

# Technical Paper

## Implications flowing from AASB Special Project on Fair Value in the Public Sector

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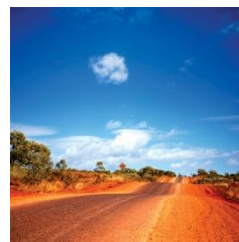
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## About APV



### What we do

APV provides specialist valuation, asset management and asset accounting services for a wide range of organisations and sectors. We enjoy close partnerships with our clients across Australia, including hundreds of local councils, state government agencies, manufacturing and transportation businesses, universities and not-for-profit organisations.

Our services include:

- Fair Value valuations: land, buildings, plant, equipment, roads, water, sewerage
- Asset accounting: valuation and depreciation methodologies, compliance reviews
- Asset management: asset management frameworks, plans and systems
- Customised training and professional development: asset accounting and asset management.
- Implementation of Asset Valuer Pro and provision of training and mentoring to enable entities to undertake their own financial reporting valuations.

As leaders in our field, we are proud of our unblemished record of audit approval. However, uncompromising quality is simply our starting point: *we deliver more than just figures*. We tailor our services to meet client needs, helping them get the most from their assets and plan effectively for the future.

And while valuation and depreciation can be complex, we keep it simple. We're constantly evolving to offer customers more flexibility and control. We use leading methodologies and custom-built valuation tools that are compliant, comprehensive, logical and truly relevant.

## Introduction

Over the past two years APV has been involved in the Australian Accounting Standards Boards (AASBs) special project for Fair Value in the Public Sector. The project has now reached final stages and following the publication of a number of decisions during 2019 an exposure draft to amend and enhance AASB13 Fair Value has been approved by the board.

The project scope was limited to providing guidance on a number of aspects relating to AASB13 Fair Value Measurement. However, discussion was also held around Depreciation Expense covered by AASB116 Property Plant and Equipment.

This paper provides a summary of the key outcomes from the discussion including those covered by the AASB13 exposure draft and a range of other issues.

It is expected that most, if not all, of the enhancements included in the exposure draft will ultimately be approved by the AASB. Likewise, it is also expected that the AASB will reiterate via their newsletter expectations regarding the various other issues highlighted in this paper.

There are a number of key consequences for many entities. These include –

- Changes to the valuation of restricted land if a discount has previously been applied
- Adjustments to the calculation of Replacement Cost if either greenfield or brownfield approaches have been adopted
- Confirmation of need to adjust for over-capacity and optimisation
- Changes to the calculation of Current Replacement Cost if it has previously been based on depreciation expense concepts rather than the key characteristics relevant of market participants.
- The need for valuations to be determined at the short-life and long-life parts for each component to enable proper calculation of depreciation expense.
- Changes to calculation of depreciation expense if terminology has been incorrectly applied
- Confirmation of the need to adopt a depreciation method that matches the expected pattern of consumption of the asset's future economic benefit.



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## Background

Since the implementation of accrual accounting in the public sector in the early 1990's and subsequent adoption of the revaluation model there has been significant inconsistencies regarding the interpretation and association application of a range of valuation related aspects of the Australian Accounting Standards (AASBs).

Over the past 15 years the level of inconsistency has been exacerbated as a number of jurisdictions mandated the revaluation model for the first time and issued guidance which was not consistent with practices adopted in other jurisdictions or jurisdictions had not updated their guidance despite significant changes in the accounting standards. In some cases, the requirements issued by State Treasuries / Departments responsible for local governments or interpretations mandated by Auditors-General in some States were in direct opposition to the mandated requirements in other States.

In recognition of the inconsistencies and implementation of AASB13 which included a new definition and concept for fair value, CPA Australia developed detailed guidance material in 2013 and 2016 which was developed through an extensive collaborative process including representatives from all jurisdictions and across a wide range of different roles including valuers, auditors and financial statement preparers.

The subsequent 'guides to the valuation and depreciation of public and NFP sector assets' (which can be downloaded from the CPA Australia and APV websites) were subsequently peer reviewed and published free of charge. The guidance material in the CPA guide is consistent with the new guidance issued by AASB and incorporated into the Exposure Draft.

An update to the CPA Australia guide is currently under development by CPA Australia and will be published in early to mid 2020.

Despite development and publication of such guidance by the leading public sector accounting body the various jurisdictions continued to apply inconsistent practices.

With the continued adoption of inconsistent practices and in response to the growing concerns from practitioners the AASB established a special project for 'Fair Value in the Public Sector' in 2017. An initial meeting was held in Nov 2017 which resulted in the identification of a range of issues that the AASB and the special project team felt needed to be addressed.

Following relevant discussion and review of technical papers developed by the AASB technical staff with some support provided by members of the special project team guidance on a range of issues was issued by the AASB in April, June and November 2019. The relevant decisions and guidance have now been encapsulated in an Exposure Draft to AASB13 aimed at ensuring full compliance with AASB13 and consistent application of the concepts across all jurisdictions.

Most of the guidance has been incorporated into a range of illustrative examples while some guidance has resulted in wording changes within the primary standard document.

It should be noted that guidance on some of the issues have not been included in the exposure draft. This is because the AASB team believed that the requirements within the standard were quite explicit and clear and as such did not require additional guidance. These included aspects relating to the determination of current replacement cost (CRC) and the calculation of depreciation expense.

# Key Issues and Implications: Exposure Draft

## ***Highest and Best Use***

The issue of what constitutes ‘Highest and Best Use’ is a concept that many practitioners have found to be confusing and to some extent has been a factor in the different interpretations applied to the valuation of restricted land.

Paragraph 28(c) of AASB 13 refers to an asset’s highest and best use generating an investment return that market participants would require from an investment in that asset. However, for public sector assets, the return on investment was not considered particularly helpful in understanding the application for specialised public sector assets such as infrastructure assets or assets restricted in use.

The AASB have now included paragraph Aus28.1, to explain a financially feasible use as one that generates sufficient services to justify a not-for-profit public sector market participant buyer incurring the asset’s current replacement cost.

*Aus28.1 Notwithstanding paragraph 28(c), in respect of assets of not-for-profit public sector entities that are not held primarily for their ability to generate net cash inflows, a use that is financially feasible takes into account whether a use of the asset that is physically possible and legally permissible generates sufficient services to justify a not-for-profit public sector market participant buyer incurring the current replacement cost of that asset.*

## ***Restricted Land and Selection of Valuation Technique***

The valuation of land which is either restricted in use or restricted from sale has over the past twenty-five years caused the most debate and variation in practices across jurisdictions. Some jurisdictions mandated practices requiring the value of the land to be ‘discounted’ whereas others adopted practices where no discount was to be applied.

The argument for discounting was based on the argument that any restrictions would result in a lower price that other market participants would be prepared to pay for the site. In some jurisdictions this was referred to as a community service obligation which was expressed as the difference between the cost of acquire the land assuming no restrictions and the market value given the restrictions.

Those who did not apply a discount argued that –

- Because the land could not be traded there was no open and active market and therefore adoption of the ‘market approach’ was inappropriate. Instead the valuation should be based on the ‘cost approach’
- Any perceived community service obligation represented service potential (no different to how infrastructure assets deliver services free of a direct user fee) and therefore the value of the service potential needs to be included in the value of the asset.

In the April 2019 AASB meeting the board decided that –

*‘for specialised or restricted public sector assets not held primarily for their ability to generate net cash inflows, the approach to determine their fair value should be current replacement cost.’*

Accordingly, restricted land currently valued to market using a discounted approach will need to be revalued using the cost approach. As such any 'discounts' will need to be eliminated.

Taking into account the decision regarding 'Highest and Best Use' it can be seen that if an entity is prepared to pay an amount to acquire land that will then be restricted in use that the 'Highest and Best Use' is the intended use and by definition the value of the land must be equal to or higher than the value other market participants would be prepared to pay for their alternative use.

Likewise, if land is acquired in the open market the Fair Value must be calibrated to the transactional cost. If the entity then uses the land for a restricted use the Fair Value does not change from the transactional cost.

The approach is incorporated in AASB13 ED by –

- Paragraphs Aus66.1,
- Illustrative Examples 1 and BC13 – BNC47

*Aus66.1 Notwithstanding paragraphs 61–66, in respect of a non-financial asset of a not-for-profit entity that is not held primarily for its ability to generate net cash inflows, if the asset has a legally restricted use or is subject to a legal restriction on the prices that may be charged for using it:*

*(a) if an equivalent restricted asset is obtainable in the marketplace at the measurement date for a price supported by observable market evidence, the asset is measured at fair value based on the available market evidence for the equivalent restricted asset; and*

*(b) if an equivalent restricted asset is not obtainable in the marketplace at the measurement date for a price supported by observable market evidence, the asset is, subject to paragraph Aus66.2, measured at its current replacement cost. The asset's current replacement cost is determined consistently with paragraphs B8 – B9, without a discount to the current market buying price of an equivalent but unrestricted asset.*

**Example 1 – Assets held primarily for their service capacity**

*A local council (Council B) recently purchased a parcel of residential land for \$30 million, which was rezoned as parkland. The local government does not have the power to rezone the land (that power resides with the State Government's Planning Minister). Land restricted for use as a park in a suitable location and with similar characteristics is not obtainable in the marketplace. At Council B's reporting date, there have been no changes in the market price of land in the area since the parkland was acquired, and the market value of a similarly sized parcel of adjacent residential land is \$30 million.*

*A restaurant was built on the parkland with the primary purpose of generating net cash inflows from lessees of the restaurant. In addition, barbecues, picnic facilities and a shelter were built on the parkland to provide services to park visitors (ie for their service capacity).*

Valuation techniques

*Council B would measure the fair value of the parkland and the improvements on that land (excluding the restaurant) at current replacement cost, in accordance with paragraph Aus66.1, because those assets are held for their service capacity and because land restricted for use as a park in a suitable location and with similar characteristics is not obtainable in the marketplace. In accordance with paragraph Aus66.1(b), the restricted parkland's current replacement cost should not be measured at a*

*discount to the current price of suitable unrestricted land that would be purchased in a replacement transaction. Based on the current market price of adjacent residential properties, the current replacement cost of the parkland at the reporting date is estimated as \$30 million.*

*The restaurant's fair value is measured separately from the current replacement cost of the parkland, taking care not to double-count the value of the land under the restaurant, because the restaurant is held with the primary purpose of generating net cash inflows—that is, paragraph Aus 66.1 does not apply to it (see also paragraph F3(a) of the Australian Implementation Guidance for Not-for-Profit Entities). Council B would use judgement in selecting an appropriate valuation technique under paragraphs 61 – 66 of AASB 13. Because the restaurant is capable of generating net cash inflows separately from the parkland, Council B concludes that either the income approach or the market approach would be appropriate to measure the fair value of the restaurant. Council B takes into account estimates under each of those approaches, maximising the use of relevant observable inputs to the fair value estimate (in accordance with paragraph 61 of AASB 13).*

## **Terminology: Greenfield and Brownfield**

Over time some jurisdictions have mandated the application of either greenfield or brownfield approaches to the calculation of the Replacement Cost. This has resulted in inconsistencies across the jurisdictions.

Illustrative Example 3 highlights that neither of these terms is consistent with the definition of Replacement Cost under AASB13.

Illustrative example 3 reflects the Board's decision in June 2019 that the current replacement cost of the assets composing a facility (eg a road and land under the road, whether reported jointly or separately) includes all necessary costs intrinsically linked to acquiring those assets at the measurement date.

For example –

- If there are parts of the asset that would not need to be replaced (such as cutting in the side of a mountain) the costs of such elements would still need to be included in the asset's replacement cost. Therefore 'brownfield' is not consistent with AASB13
- If the asset is in a built-up area and its replacement would require additional costs to operate at night, have additional traffic safety or would require the part demolition and later reinstatement of another asset, then all those associated costs would need to be included in the replacement cost. Therefore 'greenfield' is not consistent with AASB13.

## **Adjusting for Over-Capacity and Optimisation**

Illustrative examples 4 and 5 highlight the requirement under AASB13 that Fair Value must be based on an optimized model and as such the Fair Value must be discounted to adjust for excess capacity between the existing asset and the modern equivalent asset.

Illustrative example 4 deals with a school where the current facilities provide for up to 500 students but the school currently has only 100 enrollments. Because there is an expectation that with changing demographics the school will once again need its full 500 capacity in future years the excess capacity is seen only as temporary and as such the Fair Value is to be based on the full 500 capacity.



In contrast illustrative example 5 assumes the same facts except that the long-term capacity is only considered to be 100 students. As such the difference between the full capacity (500) and existing and long-term capacity (100) is seen as excess capacity. If the school needed to be replaced the government would only need to replace it with a school for 100 and as such the replacement cost should be adjusted to reflect the economic obsolescence.

# Key Issues and Implications: Other

## ***Determining Current Replacement Cost using Cost Approach***

Specific guidance on how to calculate the Current Replacement Cost (CRC) was not included in the Exposure Draft because the Board felt that the requirements within AASB13 were already explicitly clear and that the standard was ‘not broken’.

The key requirements are –

- The valuation needs to be based on the key characteristics that would be relevant to other market participants. These are specifically listed as condition, location and restrictions
- Under cost approach (BC9) the calculation of the CRC is based on the calculation of the cost of construction of an asset of similar utility adjusted for obsolescence.
- Obsolescence for valuation purposes is conceptually different and unrelated to depreciation expense which is the allocation of the asset’s value over its useful life.

As such the valuation needs to take into account general obsolescence and condition and is not dependent on the asset’s depreciation expense assumptions (useful life). If not based on the key characteristics the resulting valuation would be fundamentally flawed.

AASB13 specifically states that –

*11 A fair value measurement is for a particular asset or liability. Therefore, when measuring fair value an entity shall take into account the characteristics of the asset or liability if market participants would take those characteristics into account when pricing the asset or liability at the measurement date. Such characteristics include, for example, the following:*

- (a) the condition and location of the asset; and*
- (b) restrictions, if any, on the sale or use of the asset.*

*22 An entity shall measure the fair value of an asset or a liability using the assumptions that market participants would use when pricing the asset or liability, assuming that market participants act in their economic best interest.*

### ***Cost approach***

*B8 The cost approach reflects the amount that would be required currently to replace the service capacity of an asset (often referred to as current replacement cost).*

*B9 From the perspective of a market participant seller, the price that would be received for the asset is based on the cost to a market participant buyer to acquire or construct a substitute asset of comparable utility, adjusted for obsolescence. That is because a market participant buyer would not pay more for an asset than the amount for which it could replace the service capacity of that asset. Obsolescence encompasses physical deterioration, functional (technological) obsolescence and economic (external) obsolescence and is broader than depreciation for financial reporting purposes (an allocation of historical cost) or tax purposes (using specified service lives). In many cases the current replacement cost method is used to measure the fair value of tangible assets that are used in combination with other assets or with other assets and liabilities.*

## ***Depreciation Expense***

Depreciation Expense is a concept covered by AASB116 Property Plant and Equipment as well other specific standards. It is not covered by AASB13 and as such the discussions held regarding depreciation expense do not form part of the AASB13 exposure draft.

However, significant discussion was held regarding the inconsistent approaches adopted to calculate depreciation expense using the straight-line method as well as the consequences flowing from the AASB May 2015 Residual Value decision and Interpretation 1030 Depreciation of Long-Lived Physical Assets: Condition-Based Depreciation and Related Methods.

The discussion highlighted –

- Inconsistent understanding of key terminology such as Depreciable Amount and Useful life and their application to calculate depreciation expense using the straight-line method
- The need for valuations to provide significantly greater detail
- Concerns that the mandated adoption of a straight-line pattern of consumption could significantly misstate depreciation expense and associated sustainability measures.

## ***Terminology and Straight-Line Algorithms***

AASB116 Property Plant and Equipment requires that the Depreciable Amount be depreciated over the Useful Life. The Depreciable Amount is defined as being the cost or amount substituted for cost less the residual value.

The same terms are used by asset managers and engineers. However, application of these terms for accounting purposes is different than those used for asset management.

As an example, assume –

- Asset commissioned twenty years ago
- Asset has only one component and is not expected to undergo renewal
- Asset was condition assessed and revalued today resulting in –
  - Replacement Cost: \$10m
  - Fair Value: \$3m
  - Residual Value: nil
  - Age to date: 20 Years
  - Remaining Useful Life: 5 years

For asset management purposes the Useful life would be calculated as Age to Date plus RUL =  $(20 + 5) = 25$  years.

However, for the purposes of calculating depreciation expense the Depreciable Amount = the carrying amount less residual value = \$6m and the Useful life = time that the asset is available for use which equals the RUL = 5 years.

Some entities calculate depreciation expense based on the depreciable amount being based on the Replacement Cost (\$10m) whereas others base it on the Fair Value (carrying amount). The comparison of the two approaches is as follows –

	Asset Management	Accounting
Replacement Cost	\$10m	
Carrying Amount (Fair Value)		\$3m
Residual Value	\$0	\$0
Depreciable Amount	\$10m	\$3m
Useful Life	25 years	5 years
Depreciation Expense	\$400,000	\$600,000

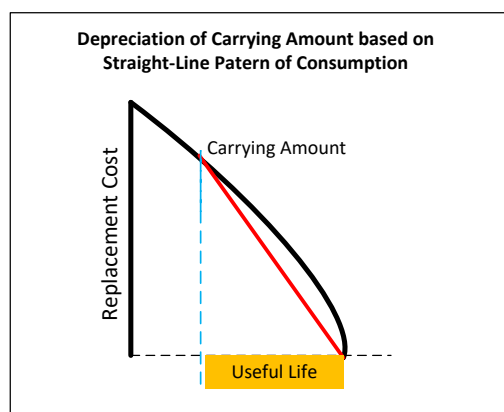
Additional guidance on the calculation of depreciation expense using the straight-line method was not considered necessary by the AASB because existing and clear guidance has already been provided by the Implementation Guidance (issued 2012) for IAS8 (AASB 108) Accounting Policies, Changes in Accounting Estimates and Errors.

Example 3 provides an example that demonstrates the calculation of depreciation expense for a revalued asset is the (carrying amount less residual value) divided by the RUL.

Delta's tax rate is 30 per cent.

	CU
Property, plant and equipment at the end of 20X1:	
Cost	25,000
Depreciation	<u>(14,000)</u>
Net book value	<u>11,000</u>
Prospective depreciation expense for 20X2 (old basis)	1,500
Some results of the engineering survey:	
Valuation	17,000
Estimated residual value	3,000
Average remaining asset life (years)	7
Depreciation expense on existing property, plant and equipment for 20X2 (new basis)	2,000

The concept of depreciation for a revalued asset using the straight-line method is as follows.



## Detailed Valuation Outputs

Having determined that depreciation expense is to be calculated based on the carrying amount (Fair Value at time of valuation) there are serious implications in terms of valuation outputs. This is because the AASB May 2015 Residual Value decision and associated AASB papers as well as Australian Interpretation 1030 confirm that depreciation expense is to be calculated separately for each part of the asset that has a different useful life.

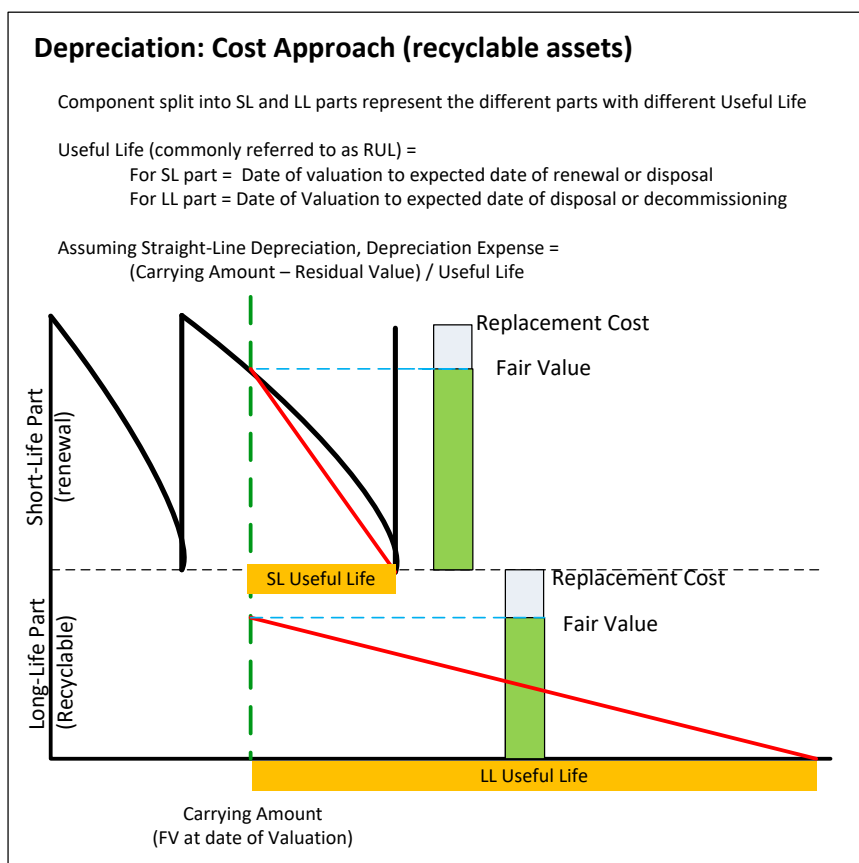
The Residual Value decision clarified that where a component of an asset undergoes regular renewal and that the cost of the renewal was less than the cost of the component that the difference between the component cost and the cost of the renewal was not residual value. Instead, this confirms that the component is comprised of two separate parts with two different useful lives and therefore each part needed to be depreciated separately.

The Residual Value decision refers to the two parts as being the renewal or short-life part and the balance being the recyclable or long-life parts.

Therefore, in order to calculate depreciation expense, the valuation needs to provide a Fair Value and RUL for the short-life and long-life parts of each component. The value for each is of course to be determined taking into account overall obsolescence and condition.

Estimating depreciation expense based on the Replacement Cost and asset management Useful Life of each component would represent a non-conforming approach to depreciation expense.

The concept for calculating depreciation expense using straight-line for a component that comprises both a short-life and a long-life part is as follows.



## ***Pattern of Consumption***

Perhaps the one aspect of depreciation expense that has provided practitioners and auditors with greatest angst over the past two decades has been the discussion around the requirement to apply a method of depreciation that reflects the pattern in which the asset's future economic benefits are expected to be consumed.

AASB116 states -

*60 The depreciation method used shall reflect the pattern in which the asset's future economic benefits are expected to be consumed by the entity.*

AASB116 further highlights (paragraph 62) that –

*a variety of depreciation methods can be used to allocate the depreciable amount of an asset on a systematic basis over its useful life. These methods include the straight-line method, the diminishing balance method and the units of production method. .... The entity selects the method that most closely reflects the expected pattern of consumption of the future economic benefits embodied in the asset. That method is applied consistently from period to period unless there is a change in the expected pattern of consumption of those future economic benefits.*

During the project discussion it was noted that prior to 1997 the then relevant accounting standard (AAS4 Depreciation) provided an option that users 'should' employ a method that matched the expected pattern of consumption but 'if it was too hard to adopt the straight-line method'.

However, from 1997 onwards the option to apply straight-line as a default was removed and the word 'should' was replaced initially with 'must' and later 'shall'. As a consequence, it is a requirement that the depreciation method match the expected pattern of consumption of the future economic benefit.

For simplicity purposes some jurisdictions mandate the application of straight-line depreciation expense. However, with the change in definition and concept of Fair Value flowing from the implementation of AASB13 in 2013 and confirmation that there is no relationship between depreciation expense and the calculation of Fair Value, there is concern that the resulting calculation of depreciation expense may be materially misstated if the straight-line pattern is adopted as a default.

For example, if it is expected that the relative value of an asset is expected to diminish incrementally due to the impact of increasing cost of renewal as an asset deteriorates combined with the impact of general obsolescence that the rate of depreciation expense should also increase incrementally.

Likewise, if there is an expected reduction in the relative value of an asset of 20% over the next 10 years, the rate of consumption of the future economic benefit is arguably 2% per annum.

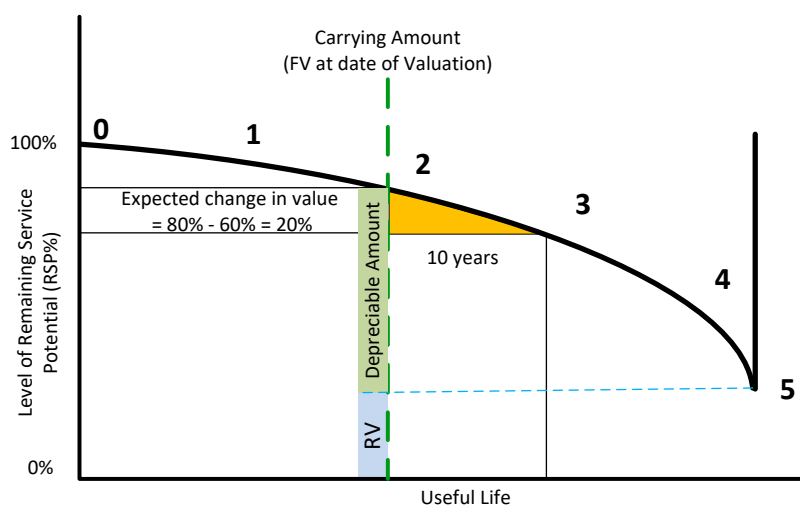
### Depreciation: Matching 'Pattern of Consumption'

Depreciation Amount is (Carrying Amount – Residual Value)

Curve represents estimated 'Level of Remaining Service Potential' which is expressed in valuation as Fair Value / Replacement Cost (i.e. If RC = \$100 and FV = \$80 the RSP% = 80%)

In diagram below –

- Valuation sets asset at 2. RSP% = 80%
- Point 3 RSP% = 60%
- If estimated time from 2 to 3 = 10 years
- Depreciation Expense =  $(80 - 60) / 10 = 2\%$  per annum



Again, as this issue deals with depreciation expense that is unrelated to ASASB13, there has not been any guidance included in the AASB13 exposure draft. However, it is expected that the AASB will reiterate via other methods that –

- AASB116 requires the depreciation method to match the expected pattern of consumption of the future economic benefit
- It is the responsibility of management to review the expected pattern of consumption and to make any necessary changes and recognise them as a change in accounting estimate per AASB108.
- AASB116 provides that a variety of methods can be used and does not provide for straight-line to be used as a default.

Given the significance of depreciation expense in the calculation of many of the sustainability measures there is concern that the adoption of the straight-line method as a default may be resulting in significant misstatement of the sustainability measures.

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