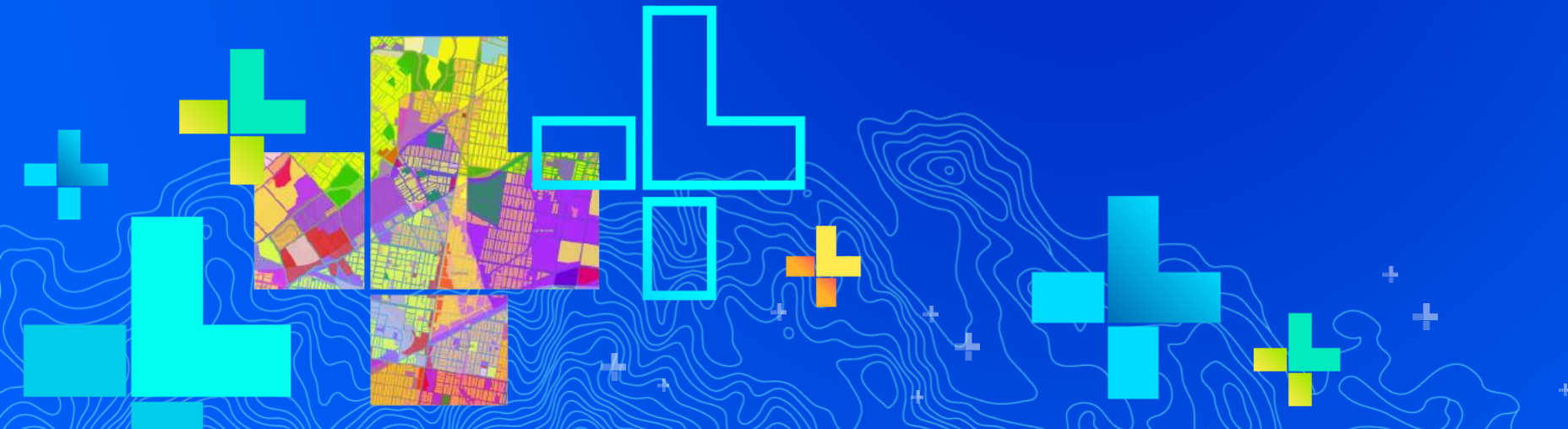


Topeka Paves The Way to A Closed Funding Gap *using Assetic Predictor*

Darren Haag, City of Topeka
Rod Lovely, Assetic
Lawrie George, Assetic



Topeka Paves The Way to A Closed Funding Gap

using Assetic Predictor

Agenda

- Introduction to Life Cycle Modelling with Assetic Predictor
- Topeka's Half Cent Sales Tax Story
- Questions and Answers



Assetic Predictor

Utilizes the science of Life Cycle Modelling

Assetic Predictor Portfolio

Create New Portfolio

Open Portfolio

Water System - Plant

Water Treatment Plant

Data

Water Treatment Plant

Model

Current Decision Model

Strategic Decision Model

Strategy

BV 2.5% Annual budget cap (...)

BV 3% Annual budget cap (Av...

BV Current Budget ~ 2% at a...

No BV 2.5% Annual budget ca...

No BV 3% Annual budget cap ...

No BV Current Budget ~ 2% a...

UNCONSTRAINED Budget - 50...

Model

Strategic Decision Model

Model Setup

Life Cycle

Treatment Criteria

Treatment Effect

Treatments

Treatment Name

Replace

Aggressive: CoF > 3 ; Condition => 4 ; No Prior Rehab

Aggressive: CoF > 3 ; LoF => 4 ; No Prior Rehab

Post Rehab: CoF between 2 and 3 ; Condition => 5 ; Prior Rehab

Post Rehab: CoF =<2 ; Condition = EOL; Prior Rehab

Post Rehab: CoF between 2 and 3 ; LoF => 5 ; Prior Rehab

Post Rehab: CoF =<2 ; LoF = EOL; Prior Rehab

Rehab

CoF between 2 and 3 ; Condition = > 4 ; No Prior

CoF between 2 and 3 ;LoF = > 4 ; No Prior

CoF < 2 ; Condition =>5 ; No Prior

CoF < 2 ; LoF =>5 ; No Prior

CoF between 2 and 3 ; Condition = > 4 ; Rehab Only

CoF between 2 and 3 ;LoF = > 4 ; Rehab Only

CoF < 2 ; Condition =>5 ;Rehab Only

CoF < 2 ; LoF =>5 ; Rehab Only

ArcGIS Pro - PAPA TraverseCity - Map

Project

Map

Insert

Analysis

View

Edit

Imagery

Share

Add-In

Time

Appearance

Labeling

Data

Steps: 30

1 Years

Time Snapping

Seconds

Direction

Repeat

Slower

Faster

Reverse

Span

Step

Snapping

Playback

Full Extent

Start: 1/1/2019

End: 12/31/2058

Adjust For Daylight Saving

Time Zone

Map

4/4/2028

8/8/2033

1:139,971

173.8461175°E 4.6637046°N

Selected Features: 0

Ported Workspace 5/22/2019 5:17 PM

Profile Filter: Generic Life Cycle Profile, Equipment, Assetic Life Cycle Profile A, Assetic...

Show Selected Only

Service State / RL

Service State / SP

Service State / NS

NS / RL

SP / RL

State 0

State 1

State 2

State 3

State 4

State 5

State EoL

Service State

Remaining Life (%)

Current Budget \$100K

Reactionary Budget averages

Funding Distribution Analysis

Asset Life Cycle Analysis

Capital Works Program

Year Level Comparison

2500000

2000000

1500000

1000000

500000

0

2019

2022

2025

2028

2031

2034

2037

2040

2043

2046

2049

2052

2055

2058

Years

Rehab & Repair (Condition)

Maintenance Cost

User Cost

Operational Cost

Surplus

Increase Size (Capacity)

Treatment: ☐ ☒ ☐

Year

Increase Size (Capac

Rehab & Repair (Cor

Maintenance Cost

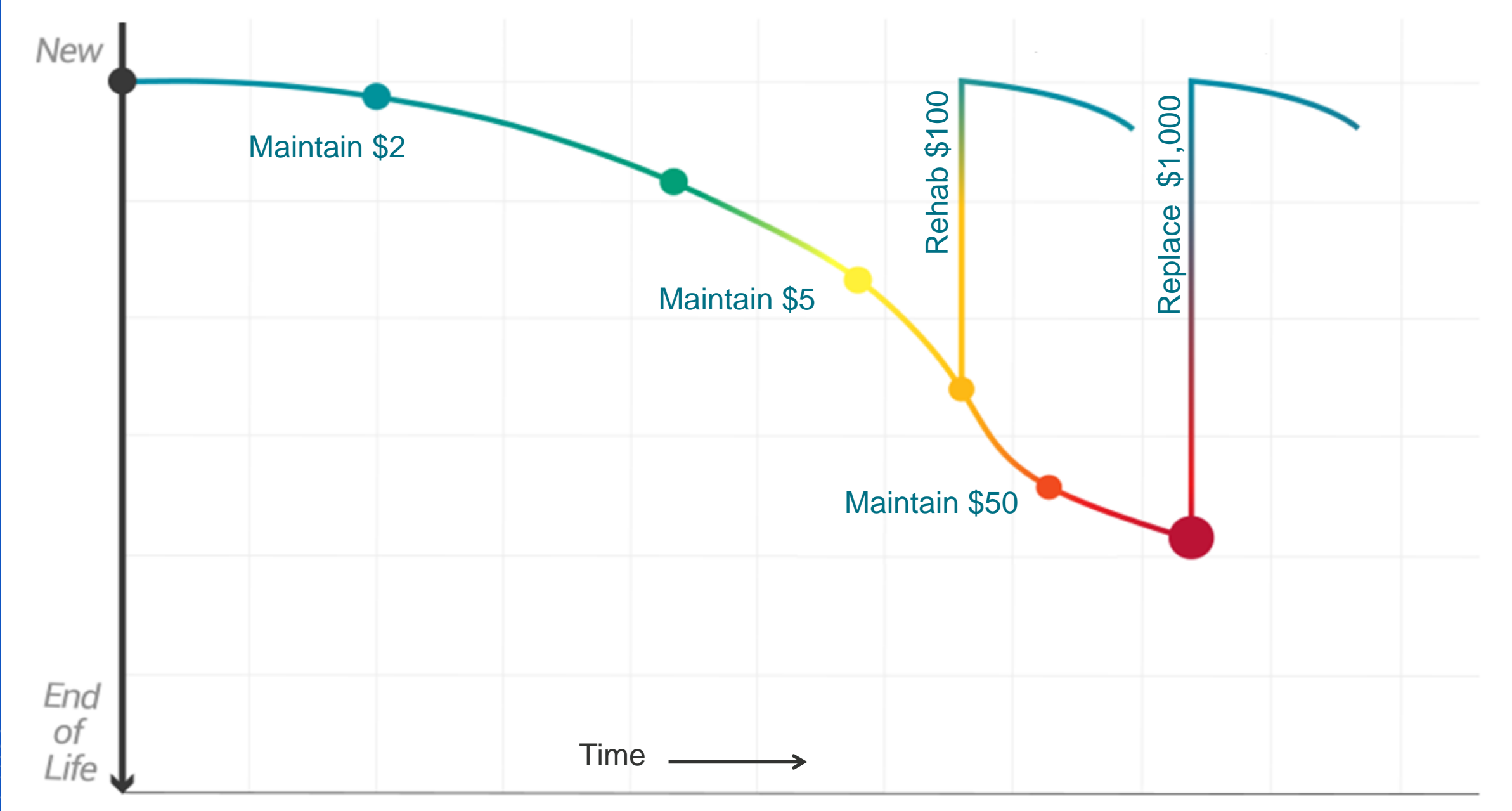
User Cost

Operational Cost

Surplus

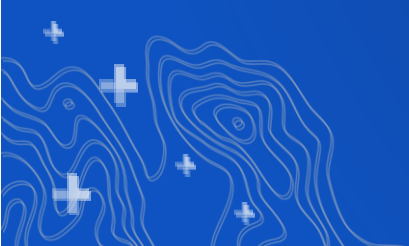
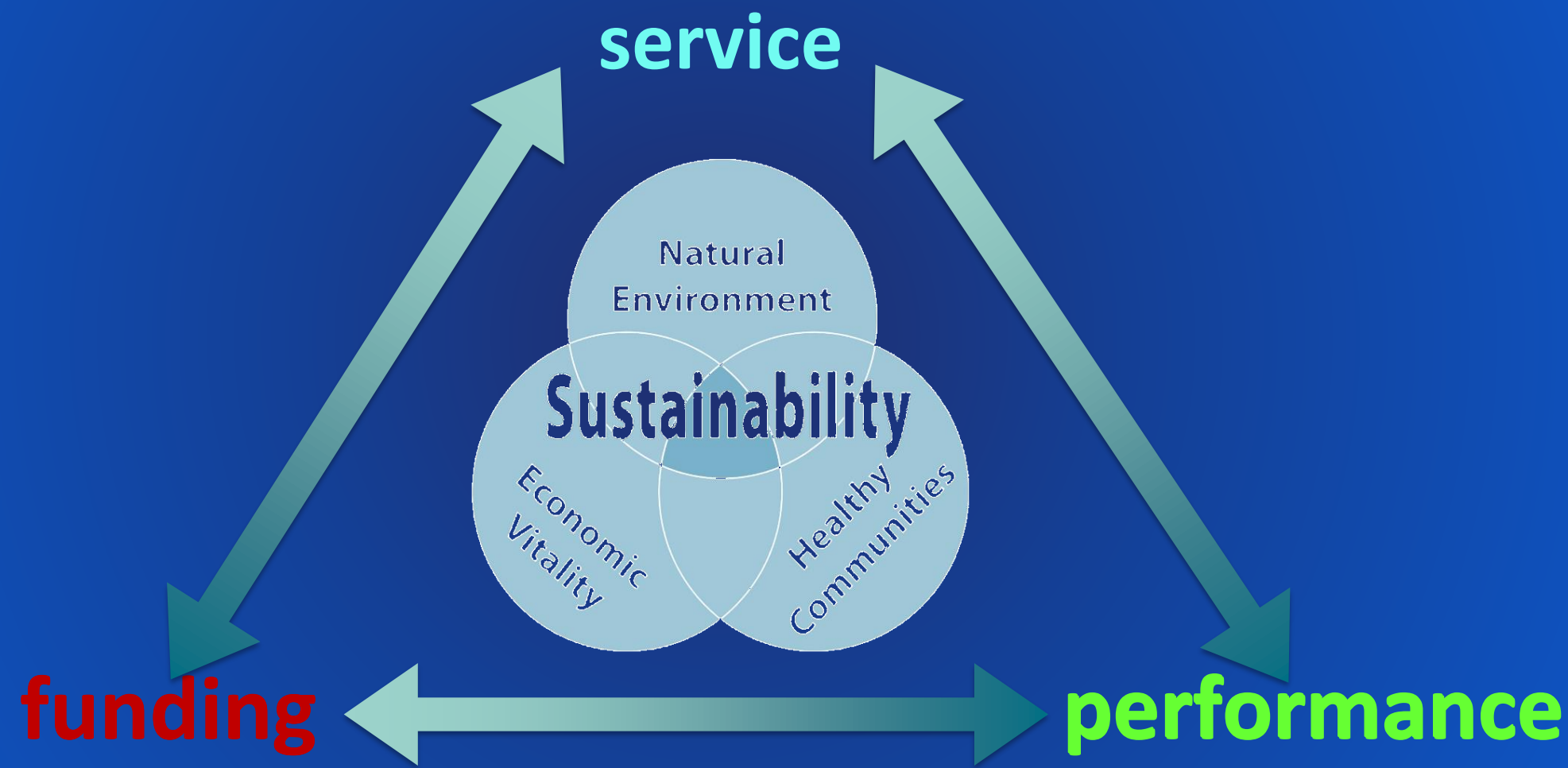
Assetic Predictor

Utilizes the science of Life Cycle Modelling



- What is the best **service** level for a given amount of funding?
- What will be the future asset **performance** if we change the current level of **funding**?
- How much **funding** is required to bring assets up to the target **performance** level?

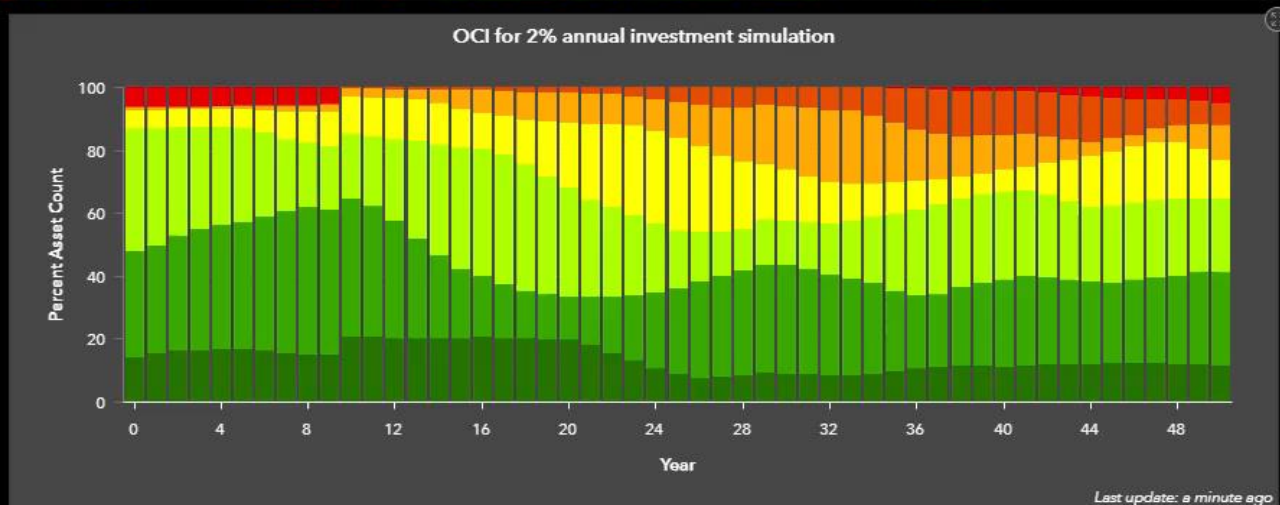
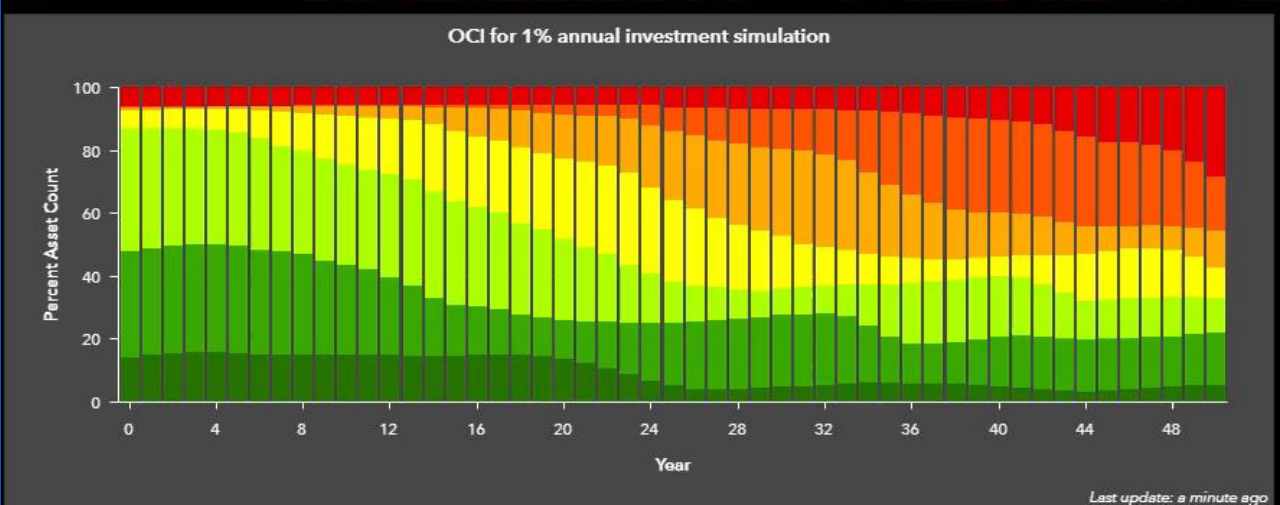
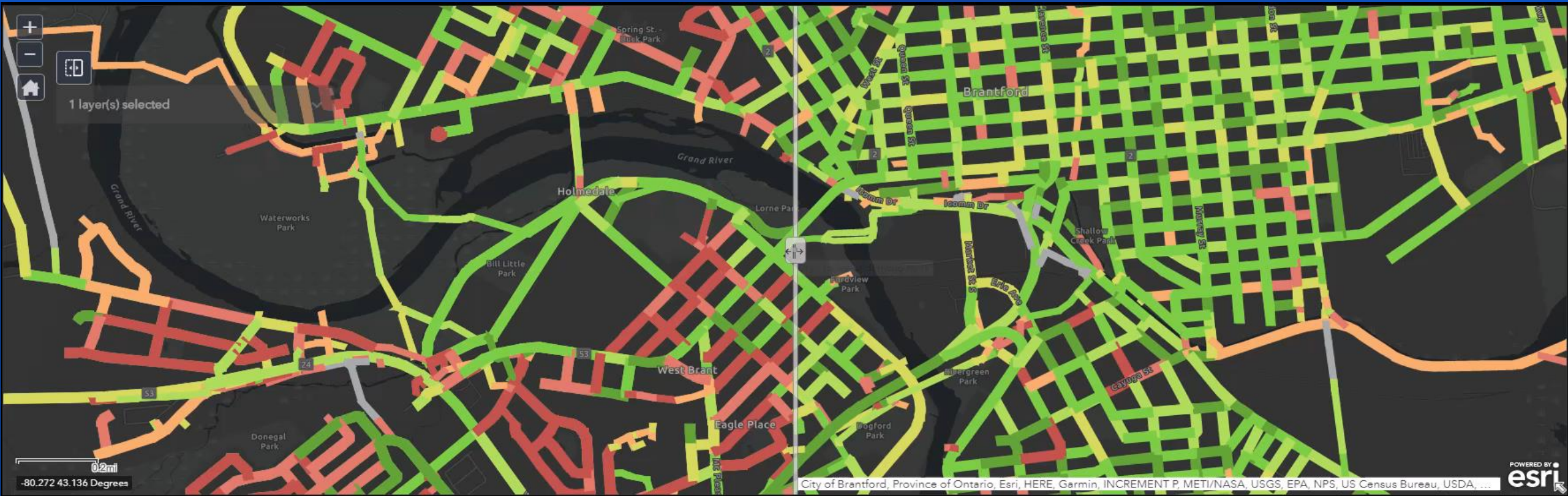






Assetic Predictor

Communicates results with Story Maps



Topeka Paves The Way to A Closed Funding Gap

The tale of the Half Cent Sales Tax

Click on the graphic to open the FIX OUR STREETS Story Map in your web browser

