

LAND TRANSPORT

Introduction

The following is a position statement on land transport prepared by the Public Health Unit for the Waikato District Health Board (Waikato DHB).

This position statement is intended to provide a high-level policy position for our organisation and guide local response across our DHB catchment and broader as required.

The Waikato District Health Board's Position

The Waikato DHB will:

1. Support the Government Policy Statement on Land Transport through its four key priorities; a safer transport network free of death and injury, accessible and affordable transport, reduced emissions, and value for money.[1]
2. Advocate for post-crash care to be embedded into road safety policy at all levels of government as a fifth pillar of the Safe System approach to road safety.
3. Recognise that land transport policy ensures all people have equal opportunity to fully participate in life through access to the goods, services and social services they need through transport, can create positive health and wellbeing outcomes and reduce inequalities via access to the determinants of health.
4. Support a broad range of initiatives through continuous effective collaboration, strong governance, and collective advocacy to create a transport system that better promotes and protects all of the people of its region.
5. Advocate for and support equity in transport planning to ensure people living in rural communities have a range of travel options available to them so they can access a full range of health services and attend appointments including specialist appointments.
6. Advocate for and support transport policy that reduces barriers for people experiencing disability.
7. Support transport policy that provides safe active transport options that increase opportunities for and levels of physical activity.
8. Mitigate indirect health hazards related to transport such as air and water quality pollution, emissions and noise.

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9. Provide for the safety of all staff and others specifically authorised to drive Waikato DHB provided vehicles through a comprehensive policy aimed at enhancing the reputation of the DHB, encouraging good driving such as prohibiting speeding, and complying with relevant legislation.
10. Reduce our transport-based carbon footprint where possible by promoting and resourcing active transport in the workplace, and exploring means of providing staff with public or group transport options to mitigate solo vehicle occupancy.
11. Support the continuation of the making of submissions to all levels of government and organisations as appropriate to ensure land transport investment is equitable and inclusive.

Health links and the wider environment

Wellbeing is a dynamic process across the life-course. This is reflected in the Ministry of Health’s (2016) representation of health in the wider context (figure 1) which illustrates the various factors that contribute to health and the way in which health influences people’s lives.[2]

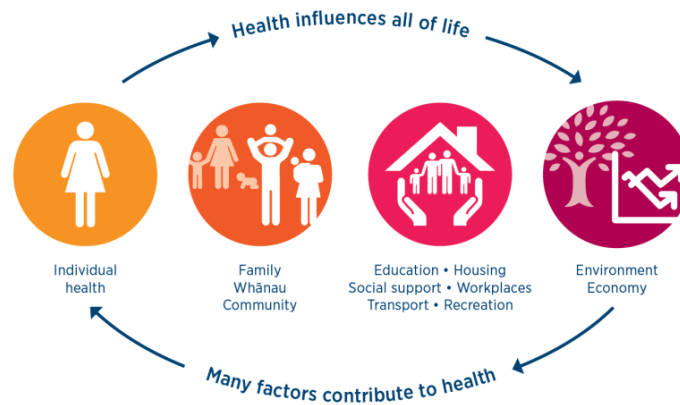


Figure 1: Health links with the wider environment

Radical improvement in Māori Health Outcomes by Eliminating Health Inequities for Māori

Health disparities are significant contributors to the burden of disease. A key strategic priority for the Waikato DHB is to achieve a radical improvement in Māori health outcomes by eliminating health inequities for Māori.[3] Waikato DHB position statements contribute to the DHB’s commitment to reducing health inequities to improve health and wellbeing for Māori.

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Key Information

Legislative overview

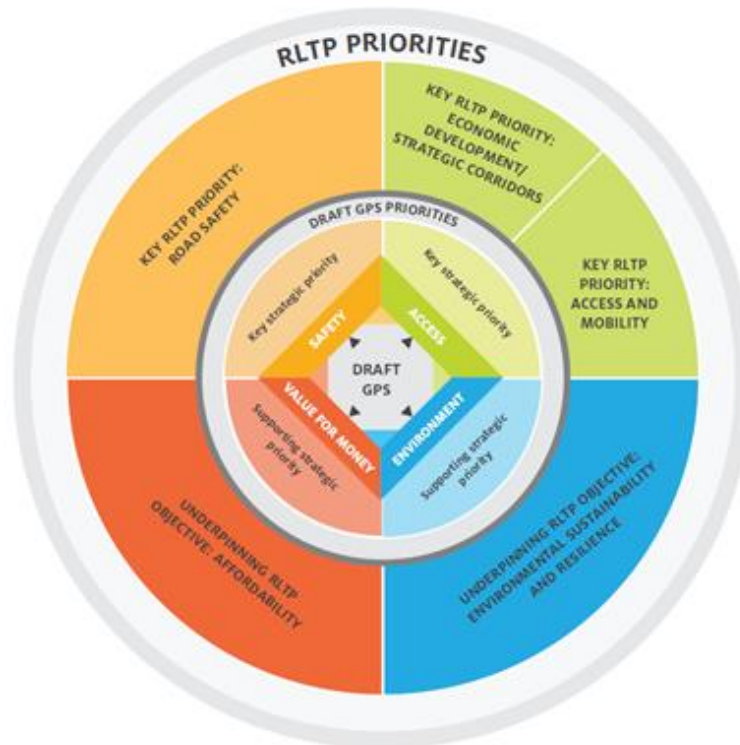


Figure 2: National and Waikato regional land transport priorities and objectives (2018)

The Land Transport Management Act 2003 (LTMA) provides the principle legal framework for managing and funding land transport activities. The purpose of the LTMA is to contribute to the aim of achieving an affordable, integrated, safe, responsive and sustainable transport system. [4]

Under the LTMA, the Government’s strategic transport priorities are set out in a number of documents including the Government Policy Statement on Land Transport (GPS) and Safer Journeys 2010-2020. The GPS on Land Transport guides land transport investment for a 10-year period.[1] National priorities help to guide the 2018-48 Waikato Regional Land Transport Plan (RLTP) priorities of economic development/strategic corridors; Road safety; and Access and mobility (see Figure 2).

The 2018 update to the 2015-2045 RLTP was a mid-term review and focused on the region’s key transport problems and priorities over the next three years leading up to a full review of the plan in 2021. The RLTP is the primary land transport plan for the Waikato region and guides all aspects of land transport planning and investment.

The Waikato Regional Road Safety Strategy 2017-2021 sets out a framework for the coordinated delivery of multiple agency interventions to reduce deaths and serious injuries on the Waikato region’s transport network.[5]

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Transport impacts on health

Access to goods and services

Transport is critical to participation in society. Transport policy and planning decisions impact every aspect of our lives. Transport enables people to be mobile and to access the goods and services they need for their day-to-day living. Goods and services include workplaces; shops and markets; educational and health facilities; leisure and sport facilities, and places of worship. Those with limited access to transport are likely to experience multi-dimensional disadvantage including poor health outcomes, social exclusion, isolation and reduced wellbeing.[6]

Land transport policy that targets communities with limited access can create positive health and wellbeing outcomes and promote a reduction in inequalities. Key strategies that can improve equity in transport planning include providing more system diversity to increase travel options for those disadvantaged through age, impairment and/or location, and giving a broader range of community stakeholders more influence and say in transport planning opportunities.[7] More than 925,000 working age New Zealanders have a disability/disabilities.[8]

Safety

Road safety has become one of the government's top transport priorities articulated through the Government Policy Statement 2018/19-2027/28; the Safer Journeys Strategy 2010 - 2020¹, and the operative Waikato Regional Land Transport Plan 2011-2041.

Road traffic injury is one of the leading causes of premature death and disability in New Zealand. [9] Provisional figures from the Ministry of Transport show that as at 9 January 2019, there were 379 road deaths from 333 fatal crashes in 2018. This is the worst annual figure since 2009 when 384 people died on our roads.[10]

Road safety in the Waikato region is a nationally significant issue with road deaths and serious injuries accounting for nearly 20% of the national toll each year at a social cost well in excess of \$500m per year. [5]

The Waikato region is among the worst for all regions in terms of the average total number of all and fatal and serious crashes by year.[11] In the five-year period between 2011 and 2015, more people died on Waikato roads than in any other region; 280 fatalities compared with 228 in Auckland, 202 in Canterbury, and 134 in Manawatu/Whanganui.[11] In 2018, 67 people died on Waikato roads.

The direct cost of road crash trauma to Waikato DHB in 2017 was \$4.96 million.[12]

¹ The Ministry of Transport is currently leading the development of a new 10-year road safety strategy with a focus on measurable targets, outcomes and performance measure and be developed alongside an action plan that considers interventions from across the road safety system. The government is investigating setting a target of 'zero road deaths'.

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The five-pillar approach to improving road safety

Improving the outcome of crash victims by facilitating their journey from the crash site to the hospital door has become a global topic of road safety discussion for the past decade.

The World Health Organisation and United Nations promote post-crash response as one of the five pillars of the Global Plan for the decade of action for road safety 2011-2020. In New Zealand, post-crash response is being discussed in road safety circles as the proposed fifth pillar of the Safe System approach to road safety.[13]

New Zealand's Safe System approach delivers road safety in four quadrants; safe roads, safe speeds, safe vehicles, safe road users.[14]. The Safe System approach does not include the 5th pillar of road safety; post-crash care.

There is a significant population burden from death and injury due to road traffic crashes. Nationally, 52% of injury between 2016 and 2017 resulted from road traffic crashes. Midland region has the highest rates of road traffic related injuries; 62% compared with 51% in the northern region; 48% in the central region and 50% in the southern region.[15]

Time is recognised as an important variable in patient survival. Nationally, 65% of patients were transported from the scene to the first hospital within two hours. Thirty-five percent of patients within the Midland region were transported from the scene to a hospital between 1 and 2 hours.[15]

The National Road Safety Strategy 2020-2030 is currently under development and affords an opportunity for the fifth pillar of road safety (post-crash care) to be embedded into the Safe System approach.

Waikato regional transport stakeholders have developed an agreed advocacy position and recommend post-crash care be embedded into the National Road Safety Strategy 2020-2030.[16]

Physical activity

One of the major health impacts of transport policy is its relationship with physical activity. The public health gain is likely to be substantial if people are encouraged to participate in 30 minutes per day of moderate physical activity such as walking and cycling as their daily means of transport.

Frank et al (2004) reports that each additional hour spent in a car is associated with a 6% increase in the likelihood of obesity. Conversely, each additional kilometre walked per day is associated with a 4.8% reduction in the likelihood of obesity.[17] Physical inactivity, after smoking, is the second most important risk factor for ill health in industrialised countries and is related to around two million deaths per year worldwide.[18]

The cost of physical activity in the Waikato region was around \$106 million. The cost for New Zealand as a whole was estimated at \$1.3 billion or 0.7% of total GDP in 2010.[19]

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Policies that encourage increased safe use of active transport have the greatest impact of all transport related strategies on the health of the population.[20]

Public Transport

Public transport plays an important role in developing environmentally and socially sustainable means of travel. Good access to public transport can also influence an increase in active transport as most trips on public transport begin and end with a period of walking. A US study found that 29% of those using public transport achieved the recommended 30 minutes of physical activity daily as a result of walking to and from public transport.[21]

Emissions

Degraded air quality has a negative impact on public health. The primary air contaminant of concern nationally, and within the Waikato region, is small airborne particles known as PM₁₀. PM₁₀ signifies particles less than 10 microns in size, which are easily inhaled into the lungs resulting in adverse health effects such as restricted activity days and premature death. Those most at risk include the elderly, children, infants and those with pre-existing respiratory conditions and/or cardiovascular disease. [22]

Approximately 85% of the degraded air quality in the Waikato region is attributed to domestic home heating sources. Motor vehicle emissions, outdoor burning and industry contribute the rest. [23]

Motor vehicles produce carbon dioxide, a major greenhouse gas which contributes to global climate change. Agriculture was New Zealand's largest greenhouse gas emitting sector in 2016, contributing 49.2% of total emissions or 38.7 million tonnes of carbon dioxide equivalent (MtCO₂-e). Energy emissions (transport and electricity production) is the second largest contributor of New Zealand's gross emissions contributing 39.8% to total emissions or 31.3 million tonnes of carbon dioxide equivalent.[24] The potential health impacts of climate change in New Zealand include the effects of floods, storms and droughts, as well as an increased risk of gastrointestinal disease and vector borne disease. New Zealand's transport related greenhouse gas emissions are small in comparison to many other countries, however global cooperation of all countries is required to prevent climate change.

The government has progressively introduced measures to reduce the health and environmental impacts of vehicle emissions. Significant measures include amending the Vehicle Exhaust Emissions Rule in 2012 and investigating the impacts of vehicle age on safety and level of harmful emissions.[25]

Noise

Noise is known to have an adverse impact on health, particularly for communities close to major traffic routes, airports or noisy industries.[26] Health impacts can include impaired communication, disturbed sleep, impaired school and work performance, annoyance, aggression and depression.[27] To help ensure transport noise is managed in an effective and efficient manner Standards New Zealand developed a Road Traffic Noise Standard (*Acoustics-Road Traffic Noise-New and Altered Roads NZS 6806:2010*)

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with support from NZ Transport Agency and the Ministry of Transport. The Ministry of Health was part of a wider committee involved in drafting the standard.[25]

Summary

Transport is a key social determinant of health whose influence on public health is much broader than the traditional considerations of noise and air pollution. Transport policy can play a key role in combating sedentary lifestyles by reducing reliance on cars, increasing walking and cycling, expanding public transport options and improving post-crash care.

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