

Maintenance and operations glossary

Term	Definition
Alliance	Used where a flexible and highly collaborative contract model is required. For example, it's used in Auckland (Auckland System Management), Wellington (Wellington Transport Alliance and for SH94 Milford Road (Milford Road Alliance).
BRP (Broom Road Products) patch	A factory-made road repair product that is manufactured on paper, onto which a bitumen rubber binder holds bitumen precoated aggregates of various size. It's used as a long-lasting repair for potholes, taking around 15-20 minutes on site to fill in the hole and lay the patch.
Drainage	Drainage relates to the ability for a road to channel water away from the road surface and structure. To prevent flooding, catchpits, culverts and subsoils are maintained throughout the year and replaced or repaired as needed.
Emergency works	Work required to repair/restore the state highway network following an emergency, such as a weather or seismic event. This work may include repairing slips, retaining walls, road surfaces, river scour and drainage.
Foam bitumen stabilisation	A road rebuilding process that involves recycling existing material and injecting it with a foamed bitumen (bitumen and water mixed at high speed) to add strength. May involve adding new material.
Lane kilometres	Lane kilometres count the number of lanes (including passing lanes) on a road rather than just the distance between point A and B. For example, a four-lane 10-kilometre stretch of road has a total of 40 lane kilometres.
Live lane	A lane that is currently open and available for vehicle use.
Mill and fill	Resurfacing of a small patch of road – the road surface is removed (milled) and then filled with asphalt.
Network	Refers to all the state highways that we maintain.
Network Outcomes Contract (NOC)	The contract model used for the majority of the country's state highway maintenance requirements.
Pothole repairs	When water penetrates the road surface through cracks, tyre action and weather can quickly turn these cracks into holes in the road surface, known as potholes. Potholes are often temporarily fixed in wetter months until permanent repairs can be carried out during the warmer, drier summer months. Maintenance crews are always travelling our networks keeping an eye out for potholes that need repair.
Rebuilding	The existing road surface and underlying road structure (pavement) is removed and replaced with new materials. This work can take approximately 4-6 weeks and can involve recycling old materials. This is also referred to as pavement rehabilitation.
Rebuilding, granular	Road rebuilding where the road structure is made up of various layers of metal, that is, rocks of different sizes.
Renewals	Rebuilding, resurfacing or resealing existing roads to improve their condition. The majority of this activity takes place between October and March, as these months tend to be warmer and drier.
Resealing	Stone chips are spread over a layer of hot sprayed bitumen (adhesive substance used for waterproofing the road) or emulsion. These can take some time to 'bed' into the existing road surface, and excess chip is swept off the road after a couple of days. The final part of this process is completed by road users. Vehicles travelling over the new seal then help compact the sealing chip. Chipseal is economical, flexible, hardwearing and extends the life of a road. This needs to be laid in warmer, drier months to ensure it'll

	become strong and long-lasting. It can crack in cold weather and wet road conditions will affect the bond between the bitumen and the road.
Resealing, SCRIM (sideway-force coefficient routine investigation machine)	Involves adding roughness to the surface texture of the road on corners to improve grip and skid resistance. The roughness on the road surface works with your vehicle's tyres to create friction when you drive and makes turning movements and braking much safer. The SCRIM undertakes an annual survey of the condition of the state highway network, from which this specific resealing programme is derived.
Resilience	Resilience work proactively improves the transport network by making sections of the state highway network less susceptible to the impacts of severe weather events.
Resurfacing	The existing road surface is removed and a pre-made mix of stone chips, bitumen and other products is laid in its place.
Second coat seals	When a section of the road is rebuilt, a chipseal finish is applied. Then a second coat seal is applied a year later. This locks in the seal to make it waterproof, keeps it stronger and safer for longer, and helps reduce the likelihood of flushing occurring.
Site Traffic Management Specialist (STMS)	A person responsible for the documentation and management of temporary traffic management (TTM) on sites along the state highway network.
Stabilisation patches	Repairing isolated patches of the road structure by replacing material and adding lime, cement or other additives to provide strength. These are generally undertaken early in the renewal season (or slightly before) on sites that'll be chipsealed later in the season.
Structural Asphaltic Concrete (SAC)	Some roads (generally high volume and/or high stress areas) have both the structural and surface elements of the road made of asphalt. Considered a rebuild, structural asphalt renewals normally take several weeks to complete.
Temporary Traffic Management (TTM)	The process of managing road users through or around a work site safely, while minimising delay and inconvenience.
Thin Asphalt Concrete (TAC)	A pre-made mix of stone chips, bitumen and other products, laid on top of the road structure (pavement). Asphalt will be used in place of chipseal in areas of higher traffic volumes or higher stress, where chipseal would not provide the right outcome. Various mixes of asphalt are used across the network, depending on the specific requirements of each site.
Traffic Management Plan (TMP)	A document outlining how traffic will be managed during roadworks, including design, implementation and removal of TTM.
Transport Operations Centre (TOC)	NZ has two main Traffic Operations Centres, in Auckland (ATOC) and Wellington (WTOC), along with a regional TOC in Tauranga (TTOC) and several smaller specialised TOCs (Waterview, Homer, Lyttelton Tunnels and Transmission Gully). The purpose of TOCs is to enable customers of the transport network to get to their destination safely and efficiently, and for any disruptions to their journey to be minimised and communicated.
VMS (Variable Message Sign)	An electronic sign that displays changeable messages to alert drivers about roadworks, incidents or events. NZTA manages a network of static signage alongside the state highway network, while portable versions are also used across the network to support roadworks or other activities.
Water cutting	Water cutting involves using high pressure water to add roughness to the surface texture of the road to improve grip and skid resistance.
Work site (of roadworks)	A section of road that's defined at each end by the 'advance warning' signs and 'end of works' signs, or between vehicles in a mobile operation, including the vehicles themselves.