Doctors for Active, Safe Transport



Submission to the Greater Wellington Regional Council on

Regional Policy Statement

Dr David Tripp Doctors for Active, Safe Transport (DAST) October 2022

We would like to present orally on this submission.

Summary

There are substantial health benefits from active transport – in particular cycling. These include substantial reductions in heart disease, cancer, diabetes and death – illnesses currently pushing our health system beyond capacity.

The benefits are in addition to the substantial benefits to minimising climate change from transport.

We submitted and were involved in the Environment Court Hearing on Riverlink. We were saddened and angered that mode shift was given lip service, while relentless growth in motor vehicle transport remains at the heart of the transport components of Riverlink – a project strongly endorsed by GWRC.

We therefore **strongly support** the increased clarity of the *requirement* for mode shift in CC.1.

We make below suggestions below for refinements to this policy.

Suggestions for Further Amendment

Inclusion of Health in Assessment of Transport

The health of people should be explicitly stated as a rational for mode shift (in addition to climate change). This could be achieved as an amendment to policy CC.1 by addition as follows:

"District and regional plans shall include objectives, policies, rules and/or methods to require that all new and altered transport infrastructure is designed, constructed, and operated in a way that contribute to reducing greenhouse gas emissions and **improved health outcomes** by:"

However, this is then "tucked into" provisions very explicitly about climate change. We don't mind where you put it – but it needs to be there!

Again, this was informed by our experience of Riverlink, where GWRC (as one of three applicants) approved of the worsening health outcomes that health experts said would result from further increases in motorised traffic because they were "not worse the currently expected". This is appalling.

Protecting and improving the health of your people is central to your mandate. The link between transport and health should be explicit.

We note that imbedded in Fresh Water Management is "Te Hauora o te Tangata" (the health and mauri of the people, page 50). It is equally relevant to your transport planning framework.

Robust Assessment of Mode Shift Options

- Proposals for "maximising mode shift" should be required to **robustly assess options**. Our experience from Riverlink was that motorised transport was subject to detailed evaluation or impacts on flow and safety. Assessment of active modes was cursory and qualitative only.
- Proposals for "maximising mode shift" should also consider the impact on the wider network. In Riverlink, improvements for motorised transport claimed benefits from decreased congestion, but did not assess worsening congestion elsewhere on the road network. Likewise, active transport improvements were proposed independently of, and disconnected from, the cycle network outside of the project designation.

Who is DAST

We are a network of over 130 Wellington and Lower Hutt Hospital doctors advocating for the benefits of active transport.

In our roles as specialist doctors, we are often the ambulance at the bottom of the cliff. We daily see the debilitating and painful – often fatal - health consequences of a national that gets far too little exercise.

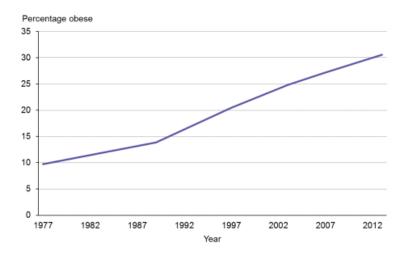
We aim to promote the health benefits of active transport for all the people of our region and want to help people make healthy choices.

As local political leaders, you can build a fence at the top of the cliff – by leading a paradigm shift from a transport infrastructure focused on private motor vehicles to one which facilitates and promotes active transport.

Despite good intentions, provision for active transport is glacial in terms of progress and consumes a tiny fraction of the budget.

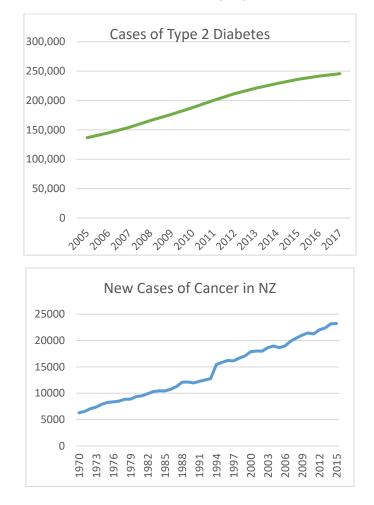
For the sake of the health of the people you lead, and that we care for, this must change.

A Snapshot of Health in NZ



New Zealand faces a dramatic increase in obesity, and the consequent health problems:

Similarly, NZ faces dramatic increases in the number of people with diabetes and cancer:



Health Benefits of Active Transport

In high- and middle-income countries physical inactivity has become the fourth leading risk factor for premature mortality.¹ Declining rates of functional active travel have contributed to this population-level decrease in physical activity, and evidence suggests that rising levels of obesity are more pronounced in settings with greater declines in active travel.^{2,3}

Evidence for the considerable health benefits of cycling continues to grow.

A recent 5-year prospective study of over 250,000 people (median age 52)⁴, published in the British Medical Journal, found cycling reduced:

- The risk of all-cause mortality by 41%
- The risk of any cancer by 45%
- The risk of cardiovascular disease by 46%

Commenting on this study, the Guardian said, "If a magic pill were invented that could generate all of these benefits, we would be falling over ourselves to buy it."⁵

A summary of 174 individual studies have given us insight into how the risk of cancer, diabetes, and ischaemic heart disease reduces with exercise. The message is clear: the more the better⁶:

¹ UK Department of Health. Start active, stay active: a report on physical activity from the four home countries' chief medical officers. DoH, 2011.

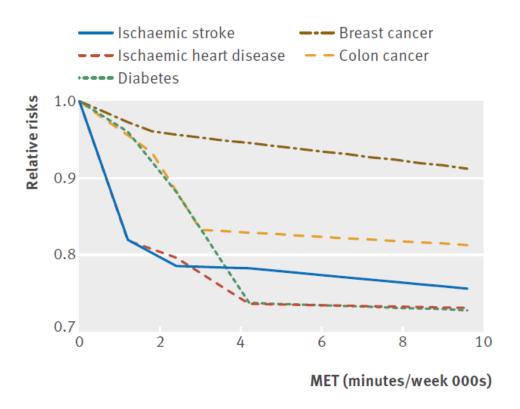
² Pucher J, Buehler R, Bassett D, Dannenberg A. Walking and cycling to health: a comparative analysis of city, state, and international data. *Am J Public Health* 2010;100:986-1992

³ Bassett D, Pucher J, Buehler R, Thompson D, Crouter S. Walking, cycling and obesity rates in Europe, North America, and Australia. *J Phys Act Health* 2008;5:795-814.

⁴ Celis-Morales CA, Lyall DM, Welsh P, et al. Association between active commuting and incident cardiovascular disease, cancer, and mortality: prospective cohort study. *BMJ* 2017;357:j1456. doi: 10.1136/bmj.j1456

⁵ https://www.theguardian.com/environment/bike-blog/2017/apr/20/its-good-to-hear-cycling-to-work-reduces-your-risk-of-dying-but-thats-not-why-i-do-it

⁶ Kyu HH, Bachman VF, Alexander LT, et al. Physical activity and risk of breast cancer, colon cancer, diabetes, ischemic heart disease, and ischemic stroke events: systematic review and dose-response meta-analysis for the Global Burden of Disease Study 2013. BMJ 2016;354:i3857. doi: 10.1136/bmj.i3857



Exercise in general has been shown to reduce the risk of stroke by 25%.⁷

Cycling has clear benefits to business. A 3-year study in Cambridge, UK, found a 54% in sickness absence from work each year⁸.

A recent, large study published in the British Medical Journal examined the effect of active transport (cycling and walking) on the obesity epidemic and compared this affect with sport involvement.⁹

	Reduction in BMI		Reduction in Percentage Body Fat	
	Men	Women	Men	Women
Attributable to active transport	-0.97	-0.87	-1.35	-1.37
Attributable to involvement in sport	-0.10	-0.26	-0.19	-0.34

These findings show a robust, independent association between active commuting and two objective markers of obesity, BMI and percentage body fat. Those who used active modes had a lower BMI and percentage body fat compared with those who used private transport.

⁷ Lee CD, Folsom AR, Blair SN, "Physical Activity and Stroke Risk", Stroke. 2003;34:2475-2482

⁸ Mytton OT, Panter J, Ogilvie D. Longitudinal associations of active commuting with wellbeing and sickness absence. Prev Med 2016;84:19-26. doi: 10.1016/j.ypmed.2015.12.010

⁹ Associations between active commuting, body fat, and body mass index: population based, cross sectional study in the United Kingdom, BMJ 2014;349:g4887 doi: 10.1136/bmj.g4887 (Published 19 August 2014)

These differences are larger than the effect sizes seen in most individually focused interventions based on diet and physical activity to prevent overweight and obesity.¹⁰ They are also approximately four times larger than the reductions in obesity due to involvement in sport.

Active commuting to work has been strongly recommended by the UK National Institute for Health and Care Excellence (NICE) as a feasible way of incorporating greater levels of physical activity into daily life.¹¹ Policies designed to effect a population-level modal shift to more active modes of work commuting therefore present major opportunities for public health improvement.

Studies consistently suggest that use of active commuting modes translates into higher levels of overall individual physical activity.^{12 13 14} A recent UK study provided 103 commuters with accelerometers for seven days and found that total weekday physical activity was 45% higher in participants who walked or cycled to work compared with those who commuted by car, while no differences in sedentary activity or weekend physical activity were observed between the two groups.⁹

Is Cycling Safe?

A New Zealand study of ACC injury risks of road cycling 3 times a week, compared to various other activities, found cycling had similar risks to DIY twice a month, 140-fold fewer injuries than skiing 4 – 5 times a year, and 530-fold fewer injuries than playing rugby every 3 weeks.

The study concludes that fear of cycling in car-dependent NZ arise from causes other than the actual risk of injury.¹⁵

Achieving Mode Shift

You have the vision – this has all been agreed in policy statements by councils for some years. It is a clear requirement of the Government Policy Statement.

However, it's still not happening. This is a complex process and a "new way of doing business" for council staff, engineering consultants and contractors, community consultation processes, and local businesses.

We are saddened – and your people's health has suffered as a result – that the development of cycling infrastructure remains subject to piecemeal planning and disconnected networks with variable levels of service.

¹⁰ Stephens K, Cobiac J, Veerman J. Improving diet and physical activity to reduce population prevalence of overweight and obesity: an overview of current evidence. *Prev Med* 2014;15:167-78.

¹¹ National Institute for Health and Care Excellence. Walking and cycling: local measures to promote walking and cycling as forms of travel or recreation (public health guidance 41). NICE, 2012. www.nice.org.uk/guidance/ph41.

¹² Faulkner GE, Buliung RN, Flora PK, Fusco C. Active school transport, physical activity levels and body weight of children and youth: a systematic review. *Prev Med* 2009:48:3-8.

¹³ Ogilvie D, Foster CE, Rothnie H, Cavill N, Hamilton V, Fitzsimons CF, et al. Interventions to promote walking: systematic review. *BMJ* 2007:334:1204.

¹⁴ Audrey S, Procter S, Cooper AR. The contribution of walking to work to adult physical activity levels: a cross sectional study. *Int J Behav Nutr Phys Act* 2014;11:37

¹⁵ Chieng M, Lai H, Woodward A. How dangerous is cycling in New Zealand? *Journal of Transport & Health* 2017 doi: 10.1016/j.jth.2017.02.008

This is also about much more than capital works projects. It is about changing culture and behaviours. It is about changing the choices each of us make each time we leave our homes to go anywhere.

This requires leadership – looking at this evidence and making our cities and roads the best they can be for everyone – not just motorists.

We need to – urgently – *reduce* our dependence on private motor vehicles – they are the key driver of congestion, they are bad for our fragile environment, and they are bad for our health. This plan does little more than advance the status quo.

Instead, the heart of our transport plan must be to facilitate and promote rapid modal shift.

Put simply, we must change. And quickly.