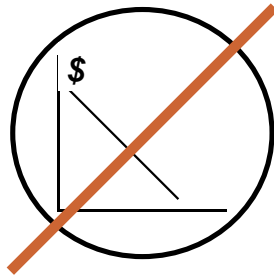


Issue 202 October 16, 2006



Fund Renewal, Not Depreciation

Part 1: WHY



**Disadvantages of
funding depreciation**
pp 163-164

Are councils financially sustainable? Recent reports from South Australia, New South Wales and, now, in process for Western Australia and nationally, suggest that for many councils the answer is no, because councils are running operational deficits, meaning that their full recurrent costs (including the cost of asset consumption) are not being covered by the rates raised.



**Difficulties in
achieving advantages
of depreciation
funding** pp 165-166

This has led to suggestions that councils should be required to fund all of their depreciation.

Last week, in Alice Springs, I presented an argument to the National Grants Commission in Alice Springs, that while depreciation was a cost of doing business and therefore should, in principle, be funded; there were in practice so many problems with mandatory funding of depreciation that we needed to look for another way of ensuring financial sustainability.



**The alternative of
funding renewal**
pp 167-168

There is another way. I believe that we should **FUND RENEWAL, NOT DEPRECIATION** and the reasons **WHY** are given in this issue.

In the next issue I will show **HOW** this can be done and how one state is already doing it.

Enjoy!

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THE ADVANTAGES AND DISADVANTAGES—in Brief

Key Ideas

Depreciation is a cost of doing business

Funding depreciation has theoretical advantages—but there are difficulties in practice in achieving them

Funding depreciation also has practical disadvantages

Maybe Funding Renewal instead of funding depreciation will be better?

Depreciation is a cost of doing business.

But it is a cost that doesn't have to be paid immediately. The longer the lives of the assets we use, the longer we can postpone the day of reckoning, the time when renewal is upon us. That time is fast approaching for many councils: the time when they will need to pay up or lose the services that their communities have become accustomed to. A number of councils have already reached the first stage where services are retained but only at the cost of falling service levels.

One solution that has been raised is to make the funding of depreciation mandatory.

It is argued that this will

- Enable financial sustainability
- Ensure that ratepayers 'pay their way' and thus
- 'Preserve intergenerational equity'.

Many support mandatory funding of depreciation because they see it as

- A needed source of renewal funds.
- A break on capital spending on the grounds that if councils have to raise rates to cover depreciation each time they propose new capital works they will be less willing to do so
- Encouragement to rationalisation of asset stocks.

Certainly it has the potential to do all of these things but in practice there is difficulty in achieving each of these advantages.

There are also disadvantages for mandatory funding of depreciation, for example:

- Rates will need to rise and may have to rise substantially
- Depreciation cannot simply be added to existing council rates without double counting
- Funding of depreciation can lead to large accumulation of financial assets that will need to be managed
- Large pools of depreciation funds could lead to more spending on assets
- We don't know what the 'right level' of funding is! And getting it wrong leads to intergenerational inequity.

The trick is to gain the maximum advantage while minimising the disadvantages.

Will funding renewal rather than depreciation do this?

pp 163–4. Disadvantages of mandatory funding

pp 165–6 Difficulties in achieving claimed advantages

pp 167–8 Renewal funding as a way around the problems—minimising the disadvantages and smoothing the way to obtain the advantages.

FUNDING DEPRECIATION—The Disadvantages



1. Rates will generally rise and could rise substantially.

This could present difficulties in those areas where councils are already struggling to stay afloat. In fact, the very act of raising the funds to make a council financially viable could, in some cases, be the cause of submerging them altogether. This is not to argue that we do not need to fund necessary costs of staying in business, but this means funding *needed renewal*, not depreciation.

2. Depreciation cannot simply be added to existing council rates.

To the extent that the budgets already include an amount for asset renewal, this would need to be deducted before the addition of depreciation or else we will be charging ratepayers twice. So it becomes very important to be clear on what is renewal on the one hand and what is maintenance on the other. It is equally important to be clear on distinguishing between renewal and other types of capital expenditure, - upgrade and expansion.

Although this distinction between maintenance and the three different types of capital expenditure were recommended in the Victorian Infrastructure Study, *The Renewal Challenge* (1998), and the SA Infrastructure Study, *The Wealth of Opportunities* (2001), and in several more recent reports, it is still not widely practiced.

As an example: If we effectively renew pavement over a period of time through a series of 'heavy patching' projects that we label as 'maintenance' and, at the same time, we charge for the wearing out of the pavement asset via depreciation, ratepayers are being hit twice.

So introducing the mandatory funding of depreciation would require more attention to these aspects of asset recording practice.

3. Funding depreciation has the potential to radically change the nature of the assets being managed from physical assets to financial assets.

Particularly where assets are relatively new, the accumulation of depreciation charges pending the need to renew could result in very significant financial resources that it will be up to the council to manage wisely and it is questionable whether

Key Ideas

1. Rates will generally rise and could rise substantially
2. Depreciation cannot simply be added to existing council rates without double counting
3. Funding depreciation has the potential to radically change the nature of the assets being managed from physical assets to financial assets
4. The existence of large cash funds encourage more capital acquisition
5. There is the presupposition that we know what the 'right level of funding for depreciation is'. *But we don't!*
6. Contrary to argument could promote rather than reduce intergenerational inequity.

FUNDING DEPRECIATION—The Disadvantages (concl.)

they will have the skilled resources to manage this.

4. The existence of large cash funds encourage more capital acquisition

This could lead to them being spent on more assets! While there is the potential to provide a fund for asset renewal there is no requirement to do so.

Indeed, any accountant will tell you that the purpose of depreciation is to allocate the cost of asset consumption and not to fund renewal.

Ratepayers faced with a hike in rates will normally look to get something in return.

We may argue that that ‘something’ is long-term financial sustainability but I suspect that few would understand that argument. There will be pressure from the community and pressure from elected members wanting to satisfy their communities.

5. There is the presupposition that we know what the ‘right level of funding for depreciation is’.

But we don’t.

Infrastructure assets are not like other assets in a number of critical ways, but the most important for our purposes here is that there is no definite life over which the cost of the asset can be allocated.

The life of an infrastructure asset that can be patched up and repaired and kept in business, *is as long as we want it to be*. There will come a time when the service level from this patch up and repair falls to an unacceptable level and then it will need to be renewed. But the important thing is that **this decision as to what is or is not acceptable, is a political one**. It has to be. The lives of infrastructure assets are

therefore politically determined – that is they are determined by the choice of decision makers – and not by some ‘objective’ measure such as physical failure.

There is no way that we can know with any great accuracy what the lives of, say road pavements, are going to be when we acquire them. We may say 60 years and the assets may last 100 or more, or conversely, perhaps because of change in usage patterns, may need reconstruction at 40. Periodically reviewing our book asset lives may help to correct earlier over- or under-estimates but unless we give refunds or charge back levies, the intergenerational damage is done.

6. Intergenerational Inequity

The above has not been a critical issue so far because we don’t, in general, fund depreciation. But it will become so, once we do. So the advantage often claimed for funding depreciation, namely that it avoids intergenerational inequity is not automatic.

These problems are not insurmountable.

They are mostly the consequences of adopting a depreciation mechanism that is designed to allocate costs **rather than one designed to fund renewal and to keep councils financially sustainable**.

Funding renewal should overcome most of them.

FUNDING DEPRECIATION—Difficulties in achieving the advantages



Intergenerational Equity - (“it ain’t necessarily so”)

In accounting theory, the purpose of depreciation is not to raise funds for renewal but rather to allocate costs over the asset’s lifetime. While straight-line depreciation (an equal cost per year) is not the only method possible, it is the usual method used for infrastructure assets. It is assumed that this correctly allocates costs to different generations of users and thus avoids intergenerational inequities. But does it?

In addition to the point raised on page 165 about getting the level of depreciation ‘right’, there is another issue that is often ignored and that is other capital related costs—interest on borrowings, maintenance—and the quality of service themselves vary over the life cycle of the asset. For example:

At the beginning, ratepayers, in addition to funding depreciation are often involved in paying interest on the loans raised to buy the assets. The loan period is generally quite a bit shorter than the life of the asset so this cost falls disproportionately on the early users. Even if it were over the life of the asset, the decline in the interest payable as the loan is paid back would mean that **interest impacts early users disproportionately**.

Towards the end of the asset’s life, maintenance costs rise and service quality and reliability fall. These are costs that **are borne disproportionately by ratepayers in the later stages of the asset’s life**.

It seems the best place to be is in the middle!— when the interest payments are negligible and the maintenance costs have yet to become significant. Simply grafting an even allocation of depreciation costs does not make this any fairer in terms of intergenerational equity!

Taking account of growth. Infrastructure assets are usually sized to take into account future growth. An even allocation of depreciation would thus fall disproportionately on ratepayers in the earlier years when the number of users is the smallest. Declining populations also give rising to unfair allocations over individual ratepayers.

So we cannot blithely assume that funding depreciation will ensure intergenerational equity – even if it were started from day one of the asset stocks. And this brings us to the next point.

Key Ideas

1. **Intergenerational Equity depends on other capital related costs also being distributed fairly**
2. **Financial Sustainability won’t be achieved unless funding is started from day 1.**
3. **A renewal fund— this is not the purpose of depreciation and cannot be assumed**
4. **Ratepayers ‘pay their way’ - is this really the benefit that is suggested?**
5. **Acts as a break on unnecessary spending—may not**
6. **Encourages asset rationalisation— maybe**

Financial sustainability *(but not when you are starting in the middle of the game!)*

For true financial sustainability, depreciation would need to be funded from day 1 of all assets. This is, of course, now not possible. When we start the procedure half way through the life cycle or later we are going to end up at the day of judgement (renewal day) with less funds than we need to do the job. In other words, *we don't automatically end up financially sustainable*. Of course we could argue *'better late than never'* but that still doesn't solve the financial sustainability issue.

A Renewal Fund

Well, as we have already seen, the funding of depreciation only makes it possible to create a renewal fund, it doesn't ensure that councils will use the funds for this purpose. Add this to the problem of coming in midway through the asset life cycle and you can see that the renewal fund can fall decidedly short. Surely, it is a step in the right direction? Well, yes. But we can do better.

Ratepayers 'pay their way'.

This is an ambiguous advantage in that it implies that ratepayers should be 'paying their way'. But should they? This is an issue that needs more debate for the following reasons:

- (1) The cost shifting inquiry indicated very clearly that councils were being required to pick up more and more costs for services that were not closely related to their one source of revenue – property tax.
- (2) The major asset of any council is their road system but this is part of the national

road system and wanted by us all because it is. This is why many of the roads were funded by the Commonwealth in the first place and are still funded under the roads grants and the special Roads to Recovery funds.

- (3) Many council assets were provided under 'equalisation' grants to compensate for known disabilities. The understanding was that the assets would be maintained by council. But over time, as the assets age, this 'maintenance' morphs into full-blown asset renewal. Have these councils overcome the disabilities that required external funding in the first place? These considerations suggest that 'paying their way' is a value that is not always appropriate to apply to councils.

Acts as a break on unnecessary asset acquisition

If councils have to argue for rate increases to provide for increased levels of depreciation for new asset acquisitions the idea is that this will act as a break on capital expenditures. But this may be outweighed by the temptation to spend the cash pools that accumulate.

Encourage Asset Rationalisation

If mandatory funding were to be introduced, it would mean that all councils would be raising rates. The increase would be seen to be the result of changed state level policy and not necessarily attributed to the council's failure to rationalise assets. So whereas it could operate, there is no necessity for it to do so.

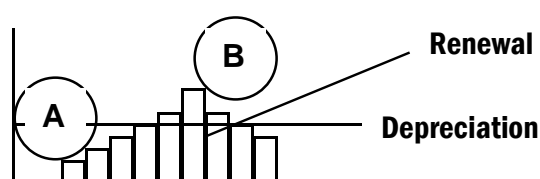
FUNDING RENEWAL



If instead of funding depreciation (which is a financial concept) we funded actual and needed renewal, what problems would this overcome?

Here are some, and you will readily see more.

Rates



Key Ideas

Rate rises can be contained

Asset and Service level rationalisation is improved

Avoids the 'spend it because you have it' syndrome

Trade offs between maintenance and renewal are facilitated

Getting the 'Economic Life' right is easier when we can use all the information at our disposal

Problems that remain are asset management problems and can be handled

Plan ahead

Rates would be contained to the amount needed to fund renewal expenditure over the ten year financial plan period.

For councils with relatively young asset portfolios, (A) on the chart, this avoids large financial build-ups that would need to be well managed for many years if the amounts are to be available at the time when they are needed—requiring good financial management skills and the ability to resist pressures to spend the money on other things.

For councils with relatively old asset portfolios, (B) on the chart, it helps to meet the real needs of the organisation for renewal and not the lesser (average) depreciation amount.

Thus funding renewal overcomes the “day 1” problem that funds for renewal can only be assured if depreciation were started—for all assets—at the time they were acquired. An impossibility now, of course.

Councils in declining areas have difficult decisions to make about what assets will be retained and what will be retired, and where service levels will need to be reduced to enable financial viability. If they were required to fund the depreciation of all of their assets, they would not be able to manage. A regime of funding renewal allows them to concentrate on the real issues of what services and what service levels are critical.

They will probably need outside help and the information that they gather on critical services will be invaluable for that purpose.

Asset and Service Level Rationalisation

Funding renewal makes it clear where the rate revenues are going. In this sense, it helps to focus attention where it should be focused—on whether the assets are really needed, on whether the service levels are really needed. It brings it home in a very concrete way what assets and services are costing.

Avoids the “Spend it because you have it” syndrome

Lately there has grown up the misconception that all depreciation should be spent on maintenance and renewal—in the year in which the depreciation funds are acquired! The inappropriateness of this can be seen from the chart on the previous page.

Trade offs between Maintenance and Renewal are facilitated

As both maintenance and renewal are funded from the ten year forward financial plan, it is not necessary to make fine distinctions in the gray area. In fact, with funding renewal, trade-offs between more maintenance now to defer renewal expenses becomes far more possible than when the trade-off appears to be between an increased recurrent cost (maintenance) and the deferral of a capital cost (renewal).

Getting the ‘economic life’ right

It is extremely difficult with long lived infrastructure assets to be confident about their economic lives when the asset is initially acquired. The range of possible economic lives for road pavement, for example, can range from 40 years to over 100 years—as we have shown in previous issues of SAM, with the research work by Jeff Roorda on the economic lives used for council road assets across the country.

We can feel far more confident that we know the economic life—the closer we are to the end!

With the funding of depreciation we need to make up our minds about economic life at the very time when we know the least! Financial rules require that we re-estimate the economic life periodically, but this has to be on the basis of the entire class of assets—and the question always is, ‘how do we know that THIS asset, for which we now have better information, is typical or atypical with respect to the class?’ This problem does not arise when we are funding renewal, because the task is done, asset by asset.

Problems that remain are asset management problems

Funding renewal provides financial disciplines but also asset management disciplines. It does not remove all problems but at least the problems that remain are asset management ones and can be addressed.

Forward Planning

Think about this now and you will be equipped to argue your case should mandatory funding of depreciation be proposed.

You can ‘go it alone’

With funding renewal you don’t have to wait for some external body to decree what should be done, you can do it yourselves.

Funding renewal makes sense to ratepayers/customers whose biggest beef is always that they can’t see where their money is going!