

# Arataki

Regional direction  
Te Tai Tokerau – Northland  
September 2023 v1.1

# At a glance



Te Tai Tokerau Northland depends on its rail and road connections south to Tāmaki Makaurau Auckland and the rest of Aotearoa New Zealand. These connections support social benefits, like helping communities thrive, and economic opportunities for the key industries of tourism, horticulture, forestry, and manufacturing.

In recent years, Te Tai Tokerau has grown faster than any other region in the country. This has put pressure on housing and infrastructure, including transport.

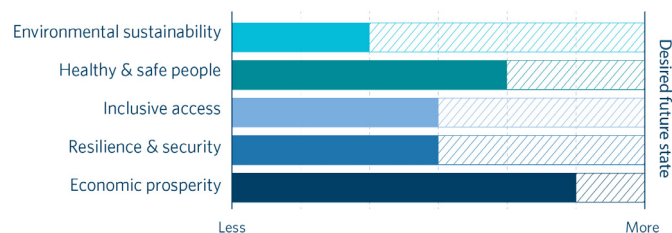
About half the region’s population lives in the Whangārei district, with growth rates varying across the region. Some areas are growing rapidly; others are in decline. Overall, the region’s population is expected to grow from 200,000 to 231,000 by 2048.<sup>1</sup>

Most growth has occurred as low-density housing. Whangārei has allowed for greater density growth; this has yet to be taken-up. This area is highly dependent on cars because of low density of development, dispersed rural and coastal communities, and limited public transportation.

Te Tai Tokerau has one of the highest rates of road deaths and serious injuries of any region.<sup>2</sup> Key safety challenges include poor vehicle condition, speeding, drug and alcohol impairment, fatigue, and not using seat belts.<sup>3</sup>

The region’s transport system is vulnerable to sea-level rise, flooding, intense storms, and slips. Many communities in Te Tai Tokerau are often accessed by one road or state highway. The region’s transport network is also vulnerable to resilience challenges. This is because the only road and rail connections from the region to the rest of the country is through Tāmaki Makaurau.

### Scale of effort to deliver outcomes in Te Tai Tokerau – Northland



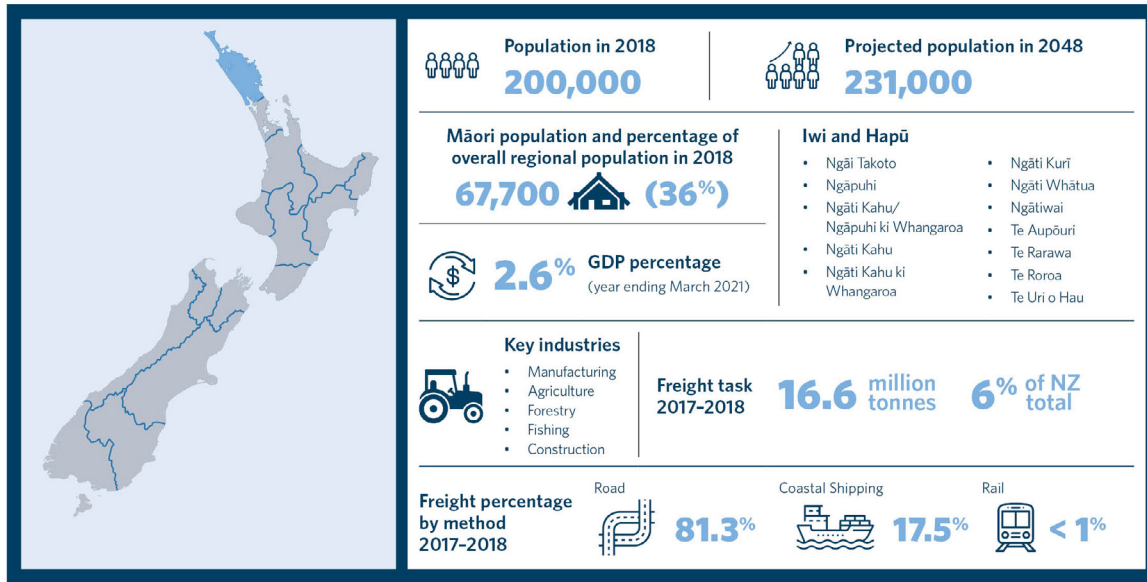
The regional ratings show how Waka Kotahi has assessed the potential scale of effort required in each region to achieve the future desired state for each outcome over the next 10 years. The ratings in each region indicate where effort can be best focused and inform conversations with partners about priority outcomes in each region.

The rating assessments are based on evidence using system-levels metrics. Further details are captured in the methodology document.

The September 2023 v1.1 release of *Arataki* includes updates to reflect the severe weather events of 2023 and correct minor errors. Most sections of the *Regional direction Te Tai Tokerau – Northland* have climate-related updates.

# Context





The population of Te Tai Tokerau Northland is projected to grow from 200,000 to about 231,000 by 2048, or 4% of the country’s population.<sup>4</sup> Nearly 70% of the population lives outside the region’s only major urban centre, Whangārei.<sup>5</sup>

From 2013 to 2018, the region’s population growth was the highest of any region in Aotearoa New Zealand.<sup>6</sup> Spill-over from Tāmaki Makaurau Auckland is a key growth driver for the region, particularly for Kerikeri, Whangārei, Mangawhai, Ruakākā, and along the corridor from Whangārei to Tāmaki Makaurau.

A large amount of population growth will be in Whangārei. This will mostly happen through a mix of greenfield growth (development of undeveloped areas) and urban redevelopment. This could support significant mode shift.

High-growth townships like Te Poupuwhenua Marsden/Ruakākā, Kerikeri/Waipapa, and Mangawhai, will likely remain car dependent unless there is significant investment in public transport.

In 2018, Māori living in Te Tai Tokerau made up 36% (67,700) of the region’s population which is projected to increase to 43% by 2043.<sup>7</sup> This is more than double the national rate of 16.5%.<sup>8</sup> In the district of Far North, Māori make up 49% of the population.<sup>9</sup> There are a number of iwi and hapu throughout the region that have yet to receive a full Treaty settlement with the Crown.

The iwi and hapū in the Te Tai Tokerau region are Ngāi Takoto, Ngāpuhi, Ngāti Kahu/Ngāpuhi ki Whangaroa, Ngāti Kahu, Ngāti Kahu ki Whangaroa, Ngāti Kurī, Ngāti Whātua, Ngātiwai, Te Aupōuri, Te Rarawa, Te Roroa and Te Uri o Hau.<sup>10</sup>

*Te Ōhanga Māori - The Māori Economy 2018* includes information for the Te Tai Tokerau rohe, which relates to the Te Tai Tokerau region. It notes the asset base in the rohe is valued at \$8.0 billion.<sup>11</sup> The primary sector important, followed by property.<sup>12</sup>

The region’s economic advantages include:

- close proximity to the large Tāmaki Makaurau market
- easy access to export markets
- the natural environment and sub-tropical climate.

Despite this, Te Tai Tokerau has the lowest GDP per capita in Aotearoa.<sup>13</sup> It also has high levels of poverty throughout the region, especially for Māori and in rural areas.<sup>14</sup>

To create greater opportunities in Te Tai Tokerau, a focus on regional development is needed. This includes improved access to employment, education, training, and essential services, particularly for communities in remote areas.

The country’s transition to a low-emission economy will impact rural land-use in Te Tai Tokerau. For example, there is already evidence of a transition from dairying to avocado production and forestry.<sup>15</sup>

Severe weather events are already affecting the land transport system in Te Tai Tokerau. There were two severe weather events at the start of 2023: the Auckland Anniversary Weekend floods in January and Cyclone Gabrielle in February. Flooding, landslips, and storm damage caused road closures on SH1 at Brynderwyn and at multiple locations along SH12. Rail was also affected with a closure on the North Auckland Line between Swanson and Whangārei. Expected closures will be an ongoing and significant issue in Te Tai Tokerau.

Key transport routes, such as SH1, are critical in connecting the towns and communities of Te Tai Tokerau. As access along the corridor north of Tāmaki Makaurau is improved, Te Tai Tokerau will become an even more attractive region to live, work, and visit.

The freight task in Te Tai Tokerau in 2017-2018 was 16.6 million tonnes, or around 6% of the Aotearoa total.<sup>16</sup> A total of 81.3% of the freight task in Te Tai Tokerau was moved by road, 17.5% by coastal shipping, and less than 1% by rail.<sup>17</sup>



# Te Tai Tokerau - Northland: Outlook

## Over the next 30 years, significant transformation to the transport system of Te Tai Tokerau is needed to address challenges and make progress on key transport outcomes.

Te Tai Tokerau has a spread out population and limited public transport services beyond Whangārei. This means people are highly dependent on private vehicles to access key services, such as tertiary education, training, and healthcare.

A greater role for Northport and investment in the productive sector, such as horticulture and fruit, in the Upper North Island could significantly increase freight volumes. The safe and efficient movement of goods to Tāmaki Makaurau Auckland and other domestic markets would need support from road, rail, and coastal shipping.

Recent or future work in the region will support an increased role for rail freight. This includes:

- recent investment in upgrading the North Auckland Line between Tāmaki Makaurau and Whangārei
- the planned reopening of the line to Otiria, where a new container terminal is to be located.

KiwiRail plans to construct a new 19km rail spur connecting Northport to the rail network.

These projects will contribute to the expansion of Northport and will allow growth for container traffic. Northport's Vision for Growth, along with business cases for a dry-dock facility, outline continued expansion of the port and the surrounding industrial area.<sup>18</sup>

In light of increased extreme weather events, the next 30 years will present long-term resilience challenges as the likelihood of damaged roads and rail networks grows. It will be necessary to work with communities to:

- understand climate adaptation
- identify and prioritise responses in high-risk areas
- identify sections of the network prone to closure
- plan to avoid infrastructure and development in high-risk areas.

It will be challenging to fund new infrastructure and services to keep pace with expected growth in Te Tai Tokerau. Maintenance of existing transport infrastructure is already costly because of the:

- size of the network
- number of isolated communities on the network
- challenging geography and increased hazards and storm events.

Steps to make progress towards transport outcomes in a more efficient and cost-effective way include:

- a renewed focus on small-scale projects and getting more from existing infrastructure
- reallocating existing road space and making temporary or low-cost improvements
- influencing travel behaviour and growth patterns
- creating a more resilient network
- implementing a targeted safety programme.

Even with these steps, more investment from a wider range of finance and funding sources is required to achieve key goals. New sources should be investigated, especially where these incentivise growth or transport outcomes.

This section uses the *Transport Outcomes Framework* from Te Manatū Waka Ministry of Transport to support a ‘decide and provide’

approach to proactively plan the desired future state we want to achieve. Key challenges and opportunities are identified and discussed. Then we highlight the most important actions to be taken to make progress on each outcome.

## Environmental sustainability

### Challenges and opportunities

Te Tai Tokerau Northland will need to make some contribution to reducing transport emissions, to reach 2035 targets set in the government’s *Emissions Reduction Plan* and net-zero emissions by 2050.<sup>19</sup>

As the main urban centre, Whangārei presents the greatest opportunity to support national emissions reductions by providing alternative transport options and reducing the need to travel. This will require a significant change to how people travel in an urban centre with high levels of private vehicle use.

During the past decade there has been progress to increase public transport services and significantly expand walking and cycling networks.

Whangārei, and the surrounding towns, will need to carefully manage how the transport system addresses population growth by:

- providing reliable public transport
- ensuring quality infrastructure for walking and cycling
- encouraging travel by alternative modes, like implementing parking restrictions.

We need to reduce freight transport carbon through:

- adopting lower-emitting fuels
- improving freight connections
- increasing mode share for rail and coastal shipping.

Care is required to ensure efforts to reduce vehicle kilometres travelled (VKT) don’t unfairly impact specific communities or groups.

We must also reduce the impact of the region’s transport system on the local environment, especially its impacts on air pollution, waterways, and ecological systems. Contaminated stormwater runoff from roads must be treated before entering waterways. The impact of new and improved transport infrastructure on the natural environment must be appropriately managed.

### Making progress

Key actions over the next 10 years to make progress on this outcome are:

- encouraging growth and urban development that supports compact and mixed-use urban form, reduces trip length, and lessens car dependency
- planning what interventions and investments are needed to achieve emissions reduction
- making changes to the allocation of space on existing roads and streets to enable and increase mode shift to public transport, walking, and cycling
- making it more safe and convenient for residents to travel around urban areas by completing the Whangārei urban cycle network, and improving public transport, such as putting in bus lanes and more frequent services
- exploring opportunities to provide more comprehensive electric vehicle (EV) infrastructure in rural communities
- exploring opportunities to use technology to help deliver better services at a lower cost
- more actively managing carparking in Whangārei to increase use of public transport, walking, and cycling
- ensuring appropriate standards, policies, and regulations are in place to reduce the impact of the transport system on the local environment
- supporting the implementation of key policies, such as vehicle fleet transformation, and investigation of pricing tools.



**The impact of new and improved transport infrastructure on the natural environment must be appropriately managed.**



## Healthy and safe people

### Challenges and opportunities

Te Tai Tokerau has a poor road safety record, with an average of 180 annual deaths and serious injuries during the past three years.<sup>20</sup> The greatest risk areas are:

- SH1 from Mahurangi Warkworth to Pakaraka (SH10)
- urban areas in Whangārei
- high-risk rural roads.<sup>21</sup>

Key safety issues are around driver behaviours, such as speeding, alcohol and drug impairment, people not wearing seatbelts, and vehicle condition.<sup>22</sup>

These issues are made worse by high levels of deprivation in Te Tai Tokerau. This highlights the importance of regional development.

Efforts to improve road safety are guided by the *Road to Zero: New Zealand's Road Safety Strategy 2020-2030* and associated *Action Plan 2020-2022*, and regional safety strategies.<sup>23</sup>

There is a significant opportunity, and need, to increase walking and cycling rates in urban areas of Te Tai Tokerau. Active mode use has fallen substantially in recent decades, contributing to many health problems around lack of physical activity. These health issues, like obesity and diabetes, disproportionately affect some demographics.<sup>24</sup> The harmful impacts of vehicle tailpipe pollutants on health, especially on the respiratory systems of our youngest, oldest, and most vulnerable, are much greater than previously realised.<sup>25</sup>

**There is a significant opportunity, and need, to increase walking and cycling rates in urban areas of Te Tai Tokerau.**

Significant progress on the healthy and safe people outcome will support environmental sustainability and inclusive access. Providing extensive networks of safe walking and cycling facilities will encourage more people to use these healthy and sustainable travel options. Similarly, a focus on reducing deaths and serious injuries for vulnerable road users will also encourage more people to walk and cycle.

### Making progress

Continuing to realise safety plans and support dramatic changes to encourage walking and cycling will help the urban areas of Te Tai Tokerau Northland. New approaches to planning, design, and delivery, along with significant investment, are needed to accelerate progress.

Key actions over the next 10 years to make progress on this outcome are:

- completing planned safety improvements, notably on SH1 between Whangārei, Port Marsden Highway, and Te Hana, and the replacement of single-lane bridges
- supporting safety improvements to the urban network
- targeting road policing and behaviour change programmes with a focus on alcohol and drug impairment, speeding, and people not wearing seatbelts
- managing safe and appropriate speeds on high-risk rural roads – this includes targeted use of safety cameras to reduce speeding
- improving access to driver learning and licensing, particularly in isolated rural communities
- rapidly rolling out a well-connected, separated cycling network in Whangārei and other towns across the region through reallocation of existing street space
- encouraging high-quality active mode infrastructure be part of new developments
- encouraging and implementing regulatory changes that reduce harmful vehicle emissions and encourage the use of zero-emissions vehicles
- continuing to manage transport system noise through planning and mitigation
- advocating for robust mobile network coverage in rural and regional areas.

## Inclusive access

### Challenges and opportunities

The region's transport system struggles to provide people of all ages, abilities, and income levels with safe, sustainable, and reliable access to a wide variety of social and economic opportunities.

A high reliance on private vehicles creates several access challenges, including:

- creating difficulties for those without easy access to, and use of, a private vehicle to fully participate in society
- placing significant pressure on household budgets to meet the high costs of car ownership and use
- limiting people's ability to travel in a way that best meets their needs because of poor travel choice
- limiting access to education, training, and employment opportunities, which impacts the wider regional economy.

Rural and coastal communities in Kaipara and the Far North need improved connections to centres, such as Whangārei. Young people need access to education and increased employment opportunities. Older residents need access to physical and social activities, as well as health and social services.

Emerging technologies, such as on-demand shuttles, could provide a shared-transport option. These would help people get around the Far North and Kaipara, and improve access to services in Whangārei. Improved access to high-quality data and information will allow better management of the transport system to get the most out of existing infrastructure. The growing popularity of online purchasing and home delivery will impact on-demand travel, including the movement of freight.

Free driving lessons and tests for the region's young drivers are expected to improve access to education, training, and employment opportunities. This will help those without access to alternative transport services and reduce road deaths.

### Making progress

Improving inclusive access will often align with making progress on other outcomes, especially where travel choice is improved and car dependency reduced. However, there may be challenging trade-offs to consider, such as balancing increased travel costs to reduce emissions while ensuring lower-income families aren't unfairly impacted.

Key actions over the next 10 years to make progress on this outcome are:

- working with councils to shape planning rules and decision-making to encourage more people to live in areas with better existing access to social and economic opportunities, especially in Whangārei and other fast-growing towns
- improving public transport infrastructure and services, and expanding on-demand services where appropriate
- exploring opportunities to improve the affordability of public transport for lower-income households
- expanding and improving walking and cycling facilities, so low cost, sustainable, healthy travel options are safe and attractive for more journeys – this includes the completion of urban cycling networks in Whangārei and improved active-mode facilities in smaller towns
- ensuring transport infrastructure and services are designed and provided to meet the needs of people of all ages and abilities
- improving access to opportunities for iwi Māori, including access to marae, and sites of cultural significance
- exploring opportunities to support the mobile or digital delivery of essential services.

**Young people need access to education and increased employment opportunities. Older residents need access to physical and social activities, as well as health and social services.**

## Economic prosperity

### Challenges and opportunities

Te Tai Tokerau Northland has the lowest GDP per capita in Aotearoa New Zealand.<sup>26</sup> Regional development is required to:

- support communities
- create greater opportunities and prosperity, especially for Māori and those living in rural areas.

Northland Inc, the Te Tai Tokerau Economic Development Agency, supports several initiatives through the *Te Tai Tokerau Economic Action Plan* and the *Regional Economic Development Strategy*. Waka Kotahi is supporting both programmes.

Because weather-related events have frequently closed key transport routes along road and rail networks, access to markets and the Ports of Auckland has been impacted.

The transition to a low-emissions economy may result in land-use changes, particularly dairying, with flow-on effects for freight movement. A growing role for Northport in the country's overall supply chain seems likely in the future, meaning improved road and rail connections will be critical.

An increasing number of residents on fixed incomes will likely make it harder to:

- maintain existing infrastructure
- fund new infrastructure
- provide appropriate services.

Technological change will have significant impacts on demand for travel and on the economy of Te Tai Tokerau. The COVID-19 pandemic accelerated working from home, while future developments, like artificial intelligence and automation, could have an impact on the type and location of work people do.

Transport planning will need to be flexible in response to these changes, recognising high levels of uncertainty around the nature and location of future jobs and the impact of this on travel patterns.

### Making progress

Economic productivity and business competitiveness in the region can be improved by a transport system that provides:

- a range of travel options with wide capacity
- reliable journey times
- safe and low-cost ways of getting around.

Key actions over the next 10 years to make progress on this outcome are:

- improving access to social and economic opportunities, especially by walking and cycling in Whangārei and other regional towns
- supporting resilient, reliable, and efficient freight travel through interregional road and rail connections to Tāmaki Makaurau Auckland and Northport
- exploring opportunities to move to a more multimodal freight system with greater use of rail and coastal shipping
- managing increased transport costs in a way that doesn't negatively impact economic activity
- supporting the continued development of key economic centres by improving the access and amenity (attractiveness)
- working with Northland Inc to identify and support economic development opportunities
- using social procurement initiatives to support positive outcomes for training and employment.

**The transition to a low-emissions economy may result in land-use changes, particularly dairying, with flow-on effects for freight movement.**

## Resilience and security

### Challenges and opportunities

The next 30 years will see growing risk of damage to road and rail networks because of increased rain and storm intensity, coastal and soil erosion, sea level rise, flooding, slips, and storm surges.<sup>27</sup>

Climate change will mean hotter, drier summers. This will create dust issues on the region's many unsealed roads (only 40% of the region's 5,805kms of local roads are sealed).<sup>28</sup>

Rising sea levels and more intense storms will continue to disrupt access in some areas. Many remote communities and marae rely on a single access road. The added risk is that marae often serve a dual role, operating as key civil defence infrastructure in an emergency event.

Landslips and flooding present long-term resilience challenges, and the highest risk natural hazards, for areas in the Te Tai Tokerau Northland region.

SH1 from the Brynderwyn Hills to Whangārei is subject to both landslips and flooding; this will likely increase in the future because of sea level rise and increased rainfall. SH1 in the Far North is at risk with sections often affected and closed because of slips and storm damage. This section, and others on the state highway and rail network, were closed in 2023 because of severe weather events. There are significant challenges and costs to ensuring long-term resilience along this part of the state highway network.

Sections of SH12 and SH14 in the Kaipara are also at risk from flooding. These are vital connections for local communities and major townships.

The small number of connections between Te Tai Tokerau, Tāmaki Makaurau Auckland, and the rest of the country mean network resilience is of particular significance to the region.

More than ever, there must be a greater focus on maintaining existing assets at current levels of access and connectivity. There is a major opportunity to progress multiple outcomes by investing in maintenance and renewals, but this requires changes to current practices and increased funding.

### Making progress

The transport system needs an ongoing focus on maintaining existing assets along with targeted improvements to reduce risks. We also need to expand our understanding of resilience in urban environments, to ensure planning work is flexible and adaptable to change.

Key actions over the next 10 years to make progress on this outcome are:

- continuing design and planning work to identify and prioritise responses to natural hazards in high-risk areas – this includes working with communities to identify plans for when to defend, accommodate, or retreat
- fast-tracking a business case to identify short- and long-term options for the Mangamuka Gorge closure
- supporting local government, communities, iwi, and hapu through Climate Adaptation Te Tai Tokerau (CATT) and the proposed projects around understanding climate adaptation for at-risk communities
- continuing work to better understand routes that provide critical connections, the conditions of these, the pressures, and the level of investment needed to address impacts – this includes identifying priorities for network resilience and long-term strategic planning for key areas of risk, such as SH1, SH10, SH12, and sections of SH14
- engaging in local planning processes to avoid infrastructure and development in areas at risk of natural hazards and climate change
- seeking continuous improvement in network resilience through maintenance, renewals, and 'low cost/low risk' investments
- improving operational responses to events to support quick recovery following disruption to the land transport system
- shifting to more adaptable 'scenarios-based' planning
- improving personal security for people using the region's transport system.



**Landslips and flooding present long-term resilience challenges, and the highest risk natural hazards, for areas in the Te Tai Tokerau region.**

# Te Tai Tokerau - Northland: Focusing our efforts



## For efficient and effective progress, the transport challenges for Te Tai Tokerau Northland must be tackled in a cohesive way.

The directions below identify the most important issues to be resolved over the next 10 years to make progress towards transport outcomes.

- Significantly reduce the harm caused by the transport system of Te Tai Tokerau, especially through improved road safety and reduced pollutants dangerous to health.
- Reduce vehicle kilometres travelled, focusing on Whangārei, in a way that's fair, equitable, and improves quality of life.
- Plan and deliver growth in Whangārei and key townships, such as Kerikeri and Mangawhai, in an affordable and cost-effective way that aligns with safety and emissions-reduction goals.
- Support the prosperity of Te Tai Tokerau by providing a safe, efficient, and resilient transport network that helps address low incomes, supports Māori economic opportunities, and improves access for rural communities to employment, training, and education.
- Increase resilience by focusing on key connections and communities at risk, as well as important road and rail connections to Tāmaki Makaurau Auckland and Northport.
- Provide communities with access to a range of social and economic opportunities by public transport, walking, and cycling.
- Work with local government, developers, and agencies to support and encourage development in areas that already have good travel choices and shorter average trip lengths.
- Rapidly accelerate the delivery of walking and cycling networks with a focus on completing existing planned networks in Whangārei and reshaping existing streets, to make these options safe and attractive.
- Improve and expand public transport services, including potential on-demand services, to improve access to social and economic opportunities.
- Identify and support opportunities to move to a multimodal freight system with greater use of rail and coastal shipping.
- Work with communities and councils to identify and confirm how key resilience risks will be addressed over time.
- Progressively upgrade road and rail connections to Tāmaki Makaurau and Northport to improve the safety, efficiency, and resilience of these critical links to the rest of Aotearoa New Zealand.
- Confirm how resilience risks will be addressed over time, and work with communities to plan for when to defend, accommodate, or retreat.
- Continue to implement road safety plans and programmes including those focused for iwi Māori.
- Reduce financial and other barriers to iwi Māori getting a driver's licence in areas not well served by public transport.
- Improve or maintain, as appropriate, physical access to marae, papakāinga wāhi tapu, and wāhi taonga.

These will be updated over time to focus effort on the most critical matters.



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