Issue 89, May 31, 2002

The 10 Minute Strategic Asset Manager

***SAM* has been 're-engineered' for greater reading ease**

- **one page, one idea**
- **3-4 main sub points clearly and quickly visible**
- **fewer words**
- **but more follow up opportunities!**

The Ant's view of the Life Cycle

Drip sugar syrup on the ground up and down in a cyclical pattern. When it dries it will be invisible—until covered in ants. Now each ant, looking down at the ground and with only the ant in front and the ant behind as reference points, will probably think it is moving in a straight line. But from our vantage point above it will look like the cyclical pattern that it is.

Asset life cycles are like the sugar line. By themselves they are invisible and can only be seen by their consequences. And not even then, if you get up too close!

In this issue we question the ant's straight line or 'steady state' assumption – both in the assets themselves and in succession planning within asset management.

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Failure to understand the average nature of depreciation can lead to inappropriate 'steady state' thinking

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Solutions lie in the improved understanding gained by disaggregating the asset into its renewable components and examining the drivers that impact the life cycles of each of the components, which is what we do in

294 Asset Components: what is a component?
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And then we provide some short references to interesting new reports, etc

296 In Brief

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Strategic Asset Management

The 'Steady State'

When, if ever, does it apply ?

In a steady state, maintenance and renewal are constant over time.

Steady states are a theoretical talking point rather than a practical reality.

A steady state could occur where

asset acquisition has been constant over a period of time equal to the economic life and then completely ceases, with renewal then taking its place.

An example would be a trucking fleet where the life of a truck was 10 years. One truck bought each year for ten years. After that only renewal of one truck a year. Renewal is constant at one truck per year. Maintenance is constant because the age distribution of the fleet is constant.

Alternatively,

the mix of asset lives in the portfolio is such that each dovetails giving rise to a constant renewal profile, or assets created in a 'lump', during a boom, have *remained constant* long enough for a number of successive renewal cycles to have spread the renewal peaks; realistically 3 or more life cycles.

These cases are very rare, and in any case -

Steady state NOT POSSIBLE with a GROWING ASSET PORTFOLIO

With a growing portfolio, future renewal is also growing

'Assuming' a steady state is dangerous; It leads to

- **a false sense of security** in the sustainability of the portfolio
- **lack of forward planning** for renewal
- **over-investment** in the early years where renewal is low
- **wasteful disinvestment** later forced by lack of funds!

Beware! *Simple renewal rules such as "replace 10% of asset stock each year" implies a steady state!*

More?

What information is required to tell if you have a steady state? Refer p.42 "Management of roads by local government" Victorian Auditor General. 2002. Avoid implied steady state assumptions by understanding your asset stocks better. See "Practice Notes" issued with the Tasmanian Audit Office's "Accounting for Road Assets and Associated Depreciation Practices" Access both at **www.amgi.com/new_articles.htm**

Succession Planning

for Asset Managers

Who will carry on when you have gone?

Succession planning is important for all managers, but particularly specialist areas like asset management where

- the choice of personnel is not wide and where
- the nature of the job will have undoubtedly changed from the one that you inherited.

Why plan for your successor?

So you can move on and up – It is a mark of good managers that they plan ahead, so succession planning is an indication of ability. On a practical level, your superiors are more likely to support your move to a better position, and to actively promote your cause if your departure is not going to leave them in a hole.

So what you have done is not lost - If you have worked hard to change attitudes, develop systems, acquire data, then you do not wish this work to disappear when you leave.

Succession planning is NOT an exercise in cloning yourself.

Plan for the next step. The stages of asset management are a series of building block. Before moving to the next stage, the current stage must be well grounded. Sometimes agencies move too quickly and do not establish good foundations. Then it pays to go back and re-do before moving forward again. In this way, 'progress' may often be 'two steps forward, one step back', so assess where you are now.

Did your organisation rush into data collection before really understanding asset management? Then look for a good communicator as your successor to ensure that this understanding is achieved. Perhaps you have good asset data but limited use is being made of it?. Then choose a successor with ability in analysis and integration with the business plan.

When your successor is YOU

Succession planning is also useful in determining what YOU do next, what new training or skills you need to adopt and what different communication strategies you may require.

Average Life Cycle Cost

and depreciation

How much the asset costs over its lifetime

The average life cycle cost is the average annual amount that needs to be spent on maintenance and renewal over the asset's lifetime.

Maintenance and renewal increases as assets age; when elements are renewed, these costs fall. This rise and fall constitutes the life cycle.

Depreciation – a proxy for average life cycle cost

If they are using the same life cycles and replacement costs, the principle difference is that average life cycle cost includes maintenance and depreciation doesn't.

Depreciation is a good proxy for the capital component of the average life cycle cost.

What depreciation doesn't tell you - how much to spend NOW on renewal

Depreciation only tells you how much you need to spend on average over the lifetime of the asset on its capital renewal. It doesn't tell you WHEN that money needs to be spent. That is the task of the life cycle cost or renewal profile.

Increasing renewal expenditure to match the depreciation amount is a waste of scarce resources.

The value of good depreciation estimates is forewarning

Depreciation doesn't tell you what to spend on renewal but it helps to plan future actions.

If current renewal is less than the average, you need to plan for increased renewal later—the life cycles and asset ages or conditions can indicate when.

Preparation may include borrowings, asset sales, rate increases. The asset management strategy should determine how these future costs are to be met and ensure that, when the time comes, the strategy can be implemented. (that means not having a strategy to increase borrowings if debt levels are already excessive.)

More?: Ballarat City Council is an example of a council that is taking positive steps to use the information provided by its depreciation estimates to plan for future renewal. Contact Phil Holloway, Ballarat City Council

Average Life Cycle Costs

AG's findings on understanding of depreciation

Recognising the differing life cycles within an asset

Infrastructure assets have different components with their own life cycle. Some are long (eg the shell or structure of a building, or the pavement of a road) and some are shorter (eg the fit-out and furnishings of a building, or the seal of a road).

It is a common mistake to assume that the life of the entire building, say, is equal to that of the structure; or, on the other hand to assess the condition of the seal as visually ok and then to assume that the pavement is also ok.

Understanding the meaning of depreciation

Inappropriate choices of life cycle can give rise to depreciation figures that are seen to be irrelevant or just plain wrong.

Often, however, the depreciation figures may be considered 'just some accounting notion', and 'misleading' even when they are not. In these circumstances agencies may be tempted to alter their depreciation estimates on an ad hoc basis, see for example, the excerpt below.

Lack of understanding of the relationship between depreciation and renewal costs over the asset life cycle was found to be common in a recent study of nine councils by the Victorian Auditor General.

> "We found that the 9 councils did not always fully understand the relationship between depreciation (the allocation of replacement cost over the life of the asset, an 'annual average') and the level of asset renewal currently being undertaken.
>
> There was a tendency in councils to downplay the depreciation figure, failing to recognise that, if the current renewal level was less than the average life cycle cost (as approximated by the depreciation amount) renewal costs would rise in the future.
>
> The depreciation figure tended to be 'adjusted' downward by artificially redefining asset lives. Thus important information for good asset management practice was not being used and, in general, rate revenues were not being set at a level that would enable assets to be renewed when needed."
>
> "Management of roads by local government" Auditor General Victoria, June 2002, p. 40.

More? This report is now available on the web and accessible via **www.amqi.com/new_articles.htm**

Asset Components

- what is a component?

Infrastructure assets have components with different life cycles

Materiality Any component, if it is large enough proportion of the total (ie 'material'), can be considered an asset in its own right. Each asset is a separate record in the asset register. (Component records may be held either in the asset register or in a subsidiary register).

Typical Components of a building

The following components are used in a renewal modelling exercise for the Victorian Government. More extensive breakdowns could be used but these capture the spirit of materiality. Note that each not only differs in life cycles but also in what is driving the life cycles:

	life	**renewal driven by**
Shell (or structure)	longest	most physical, over time—obsolescence
Site Services	medium	physical and changes to campus or site
Building Services	medium	physical and functional
Fit-out and furnishings	shortest	functionality change

Typical Components of a road

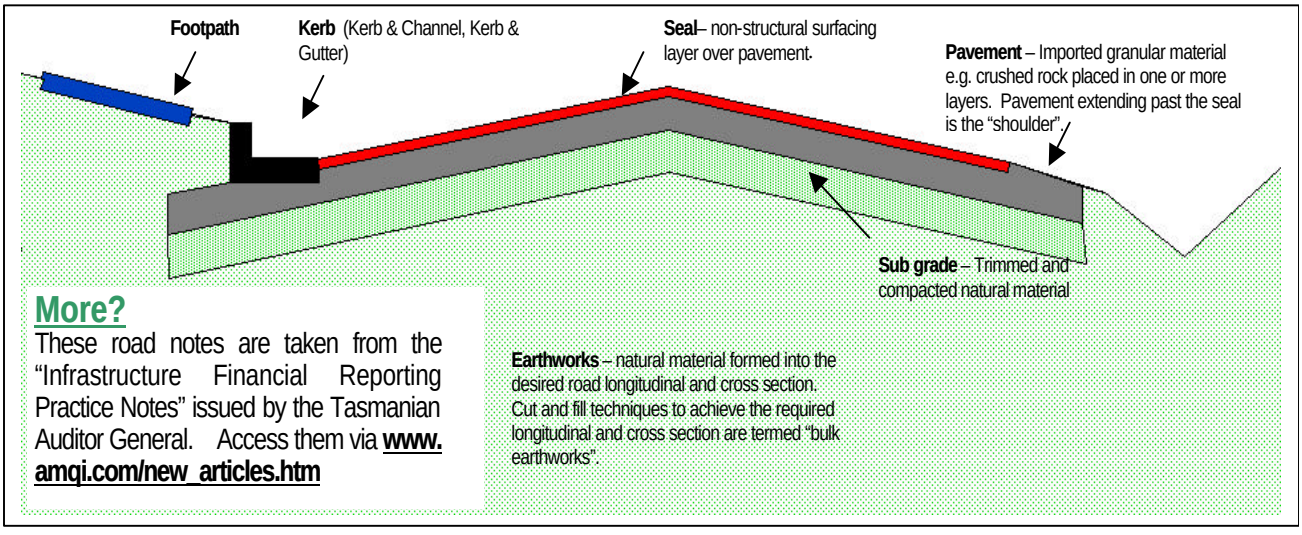
Where component values are **material**, each component should have a separate value, economic life, remaining life, and depreciation charge. Each asset should have a separate value, economic life, remaining life and depreciation charge.

Examples of road assets include

- Sealed Road Pavements per segment
- Sealed Road Surface per segment
- Gravel Road pavement / surface per segment
- Kerb per segment
- Foot paths per segment
- Bridges
- Road Furniture, signs, line marking

Note: Items such as road furniture would often by held as a 'class' of assets in the asset register, with individual items recorded separately

Typical Sealed Road Cross Section Showing Road Assets / Components



More?

These road notes are taken from the "Infrastructure Financial Reporting Practice Notes" issued by the Tasmanian Auditor General. Access them via **www.amgi.com/new_articles.htm**

Valuation & Depreciation

Using knowledge of asset components

Using component approach yields understanding and consistency

The Tasmanian Auditor General has found that most of the variability in financial reporting stemmed from variations in asset recording and valuation practice, .e.g. variations in unit rates stem from differing assumptions and treatments of factors such as earthworks, overhead/profit allocation and differing treatment of asset components. Differences in economic life are primarily due variations in estimates made due to lack of supporting data.

To improve the validity, consistency and comparability of financial reporting on roads, the AG took a pro-active approach. He set out to work with councils to increase the level of their understanding of road components and what drives the renewal periods of each. The results have been made available in the report 'Road Assets and Associated Depreciation Practices' with detailed infrastructure financial reporting guidelines from which the example on this and the previous page are taken.

Calculating the Unit Cost

The recommended methodology for the calculation of unit cost is to apply a unit cost calculation on each of the components and sub components using the current rates of construction. For example for an Asphalt Road each component / sub component of a road should be costed with supporting calculations and source data

Sample data only

Item	Unit	Cost per Unit	Comments	Depreciation Policy
Surface Asphalt	M2	$12		Separate Asset
Pavement – Base Layer 150 mm	M2	$12		Sub Component of Pavement
Pavement – Sub Base Layer 150 mm	M2	$12		Sub Component of Pavement
Trim and Compact Sub Grade	M3	$15	Convert to M2	Sub Component of Pavement
Kerb	m	$45		Separate Asset
Subsurface Drain	m	$60		Sub Component of Pavement
Footpath 1200 mm wide	m	$52		Separate Asset
Signs and Markings	m	$5		Expense – asset management plan shows expenditure needed.

More?

These notes are taken from the "Infrastructure Financial Reporting Practice Notes" issued by the Tasmanian Auditor General. Access them via www.amqi.com/lnew articles..htm

In Brief

High Court Decision on Non-Feasance

The Victorian Minister of Transport and Minister for Local Government have released a discussion paper for proposed options to address the issue of the abolition of non-feasance by the High Court. The discussion paper can be downloaded from: **www.doi.vic.gov.au/transport** Comments are invited till July 5 2002

Managing Our Community Assets

In it's most recent issue, 'Government News' takes up the need for asset management that flows from the High Court decision. I notice that all of the 'hard lines' are accredited to 'Dr Burns' including 'If an organisation is not doing good asset management, then more money can be the worst prescription for infrastructure'. See what you think.
Government News, May 2002, p.12-13

Asset Management and Urban Governance

Asset management dominates the 18th EAROPH World Planning Congress on Innovative Technologies for Good Urban Governance. Municipal authorities from Australia, New Zealand and East Asia will be attending this forum for local government asset management in Kuala Lumpur, 7-10 October 2002. More information: **www.amqi.com/conference.htm**

Housing Asset Management

"Signposts" is a UK newsletter for public sector practitioners which track news and key developments on Asset Management. Please visit **http://www.ipf.co.uk/assetmanagement** to access further details and/or to search the archive of Asset Management signposts.. You may need to subscribe but it is free.

Don't forget

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Or for follow up information or suggestions or you can email me at

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