

## AI in SAModelve

Strategic Asset Management

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"We've found that we can balance the cart before the horse with two carts behind the horse."

# CONTEXT

## \$1 Billion

- \$36 Million per annum
- \$100,000 /day
- Circa \$4,000/hour

Typical Budgets \$25M per annum



**\$\$ per \$1B Value**

**We Can Potentially Unlock  
Using AI to build efficiency**

\$ 25M capital per annum

\$ 6M maintenance per annum

\$ 200K in condition assessments

\$ 40k fair value revaluations

\$ 40k asset management plans

\$250k asset inspectors (1.5 FTE)

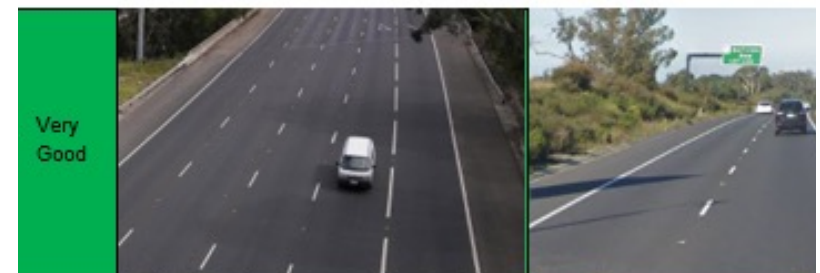
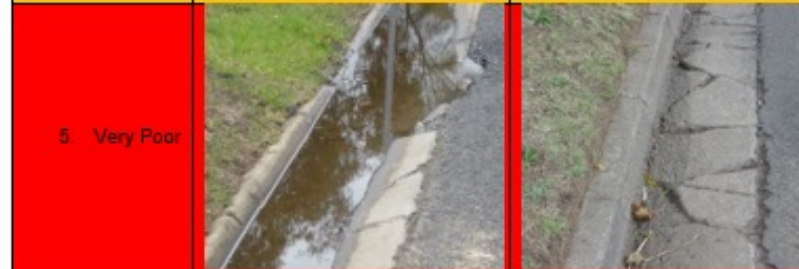


# Pro-Active Inspections - Maintenance

- Maintenance Defects
- Risks/Hazards
- Intervention Levels
- Automated Work Plan









# Maintenance Defects



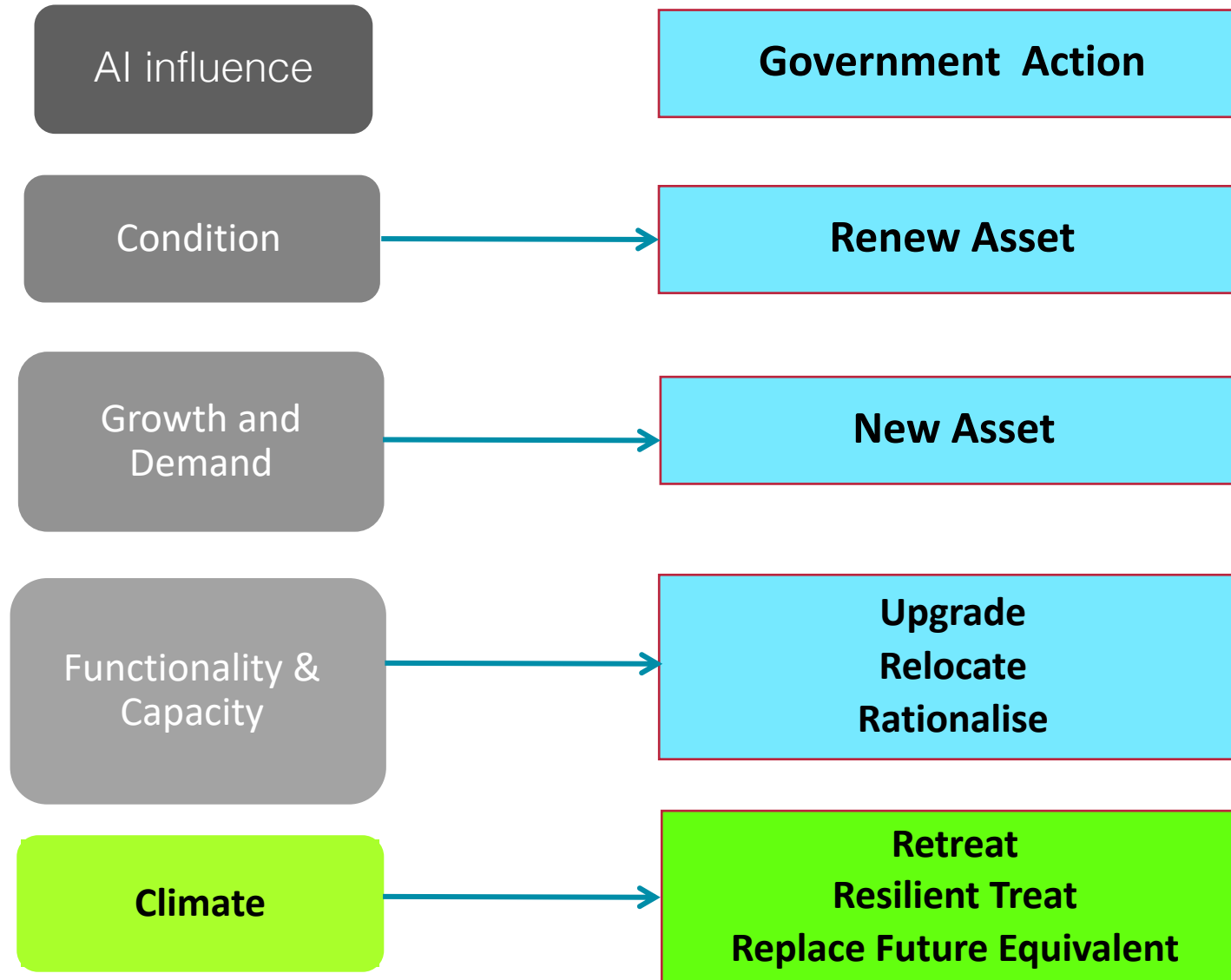
Asset Vision's AutoPilot technology detects and measures road pavement defects, along with their relative position on the road.





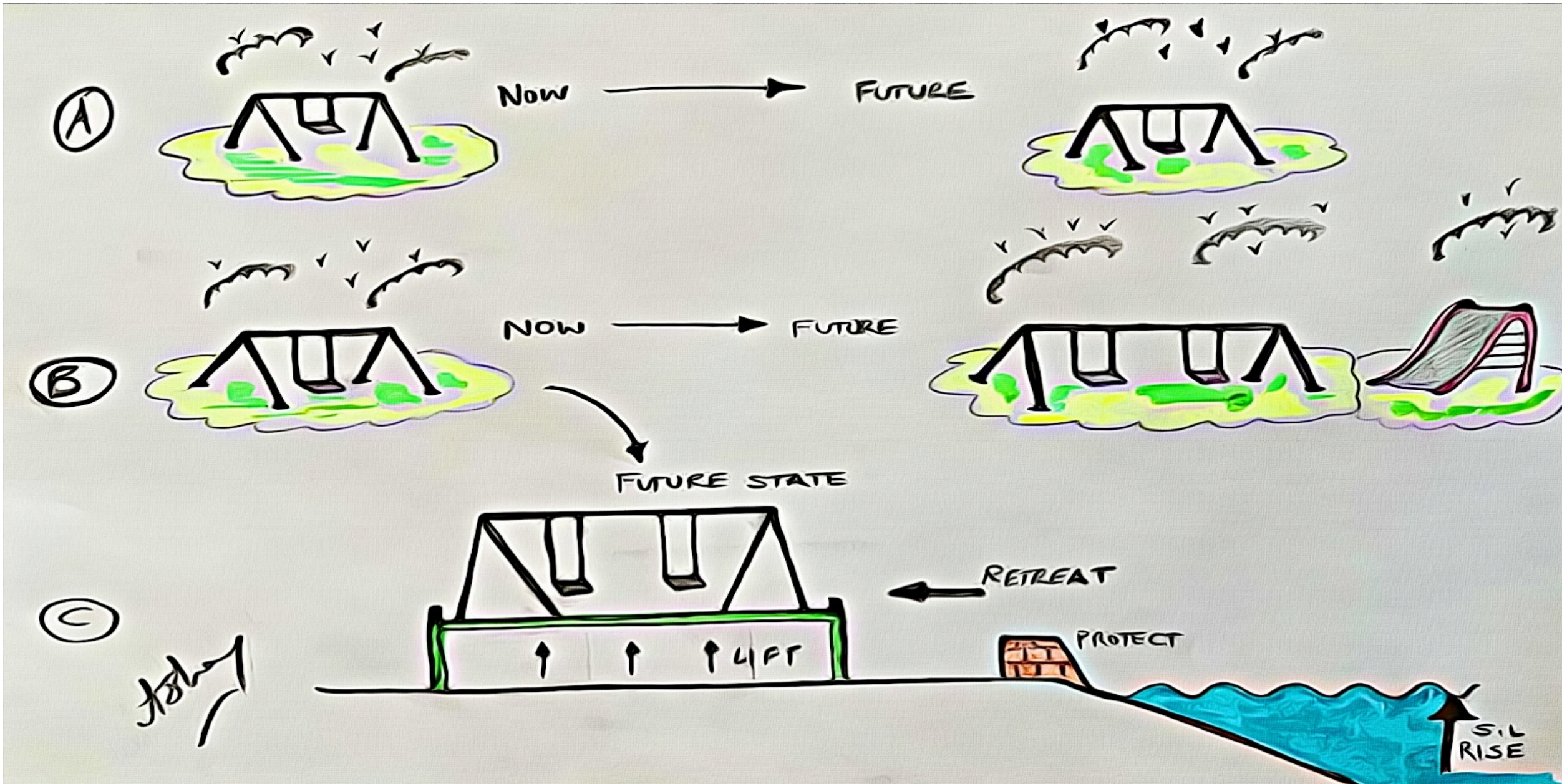
Pothole

# Typical Rol Opportunities in Decision Making





# Capital Decisions : Renew, Rationalise or Retreat







# Digital Asset Dashboard

## GIS - Climate Elements

**\$343.99M**  
Asset Value

**916**  
Asset Quantity

**1.48**  
Average Condition

**Map Setting**

Road Aerial

**Asset Type**  
All

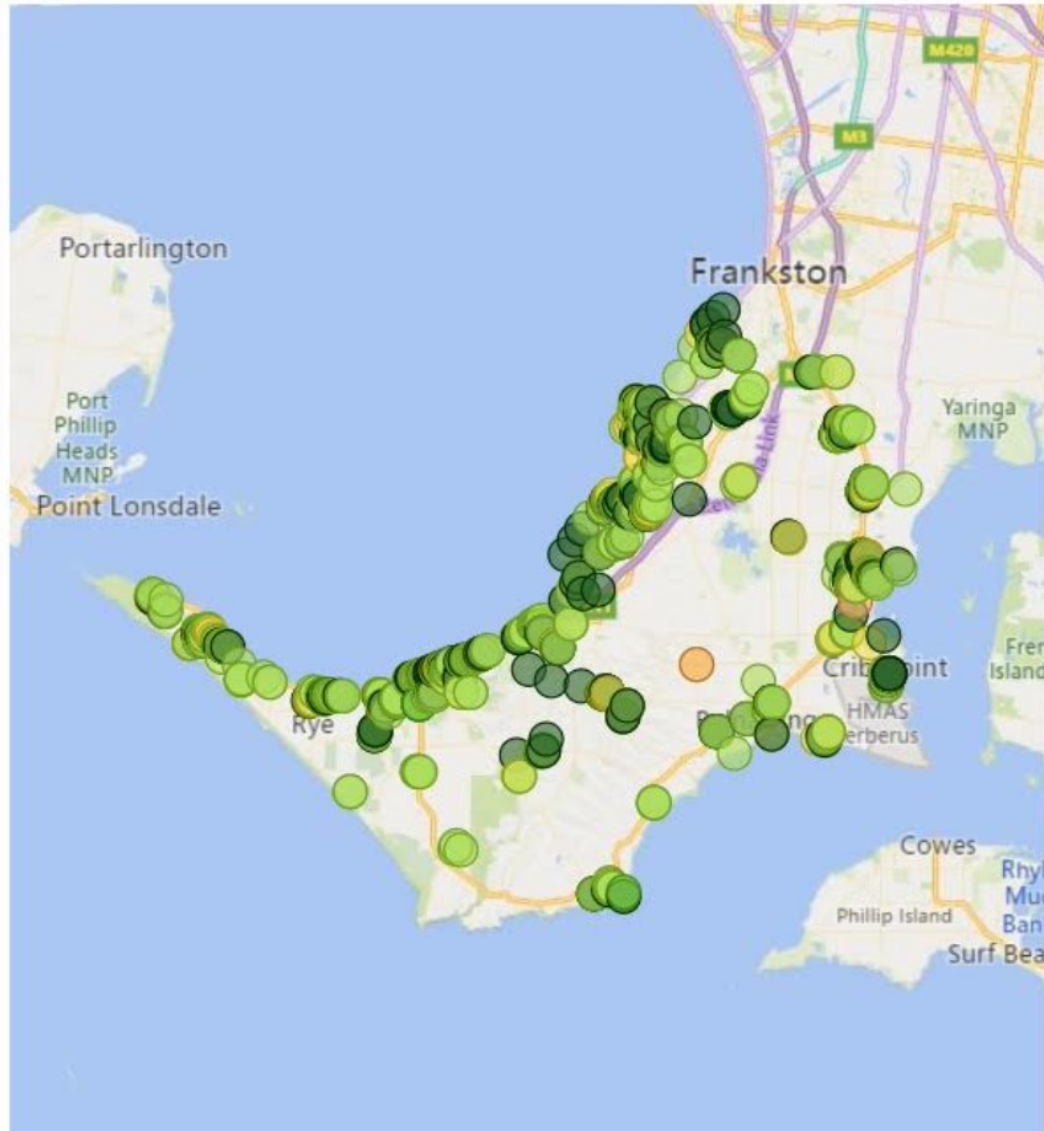
**Building Service**  
All

**Township**  
All

**Criticality**  
All

**Asset Name**  
All

**Unique Asset ID**



- Extreme Temperature
- Extreme Rainfall**
- SPI (Dryness)
- Flooding
- Sea Level Rises
- Storm Surge

Extreme Rainfall	No of Buildings	Replacement Cost	Percentage %
1 - Very Low	665	245,900,021	71.5%
2 - Low	215	88,053,666	25.6%
3 - Moderate	26	8,547,065	2.5%
4 - High	9	1,478,581	0.4%
5 - Very High	1	14,785	0.0%
<b>Total</b>	<b>916</b>	<b>343,994,119</b>	<b>100.0%</b>

Asset Name	Asset Type	Building Service	Asset Value
Southern Pen Rescue Shed	Major Building	Municipal	\$115,320.0
10 Pound Road	Major Building	Community	\$0.0
21 Ninth Avenue Commercial Lease	Minor Building	Commercial	\$0.0
23 Ninth Avenue Commercial Lease	Minor Building	Commercial	\$0.0
35 Wannau Place (Total Centre)	Major Building	Commercial	\$640,000.0
509 Nepean Highway	Major Building	Community	\$0.0
81 Victoria Street (gifted by Ambulance Vic note there is also a l	Major Building	Community	\$659,750.0
9 to 11 Ninth Avenue Commercial Lease	Minor Building	Commercial	\$0.0
A&DS Home Maintenance Workshop	Minor Building	Community	\$0.0
A&DS Meals on Wheels Kitchen	Minor Building	Municipal	\$505,494.0
A&DS Meals on Wheels Kitchen Garage	Minor Building	Municipal	\$17,546.0
Alexandra Park Pavilion	Major Building	Recreation	\$1,073,870.0
Alexandra Park Pavilion Change Rooms	Major Building	Recreation	\$486,680.0
Alexandra Park Telephone Tower	Major Building	Public Amenities	\$0.0
Alexandra Park Ticket Booth	Minor Building	Recreation	\$2,402.6
Alexandra Park Toilet Block	Major Building	Public Amenities	\$319,788.0
Annie Sage Child Care Centre	Major Building	Childrens Services	\$1,838,640.0
Annie Sage Child Care Centre Garden Shed	Minor Building	Childrens Services	\$13,410.0
Arthurs Seat State Park Water Tank	Minor Building	Community	\$0.0



# Digital Asset Dashboard

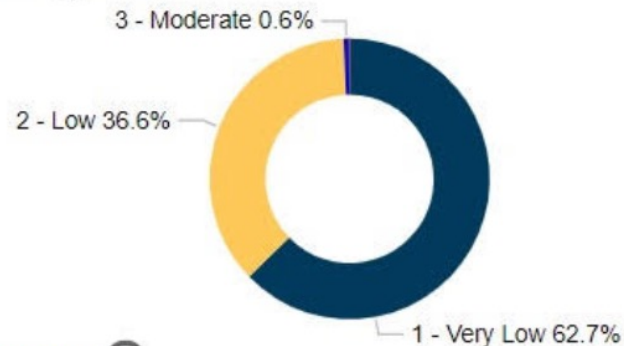
## State of Assets Report - Climate Elements ⓘ

**910**  
No of Buildings

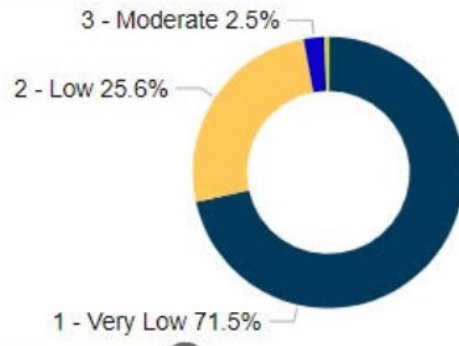
**\$344M**  
Asset Value

**1.97**  
Average Condition

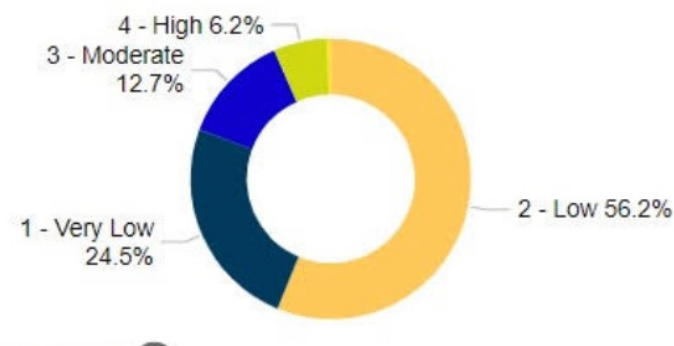
Extreme Temperature ⓘ



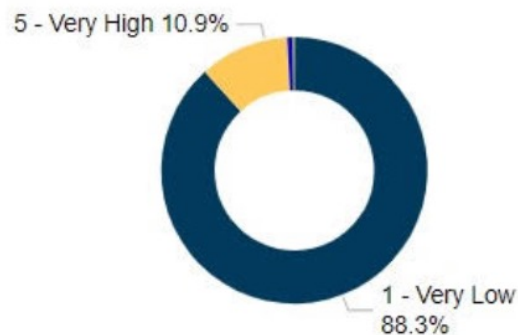
Extreme Rainfall ⓘ



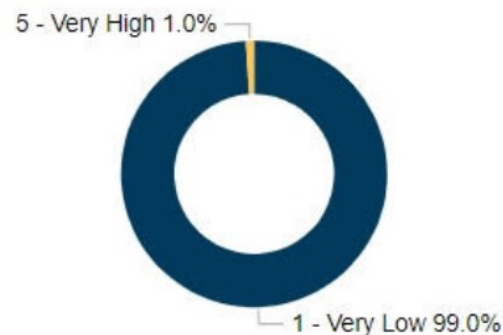
SPI (Dryness) ⓘ



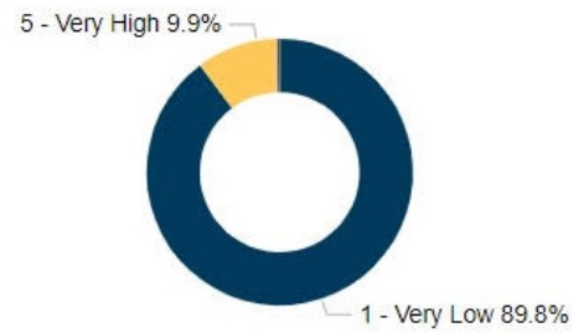
Flooding ⓘ



Sea Level Rises ⓘ



Storm Surge ⓘ



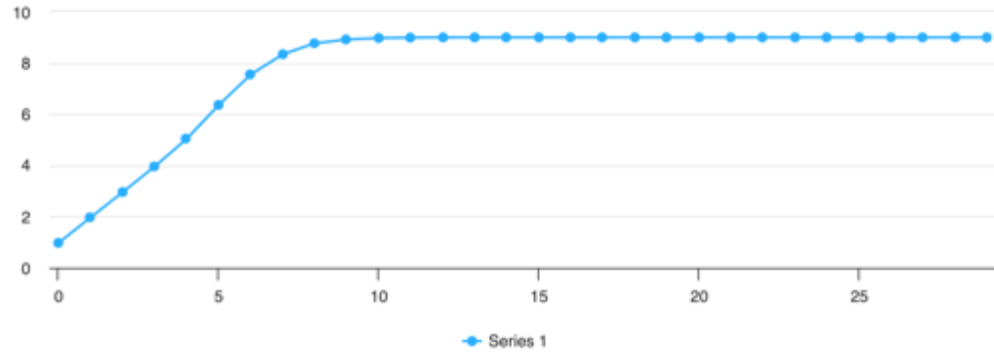
● 1 - Very Low ● 2 - Low ● 3 - Moderate ● 4 - High ● 5 - Very High ⓘ

Asset Type	Asset Value	Extreme Temperature	Extrem
<b>Major Building</b>	<b>\$304,880,511.90</b>	<b>1 - Very Low</b>	<b>1 - Ver</b>
Rosebud Municipal Office â€” West Wing	\$16,061,661.00	1 - Very Low	1 - Ver
Pelican Park	\$15,275,188.60	2 - Low	1 - Ver
Mornington Municipal Office	\$11,870,397.00	2 - Low	1 - Ver
Hastings Municipal Office	\$8,740,462.50	1 - Very Low	1 - Ver
Rosebud Municipal Office â€” East Wing	\$8,108,100.00	1 - Very Low	1 - Ver
Mornington Library	\$6,191,946.20	1 - Very Low	1 - Ver
Hastings Hub	\$4,303,944.00	1 - Very Low	1 - Ver
Bentons Square Community Centre and Preschool	\$4,218,240.00	1 - Very Low	1 - Ver
Citation Sports Reserve Pavilion	\$3,997,653.00	1 - Very Low	1 - Ver
<b>Total</b>	<b>\$343,994,118.61</b>	<b>1 - Very Low</b>	<b>1 - Ver</b>



Condition ● 0 ● 1 ● 2 ● 3 ● 4 ● 5 ⓘ

### Add Lifecycle Profile



Asset Category

Buildings

Name

Structure LCC

Profile Type

Markov

Years

30

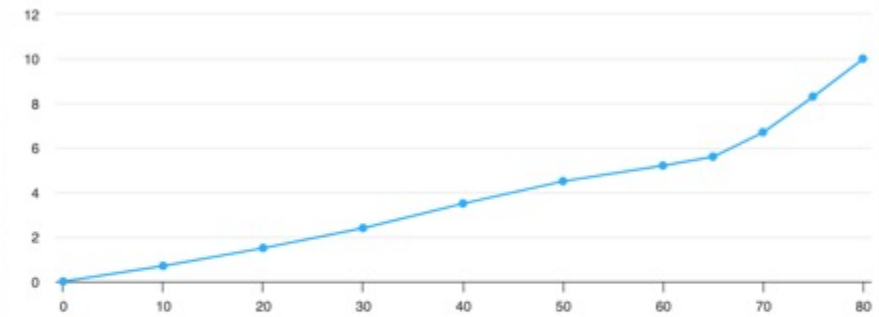
States

10

State 0	State 1	State 2	State 3	State 4	State 5	State 6	State 7	State 8	State 9	Total
0.1	0.8	0.1								1
	0.1	0.8	0.1							1
		0.1	0.8	0.1						1
			0.1	0.8	0.1					1
				0.1	0.8	0.1				1
					0.1	0.5	0.2	0.2		1
						0.1	0.4	0.4	0.1	1
							0.1	0.5	0.4	1
								0.1	0.9	1

Binning

### Add Lifecycle Profile



Asset Category

Buildings

Name

Structure LCC

Profile Type

Piecewise

Noise Standard Deviation

0.5

Year

0

State

0

10

0.70

20

1.5

30

2.40

40

3.5

50

4.5

60

5.2

65

5.60

70

6.7

75

8.3

80

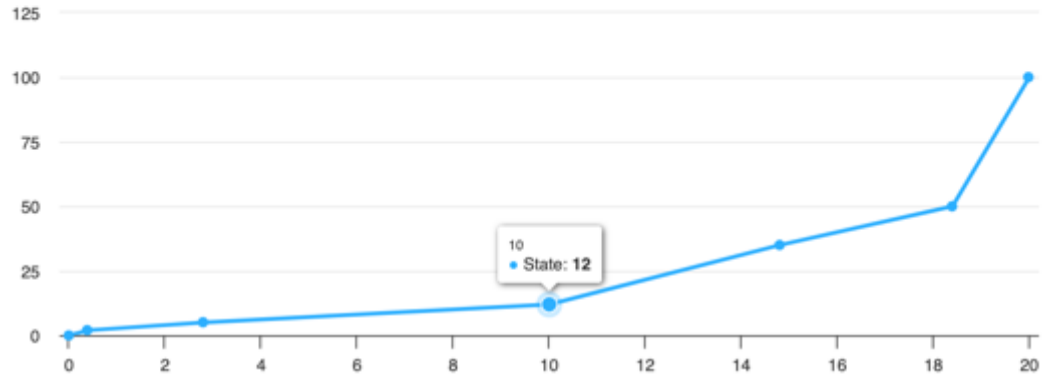
10

Cancel

Save



### Edit Lifecycle Profile



Name

20 Active Defects

Noise Standard Deviation

0

Year

State

0

0



0.4

2



2.8

5



10

12



14.8

35



18.4

50



20

100



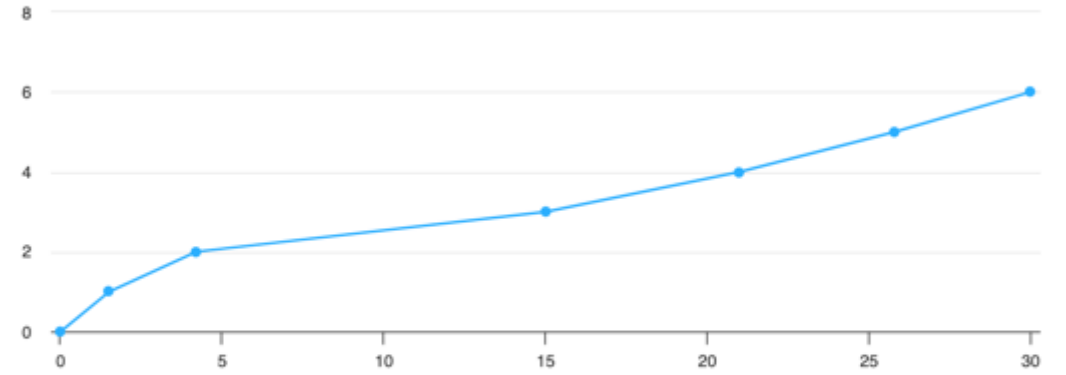
Add State

Delete

Cancel

Save

### Edit Lifecycle Profile



Name

30 Ravelling

Noise Standard Deviation

0

Year

State

0

0



1.5

1



4.2

2



15

3



21

4



25.8

5



30

6



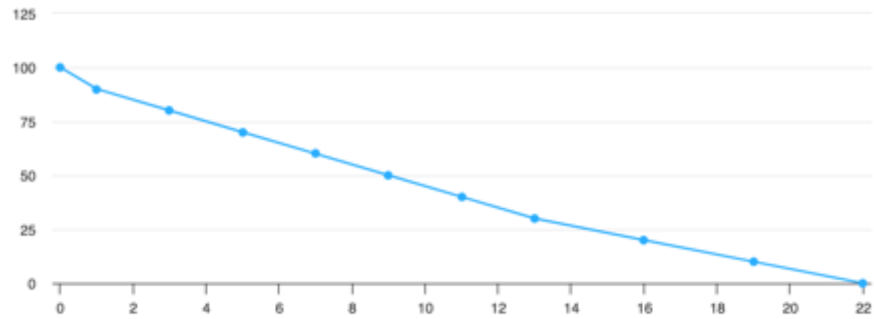
Add State

Delete

Cancel

Save

### Add Lifecycle Profile



Asset Category

Road - PCI

Name

PCI

Profile Type

Piecewise

Noise Standard Deviation

0.01

Year

0

State

100

1

90

3

80

5

70

7

60

9

50

11

40

13

30

16

20

19

10

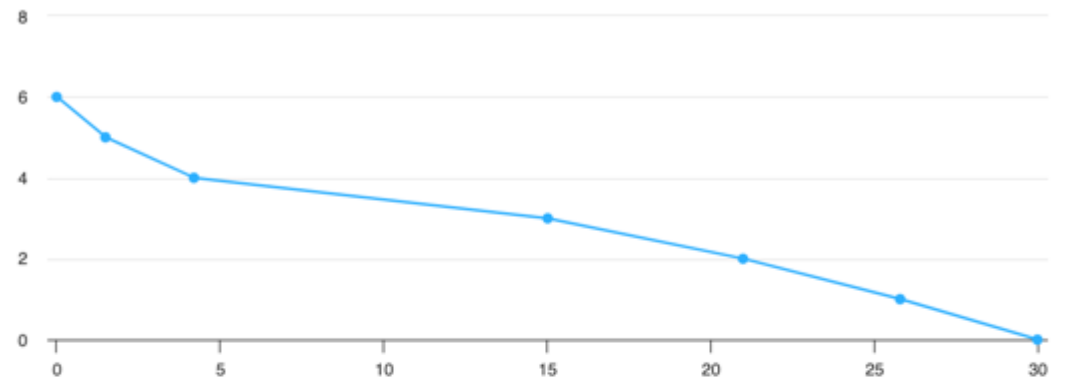
22

0

Cancel

Save

### Edit Lifecycle Profile



Name

30 Ravelling

Noise Standard Deviation

0

Year

0

State

6

1.5

5

4.2

4

15

3

21

2

25.8

1

30

0

Add State

Delete

Cancel

Save



# Buildings Interactive Asset Management Plan

This interactive report presents the current state of the Buildings Asset portfolio. Figures shown represent the modelled asset value.

\$371.6M

Modelled Asset Value

214

Number of Buildings

1,572

Number of Modelled Elements

1.92

Average Condition

\$8.58M

Average Annual Budget

## WHERE WE ARE NOW

\$262.0M

Current Worth

\$5.36M

PVP Value in 2024

68.0%

Asset Health

## WHERE WE WILL BE

\$229.9M

Projected Worth in 2034

\$23.99M

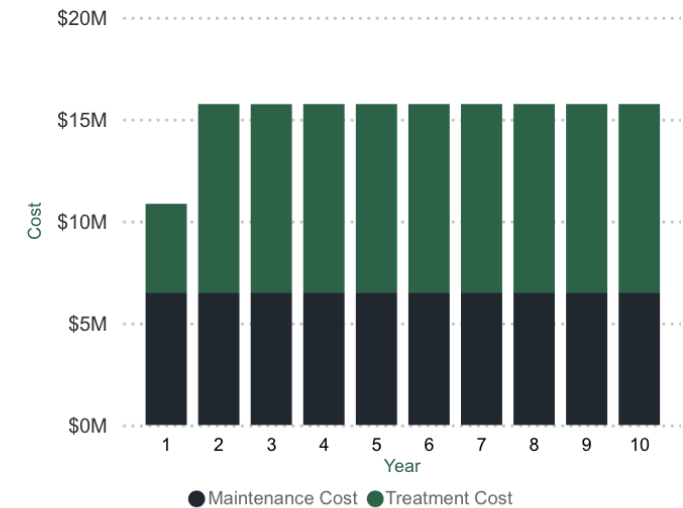
PVP Value in 2034

55.3%

Projected Asset Health

## WHAT IT WILL COST

Total Cost by Year



\* PVP = Assets that are in Poor & Very Poor Condition

Page Navigator

Cover

POP

Building Overview

Asset Inventory

Projected Asset Health

Projected Expenditure

Projected Health

Projected Expenditure Comparison

Projected Health Comparison

LoS Analysis

Building POP



# Balancing the Service Level and Funding



← Providing and maintaining assets that meet defined community service needs →