

Arataki

Regional direction
Manawatū–Whanganui
September 2023 v1.1

At a glance



The central location of Manawatū-Whanganui means its transport networks carry significant volumes of through-traffic, connecting people and freight south to Te Upoko o te Ika a Māui Greater Wellington, east to Te Matau-a-Māui Hawke’s Bay and north to Waikato and beyond.

Network resilience is an issue. Climate change is expected to bring more intense and frequent storms that will impact areas with unstable terrain north of Whanganui. The impacts of sea level rise will also increase for low-lying coastal communities.

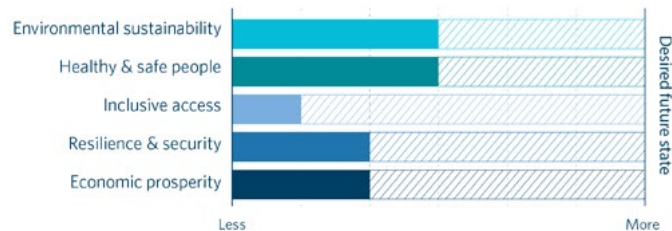
Te Papa-i-Oea Palmerston North is emerging as the primary distribution centre for the Lower North Island. The development of a high-tech rail hub in the northeast will allow rail to play a greater role in moving freight.

The population of Manawatū-Whanganui is expected to increase from 238,000 to more than 276,000 by 2048, or 2% of the population of Aotearoa New Zealand.¹ Most of this growth is expected in Te Papa-i-Oea, Aorangi Feilding, and Taitoko Levin.²

There is an opportunity to increase walking and cycling rates in Te Papa-i-Oea, Whanganui, Aorangi, and Taitoko, by investing in safe and attractive facilities. Active modes are the best way to reduce vehicle kilometres travelled, along with growing the amount of freight moved by rail and coastal shipping.

Other critical transport challenges facing the region over the next three decades include safety, resilience, and supporting the transition to a low-carbon economy.

Scale of effort to deliver outcomes in Manawatū-Whanganui



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.

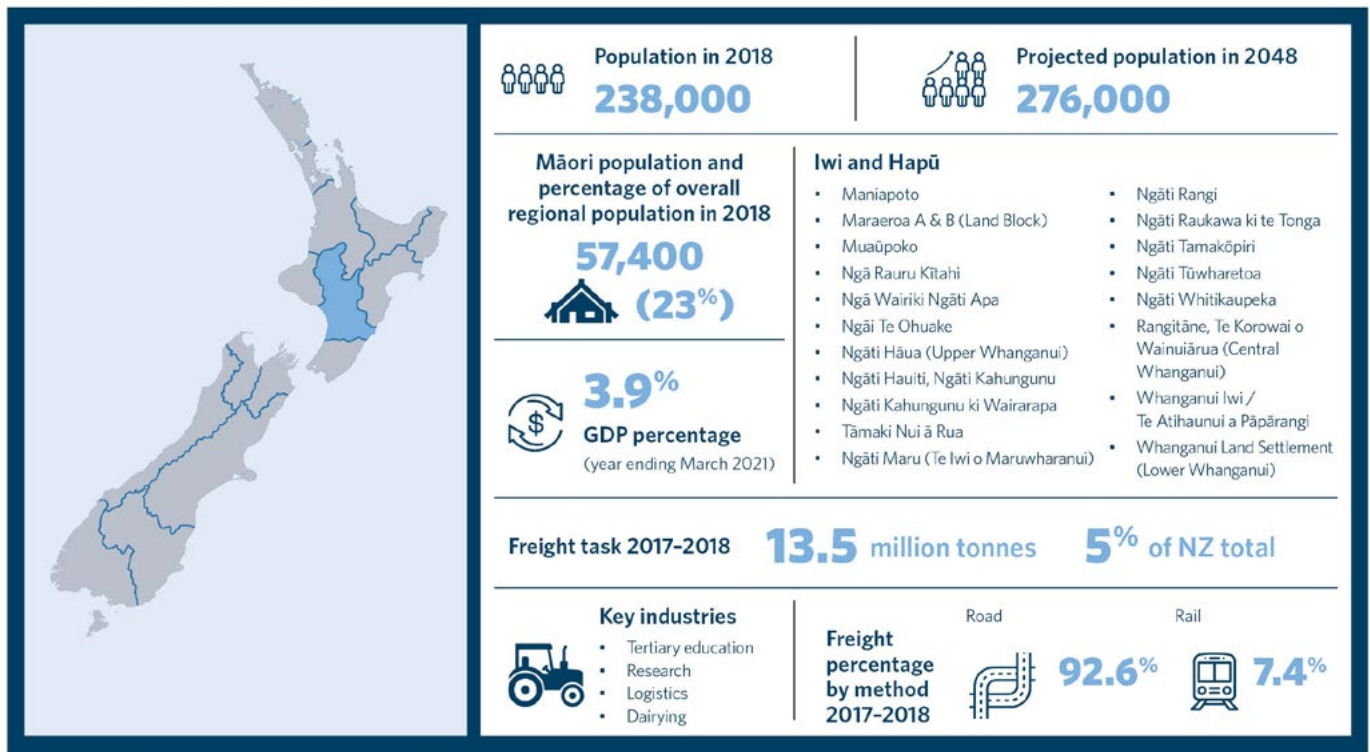
The rating assessments are based on evidence using system-levels metrics. Further details are captured in the methodology document.

The September v1.1 release of *Arataki* includes updates to reflect the severe weather events of 2023 and correct minor errors.

Context



Manawatū-Whanganui



With 238,000 residents, Manawatū-Whanganui is the sixth-most populated region in Aotearoa New Zealand.³ Its population is expected to grow to over 276,000 by 2048, or 2% of the country's population.⁴

The region's population is getting older, consistent with the national trend. The Horowhenua District, particularly Taitoko Levin, is actively positioning itself as a destination for retired residents. By 2043, 36% of the district's population is expected to be aged over 65.⁵ Enabling access for senior residents will be important to make sure they remain socially connected, active, and able to participate in their communities.

The region is located at the centre of the road and rail networks; these connect Te Matau-a-Māui Hawke's Bay, Te Upoko o te Ika a Māui Greater Wellington, Taranaki, and the Upper and Lower North Island. These connections are a key economic lifeline; they enable the movement of people and goods between key production centres, consumer markets, and freight distribution hubs. SH3 provides the main northern connection, linking Taranaki to Waikato and the Upper North Island, and a southern connection between Ngāmotu New Plymouth and Te Papa-i-Oea Palmerston North. SH3 is critical to the dairy industry, as it connects the dairy production centre in Hāwera to distribution centres in Te Papa-i-Oea.

Efforts to revitalise Whanganui Port could lead to increased movement of freight to and from the port by coastal shipping, rail, and road. The Capital Connection provides a weekday passenger rail service to Te Upoko o te Ika a Māui Greater Wellington, which could be improved in the future.

In 2018, 57,400 Māori lived in Manawatū-Whanganui, making up 23% of the region's population.⁶ This is almost 1.4 times the national rate of 16.5%.⁷ Most Māori live in Te Papa-i-Oea, where they make up 19% of the population.⁸

The iwi and hapū in the Manawatū-Whanganui region are Maniapoto, Maraeroa A & B (Land Block), Muaūpoko, Ngā Rauru Kītahi, Ngā Wairiki Ngāti Apa, Ngāi Te Ohuake, Ngāti Hāua (Upper Whanganui), Ngāti Hauti, Ngāti Kahungunu, Ngāti Kahungunu ki Wairarapa - Tāmaki Nui ā Rua, Ngāti Maru (Te Iwi o Maruwharanui), Ngāti Rangī, Ngāti Raukawa ki te Tonga, Ngāti Tamakōpiri, Ngāti Tūwharetoa, Ngāti Whitikaupeka, Rangitāne, Te Korowai o Wainuiārua (Central Whanganui), Whanganui Iwi / Te Atihaunui a Pāpārangi, and Whanganui Land Settlement (Lower Whanganui).⁹

Te Ōhanga Māori - The Māori Economy 2018 includes information for the Te Tai Hauāuru rohe, that relates to the Taranaki and Manawatū-Whanganui regions. It notes the asset base in the rohe is valued at \$5.7 billion.¹⁰ The primary sector is important, followed by property.¹¹

Te Papa-i-Oea is the region's largest centre and provides a service hub supporting the surrounding areas. Tertiary education, research, logistics, and military activities are significant economic contributors. Outside of the main urban areas, primary production is the key economic driver with tourism critical to the Ruapehu District.

Only 17% of tourism spend comes from international visitors, the lowest of any region in Aotearoa.¹²

Redeployment of defence force personnel is expected to increase activity at the military bases in Ohakea and Linton. Te Papa-i-Oea is becoming the primary distribution centre in the Lower North Island; this has increased heavy vehicle traffic and raised safety and efficiency issues on the local road network.

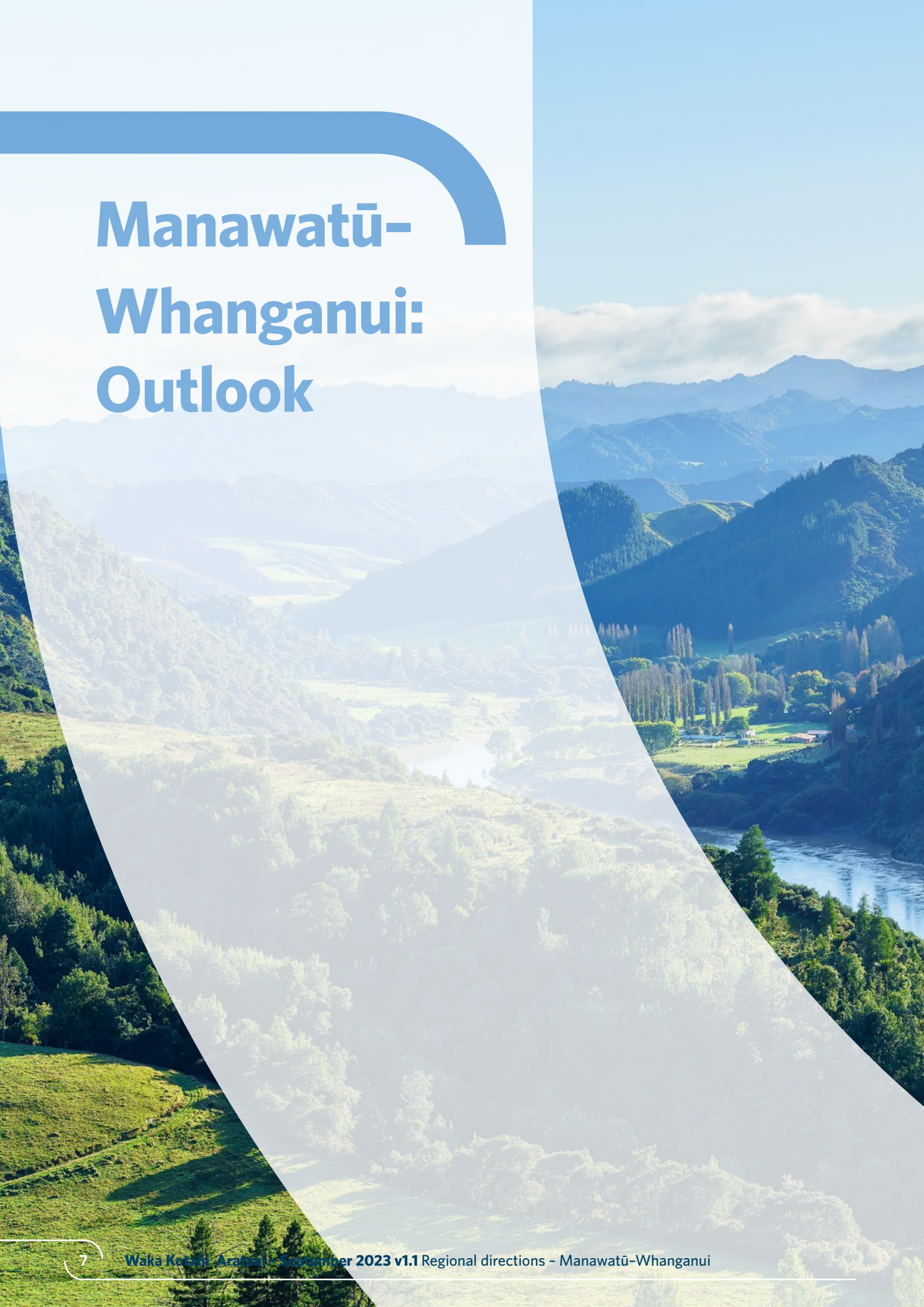
The region has high unemployment rates and a low median household income.¹³

The freight task in Manawatū-Whanganui in 2017-2018 was 13.5 million tonnes, or around 5% of the country's total.¹⁴

A total of 92.6% of the freight task tonnage in Manawatū-Whanganui was moved by road and 7.4% by rail.¹⁵

Primary sector commodities produced in Manawatū-Whanganui, representing 5% of the country's total in 2017-2018, were:

- Aggregate – 1.9 million tonnes, or 5.2% of Aotearoa production
- Logs – 2.1 million tonnes or 6.5% of Aotearoa log harvest
- Meat – 150,000 tonnes or 12.5% of Aotearoa meat and meat products
- Milk – 1.3 billion litres or 6.2% of Aotearoa milk production
- Wool – 25,771 tonnes or 18.4% of Aotearoa wool production.¹⁶



Manawatū- Whanganui: Outlook

Over the next 30 years, the population of Manawatū-Whanganui is projected to grow 16%; this will be focused in Te Papa-i-Oea Palmerston North, Aorangi Feilding, and Taitoko Levin.

The economy of Manawatū-Whanganui must transform as Aotearoa New Zealand reduces emissions and becomes more sustainable. The most significant changes to the region's transport system will include:

- supporting economic transformation to lower emissions
- making significant improvements to safety and resilience
- encouraging higher rates of walking and cycling in the main urban areas.

The region's economic drivers, like primary production, are expected to remain relatively consistent to 2030. Employment in service industries is expected to grow in the larger urban centres from 2025 to 2030. The role of Te Papa-i-Oea as a distribution hub will grow.

Manawatū-Whanganui faces long-term challenges, such as high unemployment and low incomes.¹⁷ These factors, together with an ageing population and many residents on fixed incomes, are likely to put pressure on the region's ability to:

- maintain existing networks
- fund new infrastructure
- provide appropriate services to residents.

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

- renewing the 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.

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

The transport carbon emissions per capita of Manawatū-Whanganui are above average, because of the large volumes of through traffic, particularly freight, using the region’s road networks.¹⁸

The region will need to make an important contribution to reducing transport emissions and light vehicle kilometres travelled (VKT), to reach the 2035 targets set in the government’s *Emissions Reduction Plan* and net-zero emissions by 2050.¹⁹

As the main urban centre, Te Papa-i-Oea Palmerston North 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 a city with high levels of private vehicle use.

Care is required to ensure efforts to reduce VKT don’t unfairly impact specific communities or groups.

Te Kunenga ki Pūrehuroa Massey University in Te Papa-i-Oea Palmerston North creates significant daily transport flows between the city and campus. Free bus services have helped increase public transport use. Journeys to work by foot or bike are above the national average at 11.4%.²⁰

We need to reduce freight transport carbon through:

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

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, mixed-use urban form, reduces trip length, and lessens car dependency
- planning what interventions, activities, and investments are needed to achieve vehicle kilometres travelled (VKT) and 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
- continuing to improve public transport services and exploring ways technology can deliver better services at lower costs
- more actively managing carparking at major destinations and employment areas, to increase the use of public transport, walking, and cycling for trips to these locations
- identifying opportunities for smaller projects, including making the best use of the network, that can improve system outcomes
- ensuring appropriate standards, policies, and regulations are in place to reduce the impact of the transport system on the local environment
- supporting key policies, like vehicle fleet transformation, to develop zero-emission transport solutions.

Te Papa-i-Oea Palmerston North presents the greatest opportunity to support national emissions reductions by providing alternative transport options and reducing the need to travel.

Healthy and safe people

Challenges and opportunities

The safety record of Manawatū-Whanganui is relatively poor. This is because of:

- head-on and run-off road crashes
- high-risk intersections
- driver behaviour.²¹

Focus is needed in the urban areas of Te Papa-i-Oea Palmerston North, Whanganui, and Taitoko Levin, and the state highways that link them.

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.²²

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.²³

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 supporting dramatic changes, or step changes, to encourage walking and cycling in urban areas will help Manawatū-Whanganui. 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:

- rapidly rolling out a well-connected, separated cycling network predominantly through reallocation of existing street space
- requiring high-quality active mode infrastructure to 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
- targeting road policing and behaviour change programmes with a focus on alcohol and drug impairment, speeding, and people not wearing seatbelts
- improving safety around high-risk intersections, run-off road crashes, high-volume roads, and head-on crashes on high-risk rural roads
- advocating for robust mobile network coverage in rural and regional areas.

Continuing to realise safety plans and supporting dramatic changes, or step changes, to encourage walking and cycling in urban areas will help Manawatū-Whanganui.

Inclusive access

Challenges and opportunities

The transport system in Manawatū-Whanganui struggles to provide people of all ages, abilities, and income levels with safe, sustainable, and reliable access to a variety of social and economic opportunities.

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.

Population growth in Te Papa-i-Oea Palmerston North, Aorangi Feilding, and Taitoko Levin will:

- increase travel demand on the region's networks
- provide opportunities to support increased use of public transport, walking, and cycling.

As the population of the region ages, travel needs will change. There will be a greater reliance on accessing health services, with a smaller proportion of the population needing to access education and employment.

Emerging technologies, such as on-demand shuttles, could provide a shared-transport option. This can help people get around within smaller towns and rural communities, while also improving access to services in Te Papa-i-Oea and Whanganui.

Improved access to high-quality data and information will allow better management of the transport system to get the most out of existing infrastructure.

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 households aren't unfairly impacted.

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

- shaping planning rules and urban development decision making to encourage more people to live in areas with better existing access to social and economic opportunities
- improving public transport services, including the Capital Connection rail upgrades and on-demand services where appropriate
- exploring improvements to 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
- ensuring transport infrastructure and services are designed and provided to meet the needs of people of all ages and abilities, particularly in the districts of Horowhenua and Ruapehu
- improving access to opportunities for iwi Māori, including access to sites of cultural significance
- exploring opportunities to support the mobile or digital delivery of essential services.

Improving inclusive access will often align with making progress on other outcomes, especially where travel choice is improved and car dependency reduced.

Economic prosperity

Challenges and opportunities

Manawatū-Whanganui has received substantial government investment to support regional development. These projects include:

- a cycle-walkway strategy
- a regional rail freight hub
- a farmer-driven programme to improve the cultural, environmental, social, and economic wellbeing of the Rangitikei district.

The revitalisation of the Whanganui Port area will contribute to the social, environmental, and economic wellbeing of the area. There is a need to secure existing uses for the port area and identify future ones; this includes upgrading Wharf One.

The region provides nationally significant freight and tourism connections. It will continue to support interregional connectivity, especially road and rail freight connections to key ports and hubs.

While international visitor numbers have dropped, most tourism revenue in Manawatū-Whanganui comes from domestic visitors.²⁴

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 Manawatū-Whanganui. 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.

KiwiRail has started design and land purchase for the Te Papa-i-Oea Palmerston North freight hub. This facility will support better integration of road and rail freight movements.

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 Te Papa-i-Oea, Whanganui, Aorangi Feilding and Taitoko Levin
- supporting resilient, reliable, and efficient freight and business travel around key parts of the network, especially around interregional connections and key freight and industrial hubs
- managing increased transport costs in a way that doesn't negatively impact economic activity
- supporting the continued development of key economic centres by improving their access and amenity (attractiveness) for local residents
- supporting improved accessibility in local and town centres to allow these areas to flourish and better provide for the needs of residents
- delivering safety upgrades on SH1 from Ōtaki to Taitoko, and along the southern portion of SH57
- exploring opportunities to move to a more multimodal freight system with greater use of rail and coastal shipping
- supporting freight improvements like interregional connectivity that is multimodal, efficient, and safe – this includes the Whanganui Port revitalisation, the KiwiRail freight hub in Te Papa-i-Oea, and the *Palmerston North Integrated Transport Improvements Business Case*
- supporting Te Ahu a Turanga: Manawatū-Tararua highway project
- completing and promoting walking and cycling trail plans, such as the *Tararua Tourism and Trails Strategy*, and a connected network of cycle and walking trails.

Resilience and security

Challenges and opportunities

The next 30 years will see a growing risk of damage to already vulnerable road and rail networks. This is because of increased rain and storm intensity, coastal and soil erosion, sea level rise, flooding, slips, and storm surges.²⁵

For example, the Desert Road is vulnerable to snowfall and volcanic activity, as well as SH4 north of Whanganui. Flooding on SH2 at Mangatainoka and SH3 at Whangaehu is considered a significant risk and is expected to worsen with climate change.

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.

To be resilient, the region's transport system must be able to adapt to uncertainty and rapid change. For example, in recent years the popularity of e-scooters and then the need for social distancing during the COVID-19 pandemic highlighted:

- a need for more adaptable approaches to road space management
- unexpected benefits from past improvements to walking and cycling facilities.

Rapidly fluctuating fuel prices throughout 2022, caused by international events, also emphasised the need to reduce dependency on fossil fuel.

Making progress

Te Ahu a Turanga - Manawatū Tararua Highway project is well underway, following a major slip in 2017 that left SH3 through the Manawatū Gorge impassable. This project will provide a safe and reliable connection to Te Matau a Māui Hawke's Bay. It will also reinstate SH4 north, between Whanganui and Raethi.

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
- continuing work to better understand routes that provide critical connections, the condition of these, the pressures, and the level of investment needed to address impacts – this includes assessments to identify priorities for network resilience
- 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.



Manawatū- Whanganui: Focusing our efforts

For efficient and effective progress, transport challenges in Manawatū-Whanganui 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.

- Reduce vehicle kilometres travelled, focusing on Te Papa-i-Oea Palmerston North, in a way that's equitable and improves quality of life.
- Enable and support the region's transition to a low-carbon economy.
- Maintain and improve the resilience and efficiency of interregional connections to the north and south.
- Improve access to social and economic opportunities, especially by public transport, walking, and cycling.
- Significantly reduce the harm caused by the region's transport system, especially through improved road safety and reduced pollutants dangerous to health.
- Actively support, enable, and encourage growth and development in areas that already have good travel choices and shorter trip lengths.
- Rapidly accelerate the delivery of walking and cycling networks predominantly through reshaping existing streets, to make these options safe and attractive.
- Explore new and emerging technologies, such as on-demand services, to improve access to social and economic opportunities.
- Better understand the impact of future economic transformation on travel patterns and freight volumes.
- Explore opportunities to move to a multimodal freight system with greater use of rail and coastal shipping.
- Confirm how resilience risks will be addressed over time, and work with communities to plan when to defend, accommodate, or retreat.
- Continue to implement road safety plans and programmes including those focused for iwi Māori.
- 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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