



Summary of Data Improvements and Uploads



Municipality of Machin

March 2018

2017 OSIM Inspection Report (Bridges)

Summary

The Municipality of Machin provided a copy of their most recent OSIM Inspection Report (2017). Asset attribute data were updated for all bridges and lifecycle activities were customized for based on engineering report recommendations. This upload ensures that municipal staff are using the most recent condition assessment data to management the lifecycle of all bridges and allows for a customized report detailing scheduled intervention activities (maintenance, rehabilitation and replacement).

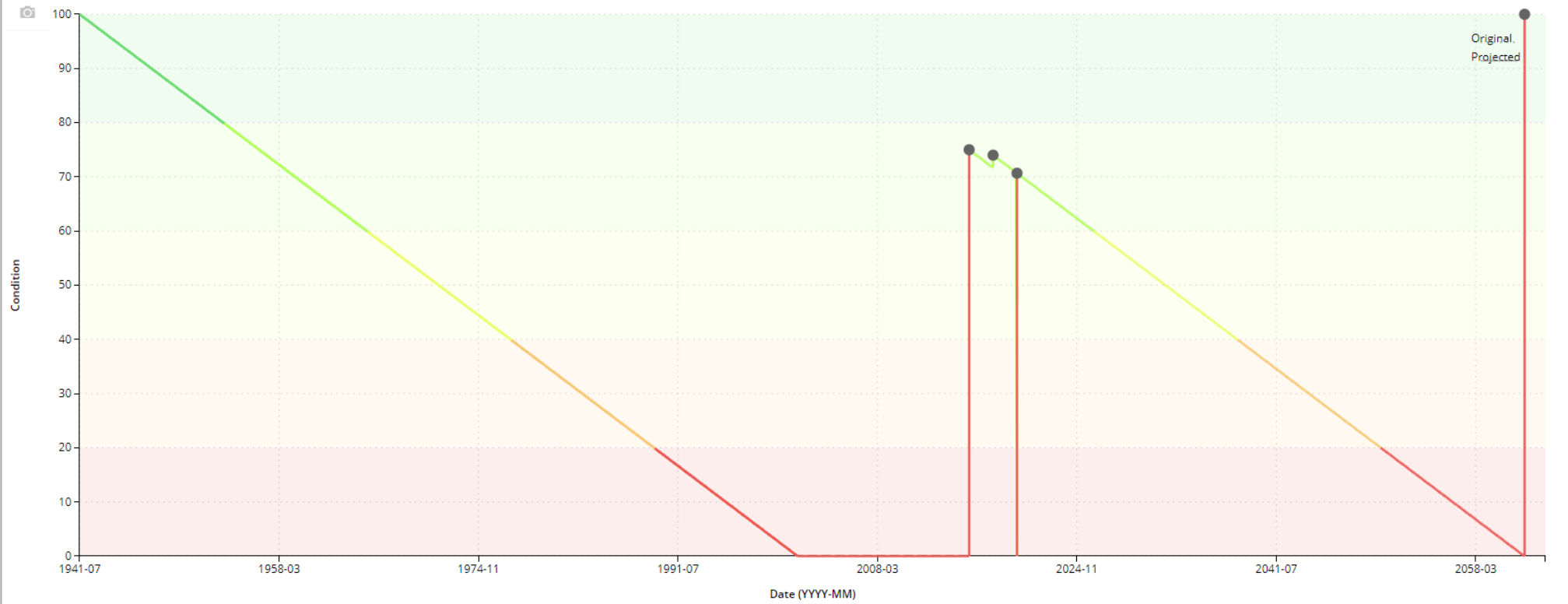
Inventory Listing

Asset ID	Category	Segment	In-Service Date	Historical Cost	Replacement Cost	Condition Rating	Construction Material	Length (m)	Width (m)
329	Bridges and Culverts	Cascade Bridge	7/1/1936	\$30,350	\$521,280	72.36 - Good	Wood & Steel Structure	50.525	5.06
330	Bridges and Culverts	South Minnitaki Bridge	7/1/1965	\$83,760	\$629,935	72.36 - Good	Wood & Steel Structure (Asphalt Top)	21.5	7.44
331	Bridges and Culverts	Roussin Road Bridge	7/1/2007	\$668,446	\$830,665	92.36 - Very Good	Wood & Steel Structure	45.75	3.66
332	Bridges and Culverts	North Minnitaki Bridge	7/1/1941	\$53,127	\$794,410	75.28 - Good	Steel/Concrete Structure	43.01	6.44

Lifecycle Strategy Example (Asset 332 – North Minnitaki Bridge)

Lifecycle Events (2016+)

Event Date	Name	Description	Event Class	Cost	Funding Source	Event Range / Trigger	Condition After	Added EUL	Cost per Added Year
2019-11-01 (Manual)	<Rehabilitation>	Rectify existing defects or deficiencies	Rehabilitation	\$32,000.00 (Provided)	Capital	0 to 100 Condition	No Impact	0 Months	\$0.00
2019-11-01 (Manual)	<Rehabilitation>	Rectify existing defects or deficiencies	Rehabilitation	\$15,000.00 (Provided)	Capital	0 to 100 Condition	No Impact	0 Months	\$0.00
2019-11-01 (Manual)	<Maintenance>	Prevent defects or deterioration	Maintenance	\$2,000.00 (Provided)	Capital	0 to 100 Condition	No Impact	0 Months	\$0.00
2062-04-01	<Asset Replacement>	End of life replacement	Replacement	\$794,409.84 (Fixed)	Capital	0 to 0 Condition	100	60 Years	\$13,240.16



Risk Matrix (All Bridges)



Recommendations

- Ensure that all future OSIM inspections are integrated into CityWide upon completion including recommended lifecycle events, condition data and replacement costs
- Develop and further refine a risk framework that quantifies both the probability and consequence of asset failure

Culvert Inventory Upload

Summary

The Municipality of Machin provided an updated inventory listing of all municipal culverts. New assets were loaded into the CityWide database complete with asset attribute data, including: **Quantity, Name, Number of Households, Road Length, Number of Intersections, Road Surface Material, Vehicle Traffic Range and School Bus Route (Yes/No)**. This upload ensures that municipal staff are using the most recent condition assessment data to management the lifecycle of all bridges and allows for a customized report detailing scheduled intervention activities (maintenance, rehabilitation and replacement).

The Municipality’s culvert inventory is missing key asset details that would be required to include in their future asset management plans and strategies, including: **In-service Date, Historical Cost, Replacement and Replacement Cost**. This data should be collected and uploaded as soon as available. This culvert data may also require further disaggregation according to the wishes of municipal staff.

Inventory Listing

Asset ID	Category	Segment	Name	Initial Quantity	Road Length (KM)	Road Surface Material	Number of Intersections	Number of Households	School Bus Route (Yes/No)	Vehicle Traffic Range (<100)
469	Bridges and Culverts	Culverts	Hanslip Rd	8	2	Gravel	1	12	Yes	5
470	Bridges and Culverts	Culverts	V. Bay Dump Rd	4	1.5	Gravel	1	1	No	5
471	Bridges and Culverts	Culverts	Tower Rd	2	1.4	Gravel	1	7	Yes	6
472	Bridges and Culverts	Culverts	Cook's Rd	1	0.5	Gravel	1	3	No	6
473	Bridges and Culverts	Culverts	Kinsmen Beach Rd	2	1.1	Gravel	2	2	No	6
474	Bridges and Culverts	Culverts	Komm Rd	2	3.2	Gravel	3	3	Yes	5
475	Bridges and Culverts	Culverts	S. Waldhof Rd	10	4	Gravel	2	12	Yes	6

476	Bridges and Culverts	Culverts	Hampe Rd	2	0.4	Gravel	1	1		6
477	Bridges and Culverts	Culverts	Cascade Rd	3	4.8	Gravel	3	0	Yes	5
478	Bridges and Culverts	Culverts	Townline Rd	14	6.3	Asphalt	5	24	Yes	4
479	Bridges and Culverts	Culverts	Fredrickson Rd	1	0.4	Gravel	1	4		6
480	Bridges and Culverts	Culverts	Temple Bay Rd	6	2.8	Gravel	2	2	Yes	6
481	Bridges and Culverts	Culverts	Detour Point Rd	5	2.1	Gravel	1	10	No	6
482	Bridges and Culverts	Culverts	Danielson Rd	2	0.9	Gravel	0	6	Yes	6
483	Bridges and Culverts	Culverts	River Point Rd - A	4	1.5	Gravel	1	10	Yes	6
484	Bridges and Culverts	Culverts	River Point Rd - B	1	0.3	Gravel	0	6	Yes	6
485	Bridges and Culverts	Culverts	Peck's Rd	12	3.2	Gravel	1	20	No	6
486	Bridges and Culverts	Culverts	Eagle River St	3	0.7	Gravel	5	14	Yes	6
487	Bridges and Culverts	Culverts	Mason Rd	4	1.6	Gravel	2	1	Yes	6
488	Bridges and Culverts	Culverts	Schultz's Rd	2	1.3	Gravel	1	4	Yes	6
489	Bridges and Culverts	Culverts	Roussin's Rd	9	4.4	Gravel	2	6	No	6
490	Bridges and Culverts	Culverts	S. Baptist Church	4	2	Gravel	2	5	Yes	6
491	Bridges and Culverts	Culverts	Berglund Rd	9	5.5	Gravel	3	5	Yes	6

492	Bridges and Culverts	Culverts	Lichty's Rd	1	0.4	Gravel	0	1	No	7
493	Bridges and Culverts	Culverts	S. Minnitaki Rd	5	3.4	Gravel	3	5	Yes	5
494	Bridges and Culverts	Culverts	Caban Rd	1	0.3	Gravel	1	1	No	7
495	Bridges and Culverts	Culverts	Ojibway Dr	2	2.2	Asphalt	1	12	No	5
496	Bridges and Culverts	Culverts	Lyle's Rd	3	0.8	Gravel	1	14	No	6
497	Bridges and Culverts	Culverts	Airport Rd	7	2.9	Asphalt and Gravel	3	18	Yes	6
498	Bridges and Culverts	Culverts	Plummer Rd	4	1.2	Gravel	2	13	Yes	6
499	Bridges and Culverts	Culverts	Dmyterko's Rd	3	1.6	Gravel	1	2	No	6
500	Bridges and Culverts	Culverts	Calvert's Rd North	1	0.4	Gravel	1	1	No	6
501	Bridges and Culverts	Culverts	Kondra Rd	1	0.2	Gravel	1	3	No	6
502	Bridges and Culverts	Culverts	Strelski's Rd	3	1.1	Gravel	1	1	No	6
503	Bridges and Culverts	Culverts	Kamm Rd North	2	1	Gravel	1	0	No	
504	Bridges and Culverts	Culverts	N. Minnitaki Rd	9	5.5	Gravel	4	11	Yes	6
505	Bridges and Culverts	Culverts	Parker Rd	4	1.6	Gravel	1	2	No	6
506	Bridges and Culverts	Culverts	Nedecker	6	3.4	Gravel	2	1	No	6

Recommendations

- Populate **In-service Date, Historical Cost, Replacement and Replacement Cost**

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