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Bridge Preservation



How do we make bridge preservation a <u>systematic process</u>?



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How do we make bridge preservation a <u>systematic process</u>?



It does not stand alone!

- Bridge Inspection
- Bridge Management
- Bridge Design
- Bridge Maintenance



Bridge Preservation

How do we make bridge preservation a <u>systematic process</u>?

3 Recommendations For Today:

- Make Data Available
- Focus on Usability/Simplicity
- Collect only what You Use



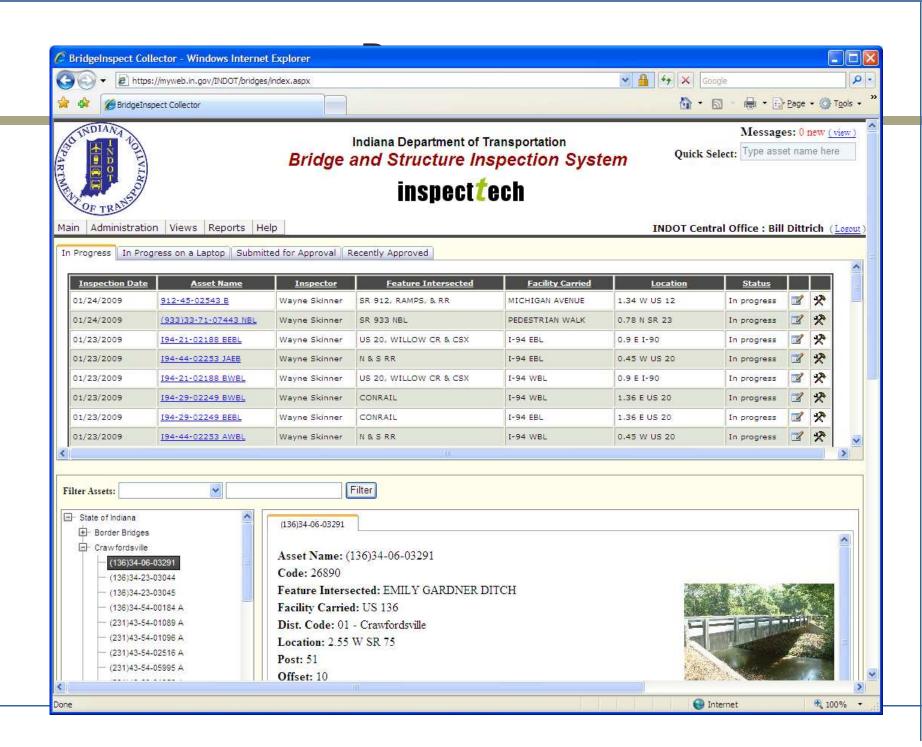
Data Availability

Give all stakeholders access to the data that affects them.

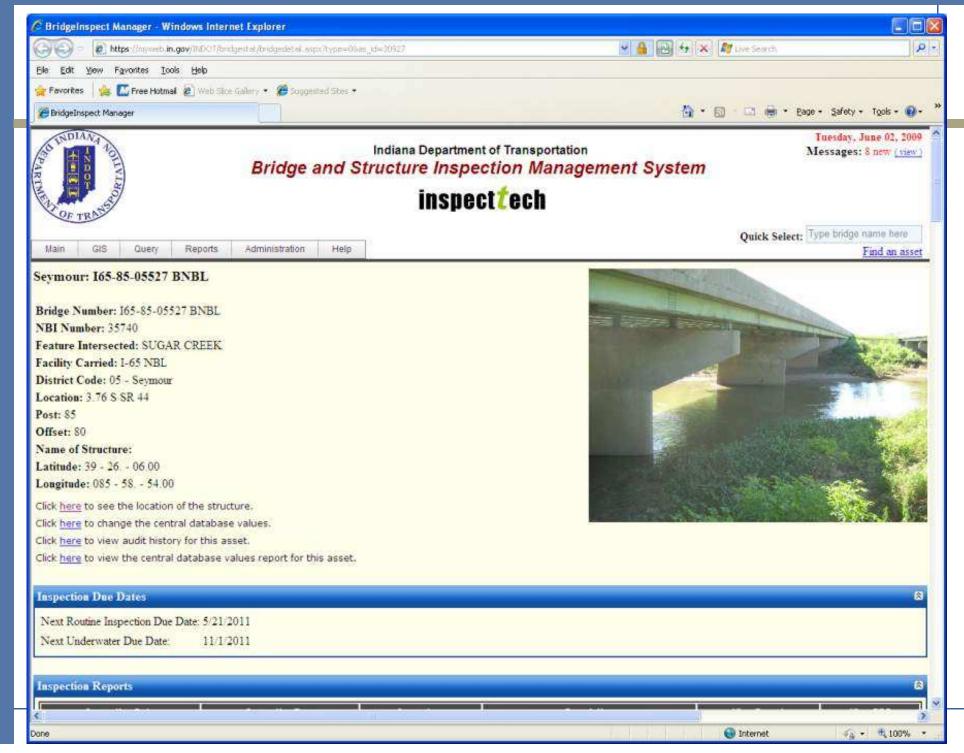
- Web based
- Understandable
- Relevant



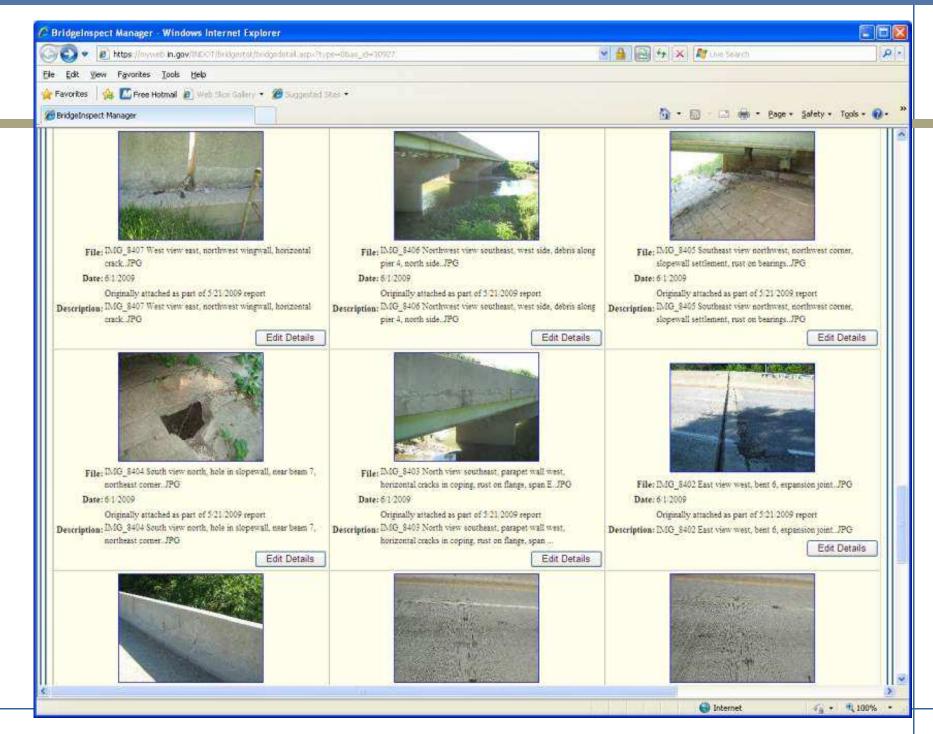






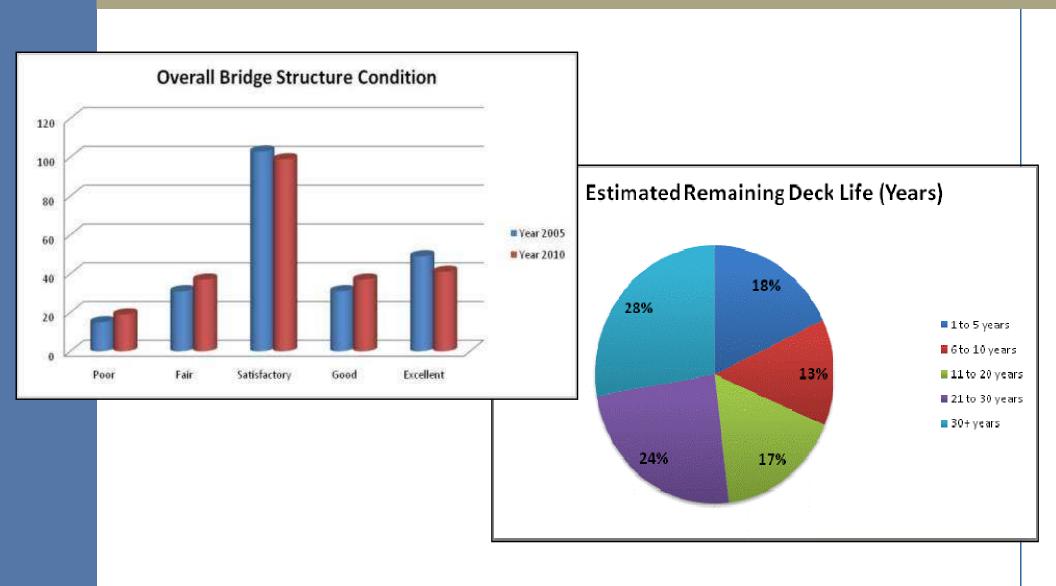








Graphical Output





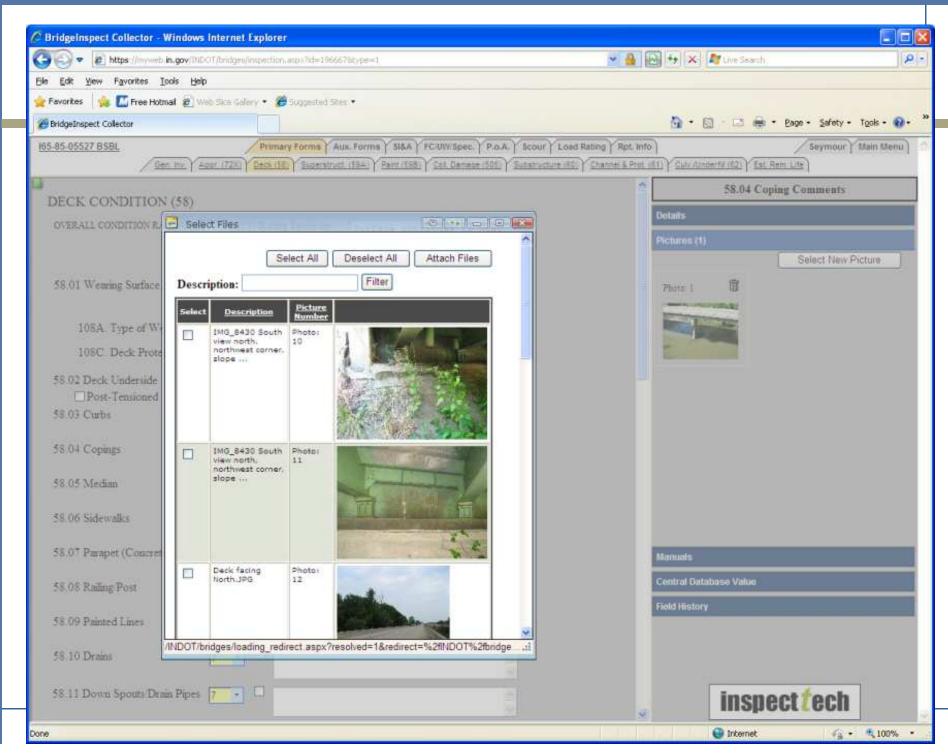
Focus on Usability/Simplicity

Focus on making the system as usable as possible

- Intuitive
- Reference Materials
- Linked to other systems

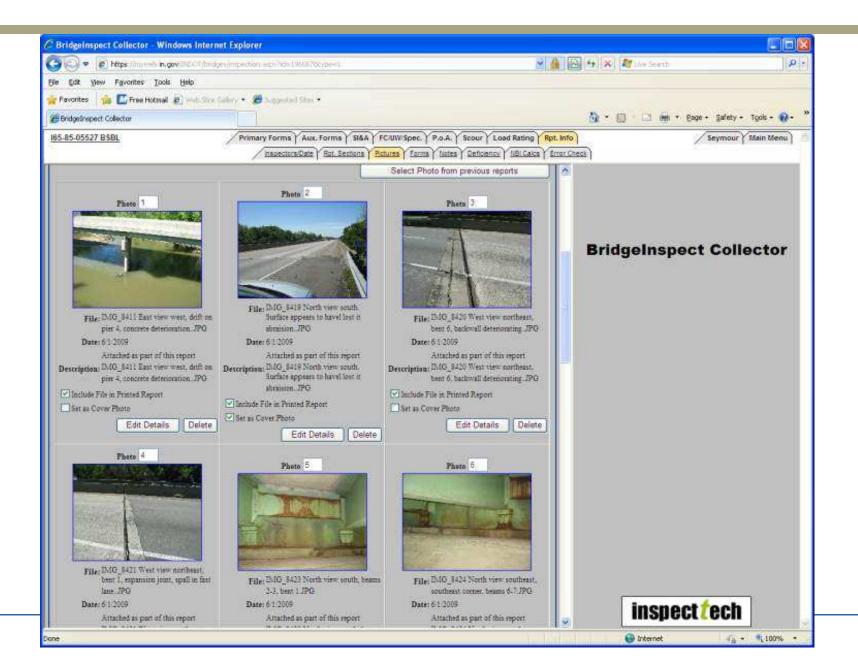




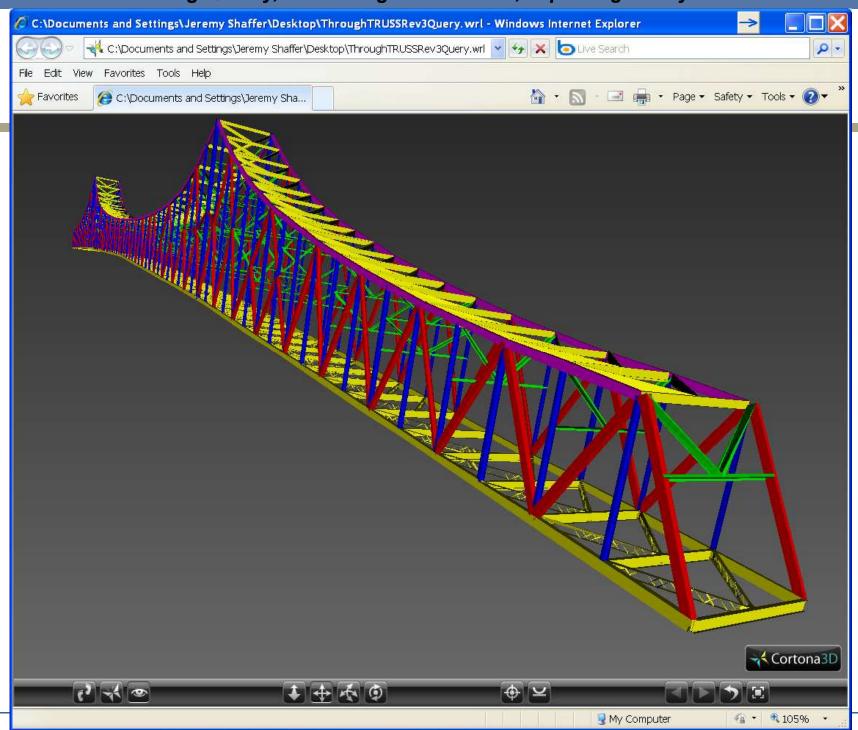




Pictures/Attachments Easy To Add





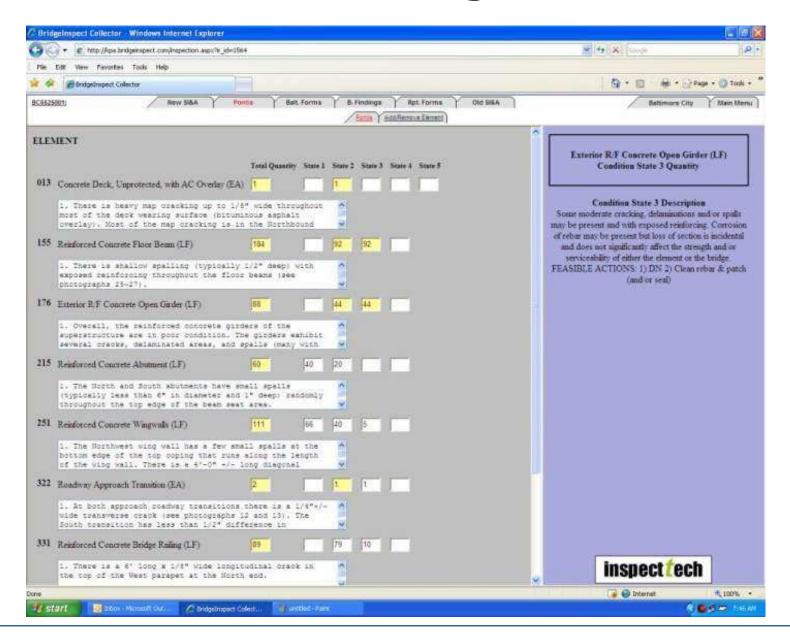




Reference Pictures

58.14 Utilities What/Where	7			<u> </u>		58.16 Transverse Joints Type
□Gas	☐ Electric	Telephone	□Water		0	etails
Sanitary Sew	er Storm Sewe	er T.V. Cable	R.R. Comm	nunication		anuals
Other						
Ž.	Rating Length	Type Location	Comments			
58.15 Longitudinal Joints	N					
				-36		
58.16 Transverse Joints (Overal	D N					
58 16A South/West	G			= 0		
58.16B Interior		N				
58.16C North/East	G	L				Page C - Tooth Joint (Finger Joint)
OVERALL CONDITION RATING	(EQ) Patie			-		
OVERALE COMMITTON ANTENO	5 (56) Katin	g based on		× 2		
Overall 58. Deck Comments						
The approaching pavement reason for this rating t						
	(sqft)					
58 20A Wearing Surface Del						eld History
				V		THE AMERICAN CO.
	7 7 7			A .		11-

Pontis Integration





Collect What You Use

Decide carefully what and how data should be collected and stored

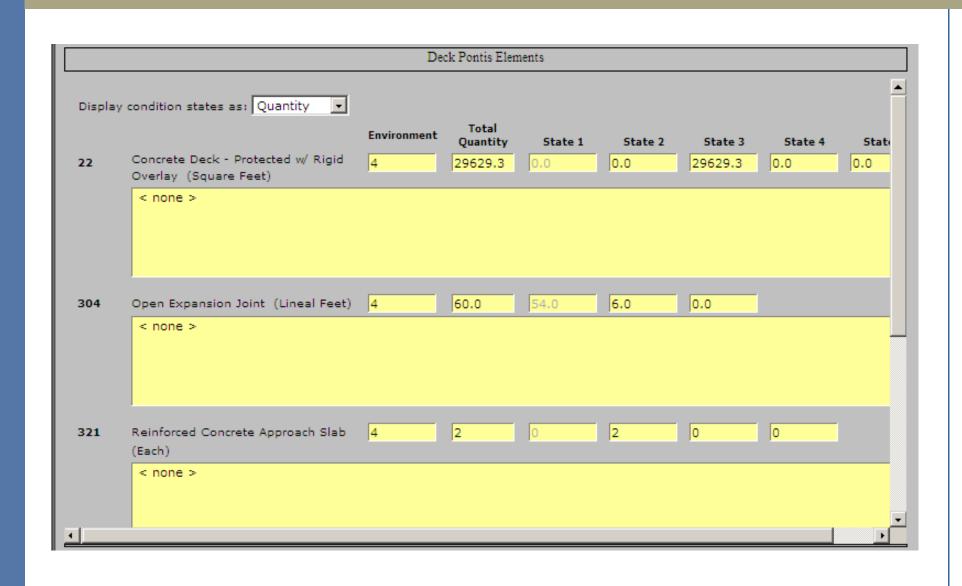
- Look at what you're using
- Design for action





Deck '	Tab							
Enter PON	TIS Element Data							
FHWA Number:	40730				Bridge ID:	7703.6S017		
Deck								
	Item	Description	Conditi	ion	Comments			
Deck Overall:		NBI Item 58	9	٠	New deck 2010		<u></u>	
Deck Drains:		Steel Extension	▼ Fair	•	Span 6: Two drain exte overhang, left.	nsions missing below	_ _ _	
Curb Type - Left:		>=9"	Fair	•	Span 1: Several hollow areas. Many hollows an overhang.Leaching crac	d spalls on top of	1	
Curb Type - Right:		>=9"	Fair	٠			<u> </u>	
Cantilevered Curb:		Yes	Fair	*			<u>~</u>	
Bottom of deck has or delaminated concrete or				*			~	
Left Bridge Rail:		(blank)	•					
Right Bridge Rail			•					







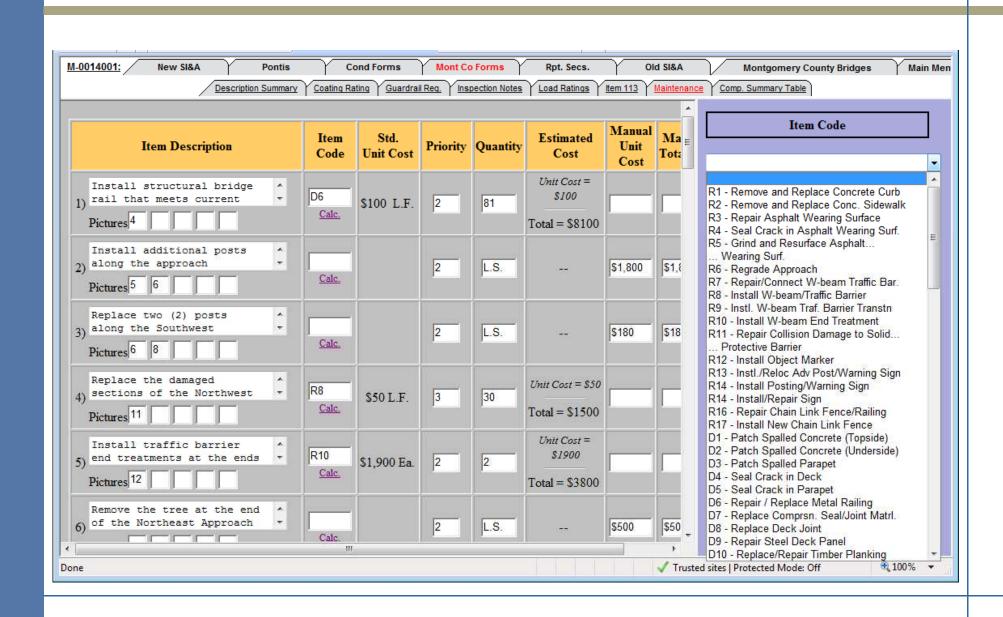
Deck (58)	
58 Overall Deck 5 - 58 Rating based on:	_
	-
58 Overall Deck Comments	
]
RATING GOVERNING COMMENTS	
58.01 Wearing Surface 5 V Wearing surface has been paved over in 2005; wide random cracks; heavily patched in all lanes	l
some heginning to crack: several small snalls:	
(108A) Wearing Surface Type:	
(108C) Deck Protection Type:	
50 00 Deale Underside	
Full depth patches; wide, transverse cracks &	
58.03 Curbs efflorescence in widehed area: several areas of	
58.04 Copings 7 Copings have minor vertical cracks &	
efflorescence.[jtr, 03/29/2000]	



58.05 Median	N T	
58.06 Sidewalks	N T	
58.07 Parapet (Concrete Railing)	7 •	Concrete barrier has vertical cracks & efflorescence.[jtr, 03/29/2000]
58.08 Railing/Post	N =	
58.09 Painted Lines	7 🔻	
58.10 Drains	7 🔻	Drains have minor debris.[jtr, 06/08/2006]
58.11 Down Spouts / Drain Pipes	7	
58.12 Lights	7 🔻	Light has missing hand hole plates.[jtr, 03/29/2000]
58.13 Signs	N 🔻	
58.14 Utilities	N T	



Repair Items & Costs





Trending Module

- Much cheaper and safer to fix problems when they are just starting
- Software's trending tools allow county/city to quickly find new problems early on
- Able to find changes on NBI and Element Level data

Condition Change Report Items - 58, 59, 60, 61, 62, 71, and 72 Sort by-> Field: Bridge Number • Order: Ascending • Go								
Bridge #	<u>Item</u>	Current	Last	Trend	<u>Last Insp.</u>	Insp. Report		
BC1101001	59	6	8	-2	1/11/2006	72		
BC1110011	60	6	7	-1	11/17/2005	72		
BC1113001	58	7	6	+ 1	12/7/2005	7		
BC1115001	59	6	7	-1	11/11/2005	72		
BC1118001	59	6	7	-1	11/29/2005	7		



Conclusions

- Consider the impact of other systems on your bridge preservation goals
- Usability should not be an after thought
- Centralize access to information to all parties – no "information silos"

"An ounce of prevention is worth a pound of cure" – Ben Franklin



Questions



inspect tech

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