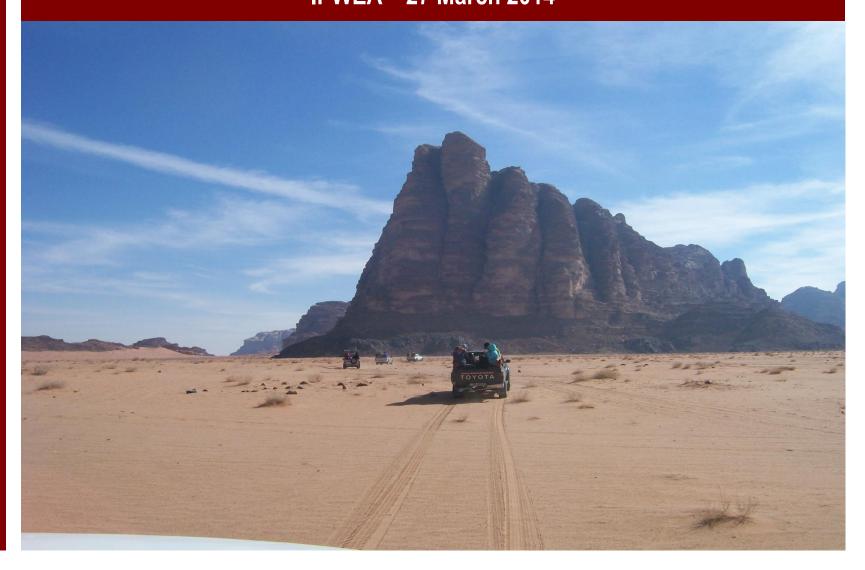


# **'WHAT SERVICE?'**

# Indigo's Journey From Badlands to Hillbilly Country IPWEA – 27 March 2014

















# **ASSET MANAGEMENT STRATEGY**

VERSION 1.3 November 2013

(Revision of VERSION 1.0 December 2010 - Adopted by Council 14 December 2010) Scheduled Review Date December 2014

## CONTENTS:

1.	Introduction	2
2.	Vision	2
3.	Purpose	2
4.	Processes & Relationships	3
5.	Council Assets	4
6.	Current Status	4
7.	Improvements	6
8.	Improvement Implementation	8
9.	Resources	8
10.	Review	9
11.	Conclusion	9
App	pendix 1 – Asset Management Improvement Plan 2013-2015	10

## **Document Control**

Rev	Version	Date	Details	Authorship	Approved
1	V1.0	Dec 14th 2010	Adopted by Council 14/12/2010	Manager Assets	Indigo Shire Council
2	V1.1	Oct 2011	Reviewed AMSG	Manager Assets	AMSG
3	V1.2	Oct 2012	Amended DRAFT after AMSG review July & Oct 2012	Manager Assets	AMSG 8 Oct 2012
4	V1.3	Nov 2013	Amended after AMSG review Aug 2013	Manager Assets	AMSG 14 Nov 2013



#### 1. Introduction:

Indigo Shire Council is the custodian of an extensive range of community assets. In order to deliver a variety of services to the community, Indigo Shire must ensure that the assets supporting these services are managed in a sustainable way over the long term.

The purpose of this Asset Management Strategy is to outline the necessary activities that need to be undertaken and implemented to achieve the continued implementation of Council's Asset Management Policy.

The strategy provides the framework to guide a maintained core standard of asset management practice at Indigo Shire, providing the structure for further development (as required) into advanced asset management moving forward.

#### 2. Vision:

Indigo Shire Council's vision is: INDIGO: A great place to live, work and visit.

This vision is supported by Council's Mission statement:

To support and develop a sustainable, thriving and resilient community through leadership and partnerships.

The Council Plan 2013-2017 provides the following objective, strategy and action supporting this asset management strategy:

Strategic Objective: We will improve the quality and maximise the long-term sustainability of the built environment

Strategy 2.12: Ensure Council's asset management practices are maintained at a core standard

Action 2.12.2: Review and implement Council's Asset Management Strategy.

Council recognises at the highest level that sound asset management is essential to the quality and sustainability of the built environment. Indigo's Asset Management Policy reinforces Council's commitment to manage and care for its assets in a sustainable way and to assist in the achievement of its vision and meet the service and infrastructure needs of the community.

### 3. Purpose:

This strategy describes the status, vision and actions for improving asset management within Indigo Shire.

The Asset Management Strategy establishes the framework that determines the nature and direction of Asset Management – its objective is to describe how Council will meet its commitment to asset management as documented in its Council Plan and Asset Management Policy. A structured set of actions aimed at enabling improved asset management by the



## **ASSET MANAGEMENT STRATEGY**

organisation forms the measurable basis for delivering this objective. These structured actions are aimed at:

- 1. Maintaining a Core level of asset management practice
- 2. Implementing selected advanced asset management practices where there is a net benefit to the sustainable management of Indigo Shire's infrastructure assets
- 3. Ensuring that the planning for new and upgraded assets is driven by Council's strategic longer term plan (strategic resources plan), service plans, and asset management plans.

It is a strategic document with the objective of optimising the lifecycle cost of assets sustainably over the long term, ensuring capital investment is used effectively and in the best interests of the community.

## Processes & Relationships:



Figure 1 - Outline of the Asset Management Process

An outline of the asset management process is illustrated above. The following strategic documents are directly linked to the Asset Management Strategy:

- Council Plan: outlines the requirement to Ensure Council's Asset Management practices are maintained at a core standard
- Strategic 2030 Plan: this strategy feeds into the Long Term Financial Plan and with associated service plans and asset management plans drives the planning of New assets and asset Upgrades over the long term
- Long Term Financial Plan (10 Year): incorporates the long term funding requirements for the maintenance and renewal of Council's various asset classes and feeds directly into the annual budgeting process
- Service Plans: defines what services and service levels Council provides, projects future service levels based on community expectations and legislative requirements, and outlines the cost of both current and projected future service levels

 Asset Management Policy: the base policy document for the formulation of Council's Asset Management Strategy

- Asset Management Plans: support Council's Asset Management Policy and Strategy in the life-cycle planning of infrastructure assets.

#### 5. Council Assets:

Council is responsible for management of a wide range of infrastructure assets. An indicative list of major assets (2013) is provided below.

Class	Sub Class	Approx. Replacement Value
Roads	Formation Pavement Surface treatment Kerb & Channel	\$132.1 M
Bridges	Bridges Major Culverts	\$20.3 M
Pathways	Footpaths Pathways	\$4.9 M
Drainage Infrastructure	Pipes Pits	\$14.8 M
Buildings	Buildings Buildings-Heritage	\$80.0 M
Recreational Grounds & Facilities	Recreation Grounds/ Reserves Playgrounds	\$6.1 M
	TOTAL	\$258.2M

Financial, human, and information assets are not covered as part of this asset management strategy.

## 6. Current Status:

## 6.1 Infrastructure Renewal Gap

The difference between a Council's modelled infrastructure renewal funding demand to maintain the current level of service and the actual renewal funding being applied by Council is known as the infrastructure renewal gap.

Indigo Shire's Asset Management Policy with associated budget and capital works evaluation processes target expenditure on meeting asset renewal requirements before expenditure on new assets. The required asset renewal expenditure is modelled (using the Moloneys Model) on an annual basis with this information fed into the annual budget and long term financial plan update processes.

Based on Council's Asset Management Policy and the on-going implementation of these associated processes, it is anticipated that there will be nil infrastructure renewal gap in the medium term. The Long Term Financial Plan provides for fully meeting asset renewal requirements over the 10 year time frame of the plan to enable sustainable management of Council's infrastructure assets.

#### 6.2 Processes

Indigo Shire has three staff who are directly involved in asset management – 1 engineer, 1 GIS technical officer and 1 inspection officer. The roles of these staff include:

STIR



- updating and improving asset system databases
- undertaking and organising asset condition re-assessments
- managing the documentation of asset management plans and processes
- assessing and reviewing asset unit renewal costs and useful lives
- modelling required for determining asset renewal expenditure
- participation in asset management improvement programs (currently the MAV STEP Program)
- participation within Council's Asset Management Steering Group (AMSG)
- review of the Indigo Shire Road Management Plan and undertaking required inspections on roads and pathways
- continued implementation of core asset management processes at Indigo
- continual improvement of asset management processes and procedures
- implementation of this Asset Management Strategy in those areas allocated for action.

Council's asset management processes have been established in only recent years with ongoing implementation into its wider corporate and financial planning processes required. As these processes become embedded, there will be increased understanding of asset related processes across the organisation.

#### 6.3 Systems

Council utilises a number of information systems to store and manage data. Current systems include:

- PowerBudget and Lynx Corporate financial systems
- Trim Corporate correspondence management system
- MapInfo Graphical information system (GIS)
- Merit and Conquest Customer service systems
- Conquest, AssetAsyst and PathAsyst operational works activities and asset management systems
- Moloney Asset Management Systems data storage for roads, kerb and channel, and bridge assets, and asset management.

Council's consolidated/ integrated asset management system for all infrastructure assets is the Mapinfo GIS system. Mapinfo is supported by two primary database systems:

- Conquest includes primary databases for (1) Building and (2) Stormwater Drainage infrastructure assets, and Recreation Reserves/ Open Space
- Moloneys Asset Management Systems includes primary databases for (3) Roads (includes kerb & channel), (4) Bridges, and (5) Pathways. These databases are held in .xls format for Bridges and .sql format for Roads (Pitt & Sherry Asset Asyst) and Pathways (Pitt & Sherry Path Asyst).

These asset management systems are outlined in "Infrastructure Asset Data & Systems: Financial Management & Asset Management Processes (2012)". The systems are kept relevant and up to date using procedures outlined in "Infrastructure Asset Data Update & Handover Procedures (2012)".

#### 6.4 Data

Indigo has a number of asset data and information systems. Databases for Roads are held on the Moloneys and associated AssetAsyst software, Pathway assets are held on the PathAssyst software, Bridge assets on the Moloney Asset Management System, with



Buildings and Drainage assets held on Conquest. Asset databases for Recreational and Sports Reserves, Playgrounds and Street Furniture are held in spreadsheets.

The available asset management data includes:

- Roads data separated into segments and components (condition data recollected 2013)
- Bridge data separated into components (full condition data update June 2010)
- Pathway data separated into segments and type (full condition data update 2013)
- Drainage infrastructure data separated into components (full inventory and age data update 2012)
- Buildings data separated into broad components (inventory and asset revaluation data recollected June 2012)
- Recreational grounds and facilities data separated into broad components (inventory data recollected June 2012 for revaluation).

Council's cyclic condition assessment schedule and assessment methodology is outlined in the "Infrastructure Condition Assessment Manual (2012)".

6.5 Programs

The MAV STEP program is the regional forum for asset management improvement. Indigo Shire forms part of the North East Regional Group, which comprises Towong, Wodonga, Wangaratta, Alpine, Moira, Benalla, Shepparton, Mansfield, Strathbogie, Murrindindi, Mitchell, and Indigo shires.

6.6 Core Asset Management

Definition: Core Asset Management relies primarily on the use of an asset register, maintenance management systems, top-down condition assessment, simple risk assessment, and defined levels of service, in order to establish a long-term cashflow projection.

The National Asset Management Assessment Framework (NAMAF) was used to assess the Core Maturity of Victorian councils as of December 2012. Using the NAMAF, the Municipal Association of Victoria deemed that Indigo Shire had attained Core Maturity by the December 2012 date.

6.7 Advanced Asset Management

Definition: Advanced Asset Management employs predictive modelling, risk management and optimised decision-making techniques to establish asset lifecycle treatment options and related long term cashflow predictions.

The National Asset Management Assessment Framework also includes an Advanced Asset Management assessment sheet. This assessment indicates that in a number of areas Indigo has achieved a measure of advanced asset management.

## 7. Improvements:

Organisations may choose to move towards Advanced asset management or conclude that a Core level of asset management is sufficient for their needs and available resources.



# **ASSET MANAGEMENT STRATEGY**

For instance, the IPWEA-NAMS.AU Practice Note 4 Asset Management for Small, Rural or Remote Communities aims at providing a system of Core asset management for communities with limited resources. In general, Advanced asset management will provide limited or nil benefit if the organisation is small or has small or negative growth.

Based on Indigo's Small Shire status and small population growth, this Asset Management Strategy does not plan a structured progress towards Advanced asset management competency. The approach in formulating the improvement plan was to cement core processes in place and improve areas that will provide net benefit to the strategic management of community infrastructure. Despite this, implementation of the improvement plan will see overall progress towards Advanced asset management.

Asset management improvements have been based on a three year plan January 2013 to December 2015, with Asset Management Strategy reviews scheduled annually. As outlined, the improvement plan is based around maintaining and improving upon a core level of asset management. Based on this, the actions from improvement plans contained within the various asset management plans have been consolidated within this overall improvement plan. The plan program outlines tasks, responsibilities, timetable and resource estimates.



#### 8. Improvement Implementation:

Implementation of the improvement plan will be generally managed by the relevant organisational unit within Council and overseen by the Asset Management Steering Group. The following figure illustrates the management of the improvement process.



Figure 3 - Management Structure for Asset Management Improvement

The membership of the Asset Management Steering Group comprises of: CEO All General Managers Manager Assets (Chairperson) Manager Finance

## 9. Resources:

Manager Civil Operations.

The improvements nominated in this report will require appropriate expenditure for resourcing the scheduled plan actions. These resources are estimated and identified within the improvement plan.



# **ASSET MANAGEMENT STRATEGY**

The plan is broadly based around:

- 1. Ensuring Core asset management processes and culture are embedded organisationally
- 2. Implementing the nominated improvement plans contained within the 5 completed asset management plans
- 3. Formulating an additional asset management plan in the Recreation area.

## 10. Review:

This strategy and the associated improvement plan will be reviewed and updated by the Asset Management Steering Group on an annual basis.

This Version 1.3 represents the third review and update of the Version 1.0 Asset Management Strategy adopted by Council in December 2010. The document was reviewed by the Asset Management Steering Group and then approved at its meeting in November 2013. The contents of this Version 1.3 will be reported to Council in the first half of 2014.

## 11. Conclusion:

Council recognises that sound asset management practices will provide ongoing benefits to the community by establishing a framework for sustainable infrastructure management. Implementation of this strategy will provide for the establishment of comparatively new Core asset management processes and continued improvement in asset management at Indigo Shire Council.

# Appendix 1 - Asset Management Improvement Plan 2013-2015:

No	Key Improvement Area/ Task	Responsibility	Timetable	Est. Cost or Resource
	1. Strategic Long Term Plan			
1.1	Annually review and update Long Term Financial Plan based on the Strategic Long Term Plan & Asset Management Plans.	MF, MA, AMSG	Oct 2013-14-15	n/a (Staff Time)
	2. Annual Budget			*
2.1	Prepare, review and implement annual budgets based on resource requirements and strategic objectives detailed in the Strategic Long Term Plan, Long Term Financial Plan and Asset Management Plans. Ensure Year 1 of Long Term Financial Plan aligns with annual budget	MF, AMSG	Jan-Jun 2013-14- 15	n/a (Staff Time)
	3. Annual Report			
3.1	Annual report includes a statement of actual performance for the year as measured against the Long Term Financial Plan, including reporting on measures of actual financial performance against short and long term financial sustainability indicators	MF, AMSG	July 2015 (for 2014-15 Annual Report)	n/a (Staff Time)
•	4. Asset Management Policy			•
4.1	Review Asset Management Policy (as part of Council Plan & Council mid-term)	AMSG, MA	Jun 2013, October 2014	n/a (Staff Time)
	5. Asset Management Strategy			
5.1	Annually review and monitor Asset Management Strategy.	AMSG, MA	Jun 2013-14-15	n/a (Staff Time)
5.2	Annually review the MAV STEP Program & participate as part of NE Group if program provides a targeted/ relevant approach	AMSG, MA	Mar 2013-14-15	Est. \$9,000/ annum
	6. Asset Management Plans			
6.1	Prepare a Recreation Asset Management Plan. Brief Council, advertise for submissions &/ or public consultation, and adopt	MA, GMSC, AMSG	June 2014	n/a (Staff Time)
6.2	Review Building Asset Management Plan. Brief Council on revised Plan (Council mid-term 4 yearly)	MA, AMSG	Dec 2014	n/a (Staff Time)
6.3	Review Bridge Asset Management Plan. Brief Council on revised Plan (Council mid-term 4 yearly)	MA, AMSG	Dec 2014	n/a (Staff Time)
6.4	Review Road Asset Management Plan. Brief Council on revised Plan (Council mid-term 4 yearly)	MA, AMSG	Dec 2014	n/a (Staff Time)
6.5	Review Pathway Asset Management Plan. Brief Council on revised Plan (Council mid-term 4 yearly)	MA, AMSG	Dec 2014	n/a (Staff Time)
6.6	Review Drainage Asset Management Plan. Brief Council on revised Plan (Council mid-term 4 yearly)	MA, AMSG	Dec 2014	n/a (Staff Time)
6.7	Building Asset Management Plan: (1) ESM define & implement, (2) DDA building facility audit	(1) MA, (2) GMSC	2013-2015	t.b.a.

**Key:** AMSG = Asset Management Steering Group; CMG = Corporate Management Group; CEO = Chief Executive Officer; GMIS = General Manager Infrastructure Services; GMSC = General Manager Sustainable Communities; MF = Manager Finance; MCO = Manager Civil Operations; MA = Manager Assets;

No	Key Improvement Area/ Task	Responsibility	Timetable	Est. Cost or Resource
	Asset Management Plans – Identified Improvements (continued)			
6.8	Bridge Asset Management Plan: (1) Review structural integrity 20 bridges, (2) sign bridge load limits	(1) MA, (2) MCO	2013-14	(1) \$50,000 (2) \$20,000
6.9	Road Asset Management Plan: (1) Review Road Management Plan	MA	Mar 2013	n/a (Staff Time)
6.10	Pathway Asset Management Plan: (1) Review Road Management Plan	MA	Mar 2013	n/a (Staff Time)
6.11	Drainage Asset Management Plan: (1) Drainage Master Planning for Chiltern & Rutherglen (2) Provide separate budget codes for urban drainage vs rural drainage	(1) MA, (2) MCO	2013-15	(1) \$80,000 (2) n/a (Staff Time)
	7. Governance & Management			
7.1	Report status of Asset Management practice to Council twice annually, including at least one annual update on status of Asset Management Strategy	MA, AMSG	Jun & Nov annually 2013-14- 15	n/a (Staff Time)
7.2	AMSG to continue meeting min. quarterly	AMSG	Quarterly on- going	n/a (Staff Time)
7.3	Continue to promote asset management across Council	MA, AMSG	Monthly in 'I Spy'	n/a (Staff Time)
	8. Levels of Service		+0	
8.1	Continued improvement of Service Plans as part of annual budget process, including costs associated with current and scenario level of service	CMG, MF	Feb-Apr annually 2013-14-15	n/a (Staff Time)
	9. Data & Systems			
9.1	Ensure asset condition surveys & defect assessments are undertaken in accord with the program (refer Infrastructure Condition Assessment Manual) and appropriate funding is recognised as part of the annual operational assets budget	MA, AMSG	Feb annually 2013-14-15 as part of budget process	n/a (Staff Time)
9.2	Benchmark Asset Management performance with like Councils over time using the NAMAF or like national benchmarking tool (NAF)	MA, AMSG	As requested by MAV or minimum annually	n/a (Staff Time)
10.1	10. Skills & Processes		10.11	I ( (0) (CT)
10.1	Annually review and update the financial forecasts for all asset classes and update the LTFP	MA, MF	Oct-Nov annually 2013-14-15	n/a (Staff Time)
10.2	Review asset management skills and training requirements and provide training to staff and Councillors	MA, CEO	Feb-Apr annually 2013-14-15	n/a (Staff Time)
	11. Evaluation			
11.1	Review/ monitor and report on Community Level of Service (through Asset Management Plan LOS document). Document and action required improvements to achieve Target LOS.	AM, AMSG	Oct annually 2013-14-15	n/a (Staff Time)
11.2	Review/ monitor and report on Technical Level of Service (through Asset Management Plan LOS document). Document and action required improvements to achieve Target LOS.	AM, AMSG	Oct annually 2013-14-15	n/a (Staff Time)

**Key:** AMSG = Asset Management Steering Group; CMG = Corporate Management Group; CEO = Chief Executive Officer; GMIS = General Manager Infrastructure Services; GMSC = General Manager Sustainable Communities; MF = Manager Finance; MCO = Manager Civil Operations; MA = Manager Assets;





# **Asset IQ**



# How we manage stuff

Noted comment (said somewhat proudly at a Unit meeting): "I'm sitting on my biggest asset ..." (silence).

Hardly relevant to a column such as this other than to illustrate a point ... being ... by now you would have forgotten this opening comment and be skipping towards the next thing you won't remember. Right?

But here's something that won't disappear into the Black Dog Creek of your forgetfulness... Indigo has reached a Core level of asset management practice!

Barely whispered in a noisy waiting room, these words will drop all jaws and cease all talk in wonderment.

After some minutes of silence you may hear someone say: "I will always remember when I heard ... (silence) ... " Core asset management at Indigo" ... (deep sigh) ... (much more silence) ... "

Yes, unforgettable. With much

cause for celebration, the occasion has been marked by the good ship SS Indigo leaving on the next leg of her voyage.

- Refurbished and floating proudly high above the murky depths
- Now fitted with the latest AM navigation system (there are still icebergs out there!)
- 100% recyclable construction
- Yes, and of course, dolphinfriendly.

#### Q's:

- 1. Where are you right now?
- 2. What's unforgettable?
- 3. Why unforgettable?
- 4. Would you swim with the dolphins in Black Dog Creek?

(A's: 1. Planet Earth 2. Core AM at Indigo 3. Sorry, words alone do not give justice to any answer ... (extended silence) 4. Not likely.)





Wednesday 11 December 2013

# Asset IQ — how we manage stuff

You've been there before ...

- the daughter and her Mr have gone to Bermagui for a week to live it up (those young people of today!)
- you've spotted Bozo in the back vard
- quickly realize you're responsible for managing their biggest asset
- immediately consider asset disposal and risk mitigation procedures.

So what do you do with dopey?

- Like any asset this one is a liability and costs you \$\$
- Asset Disposal may cost but has the upside of eliminating on-going 'whole of life' costs
- Sometimes you just have to eat the political barker's egg of asset disposal, for the good of all!!
   So what do you do with dopey?
- You chicken out, make sure the dog will be there and breathing when they get back, and try to recover costs by using Bozo in Christmas Card cover shots.

Yep, asset disposal is still a tough old chestnut, even for Mr Asset IQ!



## **Oestions**

1. So Bozo's real name is? (clue: he has featured in two previous I Spy appearances)

2. Provide one example where Indigo disposed of an asset.

## Answers

1. Noah (or Nosey) 2. The Yackandandah footbridge at corner Hammond St and William St was rationalised in 2011-12 (perhaps the only example I think!)

# Services = Assets = Liabilities (\$): The LTFP Perspective

# Indigo Shire

# **Vision**

Indigo: A great place to live, work

and visit

# **Mission**

To support and develop a *sustainable*, thriving and resilient community through leadership and partnerships



# Let's Trip Out on Services!

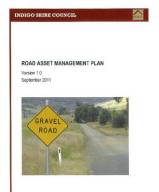
- Hey Man, what do we have to do or provide?
- Do we?
- For how long?
- What will it cost?
- What do I get for that?
- What's my community want?
- What's my community need?
- Should we change what we do to:
  - Provide a more efficient service? (same spend, marginally better service level)
  - Reduce our spend? (lower service level)
  - Provide a better service? (higher service level, higher spend)
- What's sustainable for our community?
- Where's the Indigo magic pudding kept?





# Services we Have to Have!

- **e.g.** Access/ Transport Service for light vehicles, heavy vehicles, pedestrians, bicycles, possums (?)
- What assets are required and what's it cost?
  - 1. Roads
  - 2. Bridges
  - 3. Drainage
  - 4. Pathways
  - 5. Buildings (depots, council offices).











# It's the Services Man!

**VISION** 

What are the community outcomes Council wants to achieve?



**SERVICE** 

What services (and service levels) are required to meet the vision?



<u>Infrastructure</u>

What infrastructure assets (and their service levels) are required to support the services?



# Plan for the Future

Regulatory requirement

# **Council Plan**

- Makes Service planning a priority
- Commits to Sustainable Service delivery



Service Planning (Drives asset requirements)



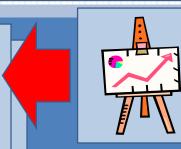
# Asset Management Plans (details!)

- Sets out how Council Manages its Assets
- Level of Service –

  Current & Desired
- Current & Future Costs: Financial Modelling based on Condition
- Maintenance;
   Renewal; &
   New/ Upgrade
   Costs

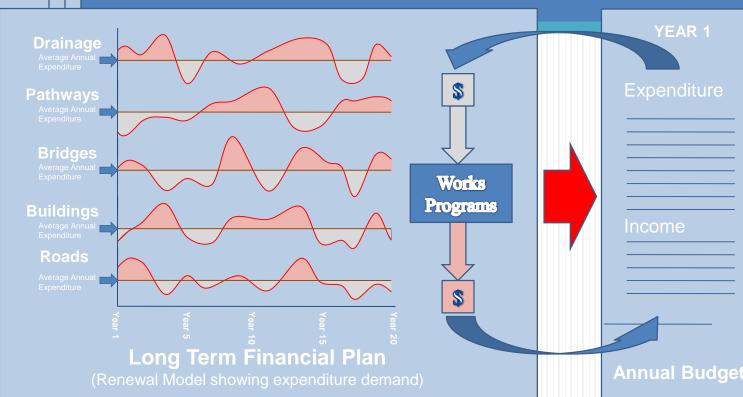


# 25



# Managing the Required infrastructure assets

(Asset Management Policy, Asset Management Strategy, Asset Management Plans)



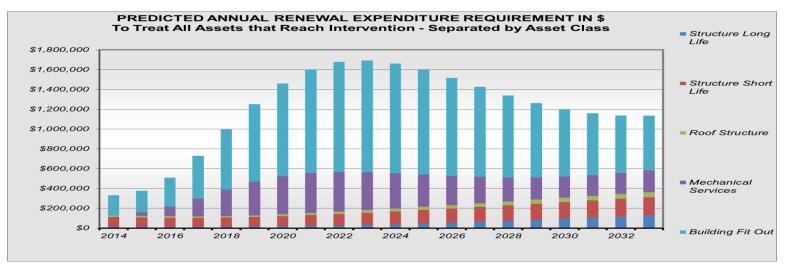
# Modelling Asset Renewal Costs Over the Long Term

Data input Details For Financial Mod	Version N		Note on Runn			in tables 2 & 3					Button 1 Note	I	
"See the Excel Cell Notes for further details"				n all Graan Shade sub asset set to be					Printing The Sheet			1,0,0	
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Council Nam	e Indigo Shi	re				Use Ro	w 15 Expe	nditure for l	Full Period	Yes			
Table No 1 Asset Quantity													
Asset Circup No	1	1	1	1	1	- 1	1	2	2	2	2	2	2
Asset Set No.	1	2	3	4	5	6	7	8	9	10	11	12	13
% of the Required Exp Being Met	16	36	Not Modelled	Not Modelled	83	93	77	19	43	63	94	Not Modelled	Nor Modelad
Av Unit Renewal Cost S	577.7	\$27.7	37D.O	528.0	84.1	54.1	\$160.0	\$26 C	\$25.0	\$4.4	\$4.1	320.0	\$200.D
Asset Group Name	Urban Roads Group	Urban Roads Group	Urban Roads Group	Unban Roads Group	Urban Roade Group	Urhan Roads Group	Urbun Roads Group	Rural Roads Group	Rural Roads Group	Rural Roads Group	Rural Roads Group	Rural Reads Groun	Rural Roads Group
Asset Set Description	Cravel Pavement (High Traffic) Uman Link	Grovel Pavement (Low Traffic) Lithan - Collector & Local Access	Asphalt Seal (High Traffic) Urban - Not Modelled	Asphalt Scal (Low Traffic) Urban - All Asphalt	Spaled Surface (High Traffid) Urban Link		All Kerbs	Gravel	Gravel		Sea ed Surface (Low Traffic) Rural	Shoulder Paveniers (High Traffic or Narrow Sool)	Shoulder
Asset Quantity	325,633	524.318	1	1	268,940	446,545	133,557	1.943,113	635,954	1,504.603	503,761	1	1
Units	rape	ecm	sqm	agm	sum	ngm	Mutros	agm	ngm	sem	sam	sum	SOM
	\$9,020,034	\$14,523,608	\$20	\$20	\$1,102,654	\$1,830,834	\$21,389,120	548.578,326	\$15,898,850	56.168.872	\$2,065,420	\$2C	S20
Total Asset Group Renewal Cost \$		\$64,000	S1	\$1	\$57,000	\$95,000	\$205,000	8133.000	\$85,000	£320,000	\$108,000	51	\$1
Annual Renewal Exp.	\$20,000				100000000000000000000000000000000000000	\$80,000	\$5,000	\$565,000	\$185,000	\$80,000	\$40,000	51	\$1
	\$20,000	\$150,000	S1.	51	\$40,000								
Annual Renewal Exp.		\$150,000 8.0	51 10.0	51 10.0	\$40,000	7.3	10.0	8.0	8.0	7.3			
Annual Renoval Exp. Annual Maintenance Exp.	\$65,000	7.000.00							8.0	7.3	7.3	10.0	10.0
Annual Renewal Exp. Annual Maintenance Exp. Retrest. Intervention Condition	\$95,000 8.0	8.0	10.0	10.0	7.3	7.3	10.0	8.0		7.3 0 16.0	7.3	10.0	

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Condition Ratings 0 to 10 Sero New or Perfect 0 No Remaining Value	Gravel Fever-ont (High Tie/Tie) Urben - Link	Oravel Pavement (Low Traffic) Urban - Lollector & Local Access	Asphalt Sea (High Traffic) Urban - No.) Medalled	Asphall Sea (Low Traffic) Jiban - All Agahali	Seded Sariase (High Traffic) Urnan Urak	Scales Surface (Low Traffic) Urban Enlegter & Local Access	All Kema		Gravel Pavement (Low Traffic) Hural Jones Avenue	Scaled Surface (Eigh Traffic) Rosal	Straked Startense (Few Traffic) Plura	Shoulder Pavement (High Traffic or Narrow Soel) - Not Modelled	Shoulder Favement (Low Traffic) - No. Modelled
10	C.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	U.CS
8	0.00	0.00	10.00	0.00	CHI	0.00	0.51	0.00	0.00	0.00	0.23	18.00	10.00
8	0.00	0.00	10.00	0.00	1.20	0.00	3,19	0.00	0.00	0.00	0.00	10.00	10.00
7	0.00	1.47	10.00	0.64	1.62	3.70	11.60	5.28	3.91	0.18	4.62	10.00	10.00
6	2.73	3.90	10.00	0.00	3.07	4.05	14.45	10.58	9.76	6.23	7.64	10.00	10.00
6	7.65	6.04	10.00	0.00	5.70	9.86	7.46	22.24	12.38	11,47	14.05	10.00	10.00
4	28.73	20.67	10.00	0.10	16.05	9.23	17.05	26.17	16.54	11.98	8.19	10.00	10.00
3	47.65	35.07	10.00	45.45	16.09	17.85	18.95	19.07	22.06	14.86	16.52	10.00	10.00
2	11.51	21.13	10.00	4.33	17.38	20.17	8.67	8.61	23.62	19.68	21.85	10.00	10.00
1	1,52	7.95	10.00	5.98	18.10	17.71	12.82	5.97	9.97	22.94	24.60	10.00	10.00
u u	0.21	3.86	10.00	43.40	20.78	17.42	4.51	2.08	1.77	12.69	2.31	10.00	10.00
	100.00	100.00	100.00	100.00	100.00	100.00	100.CC	100.00	100.00	480.00	100.00	133.00	100.00
Custom or Default Distribution	Custom	Guatom	Custom	Gustom	Custom	Custom	Gustom	Bustom	Custom	Coston	Custom	Custom	Custom

- Modelling completed annually based on inputs for:
- Renewal cost (quantity x \$/unit)
- Renewal Expenditure & Maintenance Expenditure (\*can be input as profiled)
- Condition profile (from periodic data recollection)
- Intervention condition (when we renew the asset)
- Asset life (to condition 10).
- Asset Quantity (from periodic data recollection)

# **Modelling Asset Renewal Costs Over the Long Term**



Indigo Buildings Group – Modelled Renewal Requirement for <u>All</u> Buildings

# Renewal Modelling sense checks:

- Hey Man, its just a model!
- Currently infrastructure asset replacement cost **Total approx. \$258m** Roads \$132m, Bridges \$20m, Pathways \$5m, Drainage 14.8m, Buildings \$80m, and Recreational Grounds & Facilities \$6m (Note: Roads + Buildings = 82% of total replacement cost)
- Average Renewal Cost would normally be greater than accounted depreciation cost (\$4m for 2012-13) because (1) Renewing an existing asset often costs more than building on a green field, and (2) we renew/ replace an asset before it's condition 10.

.... And don't forget.....

# It's the Services Man!