

Road surfaces: Seals of protection



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Emulsion sealing in Nyngan.

Maintaining road surfaces

The RTA maintains 17,932 km of State Roads and 2946 km of Regional and Local Roads in the unincorporated area of NSW.

The RTA faces considerable challenges in managing the maintenance and renewal of the NSW road network to ensure that it is safe and reliable. Carefully planned maintenance programs are required to protect the original investment in these assets to ensure their service into the future.

A crucial element of the RTA's preservation strategy is the proper upkeep and maintenance of the road surface. The road surface needs ongoing restoration as traffic and environmental factors continually cause wear and tear. The RTA currently replaces around nine per cent of road surfaces every year. The RTA measures the friction, surface texture and cracking of road surfaces regularly. This condition information helps the RTA prioritise resurfacing treatments.

Pavement resurfacing

Resurfacing can involve:

- Laying a new surface on top of the old by spraying bitumen and rolling stone chips into it, or laying a new thin layer of asphalt.
- Removing the old surface and replacing it with a new layer of asphalt.
- Recycling the old surface by remixing and stabilising the asphalt.



Primer sealing in Nyngan.

Why is it important?

- The road surface is a waterproofing layer and protects the underlying road pavement from moisture ingress, which can significantly reduce the strength and durability of the road. Water is an issue for road pavements and an effective preventative strategy of road resurfacing ensures that the maximum life of road pavements is obtained at the lowest cost.
- The road surface is vital for road safety as it provides a safe surface for traffic and helps vehicle tyres grip the road.
- Pavement resurfacing may improve ride quality and correct surface defects.
- Some types of surfaces can reduce the amount of noise from roads.



Scrap rubber sealing on Anzac Bridge.

Value for money

- Timely road resurfacing is at the heart of the RTA's preservation strategy. Road resurfacing ensures that the cost of maintaining road pavements is minimised over the life of the asset.
- Road resurfacing is delivered through both internal and external resources. The RTA benchmarks the cost and quality of its internal service providers and is committed to achieving recognised standards of excellence in service delivery. Annually, the RTA competitively tenders road resurfacing activities to ensure value for money.

- Forging closer alliances with Local Government is also very important to the RTA. Councils are engaged as the RTA's contractor on some roads and undertake work to the RTA's standards while supporting the local community.
- The RTA is committed to continuously improving performance relative to other state, national and international organisations. The RTA's research and development program identifies new materials and technologies for subsequent implementation.

Caring for the environment

- The RTA does resurfacing to appropriate environmental standards.

How we can all help to improve safety at worksites

- Road resurfacing activities can create a hazard if not properly managed. Loose stones and the removal of white lines are an unavoidable consequence of the work. The RTA's specifications require regular sweeping of new works and the timely reinstatement of linemarking but caution is still required.
- When resurfacing works are in progress drive slowly, carefully and as directed, without sudden braking.
- When the new seal is signposted as having loose stones, drive slowly, carefully and without sudden braking.



Scrap rubber sealing at Michelago.