

AASHTOWare Bridge Management Update



AASHTOWare Bridge Management

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User Group Priorities

User Group Concern/Priority Description	Priority Level	Response
Bentley needs to learn the difference between a patch and a re-install; we want patches. (PONWEB-2177)	1	5.2.2 Release 2 has the first patching 'capability'. A long term patching process will be a post 5.2.3 enhancement.
Upgrade script should perform all checks, then all installs. Like a checking pre-script. (PONWEB-2179)	2	The Taskforce is in favor of this enhancement. Note, one caveat is that this is a precheck to catch common errors, not all errors will be caught.
Reports need to stored where they won't be wiped out in a reinstall. (PONWEB-2180)	3	The Taskforce understands this need, the contractor is currently investigating the best way for this to be implemented. This would be included after BrM 5.2.3.
Can we have a warning about time-outs? (PONWEB-2181)	4	A warning will not be displayed, however initial steps to correct this will be addressed in 5.2.3
Importing / Exporting Customized Forms (PONWEB-2189)	5	This functionality has been introduced into 5.2.3
Upgrade scripts need to keep user customized data. (User table, registered reports, flex actions, Paramtrs ...) (PONWEB-2190)	6	The Taskforce understands the value of this enhancement. Bentley will be investigating a level of effort for this. One option would be using a 'soft delete' and/or marking things as not active. This would be an enhancement for after BrM 5.2.3.
Easier to adjust time-out settings (or instructions on how to change it). (PONWEB-2191)	7	A warning will not be displayed, however initial steps to correct this will be addressed in 5.2.3
Cross - Sections Tables / Forms / Reports (PONWEB-2192)	8	The Taskforce understands the benefit of this enhancement. This could be included after BrM 5.2.3 or potentially funded as service unit work. Implementation of this and other asset types will be discussed with the DB/API TAG.
We should still populate bridge keys on other tables (or make triggers to do it). At least for 5.2.2 (PONWEB-2193)	9	Completed. Trigger was supplied in a previous quarterly status update
Is there a way to protect completed inspections? (PONWEB-2194)	10	The Taskforce understands the value of this enhancement. The contractor is planning to research the best way this can be done. Associated items need to be able to be locked down, per the Taskforce. The users need the ability to choose which fields are locked, not default to all. The current recommendation for 5.2.3 is to make inspection screens read-only (e.g. Condition, Appraisal), and allow all others to be modifiable.
Task Scheduler (Eric's demo) (instructions on how we can do it too) (PONWEB-2195)	11	The Taskforce understands the value of this enhancement. This will be re-evaluated after the 5.2.3 release
Clearance Table / Form / Report (PONWEB-2196)	12	The Taskforce understands the benefit of this enhancement. This could be included after BrM 5.2.3 or potentially funded as service unit work. Implementation of this will be discussed with the DB/API TAG.



User Group Priorities

Updated Standard Reports (Useful) Including Craig's history report (PONWEB-2197)	13	Craig's historical report has been introduced into 5.2.3, other reports will be covered as a task for the Reports TAG.
Incorporate 3-D modeling to inspections (Becky's demo) (PONWEB-2198)	14	The Taskforce understands the value of this enhancement, currently there is no funding source for this enhancement and will not be in the BrM 5.2.3 release.
5.2.1 SP4 (preferably a patch) (PONWEB-2199)	15	To date, no issues have been reported by the user community as critical to be in an additional BrM 5.2.1 release.
Update Multimedia before / with 5.2.3 (don't break Patty's in the process) (PONWEB-2200)	16	This item will be discussed as a part of the Multimedia TAG. This will not be in the BrM 5.2.3 release.
An app store for states to share customized forms (PONWEB-2201)	17	The ability to export forms has been introduced into 5.2.3, however there is currently no app store/library for collaboration.
Fix Compatibility Mode with IE rolling back to old versions (or provide instructions to fix) and support windows 10 (PONWEB-2202)	18	Windows 10 will be on the roadmap for future support, however no workaround has been discovered to override IE policies for compatibility mode.
Mobile App - simplified input for field collection (PONWEB-2203)	19	The Taskforce understands the value of this enhancement, currently there is no funding source for this enhancement and will not be in the BrM 5.2.3 release.
Auditing changes to all fields (database) (PONWEB-2204)	20	The Taskforce understands the value of this enhancement. The contractor is investigating the level of effort on this issue. This will not be included within the release of BrM 5.2.3.
Can we turn tool tips back to a right-click option. (or group or user specific disabling) (PONWEB-2205)	21	This is unable to be included as a 'right click' option. The contractor is investigating other alternatives.
We're still concerned about GUID's. (PONWEB-2206)	22	The Taskforce understands the concerns about GUIDs but will proceed with the GUID implementation in order to improve overall performance.
Support Windows 10 (PONWEB-2207)	23	Windows 10 will be on the roadmap for future support.
Tooltip includes navigation path. (PONWEB-2208)	24	The new forms designer, as a result of the Multi Asset Enhancements should make this process much smoother.
Support 64-bit workstation version (PONWEB-2209)	25	A 64 bit version of the workstation should not be necessary, if this becomes a critical need it will be investigated. Please note that all 64 bit Operating Systems support 32 bit software, and the 64 bit conversion was primarily for agencies with many concurrent users.
Create a Multimedia TAG (PONWEB-2210)	26	Mark Faulhaber (KYTC) is leading this - Multimedia TAG. Users will be notified as part of the Quarterly Status report to join this TAG.

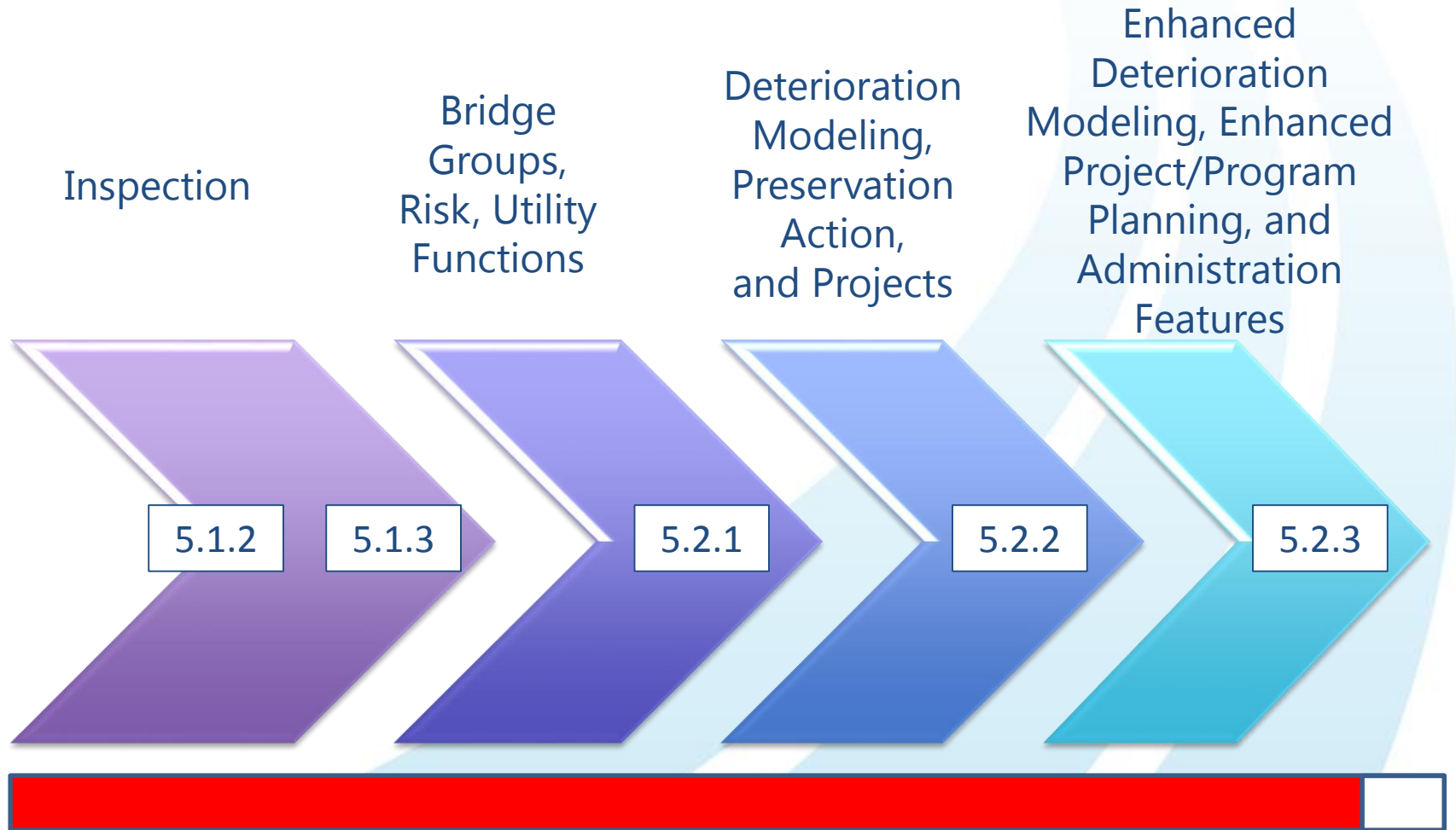


Bridge Management 5.2 Stages

- Development on 5.2 is rapidly moving forward with coordinated efforts between the Task Force, TRT, and Contractor
- Phased releases
 - Version 5.1.2/5.1.3 (Mar 2012 / May 2013)
 - New inspection and inventory functionality, integration with mapping
 - Version 5.2.1 (Feb 2014)
 - Core program framework, risk assessments, integrated utility functions, network corridors
 - Version 5.2.2 (October 2015)
 - Implementation of new deterioration models and multi-objective analysis
 - Version 5.2.3 (Planned 2016)
 - Enhancements to Deterioration Modeling
 - Integrated project and program planning
 - All administrative features



Bridge Management 5.2 Stages



Bridge Management 5.2.2

- Released in November 2015
- Key Features
 - Deterioration Modeling including Weibull shaping parameters and protection factors for protective elements
 - Project Planning and Analysis Module
 - Conversion of the database from Metric to U.S. Customary units
 - New Inspection Process to better handle inspection dates and data for the NBI submittal
 - Application Programming Interface (API)
 - Database GUID conversion



Bridge Management 5.2.2 Release 2

- Released in June 2016
- Key Features
 - NBI export updated to handle inspections dates correctly based on New Inspection Process
 - “Previous” Inspection Date migration to “Current” Inspection Date for New Inspection Process
 - Projects Screen to display all calculated utility benefits
 - Ability to modify transition times for custom elements
 - Oracle Windows Authentication



BrM 5.2.2 Release 2 Patch

- Released in September 2016
- Key Features
 - Addressed a bug in Release 2 to correctly save element conditions states for new defects



Bridge Management 5.2.2 Release 3

- Released in September 2016
- Key Features
 - Addressed a bug in Release 2 to correctly save element conditions states for new defects
 - Addressed issue where if you attempted to hide some of the groups in the inspection schedule pages, it would cause the schedule page to error out



Bridge Management 5.2.3

- Currently in Beta Testing
- Planned Release in Fall 2016
- Fully supporting the FHWA Identified Rule Making
- Key Features
 - Capability to perform life cycle cost analysis
 - Capability to perform network level analysis
 - Tracking and reporting of FHWA's 23 metrics
 - Dashboards for easy data visualization and tracking performance measures
 - Enhanced User Help System
 - Tunnels module to record and track National Tunnel Inventory data as required by FHWA



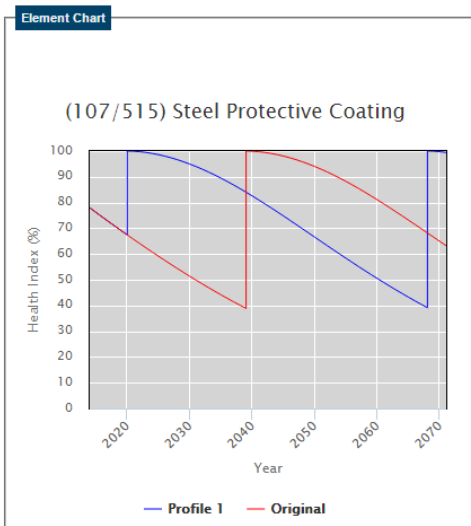
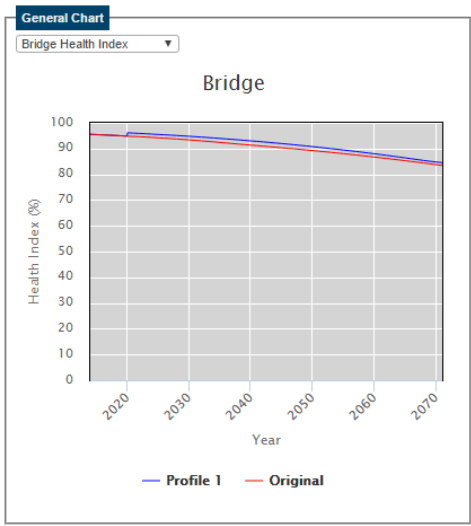
Analysis > LCCA

Add to New Project

LCCA Activity Profile

Index	Date	Year	Action Name	Orig. Cost	NPV Cost	Prior Action H.I.	After Action H.I.
1	2020	6	Repaint Steel, Rehab Deck - Network	\$16,666,243	\$14,246,374	94.82	96.11
2	2025	11	Preserve Deck - Network	\$2,761,420	\$1,940,137	95.46	95.47
3	2040	26	Preserve Deck - Network	\$5,502,525	\$2,146,653	92.97	92.99
4	2055	41	Preserve Deck - Network	\$8,243,630	\$1,785,740	89.41	89.42
5	2068	54	Preserve Super - Network	\$12,504,998	\$1,626,859	85.35	85.35
6	2070	56	Preserve Deck - Network	\$10,984,735	\$1,321,263	84.78	84.79
Residual:				\$138,984,625	\$16,074,338		
Agency Life-Cycle Cost:					\$23,067,027		
User Life-Cycle Cost:					\$0		
Total Life-Cycle Cost:					\$6,992,688		

Charts



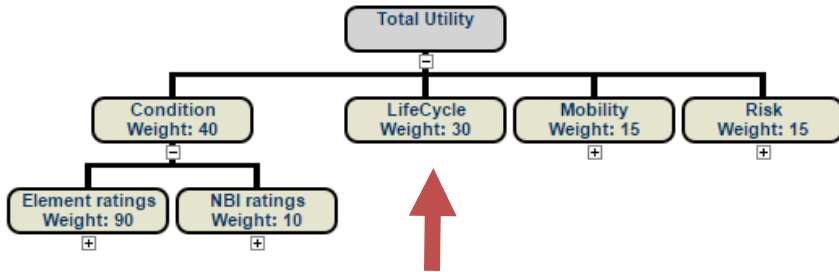
Effects on Each Element

Year: 2016

Element	Str. Unit	Env.	Quantity	Units	Starting Conditions	Effect	Ending Conditions
(12) Re Concrete Deck	1	Ben.(1)	548,221.00	sq.ft			
(107) Steel Opn Girder/Beam	1	Ben.(1)	41,296.00	ft			
(515) Steel Protective Coating	1		758,446.00	ft			
(109) Pre Opn Conc Girder/Beam	1	Ben.(1)	54,162.00	ft			
(205) Re Conc Column	1	Ben.(1)	322.00	each			
(215) Re Conc Abutment	1	Ben.(1)	138.00	ft			
(231) Steel Pier Cap	1	Ben.(1)	144.00	ft			
(233) Pre Conc Pier Cap	1	Ben.(1)	66.00	ft			
(234) Re Conc Pier Cap	1	Ben.(1)	5,190.00	ft			
(301) Pourable Joint Seal	1	Ben.(1)	4,063.00	ft			
(310) Elastomeric Bearing	1	Ben.(1)	1,096.00	each			
(311) Moveable Bearing	1	Ben.(1)	291.00	each			
(313) Fixed Bearing	1	Ben.(1)	163.00	each			
(331) Re Conc Bridge Railing	1	Ben.(1)	25,650.00	ft			



Components



Total Utility -

No editable details to display.



Network Policy Details

Network Policy Name: Rehab Deck

Actions

- Rehab Deck - Network
 - Do Nothing
- Preserve Super - Network
 - Do Nothing
- Rehab Sub - Network
 - Rehab Sub - Network
- Rehab Super - Network
 - Do Nothing
 - Rehab Sub - Network

Details

Action: Rehab Deck - Network

Action Conditional Rule

Summary

(Column 'dkrating' of Table 'inspevnt' Is In Set '4 Poor, 5 Fair, 6 Satisfactory')

Rule Builder

[Add Condition](#) [Add Group](#)

Type: Column Value In Param Set [Remove Condition](#)

Table: inspevnt Column: dkrating Value Is In Set

<input type="checkbox"/>	Unknown (NBI)
<input type="checkbox"/>	0 Failed
<input type="checkbox"/>	1 Imminent failure
<input type="checkbox"/>	2 Critical
<input type="checkbox"/>	3 Serious
<input checked="" type="checkbox"/>	4 Poor
<input checked="" type="checkbox"/>	5 Fair
<input checked="" type="checkbox"/>	6 Satisfactory
<input type="checkbox"/>	7 Good
<input type="checkbox"/>	8 Very Good

Follow-up Actions

- Preserve Super - Network ✕
- Rehab Sub - Network ✕
- Rehab Super - Network ✕
- Select an action [Add Additional](#)

**Indicates an action is no longer a network level action. These actions can be can be changed, selected, or deleted, but once saved cannot be re-added.

Program Details

Program Alternate ID: Program Status: Program Start Year:
Program Name: Program URL: Program End Year:
Program Objectives: Structure Weights Formula: Required Minimum Cost:
Bridge Filter:

Program Description:

Program Notes:

Configuration Data

NBI Deterioration Method: NBI Converter Profile: Residual HiX Approximation
Long-Term Analysis Period: Discount Rate:
Inflation Estimation Method:

Network Policies

Unassigned Network Policies:

- DN
- Eric's Paint
- Scour Policy

Assigned Network Policies:

- Replace Deck
- Rehab Sub
- Rehab Deck
- Rehab Culvert
- Replace Culvert
- Rehab Super
- Replace Bridge
- Preserve Deck



[Assign All](#)

[Unassign All](#)

Utility Weights Profile

Utility Profile:

Utility Profile's Weights

- [-] Total Utility
 - [+] Condition (40->0)
 - [+] LifeCycle (30->0)
 - [+] Mobility (15->0)
 - [+] Risk (15->15)


[Create/Edit Utility Profile](#)



Programs > Performance Measures

Select Performance Measures

Performance Measures	Best Value	Worst Value		
Utility (Scour - Bentley Test)	100.00	0.00		
Health Index	100.00	0.00		
Pct. Good/Fair (Surface-Based)	100.00	0.00		

 Add new record

Performance Constraints by Segment

Segment	Utility (Scour - Bentley Test)	Health Index	Pct. Good/Fair (Surface-Based)
Division 1, 1 On the NHS	Min: <input type="text"/> Target: <input type="text"/>	Min: <input type="text" value="50"/> Target: <input type="text" value="80"/>	Target: <input type="text" value="90"/>
Division 3, 1 On the NHS	Min: <input type="text"/> Target: <input type="text"/>	Min: <input type="text" value="50"/> Target: <input type="text" value="75"/>	Target: <input type="text" value="80"/>
Division 1, 0 Not on NHS	Min: <input type="text"/> Target: <input type="text"/>	Min: <input type="text" value="50"/> Target: <input type="text" value="80"/>	Target: <input type="text" value="85"/>
Division 10, 1 On the NHS	Min: <input type="text"/> Target: <input type="text"/>	Min: <input type="text" value="50"/> Target: <input type="text" value="75"/>	Target: <input type="text" value="80"/>
Division 3, 0 Not on NHS	Min: <input type="text"/> Target: <input type="text"/>	Min: <input type="text" value="50"/> Target: <input type="text" value="80"/>	Target: <input type="text" value="90"/>
Division 10, 0 Not on NHS	Min: <input type="text"/> Target: <input type="text"/>	Min: <input type="text" value="50"/> Target: <input type="text" value="75"/>	Target: <input type="text" value="80"/>



Funding Allocation

Performance Measures | Funding Allocation | Program Planning | Program Results | Executive Summary

Funding Sources

Funding Source	Amount	Date	Notes
Maintenance Funds	84,517,278	2015	
State Bridge Budget	84,517,278	2015	
Capital Plan	118,460,162	2016	
Capital Plan	56,406,234	2017	
Capital Plan	135,275,000	2018	
Capital Plan	130,042,073	2019	

Add New

Budget Distribution

Total Budget: \$609,268,025

	2015	2016	2017	2018	2019
Identified annual funds:	\$169,034,556	\$118,460,162	\$56,406,234	\$135,275,000	\$130,042,073
Additional funds:	10,000	10,000	10,000	10,000	10,000
Total annual budget:	\$169,044,556	\$118,470,162	\$56,416,234	\$135,285,000	\$130,052,073

Distribute

Budget distribution by program's segments:

Input method: Actual Budget Value Percentage of Annual Budget

Segment	Current Utility	Current Health Index	Current Pct. Good/Fair	Total budget per segment	Pct. overall budget	2015	2016	2017	2018	2019
District 1, On System	80	90%	90%	\$105,757,440	17%	20	20	15	15	15
District 1, Off System	82	90%	80%	\$105,757,440	17%	20	20	15	15	15
District 3, On System	95	47%	83%	\$83,510,072	14%	10	10	15	15	20
District 3, Off System	94	48%	79%	\$83,510,072	14%	10	10	15	15	20
District 10, On System	70	40%	65%	\$123,793,229	20%	25	20	20	20	15
District 10, Off System	75	42%	64%	\$106,889,774	18%	15	20	20	20	15

Cancel Save & Close Save Delete Program

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Program Optimization

Programs > Program Planning

Optimize Program

Optimization Method:

[Run Optimization](#)

Keep assigned projects:

Run on all scenarios:

Assigned Projects

Segment: Year:

Project Name	Category	Automatic	Cost	Utility	Utility Benefit	Benefit/Cost (\$k)	Cost (\$k) / Benefit	Year	Frozen	Status
019676(Preserve Deck)	None	Yes	\$56,510	92.96	1.62	0.0287	\$34.88	2019	No	Proposed
018762(Preserve Deck)	None	Yes	\$143,840	83.75	3.07	0.0213	\$46.85	2020	No	Proposed
018423(Preserve Deck)	None	Yes	\$98,495	90.74	3.01	0.0306	\$32.72	2017	No	Proposed
018405(Preserve Deck)	None	Yes	\$77,600	90.16	2.25	0.029	\$34.49	2018	No	Proposed
018122(Preserve Deck)	None	Yes	\$56,845	90.26	1.42	0.025	\$40.03	2019	No	Proposed
018121(Preserve Deck)	None	Yes	\$52,045	92.46	1.6	0.0307	\$32.53	2017	No	Proposed
017949(Preserve Deck)	None	Yes	\$57,960	92.07	1.63	0.0281	\$35.56	2019	No	Proposed
017639(Preserve Deck)	None	Yes	\$62,060	91.43	1.42	0.0229	\$43.70	2019	No	Proposed
016624(Preserve Deck)	None	Yes	\$51,650	90.7	1.43	0.0277	\$36.12	2019	No	Proposed
016037(Preserve Deck)	None	Yes	\$57,725	91.55	1.43	0.0248	\$40.37	2019	No	Proposed
015815(Preserve Deck)	None	Yes	\$113,915	85.91	2.67	0.0234	\$42.66	2019	No	Proposed
015497(Rehab Culvert)	None	Yes	\$95,538	69.2	7.53	0.0788	\$12.69	2016	No	Proposed
014125(Rehab Deck)	None	Yes	\$60,902	78.77	1.82	0.0299	\$33.46	2017	No	Proposed
014062(Rehab Culvert)	None	Yes	\$60,011	71.95	3.56	0.0593	\$16.86	2016	No	Proposed
014025(Preserve Deck)	None	Yes	\$62,900	88.7	1.64	0.0261	\$38.35	2020	No	Proposed

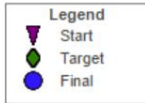
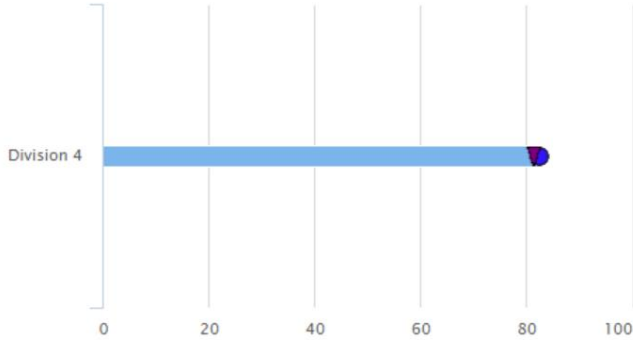
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Future Performance by Segment

2016
Utility



Benefit Cost Frontier

2016



Future Performance by Year

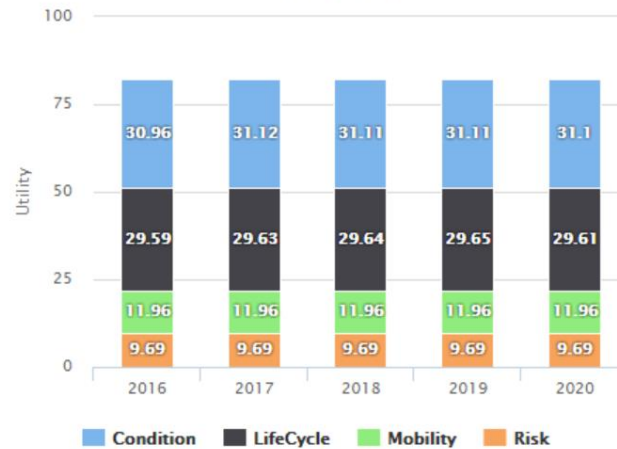
Years: 2016 to 2020
Utility



Utility

Effects on Utility Criteria

Years: 2016 to 2020



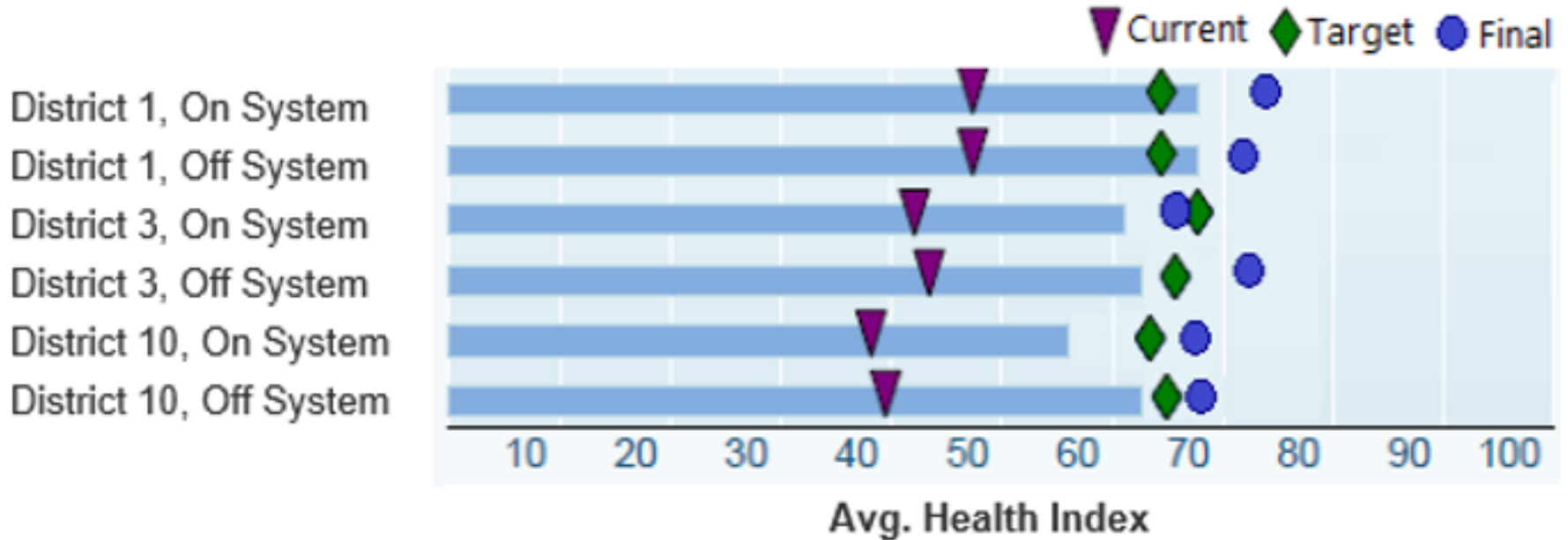
Program Optimization

Print Export

Future Performance by Segment

Performance : Avg. Health Inde: ▾

Year: 2017 ▾



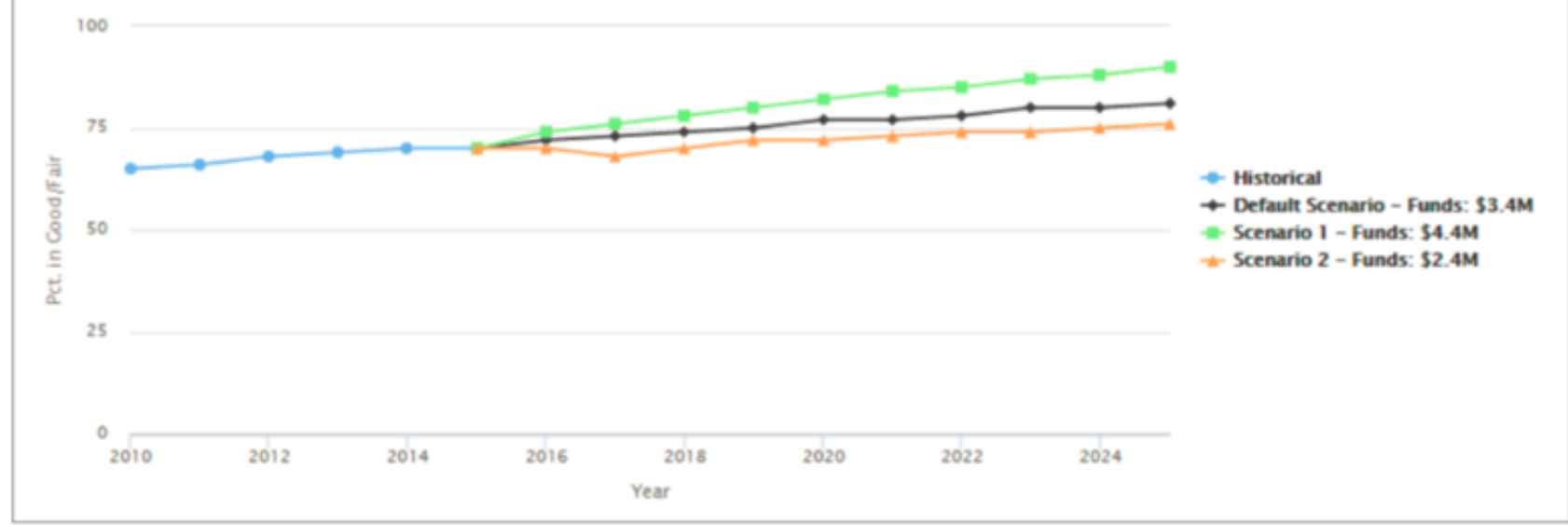
Print Export

Compare by Scenario

Program: Preservation Progra Segment: All

Performance

Performance: Pct. in Good/Fair

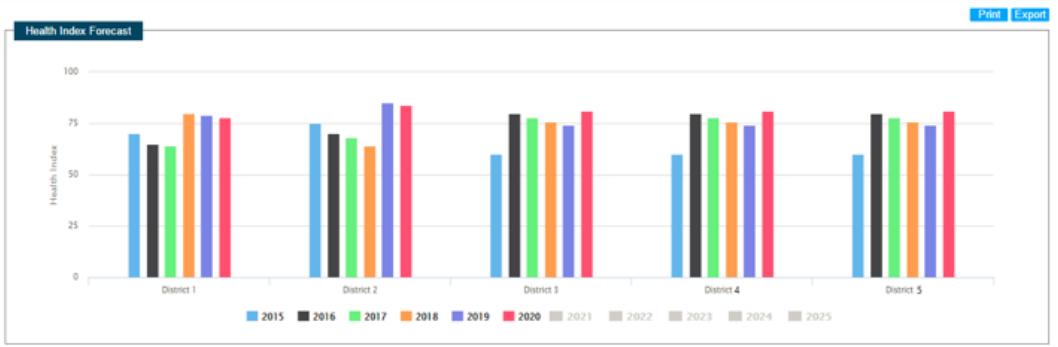
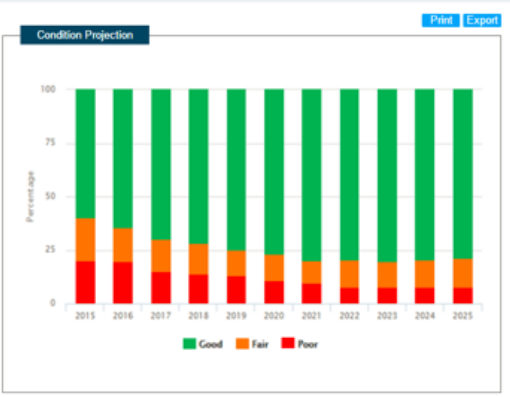
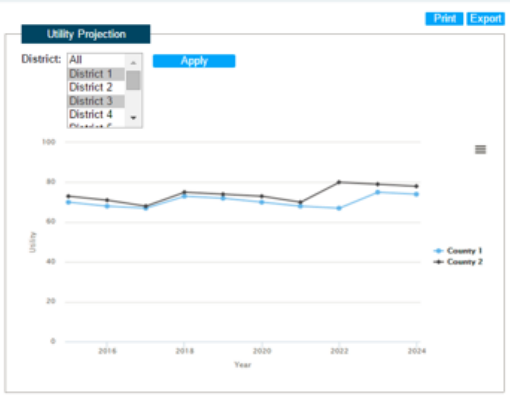
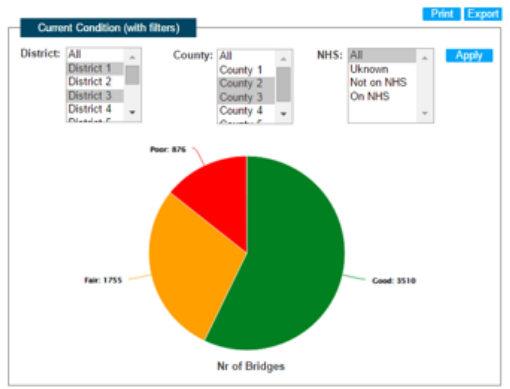
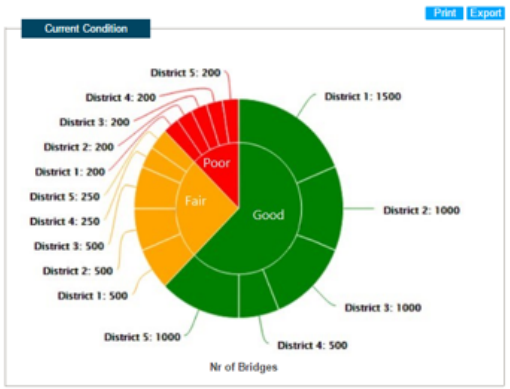




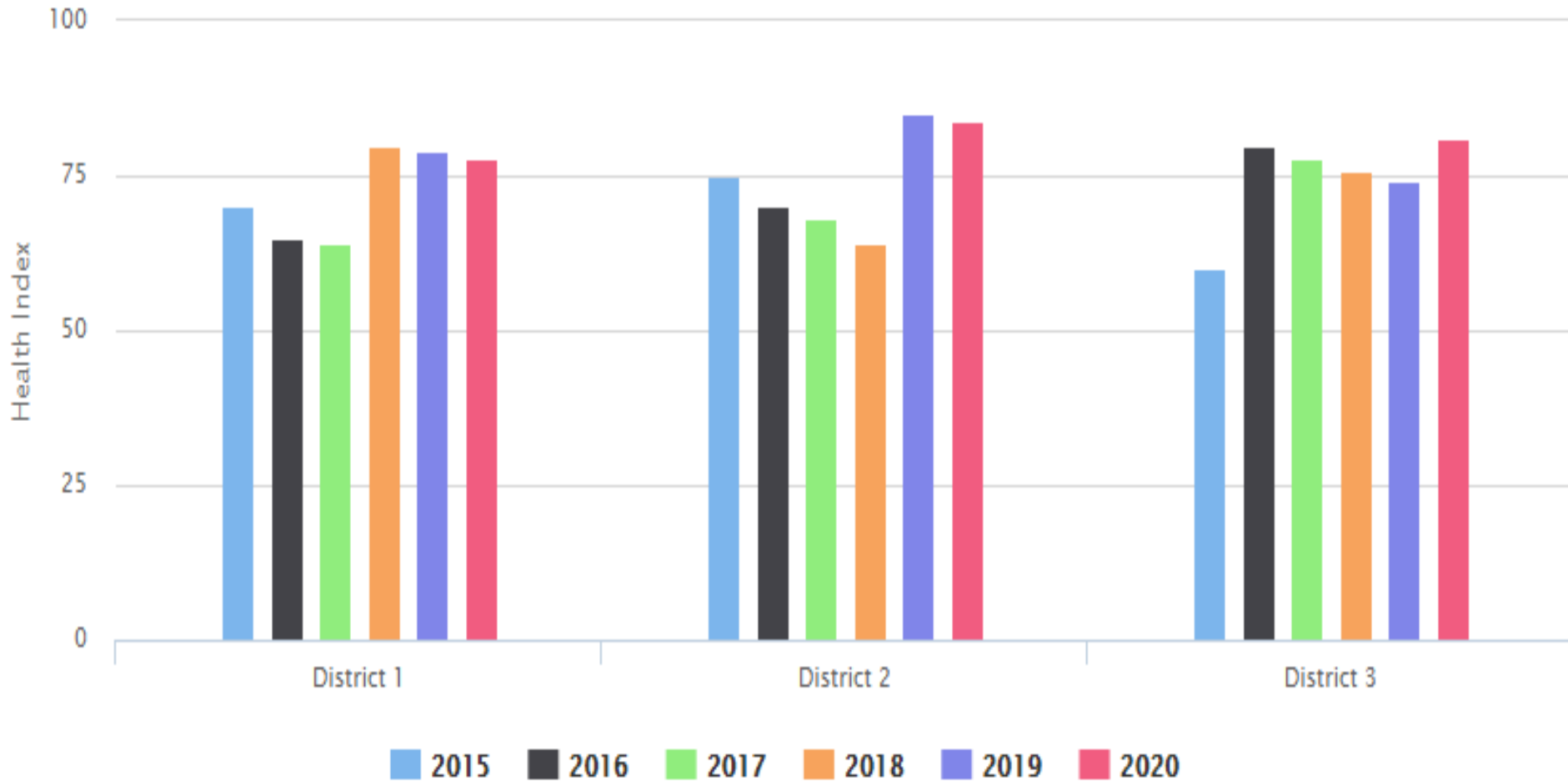
Program Results

Performance Measures | Funding Allocation | Program Planning | Program Results | Executive Summary

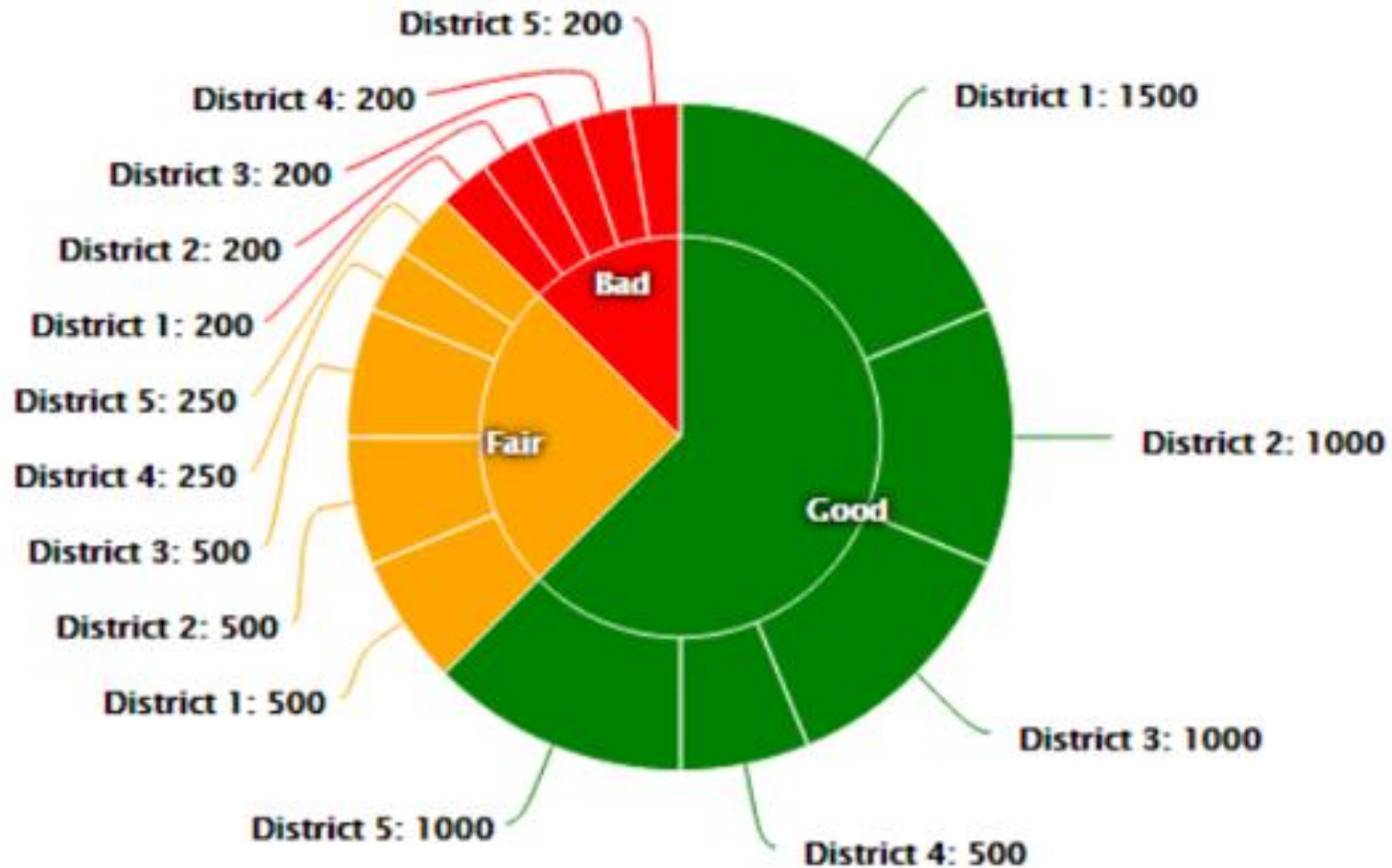
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Program Optimization



Program Optimization



Tunnel Solicitation

- 11 States provided 1 Service Unit to fund Development

Alabama

California

Colorado

Kentucky

New Mexico

New York

Oregon

Tennessee

Texas

Virginia

Wyoming

- These States provided members for the Technical Review Team
- Planned to be Released with BrM 5.2.3 in Fall 2016

23 Metric Review Report

Metric 6 - Routine Inspection Low Risk

Structure Number (8)	Structure Name	Insp Date (90)	Insp Freq (91)	Months Over	Super (59)	Sub (60)	Culvert (62)	Posting (70)	Rating Method (63)	Post Status (41)	Scour (113)
0C 401	9th South Ramp Bridge over 300 W	07/16/2014	24	1	6	5	N	5	8	A	N
2C 876	I-80 EB, Bridge over 400 South St	07/11/2014	24	1	7	6	N	5	8	A	N
1F 659	I-15 NB, bridge over I-80 WB. @ 3	07/11/2014	24	1	7	6	N	5	8	A	N
005019D	Bensen Canal Bridge on 100 Wes	05/13/2014	24	3	7	7	N	5	8	A	5
4C 400	I-15 Ramp Bridge over 400 West S	07/16/2014	24	1	7	5	N	5	8	A	N
3F 637S	I-15 SB Bridge over the UPRR, So	07/16/2014	24	1	7	7	N	5	8	A	N
0C 166	Heber Creeper Overpass, west of D	05/13/2015	12	3	5	5	N	5	2	A	N
3F 635	I-15 Col-Dist. SB Bridge over 1700	07/15/2014	24	1	7	7	N	5	8	A	N
4F 641	Stem section of the 500 South on	07/14/2014	24	1	8	7	N	5	2	A	N
1F 656	SR-270 Ramp Bridge over 1300 S	07/15/2014	24	1	7	7	N	5	8	A	N
0F 687	400 South in Salt Lake, Viaduct B	07/14/2014	24	1	8	7	N	5	2	A	8
3F 657	I-15 Col-Dist. SB Bridge over 1300	07/15/2014	24	1	7	7	N	5	8	A	N
4C 402	I-15 9th South Ramp Over 200 We	07/16/2014	24	1	7	5	N	5	8	A	N
3F 660S	I-15 SB Bridge over 200 South Str	07/10/2014	24	1	7	7	N	5	8	A	N
3F 655S	I-15 SB Bridge over 1300 South S	07/15/2014	24	1	7	7	N	5	8	A	N
2C 400	I-15 9th South Ramp over 400 We	07/16/2014	24	1	7	6	N	5	8	A	N
1F 655N	I-15 NB Bridge over 1300 South S	07/15/2014	24	1	7	7	N	5	8	A	N
1F 658N	I-15 NB Bridge over 800 South Str	07/14/2014	24	1	7	7	N	5	8	A	N
3F 661S	I-15 SB, North Temple Bridge	07/08/2014	24	1	8	7	N	5	8	A	N
1F 660N	I-15NB Bridge over 200 South Stre	07/10/2014	24	1	7	8	N	5	8	A	N
2C 887	I-80EB Bridge over 900 West Stre	07/10/2014	24	1	8	7	N	5	8	A	N
3F 633S	I-15 SB Bridge over 1700 South S	07/15/2014	24	1	7	6	N	5	8	A	N
3C 878	I-15 SB Bridge over I-80 WB @ 30	07/14/2014	24	1	8	7	N	5	8	A	N
1F 637N	I-15 NB Bridge over the UPRR, So	07/16/2014	24	1	7	7	N	5	8	A	N
4F 642	I-80 WB Bridge over 400 South St	07/11/2014	24	1	6	5	N	5	8	A	N
3C 886	I-15SB Ramp Bridge to I-80WB	07/10/2014	24	1	7	7	N	5	2	A	N
1F 633N	I-15NB Bridge over 1700 South St	07/15/2014	24	1	7	7	N	5	8	A	N
0F 791	1000 North interchange bridge ove	07/08/2014	24	1	8	8	N	5	8	A	N
1F 634	I-15 NB, Col-Dist. Bridge over 170	07/15/2014	24	1	6	7	N	5	8	A	N
1F 661N	I-15 NB, North Temple Bridge	07/08/2014	24	1	7	8	N	5	8	A	N
3F 658S	I-15 SB, Bridge over 800 South St	07/11/2014	24	1	7	7	N	5	8	A	N
0C 816	600 North Interchange Bridge over	07/08/2014	24	1	7	7	N	5	2	A	N
4C 885	I-80 WB Bridge over 900 West Str	07/10/2014	24	1	8	7	N	5	8	A	N
2F 640	600 South Viaduct in SLC	07/14/2014	24	1	7	7	N	5	8	A	N
1F 662N	I-15NB, 300 North Bridge	07/07/2014	24	1	7	7	N	5	8	A	N

There are 35 possible issues out of 948 structures. 0 of them by more than 4 months.

Compliance (C): All structures inspected within the required interval.

Substantial Compliance (SC): At least 90% of structures are inspected within the required interval plus one month, and 100% are inspected within the interval plus 4 months.

Conditional or Non-Compliance (CC or NC): One or more SC criteria are not met.



Metric 7 - Routine Inspection High Risk

Structure Number (8)	Structure Name	Insp Date (90)	Insp Freq (91)	Months Over	Super (59)	Sub (60)	Culvert (62)	Posting (70)	Rating Method (63)	Post Status (41)	Scour (113)
R 726A	I-15; South Cedar City Interchange	07/07/2014	24	1	-	-	-	-	-	-	-
R 741A	SR-108; SR-37 to SR-79 Widenin	07/09/2014	24	1	-	-	-	-	-	-	-
G 474C	I-15; US-91 Interchange	07/01/2014	24	1	-	-	-	-	-	-	-
2C 402	9th South Ramp EB Over 2nd & W	07/16/2014	24	1	6	4	N	5	8	A	N
R 743B	SR-145; Pioneer Crossing Extens	07/09/2014	24	1	-	-	-	-	-	-	-
R 730	SR-26; 1900 West to I-84	07/09/2014	24	1	-	-	-	-	-	-	-
R 725G	Provo Westside Connector Airport	07/09/2014	24	1	-	-	-	-	-	-	-
R 722B	Provo Westside Connector; 500 W	07/09/2014	24	1	-	-	-	-	-	-	-
R 739B	4800 West; Skye Drive to 10200 S	07/08/2014	24	1	-	-	-	-	-	-	-
R 739C	4800 West; Skye Drive to 10200 S	07/08/2014	24	1	-	-	-	-	-	-	-
G 471B	Bluff Street Interchange at Red Hi	07/02/2014	24	1	-	-	-	-	-	-	-
G 475B	I-15; So Payson Interchange to Sp	07/01/2014	24	1	-	-	-	-	-	-	-
R 734A	Elsinore to Central Valley	07/09/2014	24	1	-	-	-	-	-	-	-
R 734B	Elsinore to Central Valley	07/14/2014	24	1	-	-	-	-	-	-	-
R 746B	Pony Express Trail; Eagle Mounta	07/07/2014	24	1	-	-	-	-	-	-	-
R 736A	Vineyard Connector	07/09/2014	24	1	-	-	-	-	-	-	-
R 725B	Provo Westside Connector Airport	07/09/2014	24	1	-	-	-	-	-	-	-
R 736B	Vineyard Connector	07/09/2014	24	1	-	-	-	-	-	-	-
005018D	Benson Canal bridge on 300 Wes	05/13/2014	24	3	7	7	N	2	2	P	5
R 746A	Pony Express Trail; Eagle Mounta	07/02/2014	24	1	-	-	-	-	-	-	-
R 725F	Provo Westside Connector Airport	07/09/2014	24	1	-	-	-	-	-	-	-
R 722C	Provo Westside Connector; 500 W	07/09/2014	24	1	-	-	-	-	-	-	-
R 743A	SR-145; Pioneer Crossing Extens	07/09/2014	24	1	-	-	-	-	-	-	-
R 741F	SR-108; SR-37 to SR-79 Widenin	07/09/2014	24	1	-	-	-	-	-	-	-
R 725E	Provo Westside Connector Airport	07/09/2014	24	1	-	-	-	-	-	-	-
3C 880S	I-15SB bridge over UPRR at South	07/09/2014	24	1	8	7	N	4	8	A	N
R 725A	Provo Westside Connector Airport	07/09/2014	24	1	-	-	-	-	-	-	-
R 741B	SR-108; SR-37 to SR-79 Widenin	07/09/2014	24	1	-	-	-	-	-	-	-
R 725C	Provo Westside Connector Airport	07/09/2014	24	1	-	-	-	-	-	-	-
R 722D	Provo Westside Connector; 500 W	07/09/2014	24	1	-	-	-	-	-	-	-
G 474B	I-15; US-91 Interchange	07/01/2014	24	1	-	-	-	-	-	-	-
R 741E	SR-108; SR-37 to SR-79 Widenin	07/09/2014	24	1	-	-	-	-	-	-	-
R 743D	SR-145; Pioneer Crossing Extens	07/09/2014	24	1	-	-	-	-	-	-	-
G 475C	I-15; So Payson Interchange to Sp	07/01/2014	24	1	-	-	-	-	-	-	-
R 726B	I-15; South Cedar City Interchange	07/07/2014	24	1	-	-	-	-	-	-	-
R 725H	Provo Westside Connector Airport	07/09/2014	24	1	-	-	-	-	-	-	-
R 743C	SR-145; Pioneer Crossing Extens	07/09/2014	24	1	-	-	-	-	-	-	-
R 741D	SR-108; SR-37 to SR-79 Widenin	07/09/2014	24	1	-	-	-	-	-	-	-
1D 672	US-89NB Ramp Bridge to I-15NB	07/07/2014	24	1	6	4	N	5	2	A	N
R 739D	4800 West; Skye Drive to 10200 S	07/09/2014	24	1	-	-	-	-	-	-	-

1C 880N	I-15NB Bridge over UPRR and Sou	07/09/2014	24	1	8	7	N	3	8	A	N
R 722A	Provo Westside Connector; 500 W	07/09/2014	24	1	-	-	-	-	-	-	-
R 741C	SR-108; SR-37 to SR-79 Widenin	07/09/2014	24	1	-	-	-	-	-	-	-
1C 870	I-15NB Off Ramp bridge to SR-269	07/14/2014	24	1	8	8	N	0	8	A	N
R 735	US-40; MP 130.6 to MP 136.16, W	07/09/2014	24	1	-	-	-	-	-	-	-
G 471C	Bluff Street Interchange at Red Hi	07/02/2014	24	1	-	-	-	-	-	-	-
G 471A	Bluff Street Interchange at Red Hi	07/01/2014	24	1	-	-	-	-	-	-	-
R 739A	4800 West; Skye Drive to 10200 S	07/08/2014	24	1	-	-	-	-	-	-	-
G 474A	I-15; US-91 Interchange	07/01/2014	24	1	-	-	-	-	-	-	-
R 725D	Provo Westside Connector Airport	07/09/2014	24	1	-	-	-	-	-	-	-

There are 50 possible issues out of 948 structures. 0 of them by more than 4 months.

Compliance (C): All structures inspected within 24 months or the required interval if less.

Substantial Compliance (SC): At least 95% of structures are inspected within the required interval plus one month, and 100% are inspected within the interval plus 4 months.

Conditional or Non-Compliance (CC or NC): One or more SC criteria are not met.

Metric 8 - Underwater Inspection Low Risk

Structure Number (8)	Structure Name	UW Insp Req (92BA)	Date of Last UW Insp (93R)	UQ Insp Frequency (92BB)	Months Over	Sub (60)	Culvert (62)	Scour (113)
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There are 0 possible issues out of 948 structures. 0 of them by more than 4 months.

Compliance (C): All structures inspected within the required interval.

Substantial Compliance (SC): At least 90% of structures are inspected within the required interval plus one month, and 100% are inspected within the interval plus 4 months.

Conditional or Non-Compliance (CC or NC): One or more SC criteria are not met.

Metric 10 - Fracture Critical Inspection

Structure Number (8)	Structure Name	FC Insp Req (92AA)	Date of Last FC Insp (92A)	FC Insp Frequency (92AB)	Months Over
0C 140	Utah Railway Bridge over SR-51, s	Y	10/04/2007	24	82
0C 675	Eisenhower Pedestrian Overpass	Y	08/09/2007	24	84

There are 2 possible issues out of 948 structures. 2 of them by more than 4 months.

Compliance (C): All structures inspected within 24 months or the required interval if less.

Substantial Compliance (SC): At least 95% of structures are inspected within the required interval plus one month, and 100% are inspected within the interval plus 4 months.

Conditional or Non-Compliance (CC or NC): One or more SC criteria are not met.

Metric 11 - Inspection Frequencies

Structure Number (8)	Structure Name	Insp Freq (91)	FC Insp Required (92AA)	FC Insp Frequency (92AB)	UW Insp Required (92BA)	UW Insp Frequency (92BB)
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The below structures have inspection frequencies which are not standard. They will likely need to be reviewed.

0C 766	Hunter High School Pedestrian Ov	24	Y		N	
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The above structures have inspection frequencies which are not standard. They will likely need to be reviewed.



Metric 13a - Load Ratings High Risk

Structure Number (8)	Structure Name	OR Method (63)	OR Rating (64)	IR Method (65)	IR Rating (66)	High Risk Category
G 475C	I-15; So Payson Interchange to Sp	Unknown (NBI)	-1.00 LF	Unknown (NBI)	-1.00 LF	
G 474A	I-15; US-91 Interchange	Unknown (NBI)	-1.00 LF	Unknown (NBI)	-1.00 LF	
G 474B	I-15; US-91 Interchange	Unknown (NBI)	-1.00 LF	Unknown (NBI)	-1.00 LF	
G 474C	I-15; US-91 Interchange	Unknown (NBI)	-1.00 LF	Unknown (NBI)	-1.00 LF	
G 471B	Bluff Street Interchange at Red Hi	Unknown (NBI)	-1.00 LF	Unknown (NBI)	-1.00 LF	
R 726B	I-15; South Cedar City Interchange	Unknown (NBI)	-1.00 LF	Unknown (NBI)	-1.00 LF	
R 739A	4800 West; Skye Drive to 10200 S	Unknown (NBI)	-1.00 LF	Unknown (NBI)	-1.00 LF	
R 739B	4800 West; Skye Drive to 10200 S	Unknown (NBI)	-1.00 LF	Unknown (NBI)	-1.00 LF	
049081E	Murdock Canal Trail Lehi	Unknown (NBI)	-1.00 LF	Unknown (NBI)	-1.00 LF	
R 736B	Vineyard Connector	Unknown (NBI)	-1.00 LF	Unknown (NBI)	-1.00 LF	
R 722C	Provo Westside Connector; 500 W	Unknown (NBI)	-1.00 LF	Unknown (NBI)	-1.00 LF	
R 725H	Provo Westside Connector Airport	Unknown (NBI)	-1.00 LF	Unknown (NBI)	-1.00 LF	
049106C	Spanish Fork River Trail; Spanish	Unknown (NBI)	-1.00 LF	Unknown (NBI)	-1.00 LF	
G 498B	SR-225; Interchange Signing Impr	Unknown (NBI)	-1.00 LF	Unknown (NBI)	-1.00 LF	
R 743A	SR-145; Pioneer Crossing Extens	Unknown (NBI)	-1.00 LF	Unknown (NBI)	-1.00 LF	
R 725A	Provo Westside Connector Airport	Unknown (NBI)	-1.00 LF	Unknown (NBI)	-1.00 LF	
R 725B	Provo Westside Connector Airport	Unknown (NBI)	-1.00 LF	Unknown (NBI)	-1.00 LF	
R 725C	Provo Westside Connector Airport	Unknown (NBI)	-1.00 LF	Unknown (NBI)	-1.00 LF	
R 741B	SR-108; SR-37 to SR-79 Widenin	Unknown (NBI)	-1.00 LF	Unknown (NBI)	-1.00 LF	
R 743D	SR-145; Pioneer Crossing Extens	Unknown (NBI)	-1.00 LF	Unknown (NBI)	-1.00 LF	
R 742B	Hurricane 600 North Phase 2; 200	Unknown (NBI)	-1.00 LF	Unknown (NBI)	-1.00 LF	
R 741F	SR-108; SR-37 to SR-79 Widenin	Unknown (NBI)	-1.00 LF	Unknown (NBI)	-1.00 LF	
R 725D	Provo Westside Connector Airport	Unknown (NBI)	-1.00 LF	Unknown (NBI)	-1.00 LF	
OC 505	Old UTA Bridge at 300 West over	2 AS Allowable Stress	0.00 Tons	2 AS Allowable Stress	0.00 Tons	Fracture Critical Member: 1 or 2 St-gi
R 726A	I-15; South Cedar City Interchange	Unknown (NBI)	-1.00 LF	Unknown (NBI)	-1.00 LF	
R 725F	Provo Westside Connector Airport	Unknown (NBI)	-1.00 LF	Unknown (NBI)	-1.00 LF	
R 734A	Elsinore to Central Valley	Unknown (NBI)	-1.00 LF	Unknown (NBI)	-1.00 LF	
R 741C	SR-108; SR-37 to SR-79 Widenin	Unknown (NBI)	-1.00 LF	Unknown (NBI)	-1.00 LF	
R 741D	SR-108; SR-37 to SR-79 Widenin	Unknown (NBI)	-1.00 LF	Unknown (NBI)	-1.00 LF	
R 722D	Provo Westside Connector; 500 W	Unknown (NBI)	-1.00 LF	Unknown (NBI)	-1.00 LF	
R 736A	Vineyard Connector	Unknown (NBI)	-1.00 LF	Unknown (NBI)	-1.00 LF	
R 722A	Provo Westside Connector; 500 W	Unknown (NBI)	-1.00 LF	Unknown (NBI)	-1.00 LF	
OC1021	Pedestrian Bridge over SR-282	Unknown (NBI)		Unknown (NBI)		
R 739D	4800 West; Skye Drive to 10200 S	Unknown (NBI)	-1.00 LF	Unknown (NBI)	-1.00 LF	
R 746A	Pony Express Trail; Eagle Mounta	Unknown (NBI)	-1.00 LF	Unknown (NBI)	-1.00 LF	
R 739C	4800 West; Skye Drive to 10200 S	Unknown (NBI)	-1.00 LF	Unknown (NBI)	-1.00 LF	
R 741A	SR-108; SR-37 to SR-79 Widenin	Unknown (NBI)	-1.00 LF	Unknown (NBI)	-1.00 LF	
OC 920	New UTA Bridge over I-215, Adjac	Unknown (NBI)	-1.00 LF	Unknown (NBI)	-1.00 LF	Fracture Critical Member: 1 or 2 St-gi

G 500A	Double Cantilever Sign over I-15	Unknown (NBI)	-1.00 LF	Unknown (NBI)	-1.00 LF
E 1782	9 Foot Culvert	Unknown (NBI)	-1.00 LF	Unknown (NBI)	-1.00 LF
023024V	300 E Over Salt Creek, Nephi 11.3	Unknown (NBI)	-1.00 LF	Unknown (NBI)	-1.00 LF
049107C	Mapleton Lateral Canal Parkway T	Unknown (NBI)	-1.00 LF	Unknown (NBI)	-1.00 LF
R 742A	Hurricane 600 North Phase 2; 200	Unknown (NBI)	-1.00 LF	Unknown (NBI)	-1.00 LF

There are 169 potential issues out of 205 high risk structures.

Compliance (C): All high risk structures have a load rating in accordance with the MBE.

Substantial Compliance (SC): All high risk structures have a load rating in accordance with the MBE.

Conditional or Non-Compliance (CC or NC): One or more high risk structures do not have a valid load rating.



Metric 14 - Post or Restrict

Structure Number (8)	Structure Name	Open / Posted / Closed (41)	Reason for Re-Evaluation
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There are 0 potential issues out of 948 structures.

Compliance (C): All structures are properly posted or restricted as required.

Potential Substantial Compliance (SC): There are concerns with one or more structures in the submittal.



Questions?

