



National cycling programme investment priorities and approach summary



PURPOSE

This document provides a summary of the NZ Transport Agency’s approach to investing in cycling and its priorities for the development of the national cycling network from now to 2028.

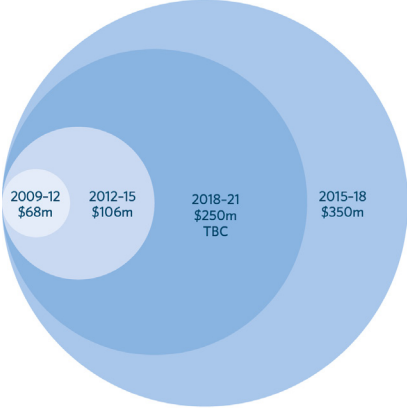
This document is for the Transport Agency’s local government partners involved in planning and delivering cycling facilities, Trail Trusts, other government departments, stakeholders and members of the public who have an interest in cycling.

INTRODUCTION

Seventy five percent of urban New Zealanders say they would cycle more if there were better networks. The key barrier is that people feel unsafe riding on our roads. Improving the level of service for people cycling on our network is critical to enable change. This is one of the biggest customer gaps in our transport system, and the most underdeveloped part of our network.

Since 2014, investment to make cycling safer and more attractive has substantially increased. New cycling infrastructure is being delivered through the government’s Urban Cycleways Programme (UCP) and other cycling activities delivered under a national cycling programme.

Cycling investment since 2009



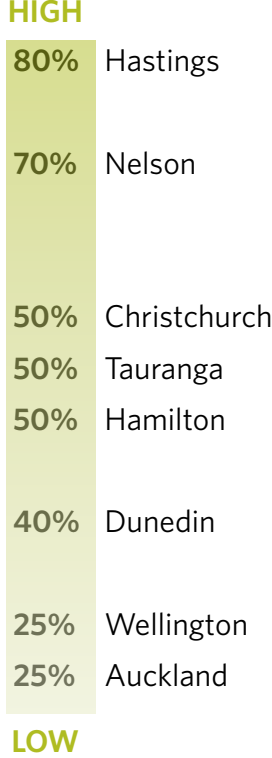
The national cycling programme reinforces the need for an ‘integrated approach’ with central and local government working together on the four elements:

- › Building the network
 - › Engaging with communities
 - › Promoting cycling
 - › Encouraging people to share the road and pathways
- Capability in the sector to plan, design, construct infrastructure and encourage people to use it has

also increased. Part of the lift in sector capability has been increased awareness of the need to take an integrated approach to cycling combining investment in infrastructure with complementary engagement, education and promotional activities.

Despite this increase in investment and capability, by the end of the UCP in June 2018, cycling networks in most of our main urban areas will be between 25-50% complete, often with key gaps in the primary networks and with inconsistent levels of service within urban areas .

ESTIMATED DEGREE OF FIT FOR PURPOSE NETWORK (BY END OF 2018)



Transport Agency investment to date has largely been focused on cycling delivery for ‘transport purposes’ and the contribution cycling can make to improve safety or the efficiency of the transport system. However, cycling supports a range of government outcomes including regional economic development, tourism, safety, health, social wellbeing and environment.

Taking a wider view is reflective of the shift the Transport Agency is making through its ‘Transformation’ (strategy refresh and structural reorganisation) to extend beyond purely transport and commuting outcomes to be explicit about how



transport can support improved social, economic, and environmental outcomes for communities.

The Transport Agency's new direction sees a much greater emphasis on providing 'one connected transport system; 'people-centred services' and supporting 'partnerships for prosperity'. This emphasises the importance of giving people safe and easy transport choices, regardless of the reason for their journey. Taking a wider view is also reflective of the deeper collaboration across government to look for opportunities to combine investment to achieve shared outcomes and objectives.

This includes work led by the Ministry of Business, Innovation and Employment (MBIE) on Nga Haerenga, the New Zealand Cycle Trail (NZCT) to improve the recreational cycling tourism offering, which will see many more people visiting different parts of New Zealand, as well as increased demand for travelling by bike inter-regionally on popular rural cycling routes.

It also includes work with the Ministry of Health to understand the significant health benefits that result from active mobility and how the transport system can be designed to better support positive health outcomes instead of compounding health problems through road trauma, air and noise pollution and physical inactivity.

PROCESS

The Transport Agency has applied the business case approach to the development of a national cycling programme and identification of investment priorities, covering four main areas:

URBAN NETWORKS providing safer transport choices for people on bikes in urban areas.

POPULAR RURAL CYCLING ROUTES safer cycling routes on state highways, local roads and off-roads, including Heartland Rides connecting to the Great Rides, urban networks and tourism attractions.

GREAT RIDES world class recreational cycle trails that are part of Nga Haerenga, the New Zealand Cycle Trail, which are mainly off-road.

BEHAVIOUR CHANGE ACTIVITIES that maximise investment in cycling infrastructure including public engagement, education and promotion.

The Transport Agency has considered and refreshed information in earlier Transport Agency cycling business cases, including undertaking a review of relevant problems, benefits and investment objectives, and progress towards addressing these.

However, a programme can only be an indicative view given the dependency on activities and the future plans of local government and other organisations for the development of cycling activities in each region or local area.

The indicative programme of activity has been built from the 'bottom-up', drawing on the information from Councils and the Transport Agency's own future plans for cycling facilities on the state highway network. In some cases, network and business cases for investment are well defined and have been formally supported by the Transport Agency (eg, Christchurch City Major Cycle Routes). In other areas, information is either currently being updated or further network planning and business case development is needed.

Information about the future opportunities associated with the Nga Haerenga, the New Zealand Cycle Trail Great Rides, and Heartland Rides has also been gathered, working with MBIE.



CHALLENGES

The key challenges associated with cycling are:

1 **Cycling has a greater safety risk leading to a higher rate of deaths and serious injuries compared to other modes.**

- › The level of risk faced by cyclists is disproportionate to their total time travelled (3% of all on-road deaths, 8% of serious injuries for 1.6% of total time travelled).
- › Data from [2008-2012 – being updated] tells us that approximately nine in ten reported cyclist casualties occurred on urban roads with a speed limit of 70km/h or less with most occurring on major arterials.
- › However over half of cyclists deaths occur on rural roads, meaning this is still an area of significant concern (as identified by the Cycle Safety Panel in 2014).
- › In 2015, active cycling claims were at a cost of \$47.8 million.

2 **The cycling network is incomplete with significant customer level of service gaps, which emphasises the perception it is unsafe, limits participation, and reduces the potential benefits of cycling.**

- › Primary cycling networks within main urban centres range from approximately 30-75% complete, however data on secondary networks is less clear, and may only be about 15% complete.
- › New Zealand has comparatively low rates of cycling participation – it makes up just 1.6% of total time travelled and 1.2% of the number of trip legs.
- › Cycling to school has reduced significantly over the last 15 years. In 1989/90 19% of secondary school students biked to school but in 2010-2014 this had reduced to 3%.
- › People want to cycle more. 75% of people in urban areas want to do so.
- › There is evidence that perceptions of cycling as unsafe and unattractive are significant barriers to cycling for transport.¹
- › A 2014 study found that Generation Y New Zealanders (aged 15 to 35) wanted to increase their travel by bike more than by any other mode.²

- › Safety concerns are one of the key drivers of non-cycle use and initiatives aimed at improving the safety of cyclists would be most influential in encouraging cycle use in urban settings (compared to if people had access to bikes on-demand or lived closer to work/study).³
- › Limited participation means that health, environmental, congestion, tourism, economic development and other benefits are not fully realised.

3 **The needs of people who cycle and people who might cycle are not well understood, increasing the potential for investments not being optimised.**

- › Cyclists' needs are not always well understood by other road users, or by those designing the roads.
- › The Cycling Safety Panel identified a relatively untrained (with regard to cycling) engineering workforce across the country for implementing best practice facilities as well as amongst other factors, inconsistent adherence to standards existed.⁴
- › This can result in provision of cycling facilities that are not connected or that have very inconsistent and/or key gaps in levels of service. This is particularly true for many urban networks, but the variation across levels of service is also applicable to the Great Rides.
- › Poorly designed facilities results in poor user experience, and is likely to discourage the user (and others by word of mouth) particularly if they feel unsafe.

REFERENCES

1. Macmillan et al. 2014. The societal costs and benefits of commuter bicycling: simulating the effects of specific policies using system dynamics modeling. *Environmental Health Perspectives*, 122(4), 335-344.
2. Rive et al. 2014. *Public transport and the next generation*. NZ Transport Agency: Wellington.
3. Research New Zealand. 2016. *Baseline Survey of New Zealanders' Attitudes and Behaviours towards Cycling in Urban Settings*.
4. Mackie et al. 2017. *Development of a Safe System for Cyclists and NZ Preparing New Zealanders for Transport Cycling*. NZ Transport Agency Research Report 606.



BENEFITS

Addressing the key challenges for cycling in New Zealand will deliver the following benefits:

- › **Improved safety for those cycling.**
- › **A more efficient transport network.**
- › **More effective delivery of cycling investment.**



An overview of the full range of benefits that can result from investment in cycling is outlined in the Transport Agency document 'Benefits of investing in cycling in New Zealand communities'. Benefits include:

- › More liveable towns and cities.
- › Improved conditions for travelling within towns and cities.
- › Stronger local economies.
- › Reduced costs for councils.
- › Less impact on the environment.
- › Healthier and more productive people.
- › Increased accessibility

INVESTMENT OBJECTIVES

The national cycling programme investment objectives are:

1. To improve safety for people on bikes represented by a downward trend in the rate of deaths or serious injuries involving people on bikes over the period from June 2017 to June 2028.⁵
2. To improve availability and access to cycling facilities by increasing development of the primary network in main urban centres by 50% by 2028.
3. To improve the efficiency of the transport system by increasing the number of trips made. [confirming target]
4. Increase the benefits across transport, economic development, tourism, environment, health, social wellbeing.
5. To improve customers' perceptions of the safety of cycling by 60% by 2028.

5. Note, AT's safety investment objective is 'reduce deaths or serious injuries involving people using bikes by 10-20% by 2028'.





INVESTMENT PRIORITIES

These priorities have been reflected in the recently released Investment Assessment Framework criteria for walking and cycling.

To deliver the integrated approach, the investment priorities for the 10-year national cycling programme that have been endorsed by the Transport Agency Board are:

Targeting the completion and promotion of strategic urban networks in our rapidly growing urban centres.



Continuing to grow and connect safe urban cycling networks in our regional centres.



Promoting economic development through the provision of safe on-road links between the New Zealand Cycle Trail Great Rides and other cycle trails.



Encouraging increased cycling, including through Bikeshare schemes that are integrated with public transport networks and emerging Mobility as a Service platforms; and other supporting activities that maximise investment in cycling infrastructure, including engagement, education and promotional activities.



Lifting the confidence and capability of cyclists, especially young cyclists entering the transport system for the first time.





ALIGNMENT TO EXISTING STRATEGIES AND ORGANISATIONAL GOALS

The Transport Agency's *Statement of intent 2017-21* presents a new direction for the Transport Agency, supported by a new operating model and organisational structure.

The Transport Agency's new operating statement is 'great journeys to keep New Zealand moving' that are 'easy, safe and connected; focused on opportunities, efficiency, sustainability, future thinking, and part of creating a better New Zealand'.

The Transport Agency's three strategic responses describe the new direction it will take to deliver value to New Zealand and enable 'great journeys to keep New Zealand moving'. These are:

ONE CONNECTED TRANSPORT SYSTEM

Create connected cycling networks that form an integrated part of our transport system and provide convenience for our customers, leveraging technology like e-bikes and bike share schemes.

PEOPLE-CENTRED SERVICES

Give our customers what they want: choices for getting around their towns and cities that contribute to their quality of life.

PARTNERSHIPS FOR PROSPERITY

Continue to deliver our cycling programme in partnership with government and non-government partners to unlock economic, social and health benefits for our customers and our country as a whole.

Eight focus areas sit under these three strategic responses reflecting areas where extra effort is required to realise the strategic responses. These describe what the Transport Agency will do over the next three to five years to make changes.

Cycling makes a key contribution to three of these focus areas:

TARGET RAPID GROWTH

By providing a high level of service for cycling on high demand, priority corridors in our busy urban areas we can optimise our transport system and manage demand by giving our customers safe and attractive cycling choices.

CONNECT AND DEVELOP REGIONS

Connected networks that offer our customers transport choices that contribute to their quality of life and help improve social and health outcomes. A national cycling network that helps grow our regional economies and provides a world-class experience for our customers, including our overseas visitors.

KEEP PEOPLE SAFE

Using a Safe System approach to improve safety outcomes for our customers on bikes. Making space and using speed management on our networks. Helping our customers use our transport system safely and in a way that contributes to healthy lifestyles.

GOVERNMENT POLICY STATEMENT ON LAND TRANSPORT

The Transport Agency is required to give effect to the Government Policy Statement of Land Transport (GPS). The current 2015 GPS includes the result area of 'increased safe cycling through improvement of cycle networks'.

The draft GPS 2018 includes the objective of 'a land transport system that provides appropriate transport choices' and the result of 'increased safe cycling through improvement of cycling networks'.

It also includes the short to medium term results/investment priorities:

- › Dedicated cycle networks in main urban areas are expanded and completed.
- › Suburban routes for cyclists are improved.
- › Cycleway network connections including New Zealand Cycle Trails are improved.

The draft GPS sees an increased upper range for the walking and cycling activity class, as well as recognition of the tourism and health benefits of cycling.

The National Cycling Programme is well-aligned with the draft GPS with a continued focus on completing urban networks and developing connections to the NZCT.



NEW ZEALAND CYCLING NETWORK

- High growth urban areas
- Urban areas
- Great Rides (existing)
- Heartland Rides (existing)
- Other cycling routes (existing)
- Other cycling routes (potential to 2022)





CONCLUSION

To meet customer demand and improve the level of service for people on bikes, a 10-year programme of investment could see a substantial increase in cycling and in customer satisfaction in main urban areas.

In urban networks, it is recommended, at least initially, that a substantial proportion of investment focuses on the high growth and medium growth urban areas and in other areas, investment is directed to connections to the Great Rides (for tourism) or schools, employment, or recreational facilities such as pump tracks, sports grounds and other facilities (for health, social well-being and economic development).

Reducing risk on popular rural cycling routes including Heartland Rides is a necessary objective to improve safety for those who cycle on these routes for commuting or recreational purposes and it is important that work to identify and prioritise these popular cycling routes continues as a high priority (as recommended by the Cycling Safety Panel).

Based on the information gathered to date, the estimated total investment required over 10 years to significantly improve the level of service for customers wanting to cycle is estimated to be in the range of \$1.3bn.

Investment over the next three years will range between \$230m to \$370m depending on available investment under the GPS and any potential future provision (and the level) of Crown investment.

For NZCT Great Rides, the estimated potential investment (including local, DOC, MBIE and NZTA funding) over the next 10 years is \$130m. In 2015, an evaluation of the overall benefits of the Great Rides showed a \$3.55 return for every dollar invested and expectations are trail usage will continue to increase in both the domestic and international visitor markets.

For the complementary activities that are a necessary part of an integrated approach to investing in cycling, councils have expressed the need for continuity of investment in education, encouragement and promotion. To support this, continued national coordination is required, exploring opportunities for collaboration across government and with key stakeholders. This and other nationally coordinated activities will require investment of approximately \$30m over the next ten years. This includes taking a Safe System approach through investment in a high-quality national cycling education system that will provide multiple opportunities for New Zealanders to experience cycling, and obtain the competencies to be a safe road user on a bike.

Cycling facilities may also be provided as part of other transport projects and continued effort should be put into working alongside others to improve understanding of the requirements of cyclists. The Transport Agency will continue to provide leadership in this space, including through implementing its cycling provision policy for state highways and delivering cycleways as part of major projects.

Councils should also continue to take a leadership role and consider the role of cycling as part of a connected transport system.



MORE INFORMATION

Available at www.nzta.govt.nz