



MnDOT's Integrated Bridge Inspection Data Collection



Image Courtesy of Mn/DOT

Jennifer L. Zink, P.E.

MnDOT Bridge Inspection Unit

National Bridge Management, Inspection, and Preservation
Conference— November 1, 2011



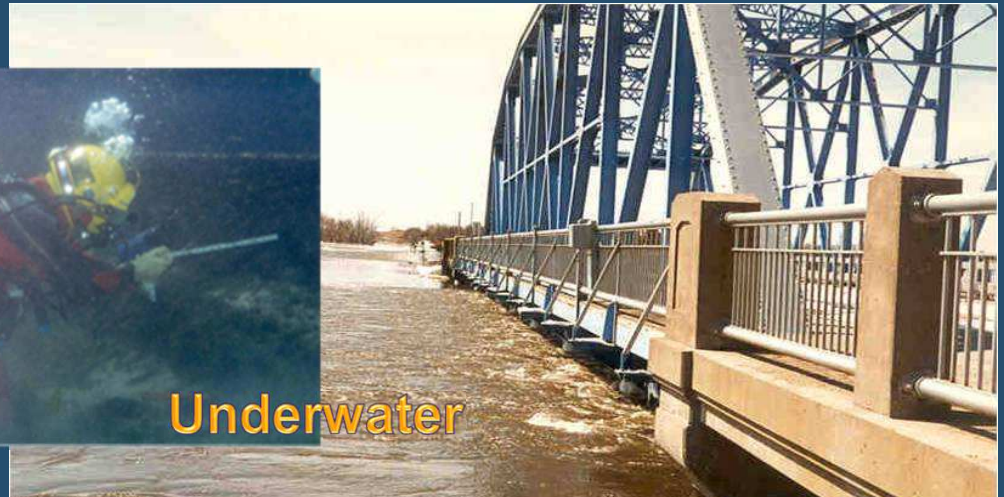


Introduction to Bridge Inspection

- 20,000+ Bridges
- Routine
- Fracture Critical
- Underwater
- Special



Underwater



Images Courtesy of Mn/DOT

Fracture Critical



Special





The Problem...

- Pontis by AASHTOWare

- Routine ONLY
- No Photos
- No Documents
- No Ancillary Structures
- No Maintenance Data

- Maintenance Tracking

- e-Bridge

Pontis 4.4.3 - You are currently logged in as ZINK1JEN

File View Tools Window Help

Bridge Inspection Mode: Edit Type: Regular NBI Key: UCVV

Bridge: L3788 Find... Inspections (16): 01/07/2009 Metric English Reports... Save

1 CONDITION 2 NOTES 3 WORK 4 APPRAISAL 5 INVENTORY 6 AGENCY 7 SCHEDULE

NBI Rating: Deck (58): 7 Good Substructure (60): 4 Poor Culvert (62): N N/A (NBI)
Superstructure (59): 6 Satisfactory Channel (61): 7 Minor Damage Waterway (71): 8 Equal Desirab
Unrepaired spalls: -1.000 sq.m. Review Needed: Status: New

Create Element Edit Element Remove Element NBI Translator Suff Rate Validate Quantity Percent

Key: 0	Structure Unit ID: 0	Type: 0						
Elem / Env	Element Description	Quantity	UOM	Qty1	Qty2	Qty3	Qty4	Qty5
31 / 2	Timber Deck (ea)	207.00	sq.m.	0.00	207.00	0.00	0.00	0.00
334 / 2	Metal Rail-Coated	74.00	m.	0.00	73.00	0.00	2.00	0.00
408 / 1	Gravel Approach	2	ea.	2	0	0	0	0
113 / 2	Paint Steel Stinger	219.00	m.	0.00	153.00	66.00	0.00	0.00
121 / 2	P/Stl Thru Truss/Bot	74.00	m.	0.00	70.00	4.00	0.00	0.00
126 / 2	P/Stl Thru Truss/Top	74.00	m.	0.00	74.00	0.00	0.00	0.00

Compare: 1/7/2009 UCW 0.00 73.00 0.00 2.00 0.00

Element Condition

State: 1 No corrosion Coated metal railing has little or no deterioration (no corrosion or impact damage).

Image Courtesy of Mn/DOT





The Solution...

Integrated Bridge Data System

- ▶ Infrastructure Interdependencies
 - Cyber
 - Physical
 - Geographic
 - Logical
- ▶ Automation
- ▶ Bridge Attributes
- ▶ Bridge Location

BridgeInspect Manager

Enter Bridge Code: go -OR-
-- Bridge QuickSelect --

Thursday, May 31, 2007

Main GIS Interface Query Generator Reports Admin Log Out

Map Satellite Hybrid

BC4402001

Bridge Name:
Bridge Type: A24, Concrete Arch
Bridge Length: 000057 ft.
Feature Crossed: HERRING RUN
Road Carried: BELAIR ROAD
Location: 0.6 MI W ERDMAN AVE
Posting: N
Year Built: 1925
BSR: 95.7
Status: Not Deficient

Image Courtesy of InspectTech – <http://www.inspecttech.com>





Objective

Mn/DOT

- Legislative Audit Report (February 2008)

Bridge Office

- Research Web-Centric Systems
- Analysis – Past and Present
- Vendor Systems
- Benefit/Risk Investigation
- Return of Investment
- Implementation
- Future Work

Inspection

Management

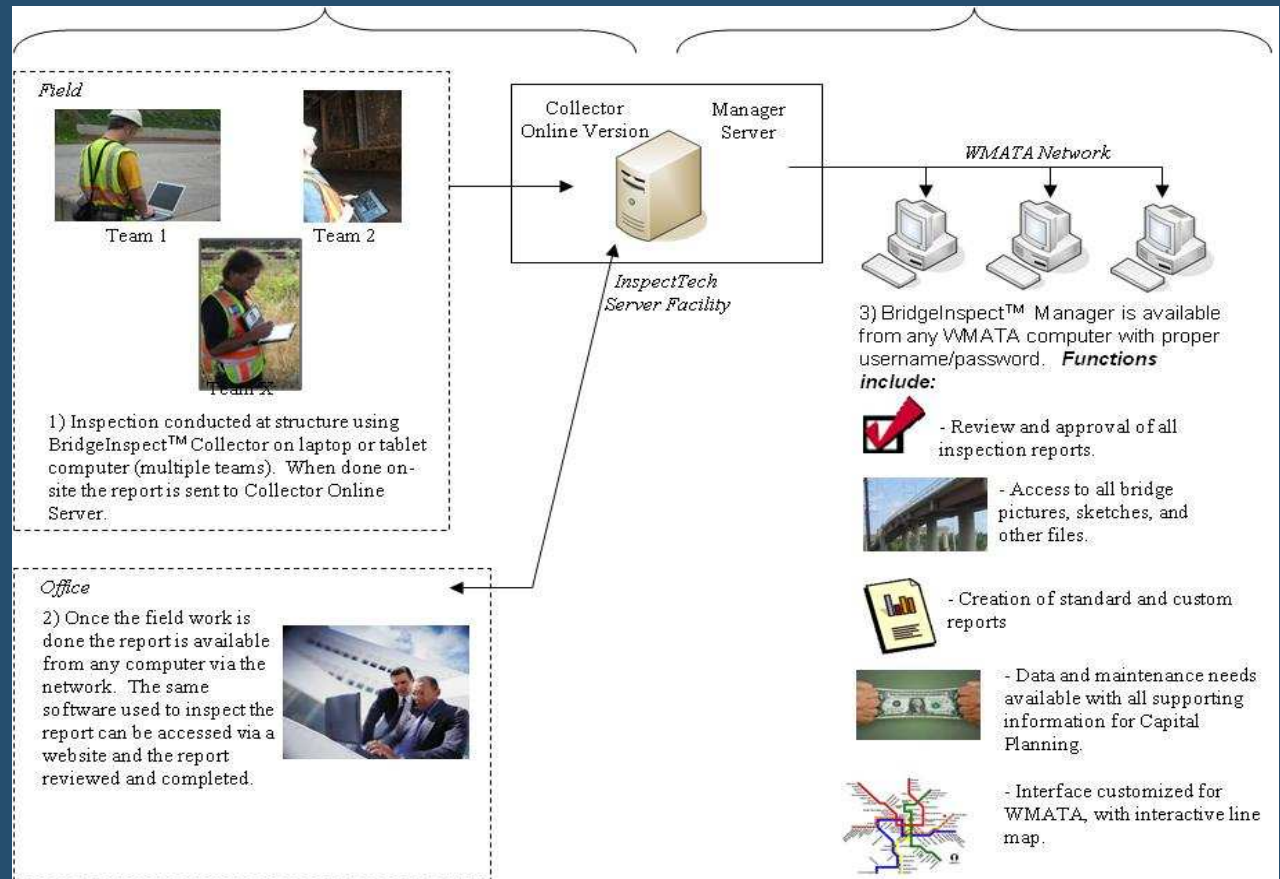


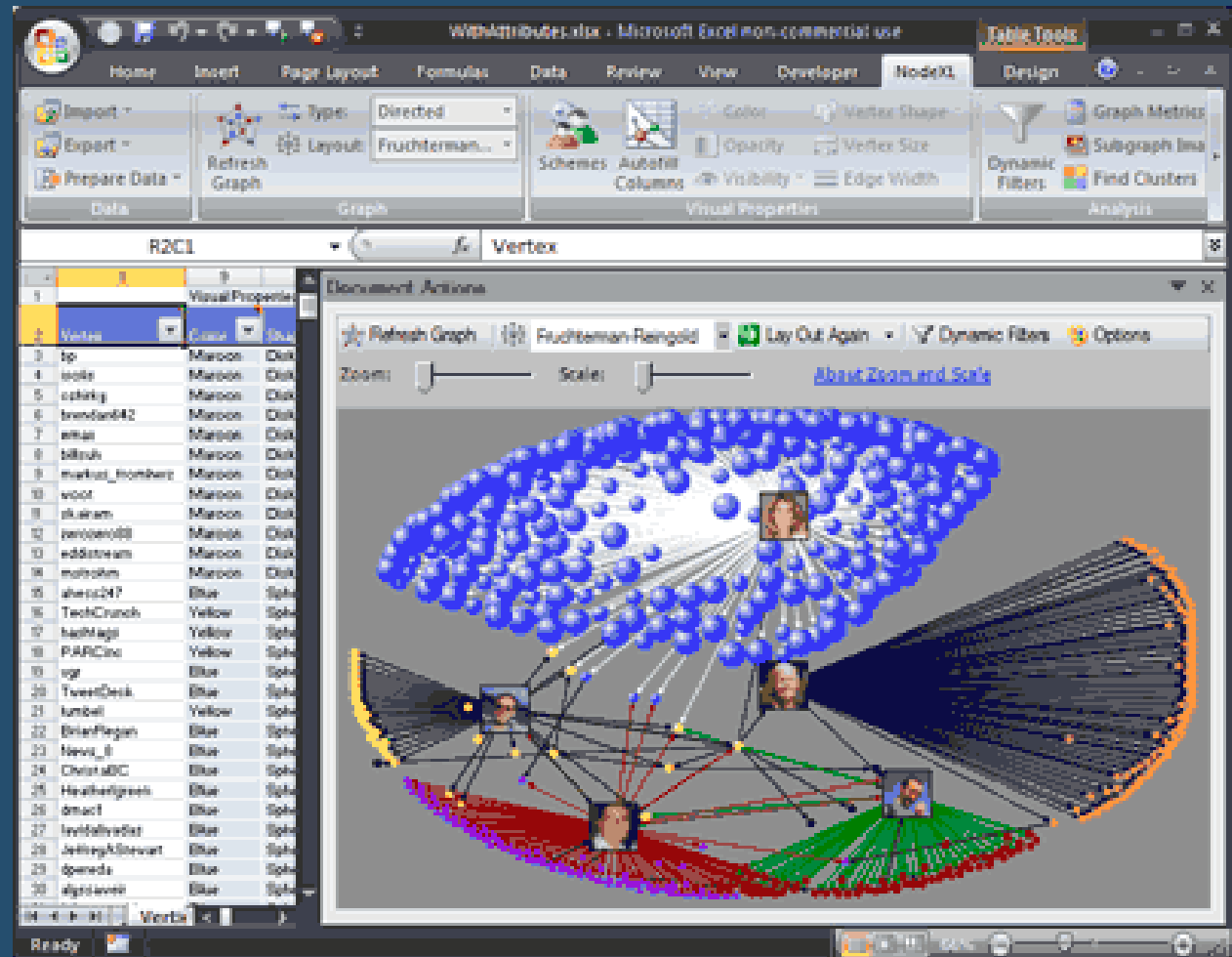
Image Courtesy of InspectTech – <http://www.inspecttech.com>





Bridge Network Analysis

- Bridge Communication Network
- Silo Effect
 - Districts
- Silo Effect
 - Engineers
 - Inspectors
 - Maintenance



er
ctor
enance

Understanding the Bridge Network

Hierarchal

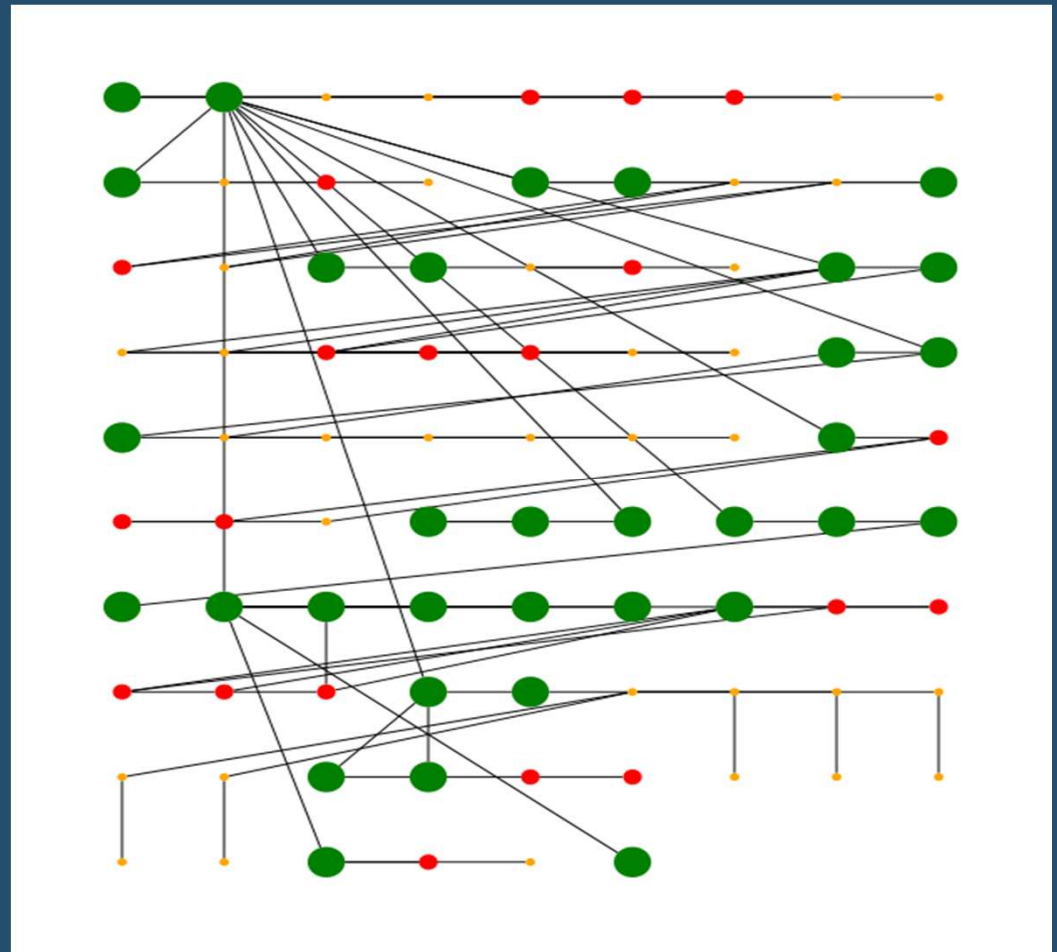
- Advantage - High Efficiency
- Disadvantages
 - Lack of Leadership Strength
 - Political
 - De-Motivational

Horizontal

- Advantage - Learning Organization
- Disadvantages
 - Implementation Difficulty
 - Enforcement
 - Lack of Authority
 - Unclear Roles

Combination

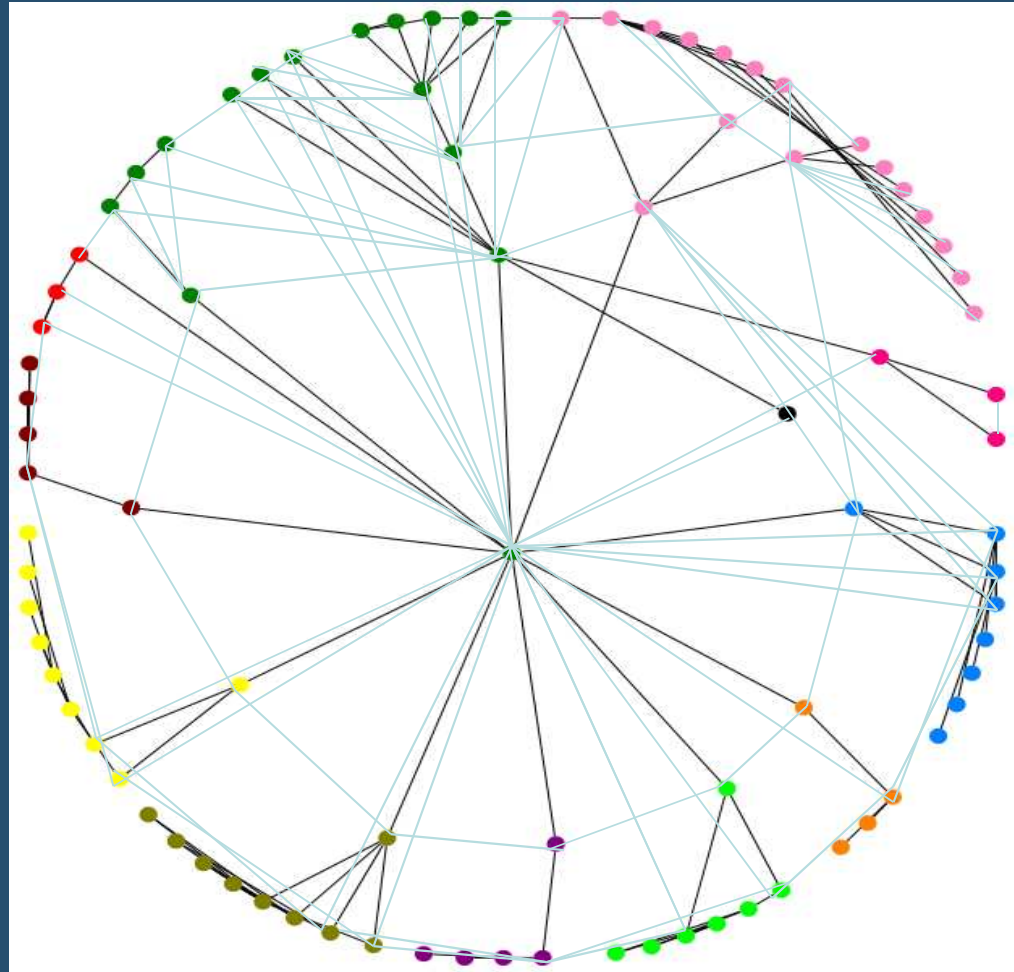
Reference: <http://practical-management.com>



Possible Solutions

1. Modify Pontis
2. Develop New System
3. Acquire & Customize Commercial System
4. Acquire & Customize another Agency System
5. Do Nothing

System must be comprehensive and web-centric.



Project Scope

- Unified System
- Maintenance Identification Tracking, & Prioritization
- Bridge Data in the Field
- Data Migration
- System Collaboration
- Training
- Custom Reports

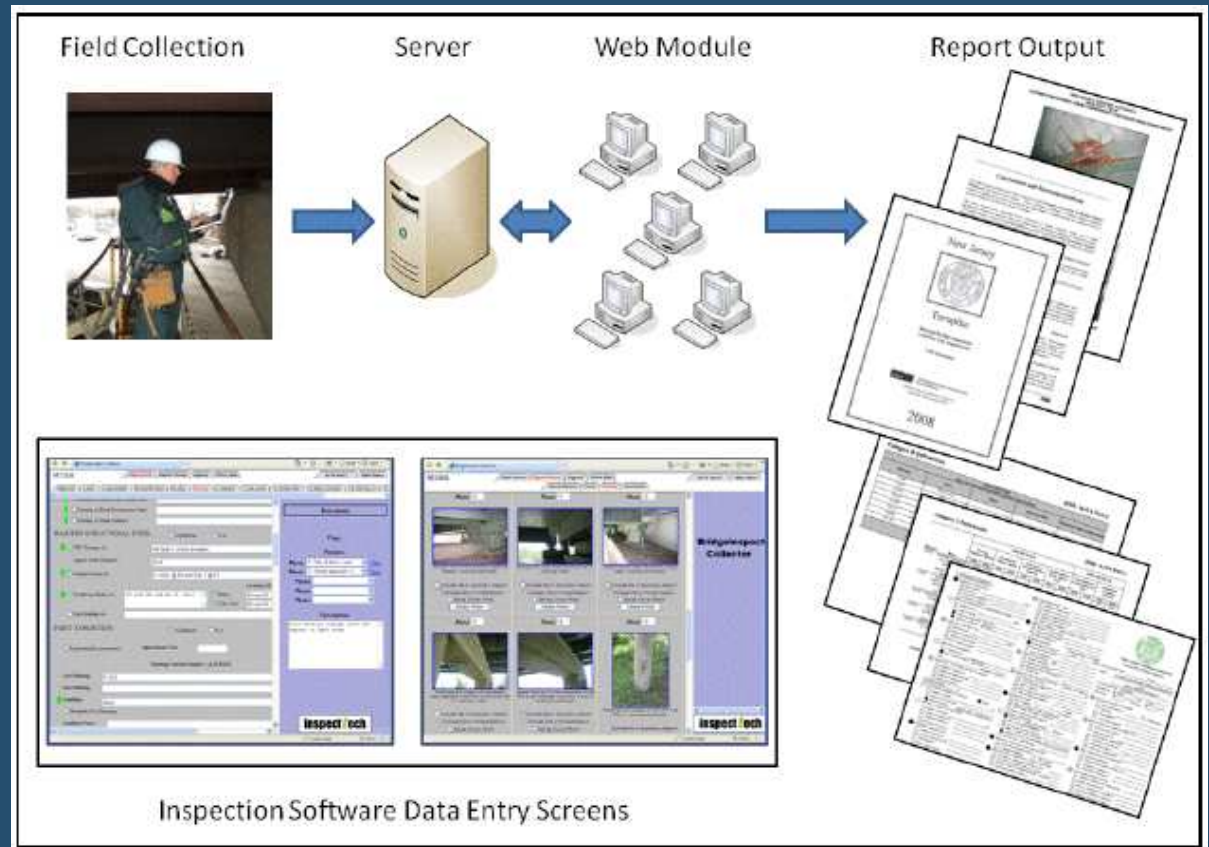


Image Courtesy of InspectTech – <http://www.inspecttech.com>





Available Systems

All	STRUCTURE	DISTRICT	COUNTY	CUSTODIAN	FEATURE_ON	FEATURE_UNDER	BUILT
<input type="checkbox"/>	B010001	4	ADAMS(01)	STATE HIGHWAY DEPT (10)	STH 13	BIG ROCHE A CRI LAKE	1957
<input type="checkbox"/>	B010002	4	ADAMS(01)	RAILROAD(60)	Z	BIG ROCHE A CRI CREEK	1975
<input type="checkbox"/>	B010003	4	ADAMS(01)	TOWN(40)	175TH LANE	BIG ROCHE A CRI CREEK	1981
<input type="checkbox"/>	B010004	4	ADAMS(01)	TOWN(40)	CZECH RD	ROCHE A CRI CREEK	1984
<input type="checkbox"/>	B010005	4	ADAMS(01)	TOWN(40)	13TH DR	CARTER CREEK	1984
<input type="checkbox"/>	B010006	4	ADAMS(01)	TOWN(40)	BROWNDDEER LANE	BIG ROCHE A CRI CREEK	1984
<input type="checkbox"/>	B010007	4	ADAMS(01)	TOWN(40)	8TH DRIVE	FORDHAM CREEK	1986
<input type="checkbox"/>	B010008	4	ADAMS(01)	TOWN(40)	8TH DRIVE	BINGHAM CREEK	1986
<input type="checkbox"/>	B010009	4	ADAMS(01)	TOWN(40)	8TH AVE	LITTLE ROCHE A CRI CREEK	1988
<input type="checkbox"/>	B010010	4	ADAMS(01)	TOWN(40)	COTTONVILLE ST	CARTER CREEK	1990
<input type="checkbox"/>	B010012	4	ADAMS(01)	TOWN(40)	15TH AVE	WHITE CREEK	1988
<input type="checkbox"/>	B010013	4	ADAMS(01)	STATE HIGHWAY DEPT (10)	STH 21	WISCONSIN RIVER 18	1959
<input type="checkbox"/>	B010014	4	ADAMS(01)	TOWN(40)	6TH AVE	BUCKNER CREEK	1989

The screenshot also shows a Windows taskbar at the bottom with various application icons and a system tray showing the time as 3:59 PM. A watermark 'Advitam' is visible on the right side of the screenshot.



InsWis/DOH/HSI



Benefits

Benefit Table				
Characteristic		Low Benefits	Medium Benefits	High Benefits
Impact	The solution will:	Provide limited benefits to a small group.	Serve large group or has significant impact on small/moderate group.	★ Serve entire department and/or many external customers.
Breadth	The solution will provide advances to:	Only one or a small set of business functions.	★ Several business tasks in diverse areas or has major impact on a group of tasks.	A broad set of business functions.
Quality of Work	The solution will:	Automate existing processes and have little impact on quality.	Improve existing processes, reducing administrative burdens or increasing job satisfaction.	★ Significantly improve or eliminate business processes, positively affecting jobs.
Customer Service	The solution will:	Have little or no direct/indirect external improvement .	Improve external service in areas of timeliness, quality, or information availability.	★ Significantly improve external service and/or addresses problem areas.
Savings	The solution will:	Have little or no impact on job or activity costs.	★ Improve existing processes to reduce job or activity costs.	Significantly improve or eliminate business processes resulting in cost savings and efficiency.





Risks

Risk Table

Characteristic		Low Risk	Medium Risk	High Risk
Skills	Skills and equipment needed are:	★ Similar to others at Mn/DOT	Somewhat unusual and unfamiliar	New and complex
IT Architecture	Technical requirements are:	★ Largely known and can be easily integrated	Somewhat defined with minimal integration difficulty	Not certain or are difficult to integrate
Definition	Business requirements are:	★ Understood	Somewhat defined, but subject to change.	Very vague, complex, or largely unknown.
Complexity	Impact on business procedures are:	Minimal	★ Moderate	Substantial
Ownership Support	Office Director and Champion are:	Both identified, committed, and enthusiastic.	★ Both supportive but somewhat removed from regular involvement.	Both not supportive or champion not identified.





Return on Investment

ROI TABLE	Project Costs & Benefits	Post-Project Costs & Benefits		
		Year 1	Year 2	Year 3
COSTS				
Software	\$400,000	\$30,000	\$30,000	\$30,000
Hardware	\$205,000	\$0	\$0	\$0
Consulting @ \$100 per hour	\$200,000	\$0	\$0	\$0
Personnel @ \$50 per hour	\$100,000	\$4,000	\$4,000	\$4,000
Training	\$85,000	\$3,000	\$3,000	\$3,000
Other	\$0	\$0	\$0	\$0
Total Costs for Period	\$990,000	\$37,000	\$37,000	\$37,000
Cumulative Costs	\$990,000	\$1,027,000	\$1,064,000	\$1,101,000
TANGIBLE BENEFITS				
Increased Revenue	\$0	\$0	\$0	\$0
Time Savings	\$0	\$455,438	\$455,438	\$455,438
Equipment Savings	\$0	\$0	\$0	\$0
Materials, Supplies, Space Savings	\$0	\$0	\$0	\$0
Commercial Services Savings	\$0	\$0	\$0	\$0
Other Savings	\$0	\$0	\$0	\$0
Total Benefits for Period	\$0	\$455,438	\$455,438	\$455,438
Cumulative Benefits	\$0	\$455,438	\$910,875	\$1,366,313
PAYBACK PERIOD TABLE	Project	Year 1	Year 2	Year 3
Total Cumulative Benefits	\$0	\$455,438	\$910,875	\$1,366,313
Total Cumulative Costs	\$990,000	\$1,027,000	\$1,064,000	\$1,101,000
Cumulative Cash Flow	(\$990,000)	(\$571,563)	(\$153,125)	\$265,313
PAYBACK PERIOD (number of years after project completion)	2.4			





Implementation Plan – Short Term (1-5 Yrs)

Research Phase

- ✓ ○ Champion/Core Group
- ✓ ○ Develop/Define Criteria
- ✓ ○ Research Systems
(Questionnaires)
- ✓ ○ Demonstrations
- ✓ ○ Selection Committee
- ✓ ○ Pilot Project
- ✓ ○ Scope of Work/RFP

• Project Phase I

- ✓ ○ Development – Training, Identify Data Errors, Finalize Pilot Project Tasks

• Project Phase II

- ✓ ○ All State and Local Agency Data – Additional Training, Data Errors

• Project Phase III

- Utilize Infrastructure
Interdependency
Capabilities





Implementation Plan – Long Term (5-10 Yrs)

Project Phase IV

- Integrate all Trunk Highway Data
 - not currently in electronic format

Project Phase V

- Integrate all Local Agency Data
 - not currently in electronic format

Project Phase VI

- Performance Measures – ROI

Mn/DOT Structure Inventory Report		
Bridge ID: 68502	CSAH 28 over ROSEAU RIVER	Date: 01/29/2009
* GENERAL *		
Agency Br. No.	2	Maint Area
District	68	ROSEAU
County	ROSEAU	
City	SPRUCE	
Township	1.7 MI E OF JCT TH 310	
Desc. Loc.	06 - 162N - 39W	
Sect., Twp., Range	48d 53m 28.49s	
Latitude	95d 43m 51.57s	
Longitude	COUNTY	
Custodian	ROSEAU COUNTY	
Owner	COUNTY	
Inspection By	ROSEAU COUNTY	
BMU Agreement No.		
Year Built	1962	
Year Fed Rehab		
Year Remodeled		
Temp		
Plan Avail.	COUNTY	
* STRUCTURE *		
Service On	HIGHWAY	
Service Under	STREAM	
Main Span Type	CSTL BEAM SPAN	
Main Span Detail		
Appr. Span Type		
Appr. Span Detail		
Skew		
Culvert Type		
Barrel Length		
Number of Spans	MAIN: 3 APPR: 0 TOTAL: 3	
Main Span Length	60.0 ft	
Structure Length	160.0 ft	
Deck Width	26.2 ft	
Deck Material	C-I-P CONCRETE	
Wear Surf Type	MONOLITHIC CONC	
Wear Surf Install Year		
Wear Course/Fill Depth		
Deck Membrane	NONE	
Deck Rebars	N/A	
Deck Rebars Install Year		
Structure Area	4,192 sq ft	
Roadway Area	3,886 sq ft	
Sidewalk Width - L/R		
Curb Height - L/R	0.83 ft 0.83 ft	
Rail Codes - L/R	42 42	
* ROADWAY *		
Bridge Match ID (TIS)	1	
Roadway O/U Key	1-ON	
Route Sys/Nbr	CSAH 28	
Roadway Name or Description	CSAH 28	
Roadway Function	MAINLINE	
Roadway Type	2 WAY TRAF	
Control Section (TH Only)		
Ref. Point (TH Only)		
Date Opened to Traffic		
Detour Length	7 mi.	
Lanes	2 Lanes ON Bridge	
ADT (YEAR)	225 (2001)	
HCADT		
Functional Class.	RURMINOR COLL	
* RDWY DIMENSIONS *		
If Divided	NB-EB SB-WB	
Roadway Width	24.3 ft	
Vertical Clearance		
Max. Vert. Clear.		
Horizontal Clear.		
Latera. Clr. - Lt/Rt		
Appr. Surface Width	24.0 ft	
Roadway Width	24.3 ft	
Median Width		
* MISC. BRIDGE DATA *		
Structure Flared	NO	
Parallel Structure	NONE	
Field Conn. ID	BOLTED	
Cantilever ID	PIN & HANGER	
Foundations		
Abut.	CONC - FTG PILE	
Pier	CONC - FTG PILE	
* PAINT *		
Year Painted	Pct. Unsound	
Painted Area		
Primer Type		
Finish Type		
* BRIDGE SIGNS *		
Posted Load	NOT REQUIRED	
Traffic	NOT REQUIRED	
Horizontal	OBJECT MARKERS	
Vertical	NOT APPLICABLE	
* INSPECTION *		
Deficient Status	ADEQ	
Sufficiency Rating	85.6	
Last Inspection Date	12-03-2008	
Inspection Frequency	12	
Inspector Name	ROSEAU	
Structure	A-OPEN	
* CONDITION CODES *		
Deck	7	
Superstructure	7	
Substructure	7	
Channel	6	
Culvert	N	
* APPRAISAL RATINGS *		
Structure Evaluation	6	
Deck Geometry	5	
Underclearances	N	
Waterway Adequacy	7	
Approach Alignment	8	
* SAFETY FEATURES *		
Bridge Railing	6-SUBSTANDARD	
Appr. Guardrail	UNKN	
GR Transition	JNKN	
GR Termini	JNKN	
* IN DEPTH INSP. *		
Frac. Critical		
Underwater		
Pinned Asbly. Y	60 mo 08/2008	
Spec. Feat.		
* WATERWAY *		
Drainage Area	2336 sq ft	
Waterway Opening	NO PRMT REQD	
Navigation Control	NO PRMT REQD	
Pier Protection	UNKN	
Nav. Vert./Horz. Clr.		
Nav. Vert. Lift Bridge Clear.		
MN Scour Code	I-LOW RISK	
Scour Evaluation Year	1994	
* CAPACITY RATINGS *		
Design Load	H20	
Operating Rating	HS 27.4	
Inventory Rating	HS 14.3	
Posting		
Rating Date	03-01-1973	
Mn/DOT Permit Codes	A: N B: N C: N	

Image Courtesy of Mn/DOT





Results....

- Web-Centric System is the SOLUTION
- MnDOT Project Approval Obtained December 2009
- Funding Obtained July 2010
- Pilot Project Finalized
- SIMS Implemented May 2011

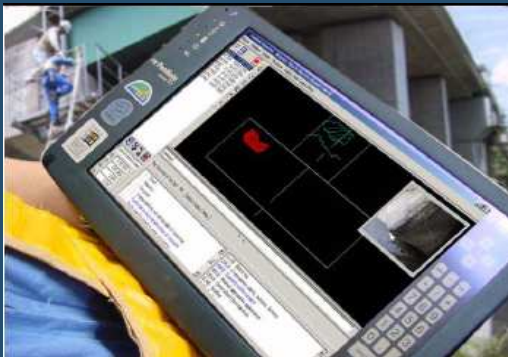


Image Courtesy of Advitam
<http://www.advitam-group.com>

The screenshot displays the SIMS web application interface. At the top, there is a navigation menu with 'Main', 'Administration', 'Views', 'GIS', and 'Help'. The main content area shows a search filter for 'District 6' and 'Asset Code' '5900'. A map view is active, showing a satellite view of a river and surrounding area. A red pin marks the location of asset 5900. A Street View window is open, showing a 3D view of the bridge structure. The interface includes a 'Show Assets' button and a 'Street View' tab. The bottom of the interface has a 'Count: 1' and 'Print | Toggle Controls' options.





Structure Information Management System

The screenshot displays the SIMS (Structure Information Management System) web application interface. At the top left is the Minnesota Department of Transportation logo. The main header features the SIMS logo and the text "STRUCTURE INFORMATION MANAGEMENT SYSTEM". On the right, there are navigation links for "Main", "Administration", "Views", "GIS", and "Help", along with a "Messages: 0 new (view)" notification and a "Quick Select" search box. Below the header, a search bar allows filtering assets by "District 1", "NBI 7: Facility Carried by Structure", and "TH 61". A "Show Assets" button is present. The main content area shows a map with 55 bridge assets marked as red pins along a road. A "Street View" window is open, showing a 3D perspective view of a road with a guardrail. Below the street view are controls: "Toggle Street Overlay", "Toggle Street View Marker", and "Set Selected Marker To Street View Marker".

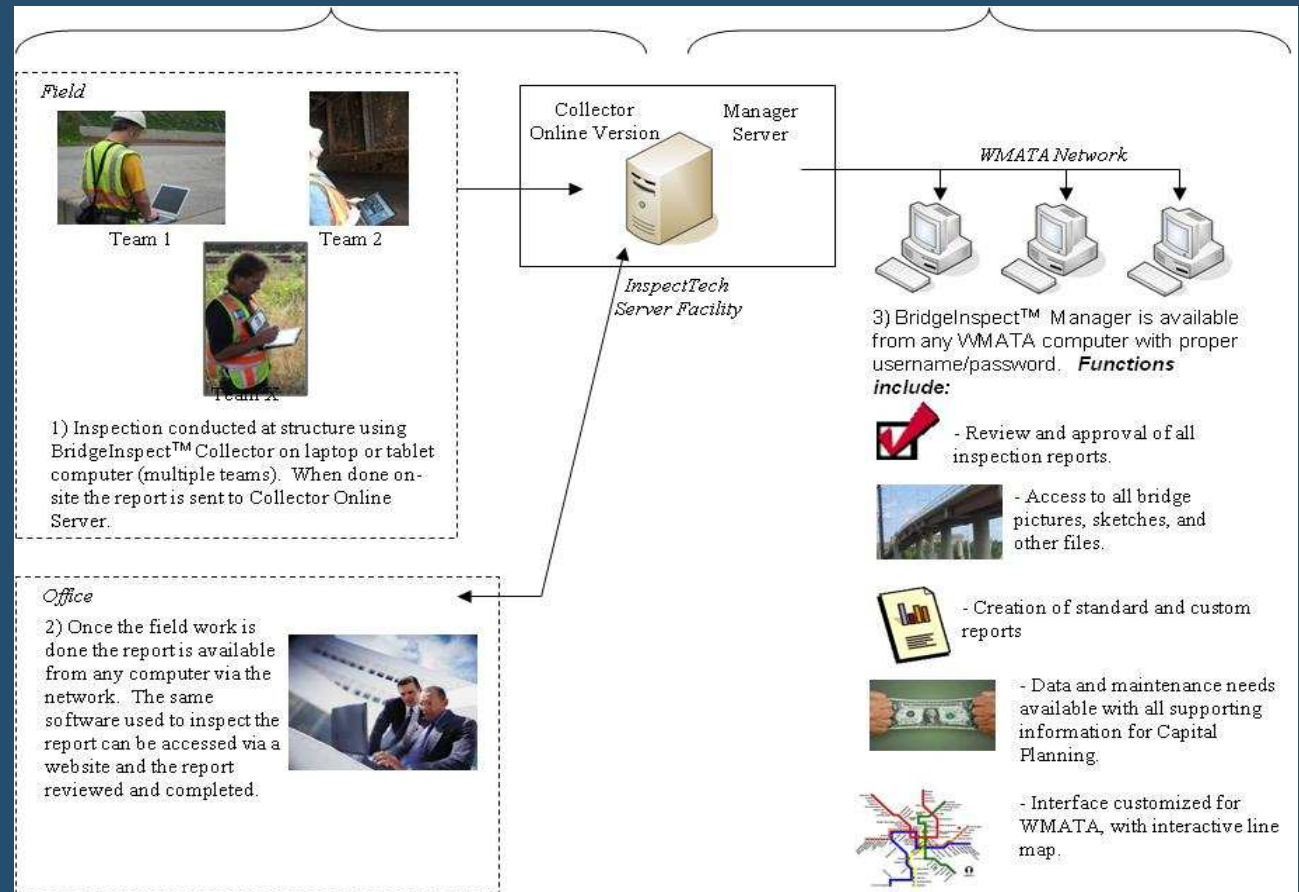


Inspection Report ~~Review~~ Approval

- Start inspection on laptop/tablet
- Submitted to Web-Server when in office
- Report continued from any computer
- Submitted for review
- Reviewed and approved online
- Able to run reporting and searching on data

Inspection

Management





Inspection Software Modules

Laptop Edition

- Runs on Laptop/Tablet computers in the field
- Each person given username/password
- Username determines structures and permissions
- Electronic enabled versions of all inspection forms
- Once done with field work all data can be submitted to the server computer

Internet Edition

- After inspection submitted from field can be continued/edited from any network computer
- No installed software required
- All features on laptop available
- Allows for anytime/anywhere access





Inspection Collector Software

SIMS Collector

Tool for collecting and generating high quality inspection reports that meet FHWA and State standards.

5900 SIA Enter Inspection - Routine Inspection Files Print Report Tabs District 6 Main Menu

Inspection Info Deck Superstructure Substructure Miscellaneous Notes All Elements Add/Delete Elements

58. Deck NBI 5 - Fair Condition

Unsound Deck % 2

36A. Traffic Safety Features: Bridge Railings NBI 1 - MEETS STANDARDS

36B. Traffic Safety Features: Transitions NBI 0 - SUBSTANDARD

36C. Traffic Safety Features: Approach Guardrail NBI 0 - SUBSTANDARD

36D. Traffic Safety Features: Approach Guardrail Terminal NBI N - NOT REQUIRED

Condition State 3

Pictures / Files

Select New Picture/File

There are no pictures linked to this field.

Manuels

Central Database Value

Field History

inspecttech

Deck Elements

Display condition states as: Quantity

	Environment	Total Quantity	State 1	State 2	State 3	State 4	State 5
022/1 Low Slump O/L (Concrete Deck with Uncoated Rebar) (Sq. Feet)	1	12082	0	12082	0	0	0
<p>Element was added to reflect deck revision completed in 1985. A 2" low slump overlay was added in spans 3 to 14 of the existing deck that was not removed for widening.</p> <p>Spans 3 thru 9 - has a few scattered delaminated areas associated along the transverse deck cracks.</p> <p>Span 10 - has a few scattered delaminated areas associated along the transverse deck cracks.</p>							
026/2 Top of Concrete Deck (No Overlay - Epoxy Rebar) (Sq. Feet)	2	64106	0	64106	0	0	0
<p>Element was revised to reflect deck revision completed in 1985. This part of the deck includes spans 1 and 2 and spans 15 to 24.</p> <p>Span 1 - the south bound lane has 8 separate patched areas that nearly blend together near the center line which range in size from 2' x 4" to 4' x 6'. There is a 1' x 2" spalled area between the patches.</p>							
300/2 Strip Seal Deck Joint (Feet)	2	372	256	16	0		





Report Generation



Messages: 0 new [\(view\)](#)

Quick Select:

[View asset group](#)

[Main](#) [Administration](#) [Views](#) [GIS](#) [Help](#)

CO Bridge : Zink, Jennifer [\(Logout\)](#)

Parent Asset: District 6

Asset Name: 5900

Asset Code: 5900

Asset Type: Bridge

NBI 7: Facility Carried by Structure: TH 43

NBI 6A: Feature Intersected: Narrative: MISS RVR, RR, STREETS

NBI 29: Average Daily Traffic (ADT): 11900

MN Operating Rating: 21.6

MN Inventory Rating: 11.4

NBI 41: Structure Open, Posted, or Closed to Traffic: P - Posted for Load

NBI 112: NBIS Bridge Length: Y



Report Details

[Create Report](#)

In Progress Reports:

Creation Date	Inspection Date	Report Type	Report Status	Edit	Action
10/21/2011	10/21/2011	Routine	In progress		

Reports Pending Approval:

No reports

Approved Reports

Creation Date	Inspection Date	Report Type	Report Status	Edit	Action
05/20/2010	05/20/2010	Routine	Approved on 5/20/2010		





Interactive Mapping

- Output search results to map...
- Full capabilities to zoom, pan, add aerial photos, etc.
- Satellite View
- Interactive StreetView

The screenshot displays the SIMS (Structure Information Management System) web interface. At the top, there is a navigation menu with 'Main', 'Administration', 'Views', 'GIS', and 'Help'. The main content area shows a search filter for 'District 6' and 'Asset Code' with the value '5900'. Below this, there is a map view showing a satellite image of a river and surrounding area. A red pin marker is placed on the map, labeled '5900'. To the right of the map, there is a 'Street View' window showing a first-person perspective of a bridge deck. Below the Street View window, there are three buttons: 'Toggle Street Overlay', 'Toggle Street View Marker', and 'Set Selected Marker To Street View Marker'. The interface also includes a 'Quick Select' field, a 'Messages' notification, and a user login 'CO Bridge : Zink, Jennifer'.



- Critical Deficiency
- Fracture Critical
- Pinned Assembly
- Special
- Damage
- Other
- Underwater
- Scour





Management Software

Powerful 'Electronic File Cabinet', turning all your data into valuable information for reporting, analysis, and tracking.

- Links to all current and past information
 - Reports, Pictures, Sketches, Maintenance Items
 - Contracts, Load Rating, Letters, etc.
- Link to Bridge Location
- Bridge Notes
- Upcoming inspection dates

Minnesota DOT
Bridge and Structure Inspection Management System
inspecttech

Friday, October 21, 2011
Messages: 0 new ([view](#))

Quick Select: [View asset](#)


Main GIS Query Reports Administration Help

Asset Detail Page

District 6: 5900

Parent Asset: District 6
Asset Name: 5900
Asset Code: 5900
Asset Type: Bridge
NBI 7: Facility Carried by Structure: TH 43
NBI 6A: Feature Intersected: Narrative: MISS RVR, RR, STREETS
NBI 29: Average Daily Traffic (ADT): 11900
MN Operating Rating: 21.6
MN Inventory Rating: 11.4
NBI 41: Structure Open, Posted, or Closed to Traffic: P - Posted for Load
NBI 112: NBIS Bridge Length: Y

Quick Links:
[View Structure on Map](#)
[Edit Central Database Values](#)
[View Central Database Values Report](#)
[View Audit History Report](#)
[Manage Security for this Asset](#)



Inspection Reports

Inspection Date	Report Type	Inspectors	Description	View Report	View PDF
05/20/2010	Routine	Administrator, InspectTech	Approved on 5/20/2010		

Bridge History / Notes





Minnesota DOT Bridge and Structure Inspection Management System inspect^{tech}

Friday, October 21, 2011
Messages: 0 new ([view](#))

Main GIS Query Reports Administration Help

Quick Select:

[View asset](#)

Report Query

[Clear Query](#) [Run Query](#)

Text Description: (All assets where field 'NBI 58: Deck' = "")

- Enter Query Criteria
- Additional Filters
- Select Display Columns
- Save Query
- Load Existing Query

Add Criteria Field to Displayed Columns
Return results that match All of the following:

NBI 58: Deck =

[Click to add](#)

- <
- <=
- >
- >=
- =
- contains
- does not contain
- in list



List of values for: NBI 58: Deck

Filter Values: [Filter](#)

	Value
Select	0 - Failed Condition
Select	1 - Imminent Failure Condition
Select	2 - Critical Condition
Select	3 - Serious Condition
Select	4 - Poor Condition
Select	5 - Fair Condition
Select	6 - Satisfactory Condition
Select	7 - Good Condition
Select	8 - Very Good Condition
Select	9 - Excellent Condition
Select	N - Not Applicable

11 values found.

[/loading_redirect.aspx?resolved=1&redirect=%2fmodal_pages%2ffist_field_values.aspx%3f%7bUP.....](#)

[Run Query](#)





Minnesota DOT Bridge and Structure Inspection Management System

Friday, October 21, 2011
Messages: 0 new ([view](#))

inspect^{tech}

Quick Select: [View asset](#)

- Main
- GIS
- Query
- Reports
- Administration
- Help

Search Results

Edit Results

Update Fields

- City Bridges
- City Bridges
- City Bridges
- City Bridges
- City Bridges
- City Bridges
- City Bridges
- City Bridges
- City Bridges
- City Bridges
- City Bridges
- City Bridges
- City Bridges
- City Bridges
- City Bridges
- City Bridges
- City Bridges
- City Bridges
- City Bridges

Count: 378 [Print](#) [Toggle Controls](#)

Map | Satellite | Hybrid | Terrain

Map navigation controls: Home, Previous, Next, Refresh, Full Screen, Zoom In, Zoom Out, Zoom Reset, Street View.

POWERED BY Google

© 2011 Europa Technologies. Google - Terms of Use

- Information
- Street View

38501

- Parent Asset: Lake
- Asset Name: 38501
- Asset Code: 38501
- Asset Type: Bridge
- NBI 7: Facility Carried by Structure: CSAH 6
- NBI 6A: Feature Intersected: Narrative: E BR BAPTISM RIVER
- NBI 29: Average Daily Traffic (ADT): 622
- MN Operating Rating: 24.4
- MN Inventory Rating: 14.8
- NBI 41: Structure Open, Posted, or Closed to Traffic: A - Open
- NBI 112: NBIS Bridge Length: Y

[Go to Bridge Detail Page](#)

[Zoom Map to Bridge](#)





Minnesota DOT Bridge and Structure Inspection Management System

Friday, October 21, 2011

Messages: 0 new [\(view\)](#)

inspect^{tech}

Quick Select:

[View asset](#)

- Main
- GIS
- Query
- Reports
- Administration
- Help

- System Reports
- Custom Reports
- Dashboard

System Reports

Parent Asset:

Output Type:

Past Due Inspections

Bridge Number	NBI	Location	Features Intersected	County	Inspection Date
1018	1018	0.2 MI S OF JCT CSAH 19	STREAM	066 - Rice	3/30/2009 12:00:00 AM
5900	5900	2.8 MI N OF JCT TH 61	MISS RVR, RR, STREETS	085 - Winona	5/14/2009 12:00:00 AM

[Conditions of Use](#)

© InspectTech 2010





Minnesota DOT
 Bridge and Structure Inspection Management System
 inspect^{tech}

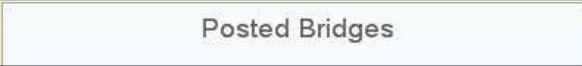
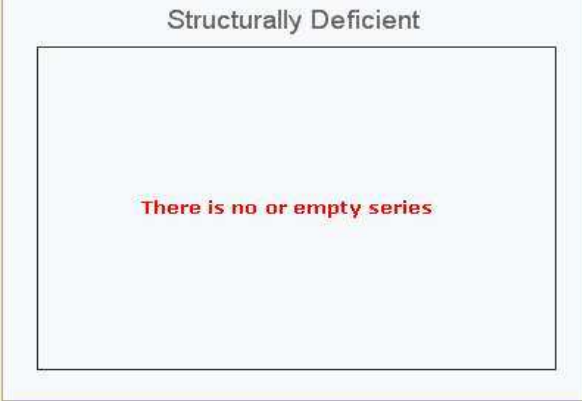
Friday, October 21, 2011
 Messages: 0 new (view)

- Main
- GIS
- Query
- Reports
- Administration
- Help

Quick Select:
[View asset](#)

- System Reports
- Custom Reports
- Dashboard

Bridge Group: State Bridges





Audit Reports



Minnesota DOT Bridge and Structure Inspection Management System inspect^{tech}

Friday, October 21, 2011
Messages: 0 new ([view](#))

Quick Select:
[View asset](#)

- Main
- GIS
- Query
- Reports
- Administration
- Help

Audit Report

Report Changed

Inspector Name Changed
Asset Name Changed
Object Changed
Report

- Field Organizer
- Audit Report**
- Bridge Detail Fields Administration
- Messages
- Manage Bridges
- Security
- Edit Manual Pages
- Edit Fields
- Create Profiles
- Profile Assignment
- Users List
- Manage Email Alerts
- Manage Group Assignment

Run Report

Inspector Name	Change Location	Change Type	Changed Object	Changed Date	Old Value	New Value	Asset Name	Asset Code	Report Create Date	Inspection Date
Zink, Jennifer	online	Value Changed	Unofficial Sufficiency Rating Date	10/7/2011 10:00:17 AM	10/06/2011	10/07/2011	4654	4654	08/19/2011	08/17/2011
Roen, Sonya	online	Value Changed	Unofficial Sufficiency Rating Date	10/6/2011 9:34:51 AM	10/05/2011	10/06/2011	4654	4654	08/19/2011	08/17/2011
Zink, Jennifer	online	Value Changed	audit	10/5/2011 10:19:22 AM	538	538	4654	4654	08/19/2011	08/17/2011
Zink, Jennifer	online	Inspection Report Submitted For Approval	Inspection Report Submitted for Review	10/5/2011 10:19:22 AM	538	538	4654	4654	08/19/2011	08/17/2011
Zink, Jennifer	online	Inspection Report Submitted For Approval	Report submitted for review	10/5/2011 10:19:22 AM	2	3	4654	4654	08/19/2011	08/17/2011
Zink, Jennifer	online	Value Changed	Status	10/5/2011 10:19:22 AM	2	3	4654	4654	08/19/2011	08/17/2011
Zink, Jennifer		Report Assignment Changed	Assignment	10/5/2011 10:19:21 AM		[To User: Green, Duane], [Comment: Please complete Part 2, and submit for review back to me. A PDF document of this same report was sent to you via Outlook e-mail on 8-19-2011 and 8-23-2011. It wasn't submitted to you via SIMS until now due to software errors and permissions.]	4654	4654	08/19/2011	08/17/2011
Zink, Jennifer	online	Value Changed	Section Order value saved	10/5/2011 10:14:49 AM	NA	6	4654	4654	08/19/2011	08/17/2011
Zink, Jennifer	online	Value Changed	Section Order	10/5/2011	NA	6	4654	4654	08/19/2011	08/17/2011





Support...

- ~~Pontis~~ – February 28, 2011
- SIMS – May 2011
- Training
 - Adobe Connect Meetings
 - Hands-On Instruction Statewide
 - Video Instructions
 - SIMS Manuals
 - SIMS Community Feedback Forums
- SIMS Website <http://www.dot.state.mn.us/bridge/sims>
- SIMS Help: simshelp.dot@state.mn.us





Questions?

Jennifer L. Zink, P.E.
Bridge Inspection Engineer
Mn/DOT Bridge Office
(651) 366-4573
jennifer.zink@state.mn.us



Image Courtesy of Mn/DOT

<https://mn.bridgeinspect.com/>
<https://mn.bridgemanage.com/>

