

Council Policy

Unsealed Roads



COUNCIL POLICY



UNSEALED ROADS

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Responsible Department(s):	Strategic Assets
Relevant Delegations:	As per the delegations schedule and as included in this Policy
Other Relevant Policies:	NIL
Relevant Procedure(s):	As adopted by the Chief Executive Officer
Relevant Legislation:	Local Government Act, 1999 Road Traffic Act, 1961
Policies and Procedures Superseded by this policy on its Adoption:	Unsealed Roads Policy SPDPC,Item 12.3, 25 July 2017
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Version Control

Version No.	Date of Effect	Description of Change(s)	Approval
1.0	25 July 2017	Adopted	SPDPC
2.0	25 August 2020	Reviewed and Adopted	Council

UNSEALED ROADS POLICY

1. INTRODUCTION

This policy provides Council and its administration with principles and guidelines for reconstruction of unsealed roads to a bituminous surface sealed road. The policy will assist Council to address the issues of both requests for Council to fund the works in their entirety, or for adjoining landowners to contribute or fund the reconstruction themselves.

This policy also provides Council and staff with criteria for assessing and prioritising requests to reconstruct unsealed roads to bituminous sealed roads, and the processes to fund the works.

2. OBJECTIVES

The objectives of this policy are:

- To clearly define Council's position in respect to reconstructing unsealed roads to sealed roads.
- To provide a clear and transparent assessment criteria in prioritising requests for sealing unsealed roads from the community.
- To provide direction on the mechanisms for private landowners to fund the sealing works.

3. DEFINITIONS

"Unsealed Road" refers to roads that have been constructed with a high clay or limestone content rubble material to provide an all-weather surface.

"Sealed Road" refers to roads that have been constructed with a low clay content engineered rubble pavement base and coated with a bituminous seal that creates an impermeable surface layer.

"Vehicles Per Day" is defined as the number of vehicles that use a road daily.

"Commercial Vehicles" refers to vehicles 8.8m long or greater with higher axle loads than cars.

"Spray Seal" refers to a thin bituminous binder applied to the road pavement with 10mm stone applied.

"Hotmix" is asphalt, typically 30 to 50mm thick, comprising a mix of sand, aggregate, and bitumen binder to create a smooth wearing surface.

4. POLICY STATEMENT

Council has committed to funding the renewal of its existing assets, and does not currently have an annual budget or program for the upgrade of unsealed roads to a sealed road.

Requests for upgrade unsealed roads are assessed by the "<u>Criteria for Prioritising and</u> <u>Costing Sealing Requests"</u> process outlined below to establish if they meet the criteria for potential upgrade. If an eligible road meets the below criteria it is then processed for consideration through the Annual Business Planning process and includes the following information items: The consideration for reconstruction information will contain as a minimum:

- Road name and suburb
- Length and width requested to seal
- The priority score (0-10) of the request against the scoring criteria
- The capital funds required to construct a pavement and seal
- The long term implications on depreciation annually
- The whole of life cost impact of sealing

Requests to upgrade unsealed roads to a sealed road that will be funded by private landowners in its entirety can be considered by Council at any time throughout the year and the following information shall be provided in its deliberations as a minimum:

- Road name and suburb
- Length and width of proposed seal
- The funds required by Council to design, procure, and project manage the sealing works
- The long term implications on depreciation annually
- The whole of life cost impact of sealing
- The cost of resealing the road at the end of its economic life and who will be responsible for the resealing.

In South Australia unsealed roads have a default state speed limit. On rural sealed roads in non-built up areas sealed roads will have a default speed limit of either 80kmh or 100kmh depending on the location and design specification.

When considering the cost of constructing new sealed road assets in rural environments the sealed width, verge, drainage, and horizontal and vertical geometric design of the new asset will be based on the Austroads Guidelines for Rural Roads based on an 80kmh speed limit minimum.

When considering the cost of constructing new sealed road assets in built-up urban environments the sealed width, verge, drainage, and horizontal and vertical geometric design of the new asset will be based on the Austroads Guidelines for Rural Roads based on a 50kmh speed limit.

Speed limits in South Australia are set by the Department for Infrastructure and Transport (DIT), and modifications to the default speed limit that would be applied to an reconstructed road when sealed will be referred to DPTI.

Criteria for Prioritising and Costing Sealing Requests

When a request for reconstructing an unsealed road to a sealed road is made, if traffic count data for that road is more than three (3) years old, then Council staff will undertake new traffic count monitoring for a minimum period of ten (10) days to establish a current vehicles per day estimate.

Council staff will prioritise the road for its suitability for being reconstructed to a sealed road based on the following criteria:

Traffic Factors	Vehicles per day using the road				
	Commercial vehicles per day				
	If sealing the road will increase the speed on the road and any likely increases in traffic volumes				

	Whether sealing the road will create local traffic problems requiring Traffic control Devices and safety improvements (Warning signs, Guardrails, roadside delineation etc.)					
Environmental Factors	The rainfall zone of the road (related to life/safety/runoff)					
	Gradient of the road (steep roads hard to maintain unsealed) and Existing geometry of the road carriageway					
	Vegetation / Tree Removal required if road realignment or widening also required to meet current standards					
Social Factors	Urban Area (if the unsealed road is consistent with the area)					
	Dwellings or Agri-business (proximity of road to houses/vineyards /cro orchards or other enterprises being adversely affected by dust)					

Scoring System:

Cotooorioo	Weight- ing	Scoring					
Categories		0	1	2	3	4	5
Average vehicles per day	20	<25	25-50	50-75	75-100	100-125	>125
Commercial vehicles per day	5	1	2 - 3	4 - 7	6 - 8	9 - 12	>12
Expected increase in 85% speed? *	10	No change	0-10 kmh	10-20 kmh	20-30 kmh	30-40 kmh	Over 40 kmh
Positive impact on the local traffic network? **	10	None	Minor	Some	Reason- able	Signif- icant	Major impact
Rainfall ^	5	None	Low		Medium		High
Gradient/Geomet ry^^	10	Flat			Medium		>10%
Vegetation/Tree Removal	10	Significant removal		High	Medium	Minimal	None
Urban Area "	15	Rural / low density township areas eg Birdwood/Mt Torrens			Higher density areas eg Stirling/Crafers/Aldgate		
Dwellings or Agri- business ""	15	None	Some		Medium		Major

- * Increase in speed is based on existing unsealed traffic counts 85% speed and the expected 85% speed if default speed limit will apply if sealed.
- ** Positive impact on local traffic network relates to the expected impact on rat-running and increase in traffic if the road was sealed, and resulting impacts on junctions/adjoining roads.
- Rainfall factor assumes that in higher rainfall areas the roads propensity to degrade is more rapid and the road is more unstable.
- AA Gradient works on the basis that steeper unsealed roads have a much higher risk of ravelling and corrugations and are harder to maintain in steep environments.
- " Urban area is where the road occurs in a location that is predominantly/all sealed roads adjoining that creates increased maintenance costs to grade/maintain in small isolated locations.
- " Dwellings or agri-business factors in the problems created for the community and business (for example wineries) amenity and damage caused by dust.

The unsealed road will be given a priority score on a 0-10 scale (10 being the highest) for its suitability and benefits for being sealed. The resultant score does not mean that it will be sealed, but aids in determining if it is likely to warrant further consideration and subsequent costing. As a guide, movements per day must exceed 100 vehicles and the assessment score must be 70% or greater before a road will be considered for sealing.

Unsealed roads are often created with a high clay rubble material that is unsuitable as a sealed road base due to the expansion and contraction of the clay damaging the sealed road surface and structure. The cost estimate for sealing an unsealed road is based on:

- Creating stable subgrade using the existing materials on site it is generally not possible to simply seal over the existing road surface due to its pavement base and subgrade material, design specifications. The specifications may require an imported crushed rock road base before sealing can be undertaken to ensure a long lived asset.
- Location and other works such as tree removals and drainage.

The initial capital construction cost and whole of life cost will then be calculated considering the asset life over 100 years including resealing and re-sheeting in line with current Asset Policy, useful life estimates along with annual maintenance and grading costs in line with observed spending trends.

The priority score of 0-10, initial capital upgrade cost, and the whole of life cost estimate will be presented to Council for consideration as part of the "New/Upgrade Capital Works Budget List" for funding, as part of the Annual Business Planning process.

Sealing of Roads Funded by Private Landowners

On occasions the community will request that an unsealed road be upgraded to a sealed road through privately funding the works. In this instance the costs to construct the road will be calculated and the required contribution per residence will be assessed.

As part of any approval by Council for the privately funded upgrade of an unsealed road to sealed the Council will consider the whole of life costs and whether there are any associated traffic issues created by sealing the road in the associated report to Council for a decision.

5. DELEGATION

The Chief Executive Officer has the delegation to:

- Approve, amend and review any procedures that shall be consistent with this Policy; and
- Make any formatting, nomenclature or other minor changes to the Policy during the period of its currency.

6. AVAILABILITY OF THE POLICY

This Policy will be available for inspection at the Council's Offices during ordinary business hours and via the Council's website <u>www.ahc.sa.gov.au</u> Copies will also be provided to the public upon request, and upon payment of a fee in accordance with the Council's Schedule of Fees and Charges.