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30 October 2017

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Submission on Tauranga Cycle Plan

Introduction

Health begins where we live, learn, work and play. Many of the crucial underlying factors that affect the health of people and communities are directly influenced by the decisions and activities of councils. The Bay of Plenty District Health Board (BOPDHB) is required under legislation to improve, promote, and protect the health of people and communities; to promote the inclusion and participation in society and independence of people with disabilities; and to reduce health disparities by improving health outcomes for Maori and other population groups. For these reasons, the BOPDHB is committed to working collaboratively with councils and welcomes the opportunity to comment on the Tauranga Cycle Plan. This submission has been prepared by Toi Te Ora Public Health (Toi Te Ora) which is the public health unit of the BOPDHB.

Benefits of Cycling Investment

The New Zealand Transport Agency (2016) has identified the following benefits of investing in cycling:

- 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, and
- Healthier and more productive people.

With respect to healthier people, increasing physical activity levels is *one* of the major benefits of cycling investment. Being physically active substantially reduces the risk of a number of health conditions (Department of Health, Physical Activity, Health Improvement and Protection, 2011):

Health condition	Reduced risk from being physically active
Coronary heart disease and stroke	20–35%
Type 2 diabetes	35–50%
Colon cancer	30–50%
Breast cancer	20%
Hip fracture	36–68%
Depression	20–30%
Death	20–35%
Alzheimer's disease	40–45%



We note that the Cycle Plan has an (active) transport focus. The following links between transport and health are identified by Transport of London (2014):

Transport as a source of	Main health impacts that can be improved
Physical activity	<ul style="list-style-type: none"> • Obesity • Heart disease • Stroke • Depression • Type 2 diabetes
Air quality	<ul style="list-style-type: none"> • Cardiovascular disease • Respiratory diseases
Road traffic collisions	<ul style="list-style-type: none"> • Physical injuries • Psychological trauma
Noise	<ul style="list-style-type: none"> • Mental health • Blood pressure • Child development
Access and severance	<ul style="list-style-type: none"> • Mental wellbeing • Personal resilience • Stress • Social isolation

Additionally, cycling is a non-polluting transport mode that can help mitigate climate change. Climate change is a worldwide concern and poses an urgent and serious threat to health both locally and internationally. Effects include (World Health Organization, 2017):

- Temperature related illness and death
- Extreme weather related health effects
- Air-pollution related health effects
- Water and food borne diseases
- Vector-borne diseases (eg from mosquitos)
- Effects of food and water shortages
- Mental, nutritional, infectious and other health effects

Brief Health Profile

The following health profile identifies the status of many of the above health outcomes modifiable by active transport. Not all data is local (as shown in italics) though in general, health statistics in Tauranga will be similar to those regionally or nationally, give or take some variation resulting from differing population features, such as age structure for example.

Currently, 44 percent of adults in the *Bay of Plenty* are not sufficiently active to meet national physical activity guidelines. Additionally, 32 percent (57,000) of adults and nine percent (4000) of children are obese. Obesity is the leading cause of health loss (healthy life lost due to early death, illness or disability) after smoking (Bay of Plenty District Health Board, 2016).

Loneliness is an indicator of social isolation. Around five percent of people in *the Northland/Bay of Plenty /Gisborne* areas felt lonely most/all of the time, a further 10 percent felt lonely some of the time. These rates are similar to the rates for New Zealand (Statistics New Zealand, 2015). An indicator of mental health/illness, 18 percent (29,600) of *Bay of Plenty* adults have had mood or anxiety disorders diagnosed (Bay of Plenty District Health Board, 2016).

In the *Bay of Plenty*, long term conditions (diabetes, cardiovascular and cerebrovascular disease, cancer and respiratory disease) account for 80 percent of early deaths. In *Tauranga*, the leading



causes of avoidable death (in order) are ischemic heart disease, suicide, breast cancer and stroke (Bay of Plenty District Health Board, 2016).

Future trends that are expected to influence this health profile include population ageing, rising burden from long term conditions, persistent health inequalities and climate change. These trends, combined with the anticipated population growth in Tauranga, will deliver rising health costs in the future which are likely to be unsustainable.

Transport Access

The World Health Organization (2009) promotes that urban transport systems should provide high quality mobility to all urban residents who need access to jobs, schools and commercial districts, *regardless of whether they own a private vehicle*. Cycling is a low cost transport option which can assist a city to achieve this essential transport vision.

At the 2013 census nearly 6.4 percent of households in *Tauranga* did not have access to a motor vehicle and were reliant on other forms of transport to reach the places they need to go. This equates to 2700 households. A large proportion (40.9 percent) of *Tauranga* households have access to only one motor vehicle. These households are likely to be more socially excluded (ie with reduced opportunities to access important destinations like work, health and social care) in car dependent communities.

Forty nine percent of the *Tauranga* population live in the two most deprived quintiles (4-5) according to the NZDep2013, compared to 22% in the two least deprived quintiles (1-2). This increases to 50%, or 12,440 children (in quintile 4-5) when looking at the population sub-group of children aged 0-14 years (Bay of Plenty District Health Board, 2016). Transport costs place a significant financial burden on households, especially low income households, and whilst many low income households may own cars, the associated costs may limit the money that they have for other activities, contributing to health inequalities.

Nationally, general driving experience increases with age. In all age groups a portion of the population has never driven. People under 30 years are more likely to have never driven compared to people over 30 years. Over 50 percent of females aged 15-19 have never driven and over 20 percent of women over 80 years have never driven. A higher proportion of women at all age groups have never driven compared to men (New Zealand Transport Agency, 2015).

According to the Ministry of Transport (2015) cycling has seen a dramatic decline in rates for getting to school in *New Zealand*. In the late 1980s, 12 percent of primary school journeys and 19 percent of secondary school journeys were by bike, but by 2010–2014 this had fallen to 2 percent and 3 percent respectively.

Key Elements for Safe, Convenient and Practical Cycling

The following is a list of key elements for safe, convenient and practical cycling sourced from the Canterbury District Health Board (2016) report “Active and Public Health Infrastructure: A Public Health Perspective”.

- The provision of separate cycling facilities along heavily travelled roads, and at intersections
- Traffic calming of most residential neighbourhoods
- Extensive cycling rights of way including priority signals
- Ample bike parking
- Full integration with public transport
- Comprehensive traffic education and training of both cyclists and motorists
- Promotional events



- Taxes and restrictions on car ownership, use and parking
- Strict land-use policies that generate shorter/bike-able trips

Tauranga Cycle Plan Survey

Thank you for the opportunity to respond to the Cycle Plan Survey. As a stakeholder, rather than user or potential user, BOPDHB have chosen not to highlight and comment on specific cycle routes, but rather provide general comments and recommendations. This response to TCC's cycle survey (in the table following) is provided with consideration of the above information as well as further supporting data and research.

BOPDHB response to the Tauranga Cycle Plan Survey

Cycle Survey Questions	BOPDHB response
Are there any safer cycle routes that you think should be priorities	<p>We recommend the following prioritisation criteria:</p> <ul style="list-style-type: none"> • Routes to/from schools • High volume, high speed routes • Routes with heavy vehicles including buses and trucks • Routes connecting higher deprivation neighbourhoods to local education, employment and shops • Routes with high aesthetic/scenic appeal, such that they will significantly attract new cyclists and help to quickly grow a cycling movement in Tauranga.
What are your thoughts about the proposed memorial park to the Strand route (along the harbours edge) or the Ocean Beach Road route?	<p>It is difficult to provide a certain response to this question without knowing the full opportunity costs of building these routes. However, using the criteria above, Ocean Beach Road would seem a good option as it has a high volume of traffic, is a route to school and connects to a scenic route along Marine Parade, which is popular among recreational cyclists and possibly some commuters. Memorial Park to the strand would also have high aesthetic appeal and connects people from the avenues and beyond to the CBD, or from Matapihi to 11th Ave employment area and surrounds. This would replace the reasonably inconvenient and potentially unsafe challenge of cycling through the city centre on Devonport Road.</p>
Do we have any comments about the proposed safer cycle routes?	<p>Overall, the routes look to be comprehensive and it would be excellent for Tauranga to have a cycle network like this. It will be important that the network is of a high quality however, such that the network infrastructure is suited to the speed, volume and type of traffic, as well as the complexity of intersections, and the type of users.</p> <p>Canterbury District Health Board (2016) found in an active transport literature review that overall, <i>“Level of Service (LOS) is strongly related to the likelihood that a person will use a particular mode of commuting (higher mode-specific LOS value generally makes it more likely that people will use that particular transport mode). Active and public transport LOS is heavily influenced by the quality of infrastructure interventions. For example, fully separated cycle paths consistently provide higher LOS than painted cycle lanes, because (among other things) they are experienced as safe by cyclists (and cyclists or potential cyclists value safety greatly)”</i>.</p>
What do we think about our proposal to focus on	<p>We strongly agree with your focus on essentially school children, tertiary students and workers (who are also likely parents).</p>



getting more people to ride bikes to work, school and tertiary education?	Research suggests other groups most likely to be receptive to adopting active transport include recent movers (therefore include a focus on urban growth areas) and low income people (who are sensitive to pricing for modes, and have a lot to gain from active transport) (Krizek, Forsyth & Baum, 2009).
What do you like about riding a bike?	<p>Some key personal benefits of active transport contained in the literature include:</p> <ul style="list-style-type: none"> • Improved fitness levels • Improved health • Weight loss/management • Environmental benefits • Cheaper - no parking fees, no or lower petrol costs • Enjoyable/pleasant/reduces stress/provides relaxation time • Connection to nature - it gets people outdoors in the fresh air • Provides contrast to a sedentary job • Empowering • Can be more convenient and reliable than public transport • Increased sense of self-worth. <p>Cycling in particular:</p> <ul style="list-style-type: none"> • Can be faster and more reliable in congested peak traffic times and over short distances • Is the most energy efficient form of travel.
Tauranga is safe and easy for adults to ride bikes?	No, Tauranga is not safe and easy for adults or children to ride bikes. This is because Tauranga:
Tauranga is safe and easy for children to ride bikes?	<ul style="list-style-type: none"> • Doesn't have a high quality, safe and attractive cycle network • Has high volumes of traffic, including heavy trucks and buses • Has low density development with few destinations close to home. <p>Therefore, despite having an agreeable climate and reasonably gentle terrain, rates of cycling in Tauranga, among children and adults alike, are low.</p>
The council need to give more priority to improving Tauranga for people on bikes?	<p>Absolutely. Given the wide benefits identified above and the relatively low cost of building cycle infrastructure, there is a very strong case for investing much more in cycling, as soon as possible.</p> <p>Both national and international literature highlight positive cost benefits analysis statistics of investing in cycling.</p>
It is important that children have the opportunity to cycle to school safely?	<p>Absolutely – this is very important. Studies show that not only is child independent mobility (being about to walk, bike etc around a neighbourhood without adult accompaniment) important for healthy child development (Thomson, 2009), it also provides time-saving advantages to time-poor parents which can benefit the whole whanau (for example, allowing more time for the preparation of healthy food).</p> <p>Additionally, research suggests that children participating in active transport expend more energy than participating in sport and structured after school activities; that it can be more inclusive than sport; and that for many children, they prefer it over being driven to school and other destinations (Thomson, 2009).</p> <p>Lastly, childhood is a time when many habits are formed for a lifetime.</p>



	<p>By focusing on children, Tauranga can grow a generation of cycle commuters who are used to, and prefer using, a bike instead of a car. This cohort will in turn (given a supportive environment) impart these values to their future children so that the personal and societal benefits last for generations.</p>
<p>Tauranga needs more cycle paths that are physically separated from traffic (eg raised barrier island)</p>	<p>Definitely. Safety, whether actual or perceived, is widely accepted as one of the greatest barriers to cycling (Canterbury District Health Board, 2016). The NZTA Cycle Network and Route Planning Guide (2004) recommends different cycle route facilities based on different volumes and speeds of traffic (p35). There are many roads in Tauranga (eg Cameron Road) in which traffic volumes and/or speeds dictate a higher quality and safety of cycle lanes than are currently provided.</p> <p>That being said, there are other factors that need to be considered when creating separated cycle lanes to ensure optimal safety and use. Therefore the design needs to be considered on an individual basis. There are host of considerations outlined within the Canterbury District Health Board (2016) <i>Active and Public Transport Infrastructure: a public health perspective</i> document which we would be more than happy to work alongside Council on in ensuring the inclusion of these.</p>
<p>What puts you off riding to work?</p>	<p>Some of the main barriers in the literature to increasing cycling include:</p> <ul style="list-style-type: none"> • Fragmented cycling networks and a lack of connectivity • Poorly maintained networks • Lack of end of trip facilities • High speed and/or high volume traffic environments • Threatening behaviour of other road users • Destinations being too far or perceived to be too far to ride • Real or perceived lack of time • Lack of fitness, experience or confidence • Weather conditions and terrain • Actual and perceived safety • The perceived attractiveness of cars as primary transport • Ease of driving a car • Not owning a bike (or learning to ride a bike) <p>Safety (both real and perceived, from traffic and other people) is obviously a key barrier to children using active transport to get to/from school, as well as the benefits of 'trip chaining' (eg dropping the kids at school on the way to work). Thomson (2009) also provides some deeper values or awareness based barriers to children undertaking active transport:</p> <ul style="list-style-type: none"> • Parents not valuing physical activity and parents not doing active transport when they were young • Parenting social norms / peer pressure – parents may want to give their children freedom to travel independently, but this may be in contrast to societal expectations of being a good parent, eg parents perception that child transportation demonstrates good parenting • Parents lack of awareness of the benefit (to child development)
<p>What puts you off riding to school or tertiary education?</p>	
<p>What puts you off riding a bike to other destinations, or for exercise/fun?</p>	



	versus cost (time and safety) trade-offs
How do you think we could get more people riding their bikes?	<p>In addition to the recommendations highlighted through our survey question responses above, the following recommendations are provided to support more people riding their bikes:</p> <p>Prioritisation and planning</p> <ul style="list-style-type: none"> • Ensure active transport is prioritised when considering the wider transport network • Ensure cycle lanes are included, connected and clearly identifiable as part of a wider cycle network • Implement best practice cycle lane standards into City Plans and policies to ensure new growth areas have the best start for best practice cycle infrastructure and facilities • Where appropriate invest in separated cycle lanes (ensuring lanes are outside the 'door zone' of parked cars) • Remove minimum parking requirements <p>Collaboration</p> <ul style="list-style-type: none"> • Collaborate with other Council departments to ensure the Tauranga Cycle Plan principles are embedded throughout all Council plans, policies, and strategies • Link in with Western Bay of Plenty District Council for connected cycle ways that span council regions • Continue collaboration with Bay of Plenty Regional Council to ensure cycle and bus lanes complement each other • Continue with multi-sector collaboration for a sustainable, comprehensive cycle network <p>Infrastructure and Facilities</p> <ul style="list-style-type: none"> • Ensure provision of other supporting infrastructure and facilities to support and adapt to an increase in cyclists eg bike parks, racks at key locations and points of interest • Consider other strategies to encourage cycling such as; <u>Open Streets</u>, park and ride and bike hire facilities • Consider facilities to support the charging and storage of electric bikes <p>Education</p> <ul style="list-style-type: none"> • Develop comprehensive educational campaign to support the development and implementation of the Cycle Plan • Encourage a shift in mentality where greater ownership is placed on vehicle users in the event of cyclist/pedestrian vs car incidents and accidents • Support workplaces to develop travel plans to encourage active and public transport. Encourage workplaces to provide sufficient facilities to enable workers to cycle to work eg lockers, showers, bike racks or sheds <p>Maintenance</p> <ul style="list-style-type: none"> • Consider opportunities for improving cycle infrastructure when completing maintenance on roads



	<ul style="list-style-type: none"> • Ensure processes are in place for the ongoing day to day maintenance of cycle paths especially during adjacent road works.
Do we have any other comments?	<p>The NZTA Cycle Network and Route Planning Guide (2004) identify five different cyclist types (neighbourhood, commuting, sports, recreation and touring) and each has different requirements of the cycle network (see p23). It will be important to identify, for each route, the target audience(s) so that the appropriate infrastructure is built that will maximise uptake by users. This may mean providing more than one solution on certain routes, particularly at intersections. For example, commuters value directness/minimal delays, high-quality riding surface and continuity above achieving maximal safety (though safety is still important). Whereas for neighbourhood cyclists such as school children, safety and separation from busier/faster urban traffic are the most important features, even if this causes minimal delays.</p>

The BOPDHB would like to offer their continuing support in working with Tauranga City Council through the development and implementation of the Tauranga Cycle Plan.

The BOPDHB would like the opportunity to speak to its submission.

Yours sincerely,



SALLY WEBB
Board Chair



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