



BrM 7.1 Optimization 201

2025 Bridge Management User Group Meeting
Providence, RI | September 9-10, 2025

CONTACT



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Course Overview

YESTERDAY

Before Break

- BrM 7.1 Navigation
- Inspection Data
- Utility
- Deterioration
- Benefits Groups

After Break

- Actions
- Costs
- Advanced Formulas

TODAY

Before Break

- Network Policies
- Life Cycle Policies
- Programs
- Scenarios
- Funding Allocation
- Performance Measures

After Break

- Optimization
- Projects
- LCCA Plans
- Results

15

BrM 7.1 Navigation

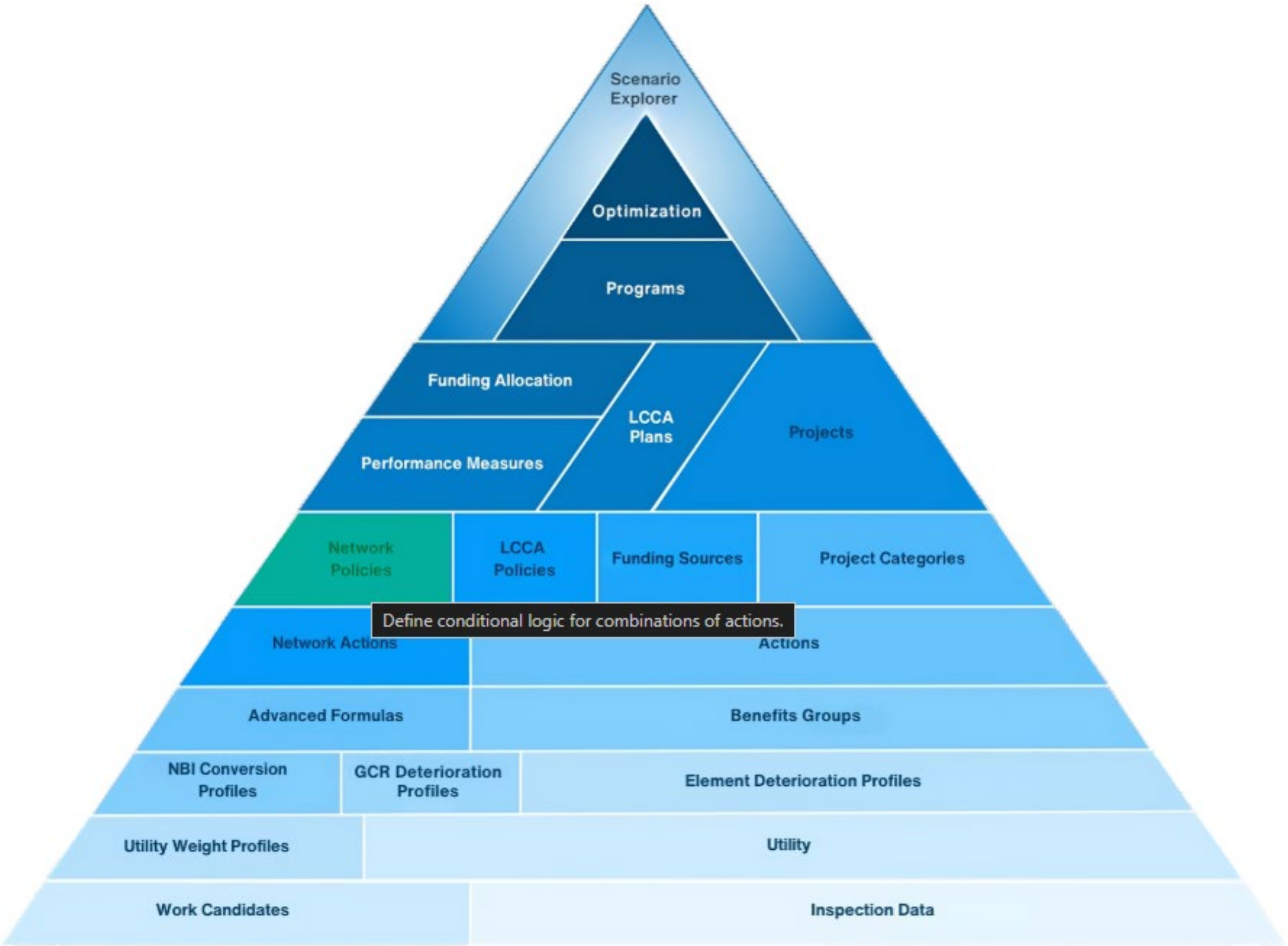


FASTER



Network Policies

Network Policies



A Crash Course in Network Asset Management

Top-Down Approach

Use approximations of projects, bridges and conditions to quickly arrive at results.

Example:

Average bridge size x
average replacement cost x
number of bridges /
number of years =
Network Funding Need

Pros: Very quick. Can be done on napkins.

Cons: Ignores condition and cost 'gotchas'



A Crash Course in Network Asset Management

Top-Down Approach

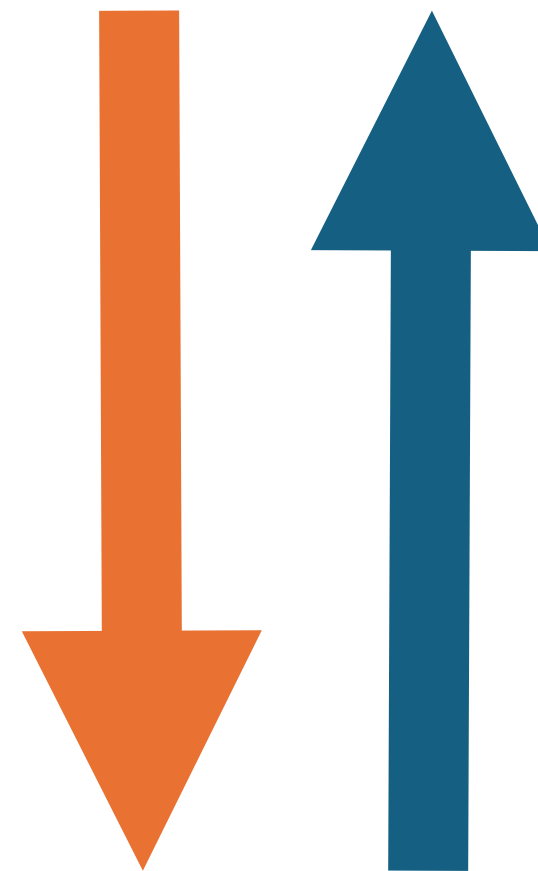
Use approximations of projects, bridges and conditions to quickly arrive at results.

Example:

Average bridge size x
average replacement cost x
number of bridges /
number of years =
Network Funding Need

Pros: Very quick. Can be done on napkins.

Cons: Ignores condition and cost 'gotchas'



Bottom-Up Approach

Consider the needs of each bridge individually and add up to a full network need.

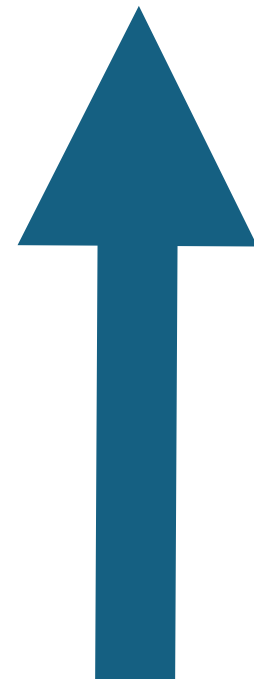
Example:

Consider the needs of Bridge 1 now and throughout its lifecycle.
Consider the needs of Bridge 2 now and throughout its lifecycle.
Consider the needs of Bridge 3 ...

Pros: Very accurate.

Cons: Can take considerable time and manpower

A Crash Course in Network Asset Management



Bottom-Up Approach
(with computers)

The Utah DOT Bridge Toolbox (2015)

Wearing Surfaces

Do Nothing
Healer Sealer
Thin Bonded Polymer Overlay
Asphalt Overlay w/ Membrane
Polyester Concrete Overlay

Deck

Do Nothing
Pothole Patching
Hydro-Demo
Deck Replacement

Ancillary

Do Nothing
Parapet Seal
Parapet Repair
Replace Parapets
Clean Joints
Seal Joints
Replace Joint Seals
Close Joints

Superstructure

Do Nothing
Spot Paint Repair
Clean & Overcoat
Repaint Beams
Beam Repair
Bearing Replacement

Substructure

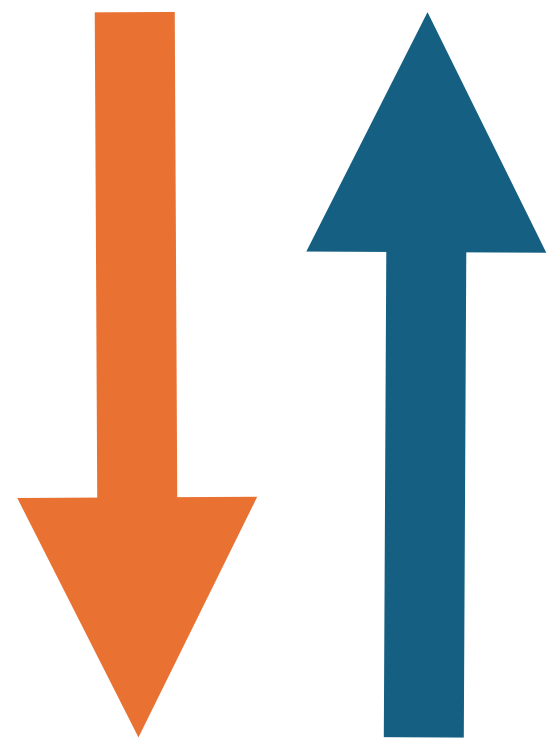
Do Nothing
Backwall Repair
Column Repair
Column Wrap
Bent Repair
Bent Wrap

$$2^{29} = 536,870,912 \text{ combinations per bridge}$$

For a state of 5,000 bridges, that would take
4,256 years to calculate at current technology.

A Crash Course in Network Asset Management

Middle Approach
(with computers)



Deck

Do Nothing
Preserve Deck
Rehab Deck
Replace Deck

Superstructure

Do Nothing
Preserve Super
Rehab Super
Replace Super

Substructure

Do Nothing
Preserve Sub
Rehab Sub
Replace Sub

Preserve Deck

Thin Bonded Polymer
Pothole Patching
Parapet Sealing
Seal Joints

Rehab Deck

Asphalt w/ Membrane
Hydro-Demo
Parapet Repair
Close Joints

$4 \times 4 \times 4 = 64$ combinations per bridge

A Crash Course in Network Asset Management

Deck

Do Nothing
Preserve Deck
Rehab Deck
Replace Deck

Superstructure

Do Nothing
Preserve Super
Rehab Super
Replace Super

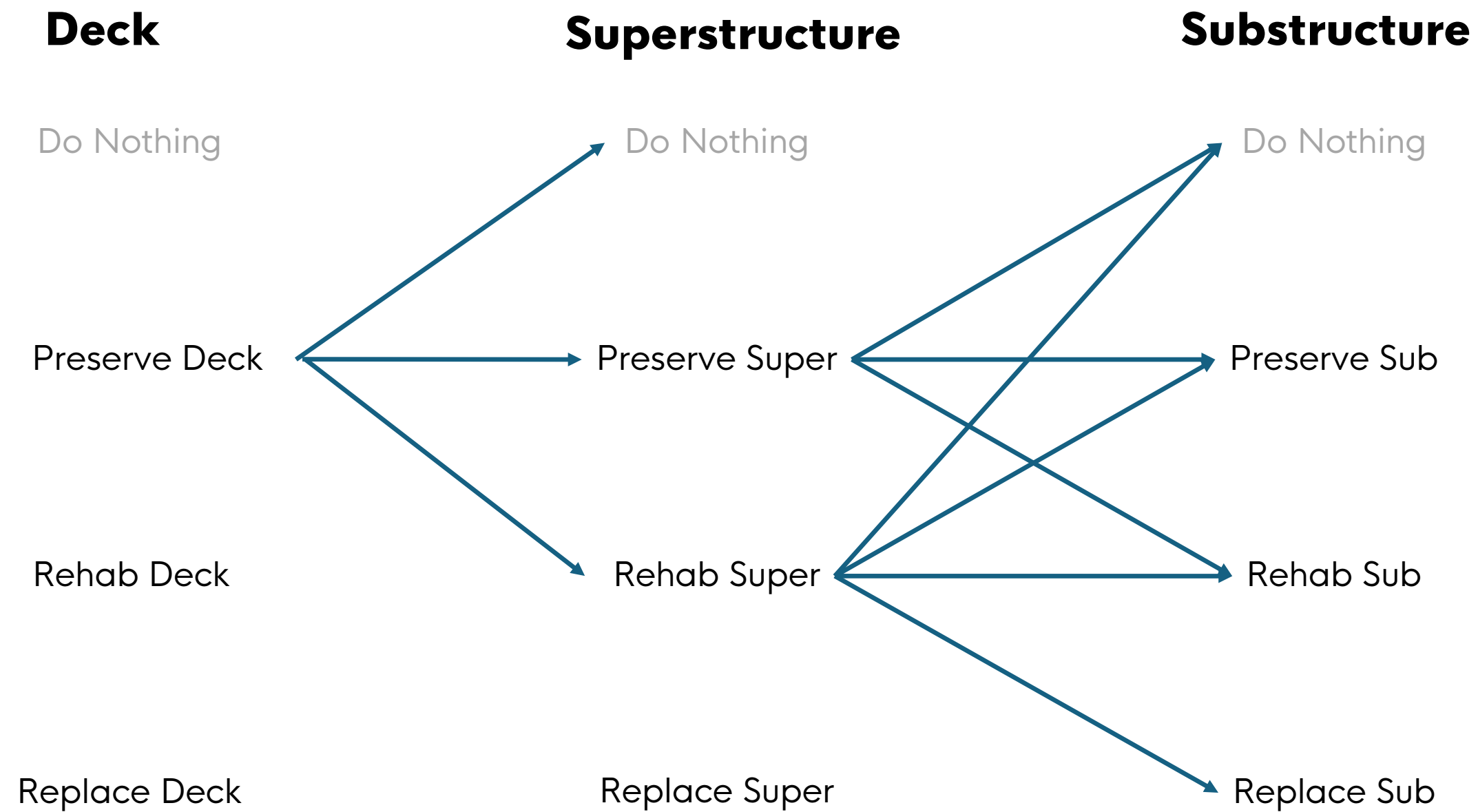
Substructure

Do Nothing
Preserve Sub
Rehab Sub
Replace Sub

$4 \times 4 \times 4 = 64 \text{ combinations per bridge}$

Deck	Superstructure	Substructure
Preserve Deck	Do Nothing	Do Nothing
Preserve Deck	Do Nothing	Preserve Sub
Preserve Deck	Do Nothing	Rehab Sub
Preserve Deck	Do Nothing	Replace Sub
Preserve Deck	Preserve Super	Do Nothing
Preserve Deck	Preserve Super	Preserve Sub
Preserve Deck	Preserve Super	Rehab Sub

Network Policies



Network Policies

AASHTOWare™
Bridge Management

Settings » Modeling Configuration » Network Policies

Edit Network Policy

Details

Actions

+

Add New

Edit

Delete

Preserve Deck - Network

Do Nothing

Rehab Super - Network

Repaint Super/Sub - Network

Paint Super - Network

Do Nothing

Rehab Sub - Network

Do Nothing

Paint Sub - Network

Save

Save & Close

Cancel

Delete

AASHTOWare™
BRIDGE
MANAGEMENT

Network Policies

AASHTOWare™
Bridge Management

Settings » Modeling Configuration » Network Policies

Edit Network Policy

Details Actions

+ Add New

Edit

Delete

Nothing

per - Network

er/Sub - Network

per - Network

Do Nothing

Rehab Sub - Network

Do Nothing

Paint Sub - Network

AASHTOWare™
Bridge Management

Settings » Modeling Configuration » Network Policies

Edit Network Policy

Details Actions

Name *

MAYDOT - Preserve Deck

Project Category *

Preservation

☒ Active

Save

Save & Close

Cancel

Delete

Save

Save & Close

Cancel

Delete

AASHTOWare™
BRIDGE
MANAGEMENT

Preserve D

Preserve D

Project Category *

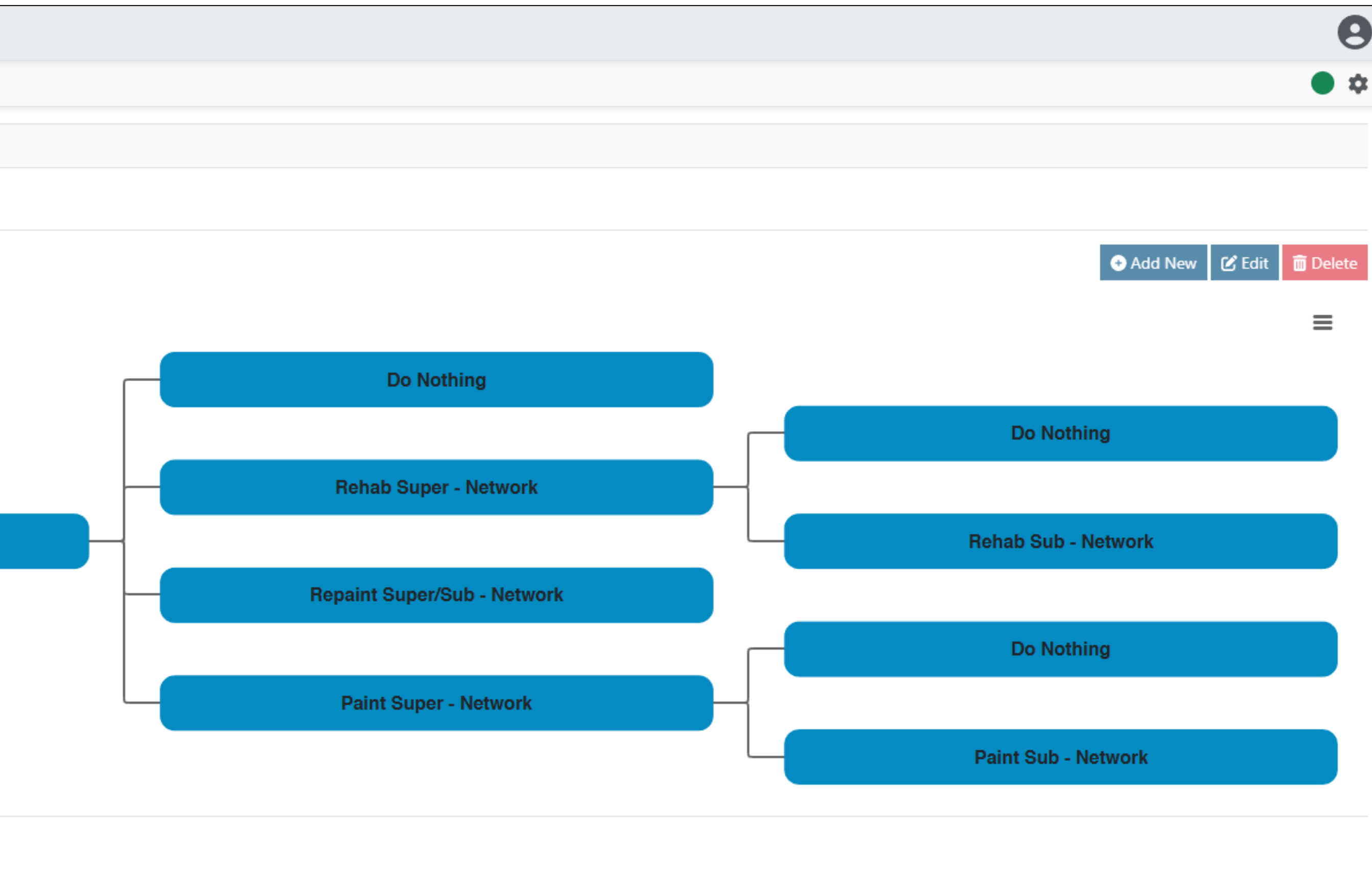
Preservation

☒ Active

Save Save & Close Cancel Delete

Save Save & Close Cancel Delete

Network Policies



AASHTOWare™
Bridge Management

Settings > Modeling Configuration > Network Policies

Edit Network Policy Action

Action *
Rehab Super - Network

Rule Summary
(Column 'SuperstructureRating' of Table 'BridgeInspection' Is In Set '4 4 Poor, 5 5 Fair, 6 6 Satisfactory')

Action Conditional Rule

Add ConditionAdd Group

Condition 1

Rule Type *
Column Value in Param Set

Type *
Bridge Inspection

Field *
SuperstructureRating

Must Be *
In

6 Satisfactory
5 Fair
4 Poor

Edit

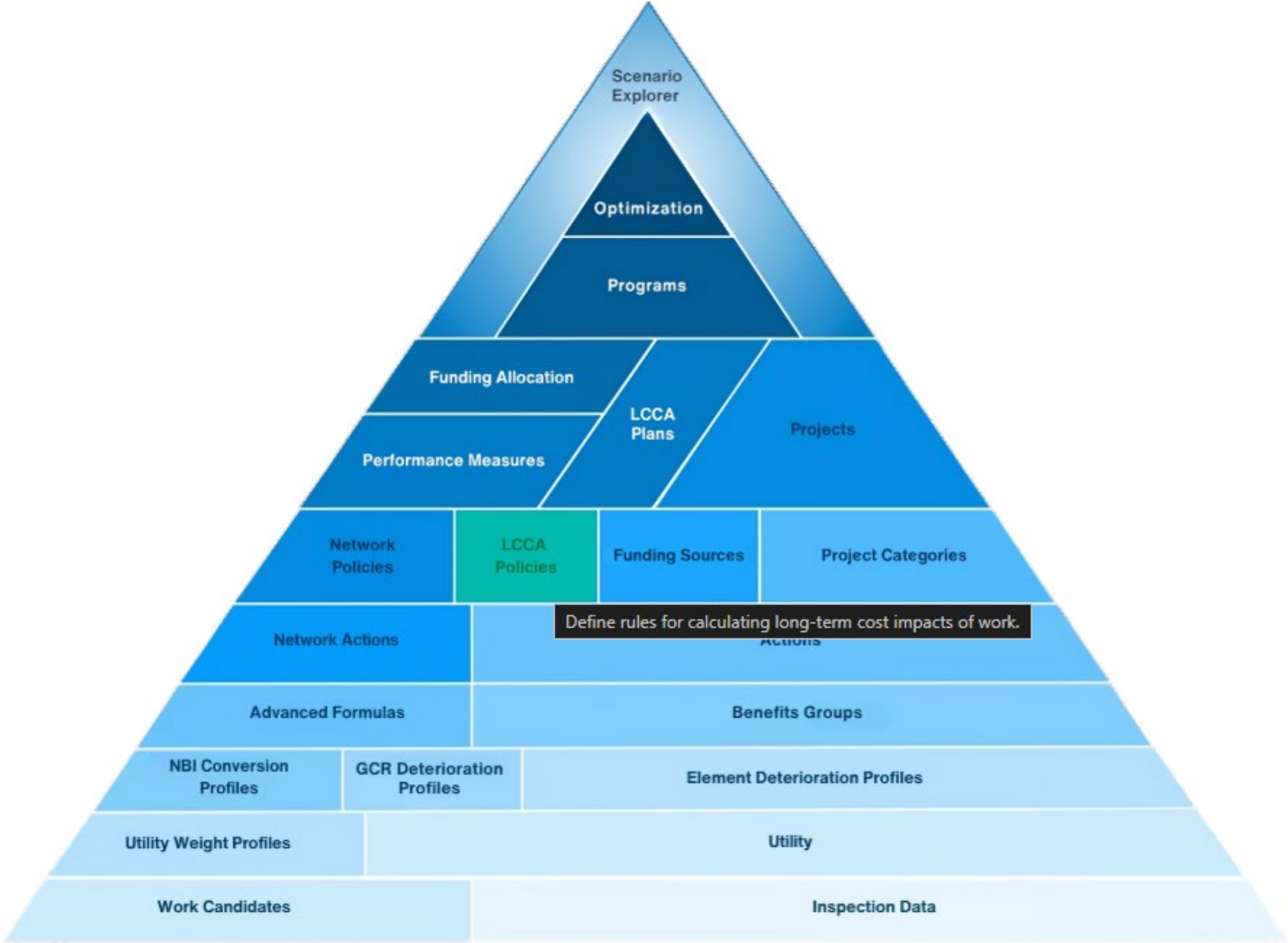
Remove Condition

SaveSave & CloseCancelDelete




Life Cycle Policies



Life Cycle Policies




Life Cycle Policies


 AASHTOWare™
Bridge Management


Settings > Modeling Configuration > LCCA Policies














 

LCCA Policies



 Export

 Add New

Name ↑	Description ↑↓	Standard ↑↓	Active ↑↓	
Culvert Policy		True	True	 
Deck Policy		True	True	 
Deck Policy 2		False	True	  
Structure Overall		True	True	 
Substructure Policy		True	True	 
Superstructure Policy		True	True	 




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15 ▼



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 AASHTOWare™
BRIDGE
MANAGEMENT




Life Cycle Policies



































Settings > Modeling Configuration > LCCA Policies


Edit LCCA Policy


Details

Policy Rules

Order ↑↓	Name ↑↓	Action ↑↓	
1	Preserve Deck	Preserve Deck - Network	
2	Rehab Deck	Rehab Deck - Network	
3	Deck Replace	Replace Deck - Network	
4	Apply Wearing Surface	Place Wearing Surface - Network	

 Save

 Save & Close

 Cancel

Life Cycle Policies

<

The screenshot displays the AASHTOWare Bridge Management software interface. On the left is a sidebar with a user profile icon, a green status indicator, and a settings gear. Below these is a blue button labeled '+ Add New'. The main content area features a header with the AASHTOWare logo and the text 'AASHTOWare™ Bridge Management'. Below the header is a breadcrumb trail: 'Settings > Modeling Configuration > LCCA Policies'. The main title is 'Edit LCCA Policy'. There are two tabs: 'Details' and 'Policy Rules', with 'Policy Rules' being the active tab. The 'Policy Rules' tab displays a table with columns 'Order' and 'Name'. The table lists four rules: 1. Preserve Deck, 2. Rehab Deck, 3. Deck Replacement, and 4. Apply Wear. At the bottom of the main content area are three buttons: 'Save', 'Save & Close', and 'Cancel'.

Number Input

50

AND

Condition 2

Rule Type *

Category Health Index

Type *

Number Value

Field *

Decks/Slab

Must Be *

Less Than or Equal To

Number Input *

90

AND

Group

Condition 1

Life Cycle Policies

AASHTOWare™
Bridge Management

Settings » Modeling Configuration » Assign LCCA Policies

Assign LCCA Policies

Filter

None

Layout

Bridge List

Export

Add to Selected

Add to All

<input type="checkbox"/>	BridgeID ↑↓	Highway Agency District (B.L.04) ↑↓	County Code (B.L.02) ↑↓	Owner (B.CL.01) ↑↓	Maintenance Responsibility (B.CL.02) ↑↓	Year Built (B.W.01) ↑↓	LCCAPolicy ↑↓	
<input type="checkbox"/>	0000000000000001	Name 5		S01 State transportation department	S01 State transportation department	2021	Structure Overall	
<input type="checkbox"/>	0000000000000002	Name 5		S01 State transportation department	S01 State transportation department	1925	Structure Overall	
<input type="checkbox"/>	0000000000000003	Name 4		S01 State transportation department	S01 State transportation department	2009	Structure Overall	
<input type="checkbox"/>	0000000000000004	Name 5		S01 State transportation department	S01 State transportation department	1925	Structure Overall	
<input type="checkbox"/>	0000000000000005	Name 1		S01 State transportation department	S01 State transportation department	1958	Structure Overall	
<input type="checkbox"/>	0000000000000006	Name 4		L03 City or municipal highway agency	L03 City or municipal highway agency	1858	Structure Overall	
<input type="checkbox"/>	0000000000000007	Name 4		S01 State transportation department	S01 State transportation department	2022	Structure Overall	
<input type="checkbox"/>	0000000000000008	Name 7		S01 State transportation department	S01 State transportation department	1926	Structure Overall	
<input type="checkbox"/>	0000000000000009	Name 3		S01 State transportation department	S01 State transportation department	1928	Structure Overall	
<input type="checkbox"/>	0000000000000010	Name 6		S01 State transportation department	S01 State transportation department	1918	Structure Overall	
<input type="checkbox"/>	0000000000000011	Name 5		S01 State transportation department	S01 State transportation department	1925	Structure Overall	
<input type="checkbox"/>	0000000000000012	Name 1		S01 State transportation department	S01 State transportation department	2005	Structure Overall	
<input type="checkbox"/>	0000000000000013	Name 4		L04 Local park, forest, or reservation agency	L04 Local park, forest, or reservation agency		Structure Overall	
<input type="checkbox"/>	0000000000000014	Name 4		S01 State transportation department	S01 State transportation department	1962	Structure Overall	
<input type="checkbox"/>	0000000000000015	Name 4		S01 State transportation department	S01 State transportation department	2022	Structure Overall	

<< < 1 2 3 4 5 > >>

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15

AASHTOWare™

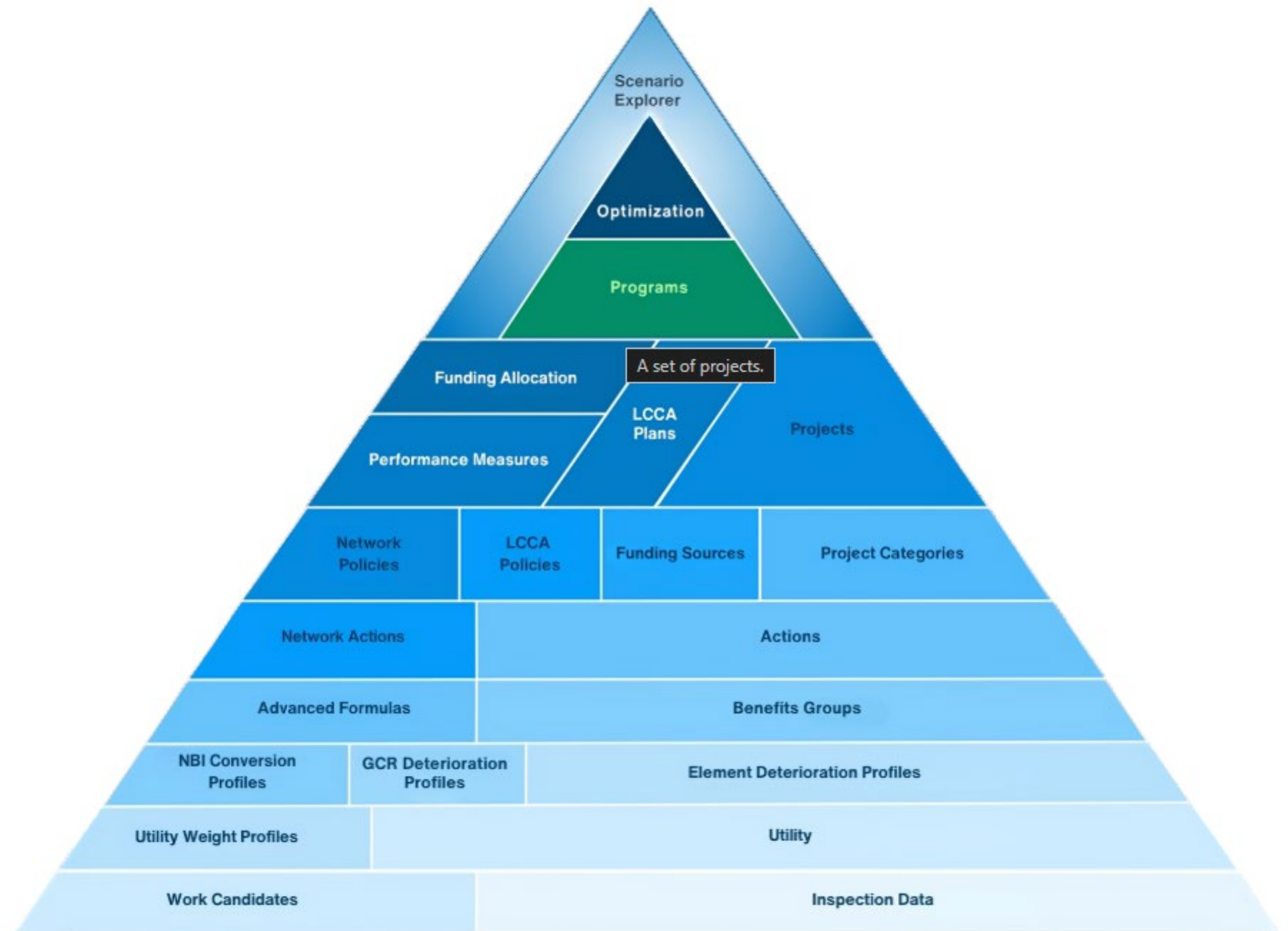
BRIDGE

MANAGEMENT



Programs

Programs



Programs

Programs » Program List

Program List

Filter

None































Layout

Program List

Jump to Program

Export

Add New































Program Name	Alternate ID	Description	Start Year	End Year	Status	
10% Poor Target		10 Percent Poor target.	2025	2034	Active	  
10% Poor Target (10 Yrs)		10 Percent Poor target.	2025	2034	Planned	  
20-year Bridge Program		20-year program run on Bridges reported to FHWA.	2025	2044	Planned	  
Example Program			2026	2035	Planned	  
Program 1			2025	2059	Planned	  
Program 2			2025	2030	Planned	  
Program 3			2025	2030	Planned	  
Program 4			2025	2059	Planned	  
Zac's First Flight in 7.1			2025	2032	Planned	  
Zac's Rainbow Chart Example		Zac's effort to create a 6 scenario rainbow chart.	2025	2045	Planned	  

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1 - 10 of 10

15

Programs

	Start Year ↑↓ ▾	End Year ↑↓ ▾	Status ↑↓ ▾	
et.	2025	2034	Active	  
et.	2025	2034	Planned	  
n on Bridges reported to FHWA.	2025	2044	Planned	  
	2026	2035	Planned	  
	2025	2059	Planned	  
	2025	2030	Planned	  
	2025	2030	Planned	  
	2025	2059	Planned	  
	2025	2032	Planned	  
e a 6 scenario rainbow chart.	2025	2045	Planned	  

AASHTOWare™
Bridge Management

Programs > Program List

Create Program

Validation Messages 2

⚠

The Program does not have any Network Policies associated to it. At least one Network Policy must be added to the Program in order to add it to the optimization queue.

⚠

The Program does not have a Subdivision Profile associated to it. A Subdivision Profile must be added to the Program in order to add it to the optimization queue.

Details

Configuration

Name *

Program Status *

Planned ▾

Structure Weights Formula *

Undefined ▾































Program Start Year *


Undefined ▾


Program End Year *

Undefined ▾

Programs

	Start Year ↑↓ ▾	End Year ↑↓ ▾	Status ↑↓ ▾	
get.	2025	2034	Active	  
get.	2025	2034	Planned	  
n on Bridges reported to FHWA.	2025	2044	Planned	  
	2026	2035	Planned	  
	2025	2059	Planned	  
	2025	2030	Planned	  
	2025	2030	Planned	  
	2025	2059	Planned	  
	2025	2032	Planned	  
e a 6 scenario rainbow chart.	2025	2045	Planned	  

 AASHTOWare™
Bridge Management



Programs > Program List

Create Program

Validation Messages 2

⚠ The Program does not have any Network Policies associated to it. At least one Network Policy must be added to the Program in order to add it to the optimization queue.

⚠ The Program does not have a Subdivision Profile associated to it. A Subdivision Profile must be added to the Program in order to add it to the optimization queue.

Details

Configuration

Name *

Program Status *

Planned ▾

Structure Weights Formula *

Undefined ▾































Program Start Year *

Undefined ▾

Program End Year *

Undefined ▾

Programs

	Start Year ↑↓ ▾	End Year ↑↓ ▾	Status ↑↓ ▾	
get.	2025	2034	Active	  
get.	2025	2034	Planned	  
n on Bridges reported to FHWA.	2025	2044	Planned	  
	2026	2035	Planned	  
	2025	2059	Planned	  
	2025	2030	Planned	  
	2025	2030	Planned	  
	2025	2059	Planned	  
	2025	2032	Planned	  
e a 6 scenario rainbow chart.	2025	2045	Planned	  

Validation Messages 2

- ⚠ The Program does not have any Network Policies associated to it. At least one Network Policy must be added to the Program in order to add it to the optimization queue.
- ⚠ The Program does not have a Subdivision Profile associated to it. A Subdivision Profile must be added to the Program in order to add it to the optimization queue.

Details

Configuration

Name *

Program Status *

Planned ▾

Structure Weights Formula *

Undefined ▾

Program Start Year *

Undefined ▾

Program End Year *































Undefined ▾

Required Minimum Cost

Bridge Filter *

Undefined ▾

Description

	Start Year ↑↓	End Year ↑↓	Status ↑↓	
jet.	2025	2034	Active	  
jet.	2025	2034	Planned	  
n on Bridges reported to FHWA.	2025	2044	Planned	  
	2026	2035	Planned	  
	2025	2059	Planned	  
	2025	2030	Planned	  
	2025	2030	Planned	  
	2025	2059	Planned	  
	2025	2032	Planned	  
e a 6 scenario rainbow chart.	2025	2045	Planned	  

Details

Configuration

Name *

Program Status *

Planned

Structure Weights Formula *

Undefined

Program Start Year *

Undefined

Program End Year *

Undefined































Required Minimum Cost

Bridge Filter *

Undefined































Description

Notes

	Start Year ↑↓	End Year ↑↓	Status ↑↓	
jet.	2025	2034	Active	  
jet.	2025	2034	Planned	  
n on Bridges reported to FHWA.	2025	2044	Planned	  
	2026	2035	Planned	  
	2025	2059	Planned	  
	2025	2030	Planned	  
	2025	2030	Planned	  
	2025	2059	Planned	  
	2025	2032	Planned	  
e a 6 scenario rainbow chart.	2025	2045	Planned	  

Program Status	Planned
Structure Weights Formula *	Undefined
Program Start Year *	Undefined
Program End Year *	Undefined
Required Minimum Cost	
Bridge Filter *	Undefined
Description	
Notes	
Program Alternate ID	
Program Objectives	Undefined

Programs


	Start Year ↑↓ ▾	End Year ↑↓ ▾	Status ↑↓ ▾	
jet.	2025	2034	Active	  
jet.	2025	2034	Planned	  
n on Bridges reported to FHWA.	2025	2044	Planned	  
	2026	2035	Planned	  
	2025	2059	Planned	  
	2025	2030	Planned	  
	2025	2030	Planned	  
	2025	2059	Planned	  
	2025	2032	Planned	  
e a 6 scenario rainbow chart.	2025	2045	Planned	  


AASHTOWare™
Bridge Management

Programs > Program List

Create Program

Validation Messages 2

 The Program does not have any Network Policies associated to it. At least one Network Policy must be added to the Program in order to add it to the optimization queue.

 The Program does not have a Subdivision Profile associated to it. A Subdivision Profile must be added to the Program in order to add it to the optimization queue.

Details

Configuration

Configuration Data

NBI Deterioration Method *

NBI Converter

☒ Residual Health Index Approximation

Long Term Analysis Period

50































Inflation Estimation Method *

Undefined

Additional Direct Cost

%

Programs

	Start Year ↑↓ ▾	End Year ↑↓ ▾	Status ↑↓ ▾	
get.	2025	2034	Active	  
get.	2025	2034	Planned	  
n on Bridges reported to FHWA.	2025	2044	Planned	  
	2026	2035	Planned	  
	2025	2059	Planned	  
	2025	2030	Planned	  
	2025	2030	Planned	  
	2025	2059	Planned	  
	2025	2032	Planned	  
e a 6 scenario rainbow chart.	2025	2045	Planned	  

Create Program

Validation Messages 2

- ⚠ The Program does not have any Network Policies associated to it. At least one Network Policy must be added to the Program in order to add it to the optimization queue.
- ⚠ The Program does not have a Subdivision Profile associated to it. A Subdivision Profile must be added to the Program in order to add it to the optimization queue.

Details Configuration

Configuration Data

NBI Deterioration Method *

NBI Converter ▾

☒ Residual Health Index Approximation

Long Term Analysis Period

50

Inflation Estimation Method *

Undefined ▾































Additional Direct Cost

%

Network Policies

 Edit

Programs

	Start Year ↑↓ ▾	End Year ↑↓ ▾	Status ↑↓ ▾	
jet.	2025	2034	Active	  
jet.	2025	2034	Planned	  
n on Bridges reported to FHWA.	2025	2044	Planned	  
	2026	2035	Planned	  
	2025	2059	Planned	  
	2025	2030	Planned	  
	2025	2030	Planned	  
	2025	2059	Planned	  
	2025	2032	Planned	  
e a 6 scenario rainbow chart.	2025	2045	Planned	  

NBI Deterioration Method *

NBI Converter

☒ Residual Health Index Approximation

Long Term Analysis Period

50

Inflation Estimation Method *

Undefined

Additional Direct Cost

%

Network Policies

Edit

No items selected

☐ Optimize Work Candidates

Utility Weight Profile

Utility Profile *

Utility Tree

Subdivision Profiles

Subdivision Profile

Undefined































Edit Network Policies

Search

- ☐ Select All
- ☐ Deck Rating to 8
- ☐ First Protective System
- ☐ MAYDOT - Paint Super/Sub
- ☐ MAYDOT - Place Wearing Surface
- ☐ MAYDOT - Preserve Deck
- ☐ MAYDOT - Preserve Super / Sub
- ☐ MAYDOT - Rehab Deck
- ☐ MAYDOT - Rehab Sub
- ☐ MAYDOT - Rehab Super
- ☐ MAYDOT - Replace Deck
- ☐ MAYDOT - Replace Structure

Ok Cancel

Programs

	Start Year ↑↓ ▾	End Year ↑↓ ▾	Status ↑↓ ▾	
jet.	2025	2034	Active	  
jet.	2025	2034	Planned	  
n on Bridges reported to FHWA.	2025	2044	Planned	  
	2026	2035	Planned	  
	2025	2059	Planned	  
	2025	2030	Planned	  
	2025	2030	Planned	  
	2025	2059	Planned	  
	2025	2032	Planned	  
e a 6 scenario rainbow chart.	2025	2045	Planned	  

☒ Residual Health Index Approximation

Long Term Analysis Period

Inflation Estimation Method *

Additional Direct Cost

 %

Network Policies

 Edit

No items selected

☐ Optimize Work Candidates

Utility Weight Profile

Utility Profile *

Subdivision Profiles

Subdivision Profile

 Save

 Cancel

Programs

Start Year ↑↓ ▾	
get.	2025
get.	2025
n on Bridges reported to FHWA.	2025
	2026
	2025
	2025
	2025
	2025
e a 6 scenario rainbow chart.	2025

No items selected

☐ Optimize Work Candidates

Utility Weight Profile

Utility Profile *

Utility Tree



Subdivision Profiles

Subdivision Profile

Undefined



Undefined

Demo Profile

Network-Wide

NHS system (Z)

Programs

Programs » Program List

Program List

Filter

None































Layout

Program List

Jump to Program

Export

Add New

Program Name	Alternate ID	Description	Start Year	End Year	Status	
10% Poor Target		10 Percent Poor target.	2025	2034	Active	  
10% Poor Target (10 Yrs)		10 Percent Poor target.	2025	2034	Planned	  
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Program 3			2025	2030	Planned	  
Program 4			2025	2059	Planned	  
Zac's First Flight in 7.1			2025	2032	Planned	  
Zac's Rainbow Chart Example		Zac's effort to create a 6 scenario rainbow chart.	2025	2045	Planned	  

<<

<

1

>

>>

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15

Programs

Export

Add New

Description ↑↓	Start Year ↑↓	End Year ↑↓	Status ↑↓	
Percent Poor target.	2025	2034	Active	
Percent Poor target.	2025	2034	Planned	
Program run on Bridges reported to FHWA.	2025	2044	Planned	
	2026	2035	Planned	
	2025	2059	Planned	
	2025	2030	Planned	
	2025	2030	Planned	
	2025	2059	Planned	
	2025	2032	Planned	
Effort to create a 6 scenario rainbow chart.	2025	2045	Planned	

AASHTOWare™ Bridge Management

Programs > Program List

Edit Program

Details

Configuration

Scenarios

Search

Add New

Name ↑	Element Deterioration Profile ↑↓	
100M	Default Profile	
20M	Default Profile	
40M	Default Profile	
60M	Default Profile	
80M	Default Profile	
Do Nothing	Default Profile	

<< < 1 > >>

15

1 - 6 of 6

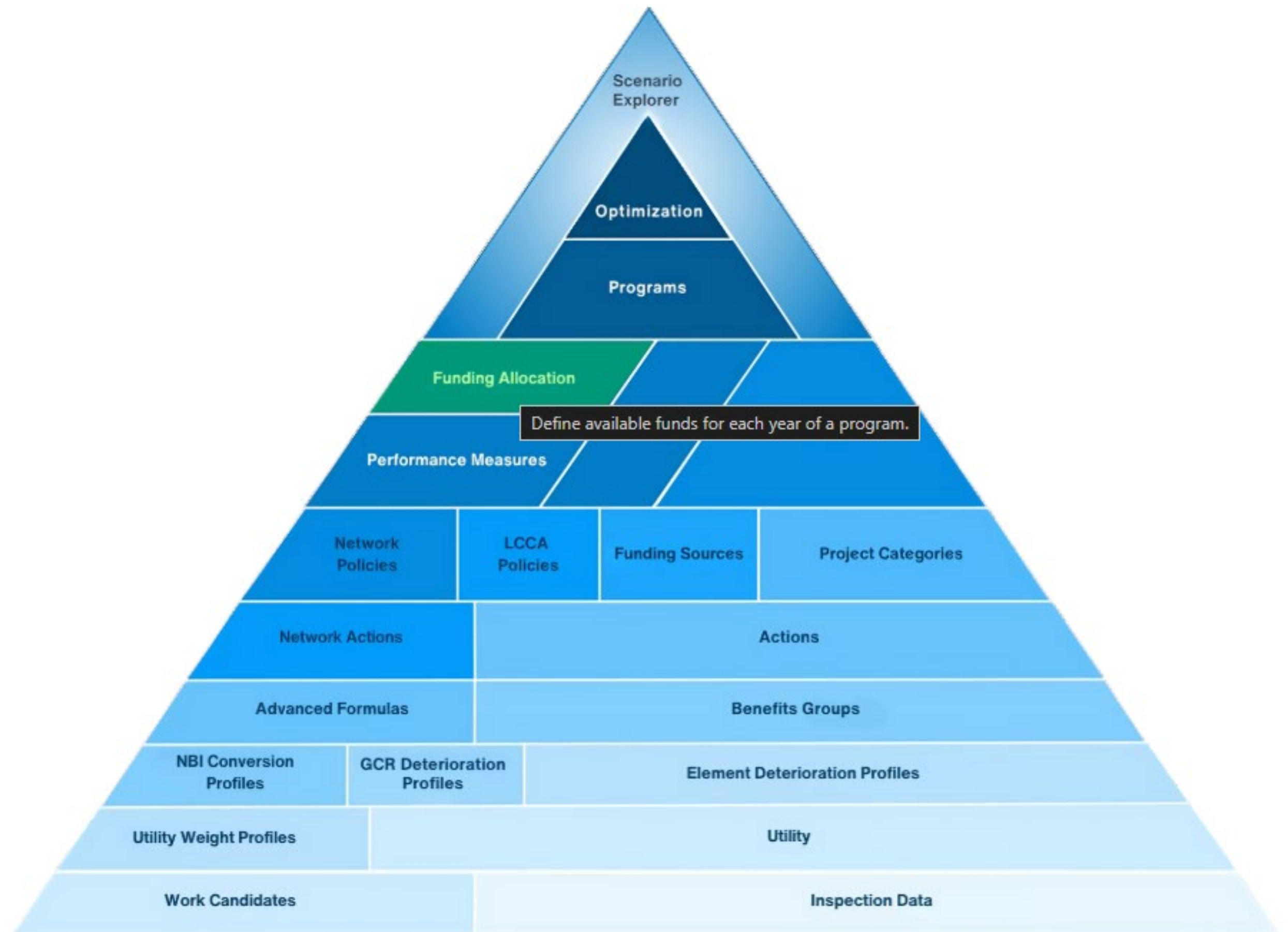
Save

Save & Close

Cancel

Delete

Funding Allocation



Funding Allocation

AASHTOWare™
Bridge Management

Programs > Funding Allocation

Funding Allocation

Program

20-year Bridge Program

Scenario

100M

Funding Source

+ Add New

Name ↑

No records to display.

<< < > >> 15 0 - 0 of 0

Budget Distribution

Total Budget

\$1,900,000,000.00

Total Allocated Funds

\$0.00

Override Additional Funds

20252026202720282029

Vare™
DGE

Funding Allocation

Budget Distribution

Total Budget

\$1,900,000,000.00

Total Allocated Funds

\$0.00

Override Additional Funds

	2025	2026	2027	2028	2029
Funding Source Funds	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
Additional Funds	\$ 0	\$ 100000000	\$ 100000000	\$ 100000000	\$ 100000000
Total Annual Budget	\$0.00	\$100,000,000.00	\$100,000,000.00	\$100,000,000.00	\$100,000,000.00
Allocated Funds	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
Available Funds	\$0.00	\$100,000,000.00	\$100,000,000.00	\$100,000,000.00	\$100,000,000.00

☐

Subdivide by Project Category

Input Method

Actual Budget Value

Get Performances

Distribute by Performance

Subdivision	Percent Good (Surface-based)	Percent Poor (Surface-based)	Utility	Total Budget per Subdivision	% Overall Budget
All				\$1,900,000,000.00	100.00 %

Funding Allocation

Budget Distribution

Total Budget
\$1,900,000,000.00

Total Allocated Funds
\$0.00

Override Additional Funds

Override Amount *
\$ 100000000

Inflation
%

Distribute Annually

Distribute Evenly

Cancel

2028

2029

\$0.00

\$0.00

Funding Source Funds

Additional Funds

\$ 0

\$ 100000000

\$ 100000000

\$ 100000000

\$ 100000000

\$ 100000000

Total Annual Budget

\$0.00

\$100,000,000.00

\$100,000,000.00

\$100,000,000.00

\$100,000,000.00

\$100,000,000.00

Allocated Funds

\$0.00

\$0.00

\$0.00

\$0.00

\$0.00

\$0.00

Available Funds

\$0.00

\$100,000,000.00

\$100,000,000.00

\$100,000,000.00

\$100,000,000.00

\$100,000,000.00

Subdivide by Project Category

Input Method

Actual Budget Value

Get Performances

Distribute by Performance

Subdivision

Percent Good (Surface-based)

Percent Poor (Surface-based)

Utility

Total Budget per Subdivision

% Overall Budget

All

\$1,900,000,000.00

100.00 %

\$

Funding Allocation

\$0.00

Override Additional Funds

	2025	2026	2027	2028	2029
Funding Source Funds	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
Additional Funds	<div>\$ 0</div>	<div>\$ 100000000</div>	<div>\$ 100000000</div>	<div>\$ 100000000</div>	<div>\$ 100000000</div>
Total Annual Budget	\$0.00	\$100,000,000.00	\$100,000,000.00	\$100,000,000.00	\$100,000,000.00
Allocated Funds	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
Available Funds	\$0.00	\$100,000,000.00	\$100,000,000.00	\$100,000,000.00	\$100,000,000.00

☐ Subdivide by Project Category

Input Method

Actual Budget Value

Get Performances

Distribute by Performance

Subdivision	Percent Good (Surface-based)	Percent Poor (Surface-based)	Utility	Total Budget per Subdivision	% Overall Budget
All				\$1,900,000,000.00	100.00 %
Total				\$1,900,000,000.00	


Save

Cancel

Subdivisions must be populated in BrM 7.1. If you are not subdividing, the easiest method is to click the Distribute by Performances Button

Funding Allocation

\$0.00

 Override Additional Funds

	2025	2026	2027	2028	2029	
Funding Source Funds	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	
Additional Funds	<input type="text" value="\$ 0"/>	<input type="text" value="\$ 100000000"/>	<input type="text" value="\$ 100000000"/>	<input type="text" value="\$ 100000000"/>	<input type="text" value="\$ 100000000"/>	<input type="text" value="\$ 100000000"/>
Total Annual Budget	\$0.00	\$100,000,000.00	\$100,000,000.00	\$100,000,000.00	\$100,000,000.00	\$100,000,000.00
Allocated Funds	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	
Available Funds	\$0.00	\$100,000,000.00	\$100,000,000.00	\$100,000,000.00	\$100,000,000.00	\$100,000,000.00

☒ Subdivide by Project Category

Input Method


 Get Performances  Distribute by Performance

Subdivision	Percent Good (Surface-based)	Percent Poor (Surface-based)	Utility	Total Budget per Subdivision	% Overall Budget	
All				\$1,900,000,000.00	100.00 %	<input type="text" value="\$"/>
Total				\$1,900,000,000.00		

 Save  Cancel

Funding Allocation

\$0.00



	2025	2026	2027	2028	2029
Funding Source Funds	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
Additional Funds	<input type="text" value="\$ 0"/>	<input type="text" value="\$ 100000000"/>	<input type="text" value="\$ 100000000"/>	<input type="text" value="\$ 100000000"/>	<input type="text" value="\$ 100000000"/>
Total Annual Budget	\$0.00	\$100,000,000.00	\$100,000,000.00	\$100,000,000.00	\$100,000,000.00
Allocated Funds	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
Available Funds	\$0.00	\$100,000,000.00	\$100,000,000.00	\$100,000,000.00	\$100,000,000.00

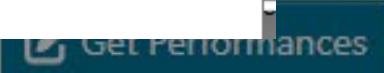

☒ Subdivide by Project Category

Input Method


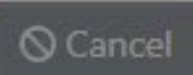
Add Project Category

Name *

- Preservation
- Preservation
- Rehabilitation
- Replacement

Subdivision	Percent Good (Surface-based)	Percent Poor (Surface-based)	Utility	Total Budget per Subdivision	% Overall Budget
All				\$1,900,000,000.00	100.00 %
Total				\$1,900,000,000.00	

Funding Allocation

☒ Subdivide by Project Category

Sort Order ↑	Name	
↕ 1	Preservation	🗑
↕ 2	Rehabilitation	🗑
↕ 3	Replacement	🗑

Input Method

Actual Budget Value

[Get Performances](#) [Distribute by Project Category](#)

Project Category	Total Budget per Category	% Budget per Category	2025	2026	2027
Preservation	\$0.00	0.00 %	\$ 0	\$ 0	\$ 0
Rehabilitation	\$0.00	0.00 %	\$ 0	\$ 0	\$ 0
Replacement	\$0.00	0.00 %	\$ 0	\$ 0	\$ 0
			\$0.00	\$0.00	\$0.00

Funding Allocation

☒ Subdivide by Project Category

Sort Order ↑	Name	
↕ 1	Preservation	🗑️
↕ 2	Rehabilitation	🗑️
↕ 3	Replacement	🗑️

Input Method
Actual Budget Value

Get Performances

Distribute by Project Category

Project Category	Total Budget per Category	% Budget per Category	2025	2026	2027
Preservation	\$0.00	0.00 %	\$ 0	\$ 0	\$ 0
Rehabilitation	\$0.00	0.00 %	\$ 0	\$ 0	\$ 0
Replacement	\$0.00	0.00 %	\$ 0	\$ 0	\$ 0
			\$0.00	\$0.00	\$0.00

Distribute by Project Category

Preservation
10 %

Rehabilitation
20 %

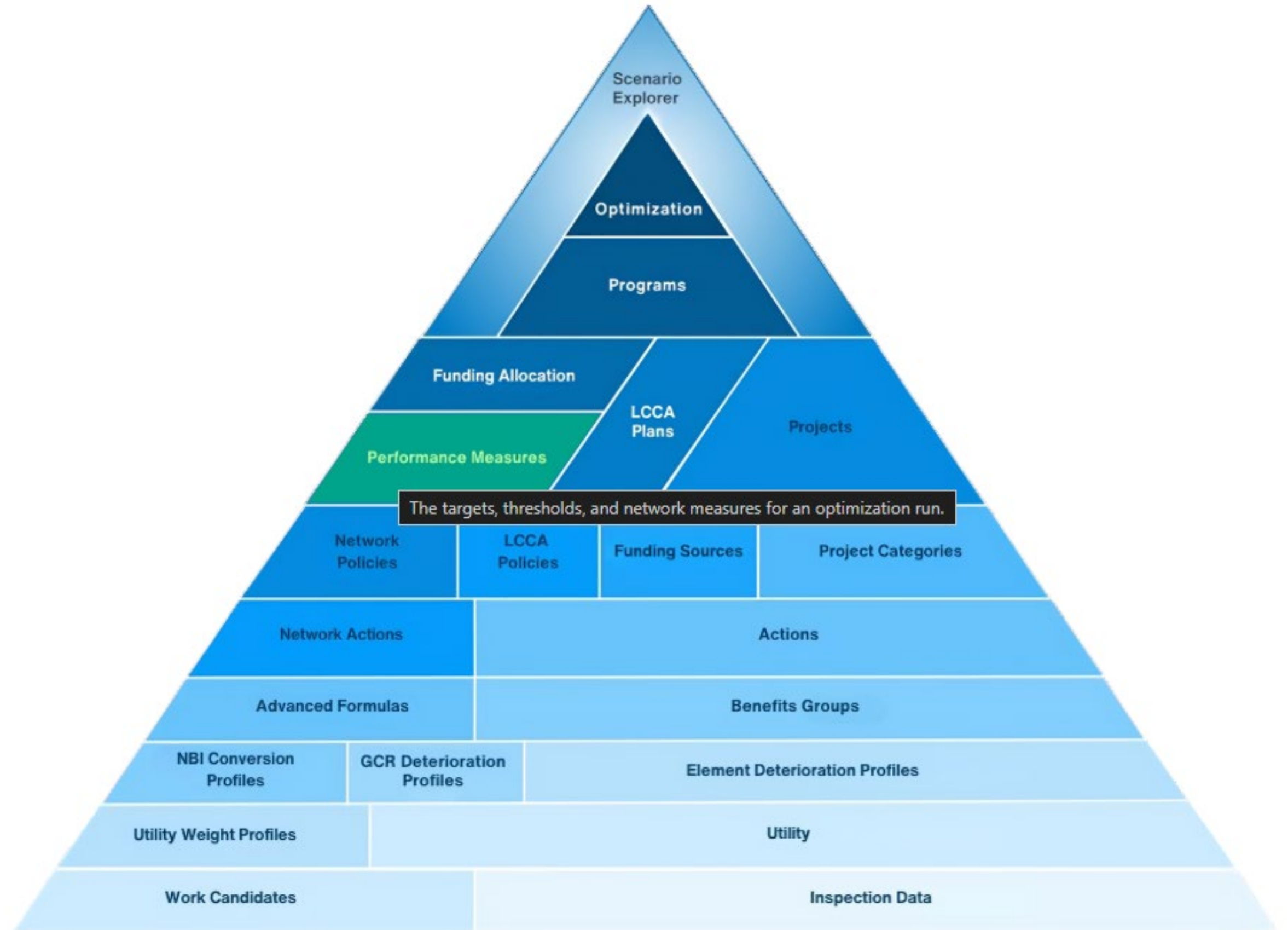
Replacement
70 %

Total
100.00%


Ok

Cancel




Performance Measures



Performance Measures

 AASHTOWare™
Bridge Management

Programs > Performance Measures



Performance Measures



Program

Scenario

20-year Bridge Program

100M

+ Add New

Name ↑	Best Value ↑↓	Worst Value ↑↓	
Percent Good (Surface-based)	100	0	
Percent Poor (Surface-based)	0	100	
Utility (Condition and Risk)	100	0	

<< < 1 > >>

15

1 - 3 of 3


Performance Constraints by Subdivision

Name ↑	Percent Good (Surface-based) Target ↑↓	Percent Poor (Surface-based) Target ↑↓	Minimum Utility (Condition and Risk) ↑↓
All			

<< < 1 > >>

15

1 - 1 of 1

 AASHTOWare™
BRIDGE
MANAGEMENT

Performance Measures

AASHTOWare™
Bridge Management

Programs > Performance Measures

Performance Measures

Program

20-year Bridge Program

Scenario

100M

Name ↑

Percent Good (Surface-based)

Percent Poor (Surface-based)

Utility (Condition and Risk)

<< < 1 > >>

15

1 - 3 of 3

Performance Constraints by Subdivision

Name ↑

Percent Good (Surface-based) Target ↑↓

Percent Poor (Surface-based) Target ↑↓

Minimum Utility (Condition and Risk) ↑↓

All

<< < 1 > >>

15

1 - 1 of 1

Edit Performance Constraints by Subdivision

Name

All

Percent Good (Surface-based) Target

Percent Poor (Surface-based) Target

Minimum Utility (Condition and Risk)

Target Utility (Condition and Risk)

Save

Cancel

Worst Value ↑↓

0

100

0

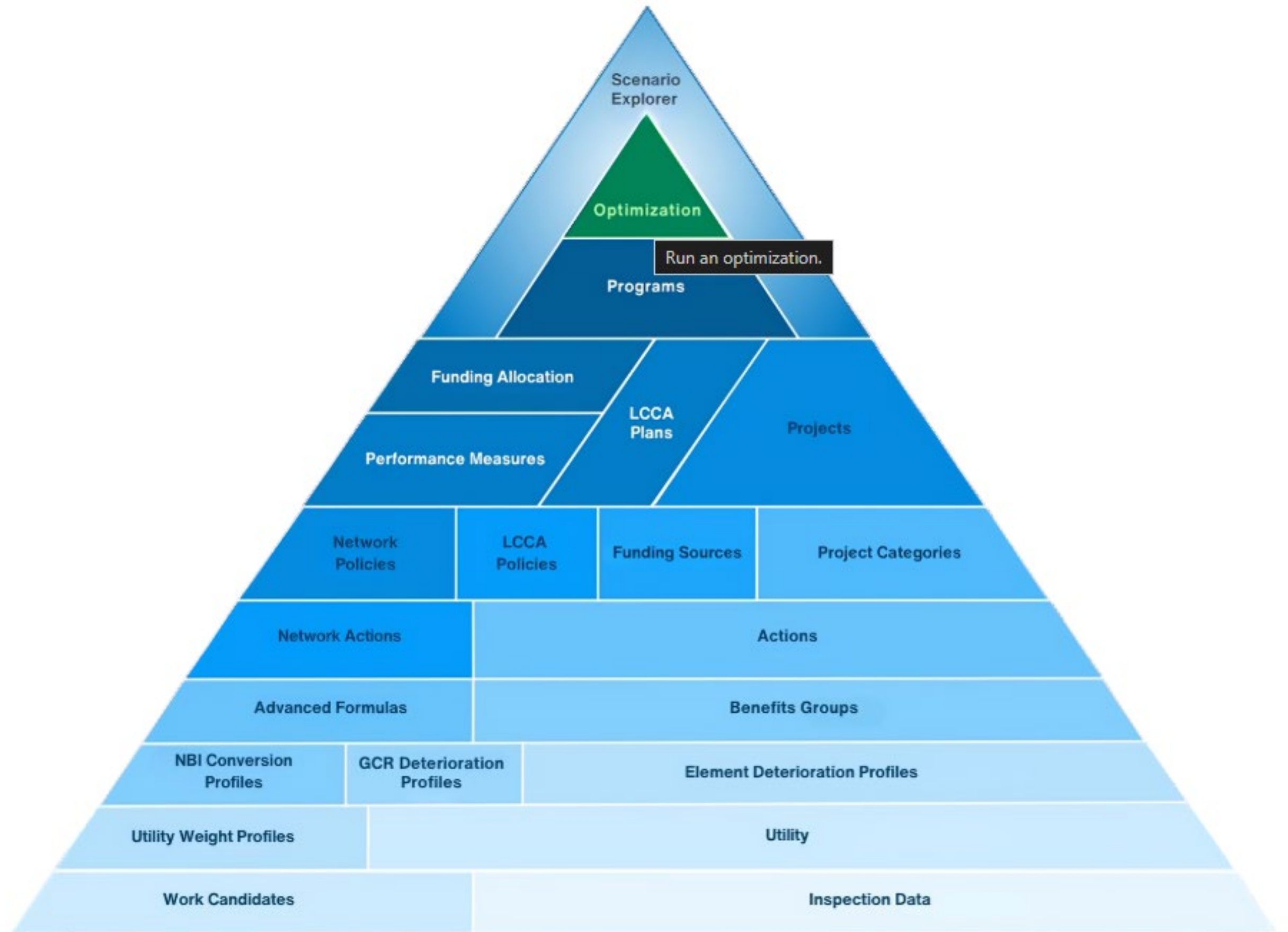
Add New

AASHTOWare™
BRIDGE
MANAGEMENT



Optimization

Optimization



Optimization

AASHTOWare™

Bridge Management

< Back

Programs

Program List

Assign Projects

Funding Allocation

Program Comparison

Program Optimization

Program Results

Executive Summary

Scenario Explorer

Performance Measures

Programs > Program Optimization

Program Optimization

Queue

Output

Alternatives Log

+ Add to Queue

ⓧ Abort

<input type="checkbox"/>	Order ↑	Program	Scenario
No records to display.			

AASHTOWare™

BRIDGE

MANAGEMENT

AASHTOWare™

Bridge Management

Back

Programs

Program List

Assign Projects

Funding Allocation

Program Comparison

Program Optimization

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Scenario Explorer

Performance Measures

Program

Program Optimization

No

Add to Optimizer Queue

Details

Program *

20-year Bridge Program

Scenario *

100M

Optimization Method *

Maximize Utility

☐ Keep Assigned Projects

☒ Respect External Frozen Projects

☒ Recalculate Structure Weight Annually

☒ Respect LCCA Plans


Program Information

Add to Queue


Abort

Scenario

Details

20-year Bridge Program 

100M ▼

Maximize Utility 

- ## Program Information

AASHTOWare™
Bridge Management

< Back

Programs

Program List

Assign Projects

Funding Allocation

Program Comparison

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Executive Summary

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Program

Pro

C

Pr

Add to Optimizer Queue

Details

Program *

20-year Bridge Program

Scenario *

100M

Optimization Method *

Maximize Utility

Maximize Utility

Minimize Cost

☒ Respect External Frozen Projects

☒ Recalculate Structure Weight Annually

☒ Respect LCCA Plans

Program Information

+ Add to Queue

⊘ Abort

Scenario

Details

20-year Bridge Program

100M

Maximize Utility

Maximize Utility

Minimize Cost

☒ Recalculate Structure Weight Annually

- ✓ Respect LCCA Plans

Program Information

The screenshot displays the AASHTOWare Bridge Management application. On the left, a sidebar menu lists various functions: Back, Programs, Program List, Assign Projects, Funding Allocation, Program Comparison, Program Optimization (highlighted with an orange arrow), Program Results, Executive Summary, Scenario Explorer, and Performance Measures. The main window shows a 'Program Optimization' section with a table of scenarios. An 'Add to Optimizer Queue' dialog box is open over this section.

Add to Optimizer Queue

Details

Program *
20-year Bridge Program

Scenario *
100M

Optimization Method *
Maximize Utility

☐ Keep Assigned Projects

☒ Respect External Frozen Projects


☒ Recalculate Structure Weight Annually


☒ Respect LCCA Plans

Program Information

In the background, the 'Program Optimization' table is visible, showing columns for Program, Scenario, and Status. Two rows are listed: '20-year Bridge Program' with scenario '100M' and status 'Not Optimal', and '20-year Bridge Program' with scenario '100M' and status 'Optimal'. Buttons for '+ Add to Queue' and '- Abort' are located at the bottom right of the dialog box.

Details

20-year Bridge Program 

100M 

▶ Maximize Utility

☐ Keep Assigned Projects

- ✓ Respect External Frozen Projects

- ☒ Recalculate Structure Weight Annually

- ✓ Respect LCCA Plans

Program Information

Optimization

Utility Weight Profile

Condition and Risk

Network Policies

MAYDOT - Rehab Deck

MAYDOT - Preserve Super / Sub

MAYDOT - Paint Super/Sub

MAYDOT - Place Wearing Surface

MAYDOT - Rehab Super

MAYDOT - Replace Structure

MAYDOT - Preserve Deck



MAYDOT - Replace Deck


MAYDOT - Rehab Sub

 Add to Queue

 Cancel

Optimization

AASHTOWare™
Bridge Management



[< Back](#)

Programs

[Program List](#)

[Assign Projects](#)

[Funding Allocation](#)

[Program Comparison](#)



[Program Optimization](#)

[Program Results](#)

[Executive Summary](#)

[Scenario Explorer](#)

[Performance Measures](#)


Programs > Program Optimization


Program Optimization

Queue

Output

Alternatives Log

 Add to Queue

 Abort

<input type="checkbox"/>	Order ↑↓	Program	Scenario
<input type="checkbox"/>	1	20-year Bridge Program	100M

Optimization

Programs » Program Optimization

Program Optimization

QueueOutputAlternatives Log

Program

20-year Bridge Program

Scenario

100M

Program Information

Start Year
2025

End Year
2044

Subdivision Profile
Network-Wide

NBI Deterioration Method
ComponentLevelDeterioration

Utility Weight Profile
Condition and Risk

Network Policies

MAYDOT - Rehab Deck

MAYDOT - Preserve Super / Sub

MAYDOT - Paint Super/Sub

MAYDOT - Place Wearing Surface

Optimization

MAYDOT - Preserve Super / Sub

MAYDOT - Paint Super/Sub

MAYDOT - Place Wearing Surface

MAYDOT - Rehab Super

MAYDOT - Replace Structure

MAYDOT - Preserve Deck

MAYDOT - Replace Deck

MAYDOT - Rehab Sub

Optimizer Progress

Optimizing Program...

74.45%

Progress Messages & Log

Copy Log to Clipboard

Optimizer Progress

Optimizing Program...

28.85%

Progress Messages & Log

Copy Log to Clipboard

Message	Time ↑
Getting Utility Tree	09/07/2025, 1
Processing Subdivisions...	09/07/2025, 1
Estimating initial conditions of all subdivisions	09/07/2025, 1
Getting inspections for ALL	09/07/2025, 1

Optimization

Subdivision Profile

Network-Wide

NBI Deterioration Method

ComponentLevelDeterioration

Utility Weight Profile

Condition and Risk

Network Policies

MAYDOT - Rehab Deck

MAYDOT - Preserve Super / Sub

MAYDOT - Paint Super/Sub

MAYDOT - Place Wearing Surface

MAYDOT - Rehab Super

MAYDOT - Replace Structure

MAYDOT - Preserve Deck

MAYDOT - Replace Deck

MAYDOT - Rehab Sub

Optimizer Progress

Complete!

Progress Messages & Log

Copy Log to Clipboard

Message

Time ↑

Running optimization version: Unknown With options Program: 20-year Bridge Program Optimization Met ... 09/07/2025, 07:32:57 AM

Clearing optimization alternative logs older than 30 runs or runs that were abandoned. 09/07/2025, 07:32:57 AM

Optimization

MAYDOT - Rehab Sub

Optimizer Progress

Complete!

Progress Messages & Log

Copy Log to Clipboard

Message	Time ↑
Running optimization version: Unknown With options Program: 20-year Bridge Program Optimization Met ...	09/07/2025, 07:32:57 AM
Clearing optimization alternative logs older than 30 runs or runs that were abandoned.	09/07/2025, 07:32:57 AM

Assigned Projects

Subdivision

Year

Export

Map

Project	Project Category	Automatic	Cost	Utility	Δ Utili
000000000000596(Rehab Super, Preserve Deck, Rehab Sub)	No Category	Automatic	\$39,802.00	89.54	
000000000000869(Preserve Deck, Rehab Super)	No Category	Automatic	\$44,362.00	83.96	
000000000000356(Rehab Deck, Rehab Sub)	No Category	Automatic	\$46,360.00	90.38	
000000000000562(Rehab Super, Preserve Deck, Rehab Sub)	No Category	Automatic	\$53,248.00	91.60	
000000000001075(Rehab Super, Rehab Sub)	No Category	Automatic	\$37,971.00	75.91	
000000000001113(Rehab Deck, Rehab Super)	No Category	Automatic	\$132,890.00	90.03	
000000000000952(Preserve Deck, Rehab Super)	No Category	Automatic	\$255,039.00	80.88	
000000000001271(Rehab Super)	Rehabilitation	Automatic	\$55,186.00	78.42	
000000000000893(Rehab Deck, Rehab Sub)	No Category	Automatic	\$90,450.00	77.70	

Optimization

MAYDOT - Rehab Sub

Optimizer Progress

Progress Messages & Log

Message

Running optimization version: Unknown

Clearing optimization alternative logs

Assigned Projects

Subdivision

All

Year

All

Export

Project

000000000000596(Rehab Super, Preser

000000000000869(Preserve Deck, Rehab

000000000000356(Rehab Deck, Rehab

000000000000562(Rehab Super, Preser

000000000001075(Rehab Super, Rehab

000000000001113(Rehab Deck, Rehab

000000000000952(Preserve Deck, Rehab

000000000001271(Rehab Super)

000000000000893(Rehab Deck, Rehab Sub)

No Category

Automatic

\$90,450.00

77.70

Assigned Projects Map

Map

Satellite

Legend

Bridges with Assigned Projects

Copy Log to Clipboard

Time ↑

09/07/2025, 07:32:57 AM

09/07/2025, 07:32:57 AM

Map

Utility

Δ Utili

2.00

89.54

2.00

83.96

0.00

90.38

8.00

91.60

1.00

75.91

0.00

90.03

9.00

80.88

6.00

78.42

Optimization

AASHTOWare™
Bridge Management

Programs » Program Optimization

Program Optimization

Queue

Output

Alternatives Log

Program	Scenario	Completed ↓	
20-year Bridge Program	100M	09/07/2025, 07:39:56 AM	
10% Poor Target	10% Poor Target	09/06/2025, 12:25:22 PM	
10% Poor Target	10% Poor Target	09/06/2025, 12:15:46 PM	
10% Poor Target	10% Poor Target	09/06/2025, 10:26:51 AM	
10% Poor Target	10% Poor Target	09/06/2025, 09:46:40 AM	
10% Poor Target	10% Poor Target	09/06/2025, 09:00:31 AM	
10% Poor Target	10% Poor Target	09/05/2025, 09:45:07 PM	
10% Poor Target	10% Poor Target	09/05/2025, 09:26:44 PM	
20-year Bridge Program	80M	09/04/2025, 10:16:13 AM	
20-year Bridge Program	60M	09/04/2025, 10:09:03 AM	
20-year Bridge Program	40M	09/04/2025, 10:01:08 AM	
20-year Bridge Program	20M	09/04/2025, 09:52:02 AM	
20-year Bridge Program	100M	09/04/2025, 09:41:23 AM	
20-year Bridge Program	60M	09/04/2025, 02:59:56 AM	
20-year Bridge Program	80M	09/04/2025, 02:20:55 AM	

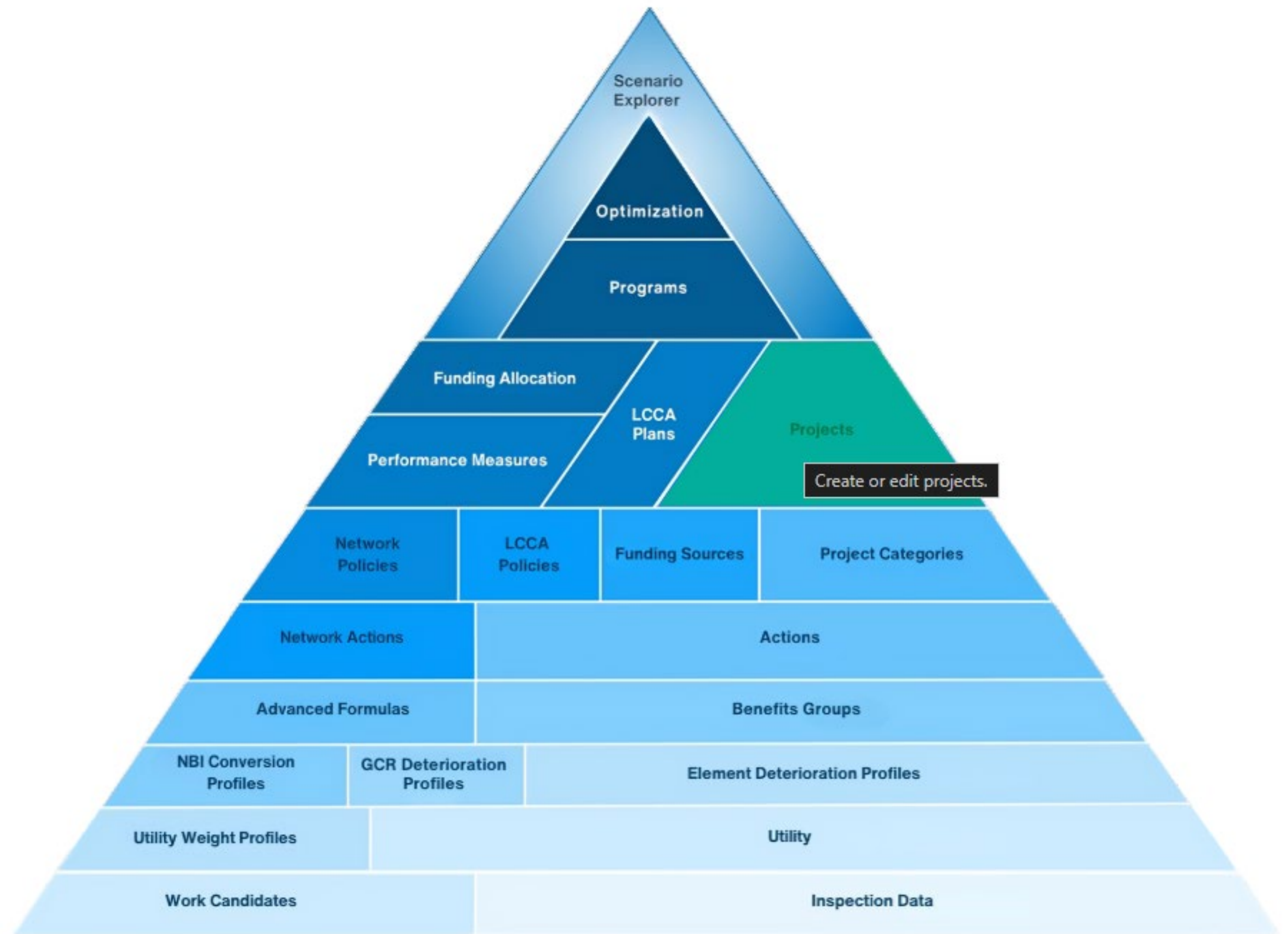
<< < 1 2 > >>

15

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Alternative logs can be downloaded to see why projects were or were not selected by the optimizer.

Projects



Projects

Projects » Projects List

Projects List

Filter

None































Layout

Project List

Jump to Project

☐ Enable Bulk Delete

Add New

Name	Alt ID	Start Date	End Date	Create Date	Generation	First Name	Status	Project Category	
000000000000001(Rehab Super)		1/1/2025			Automatic		Proposed	Rehabilitation	 
000000000000001(Rehab Super)		1/1/2025			Automatic		Proposed	Rehabilitation	 
000000000000001(Rehab Super)		1/1/2027			Automatic		Proposed	Rehabilitation	 
000000000000001(Rehab Super)		1/1/2025			Automatic		Proposed	Rehabilitation	 
000000000000001(Rehab Super)		1/1/2025			Automatic		Proposed	Rehabilitation	 
000000000000001(Rehab Super)		1/1/2045			Automatic		Proposed	Rehabilitation	 
000000000000002(Rehab Deck)		1/1/2028			Automatic		Proposed	Rehabilitation	 
000000000000002(Rehab Deck)		1/1/2039			Automatic		Proposed	Rehabilitation	 
000000000000002(Rehab Deck)		1/1/2029			Automatic		Proposed	Rehabilitation	 
000000000000002(Rehab Deck)		1/1/2040			Automatic		Proposed	Rehabilitation	 
000000000000002(Rehab Deck)		1/1/2026			Automatic		Proposed	Rehabilitation	 
000000000000002(Rehab Deck)		1/1/2043			Automatic		Proposed	Rehabilitation	 
000000000000002(Rehab Deck)		1/1/2042			Automatic		Proposed	Rehabilitation	 
000000000000002(Rehab Deck)		1/1/2033			Automatic		Proposed	Rehabilitation	 
000000000000002(Rehab Deck)		1/1/2038			Automatic		Proposed	Rehabilitation	 

<< < 1 2 3 4 5 > >>

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15

AASHTO Ware™



Projects

Programs

Assign Projects

Assign Projects

Filter

Layout

Program

Scenario

None

Project List

All

All

Assign

Unassign

<input type="checkbox"/>	Name	Alt ID	Start Date	End Date	Create Date	Generation	First Name	Status	Project Category
<input type="checkbox"/>	0000000000000001(Rehab Super)		1/1/2025			Automatic		Proposed	Rehabilitation
<input type="checkbox"/>	0000000000000001(Rehab Super)		1/1/2025			Automatic		Proposed	Rehabilitation
<input type="checkbox"/>	0000000000000001(Rehab Super)		1/1/2027			Automatic		Proposed	Rehabilitation
<input type="checkbox"/>	0000000000000001(Rehab Super)		1/1/2025			Automatic		Proposed	Rehabilitation
<input type="checkbox"/>	0000000000000001(Rehab Super)		1/1/2025			Automatic		Proposed	Rehabilitation
<input type="checkbox"/>	0000000000000001(Rehab Super)		1/1/2045			Automatic		Proposed	Rehabilitation
<input type="checkbox"/>	0000000000000002(Rehab Deck)		1/1/2028			Automatic		Proposed	Rehabilitation
<input type="checkbox"/>	0000000000000002(Rehab Deck)		1/1/2039			Automatic		Proposed	Rehabilitation
<input type="checkbox"/>	0000000000000002(Rehab Deck)		1/1/2029			Automatic		Proposed	Rehabilitation
<input type="checkbox"/>	0000000000000002(Rehab Deck)		1/1/2040			Automatic		Proposed	Rehabilitation
<input type="checkbox"/>	0000000000000002(Rehab Deck)		1/1/2026			Automatic		Proposed	Rehabilitation
<input type="checkbox"/>	0000000000000002(Rehab Deck)		1/1/2043			Automatic		Proposed	Rehabilitation
<input type="checkbox"/>	0000000000000002(Rehab Deck)		1/1/2042			Automatic		Proposed	Rehabilitation
<input type="checkbox"/>	0000000000000002(Rehab Deck)		1/1/2033			Automatic		Proposed	Rehabilitation
<input type="checkbox"/>	0000000000000002(Rehab Deck)		1/1/2038			Automatic		Proposed	Rehabilitation

<<

<

1

2

3

4

5

>

>>

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>

AASHTO

WARE

BRIDGE

MANAGEMENT

Projects

Projects » Projects List

Projects List

Filter

None






























Layout

Project List

Jump to Project

☐ Enable Bulk Delete

Add New


Name	Alt ID	Start Date	End Date	Create Date	Generation	First Name	Status	Project Category	
000000000000001(Rehab Super)		1/1/2025			Automatic		Proposed	Rehabilitation	
000000000000001(Rehab Super)		1/1/2025			Automatic		Proposed	Rehabilitation	 
000000000000001(Rehab Super)		1/1/2027			Automatic		Proposed	Rehabilitation	 
000000000000001(Rehab Super)		1/1/2025			Automatic		Proposed	Rehabilitation	 
000000000000001(Rehab Super)		1/1/2025			Automatic		Proposed	Rehabilitation	 
000000000000001(Rehab Super)		1/1/2045			Automatic		Proposed	Rehabilitation	 
000000000000002(Rehab Deck)		1/1/2028			Automatic		Proposed	Rehabilitation	 
000000000000002(Rehab Deck)		1/1/2039			Automatic		Proposed	Rehabilitation	 
000000000000002(Rehab Deck)		1/1/2029			Automatic		Proposed	Rehabilitation	 
000000000000002(Rehab Deck)		1/1/2040			Automatic		Proposed	Rehabilitation	 
000000000000002(Rehab Deck)		1/1/2026			Automatic		Proposed	Rehabilitation	 
000000000000002(Rehab Deck)		1/1/2043			Automatic		Proposed	Rehabilitation	 
000000000000002(Rehab Deck)		1/1/2042			Automatic		Proposed	Rehabilitation	 
000000000000002(Rehab Deck)		1/1/2033			Automatic		Proposed	Rehabilitation	 
000000000000002(Rehab Deck)		1/1/2038			Automatic		Proposed	Rehabilitation	 

<< < 1 2 3 4 5 > >>

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AASHIOWare™



Projects

Programs > Program Optimization

Getting Constraints

Initializing Subdivision 1 of 1

Assigned Projects

Subdivision

All

Year

All

Export

Programs > Program Optimization

09/07/2025, 07:33:37 AM

09/07/2025, 07:33:37 AM

QueueOutputAlternatives Log

Program

20-year Bridge Program

Scenario

100M

Map

Project	Project Category	Automatic	Cost	Utility	Δ Utility	Benefit / Cost (\$k)	Cost (\$k) / Benefit	Year	Frozen	Status
000000000000596(Rehab Super, Preserve Deck, Rehab Sub)	No Category	Automatic	\$39,802.00	89.54	14.14	0.000355256	\$2,814.88	2026	False	Proposed
000000000000869(Preserve Deck, Rehab Super)	No Category	Automatic	\$44,362.00	83.96	8.15	0.000183715	\$5,443.22	2026	False	Proposed
000000000000356(Rehab Deck, Rehab Sub)	No Category	Automatic	\$46,360.00	90.38	13.84	0.000298535	\$3,349.70	2026	False	Proposed
000000000000562(Rehab Super, Preserve Deck, Rehab Sub)	No Category	Automatic	\$53,248.00	91.60	6.43	0.000120755	\$8,281.20	2026	False	Proposed
000000000001075(Rehab Super, Rehab Sub)	No Category	Automatic	\$37,971.00	75.91	7.78	0.000204891	\$4,880.65	2026	False	Proposed
000000000001113(Rehab Deck, Rehab Super)	No Category	Automatic	\$132,890.00	90.03	10.95	0.000082399	\$12,136.04	2026	False	Proposed
000000000000952(Preserve Deck, Rehab Super)	No Category	Automatic	\$255,039.00	80.88	9.79	0.000038386	\$26,050.98	2026	False	Proposed
000000000001271(Rehab Super)	Rehabilitation	Automatic	\$55,186.00	78.42	5.59	0.000101294	\$9,872.22	2026	False	Proposed
000000000000893(Rehab Deck, Rehab Sub)	No Category	Automatic	\$90,450.00	77.70	12.21	0.000134992	\$7,407.87	2026	False	Proposed
000000000001138(Rehab Deck, Rehab Sub)	No Category	Automatic	\$93,630.00	98.74	0.77	0.000008224	\$121,597.71	2026	False	Proposed
000000000000989(Rehab Super, Rehab Sub)	No Category	Automatic	\$85,445.00	83.46	6.69	0.000078296	\$12,772.07	2026	False	Proposed
000000000000384(Preserve Deck, Paint Super)	No Category	Automatic	\$30,947.00	74.26	8.99	0.000290499	\$3,442.36	2026	False	Proposed
000000000001190(Rehab Super, Rehab Sub)	No Category	Automatic	\$329,660.00	61.63	13.21	0.000040072	\$24,955.30	2026	False	Proposed
000000000000125(Rehab Super)	Rehabilitation	Automatic	\$57,292.00	70.89	4.85	0.000084655	\$11,812.72	2026	False	Proposed
000000000000961(Rehab Deck, Rehab Sub)	No Category	Automatic	\$157,375.00	79.93	11.77	0.000074789	\$13,370.89	2026	False	Proposed

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1 - 15 of 3334

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AASHTO Ware™

BRIDGE

MANAGEMENT

Projects

Programs » Program Optimization

Getting Constraints

Initializing Subdivision 1 of 1

09/07/2025, 07:33:37 AM

09/07/2025, 07:33:37 AM

Assigned Projects

Subdivision

Year

All

All

Export

Map

All projects assigned to the selected Program and Scenario

Project	Project Category	Automatic	Cost	Utility	Δ Utility	Benefit / Cost (\$k)	Cost (\$k) / Benefit	Year	Frozen	Status
000000000000596(Rehab Super, Preserve Deck, Rehab Sub)	No Category	Automatic	\$39,802.00	89.54	14.14	0.000355256	\$2,814.88	2026	False	Proposed
000000000000869(Preserve Deck, Rehab Super)	No Category	Automatic	\$44,362.00	83.96	8.15	0.000183715	\$5,443.22	2026	False	Proposed
000000000000356(Rehab Deck, Rehab Sub)	No Category	Automatic	\$46,360.00	90.38	13.84	0.000298535	\$3,349.70	2026	False	Proposed
000000000000562(Rehab Super, Preserve Deck, Rehab Sub)	No Category	Automatic	\$53,248.00	91.60	6.43	0.000120755	\$8,281.20	2026	False	Proposed
000000000001075(Rehab Super, Rehab Sub)	No Category	Automatic	\$37,971.00	75.91	7.78	0.000204891	\$4,880.65	2026	False	Proposed
000000000001113(Rehab Deck, Rehab Super)	No Category	Automatic	\$132,890.00	90.03	10.95	0.000082399	\$12,136.04	2026	False	Proposed
000000000000952(Preserve Deck, Rehab Super)	No Category	Automatic	\$255,039.00	80.88	9.79	0.000038386	\$26,050.98	2026	False	Proposed
000000000001271(Rehab Super)	Rehabilitation	Automatic	\$55,186.00	78.42	5.59	0.000101294	\$9,872.22	2026	False	Proposed
000000000000893(Rehab Deck, Rehab Sub)	No Category	Automatic	\$90,450.00	77.70	12.21	0.000134992	\$7,407.87	2026	False	Proposed
000000000001138(Rehab Deck, Rehab Sub)	No Category	Automatic	\$93,630.00	98.74	0.77	0.000008224	\$121,597.71	2026	False	Proposed
000000000000989(Rehab Super, Rehab Sub)	No Category	Automatic	\$85,445.00	83.46	6.69	0.000078296	\$12,772.07	2026	False	Proposed
000000000000384(Preserve Deck, Paint Super)	No Category	Automatic	\$30,947.00	74.26	8.99	0.000290499	\$3,442.36	2026	False	Proposed
000000000001190(Rehab Super, Rehab Sub)	No Category	Automatic	\$329,660.00	61.63	13.21	0.000040072	\$24,955.30	2026	False	Proposed
000000000000125(Rehab Super)	Rehabilitation	Automatic	\$57,292.00	70.89	4.85	0.000084655	\$11,812.72	2026	False	Proposed
000000000000961(Rehab Deck, Rehab Sub)	No Category	Automatic	\$157,375.00	79.93	11.77	0.000074789	\$13,370.89	2026	False	Proposed

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AASHTO Ware™

BRIDGE

MANAGEMENT

Projects

Projects

Projects List

Edit Project

Details

Costs & Benefits

Bridges & Work

Management

Analysis

Program

Scenario

Bridge

20-year Bridge Program

100M

000000000000596

Condition

Deck Rating

7

Superstructure Rating

5

Substructure Rating

7

Culvert Rating

N

Channel Rating

8

Deck NBI Conversion Rating

9

Superstructure NBI Conversion Rating

7

Substructure NBI Conversion Rating

7

Culvert NBI Conversion Rating

Bridge Health Index

Utility

Risk

98.38

Life Cycle

Condition

78.22

Mobility

90.25

Configuration

Utility Profile

Default Utility Tree

NBI Deterioration Method

NBI Converter

Projects

Default Utility Tree

NBI Deterioration Method

NBI Converter

Work Candidates

All

<input type="checkbox"/>	Name ↑	Action	Base Utility	Δ Utility	Cost	Benefit / Cost (\$k)	Cost (\$k)
	Selected Work Candidates		85.43	5.89	\$6,730.00	0.88	
<input checked="" type="checkbox"/>	Optimizer Generated 9/7/2025	Rehab Sub - Network	85.43	3.08	\$ 4017	0.77	
<input checked="" type="checkbox"/>	Optimizer Generated 9/7/2025	Preserve Deck - Network	85.43	2.82	\$ 2713	1.04	
<input type="checkbox"/>	Optimizer Generated 9/7/2025	Rehab Super - Network	85.43	1.63	\$ 33072	0.05	

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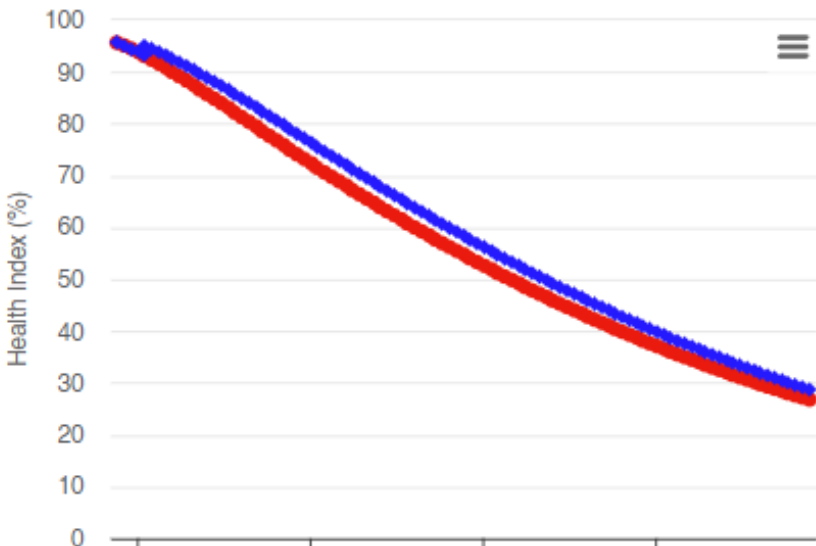
1 - 3 of 3

Charts

Bridge

Chart Type

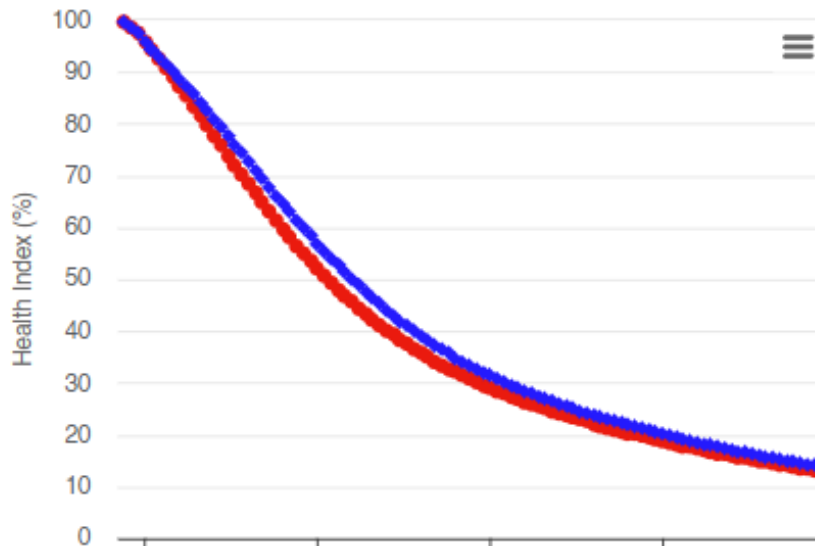
Bridge Health Index



Element

Selected Element

12 Re Concrete Deck

























Projects



Effect on Each Element

Show All Elements 



Year: 2026 (4 years after inspection)


	Element	Structure Unit	Environment	Quantity	Units	Condition	Effect
	> 12 Re Concrete Deck	0	Moderate	5178	sq.ft		
	> 109 Pre Opn Conc Girder/Beam	0	Moderate	853	ft		
	> 215 Re Conc Abutment	0	Moderate	102	ft		
	> 301 Pourable Joint Seal	0	Moderate	38	ft		
	> 302 Compressn Joint Seal	0	Moderate	38	ft		
	> 310 Elastomeric Bearing	0	Moderate	14	each		
	> 321 Re Conc Approach Slab	0	Moderate	1043	sq.ft		





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15 

1 - 7 of 7

Effect on Utility

Show All Criteria 

 Export

Year: 2026 (4 years after inspection)

Name	Before Work Candidates	After Work Candidates	Weighted Δ Utility
Total Utility	85.43	91.32	5.89
Condition	67.85	82.56	5.88

Projects

Show All Criteria

Export

Year: 2026 (4 years after inspection)

Name	Before Work Candidates	After Work Candidates	Weighted Δ Utility
Total Utility	85.43	91.32	5.89
Condition	67.85	82.56	5.88
Element Ratings	65.28	81.29	5.76
Deck/Slab Elements	73.67	73.67	0.00
Substructure Elements	61.88	96.29	2.95
Superstructure Elements	74.86	74.86	0.00
Bearings Elements	61.02	61.02	0.00
Joint Elements	45.29	100.00	2.81
NBI Ratings	91.00	94.00	0.12
Deck	91.00	91.00	0.00
Substructure	91.00	100.00	0.12
Superstructure	91.00	91.00	0.00
Life Cycle	100.00	100.00	0.00
Mobility	90.25	90.25	0.00
Highway Maximum Usable Vertical Clearance (B.H.12)	100.00	100.00	0.00
Approach Roadway Alignment (B.AP.01)	67.50	67.50	0.00
Bypass Detour Length (B.H.17)	100.00	100.00	0.00
Risk	98.38	98.38	0.00
Scour Vulnerability (B.C.11)	100.00	100.00	0.00
Highway Maximum Usable Vertical Clearance (B.H.12)	100.00	100.00	0.00
NSTM Inspection Required (B.IR.01)	100.00	100.00	0.00
Channel Condition Rating (B.C.09)	87.00	87.00	0.00

Projects

Show All Criteria

Export

Year: 2026 (4 years after inspection)

Name	Before Work Candidates	After Work Candidates	Weighted Δ Utility
Total Utility	85.43	91.32	5.89
Condition	67.85	82.56	5.88
Element Ratings	65.28	81.29	5.76
Deck/Slab Elements	73.67	73.67	0.00
Substructure Elements	61.88	96.29	2.95
Superstructure Elements	74.86	74.86	0.00
Bearings Elements	61.02	61.02	0.00
Joint Elements	45.29	100.00	2.81
NBI Ratings	91.00	94.00	0.12
Deck	91.00	91.00	0.00
Substructure	91.00	100.00	0.12
Superstructure	91.00	91.00	0.00
Life Cycle	100.00	100.00	0.00
Mobility	90.25	90.25	0.00
Highway Maximum Usable Vertical Clearance (B.H.12)	100.00	100.00	0.00
Approach Roadway Alignment (B.AP.01)	67.50	67.50	0.00
Bypass Detour Length (B.H.17)	100.00	100.00	0.00
Risk	98.38	98.38	0.00
Scour Vulnerability (B.C.11)	100.00	100.00	0.00
Highway Maximum Usable Vertical Clearance (B.H.12)	100.00	100.00	0.00
NSTM Inspection Required (B.IR.01)	100.00	100.00	0.00
Channel Condition Rating (B.C.09)	87.00	87.00	0.00

FREEZING PROJECTS

Projects

Programs

Assign Projects

Assign Projects

Filter

Layout

Program

Scenario

None

Project List

All

All

Assign

Unassign

<input type="checkbox"/>	Name	Alt ID	Start Date	End Date	Create Date	Generation	First Name	Status	Project Category
<input type="checkbox"/>	0000000000000001(Rehab Super)		1/1/2025			Automatic		Proposed	Rehabilitation
<input type="checkbox"/>	0000000000000001(Rehab Super)		1/1/2025			Automatic		Proposed	Rehabilitation
<input type="checkbox"/>	0000000000000001(Rehab Super)		1/1/2027			Automatic		Proposed	Rehabilitation
<input type="checkbox"/>	0000000000000001(Rehab Super)		1/1/2025			Automatic		Proposed	Rehabilitation
<input type="checkbox"/>	0000000000000001(Rehab Super)		1/1/2025			Automatic		Proposed	Rehabilitation
<input type="checkbox"/>	0000000000000001(Rehab Super)		1/1/2045			Automatic		Proposed	Rehabilitation
<input type="checkbox"/>	0000000000000002(Rehab Deck)		1/1/2028			Automatic		Proposed	Rehabilitation
<input type="checkbox"/>	0000000000000002(Rehab Deck)		1/1/2039			Automatic		Proposed	Rehabilitation
<input type="checkbox"/>	0000000000000002(Rehab Deck)		1/1/2029			Automatic		Proposed	Rehabilitation
<input type="checkbox"/>	0000000000000002(Rehab Deck)		1/1/2040			Automatic		Proposed	Rehabilitation
<input type="checkbox"/>	0000000000000002(Rehab Deck)		1/1/2026			Automatic		Proposed	Rehabilitation
<input type="checkbox"/>	0000000000000002(Rehab Deck)		1/1/2043			Automatic		Proposed	Rehabilitation
<input type="checkbox"/>	0000000000000002(Rehab Deck)		1/1/2042			Automatic		Proposed	Rehabilitation
<input type="checkbox"/>	0000000000000002(Rehab Deck)		1/1/2033			Automatic		Proposed	Rehabilitation
<input type="checkbox"/>	0000000000000002(Rehab Deck)		1/1/2038			Automatic		Proposed	Rehabilitation

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AASHTO


WARE

BRIDGE

MANAGEMENT

Projects

AASHTOWare™
Bridge Management



[< Back](#)

Projects

[Projects List](#)



[Combine Projects](#)

[Funding Sources](#)

[Import Project](#)


[Split Project](#)


Projects » Import Project




Import Project

Import File Type


BrM External Bulk Project Spreadsheet (XLS) 

 Download XLS Template



Choose File

No file chosen

 Import

Projects

Projects can be frozen and assigned to a Program and scenario and run on the same Program and scenario (aka: Internally frozen).

Or, project can be Externally frozen meaning they are assigned to a different program and respected by another Program and Scenario.

Add to Optimizer Queue

Details

Program *
20-year Bridge Program

Scenario *
100M

Optimization Method *
Maximize Utility

☐ Keep Assigned Projects

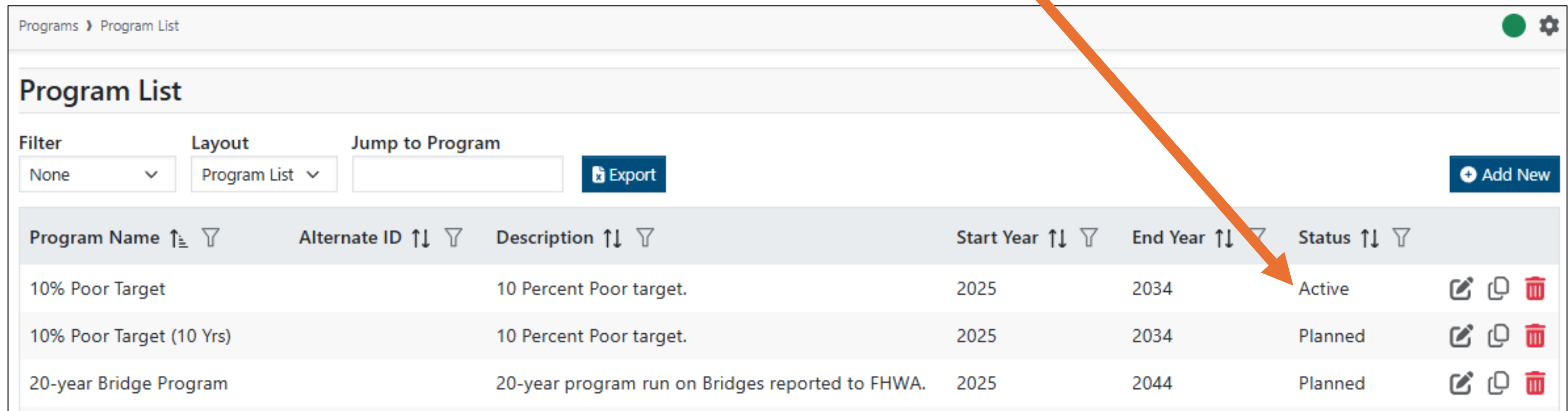
☒ Respect External Frozen Projects

☒ Recalculate Structure Weight Annually

☒ Respect LCCA Plans

Projects

In order for externally frozen projects to be respected, the status of the program they are frozen to must be set to 'Active'



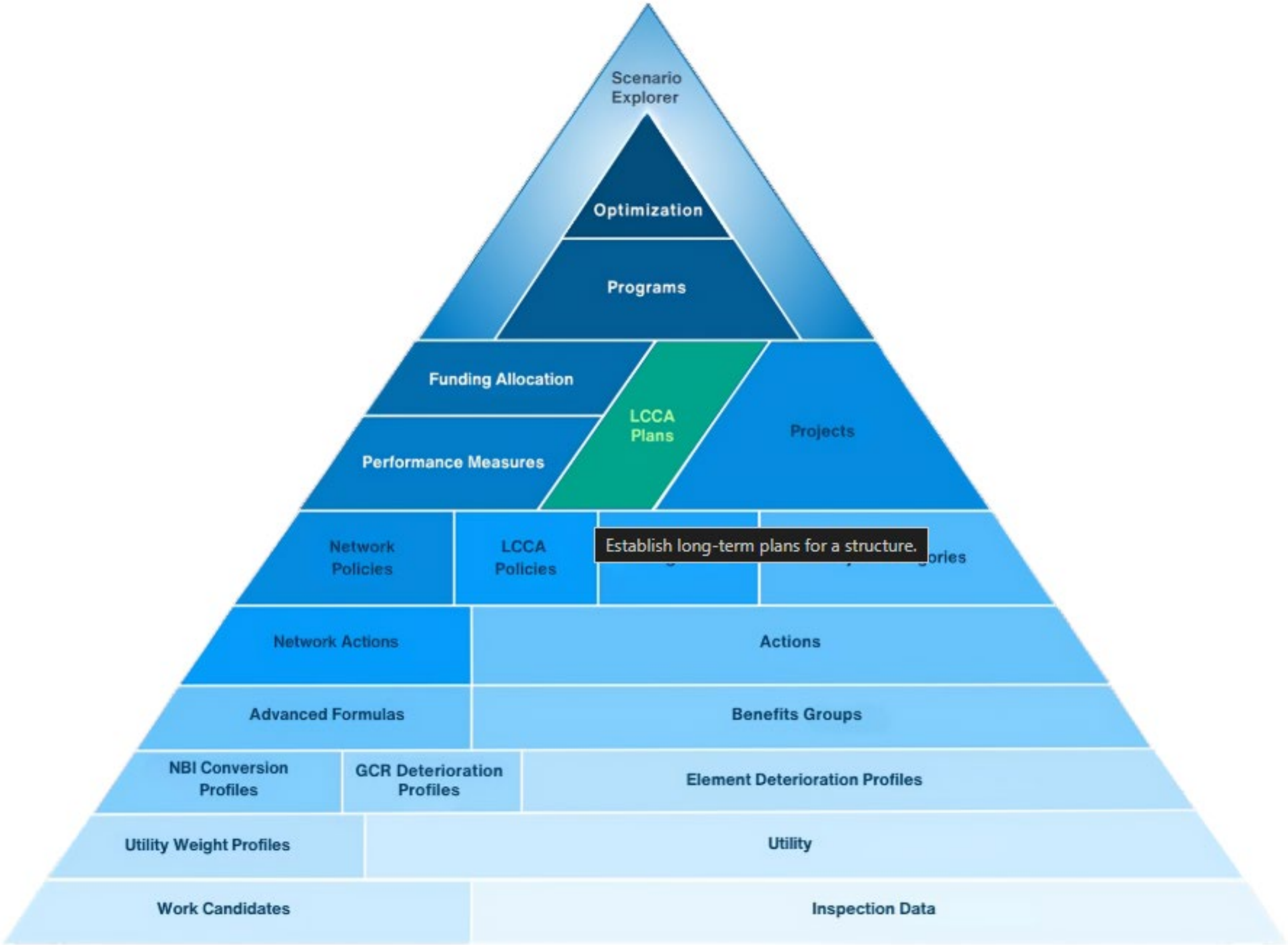
Programs > Program List

Program List

Filter: None Layout: Program List Jump to Program: [Export](#) [Add New](#)

Program Name ↑	Alternate ID ↑↓	Description ↑↓	Start Year ↑↓	End Year ↑↓	Status ↑↓	
10% Poor Target		10 Percent Poor target.	2025	2034	Active	Edit Copy Delete
10% Poor Target (10 Yrs)		10 Percent Poor target.	2025	2034	Planned	Edit Copy Delete
20-year Bridge Program		20-year program run on Bridges reported to FHWA.	2025	2044	Planned	Edit Copy Delete

LCCA Plans



LCCA Plans

AASHTOWare™
Bridge Management

Analysis > LCCA Plans

LCCA Plans

Bridge ID

Bridge Name

Bridge Nickname

0000000000000001

Bridge 1

Br 1

Plans

Q

Search

Export

Compare Plans

Add from Scenario

Add New

<input type="checkbox"/>	Current	Name ↑↓	Start Year ↑↓	End Year ↑↓	Agency Life Cycle Cost ↑↓	User Life Cycle Cost ↑↓	Total Life Cycle Cost ↑↓	Modified By ↑↓	Modified On ↑↓	Notes ↑↓
<input type="checkbox"/>		Plan 1	2025	2054	-\$1,223,416.97	\$0.00	-\$1,223,416.97	User, Pontis	09/07/2025	<div></div> <div></div> <div></div>
<input type="checkbox"/>		Plan 2	2025	2054	\$0.00	\$0.00	\$0.00	User, Pontis	09/07/2025	<div></div> <div></div> <div></div>

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AASHTOWare™
BRIDGE
MANAGEMENT

LCCA Plans

Report						Compare Plans Add from Scenario Add New		
Agency Life Cycle Cost ↑↓	User Life Cycle Cost ↑↓	Total Life Cycle Cost ↑↓	Modified By ↑↓	Modified On ↑↓	Notes ↑↓			
-\$1,223,416.97	\$0.00	-\$1,223,416.97	User, Pontis	09/07/2025	  			
\$0.00	\$0.00	\$0.00	User, Pontis	09/07/2025	  			

Edit LCCA Plan

Details Actions Optimization Results

Name *

Plan 1

☐ Set as Current Plan

Start Year *

2025

Analysis Length *

30

Inflation Estimation Method *

Fixed Inflation Rate

Inflation % *

0

%

Nominal Discount Rate *

0

%

NBI Deterioration Method *

GCR Deterioration

Utility Profile *

Utility Tree

☐ Estimate Functional User Cost

Element Deterioration Profile *

BrM Standard Profile

Condition Based on Inspection Event

09/27/2021 (VCOU)

Residual Value Calculation *

Utility Approximation

Notes

AASHTO Ware™



LCCA Plans

Report						Compare Plans Add from Scenario Add New		
Agency Life Cycle Cost ↑↓	User Life Cycle Cost ↑↓	Total Life Cycle Cost ↑↓	Modified By ↑↓	Modified On ↑↓	Notes ↑↓			
-\$1,223,416.97	\$0.00	-\$1,223,416.97	User, Pontis	09/07/2025				
\$0.00	\$0.00	\$0.00	User, Pontis	09/07/2025				

Edit LCCA Plan

Details Actions Optimization Results

Name *

Plan 1

☒ Set as Current Plan

Start Year *

2025

Analysis Length *

30

Inflation Estimation Method *

Fixed Inflation Rate

Inflation % *

0

Nominal Discount Rate *

0

NBI Deterioration Method *

GCR Deterioration

Utility Profile *

Utility Tree

☐ Estimate Functional User Cost

Element Deterioration Profile *

BrM Standard Profile

Condition Based on Inspection Event

09/27/2021 (VCOU)

Residual Value Calculation *

Utility Approximation

Notes

LCCA Plans

AASHTOWare™
Bridge Management

Analysis > LCCA Plans

LCCA Plans

Bridge ID

Bridge Name

Bridge Nickname

0000000000000001

Bridge 1

Br 1

Plans

Freeze to Scenarios

Q

Search

Export

Compare Plans

Add from Scenario

Add New

<input type="checkbox"/>	Current	Name ↑↓	Start Year ↑↓	End Year ↑↓	Agency Life Cycle Cost ↑↓	User Life Cycle Cost ↑↓	Total Life Cycle Cost ↑↓	Modified By ↑↓	Modified On ↑↓	Notes ↑↓
<input type="checkbox"/>	★	Plan 1	2025	2054	-\$1,223,416.97	\$0.00	-\$1,223,416.97	User, Pontis	09/07/2025	<div></div> <div></div> <div></div>
<input type="checkbox"/>		Plan 2	2025	2054	\$0.00	\$0.00	\$0.00	User, Pontis	09/07/2025	<div></div> <div></div> <div></div>

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AASHTOWare™
BRIDGE
MANAGEMENT

LCCA Plans

AASHTOWare™
Bridge Management

Analysis » LCCA Plans

LCCA Plans

Bridge ID

0000000000000001

Bridge Name

Bridge 1

Bridge Nickname

Br 1

Plans

Freeze to Scenarios

☐ Freeze all scenarios including future scenarios

Scenarios

Program ↑ 1

No records to display.

Save

Cancel

Edit Scenarios

Q Search

<input type="checkbox"/>	Program ↑ 1	Scenario ↑ 2
<input type="checkbox"/>	10% Poor Target	10% Poor Target
<input type="checkbox"/>	10% Poor Target	Do Nothing
<input type="checkbox"/>	10% Poor Target (10 Yrs)	10% Poor Target
<input type="checkbox"/>	20-year Bridge Program	20M
<input type="checkbox"/>	20-year Bridge Program	40M
<input type="checkbox"/>	20-year Bridge Program	60M
<input type="checkbox"/>	20-year Bridge Program	80M
<input type="checkbox"/>	20-year Bridge Program	100M
<input type="checkbox"/>	20-year Bridge Program	Do Nothing
<input type="checkbox"/>	Example Program	\$30M per year
<input type="checkbox"/>	Example Program	\$50M per year
<input type="checkbox"/>	Example Program	No Funding
<input type="checkbox"/>	Program 1	Default
<input type="checkbox"/>	Program 2	Default
<input type="checkbox"/>	Program 2	Scenario 2

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▼

Ok

Cancel

AASHTOWare™
BRIDGE
MANAGEMENT

LCCA Plans

AASHTOWare™
Bridge Management

Analysis » LCCA Plans

LCCA Plans

Bridge ID

0000000000000001

Bridge Name

Bridge 1

Bridge Nickname

Br 1

Plans

Freeze to Scenarios

☐ Freeze all scenarios including future scenarios

Scenarios

Program ↑ 1

No records to display.

Save

Cancel

Edit Scenarios

Q Search

<input type="checkbox"/> Program ↑ 1	Scenario ↑ 2
<input type="checkbox"/> 10% Poor Target	10% Poor Target
<input type="checkbox"/> 10% Poor Target	Do Nothing
<input type="checkbox"/> 10% Poor Target (10 Yrs)	10% Poor Target
<input type="checkbox"/> 20-year Bridge Program	20M
<input type="checkbox"/> 20-year Bridge Program	40M
<input type="checkbox"/> 20-year Bridge Program	60M
<input type="checkbox"/> 20-year Bridge Program	80M
<input type="checkbox"/> 20-year Bridge Program	100M
<input type="checkbox"/> 20-year Bridge Program	Do Nothing
<input type="checkbox"/> Example Program	\$30M per year
<input type="checkbox"/> Example Program	\$50M per year
<input type="checkbox"/> Example Program	No Funding
<input type="checkbox"/> Program 1	Default
<input type="checkbox"/> Program 2	Default
<input type="checkbox"/> Program 2	Scenario 2

<< < 1 2 > >>

1 - 15 of 26

15 ▼

Ok

Cancel

AASHTOWare™
Bridge Management

Analysis » LCCA Plans

LCCA Plans

Bridge ID

0000000000000001

Bridge Name

Bridge 1

Bridge Nickname

Br 1

Plans

Freeze to Scenarios

☒ Freeze all scenarios including future scenarios

Save

Cancel

Projects

When the box is checked, any LCCA Plans frozen to All scenarios or the scenario being run, will be respected by the Optimizer.



Add to Optimizer Queue

Details

Program *

20-year Bridge Program

Scenario *

100M

Optimization Method *

Maximize Utility

☐ Keep Assigned Projects

☒ Respect External Frozen Projects

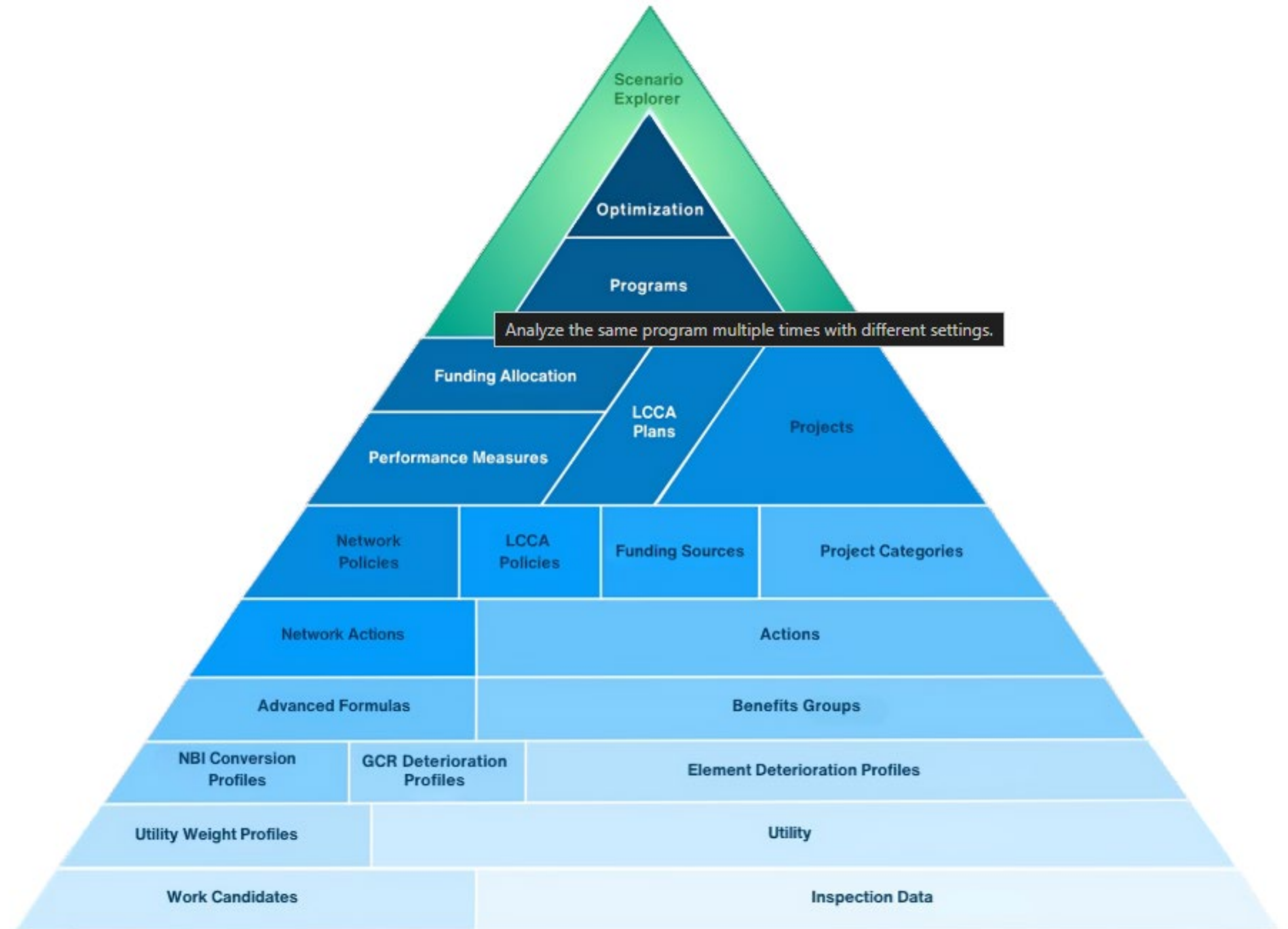
☒ Recalculate Structure Weight Annually

☒ Respect LCCA Plans

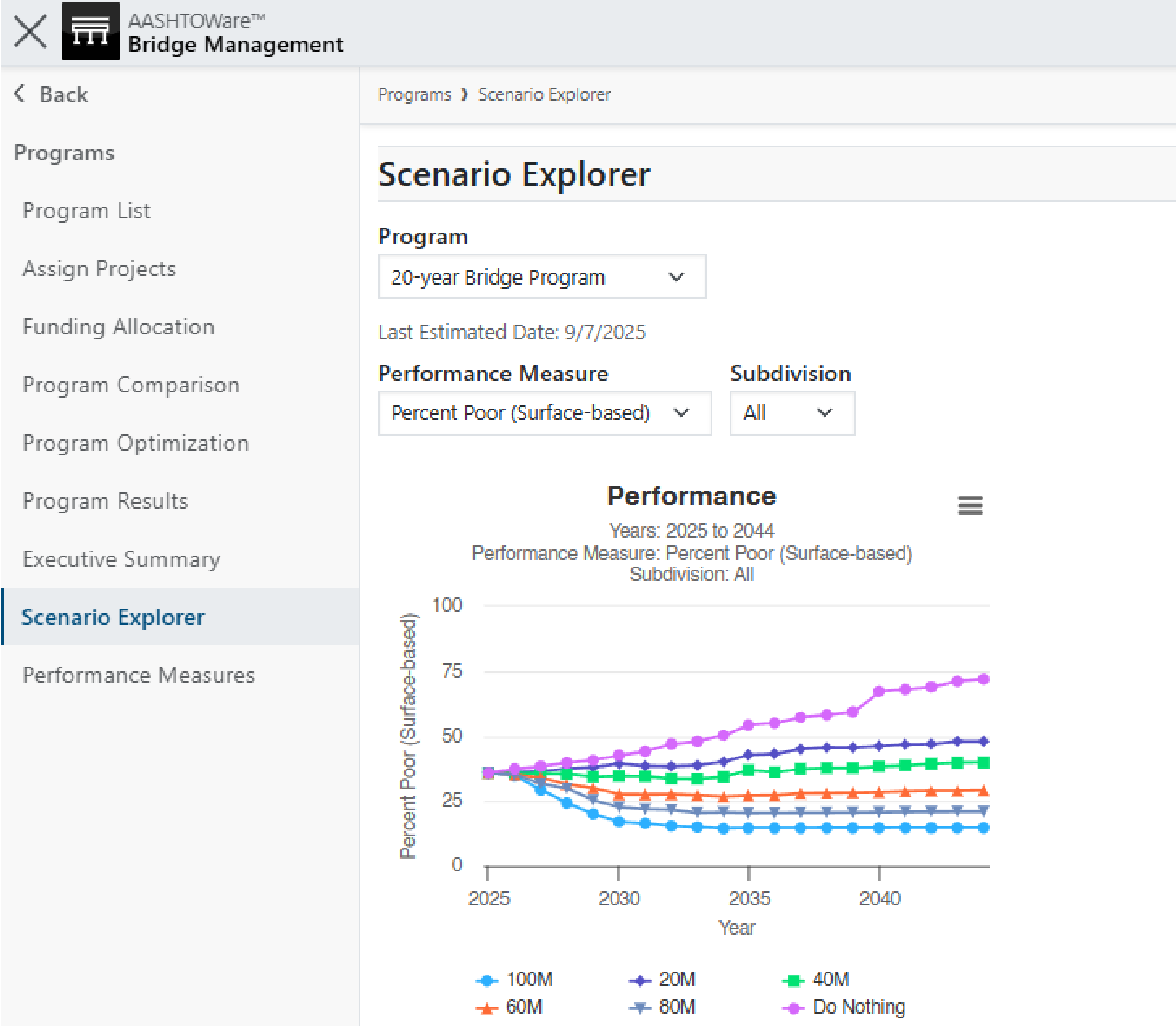


Results

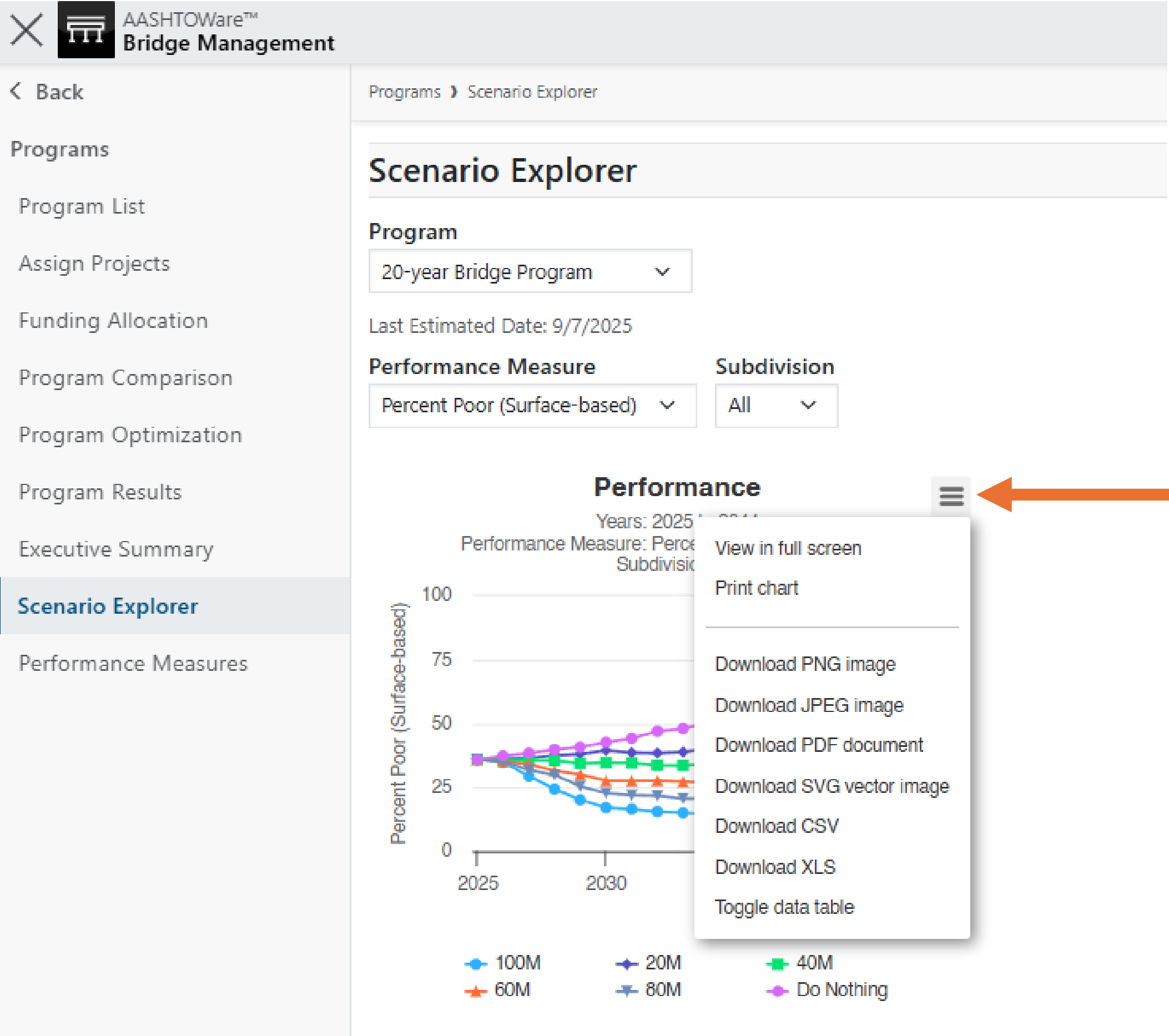
Scenario Explorer



Results



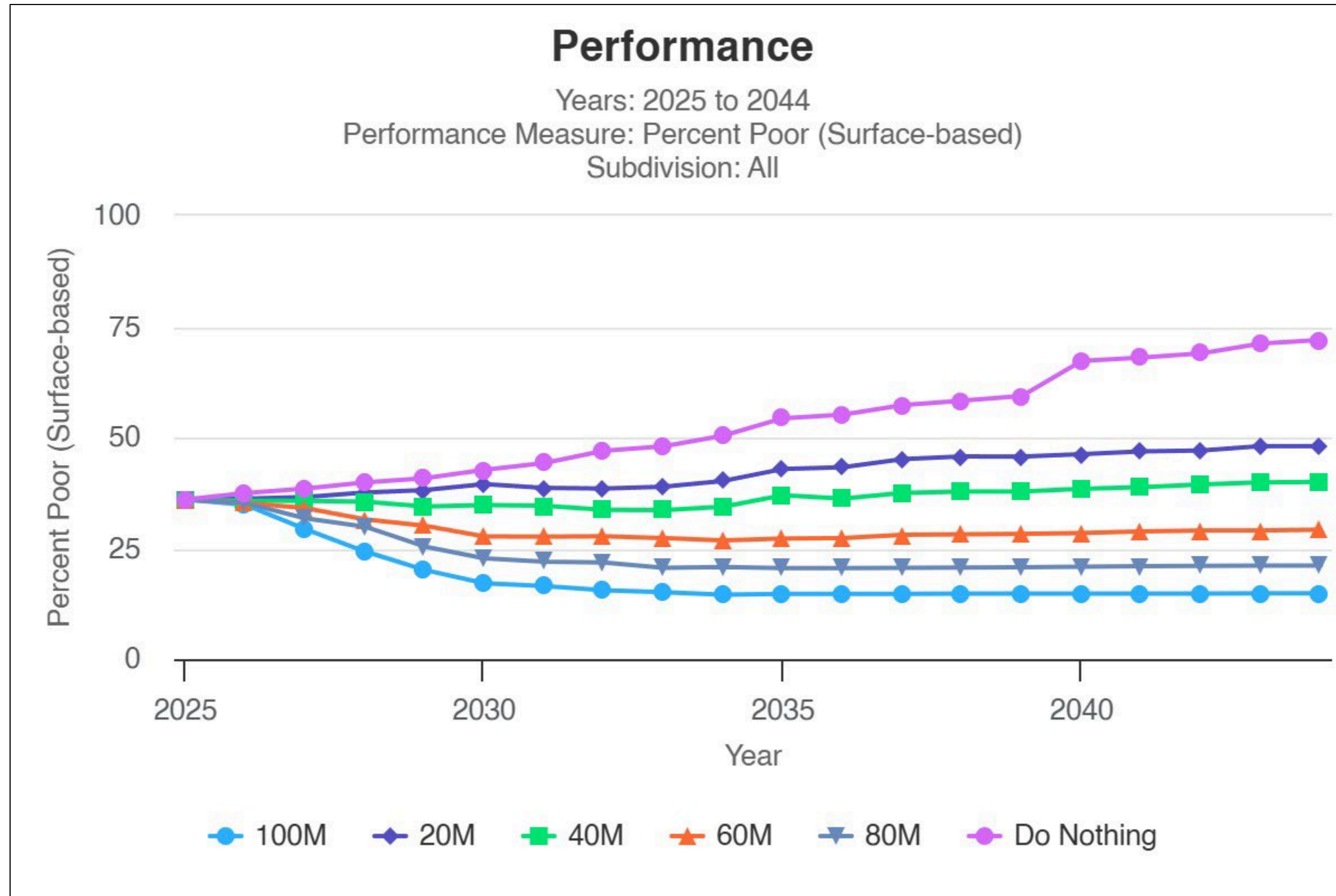
Results



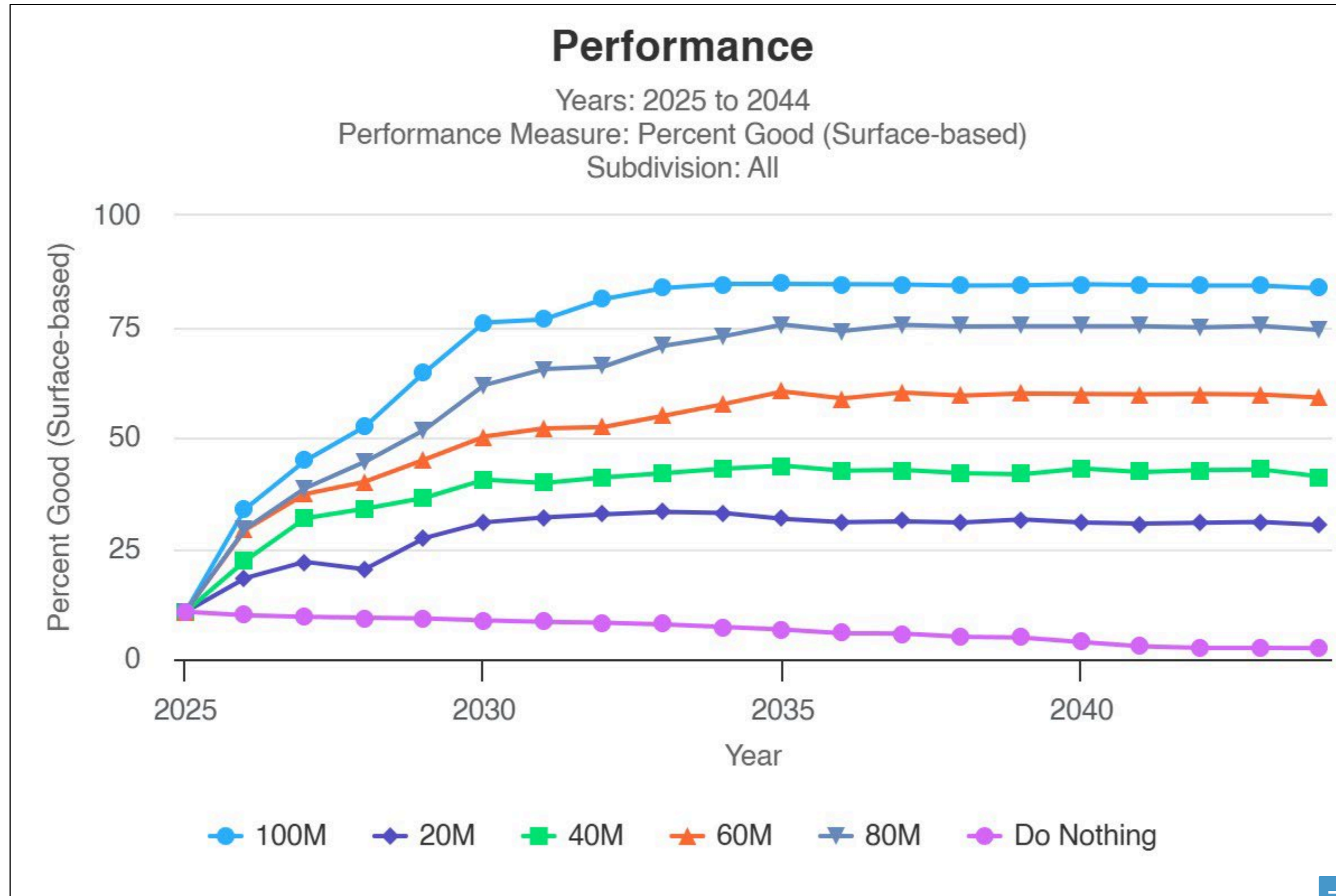
Results

Year	100M	20M	40M	60M	80M	Do Nothing
2025	10.69	10.69	10.69	10.69	10.69	10.69
2026	33.88	18.26	22.19	29.14	29.38	9.89
2027	44.7	21.94	31.74	37.22	38.52	9.54
2028	52.41	20.25	33.88	39.97	44.47	9.34
2029	64.62	27.29	36.37	44.96	51.7	9.18
2030	75.9	30.84	40.44	50.18	61.77	8.74
2031	76.59	31.92	39.7	52.01	65.38	8.4
2032	81.19	32.62	40.99	52.35	65.97	8.21
2033	83.67	33.18	41.93	54.86	70.63	7.83
2034	84.57	32.95	42.95	57.49	72.76	7.27
2035	84.61	31.62	43.65	60.36	75.44	6.67
2036	84.51	30.88	42.51	58.76	73.97	5.83
2037	84.47	31.08	42.65	60.13	75.38	5.77
2038	84.21	30.81	41.94	59.41	75.03	5.03
2039	84.26	31.51	41.69	59.94	75.04	4.86
2040	84.52	30.81	42.98	59.81	75.05	3.84
2041	84.32	30.55	42.2	59.7	75.04	2.87
2042	84.23	30.74	42.62	59.79	74.82	2.54

Results

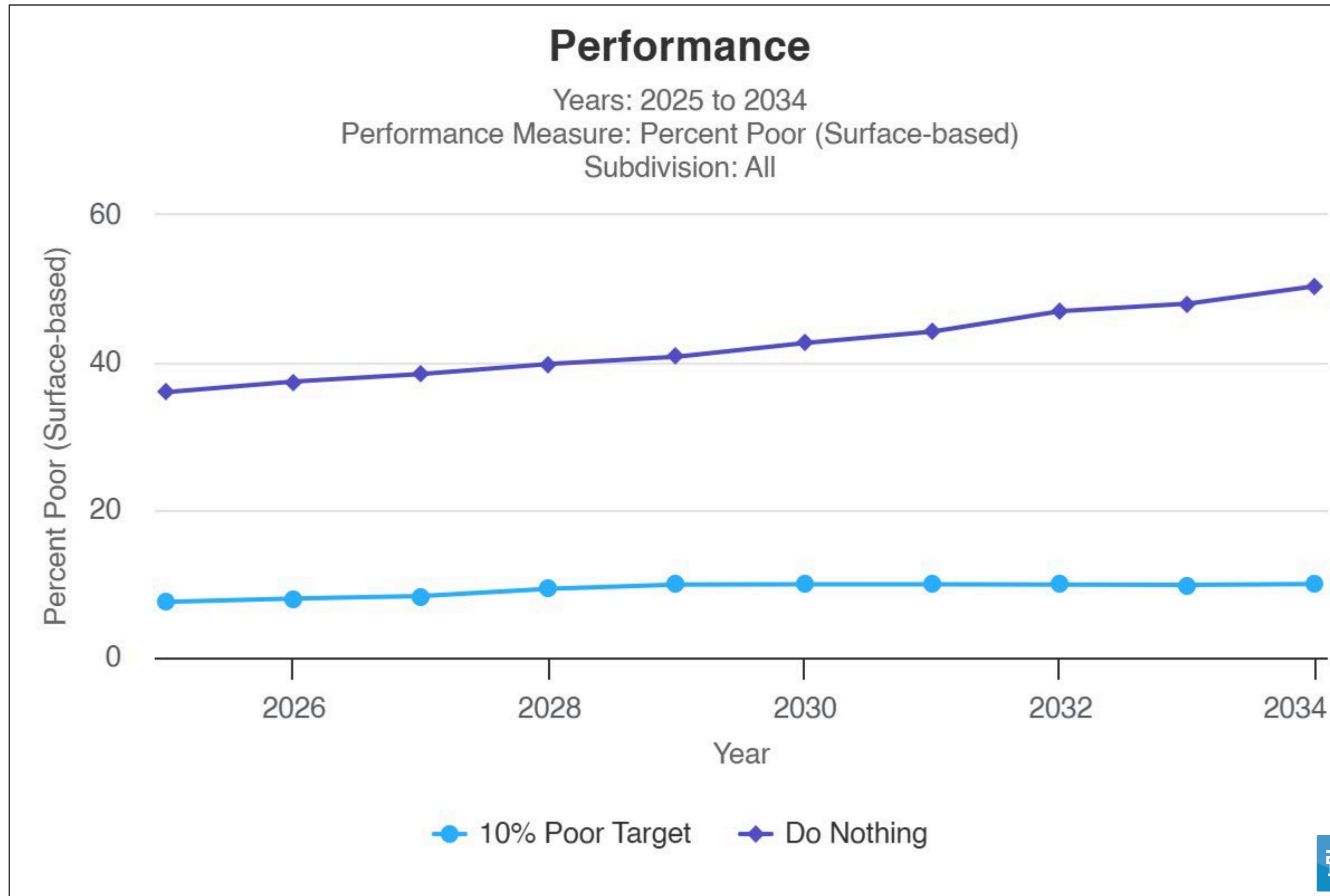


Results



Minimize Cost Optimization Method with 10% Poor Target

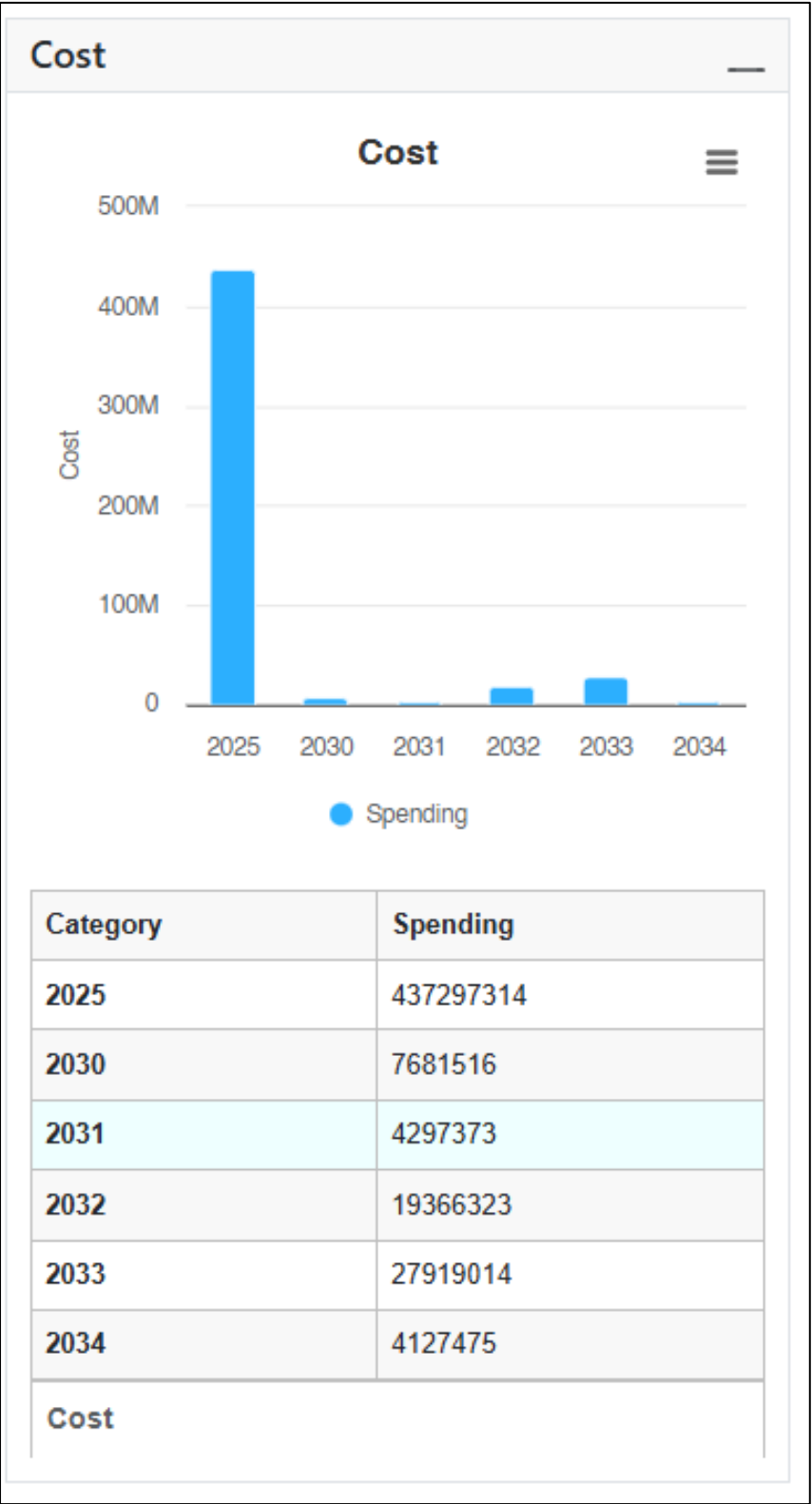
Minimize Cost Optimization Method with 10% Poor Target



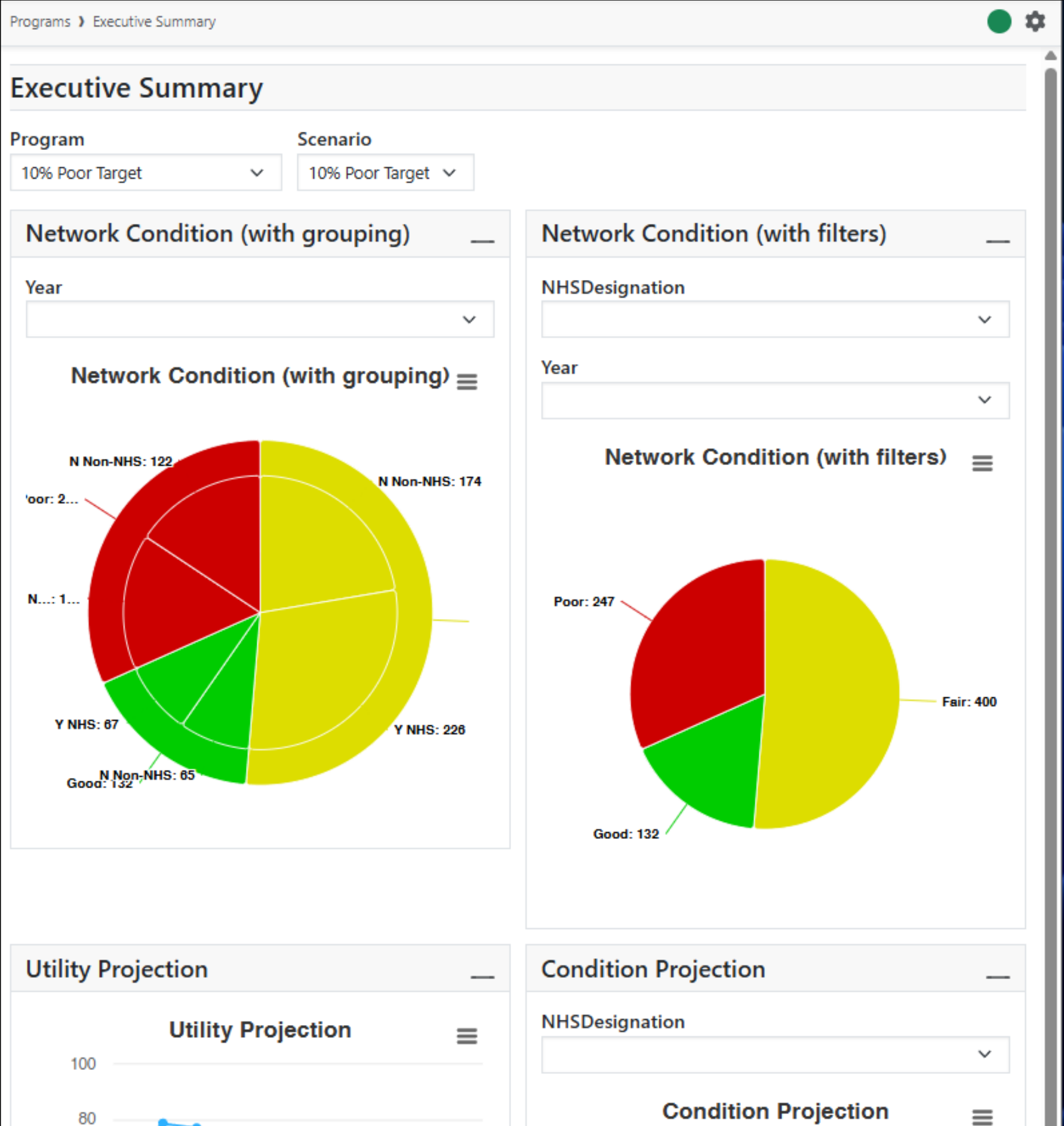
Minimize Cost Optimization Method with 10% Poor Target

Executive Summary Page Cost graph shows total project costs each year to hit Performance Target

To get the average Annual cost needed, the total cost of the program duration can be summed and divided by the number of years.

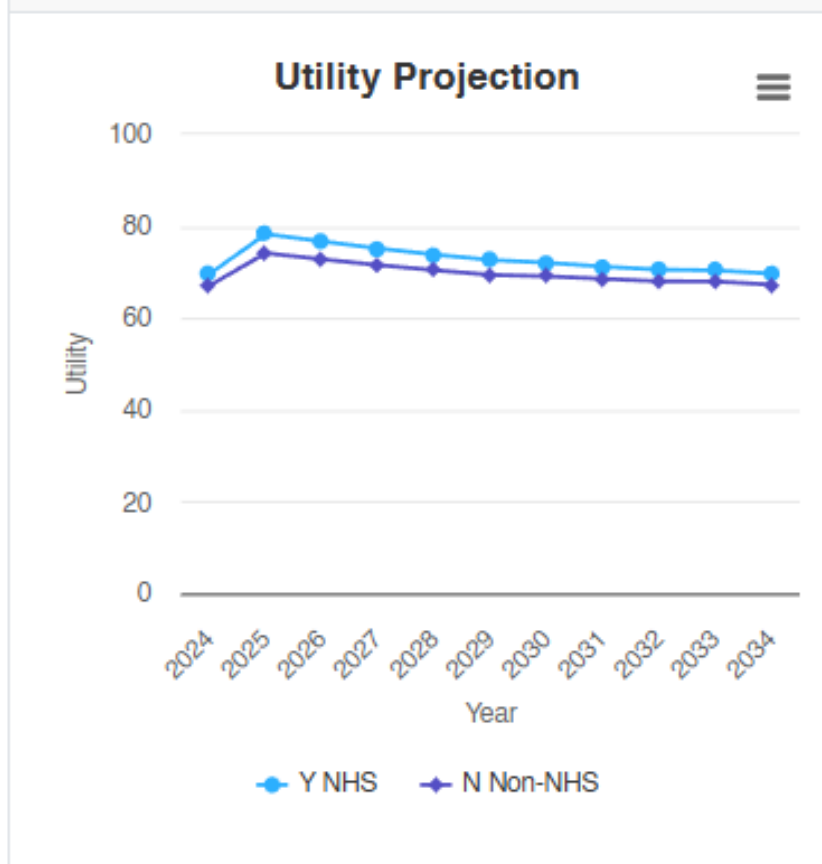


Results

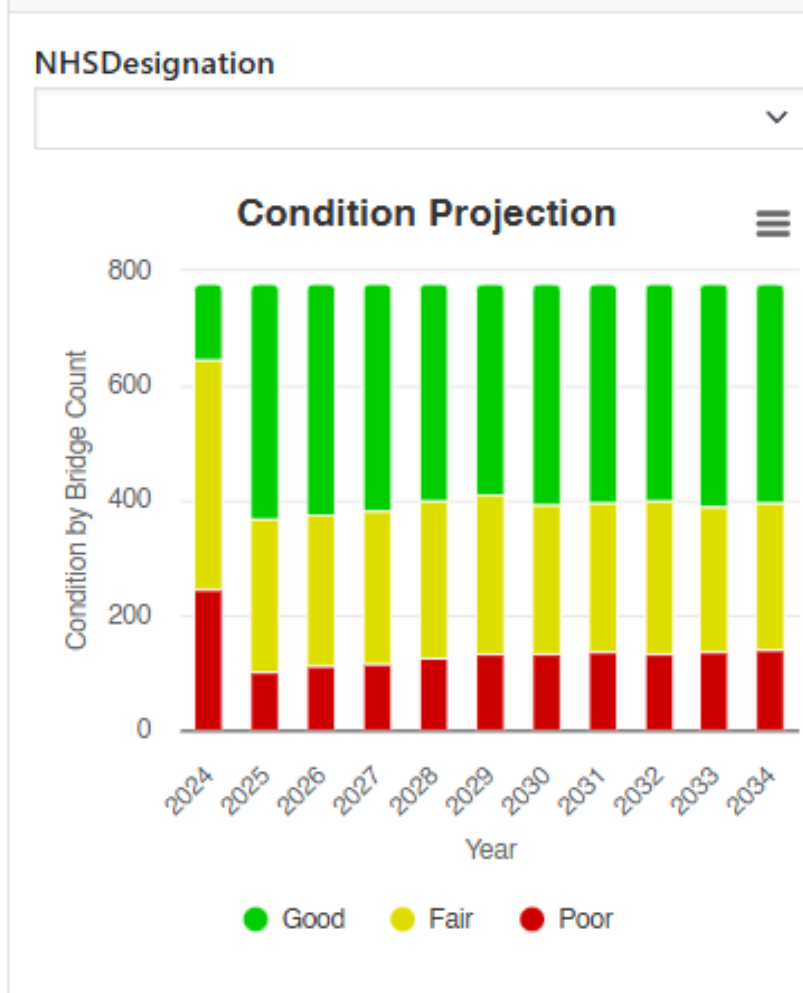


Results

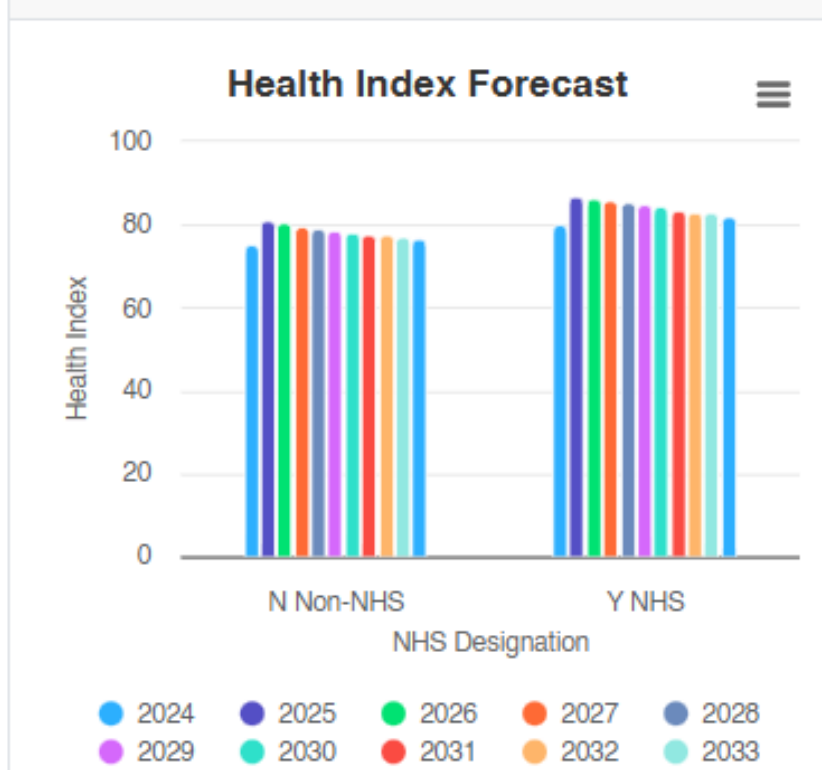
Utility Projection



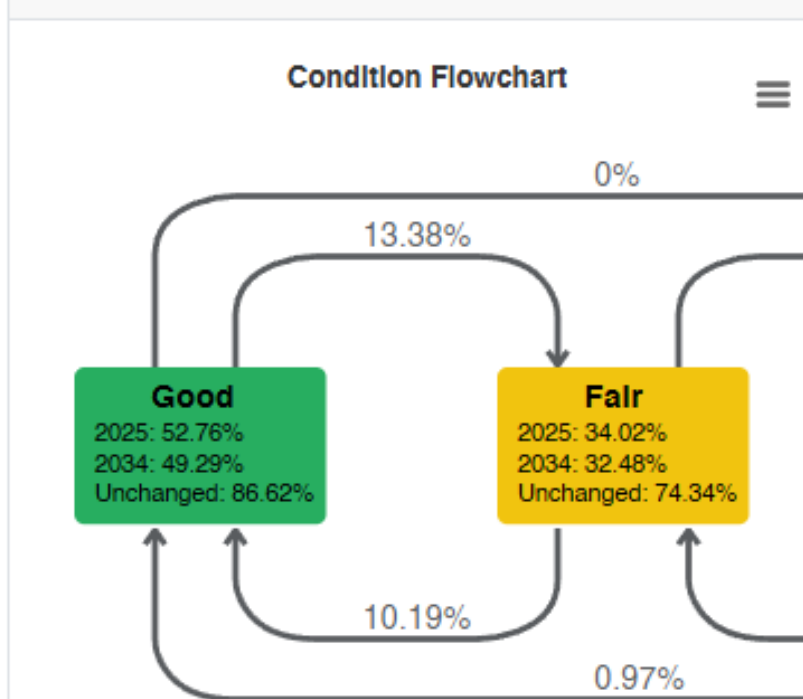
Condition Projection





Health Index Forecast




Condition Flowchart



Results

AASHTOWare™
Bridge Management



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Programs

Program List

Assign Projects

Funding Allocation

Program Comparison

Program Optimization



Program Results

Executive Summary

Scenario Explorer

Performance Measures

Programs » Program Comparison



Program Comparison

Program 1

20-year Bridge Program

Program 2

20-year Bridge Program

Scenario 1


40M

Scenario 2

80M

Comparison Data

Comparison Chart

 Export All Tables


Same in Both Programs 587

Same Bridge & Work, Different Years 740

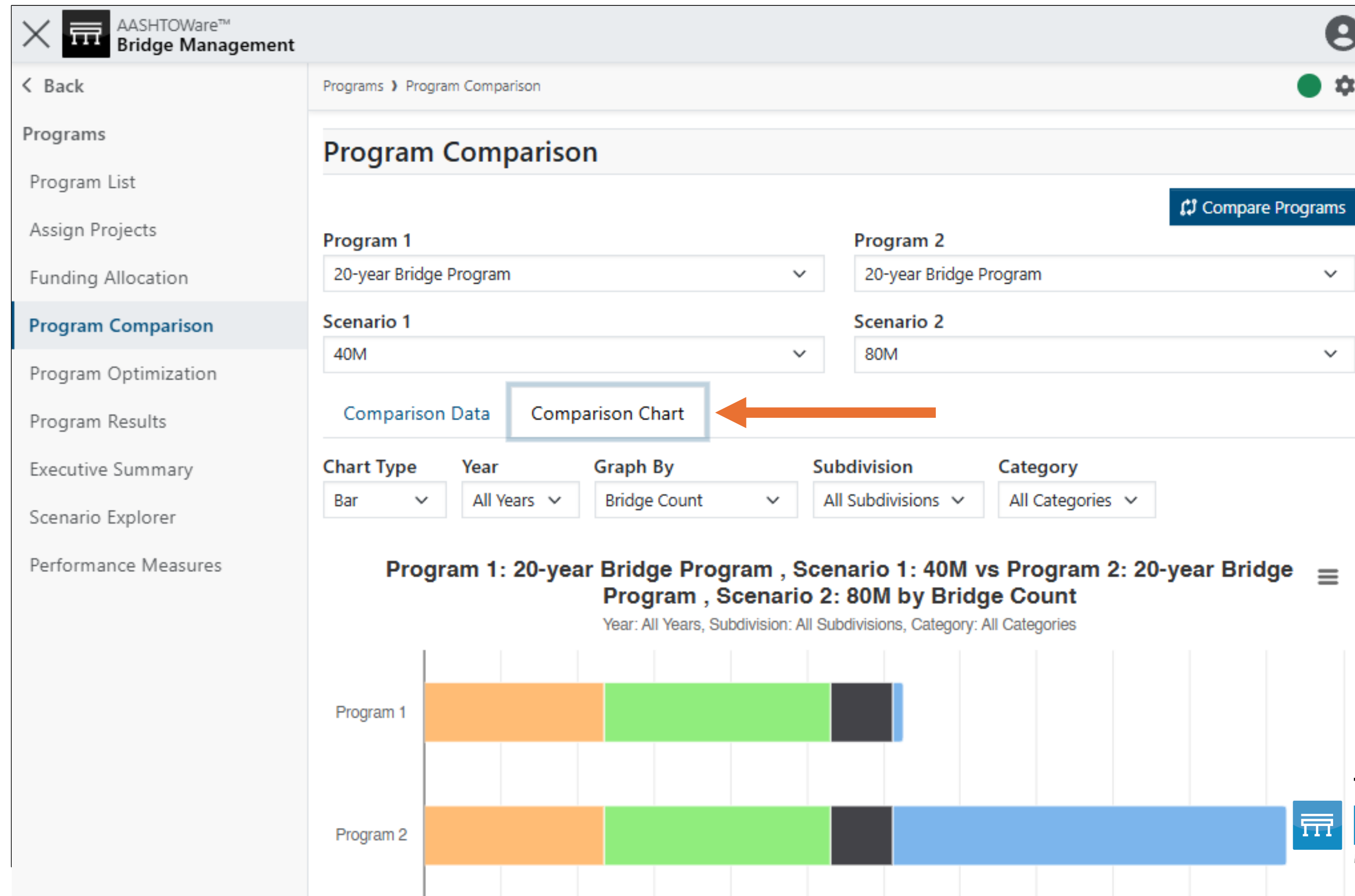
Same Structure, Different Work 204

Unique to Program 1 32

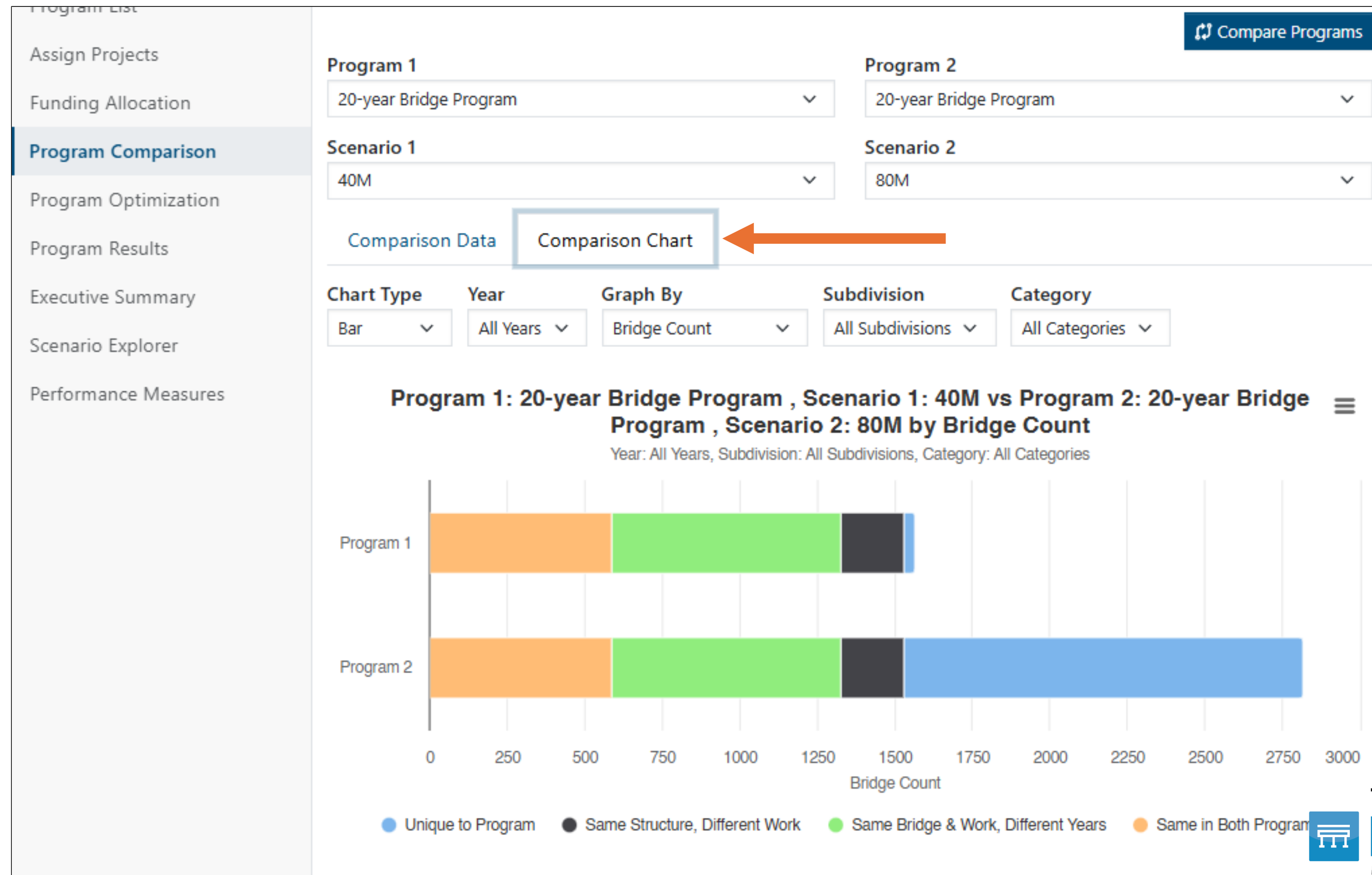
Unique to Program 2 1287

 Compare Programs

Results



Results



QUESTIONS

