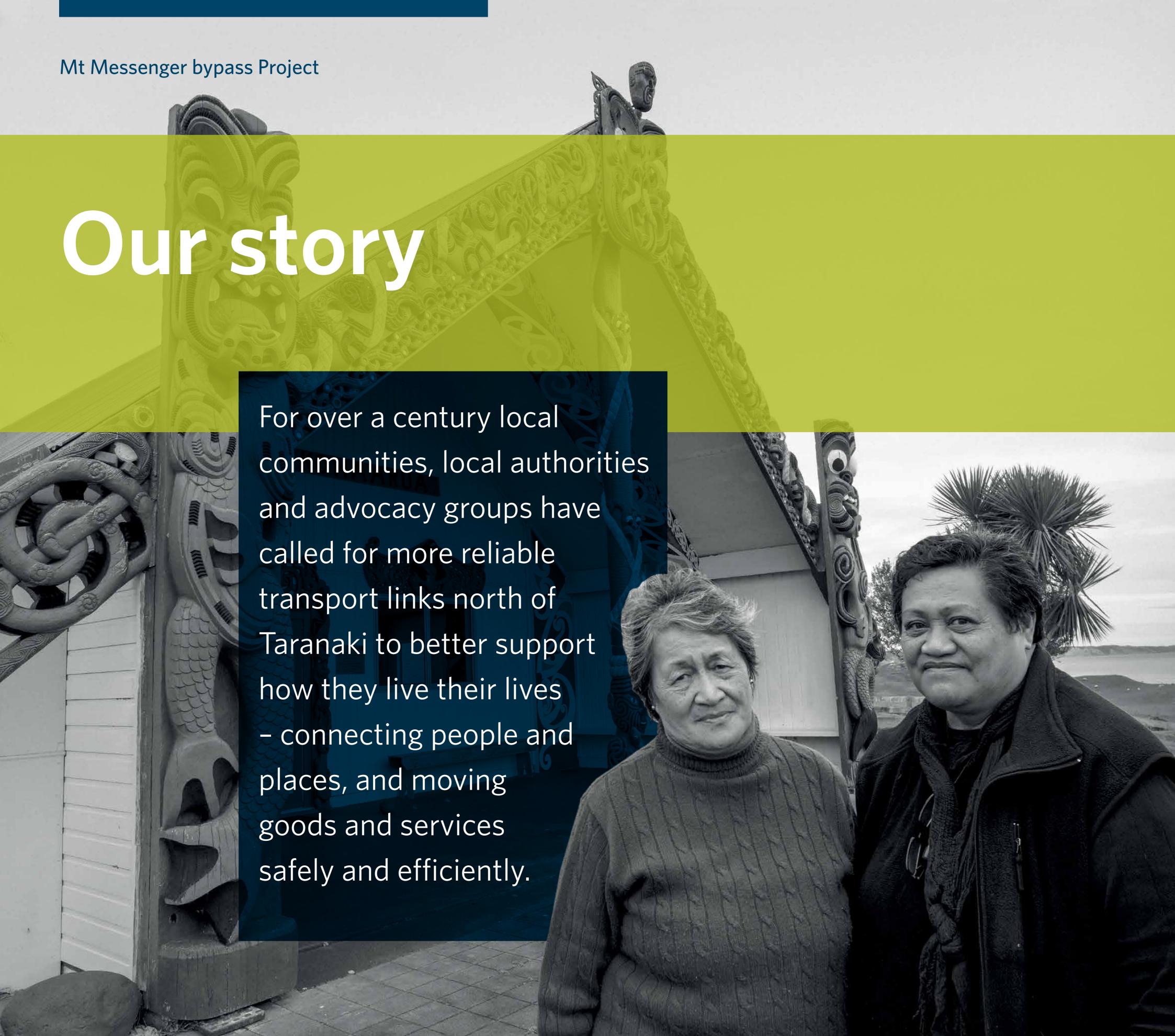
Mt Messenger bypass Project Update







The challenge

The existing Mt Messenger route on State Highway 3 travels through rough terrain – narrow in places and prone to rockfalls and slips. The corners are windy nearing the tunnel, making the road unsafe and vulnerable to crashes.

The opportunities

Over the years considerable efforts have been made to advance major improvements to this section of SH3.

A substantial government investment of \$135 million, including up to \$105 million through the Government's

Accelerated Regional Roading Programme, will see major improvements to the most treacherous section of State Highway 3 from Awakino Gorge to Mount Messenger.

The Awakino Gorge to Mount Messenger Programme was established in 2016 and a public consultation on options was held for the three projects making up the Programme. The feedback received informs further rigorous investigations to identify a preferred route for Mt Messenger.

The Mt Messenger Alliance is formed to take the project forward. It brings together the NZ Transport Agency, Downer, HEB Construction, Tonkin & Taylor, Opus International Ltd, Holmes Consulting and Isthmus.

You said, we've acted

Your feedback on the earlier options

We listened to your feedback on the options proposed for the Mt Messenger bypass Project from the earlier consultation for the Awakino Gorge to Mt Messenger Programme.

The key themes from the feedback included:

- » strong support for a route that provides travel time, safety and reliability benefits
- » concerns about environmental and cultural impacts of a bypass
- » insights into the complex issues of improving the highway in this challenging environment
- » the importance of taking a long-term view so that the improvements will benefit future generations and the environment.

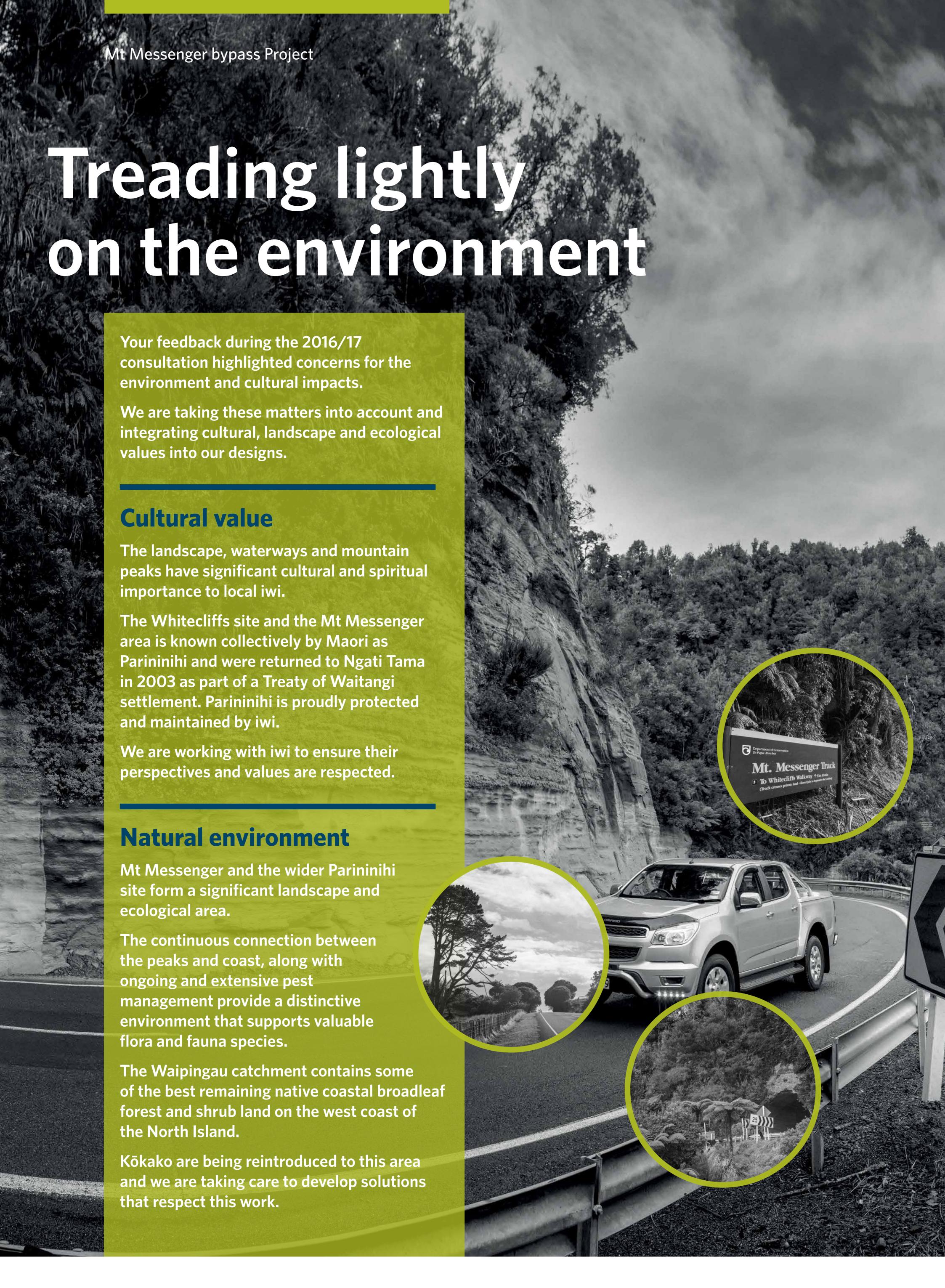
Our approach

After considering the feedback our team has revisited the options. We've carried out further planning, testing and design work.

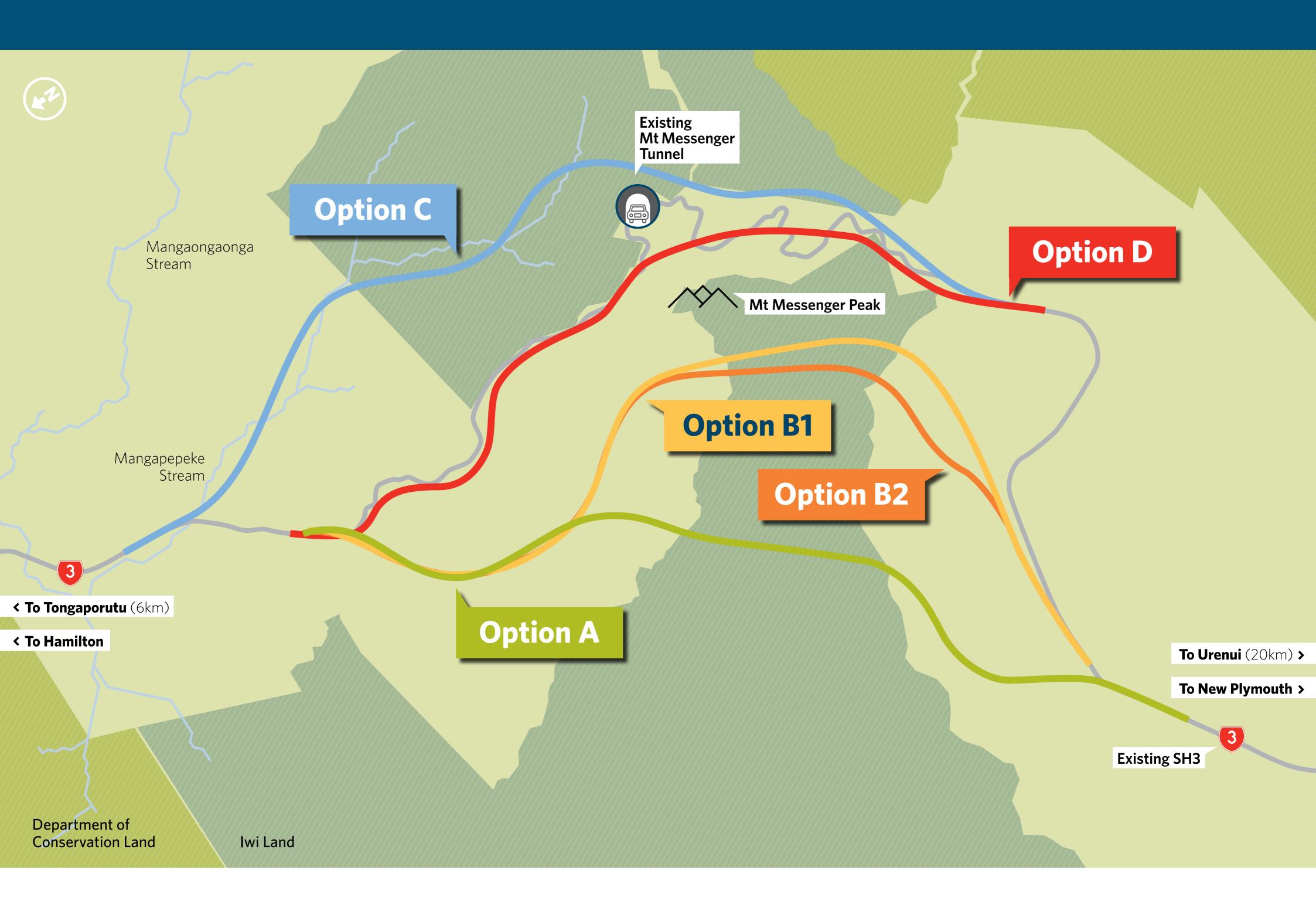
The optimal solution for this challenging project will be reached when we find the balance between affordability, stakeholder needs and expectations, and design solutions.

Our approach includes "treading lightly on the land", and so, in addition to solutions that use cuts through ridges and fills in valleys, we've also developed options that use bridges and short tunnels to significantly reduce the impact on the land.





Mt Messenger bypass route options



There are five options currently under consideration for the Mt Messenger bypass Project.

The route options are:

Option A

A 5.4km route running west of the existing highway, which includes a bridge and tunnel.

Options B1 and B2

5.2km routes running west of the existing highway. They include bridges and tunnels.

Option C

A 5.2km route running east of the existing highway, which includes a bridge and a tunnel.

Option D

A 4.2 km route is located in the area of the existing highway. It includes three bridges and a tunnel under Mt Messenger.



Option A

This is a 5.4km route to the west of the existing highway. It will likely include a bridge over the Waipingau catchment (rainfall drainage area) and a tunnel under the ridgeline to the south of Mt Messenger.

This option includes grades of up to 10%. We are considering a range of design solutions such as climbing lanes. To the north of Mt Messenger, the route continues over farm land, and is improved with raised banks and cuttings. Bridges and pipes allow water flows along existing streams.

To Tongaporutu 🔨 Mangapepeke Stream **Option A Existing** Mt Messenger **Tunnel** Mt Messenger Peak **Existing SH3 ≮** To Urenui

- » This option is broadly similar to the 'Option 3' route, which was favoured by the public in the earlier consultation.
- » It is 3.5km shorter than the existing route, and is currently designed to provide consistent traffic speeds that result in travel time savings.
- » It provides better resilience than the existing section of the highway.
- » While this route runs closest to the kōkako release area, the bridge and tunnel will allow kōkako to cross the route safely (either under the bridge which may be up to 65m above the valley floor, or along the ridge over the tunnel).
- » Land in this area has been returned to iwi as part of a treaty settlement and the route would impact this land.
- This option affects approximately 9ha of native vegetation within the ecologically sensitive land undergoing restoration. It has been identified as having high ecological value, with the land to the west of the existing route being recognised as having the greatest value.
- » The route affects approximately 3km of streams in the area north of Mt Messenger, with approximately 2km needing diversion.



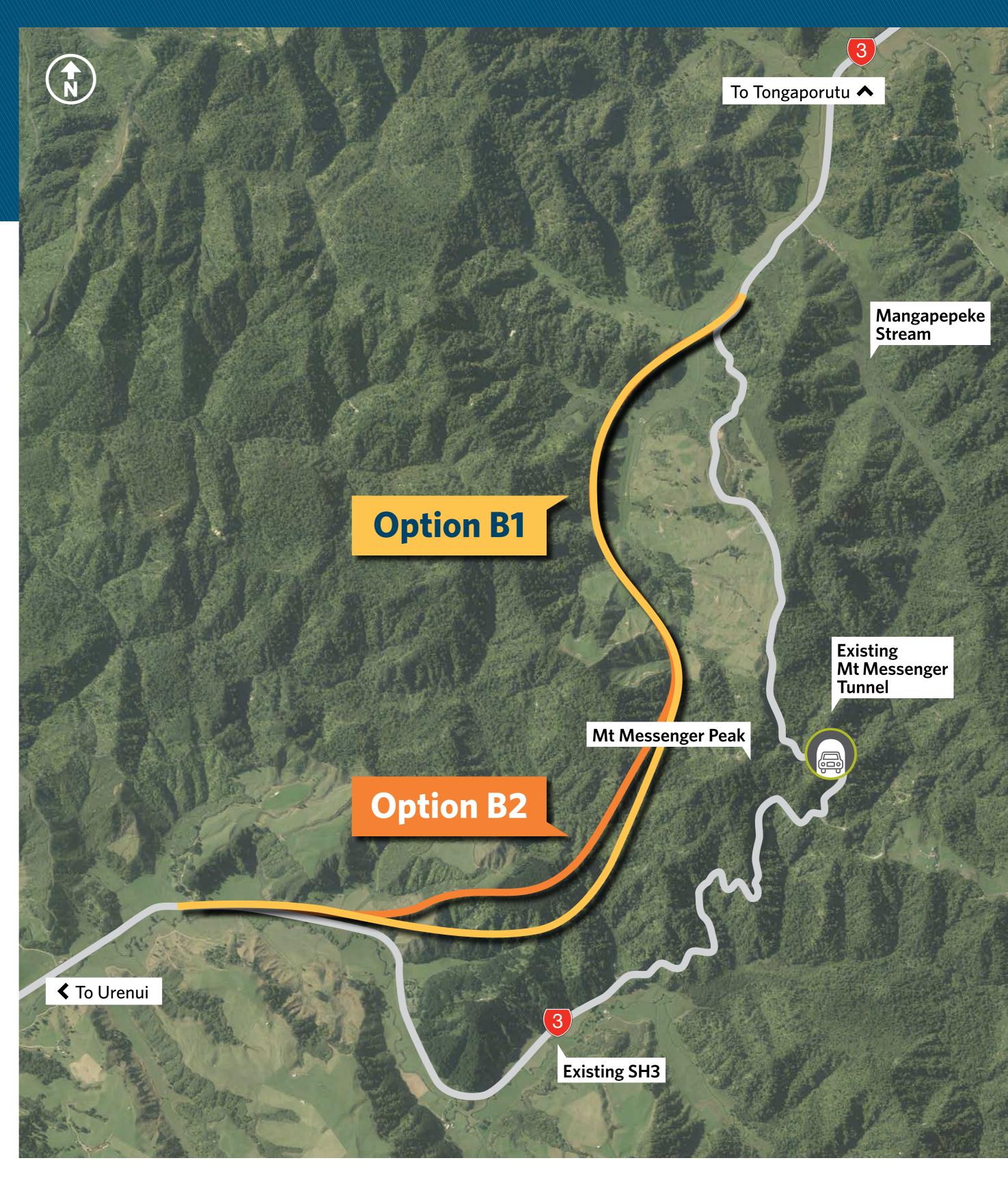
Options B1 and B2

These are 5.2km routes to the west of the existing highway.

The layout of the southern portions of the routes differ slightly with Option B1 likely to require two bridges over valleys while Option B2 is likely to require one. Both options will have tunnels under the ridgeline to the west of Mount Messenger.

The options follow the same route north of the ridgeline.

The options include grades of up to 10%. We are considering a range of design solutions such as climbing lanes. To the north of Mt Messenger, the routes continue over farm land, and are improved with raised banks and cuttings. Bridges and/or pipes allow water flows along existing streams. Further work is being done to determine which is a more viable option.



- » These options are 2.4km shorter than the existing route, and are currently designed to provide consistent traffic speeds that result in travel time savings.
- » The bridges and tunnels minimise the impact on the ecologically sensitive land (compared to an earthworks option on the same route) and provides resilience and other improvements through this area.
- » These options have less impact on the ecologically sensitive land and are broadly similar to the 'Option 2' from the earlier consultation.
- » Land in this area has been returned to iwi and the routes would impact this land.
- » These options are also closer to the kōkako release area than Options C or D. However the bridges and tunnels will allow kōkako to cross the route safely either under the bridges or over the tunnels.
- » The options affect approximately 8ha of native vegetation and about 4ha of exotic forest. Construction methods are still being developed but it is possible construction of one of the bridges on B1 will result in some disturbance of the ecologically significant area beneath the bridge.
- » The routes affect about 3km of streams with approximately 2.6km of stream diversion.



Option C

This is a 5.2km route to the east of the existing highway. It will likely include a bridge and a tunnel under the ridgeline to the south east of Mt Messenger.

The options include grades of up to 9%. We are considering a range of design solutions such as climbing lanes. To the north of Mt Messenger, the route continues through the eastern block of iwi land and along the valley on a raised bank over farm land. A number of bridges and pipes carry streams under the raised bank.

To Tongaporutu 🔨 **Option C** Existing Mt Messenger **Tunnel** Mt Messenger Peak **Existing SH3 ≮** To Urenui

- » This option is 1km shorter than the existing route. It provides consistent traffic speeds and some travel time savings.
- » This route avoids the regionally significant landscape identified in the New Plymouth District Plan and the Waipingau catchment (rainfall drainage area). It also provides improved resilience through this area.
- » Land in this area has been returned to iwi and the route would impact this land.
- » This option affects approximately 20ha of native vegetation. The design is currently being refined to avoid a significant wetland area near the south end of the proposed route. The design of the bridge is curved, and the construction of the bridge will require haul roads to be established through the ecologically significant area.
- » The route affects approximately 3 to 4km of streams near the route with a possible diversion.



Option D

This 4.2 km route is located in the existing highway area. It will likely include three bridges and a tunnel under Mt Messenger.

It is significantly different to 'Option 1' (improvements to the existing route) proposed in the earlier consultation.

The option is designed to an appropriate standard and removes the tortuous curves of the existing section of highway.

The options include grades of up to 10%. We are considering a range of design solutions such as climbing lanes.



- » This option is 1.2km shorter than the existing route, and is designed to provide consistent traffic speeds that result in travel time saving.
- » It avoids all but a very small area of ecological and cultural significance, and needs the least amount of land to be acquired. It has no effect on natural waterways. It also has the least impact on landscape as it is in the same area as the existing route and involves structures and earthworks.
- » It is possible this option will have the lowest speed of all options under consideration. While the route crosses the existing highway a number of times, it is designed to minimise disruption on the highway operation during the construction phase.



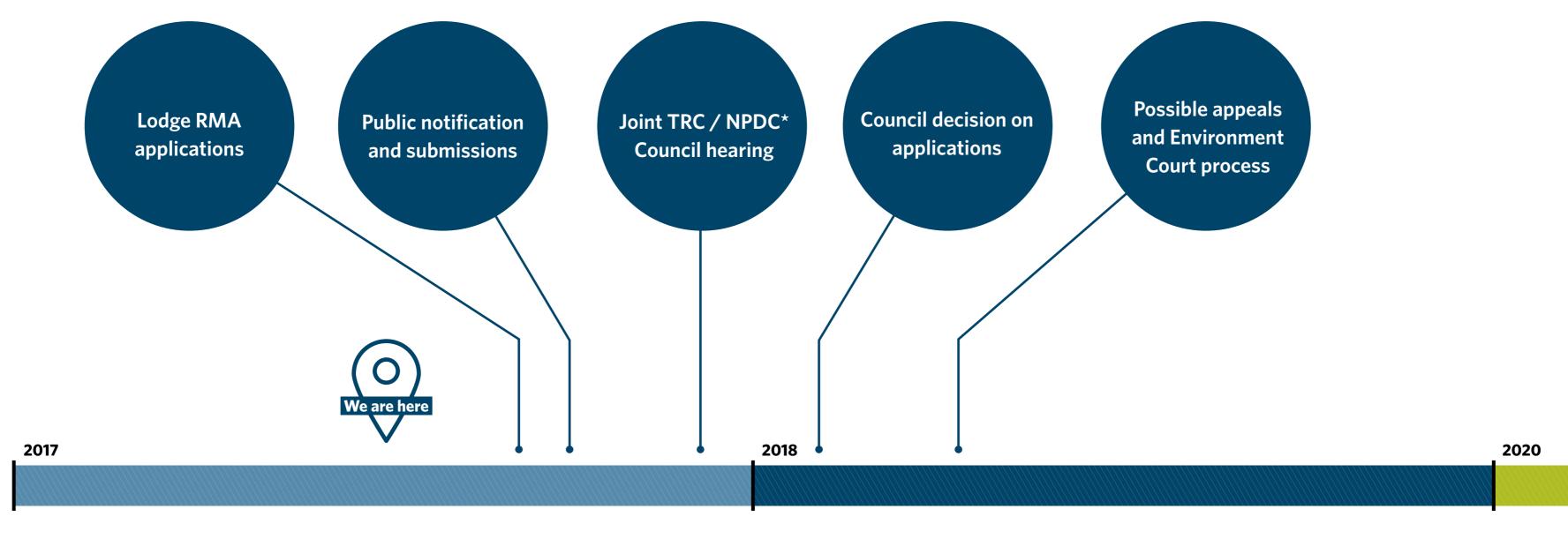
What's coming up for the Mt Messenger bypass Project?

We are continuing to refine the options. More information is being collected including your feedback to shape our designs.

Once a preferred option is identified an announcement will be made over the next few months. The next stage will be to apply for consents to build the improvements.



Consent process and timeline for the Mt Messenger bypass Project



Stakeholder engagement

Announcement of next steps for the Mt Messenger bypass Project

Design and investigation

Assessment of options process

Resource consent applications prepared and lodged

Preferred option selected

Start construction on Mt Messenger bypass Project

Construction expected to finish in 2020

* TRC - Taranaki Regional Council NPDC - New Plymouth District Council

