Australian Infrastructure Financial Management Manual (2nd Edition)

Use of Residual Value

23 Sep 2015 Webinar

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1

Welcome!

- Where are participants from?

John Comrie

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2

Use of Residual Value Webinar

Topics discussed

- Background to use of residual value
- Issues with use of residual value
- Methods to recognise optimum renewals without use of residual value
- Decisions by Australian Accounting Standards Board
- A way forward
- Componentisation and valuation as MEA
  - Based on asset management plans
- Benefits

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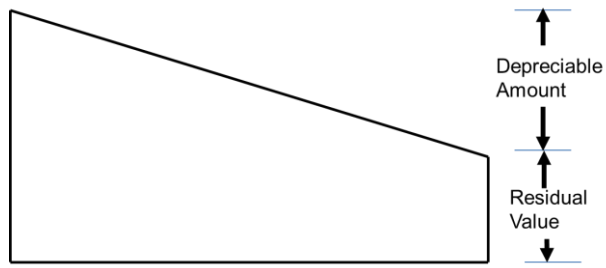
3

What is Residual Value?

Residual value is an accounting term used to recognise an amount gained from sale of an asset at the end of life (ie trade in of a motor vehicle)



The depreciable amount is generally the replacement cost of a new asset less any net proceeds from sale of disposal at end of life

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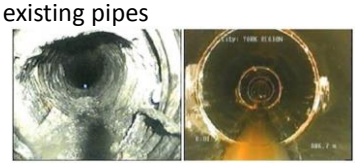
4

How has Residual Value been used?

Residual value has commonly been used in a 'technical interpretation' in local government to recognise a future cost saving in renewal of an asset.

Examples include:

- Road resurfacing
  - replace 2 coat seal with single coat seal
- Road pavement - recycling existing pavement material
  - stabilisation with lime, cement or bitumen
  - topping up pavement material
- Pipelines – relining existing pipes



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How have we determined Residual Value?

Future cost saving in renewal of a road surface asset.

- Road resurfacing - replacing 2 coat seal with single coat reseal
  - Cost of two coat flush seal $6.00 / m2
  - Cost of single coat reseal $4.00 / m2
  - Cost 'saving' $2.00 / m2
  - Residual value $2.00 / m2 (33%)

Known in AIFMG (1st edition) as 'optimum renewals'

- Renewing assets for less than replacement cost

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How have we determined Residual Value?

Future cost saving in renewal of a road pavement asset.

- Road Pavement 'recycling' existing pavement with stabilising agent
  - Cost of pavement 300 mm thick $40 / m2
  - Cost of stabilising 150 mm with cement $20 / m2
  - Cost 'saving' $20 / m2
  - Residual value $20 / m2 (50%)

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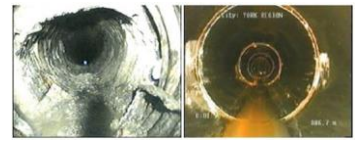
How have we determined Residual Value?

Future cost saving in renewal of a stormwater drainage asset.

- Lining of stormwater pipe with structural liner
  - Cost of stormwater pipeline 450 mm dia $700 / m2
  - Cost of lining $300 / m2
  - Cost 'saving' $400 / m2
  - Residual value $400 / m2 (57%)



Before After lining

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How have we determined Residual Value?

Future cost saving in renewal of a building roof

- Lining of stormwater pipe with structural liner
  - Cost of building roof component $60,000
  - Cost of replacing roof sheeting $24,000
  - Cost 'saving' $36,000
  - Residual value $36,000 (60%)

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Justifying use of Residual Value?

Australian Infrastructure Financial Management Guidelines (2009, 1st edition) defined method to determine residual value for infrastructure

Cost to replace asset $100

Cost to renew asset $60

If cost to renew asset is less than cost to replace asset ($60 is less than $100)

Residual value may be recognised = $40 (40%)

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Issues with use of Residual Value

Tasmanian Audit Office Report to Parliament concluded:

"From discussions with council management and engineers, it became apparent that there are differing views regarding the definition, use and validity of residual values in the valuation of infrastructure assets, such as roads, for financial reporting purposes.

We consider the use of residual values, as it relates to infrastructure assets, ignores the impact of technical or commercial obsolescence over the asset's life. The residual balance should be depreciated on some basis, even if over an extended useful life, to ensure the calculation of depreciation complies with the requirements of Australian Accounting Standard AASB 116 Property, Plant and Equipment. (p 29)

Ref: Report on the Financial Statements of State Entities, Vol 4, Part 1, Local Government Authorities 2011-12

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Review of use of Residual Value

Tasmanian Audit Office commissioned an expert report to investigate

"The two main concerns that arose regarding the use of residual values, in the context of infrastructure assets, particularly roads, were:

1. It ignores the fact that at some point in time, the asset may no longer be required and its function may be decommissioned due to obsolescence.
2. Compliance with Australian Accounting Standards in particular AASB 116 Property, Plant and Equipment." (p 8)

Ref: Report No 5 of 2013-14, *Infrastructure Financial Accounting in Local Government*

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Review of use of Residual Value

Tasmanian Audit Office Report concluded

"We concluded that asset management practices of councils complied with Australian Accounting Standards but that some alterations to existing practices in councils are required.

Broadly, the changes to current practice involve:

- a reduced reliance on residual values to affect the depreciable amount of infrastructure assets
- a greater reliance on cost based fair value assessments to establish current replacement costs
- a greater use of componentisation to reflect assets with different estimated useful lives." (p 7)

Ref: Report No 5 of 2013-14, *Infrastructure Financial Accounting in Local Government*

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13

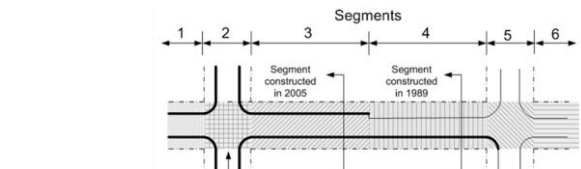
TAO Report Recommendations

1. Components of road asset be identified and recognised at fair value and separately valued and depreciated over their useful lives.

Segmentation

- for linear assets

Componentisation.



Ref: Report No 5 of 2013-14, p 8.

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14

TAO Report Recommendations

2. Assets be recognised at cost based on a modern equivalent asset

Revaluations be based on amount currently required to replace the service capacity of the asset (modern equivalent asset)

Evidenced by renewal strategies in AM Plans

15

Ref: Report No 5 of 2013-14, p 8.

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TAO Report Recommendations

3. Residual values for property, plant and equipment assets be recognised only where the estimated amount to be received from disposal of the asset is greater than the cost of disposal of the asset.

16

Ref: Report No 5 of 2013-14, p 8.

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TAO Report Recommendations

4. Assets subject to planned 'optimal' renewal methods be componentised to recognise the different useful lives estimated for each part of the asset.

The componentised assets be revalued as modern equivalent assets being the cost that is required currently to replace the service capacity of an asset.

17

Ref: Report No 5 of 2013-14, p 8.

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Componentisation and Valuation as Modern Equivalent Assets

What does it mean?

Recognising optimal renewals
Recycling of 150 mm pavement base

Componentisation to recognise the different useful lives

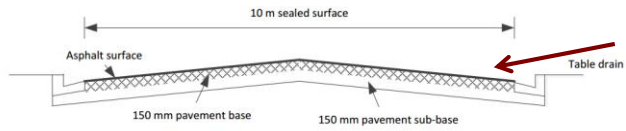

Figure V: Road Asset Components recognising Planned Recycling Renewal Treatments

Asphalt surface – depreciated over (say) 25 years

Pavement base (to be recycled) – depreciated over (say) 60 yrs

Pavement sub-base – depreciated over (say) 100 yrs

Ref: Report No 5 of 2013-14, p 42.

19

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Recognising optimal renewals
Recycling of 150 mm pavement base

Valuation as modern equivalent assets

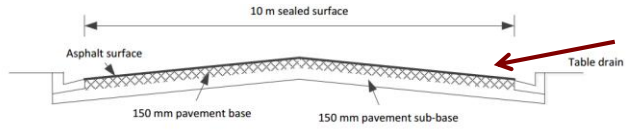

Figure V: Road Asset Components recognising Planned Recycling Renewal Treatments

Surface – valued at cost of resurfacing

Pavement base $\$20/m^2$ – valued at cost of recycling

Pavement sub-base $\$40/m^2$ – valued at cost of replacement less cost of recycling ($\$60/m^2$ - $\$20/m^2$)

Ref: Report No 5 of 2013-14, p 42.

20

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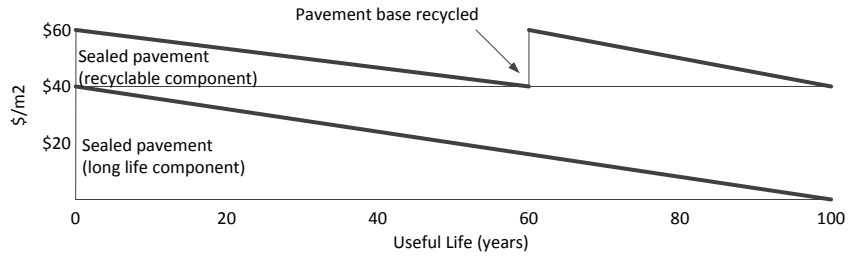
Recognising optimal renewals
Recycling of 150 mm pavement base

Recognition and Depreciation



No need to use residual value

Ref: AIFMG based on Report No 5 of 2013-14, p 45.

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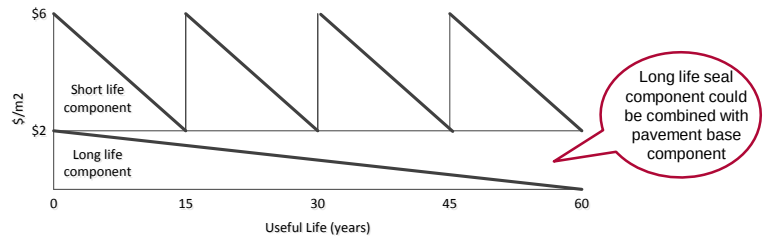
21

Recognising optimal renewals
Resurfacing of 2 coat seal with single coat seal

AM Plans show sealed roads to be resurfaced at 15 year intervals until road is reconstructed after 60 years

- Short life component – cost of single coat reseal $4/m^2 – 15 yrs
- Long life component – cost of 2 coat seal less cost of single coat reseal $2/m^2 ($6/m^2 - $4/m^2) - 60 yrs



No need to use residual value

Ref: AIFMG based on Report No 5 of 2013-14, p 45.

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Building Roof Replacement Example

Recognised roof component
(Roof structure & sheeting ~ 15%)
Replacement Value Say $60k

Replace sheeting Say $24k
Residual value $60 - $24k
= $36k (60%)

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Building Roof Replacement Example

Roof is actually 2 components
Roof structure $36k – part of building structure (100 yrs)
Roof sheeting $24k life 50 yrs

AIFMG recommends building componentisation percentages be based on renewal plans instead of construction costs.

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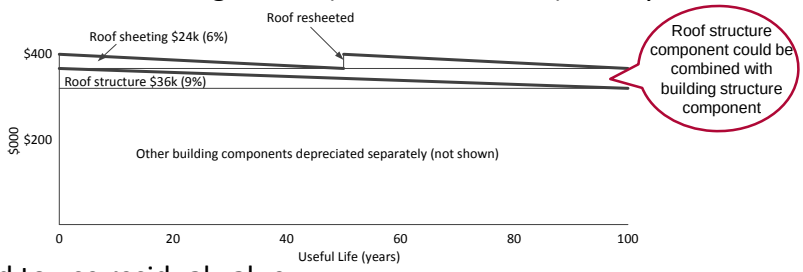
Recognising Building Roofing Components

AM Plans show building roof is to resheeted at 50 year intervals until building is replaced after 100 years

- Short life component – cost of roof sheeting $24/m^2 – 50 yrs
- Long life component – cost of roof structure – total roofing cost less cost of resheeting $36m^2 ($60/m^2 - $24/m^2) - 100 yrs



No need to use residual value

Ref: AIFMG based on Report No 5 of 2013-14, p 45.

25

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Compliance with AAS 116

AASB 116.6 *Property, Plant and Equipment* defines residual value

The *residual value* of an asset is the estimated amount that an entity would currently obtain from disposal of the asset, after deducting the estimated costs of disposal, if the asset were already of the age and in the condition expected at the end of its useful life.

26

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Compliance Issues

AASB 116.6 defines residual value

The *residual value* of an asset is the estimated amount that an entity would currently obtain from disposal of the asset, after deducting the estimated costs of disposal, if the asset were already of the age and in the condition expected at the end of its useful life.

27

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Compliance issues with use of Residual Value

Compliance (and materiality) issues raised by Tas Audit Office.

Two main concerns

- Ignores the fact that at some point the asset may no longer be required and its function may be decommissioned due to obsolescence
- Compliance with AASB 116

Ref: Report No 5 of 2013-14, *Infrastructure Financial Accounting in Local Government, p 8.*

28

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AASB Targeted Outreach on Residual Value

The AASB received a request to clarify whether residual value, as defined in AASB 116 *Property, Plant and Equipment*, includes the cost savings from the re-use of in-situ materials.

The submitter contended that the definition of residual value is unduly limiting in the not-for-profit (NFP) sector and requested an exception be made for NFP entities to permit such entities to recognise the cost savings from the re-use of in-situ materials in the residual value of infrastructure assets.

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29

AASB Targeted Outreach on Residual Value

Board consideration

- Noted concerns in relating to the definition and application of the term 'residual value', which might be read as limiting the recognition of residual value to those cases where an entity will receive consideration from the sale of an item of property, plant and equipment (PPE) at the end of its useful life
- Noted the applications of principles in AASB116 for an asset subject to being recycled into a new asset
- Considered the issues detailed in the submission are not limited to the NFP sector and could apply to a range of recyclable assets
- Directed staff to conduct targeted outreach on the issue to assess the prevalent treatment for recyclable assets and whether diversity in practice exists

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30

AASB Targeted Outreach on Residual Value

Process

AASB performed targeted outreach on the issue seeking specific comment on:

- whether constituents feel the requirements of AASB 116, in relation to residual value, are clear?
- how constituents are determining the residual value of recyclable assets?
- whether constituents consider the issue is limited to the not-for-profit sector?
- examples of recyclable assets.

AASB Tentative Agenda Decision

AASB noted 2 views

- View 1: residual value is only recognised in circumstances when an entity expects to receive consideration for an asset at the end of its useful life and, accordingly, would not include the cost savings from the re-use of in-situ materials; and
- View 2: residual value includes the cost savings from the re-use of in-situ materials.

Ref: AASB, February 2015.

AASB Tentative Agenda Decision

AASB noted:

- the definition of residual value in AASB 116 refers to the estimated amount that an entity would currently obtain from disposal of the asset at the end of its useful life. That is, if significant values attach to in-situ materials, and they are expected to be recycled, the materials have not reached the end of their useful lives.
- AASB considered that a residual value should only be recognised when an entity expects to receive consideration for an asset at the end of its useful life.

33

Ref: AASB, February 2015.

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AASB Tentative Agenda Decision

AASB

- observed that AASB 116 (paragraph 43) requires each part of an item of property, plant and equipment with a cost that is significant in relation to the total cost of the item to be depreciated separately and includes guidance when parts of items of property, plant and equipment require replacement at regular intervals (paragraphs 12-14). These requirements apply equally to for-profit and not-for-profit entities.
- noted that adequate componentisation of parts of an item of property, plant and equipment, and appropriate estimation of useful lives of such parts, would result in a similar overall depreciation expense recognised under either View 1 or View 2.

34

Ref: AASB, February 2015.

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AASB Tentative Agenda Decision

AASB determined

- in light of the existing requirements in Australian Accounting Standards, the AASB determined that neither an Interpretation nor an amendment to a Standard was necessary.

35

Ref: AASB, February 2015.

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AASB Tentative Agenda Decision

Further submission made on tentative agenda decision.

Considered by Board Meeting May 2015

Action Alert No 172 issued 29 May 2015

36

Ref: AASB, February 2015.

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Recognition of Residual Value for Infrastructure Assets

- The Board confirmed its previously stated view that residual value reflects consideration receivable for an asset at the end of its useful life to the entity, and accordingly would not include cost savings from the re-use of in-situ materials.
- The Board discussed at length whether there was a supportable argument that the ordinary meaning of the words included in the definition of residual value in AASB 116 *Property, Plant and Equipment* could be read to include expected cost savings from the reuse of part of an asset.

37

Ref: AASB, Action Alert No 172, 29 May 2015.

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Recognition of Residual Value for Infrastructure Assets

The Board decided that the inclusion of expected cost savings from the continued use of part of an asset as part of the asset's residual value was inappropriate for the following reasons:

a) disposal involves loss of control of the asset by the entity at the end of its useful life to the entity – the relocation of an asset into another asset or location does not involve any loss of control of the asset by the entity; and

38

Ref: AASB, Action Alert No 172, 29 May 2015.

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Recognition of Residual Value for Infrastructure Assets

The Board decided that the inclusion of expected cost savings from the continued use of part of an asset as part of the asset's residual value was inappropriate for the following reasons:

b) where an entity has control of an asset and intends to continue to consume the future economic benefits embodied in an asset through use, the asset cannot be regarded as having reached the end of its useful life to the entity. In the instance of public sector assets held for their current service potential, the useful life is unlikely to be less than the time all of the service potential in that asset is substantially consumed, at which time no cost savings from reuse of the asset would remain available to the entity.

39

Ref: AASB, Action Alert No 172, 29 May 2015.

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Recognition of Residual Value for Infrastructure Assets

The Board also noted that a residual value that represents a significant portion of an asset's value is indicative that the entity should consider whether an asset that will not be sold before the end of its useful life to the entity has been appropriately componentised.

40

Ref: AASB, Action Alert No 172, 29 May 2015.

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Appropriate Componentisation

- Recognising components with different useful lives based on asset management plans
- Valuation as modern equivalent assets

Recognising optimal renewals
Resurfacing of 2 coat seal with single coat seal

AM Plans show sealed roads to be resurfaced at 15 year intervals until road is reconstructed after 60 years

- Short life component – cost of single coat reseal $4/m^2$ – 15 yrs
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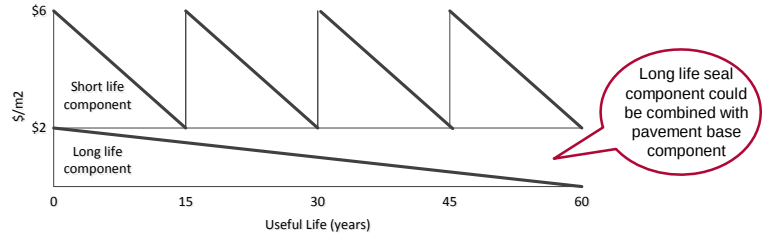

No need to use residual value

Ref: AIFMG based on Report No 5 of 2013-14, p 45.

43

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Benefits

Componentisation and valuation as modern equivalent assets will

- more accurately represent how the assets are managed to provide services
- improve
  - asset register data
  - asset management planning
  - financial statements accuracy

44

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Webinar Summary

- Use of residual value to recognise a 'future costs savings' from renewal or recycling of infrastructure is not allowed by Australian Accounting Standards.
- Appropriate componentisation and valuation as modern equivalent assets will recognise 'optimum renewal' asset management practices.

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45

Any Questions?

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End Webinar - Use of Residual Value

Post any further questions on the discussion forum by end of week or send to john@jaccomrie.com.au **by Fri 2 Oct** – I will collate questions and send a copy of my responses to all participants

47

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