCP Project # 8-62
- 10:30 am Breakouts (2) - Winter Operations & Pavement
- 1:30 pm Breakouts (2) - Roadsides and Traffic Signs / Markings
- 3:30 pm Agency Showcase

Wednesday, September 24

- 8:00 am Integration Of MQA Into Overall Asset Management Programs
- 9:30 am Using MQA to Make Budgeting Decisions
- 11:00 am Discussion and Next Steps
- 12:00 pm Adjourn

Transportation Asset Management Pooled Fund (TPF-5 (036))



- Level 1
 - \$6,000 – 2 representatives attend the MQA Peer Exchange
 - All travel expenses paid by Pooled Fund
- Level 2
 - \$7,200 – 2 representatives attend both the MQA Peer Exchange & the National Workshop on Highway Asset Inventory & Data Collection
 - All travel expenses paid by Pooled Fund
- Level 3
 - \$1,500 supports MQA Peer Exchange and research efforts
 - Participants must pay own travel expenses

Call Jason Bittner for details (608) 262-7246



Maintenance Quality Assurance Website

<http://www.mrutc.org/outreach/MQA/index.htm>

Midwest Regional University Transportation Center

University of Wisconsin - Madison

Optimization of Transportation Investment and Operations

[About MRUTC](#) | [Asset Management](#) | [Education](#) | [Outreach](#) | [Research](#) | [Other Activities](#) | [Calendar](#)

[mrutc.org](#) : [outreach](#) : [MQA](#) : Maintenance Quality Assurance Peer Exchange



Maintenance Quality Assurance Resource Site

MQA

[Home](#)

[Documents and
Materials](#)

[2004 MQA Peer
Exchange](#)

[Calendar](#)

[Links](#)

[Mailing List](#)

**Welcome to the
Maintenance Quality Assurance
Resource Site!**



September 23-24, 2008 in beautiful Raleigh North Carolina

To be held at the [Sheraton Imperial Hotel & Convention Center](#)

Draft Agenda available [here](#).

Promotional Flyer available [here](#).

NEWS: The Planning Committee has agreed to invite private sector contractors and



Maintenance Quality Assurance Website

<http://www.mrutc.org/outreach/MQA/library/>

Maintenance Quality Assurance Resource Site

MQA

[MRUTC Home](#) | [MQA Home](#)

Maintenance Quality Assurance - Document Library

Click on a category or state to choose documents to be displayed

[Show all documents \(default\)](#)

Show by category: [About MQA programs](#) - [Customer Surveys](#) - [MQA Budgeting](#) - [MQA Reports](#) - [Oct 04 MQA Peer Exchange](#) - [Other relevant reports](#) - [Performance measures](#) - [Rating manual](#) - [Rating sheets](#) - [Scoring strategies](#) - [Training Materials](#)

Show by state: - [AB](#) - [AL](#) - [AZ](#) - [CA](#) - [CO](#) - [DC](#) - [FL](#) - [GA](#) - [IA](#) - [IN](#) - [KS](#) - [KY](#) - [LA](#) - [MD](#) - [MI](#) - [MN](#) - [MO](#) - [MS](#) - [MT](#) - [NC](#) - [NE](#) - [NM](#) - [NY](#) - [OH](#) - [OK](#) - [ON](#) - [PA](#) - [SC](#) - [SD](#) - [TN](#) - [TX](#) - [UT](#) - [VA](#) - [WA](#) - [WI](#)

Search here to find matching keywords in title and/or description

Note: Some of the files are large, it is recommended to download them first to your computer before opening.

217 documents found

[Pavement Management Systems Peer Exchange Program Report](#)

Category: *Program Report*

Description: The purpose of the peer exchange was to allow California and Utah to meet with Minnesota and Utah to promote effective use of Pavement Management Systems. This report summarizes the use of pavement management tools to support agency decisions in UDOT and Mn/DOT, provides tips for procuring new pavement management software, and identifies institutional issues that must be addressed to make the most of a pavement management program. It closes with a summary of the key factors influencing the successful pavement management practices in UDOT and Mn/DOT, which include the following considerations

Submitted by: FHWA and USDOT

State:

Date: 2008-06-23

URL: <http://mrutc.org/outreach/mqa/doclib/docs/National/pmspeer.pdf>

[Contract Administration Manual - Highway and Bridge Maintenance](#)

Category: *Rating manual*

Description: This is a revised version and replaces Alberta Transportation's Contract Administration Manual for Highway and Bridge Maintenance issued in February 1999. This manual is intended to provide a framework for consistent administration of highway maintenance contracts province wide. This manual outlines the duties and responsibilities of Alberta Transportation's highway maintenance sector employees, and provides proper protocol for handling issues that arise from contract interpretation and work specifications.

Submitted by: Steve Otta

2008 Highway Asset Inventory & Data Collection



<http://www.itre.ncsu.edu/NCassetMgmtConf/>



2008 Highway Asset Inventory & Data Collection
National Workshop
September 24-26, 2008



- At a glance
- Host Agencies
- Location
- Agenda
- Exhibitor Info.
 - Exhibitor - Data Collection
 - Exhibitor - Display Booth Only
- Registration
- Links

Sheraton Imperial
Hotel & Convention Center
Durham, North Carolina
www.sheratonrtp.com

[Download Save the Date Flyer](#) (pdf, 56 KB)

Workshop at a Glance

To view and print a complete agenda, please visit the [Agenda Page](#).

Professional Development Hours (PDHs) Approved - 11.5

Workshop and Showcase

Wednesday, September 24

Registration 10:00 AM until 1:00 PM at the hotel.

Welcome and Opening – Imperial Ballroom 1:00 PM

General Sessions with Breaks
Topics: Keynote Speakers and Experimental Design and Ground Truthing

Networking Highlight: Reception 6:00 - 8:00 PM

Thursday, September 25





Ya'll come!

Jennifer Brandenburg, PE

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