THE VALUATION OF

LAND UNDER ROADS

A Coalface Discussion Paper

Introduction

We are aware of 5 different suggested methodologies for the valuation of land under roads[1], and in this paper we have sought to summarise each method, and to compare the results.

These methods have been developed for the purpose of assigning a ***fair value*** within the meaning of Australian Accounting Standard AASB 116 *Property, Plant & Equipment.*

Method 1 - AASB Land Under Roads Working Party

This working party was established by the Public Sector Accounting Standards Board in 1997, before it was subsumed into the Australian Accounting Standards Board. In November 2001 a discussion paper was prepared: we are not certain whether it was publicly issued, and are indebted to Mr Robert Keys of the AASB for our copy. So far as we have been able to ascertain there have been no further documents relating to the valuation of land under roads released by the AASB.

AASB 1051 Land under Roads deals only with the recognition or non-recognition of land under roads acquired before 1 July 2008, and does not address valuation issues.

As may be expected of a discussion paper of this nature, a wide range of methodologies was considered, and the salient points of each noted:

- Market buying price
- Market selling price
- Values of adjacent land
- En globo method
- Deprival value
- Value in use
- Nominal value

1. More accurately, the matter under consideration relates to the valuation of the land contained in the entire road reserve, and not merely the land under the road infrastructure, but we have adopted the conventional terminology.

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"The Working Party's view is that where land under roads is not measured at historical cost, it should be measured at its fair value calculated by reference to the land's market buying price. Market buying prices should be determined without regard for whether the entity is prohibited from selling or redeploying the asset.

"The Working Party considers that land under roads should be valued at the amount that a purchaser would allocate to the land under roads as part of the purchase of the roads and the land under those roads. This value should be determined using the value of the adjacent land less the market premium for the features (such as development or other improvements) embodied only in the adjacent land. That is, land under roads should be valued as en globo land.

"The Working Party also considers that the deprival value of land under roads that would be replaced if the entity were to be deprived of the land would be measured similarly to the fair value of that land, which should be determined using the en globo value method."

An Appendix provides a worked example for "employing the "en globo" method of valuation to land under roads as subdivisional land", summarised below, and has been used for further analysis in this paper.

Gross realisation	1,000,000
Less: Selling expenses (legals, commission)	43,000
Net realisation	957,000
Less: profit and risk allowance (30%)	220,846
Total Project Cost	736,154
Less: development costs, annual expenses, holding charges	365,750
Funds available for land purchase	370,404
Less: Costs of purchase (holding charges, legals, stamp duty)	51,090
Indicated en globo value	**319,314**

The Working Party was principally concerned with examining the principles involved in the valuation of land under roads, and deliberately did not examine the practicalities of application. This method relies on information that would only be available to the land developer, and the proportions of each deductible would vary with each subdivision. It is improbable that a Council would be able to gain access to this information, and it would be impossible to reconstruct it for road reserves acquired in the past.

We have used the example provided in the Discussion Paper for comparison purposes only, noting that the calculation and deductibles percentages would vary for each subdivision.

Method 2 - Vic FinPro Discussion Paper

This was initially issued as a discussion paper to FinPro members on 5 February 2009, but appears to have been fairly widely adopted by Victorian Councils. The paper provides short discussion on each of the points, and the summary is taken from the paper. Particular weight is given to providing clear guidelines for the practical application of the method by Councils at a realistic cost.

Site Value (derived from statutory site value)	100%
Less: adjustment for en globo value	60% - 70%
Less: adjustment for access & carriageway rights	15%
Less: adjustment for infrastructure assets	10%
Value of road reserve	5% - 15%

A slightly modified version of this method is set out more fully in the *Australian Infrastructure Management Guidelines* (Institute of Public Works Engineering Australia, 2009) section 12.15.15, page 12.92ff.

Methods 3 - 5 - NSW Code

Draft update #19 of the NSW Code of Accounting Practice and Financial Reporting refers to three "alternative methods for valuing currently held land under roads" - page A-96. These are:

- *"valuation of the entity's total land under roads at the average unit value of the land contained within the entity's area of control*
- *"valuation of road segments at the average unit value of properties adjoining the relevant road segment*
- *"valuation on the 'Englobo' basis"*

"The Division of Local Government has determined that Councils can use any of the three alternative methods described above for valuing land under roads acquired before 1 July 2008. The method should be fully disclosed in the significant accounting policies. Land under roads acquired after 1 July 2008 is to be recognised in accordance with AASB 116 … but should be consistent with the valuation methodology for land under roads held up to 1 July 2008 where that land has been recognised."

While an example is provided for the third alternative (in fact extracted from the *Australian Infrastructure Financial Management Guidelines*), we have not been able to identify any description other than quoted above for the first two options. Nor have we been able to find any reference or further description in draft update #19 of the term *"average unit value"* used in the first two methods.

> The *site value* referred to in version 3 is defined in the draft Code update as "*the value of the underlying land assuming that any existing improvements have not been made. It also assumes that the land is not encumbered by any lease, mortgage or other charge*". Australian Property Institute, 2004
>
> The valuations supplied to NSW Councils for rating purposes by the Valuer-General are of *land value*, which is effectively the unimproved value of the land, plus the value of certain improvements defined as *land improvements.* Accordingly, this does not equate to *site value* under all circumstances.
>
> Given that we are unaware of any convenient source of *site valuations,* we suspect that most Councils will use the Valuer-General valuations as the basis for valuing land under roads. On the assumption that *land improvements* would not be a material percentage of all valuations on a Council-wide basis, and having regard to the other approximations inherent in all of the methodologies, we do not consider that the resulting distortion will be a material factor.

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Comparison of Methodologies

Method	1	2	3	4	5
Selling Price	**START**				
Site Value		**START**			**START**
Unit Value (undefined)			**START**	**START**	
Less: Deductibles					
Selling expenses	YES		? ?	? ?	
Profit allowance	YES		? ?	? ?	
Purchase costs	YES		? ?	? ?	
En globo allwance		60% - 70%	? ?	? ?	65%
Access rights allowance		15%	? ?	? ?	COMBINED 25%
Infrastructure allowance		10%	? ?	? ?	
VALUE OF LAND UNDER ROADS	**32%**	**5% - 15%**	**? 100% ?**	**? 100% ?**	**10%**

The original intention of this paper was to attempt to estimate the percentage variation that might arise between the different methods for a given parcel of land. The following attempt is based on what we will describe as "unimproved land" with a selling price equivalent to $100 per square metre.

Selling price $100 m^2	**$32 m^2**	**$5 - $15 m^2**	**$100 m^2**	**$100 m^2**	**$10 m^2**

We welcome any correction to our interpretations of any of the methods considered above.

Land Purchased for Road Purposes

Land purchased for road purposes is normally acquired at market value, including any improvements thereon. Indeed, the full cost of acquisition is often at a premium to market value, with the Council being required to replace fencing, demolish improvements and/or pay the full costs of adjustments to land titles.

We regard it as axiomatic that market value will never be less than site value (using the Australian Property Institute definition above).

Land purchased for road purposes will be initially recognised at cost[1]. For each of the *fair value* methodologies considered above, *cost* will exceed the *fair value.*

This brings Australian Accounting Standard AASB 136 *Impairment of Assets* into play. An impairment is normally recognised when the carrying value of an asset exceeds its *recoverable amount.* (Recoverable amount is defined as "the higher of its fair value less costs to sell and its *value in use*."[2])

> For not-for-profit entities, value in use is *depreciated replacement cost* of an asset when the future economic benefits of the asset are not primarily dependent on the asset's ability to generate net cash inflows and where the entity would, if deprived of the asset, replace its remaining future economic benefits.[3]

1. AASB 116.15 "An item of property, plant and equipment that qualifies for recognition as an asset shall be measured at its cost."
2. AASB 136.6 Definitions
3. AASB 136.Aus6.1

> This would clearly apply to road reserves, where the future economic benefits of the asset are not primarily dependent on the asset's ability to generate net cash inflows. (However, we have difficulty contemplating the circumstances under which the entity would be deprived of the asset, other than by voluntary disposal.)

It would thus appear that, either immediately after purchase or at the date of the next revaluation of this class of assets, an impairment (or revaluation decrement) of up to - *or exceeding* - 95% of the acquisition cost will need to be recognised in relation to these assets.

Land Acquired at No or Nominal Cost

"... in respect of *not-for-profit entities*, where an asset is acquired at no cost, or for a nominal cost, the cost is its *fair value* as at the date of acquisition."[1]

Accordingly, land acquired for no or nominal cost (say, as a result of a subdivision dedication) would be recognised at *fair value* as determined by the use of one of the above methodologies.

We thus have the potential for two equivalent parcels of land, one purchased and one acquired at no or nominal cost, to be recognised at two very different amounts - ***one of which is some 10 - 20 times the other.*** We consider this to be a particularly unsuitable accounting situation.

Conclusion

The author has previously expressed the view that there is no *reliable* basis of determining the fair value of land under roads. The information and analysis contained in this paper has done nothing to change that view.

1. AASB 116.Aus15.1