

Te Ara o Te AtaMt Messenger Bypass project

He rau ringa, He oti ai The hands of many will complete the works ahead







Project overview

Te Ara o Te Ata: Mt Messenger Bypass is a new 6km route from Uruti to Ahititi that avoids the existing steep, narrow and winding route over Mt Messenger on State Highway 3 in North Taranaki.

Te Ara o Te Ata will rise to a maximum of 110 metres above sea level, 65m lower than the current route. With a maximum grade of 7.5%, it will also be less steep than the existing road, which has inclines of up to 12%.

The main objectives of the bypass are to:

- reduce the likelihood of deaths and serious injuries from crashes
- provide a more resilient route, standing up to the local weather, ground and geographic conditions
- enhance the reliability of journeys in and out of North Taranaki
- improve the experience of driving on this section of SH3
- deliver lasting improvements to the surrounding natural environment - flora and fauna.

The project is being delivered by the Mt Messenger Alliance comprising Waka Kotahi, Downer, HEB Construction, Tonkin + Taylor and WSP.

Waka Kotahi NZ Transport Agency

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Environmental protection and enhancement

Te Ara o Te Ata: Mt Messenger Bypass project is much broader than simply building a road.

The project includes a comprehensive and enduring environmental restoration programme designed to balance the effects of construction and ensure the project area is in a better condition in the long term than its current state.

A large part of this is an enduring pest management programme over 3,650ha of bush on either side of the new road – from the coast to almost 10km inland.

Pests such as rats, stoats, goats and possums have seriously damaged the mature native forest and habitat surrounding the bypass route.

Delivered alongside our mana whenua partner, the project's pest management programme will support the forest's recovery from this damage and provide an environment where threatened species such as long-tailed bats and kiwi can thrive once more.

An intensive 250km network of traps and bait stations every 100 to 150 metres, supplemented by an aerial pest control operation, will ensure a significant reduction in predator numbers.

As a result, it is estimated that the kiwi population in this area – which has been in decline – is likely to increase by more than 1200 birds over 30 years.

During construction we are protecting long-tailed bats by carefully diverting them to the abundance of suitable mature trees that will not be affected by construction activities. This approach has been used successfully on other major projects elsewhere in the country.





Te Ara o Te Ata: Mt Messenger Bypass project

Restoration planting

The project's broad environmental programme will also feature large areas of restoration planting, to offset the native vegetation removed to build the road and lessen the effects of construction on the local ecology.

We'll undertake 32ha of forest, wetland and riparian planting, comprising approximately 120,000 plants.

We're using sedges and rushes for the open wetland areas, hardy shrubs and small trees for the dryland bush plantings and tall canopy tree species for the wetland and bush margin plantings.

For every significant tree that has to be removed, the project will plant 200 seedlings of the same species. We only use native flora grown from seeds collected from the area around Parininihi/Mt Messenger.

In addition, we'll plant a further 100,000-plus plants along the roadside margins and embankments.

After completion, stormwater runoff from the road will be treated using constructed wetlands along the route. As the runoff flows through, plants in the wetlands remove contaminants before they enter natural watercourses.

Through all our environmental efforts we aim to achieve significant improvements in biodiversity within 10 to 15 years of completing the bypass.

Te Ara o Te Ata has been described as an environmental project as much, if not more than, a roading project. We take a great deal of pride in this and feel a significant responsibility to live up to it.

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Images from our first construction seasonSeptember 2022 to April 2023



















Iwi partnership

Waka Kotahi has worked in partnership with the mana whenua of this rohe (area), Ngāti Tama, and with the Mt Messenger Alliance over several years to develop the project.

Respect for the land and their values is at the core of the involvement of Ngāti Tama with the project, which has included input into or leadership on:

- selecting a safer and more secure route with the minimum environmental impact
- the bypass design and cultural expression
- the significant environmental programme to improve the current decline of the native flora and fauna, that is a key feature of the project
- the provision of cultural monitoring.

A significant milestone was reached in 2020 when iwi members voted with an 82% majority in favour of the agreements with Waka Kotahi, to allow land needed for the Mt Messenger Bypass to be exchanged.

The agreement includes a 120ha coastal property – re-named as 'Ngarautika' by Ngāti Tama – in exchange for 20ha of Ngāti Tama land, a cultural compensation payment and the aforementioned environmental programme including enduring pest management over 3,650ha of the rohe of Ngāti Tama.



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Cultural inductions for all workers

It is important to our mana whenua partner Ngāti Tama that all involved in Te Ara o Te Ata: Mt Messenger Bypass enter the front doors of the iwi before entering the project site.

Since 2020, Pukearuhe Marae has hosted cultural inductions for more than 600 project workers.

A core principle of the iwi is **Manaaki** – respecting and valuing others. **Manaaki** is the foundation of the cultural induction space. Cultural safety and wellbeing for the environment and each other are paramount on the project.

The rich history and korero of Ngāti Tama are shared on a visit to the coastal lands returned under the project agreement, which unlock access to significant wāhi tapu (sacred places) and pā sites. This visit has been a memorable experience for many.

The project team and Ngāti Tama will continue widening pathways of true collaboration and successful outcomes for all involved on Te Ara o Te Ata.

'He rau ringa, He oti ai' – 'The hands of many will complete the works ahead'
Some feedback from cultural inductions:

'It was a lovely introduction into the history and culture of the locals (Ngāti Tama) and their collaboration in building the new road'

'The induction opened my eyes to the history of the mana whenua and the deep significance of the land where we are working'

'Knowing that Ngāti Tama is happy with the road is a weight lifted off my shoulders'



Bridges and tunnel

We're reducing the new road's impact on the significant ecological swamp maire wetland with two bridges. A 235m tunnel through the main ridge will allow wildlife to continue uninterrupted movement from one side of the new road to the other.

A single span 125m bridge will carry the road over a stream that feeds into the Mimi River, while a 30m bridge to the north of the tunnel will help keep the new route on a steady gradient above the valley floor.

A 100-tonne roadheader machine will excavate the top part of the tunnel followed by the bottom section. The tunnel's lining, comprising ground anchors and approximately 3,000m3 of steel fibre reinforced shotcrete (sprayed concrete), will be constructed as the tunnel takes shape. Estimated progress is up to 1.5m per day in the top and 3m at the bottom.







The cableway

The 1.1km Mt Messenger Cableway enables the transport of machinery, materials and workers into the heart of the future 6km Te Ara o Te Ata: Mt Messenger Bypass.

It provides access to critical areas of the project, while minimising impact on the environment.

A first for New Zealand roading, the Mt Messenger cableway will allow the bypass to be completed faster, as access to start work north of the project's tunnel can begin before the 125-metre-long bridge from the south is complete.

The cableway will operate for 12 to 18 months from late 2023, before being safely dismantled and returned to its supplier.

It runs for 600m between a north anchor point and a 28m tall central tower, with an attached cable crane.

The 500m section from the tower to the south anchor point is a backstay that doesn't carry people or equipment. The cableway can transport up to 20 tonnes of plant and gear at a time. A gondola also operates, capable of carrying up to eight trained workers.









Cultural expression

Ngāti Tama were traditionally the northern 'Gatekeepers' of the wider Taranaki region. Cultural elements in the bypass design convey stories of Ngāti Tama Tūpuna, events and places.

For example, near the tunnel's northern entrance three pou will depict the defence line that reflects the wero (challenge) that Ngāti Tama presented to others entering Taranaki from the north. The design on the tunnel's northern portal features Te Kauae o Ngāti Tama (the jaws of Ngāti Tama) and includes:

- a waterfall (Te Rerepahupahu) and a Kōkako signifying the area's native bird life
- a circular element representing the mauri (life force) and continued protection of the area
- purapura whetu (stars) in the upper jaw symbolise ancestors
- markings in the lower jaw reflect the three iwi that descend from voyagers on the Tokomaru waka.



Cultural monitoring

Like the grand Pūriri tree, Ngāti Tama stand tall and proud in their responsibilty of providing **Manaaki** or cultural support over the Project, Te Ara o Te Ata.

Ngāti Tama acknowledge Te Ata, guardian of the coastal whenua of the iwi. The project carries the name Te Ata, as it is Te Ata who watches over the mauri and changes of the landscape during and after construction.

Tāngata Tiaki (Cultural Monitors) and the Pou Tiaki (**Manaaki** Support) are all Ngāti Tama, and they work to ensure the maru (shelter) of **Manaaki** is a warm space, where cultural safety is woven into the day to day operations in the project.

Manaaki is lived and breathed onsite, where sharing knowledge and values offers a pathway to greater understanding between the project team and mana whenua Ngāti Tama.

'If we look after the wellbeing of our people, then our people will look after the wellbeing of our environment'







Te Ara o Te Ata



