Asset Condition

It’s only one factor in a complex puzzle

DEAKIN UNIVERSITY AUSTRALIA Worldly

assetic

What we are doing

1. Introduction
2. Types of data
3. Relevant data factors
4. Analysing the data
5. How the data can be relevant
6. What outputs can the data reveal

Presenting

Main Topic by:

Assetic

Michael McCosker

Introduction by:

Deakin University

Kellie Arnold

Deakin – the Introduction

Deakin University was looking for a dynamic, fluid and live model to manage data for its asset portfolios.

Previous data gathering programs quickly became static and difficult to manage.

Assetic provided the software system, and the data was collected as CLEAN data.

The data was captured by an independent third party.

Clean Data

Like any software...
Rubbish IN =
Rubbish OUT

The Collect

Over an eight month period, Deakin broke the collect into three stages:

1. External & Open Space Assets

2. Residential Buildings

3. Commercial, Administration & Educational Buildings

External & Open Space Assets

Roads, Signage, Fire Assets, Fencing, Furniture, Access & Carriage, Sports Areas, Lighting, Pedestrian Pathways, Retaining Walls, Shelters & other areas were all included.

Residential Buildings

Commercial & Educational Buildings

Commercial & Educational Buildings

Let's Talk Condition

Endorsed by various international authorities, Assetic applied and uses the National Asset Management Strategy (NAMS) scale scoring system:

- 1 to 5 scale: 1 being highest, 5 lowest
- 0 is brought in for BRAND NEW (under DLP)
- 6 is brought to trigger IMMEDIATE ACTION (alongside Safety)

NB: Not a Deakin University Image

Condition 5

Condition Examples

Condition 0

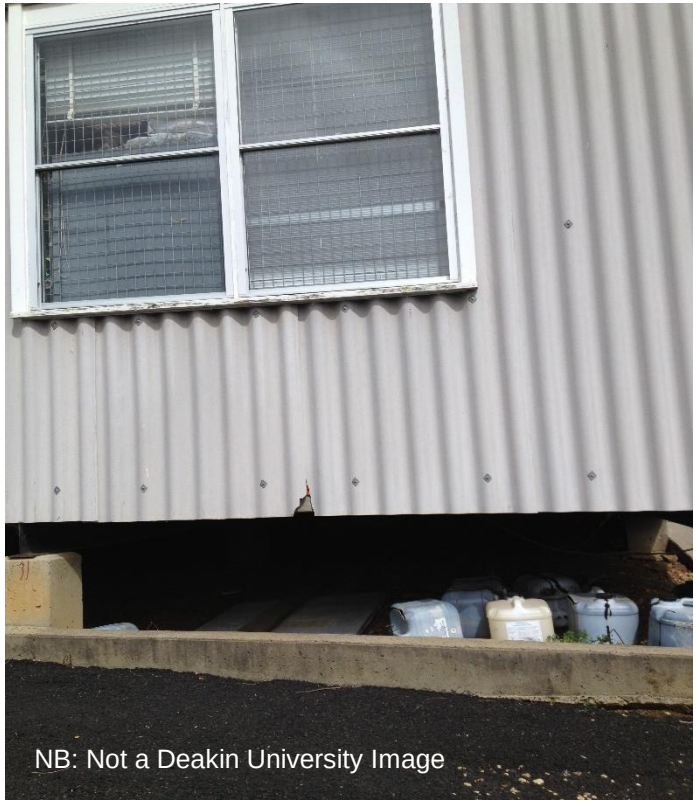
Condition 1

Condition Examples

Condition 2

Condition 3

Condition Examples



Condition 4

Condition 5

Condition Examples

Condition 6:
The paint is Condition 6
The slab remains in Condition 1

Condition 6:
The Nozzle joining the gutter & downpipe renders the stormwater exhaustion useless

What Does Condition Tell Me?

Condition is a factor pertaining to the COMPONENT.

A COMPONENT is a single element of an ASSET.

The ASSET is the sum of all the COMPONENTS.

The CONDITION tells me where, at that point in time, that particular component is along the asset LIFE-CYCLE journey.

Condition on its own only provides me with the view to assess the single element as part of the asset.

What are the Other Factors?

1. Safety
2. Fitness for Purpose
3. Appearance
4. Strategic Importance
5. Business interruption Criticality
6. Accessibility
7. Functionality
8. Utilisation

Safety


NB: Not a Deakin University Image


NB: Not a Deakin University Image

Fitness for Purpose

Appearance

Strategic Importance

THIS IS CRITICAL TO PLANNING!

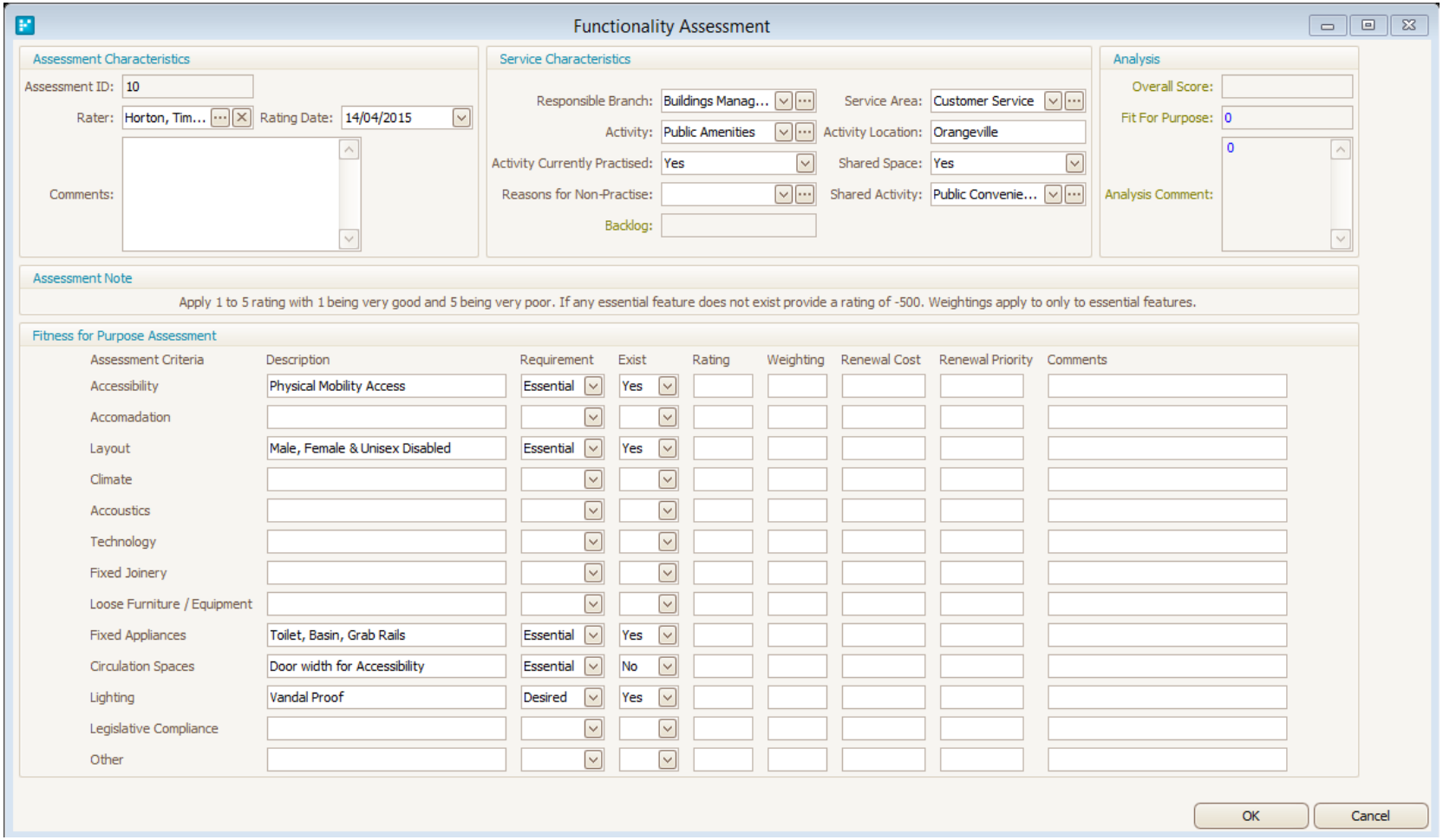
Managed from University, to Campus, to Building, to Floor, to Functional Space.

Business Interruption Criticality

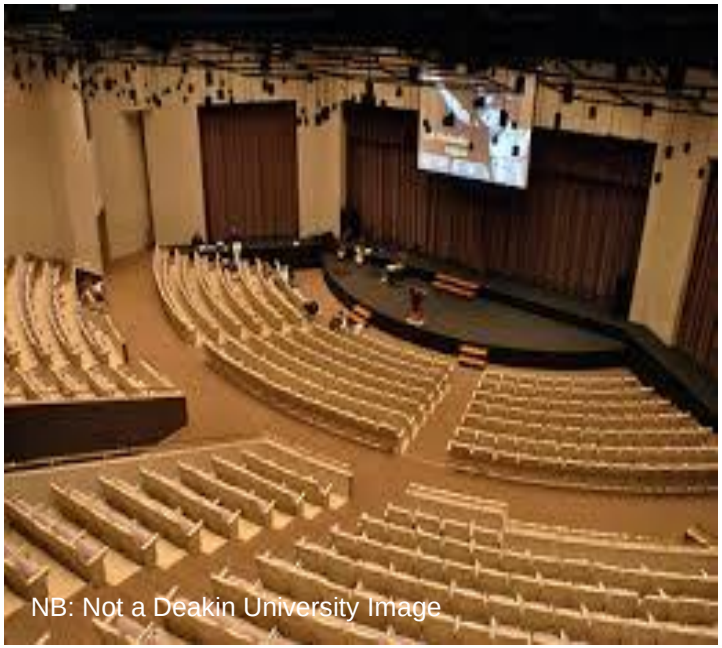
Accessibility

Functionality

Functionality Assessment



Utilisation



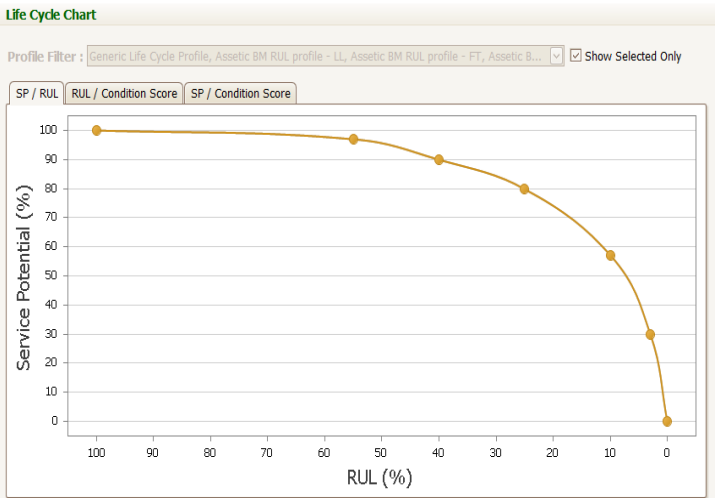
If I add this all together...

- Make informed decisions based on the complete picture
- Determine Maintenance Programs against desired intervention and funding models
- Decisions in asset management can be influenced by Appearance, Criticality, Utilisation or Functionality as well as the asset's current condition
- Service shifts can be expected to occur at least 3-6 times during the lifetime of any asset. Condition may be a mute factor where service strategy changes.

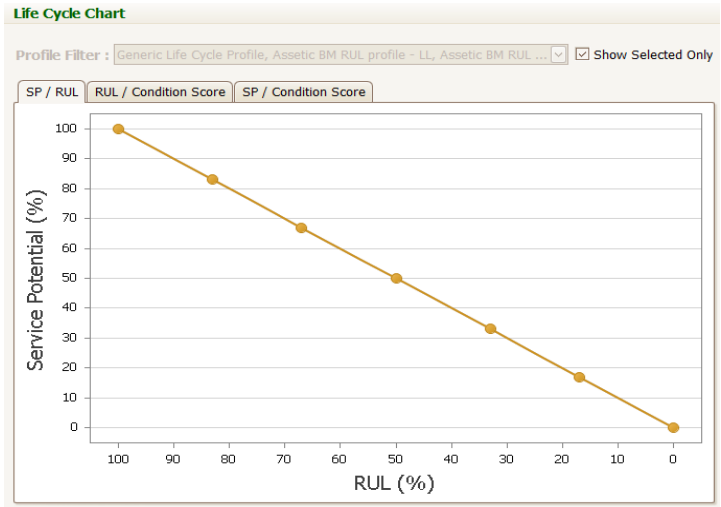
If I add this all together...

- Do I have sufficient space:
  - Are there areas that could be better utilised?
  - Is my service strategy accurate?
  - Can I OPTIMISE my spaces?
- Am I certain that all the areas can be accessed by able and impaired persons?
- Is my Functionality completed using a Matrix?
- Is my Backlog / Deferred Maintenance correctly calculated & managed?
- Are my Commercial and Education Strategies suitable to my university's business?

Asset Life-cycles

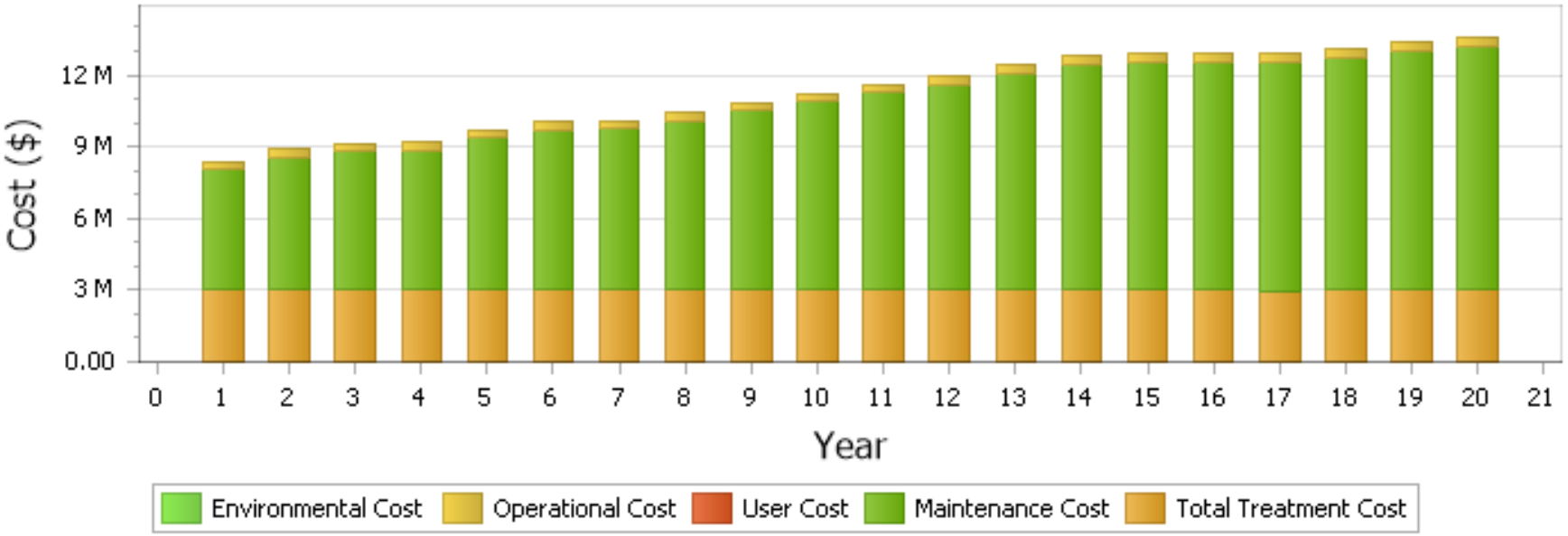


Long-life assets



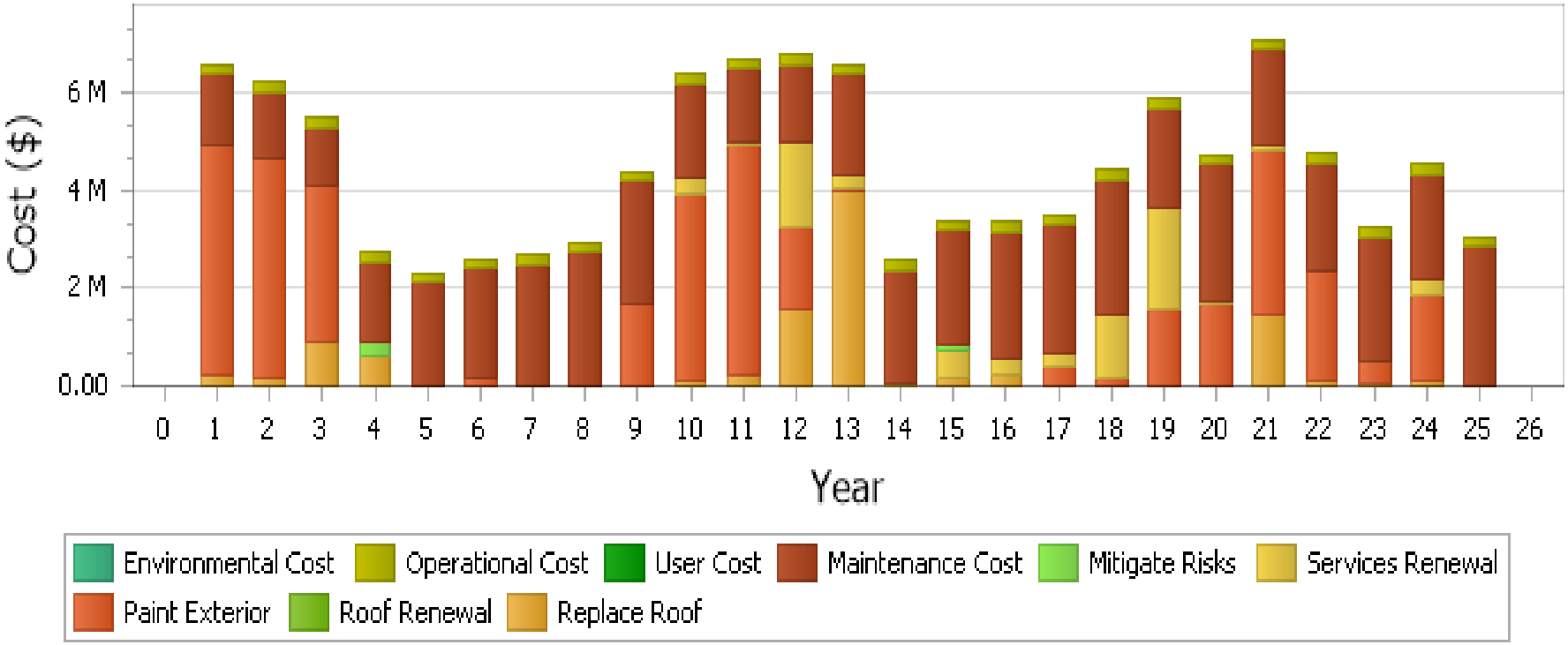
Short-life assets

Overall Maintenance Expectancy



NB: Diagrammatic example only – not specific to Deakin University

Functionality Cost Breakdowns



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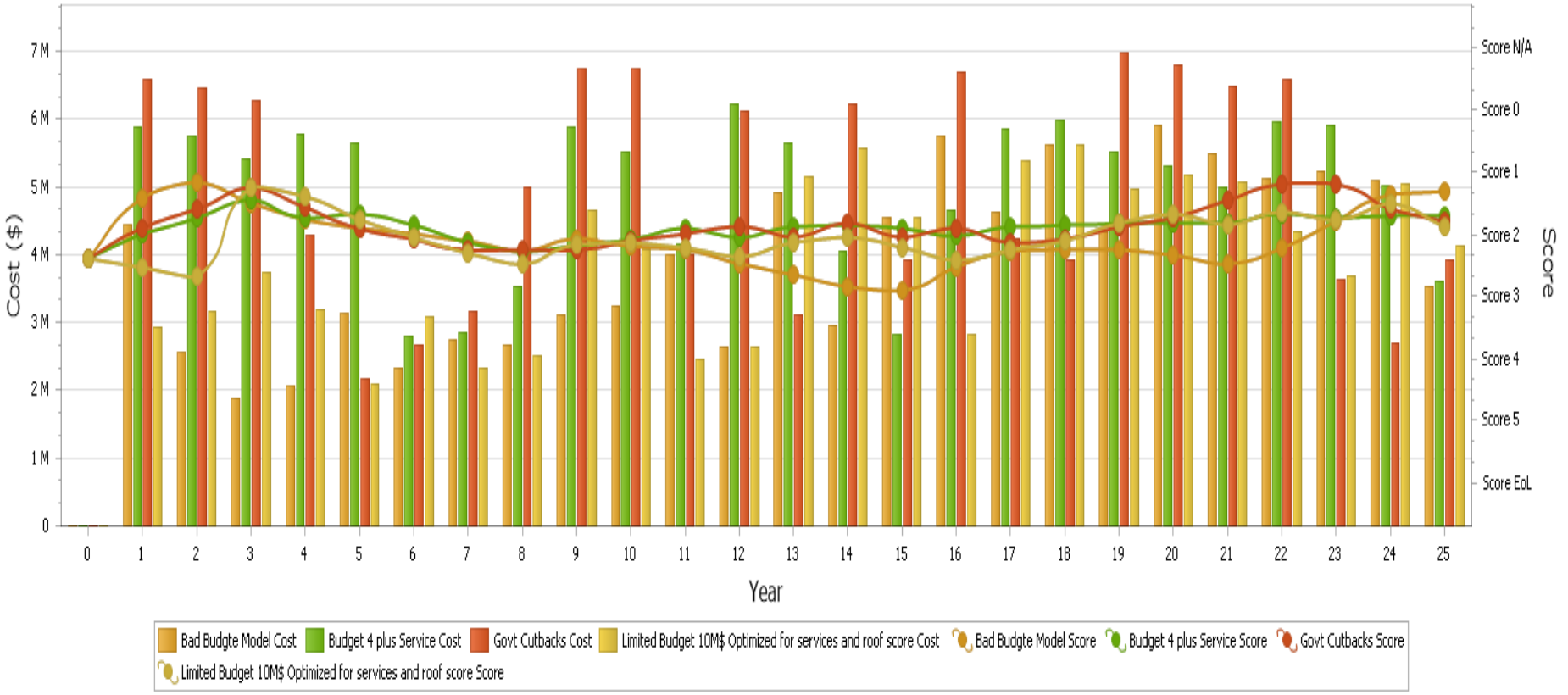
Service Criticality & Outcomes



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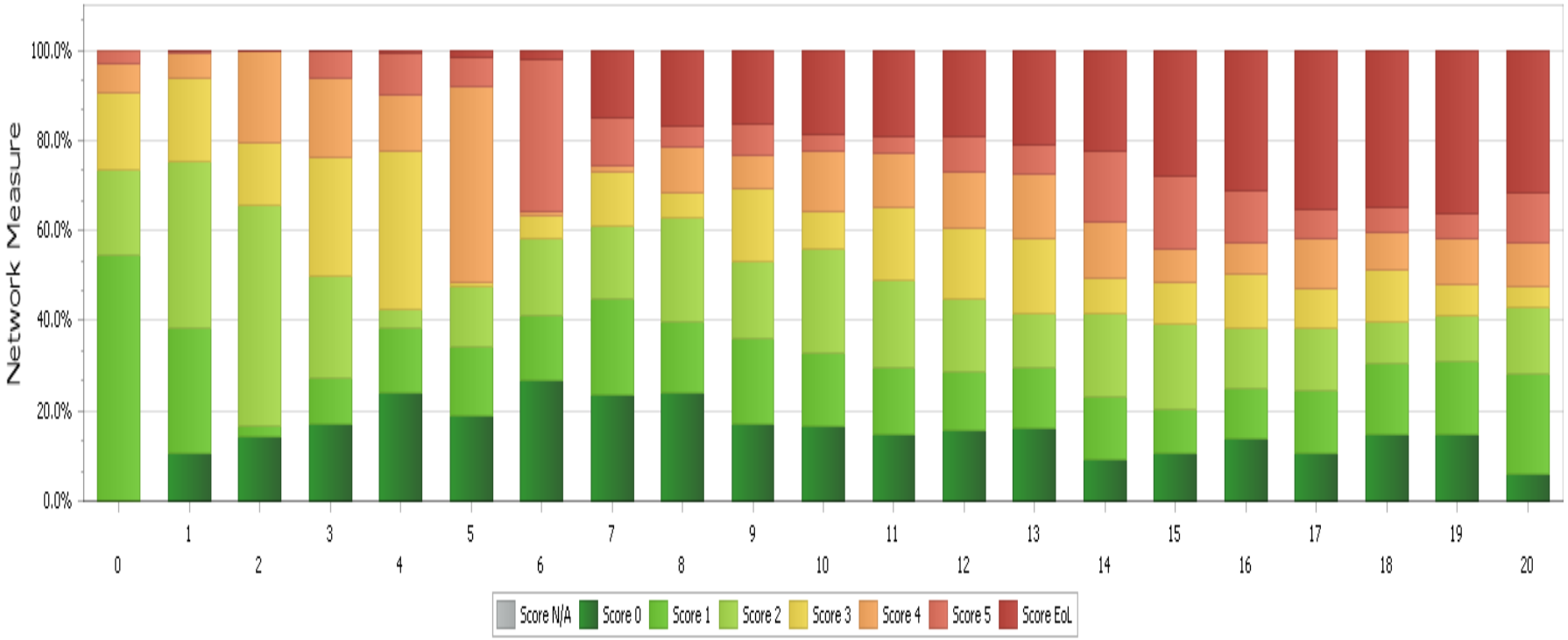
Component Performance Against Corporate Expectation



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Deakin now understands business like never before:

Deakin has a strong grasp on these business areas:

1. Use Asset Replacement Value as a critical tool - reporting maintenance liability as a % of ARV
2. Define Backlog using various drivers
3. Manage maintenance according to Strategic Importance
4. Understand liability for maintenance & renewals
5. Provide indicative works programs to guide staff
6. Model current, future and perceived service changes
7. Provide evidence to confirm theories and decisions
8. Remove the anecdotal environment, and deal in truth
9. Combine information across multiple Business Units to ensure the university has total strategic asset management

Thank you

Love your assets.

After all, you're all they have!