Why we're chip sealing your road

Kia Ora,

Road maintainence is like painting your house to prevent the weatherboards rotting. These streets and roads are due for reseal and we want to provide more information about our chipseal Maintenance Programme.

Why we resurface roads

Auckland Transport is responsible for the managementof approximately **6,900 km of sealed roads** (both urban and rural) in Tāmaki Makaurau and these factors are what we need to consider:

Road surfaces don't last forever, wear and tear from traffic, trenching work for underground services and oxidation of the surface from sunlight all take a toll.

We have to ensure the underlying foundations don't deteriorate, otherwise it can result in expensive and disruptive remedial work.

The seal on a road is like painting your house – it keeps water out of the structure underneath. Like paint, the seal breaks down over time and starts to let water in.

How we select the resurfacing treatment for your street

We carry out two surveys in your area :

1. We assesses the condition of the existing surface and record things like cracking, potholes, broken edges and patching.
2. Then we measures road 'roughness' – using a number of lasers attached to a vehicle.

These surveys are entered into our road assessment and maintenance management system which helps to identify which sections of the network need waterproofing and which need reshaping.

A benefit/cost analysis takes into account traffic volumes, pavement loadings, and the results of the 'roughness' survey

AT has an obligation to ratepayers and taxpayers to ensure that the best engineering options and the most cost-effective solution is chosen in each case.

Most of our suburban streets have a flexible structure requiring periodic waterproofing – and chipseal is the best engineering solution for this.

Roads are generally resurfaced with chipseal, except where the traffic volumes or pavement conditions justify otherwise. Roads that have previously had asphalt surfacing may be resealed with chip seal.

Chip seal

Used on roads with less than 10,000 cars per day

Prevents water damage
Mainly used to prevent water entering and damaging the underlying foundation layers.

10 x better for the environment vs Asphaltic concrete

Most common type of road surface in New Zealand

Economical, flexible and hardwearing
Provides an adaptable, cost-effective and safe surface for road users.

Asphaltic concrete (AC)

Used on roads with more than 10,000 cars per day

Used in areas where lots of people drive or walk
e.g. around Schools, Hospitals, Shopping centres, State Highways (Motorways) and on some very narrow and steep roads.

4-5 times more expensive
Waka Kotahi NZTA only subsidise AT 50% of the asphalt on roads. If a road has less than 10,000 cars per day and asphalt is used, then AT don't receive any contribution towards the cost

Larger carbon footprint than chip seal. Approx 10x higher as more bitumen/emulsion and metal are used and can cause air pollution especially in hot weather.

Smooth ride for people in vehicles and on bikes and also means less vehicle maintenance costs.

Why Chip seal?

Chip sealing is a very important part of road maintenance

While it's true that chipseal in suburban streets can cause some inconvenience, if we were to use the smoother asphaltic concrete seal, then the cost would be more than 3-5 times more. In the present economic climate, AT can't justify getting asphalt subsidised by Waka Kotahi NZ Transport Agency for more Auckland roads.

Improves road safety including maintaining skid resistance providing:

- A flexible, waterproof, highly skid resistant surface.
- Better road surface grip, it reduces how long it takes a vehicle to stop when braking in an emergency.
- It provides greater texture which prevents vehicles aqua-planing (skidding on water).

Waterproofs it and extends the life of the road

This means the road foundation is preserved, it prevents ruts forming and extends the life of the road.

Provides value for our maintenance dollars

A dollar spent on chipsealing to prevent structural failures will save $8 in structural rehabilitation costs later. This means it helps to prevent future maintenance.

What's the chip seal process?

1. Minor repairs are carried out throughout September, October and November. These patches are called pre-seal repairs.
2. Our team will send a letter to notify residents about a week before work starts. The chipseal work is generally completed within a day.
3. Hot bitumen is sprayed and stone sealing chips are spread and rolled in.
4. Traffic is then allowed on the road to bed in the new seal.
5. Small stones (chips) are regularly swept away and road marking repainted if needed. Temporary traffic management will be removed.
6. As many as three additional sweeps may follow in the next 6-9 months to remove loose chip.

What to do when we're chip sealing

Āta Haere – Slow down

Stones can be flicked up from the road surface and hurt people passing by or damage vehicles – especially windscreens. Hot bitumen/emulsions can also splash up and stick to your paintwork.

Pūrongo – Report a problem

If you get into difficulty at a chip seal site, please park up in a safe location and inform the site supervisor of your concern. The site supervisor will be able to assist you and log your report.

FAQs

Why chip seal in Summer and not all year round?

Bitumen/emulsions, the glue that holds the chip on, is a liquid when it's hot and hard when cold. So we apply chip seals at the hottest time of the year, to ensure that the new seal will be strong and long lasting. If the road is wet, it will affect the bond between the bitumen/emulsion and the road. It can crack in cold weather, which can lead to chip seal failures. This means we would have to do the work all over again, causing more inconvenience to our customers.

Why is no one working on the resealing, yet the lane or road is still closed to traffic?

If the road looks brown, dusty or muddy then it's likely that we're waiting for the new seal to set before we let cars, trucks and bikes drive over it and churn up the newly laid road surface.

Why can't you do this work overnight?

We still need the ground to be warm, so this has to be during the day, to help the seal set and stick to the road surface.

How does this work benefit me?

A smooth, skid-resistant surface free of pot holes and slippery sections which helps reduce the risk of crashes .

Strenghthening the seal increases the life of the road, meaning we won't have to come in and cause major disruptions reconstructing the road.

We understand maintaining our road network may cause disruptions and appreciate your patience while our team works in your area.

He pātai? Any questions?

Please contact us on **09 355 3553**