



Trevor Kempton and Eric Roy
Chairs of the combined Otago-Southland Regional Transport Committee

30 January 2018

Dear Chairs,

RE: Proposed variations to the Otago-Southland RLTP 2015-2021

Thank you for the opportunity to submit on these proposed RLTP variations. Please find below my submission. I would like to speak to this submission in person.

I have prepared this submission as an individual, wearing the following hats:

- As the senior lecturer in environmental health at the Department of Preventive and Social Medicine, University of Otago, where my areas of expertise are in the crucial links between human health and health equity, and transport policy, urban planning and climate change.
- As a member of the National Cycling Safety Panel
- As the mother of a school-aged child in St Leonards, situated on SH88 in Dunedin.
- As the co-convenor of OraTaiao: NZ Climate & Health Council, the country's largest health NGO

It's heartening to see the RTC updating both the strategic direction and the activities in the plan. Regional transport planning plays a fundamental role in population health, and in the fairness of health outcomes, as it is a major building block for health. Putting health and fairness at the centre of transport policy can therefore bring significant benefits for wellbeing across all domains: physical, social, mental, economic, environmental and cultural. Improving wellbeing is the fundamental business of government and therefore of central and local government's transport investment.

I therefore summarise my recommendations below and provide further evidence in the body of my submission. In completing this submission I have taken account of the letter from Phil Twyford signalling the re-prioritising of the transport investment and imminent revision of the GPS, tabled at the combined RTC meeting of 4 December 2017.

Kind regards

Dr Alexandra Macmillan

Senior Lecturer Environmental Health

Summary of Recommendations

- 1. Await the updated GPS before finalising this revision of the RLTP.** I do not consider that the current variations are adequately in keeping with the directions signalled by Phil Twyford's letter and there is a real risk of consultation fatigue with the need to do further revisions in such a short timeframe.
- 2. Use the signalled re-prioritisation to put population wellbeing and fairness at the heart of the RLTP.** Economic growth is but one part of this, and stems ultimately from a healthy and productive population; the rights of all sectors in the population to affordably access education, jobs and health services; and the Otago and Southland regions having opportunities for high quality of life to attract high value residents, tourists and businesses
- 3. Respond to the signals in Phil Twyford's letter by going further to re-balance the transport investment, spending a larger proportion (more than 50%) of the RLTP budget on public and active transport investments**
- 4. Take a more integrated, visioning and backcasting approach to land use and transport planning** that recognises the role transport investments play in shaping population growth, land use and where that happens, and the future value for money in transport investments
- 5. Work in close partnership with the Southern DHB and Otago University as major social leading regional employers and creators of transport demand,** especially around the DHB's aspirations for transport in the Dunedin hospital rebuild
- 6. Partner with central government and KiwiRail to ensure that there is a shift from road freight to an improved, electrified freight network,** especially to plan for and mitigate the negative health and wellbeing impacts of increasing forestry harvest freight.
- 7. In considering future plans for SH88, ensure that access to the walking and cycling shared path is improved and the Port's strategic plan to move all freight to rail is accounted for**
- 8. Include electric bicycle technology, and autonomous and electric public transport technologies in the consideration of future technologies** as these will have greater benefits for health and fairness, as well as creating greater transport efficiencies than electric private motor vehicles
- 9. Urgently address the absence of strategic planning required to meet our obligations under the Paris Agreement** by including healthy, equitable solutions to transport climate pollution, with the target of a zero carbon transport system by 2050 that is also resilient to climate impacts
- 10. Urgently address the chronic under investment in public transport, and fix Dunedin's school bus debacle caused by recent "public transport service improvements".**
- 11. Reconfigure the RLTP's articulation of the key problems to reflect the real issues of urgency, and the combined RTC to enable the representation needed to address them,** including representation of a range of important stakeholders in keeping with the Treaty of Waitangi, as well as having a mix of gender, age groups, ability/disability and income. Consider whether the ORC transport planning and implementation team needs additional expertise to address the issues
- 12. Acknowledge the role that mode share plays in road traffic injury, report injury rates rather than crude numbers and plan to reduce injuries through mode shift**

Introduction to transport and health

The transport system is a fundamental building block for the health and wellbeing of the Otago and Southland communities¹.

While economic growth and road safety are prominent part of thinking and planning for transport in the two regions, the RLTP currently misses almost all the other links between transport and health including:

- Opportunities for daily physical activity being built in or out of people's lives, contributing to our major killers (heart disease, obesity, diabetes, bowel cancer)
- Air pollution – Otago and Southland has some of the worst air quality in the country. While much of this can be attributed to household solid fuel burning, vehicle emissions contribute a significant and increasing proportion, particularly in areas with increasing freight movements and rapid population growth (e.g. Queenstown and Frankton)
- Climate change – arguably the greatest threat to public health facing us, and one where transport makes a major contribution (40% of New Zealand's carbon emissions and the fastest growing sector)
- Fair access by all income, ethnicity, gender, rurality and age groups to other vital building blocks for health, including education and employment, healthcare, family and friends, and other health-promoting goods and services
- Noise pollution – traffic noise contributes to psychiatric illness, sleep disturbance, diminished cognitive performance and stress-related illnesses such as heart disease. Areas of heavy traffic, particularly heavy freight traffic impacting on residents, schools, and hospitals are most affected
- Health outcome inequities – as well as built in access inequalities, there are built-in injustices in road traffic injury, public transport service provision, air quality and opportunities for active transport in New Zealand, including in Otago-Southland

Taking into account these multiple connections between transport and health, the World Health Organization recommends the following prioritisation of transport investments to address trips by individuals:

1. Cycling and walking
2. Trip avoidance through videoconference/telephone call or other virtual communication
3. Public transport
4. Park and ride
5. Car share
6. Private motor vehicle use

To improve and protect health and wellbeing through investment in the freight network, it is recommended that prioritising investment into expanding and electrifying the rail freight network, followed by enabling greater coastal shipping.

¹ See for example: Mindell, J., Rutter, H., & Watkins, S. (2011). Urban Transportation and Human Health. In J. O. Nriagu (Ed.), *Encyclopedia of Environmental Health* (pp. 578-589). Burlington: Elsevier.

Discussion about specific RLTP sections

2 The current situation

Currently this section recognises only the economic context. It urgently needs to be expanded to consider other major, relevant trends, including the social and environmental contexts.

2.2 Drivers of change

I support the acknowledgement of demographic and population change. However, there is limited acknowledgement in this section of how transport investments can shape this change. The section about “regional development in Southland” certainly acknowledges that transport “is one enabler of population growth” yet this is not recognised in the sections about Queenstown (or Dunedin), where a strategic and integrated approach to population, land use and transport planning could successfully enable a visioning of desired outcomes for population and land use, and how the transport investment can support that by either constraining growth or enabling it (depending on the desired outcome). There is a failure here to take leadership around how transport can **direct** where people live to maximise value for money and minimise environmental and health impacts of transport and land use infrastructure, as well as ensuring the viability of high quality public transport. Particular examples include the way the future growth and shape of growth in Queenstown, and the future growth in Dunedin, which is currently “forecast” for the areas west of the city (Mosgiel, Wingatui etc.). These patterns of growth are clearly able to be influenced by transport decision-making and investment, with significant implications for built-in car dependence (and therefore community resilience in the face of oil-price rises); value for money from transport investments; and the viability of public transport services. Rather than accepting forecasts, it is crucial that the RTC plays a part in shaping this future growth.

The same principles apply to backcountry access. DOC is currently reviewing its National Parks Strategy with a view to managing the massive increase in visitor numbers. One possibility is that transport access could positively constrain growth in potentially crowded wilderness areas, with environmental and wellbeing benefits.

It’s great that the strategy acknowledges the important role the DHB plays in the region, and the impact the hospital rebuild will have on transport infrastructure and service needs. Please see again the presentation tabled at the 4 December 2017 RTC relating to Dunedin Hospital outpatient travel, and its recommendations.

The projected harvesting of forestry and reliance on road freight for transporting logs, is set to also pose a threat to the health of the regions’ populations through increased road traffic injury, noise and air pollution. These risks need to be acknowledged and mitigated through an improved rail freight strategy partnership with central government and KiwiRail.

The increase in volumes of freight to Port Chalmers make SH88 one of the most dangerous lengths of state highway in the country, as is recognised by KiwiRAP. It not only poses a risk to all road users, but it acts as a major severance between the communities and the West Harbour shared walking and cycleway, an important commuter route. This significantly limits the use of that investment, particularly by school students, reducing the value for money from it. Any planning for SH88 needs to account for access to the shared path, as well as the strategic planning by the Port, who have signalled their vision is to move ALL freight by rail and none via the state highway.

Changing technologies are on the whole well-described. However, the considerations of electric vehicle technology is limited to electric private motor vehicles. Electric bicycles, and electric and autonomous public transport are both set to revolutionise active and public transport, with much greater benefits to health and fairness than electric cars. These need to be included in considerations of future technology.

While I support the acknowledgement of the need to ensure the transport system is resilient to the **impacts** of climate change, the RLTP is currently **negligent** in ignoring the existing and impending strategic and legislative imperatives to address climate pollution from the transport sector. New Zealand has ratified the Paris Agreement and the current government has signalled its commitment to a zero carbon target for 2050. It is therefore imperative that the RLTP includes its own zero carbon plan for transport emissions by 2050. This includes an urgent need to include solutions for:

- Urban areas
- Rural transport
- Freight

These solutions need to ensure they also grasp the opportunities across wellbeing domains that lie in well-designed actions, while avoiding harms to health and the potential to increase transport system mediated social injustices (as outlined in the transport and health introduction).

Solutions also need to consider climate change **adaptation** and **mitigation** together, to ensure the end result in 2050 is a zero-carbon system that is resilient to climate impacts.

2.3 The key problems facing the transport system today

Currently these key problems fail to recognise the fundamental role of the transport system in population wellbeing and fairness. As described earlier, this goes beyond economic growth and road safety. I would suggest that the key problems facing the region's transport system are:

1. The current orientation of the transport investment contributes to major threats to the region's health and wellbeing, including a resilient economy, obesity, heart disease, cancer, road traffic injury and climate change; as well as contributing to social and health inequities
2. The extremely limited representation of population groups on the RTC hampers its ability to provide a transport system that optimises wellbeing domains for the regions' population groups, its composition appears to be 100% Pākeha, male and within a rather limited age range.
3. There has been thus far no acknowledgement of the imperatives to move towards a zero carbon transport system for the region, and therefore no strategic thinking about how this could be achieved

In addition, the chronic multi-decadal divestment in public transport has had serious consequences for health and human rights. An excellent example of this is the current debacle being experienced by Dunedin school-children in accessing their local intermediate and high schools. All children have the right to access their local school in a healthy and affordable manner. The recent changes to public transport services have led to serious infringement of this right and increasing income inequalities. Appalling daily stories of repeated missed pick-ups and set downs at dedicated bus stops, unnecessarily long and complex journeys, physical and verbal abuse by bus drivers and unaffordable price hikes come from the families of Dunedin school

children, even the most dedicated public transport users of which are abandoning bus services in favour of driving their children to school. This requires immediate addressing.

In case the committee does not feel compelled to change the definition of key problems to the ones suggested above, I have also made the following comments on the existing ones and their explanations:

1. **Inability to assess, plan, fund and respond appropriately:** this governance failure extends to my suggested problems above, and reflects the lack of representation. A wider range of expertise will be needed to address the challenges facing us, requiring a reconfiguration of the RTC and the ORC's transport planning and implementation teams.
2. **Attitudes and behaviour.... Which are resulting in fatal and serious injury crashes:** the increasing rates of road traffic injury nationally are not just about behaviour, road and vehicle design. When, over decades, you build in motor vehicle dependence, you also build in road traffic injury. The countries of the world who are leading on reductions in road traffic injury are those who are investing in "sustainable safety" through a shift of as many motor vehicle trips as possible to safer modes – bus, rail, coastal shipping, walking and cycling. In your explanation you have only provided crude numbers of injuries, which makes it difficult to account for population growth or decline. Please can you remedy this by providing **road traffic injury rates by mode**.
3. **Parts of the network are vulnerable to closure...:** there is a risk of induced traffic when you address vulnerability through "built-in redundancy", further compounding issues of congestion and motor vehicle dependence. Further, there is a need to recognise here the resilience benefits of providing for a range of modes, especially active transport. Walking and cycling turned out to be the most resilient modes of transport in Christchurch after the earthquakes.

Currently the RLTP does not clearly report on the total expenditure by activity class to enable an assessment of the balance of the transport investment by activity class or mode. This would be helpful in future.

These detailed comments comprise the justification for the twelve recommendations outlined in the Summary of Recommendations Section. I'll look forward to discussing the submission further, answering questions and providing further sources of evidence in a hearing.