Title: Useful Life of Infrastructure Assets – Understanding and evidence in practice

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Background

Local governments are facing increasing challenges to plan expenditure to sustain and develop their services. Councils need to manage competing demands for investment to sustain services (providing services from existing assets) and for growth (to provide additional assets for improved and new services).

At any stage of the life cycle, infrastructure asset managers needs to know what is the current condition, what is the current value and what is the expected useful life. Useful life and remaining useful life estimates are some of the most critical inputs for renewal planning and asset valuation. Estimating the timing when renewal is required (remaining useful life) is the most critical element of infrastructure renewal planning and is an important input into valuation calculations

For infrastructure assets, useful life is defined in terms of the asset's expected utility to the entity. It is normally the point at which some form of intervention is required. This intervention may range from complete replacement through to erecting a sign which says "Closed". The estimation of the useful life of the asset is a matter of judgement based on the experience of the entity with similar assets.

Industry guidelines such as IPWEA practice notes provide no standard template answers for useful lives and include typical useful life estimates as a reference guide. Managers are advised to determine the useful lives of infrastructure assets to fit local circumstances. Accounting standard AASB116 specifies that "The estimation of the useful life of the asset is a matter of judgement based on the experience of the entity with similar assets".

Objective

The objective of this paper is to provide practitioners information on available guiding principles, procedures and practical examples to understand how useful life is estimated and used in asset management and financial management practice for the reporting of infrastructure assets

Principals in practice

For asset valuation purposes, useful life estimates need to be assessed against following factors;
- expected usage of the asset (what types of vehicles are or could be using the roads)
- technical or commercial obsolescence (new work methods and materials)
- legal or similar limits on the use of the asset (load limits, parking and traffic restrictions)
- expected physical wear and tear (condition)

Australian Accounting Standards

Sections of AASB 116 relevant to useful life of road assets include:

The future economic benefits embodied in an asset are consumed by an entity principally through its use. However, other factors, such as technical or commercial obsolescence and wear and tear while an asset remains idle, often result in the diminution of the economic benefits that might have been obtained from the asset. Consequently, all the following factors are considered in determining the useful life of an asset:

(a) expected usage of the asset. Usage is assessed by reference to the asset's expected capacity or physical output.
(b) expected physical wear and tear, which depends on operational factors such as the number of shifts for which the asset is to be used and the repair and maintenance programme, and the care and maintenance of the asset while idle.
(c) technical or commercial obsolescence arising from changes or improvements in production, or from a change in the market demand for the product or service output of the asset.
(d) legal or similar limits on the use of the asset, such as the expiry dates of related leases.

The asset management policy of the entity may involve the disposal of assets after a specified time or after consumption of a specified proportion of the future economic benefits embodied in the asset. Therefore, the useful life of an asset may be shorter than its economic life

AASB136

The objective of this Standard is to prescribe the procedures that an entity applies to ensure that its assets are carried at no more than their recoverable amount. An asset is carried at more than its recoverable amount if its carrying amount exceeds the amount to be recovered through use or sale of the asset. If this is the case, the asset is described as impaired and the Standard requires the entity to recognise an impairment loss. The Standard also specifies when an entity should reverse an impairment loss and prescribes disclosures.

Section 5(b) states: "if the asset's fair value is determined on a basis other than its market value (which is the case for transport assets), its revalued amount (i.e. fair value) may be greater or lower than its recoverable amount. Hence, after the revaluation requirements have been applied, an entity applies this Standard to determine whether the asset may be impaired. "

Queensland Treasury' Non-Current Asset Policies

Provides further clarification on useful lives: "In addition, and most importantly, the estimation of useful life should be based on the agencies past experience and its realistic planned replacement program as outlined in its asset planning. Tensions often exist between the replacement timeframes estimated by engineers and those in which fiscal provision has been made for asset replacement. If an asset is expected to be used by an agency beyond an 'ideal' or 'optimum' replacement timeframe, the extended period is the useful life, which should be used. **This assessment is a matter requiring professional judgment to be exercised at each reporting date."**