



Welcome to BrM 5.2.3

It's not Pontis Anymore

April 26, 2017

Mesa, Arizona



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- Who uses BrM
- When to use BrM
- How to use BrM

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- Tunnel
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- Explorer

BrM Help Desk
AASHTOWareBridge.com
BrM@Bentley.com
JIRA tickets:
bridgeware.atlassian.net

Zachary Boyle, PE
BrM Solutions
Consultant
Zac.Boyle@Bentley.com





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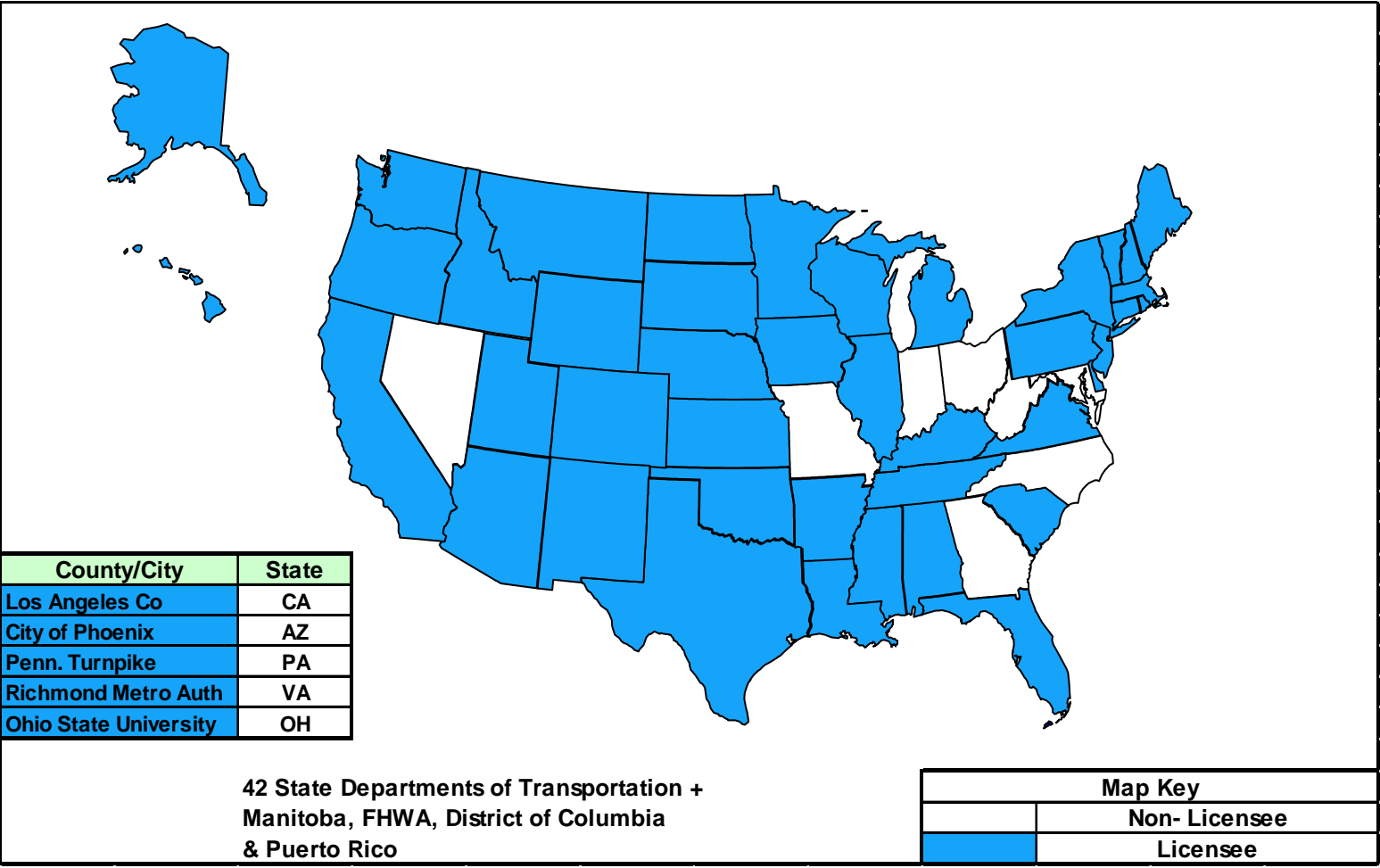
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AASHTOWare: For States by States

States participating in BrM





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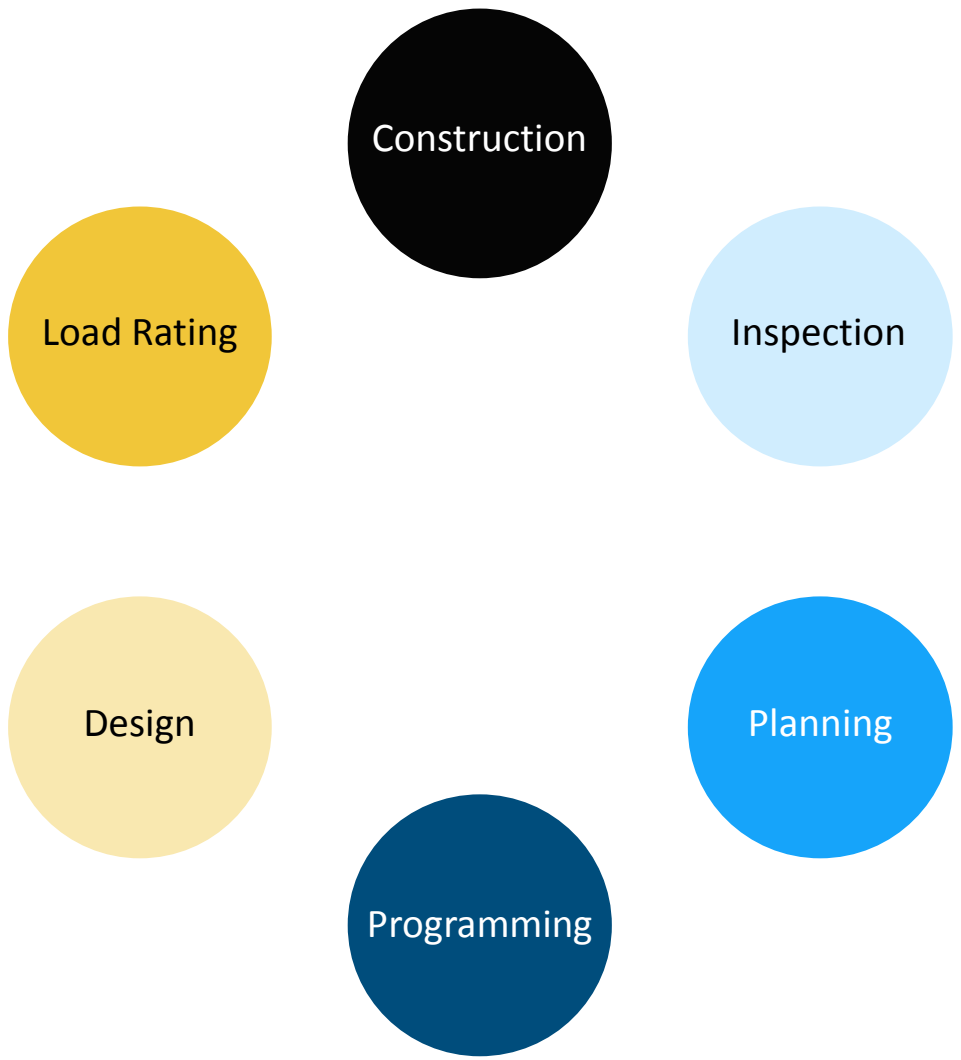
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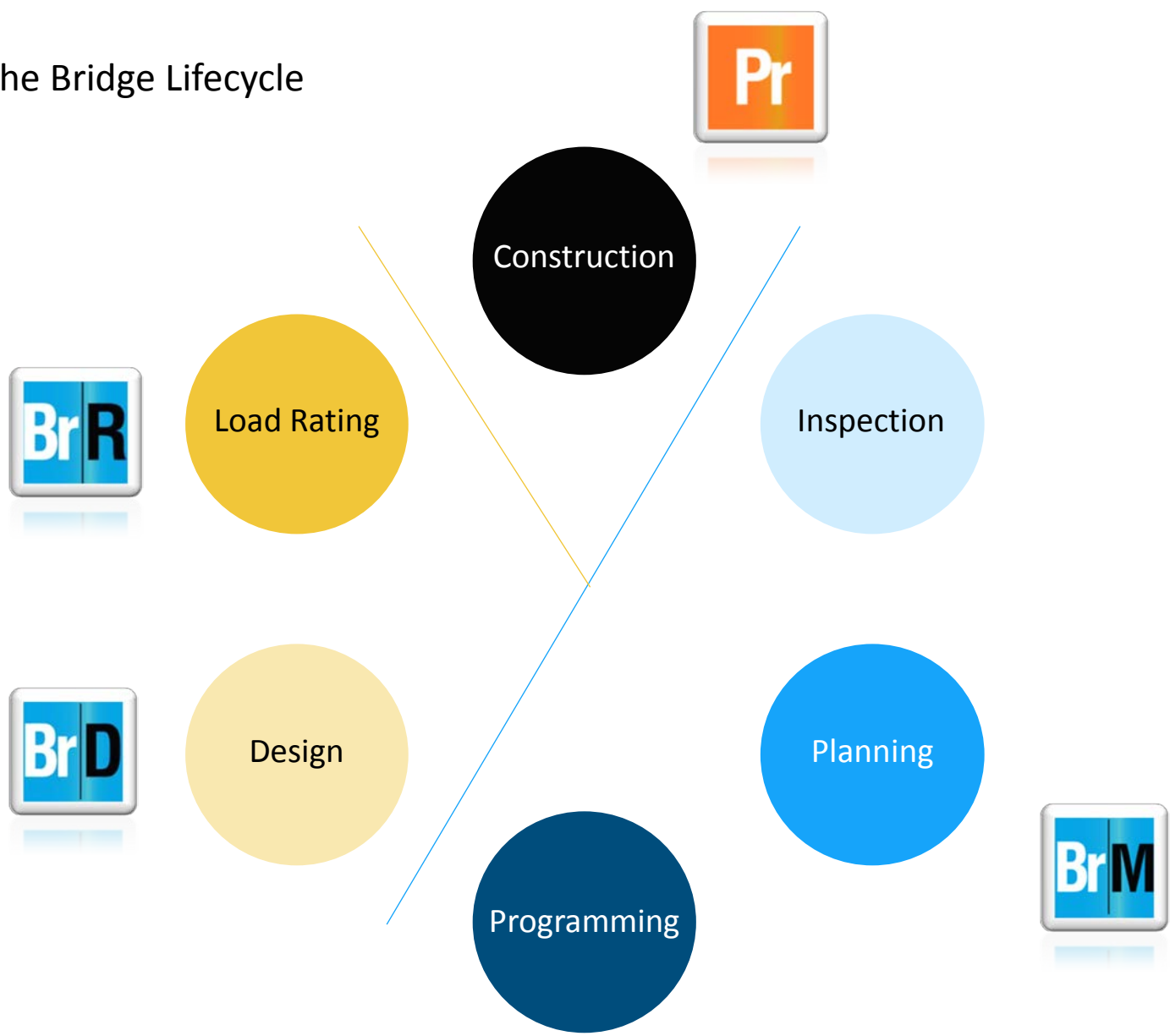
The Bridge Lifecycle





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The Bridge Lifecycle





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Enterprise



Workstation





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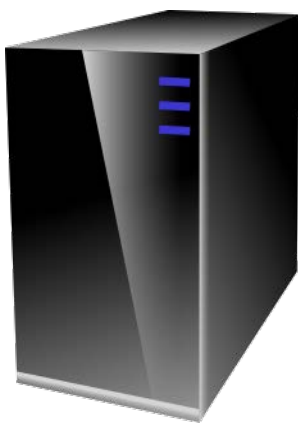
Explorer



Enterprise



Workstation



example.org Bridges > View List

Bridge ID	District	County	Facility Control	Feature Information	Dist	State	Year
1-1-1-1-1-1	Region 1	San Francisco	2000000000	BRIDGE	San Francisco Agency	CA	2000
1-1-1-1-1-2	Region 1	San Francisco	2000000001	BRIDGE	San Francisco Agency	CA	2001
1-1-1-1-1-3	Region 1	San Francisco	2000000002	BRIDGE	San Francisco Agency	CA	2002
1-1-1-1-1-4	Region 1	San Francisco	2000000003	BRIDGE	San Francisco Agency	CA	2003
1-1-1-1-1-5	Region 1	San Francisco	2000000004	BRIDGE	San Francisco Agency	CA	2004
1-1-1-1-1-6	Region 1	San Francisco	2000000005	BRIDGE	San Francisco Agency	CA	2005
1-1-1-1-1-7	Region 1	San Francisco	2000000006	BRIDGE	San Francisco Agency	CA	2006
1-1-1-1-1-8	Region 1	San Francisco	2000000007	BRIDGE	San Francisco Agency	CA	2007
1-1-1-1-1-9	Region 1	San Francisco	2000000008	BRIDGE	San Francisco Agency	CA	2008
1-1-1-1-1-10	Region 1	San Francisco	2000000009	BRIDGE	San Francisco Agency	CA	2009
1-1-1-1-1-11	Region 1	San Francisco	2000000010	BRIDGE	San Francisco Agency	CA	2010





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USER, PONTIS Bridge: 5-5-6 Steel Cont 3spd Facility Carried (007): I-15 (SR-15) NBL Inspection: 2015-06-16 (FYE) Type: Regular NBIS Metric English

Inspection > Condition

Condition Ratings

Deck (058): 5 Fair Channel (061): N N/A (NBI) Validate NBI Converter Profile: BrM Default

Superstructure (059): 5 Fair Culvert (062): N N/A (NBI) Calculate SR Calculate NBI

Substructure (060): 6 Satisfactory Waterway (071): N Not applicable Unrepaired Spalls: (SF)

Element Conditions

- All Structures - Quantity Percent Show Last CoRe Insp

AASHTO Bridge Elements Add New Element

Elem	Str. Unit	Env	Description	Quantity	Units	Qty. 1	Qty. 2	Qty. 3	Qty. 4
12	101	Mod. (3)	Re Concrete Deck	16008	sq.ft	4642.32	7523.76	3841.92	0.000
107	101	Low (2)	Steel Opn Girder/Beam	2478.7	ft	0.000	2106.89	371.805	0.000
161	101	Low (2)	Stl Pin Pin/Han both	22	each	0.000	6.000	16.000	0.000
205	101	Mod. (3)	Re Conc Column	20	each	16.000	4.000	0.000	0.000
215	101	Mod. (3)	Re Conc Abutment	288.3	ft	236.406	43.245	8.649	0.000
234	101	Low (2)	Re Conc Pier Cap	266.2	ft	252.890	13.310	0.000	0.000
300	101	Sev. (4)	Strip Seal Exp Joint	280	ft	0.000	76.000	204.000	0.000
313	101	Low (2)	Fixed Bearing	44	each	0.000	6.000	38.000	0.000
321	101	Sev. (4)	Re Conc Approach Slab	1380	sq.ft	1380.00	0.000	0.000	0.000
331	101	Sev. (4)	Re Conc Bridge Railing	504	ft	252.000	252.000	0.000	0.000

Status: New - modified Review Needed Approved By: Crawford, David Cancel Save Save & Close Delete Inspection





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USER, PONTIS Tunnel: 1639999 Tunnel Name (I.2): Test Tunnel Border1 Inspection: Missing INSPDATE v Metric English

Tunnels > Tunnel Inspection

Fire Suppression:

Inspection Schedule

	Scheduled	Inspector	Current Date	Frequency
Routine Inspection:		USER, Pontis	(D.2)	(D.3) 24 Months
In-Depth Inspection:	<input type="checkbox"/> (D.4)			Months
Damage Inspection:				
Special Inspection:	<input type="checkbox"/> (D.6)	Type:		Months
Mechanical:				Months
Electrical:				Months
Fire Suppression:				Months
Damage Inspection performed since last reported inspection (D.5):				

General Inspection Data

Tunnel Load Posting Status (L.4): null (FIX PARAM VALUE)

Hazardous Material Restriction (L.11): 1 - Yes

Other Restrictions (L.12): 0 - No

Tunnel or Portal Island Protection from Navigation (N.3): 0 - Nav prot not req.

Inspection Notes

Element Condition

- All Structure - Quantity Percent

Add Defect Add Protective Sys Add New Element Edit Element

Elem	Str. Unit	Description	Quantity	Units	Qty. 1	Qty. 2	Qty. 3	Qty. 4
10001	1	Cast-in-Place Conc Tunnel Liner	10000	sqft	10000.00	0.000	0.000	0.000
10051	1	Concrete Portal	2100	sqft	2100.000	0.000	0.000	0.000

Cancel Save Create New Inspection Delete Inspection





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USER, PONTIS

Bridge Facility Carried (007): SR-163 Inspection: Type: Regular NBIS



Inspection > Work > Work Candidates

- BRIDGES
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Work

Show All Show Open

Candidate ID	Action	Date Recommended	Target Year	Estimated Cost	Status	Work Assignment	Priority
5A636EB-00BF-122716-B4566BBCE8	Rehab Deck - Network	8/11/2015	2016	\$36,530.79	Unknown	0	High
5A636EB-00BF-122716-57FCE79E2D	Place Wearing Surface - Network	8/11/2015	2016	\$0.00	Unknown	0	High

Type of Work

Candidate ID:
 Structure Unit:
 Action Type:
 Action:
 Date Recommended:
 Priority:
 Date Completed:
 Target Year:
 Assigned:
 Work Assignment:
 Status:
 Source:

Work Estimates

Estimated Quantity:
 Cost per unit:

 Estimated Cost (\$):

Generated by user "pontis" on 12/27/2016

Status: New - modified Review Needed Approved By: McCleery, Clint





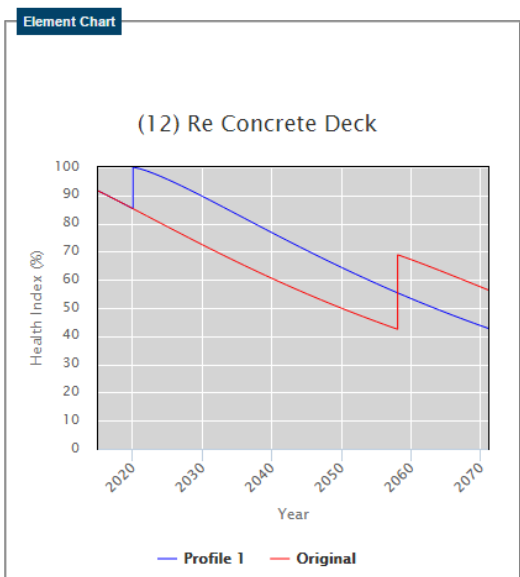
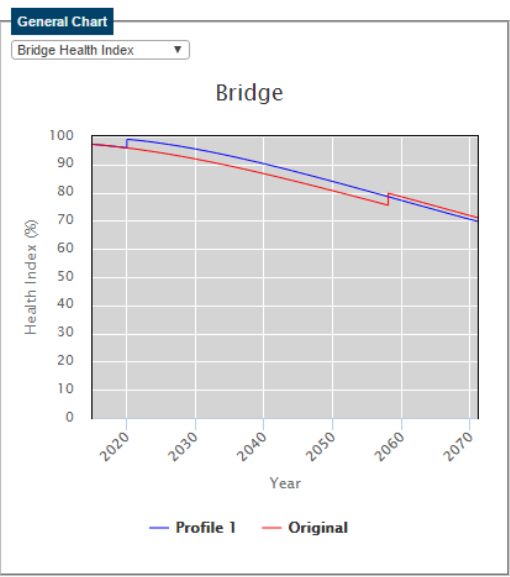
Bridge Name: I-215 Fly over Ramp Br Facility Carried (007): RPJ215NB TO I80WB Feature Intersected (006A): I-215,I-80 & 4 INT.RAMF Metric English

Analysis > LCCA

Convert Policy: Convert policy

Index	Date	Year	Action Name	Orig. Cost	NPV Cost	Prior A
1	2020	5	Column Repair, Profile Rotomilling	\$40,000	\$34,192	95.87
Residual:				\$9,027,183	\$1,044,043	
Agency Life-Cycle Cost:					\$34,192	
User Life-Cycle Cost:					\$0	
Total Life-Cycle Cost:					(\$1,009,851)	

Charts



Effects on Each Element

Year: 2016

Element	Str. Unit	Env.	Quan
(12) Re Concrete Deck	101	Sev.(4)	43,129
(107) Steel Opn Girder/Beam	101	Low(2)	5,687.3
(161) Stl Pin Pin/Han both	101	Sev.(4)	16.00
(205) Re Conc Column	101	Mod.(3)	7.00
(215) Re Conc Abutment	101	Low(2)	60.00
(231) Steel Pier Cap	101	Low(2)	22.50
(234) Re Conc Pier Cap	101	Low(2)	172.00
(300) Strip Seal Exp Joint	101	Sev.(4)	120.00
(311) Moveable Bearing	101	Low(2)	16.00
(313) Fixed Bearing	101	Low(2)	12.00
(321) Re Conc Approach Slab	101	Sev.(4)	900.00
(331) Re Conc Bridge Railing	101	Sev.(4)	3,301.1
(5000) General Notes	200	Ben.(1)	1.00
(5001) Roadway / Channel / Drainage	200	Ben.(1)	3.00
(5002) Maintenance Recommendations	200	Ben.(1)	3.00
(5103) Asphalt Overlay w/ Membrane	101	Sev.(4)	39,382
(5203) Steel Protective Coating (515)	101	Low(2)	96,473
(5300) Reinforced Concrete Wingwalls	101	Low(2)	60.30

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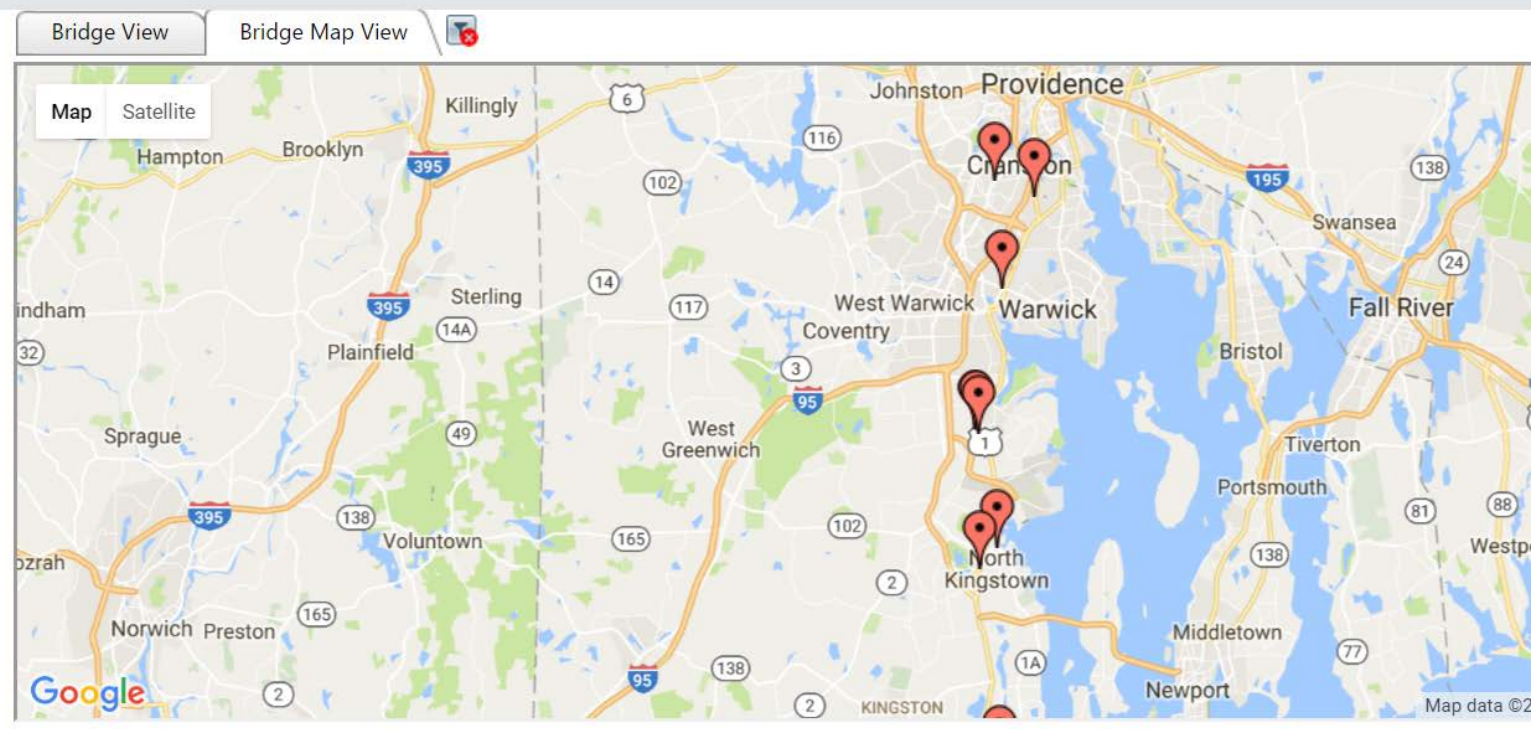
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Selected Project: PRJ 3/10/2017 Create New

Projects > Create / Edit Project > Query



Selected Bridges and Work								
Bridge ID	District	County	Facility Carried	Feature Intersected	Deck	Superstructure	Substructure	
000201	04	003	RI 113 MAIN AV	AMTRAK	7 Good	7 Good	7 Good	
Action	Work Item	Base Utility	Utility	Utility Change	Estimated Cost	Benefit/Cost(\$k)		
Replace Super - Network	Generated 03/10/2017	97.53	97.41	-0.12	\$3,707,360	0		





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Programs > Program Planning

Keep assigned projects: ▼

Run on all scenarios: ▼

Respect external frozen projects: ▼

Program Information

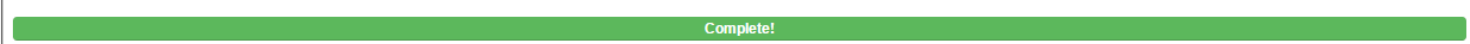
Start Year: 2017
End Year: 2021

Utility Weight Profile: Sample

Assigned Network Policies:
 Rehab Culvert
 Replace Bridge
 Replace Culvert
 Rehab Super
 Replace Deck
 Rehab Sub
 Rehab Deck

Subdivision Profile: NHS status
 NBI Deterioration Method: NbiConverter
 NBI Converter Profile: BrM Default

Optimization Progress



Progress Messages

Get Project Alternatives	9/14/2016 11:31:04 AM
Getting work candidates	9/14/2016 11:31:04 AM
Processing Segment 2	9/14/2016 11:31:05 AM
Persisting Segment 2's Results	9/14/2016 11:38:34 AM
Year: 2017 Project Count: 170	9/14/2016 11:39:17 AM
Year: 2018 Project Count: 53	9/14/2016 11:39:42 AM
Year: 2019 Project Count: 22	9/14/2016 11:40:01 AM
Year: 2020 Project Count: 15	9/14/2016 11:40:18 AM
Year: 2021 Project Count: 9	9/14/2016 11:40:36 AM
Processing Segments Completed	9/14/2016 11:40:40 AM
Finalizing Data	9/14/2016 11:40:40 AM
Program Optimization Complete	9/14/2016 11:40:40 AM

Assigned Projects

Segment: ▼ Year: ▼

Project Name	Category	Automatic	Cost	Utility	Utility Benefit	Benefit/Cost (\$k)	Cost (\$k) / Benefit	Year	Frozen	Status
031000(Replace Deck)	No Category	Yes	\$70,000	88.05	10.46	0.1494	\$6.69	2017	No	Proposed
021206(Rehab Culvert)	No Category	Yes	\$29	91.14	0.03	1.0509	\$0.95	2021	No	Proposed
020956(Rehab Culvert)	No Category	Yes	\$168	90.51	0.02	0.1194	\$8.38	2021	No	Proposed
020955(Rehab Culvert)	No Category	Yes	\$187	89.81	0.03	0.1601	\$6.25	2021	No	Proposed
020786(Rehab Deck)	No Category	Yes	\$1,452	88.88	0.71	0.489	\$2.05	2017	No	Proposed
020783(Rehab Culvert)	No Category	Yes	\$2,734	82.12	0.14	0.0512	\$19.53	2020	No	Proposed
020774(Replace Deck, Replace Super)	No Category	Yes	\$75,566	57.34	17.03	0.2254	\$4.44	2017	No	Proposed
020774(Rehab Sub)	No Category	Yes	\$343,981	70.7	16.49	0.0479	\$20.86	2021	No	Proposed
020762(Replace Deck, Replace Super)	No Category	Yes	\$396,800	84.53	24.72	0.0623	\$16.05	2020	No	Proposed
020762(Rehab Deck)	No Category	Yes	\$62	65.53	0.03	0.4841	\$2.07	2017	No	Proposed
020738(Rehab Culvert)	No Category	Yes	\$121	89.46	0.25	2.0619	\$0.49	2021	No	Proposed
020726(Replace Deck, Replace Super)	No Category	Yes	\$148,436	77.83	19.06	0.1284	\$7.79	2018	No	Proposed
020714(Replace Deck)	No Category	Yes	\$42,400	85.03	5.72	0.1349	\$7.41	2018	No	Proposed
020712(Rehab Culvert)	No Category	Yes	\$5,380	85.36	0.29	0.0539	\$18.55	2020	No	Proposed
020702(Replace Deck, Replace Super)	No Category	Yes	\$128,800	71.83	31.49	0.2445	\$4.09	2017	No	Proposed





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Programs > Executive Summary

[Edit Parameters](#)

Network Condition (with grouping)

Year: 2018

Condition	On the NHS	Not on NHS
Fair	1	0
Good	1	0
Poor	1	0
Other	0	0

[Edit Parameters](#)

Network Condition (with filters)

Year: 2021
roadway.nhs_ind: ALL

Condition	Count (Approximate)
Fair	50
Good	40
Poor	10

[Edit Parameters](#)

Utility Projection

Years: 2017 to 2021

Year	0 Not on NHS	1 On the NHS
2017	75	82
2018	75	81
2019	75	80
2020	75	79
2021	75	78

[Edit Parameters](#)

Condition Projection

Years: 2017 to 2021
roadway.nhs_ind: ALL

Year	Poor	Fair	Good
2017	244	637	612
2018	244	641	608
2019	243	650	600
2020	242	669	582
2021	246	749	498





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JIRA tickets:

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Or add '@ZacBoyle' to your JIRA tickets

