



Ararat Rural City

Valuations Policy – Major Asset Classes

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Valuations Policy – Major Asset Classes



Ararat Rural City

POLICY

Ararat Rural City Council has a responsibility to financially represent its network of assets to fair value. This policy outlines the valuation approach taken to value major asset classes including roads, bridges, pathways, buildings, kerb and culverts.

COMMON TERMS

TERM	DEFINITION
<i>Current Replacement Cost</i>	Cost of replacement of an asset at an applied unit rate
<i>Unit Rate of Replacement</i>	Applied unit rate used to calculate the current replacement cost of an asset
<i>Estimated Asset Useful Life</i>	The estimated total life space of an asset expressed in years. Set at the construction or reconstruction of an asset and stored within council's asset management system.
<i>Estimated Remaining Asset Useful Life.</i>	The total estimated remaining life of an asset in years. Calculated by assessing the current condition of the asset along with the current age of the asset in relation to its expected asset useful life. Note* The estimated remaining asset useful life is a calculated field and may increase or decrease under circumstances where an asset is degrading quicker or slower than anticipated based on its most recently assessed condition.
<i>Recurrent Assets</i>	Assets which are intended to be renewed at the end of useful life.
<i>Non-Recurrent Assets</i>	Assets which are not intended to be renewed at the end of useful life.
<i>Asset Condition</i>	The current assessed condition of an asset, the assessed condition is relational to how far the asset is through its useful life. Asset condition is not influenced by standard maintenance items.
<i>Written Down Value</i>	The current value of the asset which can also be expressed as current cost of replacement minus the amount the asset has already depreciated.
<i>Asset Depreciation</i>	Asset Depreciation is the value in currency of the already consumed portion of the asset. For example, if the asset is expected to last 10 years and it is currently 5 years old then it is determined that 50% of the asset is already depreciated. It is calculated by taking the current unit rate of replacement and multiplying it against the number of units that belongs to the asset and then against the percentage of the asset already consumed.

1 SEALED ROADS

Valuation Overview

Sealed Roads are valued via the road components of Wearing Surface and Pavement.

Pavement refers to the sub structure of the road. It is the element that exists below the visible sealed wearing surface.

Wearing Surface refers to the visible surface of the road and most commonly will be encountered as spray seal. Spray seal is constructed using an aggregate mix of stone combined with a process called emulsion which acts as a bonding agent. In some occurrences such as intersections where traffic provides significant and constant turning forces on the road surface the seal may be an asphalt mix providing greater lateral strength at higher construction cost. Because of the cost differences between asphalt and conventional spray seal a different unit rate is required to correctly apply the valuation dependant on seal type of each asset assessed.

Roads of significantly higher throughput may require deeper pavement or thicker seal in order to ensure maximum lifetime and value. In this regard roads which are designated as link or collector roads may be constructed to a higher engineering specification than property or dwelling access roads. This can impact unit rate of replacement costs of differing roads.

Council estimates that wearing surface on average across the network will have a useful life of 20 years. Council estimates that pavement on sealed roads on average across the network will have a useful life of 80 years.

Valuing Pavement

Current Cost of Reconstruction

Current cost of reconstruction of road pavement will be valued by taking the total area in metres of the road pavement (length x width) and are then multiplied by the current unit cost of pavement replacement per square metre. Asset attributes such as length, width, area, etc will be extracted directly from council's asset management system.

The current unit cost of pavement per square metre will be baselined by council each year. This process is undertaken by averaging the cost of pavement works across multiple capital works projects throughout the most recent financial year. The process enables the accurate estimation of real-world costs based on what the council is currently realising for pavement reconstruction per square metre on a best value proposition.

Depreciation

Pavement depreciation is calculated by assessing how far through the total useful life the pavement asset is and then calculating the value of what has already been consumed. For example, if the road pavement being assessed is 20 years old and condition is where council would expect it to be after 20 years then council can assume that it is 25% through its total life of 80 years. Therefore 25% of the current cost of replacement is the 'realised' depreciated value of the pavement. In instances where the asset is degrading in condition either faster or slower than expected it will have a consequence on estimated remaining useful life and therefore impact the amount the asset depreciated either positively or negatively.



Written Down Value

The written down value of the pavement is calculated by taking the current cost of pavement reconstruction and subtracting the amount the pavement asset has already depreciated. This gives a fair value of what the asset is worth in current condition based on how long council are anticipating the asset to last (based on its current condition and expected remaining useful life).

Valuing Wearing Surface

Current Cost of Reconstruction

Current cost of reconstruction of the wearing surface will be valued by taking the total area in metres of the road seal (length x width) and then multiplying by the current unit cost of seal replacement per square metre. Asset attributes such as length, width, area, etc will be extracted directly from council's asset management system.

The current unit cost of seal per square metre will be baselined by council each year. This process is undertaken by averaging the cost of seal works across multiple capital works projects throughout the most recent financial year. The process enables the accurate estimation of real-world costs based on what the council is currently realising for seal reconstruction per square metre on a best value proposition. Different unit rates will be calculated for different types of seal such as asphalt or spray and applied on a like for like asset basis.

Depreciation

Wearing Surface depreciation is calculated by assessing how far through the total useful life the wearing surface asset is and then calculating the value of what has already been consumed. For example, if the road seal being assessed is 10 years old and condition is where council would expect it to be after 10 years then council can assume that the asset is 50% through its total life of 20 years. Therefore 50% of the current cost of replacement is the 'realised' depreciated value of the seal. In instances where the seal is degrading in condition either faster or slower than expected it will have a consequence on estimated remaining useful life and therefore impact the amount the asset depreciated either positively or negatively.

Written Down Value

The written down value of the seal is calculated by taking the current cost of seal reconstruction and subtracting the amount the seal asset has already depreciated. This gives a fair value of what the asset is worth in current condition based on how long council are anticipating the asset to last (based on its current condition and expected remaining useful life).

Roads Valuation

Total Road - Current Cost of Reconstruction

Current cost of pavement reconstruction plus the current cost of wearing surface reconstruction.

Total Road – Depreciation

Pavement depreciation plus wearing surface depreciation.

Total Road - Written Down Value

Pavement written down value plus wearing surface written down value.



2 UNSEALED ROADS

Valuation Overview

Unsealed roads are valued as a singular component rather than broken down into sub asset components.

Council estimates that unsealed roads will have a useful life of 60 years on average across the network of council unsealed roads.

Defects requiring operational maintenance ie, rutting or potholing where routine road grading is required do not impact the value or condition of the unsealed road.

Unsealed roads require reconstruction when the base material required for the road reaches end of life or has eroded beyond what can be maintained under standard operational maintenance.

Unsealed Roads Valuation

Current Cost of Reconstruction

Current cost of unsealed road reconstruction is calculated by averaging the cost of unsealed roads capital works during the previous financial year and establishing the cost of construction per kilometre. This cost per kilometre is then applied based on length of road in kilometres. For example, if the length of the unsealed road is 5.6 kilometres then the current cost of reconstruction is the current cost per kilometre of reconstruction based on actual costings multiplied by 5.6.

Depreciation

Unsealed road depreciation is calculated by assessing how far through the total useful life the unsealed road is and then calculating the value of the unsealed road that has already been consumed. For example, if the unsealed road being assessed is 45 years old and is expected to last in total for 60 years then it is 75% through its useful life. Therefore, it's depreciation is 75% of the total current cost of reconstruction. Unusual changes to overall unsealed road condition can impact on the estimated remaining useful life of the asset and impact depreciation either negatively or positively depending on if the unsealed road is degrading quicker or slower than expected.

Written Down Value

The written down value of the unsealed road is calculated by taking the current cost of unsealed road reconstruction and subtracting the amount the unsealed road asset has already depreciated. This gives a fair value of what the asset is worth in current condition based on how long council are anticipating the unsealed road asset to last (based on its current condition and expected remaining useful life).

3 BRIDGES

Valuation Overview

Bridges are broken down into seven different classes for valuations purposes, each different class having a different unit rate of replacement **Note*** The rates shown in the below table are for example purposes only, they will change year to year based on real world factors impacting the cost of bridge renewal. The class codes and descriptors are relevant to the current network of bridges seen across the Ararat Rural City Council.

CODE	RATE \$/SQM	DESCRIPTION
1	920	Narrow Low flat slab bridge
2	920	Wide Low flat slab Bridge
3	1500	Narrow Medium height FS Bridge
4	1500	Wide, medium Height FS Bridge
5	4000	Narrow High Bridge
6	4000	Medium High Bridge
7	3000	Muti-span high bridge

Current Cost of Reconstruction

Current cost of bridge reconstruction is calculated by first identifying an appropriate unit rate to use for each class of bridge, this is calculated by using real world renewal costs. This unit cost is then applied based on the class of bridge and by its area in square metres. For example, if the bridge being assessed is a class 2 bridge, then a unit rate applicable to class 2 bridges is applied to the physical dimensions of the bridge (area) to calculate a realistic cost for reconstruction.

Depreciation

Bridge depreciation is calculated by assessing how far through the total useful life the bridge is and then calculating the value of the bridge that has already been consumed. For example, if the bridge being assessed is 50 years old and is expected to last in total for 100 years then it is 50% through its useful life. Therefore, it's depreciation is 50% of the total current cost of reconstruction. Unusual changes to overall bridge condition can impact on the estimated remaining useful life of the asset and impact depreciation either negatively or positively depending on if the bridge is degrading quicker or slower than expected.

Written Down Value

The written down value of the bridge is calculated by taking the current cost of bridge reconstruction for its applicable class and subtracting the amount the bridge asset has already depreciated. This gives a fair value of what the asset is worth in current condition based on how long council are anticipating the bridge asset to last (based on its current condition and expected remaining useful life).



4 CULVERTS

Valuation Overview

Culverts are broken down into seventeen different classes for valuations purposes covering both pipes and traditional culvert designs, each different class having a different unit rate of replacement **Note*** The rates shown in the below table are for example purposes only, they will change year to year based on real world factors impacting the cost of culvert renewal. The class codes and descriptors are relevant to the current network of culverts seen across the Ararat Rural City Council.

TYPE	CODE	DIA / WIDTH	RATE	LENGTH	RATE / m
Pipe 1	1	450	3000	9.6	363
Pipe 2	2	600	5750	9.6	695
Pipe 3	3	750	6500	9.6	785
Pipe 4	4	900	8240	9.6	996
Pipe 5	5	1050	12500	9.6	1510
Pipe 6	6	1200	18500	12	1788
Pipe 7	7	1350	21000	12	2030
Pipe 8	8	1500	24000	12	2320
Pipe 9	9	1650	27500	12	2658
Pipe 10	10	1800	30000	12	2900
Pipe 11	11	2100	36000	12	3480
Pipe 12	12	2700	45000	12	4350
Culvert 1	20	300	10000	7	1657
Culvert 2	21	450	12000	7	1989
Culvert 3	22	600	14000	7	2320
Culvert 4	23	900	17000	8	2465
Culvert 5	24	1200	20000	9	2578

Current Cost of Reconstruction

Current cost of culvert reconstruction is calculated by first identifying an appropriate unit rate to use for each class of culvert, this is calculated by using real world renewal costs. This unit cost is then applied based on the class of culvert by length. For example, if the culvert being assessed is a Pipe 11, then a unit rate applicable to pipe 11 culverts is applied to the length of the culvert to calculate a realistic cost for renewal.

Depreciation

Culvert depreciation is calculated by assessing how far through the total useful life the culvert is and then calculating the value of the culvert that has already been consumed. For example, if the culvert being assessed is 20 years old and is expected to last in total for 80 years then it is 25% through its useful life. Therefore, its depreciation is 25% of the total current cost of reconstruction. Unusual changes to overall culvert condition can impact on the estimated remaining useful life of the asset and impact depreciation either negatively or positively depending on if the culvert is degrading quicker or slower than expected.



Written Down Value

The written down value of the culvert is calculated by taking the current cost of culvert reconstruction for its applicable class and subtracting the amount the culvert asset has already depreciated. This gives a fair value of what the asset is worth in current condition based on how long council are anticipating the culvert asset to last (based on its current condition and expected remaining useful life).

5 PATHWAYS

Valuation Overview

Pathways are broken down into five different classes for valuations purposes, each different class having a different unit rate of replacement **Note*** The rates shown in the below table are for example purposes only, they will change year to year based on real world factors impacting the cost of pathway renewal. The class codes and descriptors are relevant to the current network of pathway seen across the Ararat Rural City Council.

UNIT RATE	CODE	RATE /SQM	EST LIFE
1 - Concrete	1	100	80
2 - Asphalt	2	75	40
3 - Spray Seal	3	25	20
4 - Gravel	4	25	20
5 - Paving	5	125	80

Current Cost of Reconstruction

Current cost of pathway reconstruction is calculated by first identifying an appropriate unit rate to use for each class of pathway, this is calculated by using real world renewal costs. This unit cost is then applied based on the class of pathway by length. For example, if the pathway being assessed is concrete, then a unit rate applicable to concrete pathways is applied to the area of the pathway to calculate a realistic cost for renewal.

Depreciation

Pathway depreciation is calculated by assessing how far through the total useful life the pathway is and then calculating the value of the pathway that has already been consumed. For example, if the pathway being assessed is concrete and 20 years old and is expected to last in total for 80 years then it is 25% through its useful life. Therefore, it's depreciation is 25% of the total current cost of reconstruction. Unusual changes to overall pathway condition can impact on the estimated remaining useful life of the asset and impact depreciation either negatively or positively depending on if the pathway is degrading quicker or slower than expected.

Written Down Value

The written down value of the pathway is calculated by taking the current cost of pathway reconstruction for its applicable class and subtracting the amount the pathway asset has already depreciated. This gives a fair value of what the asset is worth in current condition based on how long council are anticipating the pathway asset to last (based on its current condition and expected remaining useful life).



6 KERB AND CHANNEL

Valuation Overview

Kerb and Channel are broken down into three different classes for valuations purposes, each different class having a different unit rate of replacement **Note*** The rates shown in the below table are for example purposes only, they will change year to year based on real world factors impacting the cost of Kerb renewal. The class codes and descriptors are relevant to the current network of Kerb seen across the Ararat Rural City Council.

UNIT RATE	CODE	RATE	EST LIFE
Concrete	1	119	80
Bluestone	2	245	120
Brick	3	135	100

Current Cost of Reconstruction

Current cost of Kerb reconstruction is calculated by first identifying an appropriate unit rate to use for each class of Kerb, this is calculated by using real world renewal costs. This unit cost is then applied based on the class of Kerb by length. For example, if the Kerb being assessed is bluestone, then a unit rate applicable to bluestone Kerb is applied to the area of the Kerb to calculate a realistic cost for renewal.

Depreciation

Kerb depreciation is calculated by assessing how far through the total useful life the Kerb is and then calculating the value of the Kerb that has already been consumed. For example, if the Kerb being assessed is concrete and 20 years old and is expected to last in total for 80 years then it is 25% through its useful life. Therefore, it's depreciation is 25% of the total current cost of reconstruction. Unusual changes to overall Kerb condition can impact on the estimated remaining useful life of the asset and impact depreciation either negatively or positively depending on if the Kerb is degrading quicker or slower than expected.

Written Down Value

The written down value of the Kerb is calculated by taking the current cost of Kerb reconstruction for its applicable class and subtracting the amount the Kerb asset has already depreciated. This gives a fair value of what the asset is worth in current condition based on how long council are anticipating the Kerb asset to last (based on its current condition and expected remaining useful life).

7 BUILDINGS

Valuation Overview

Council owned and controlled land and buildings are valued by an independent qualified valuer on a 2-year valuation cycle. The valuation of land and buildings is at fair value, being market value based on highest and best use permitted by relevant land planning provisions. Where land use is restricted through existing planning provisions the valuation is reduced to reflect this limitation.

Depreciation

Building depreciation is calculated using the useful life and remaining useful life provided for each building by council's independent qualified valuer. For example, if the building being assessed is 75 years old and is expected to last in total for 150 years then it is 50% through its useful life. Therefore, its depreciation is 50% of the total current cost of building reconstruction. The remaining useful lives of buildings are currently determined on the basis of the current condition of buildings and vary from 20 years to 193 years. Useful lives of buildings are sensitive to changes in expectations or requirements that could either shorten or extend the useful lives of buildings.

8 REFERENCES

- Local Government Act 2020
- Australian Accounting Standards Board [AASB] 2010, AASB 101 Presentation of financial statements.