



NZ Climate & Health Council

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Greater Wellington Regional Council

By email to: info@gw.govt.nz

Submission to Greater Wellington Regional Council on its Draft Regional Land Transport Plan (RLT Plan) 2015

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This submission to the Greater Wellington Regional Council (GW) on its RLT Plan has been prepared on the behalf of OraTaiao: The New Zealand Climate and Health Council ("Our Council").

OraTaiao wishes to make an oral presentation at the Regional Land Transport Planning Committee hearing.

Summary

Our Council commends GW for the RLT Plan's aim to produce "a transport system that is resilient, reliable and easy to use". But we believe this RLT Plan, with its almost exclusive emphasis on new roading projects favouring private vehicles, downgrades public and active transport modes, and so will not achieve this aim.

To be resilient, modern cities must address man-made climate change and its causes. Our Council has major concerns that the climate and health implications of the RLT Plan have not been addressed. We call on GW to perform an updated Health Impact Assessment of any of its major transport plans, taking into account Climate Change and the wide health effects of transport policies on the community.

Our Council therefore recommends that the Regional Transport Committee (RTC) reject the GW RLT Plan 2015 in its present form.

Details and our reasoning are described on the following pages.

OraTaiao: The New Zealand Climate and Health Council

OraTaiao: The New Zealand Climate and Health Council (www.orataiao.org.nz) comprises more than 300 senior doctors and other health professionals in New Zealand highly concerned about the impact of climate change on health and health services. Climate change is widely recognised by world health authorities and leading medical journals to be the biggest global health threat of the 21st century³⁻⁵. Major threats—both direct and indirect—to global health from climate change will occur through water and food insecurity, threats to shelter and human settlements, population displacement and migration, extreme climatic events, changing patterns of disease, risks to security (e.g. war), and loss of economic potential.

Our Council is therefore advocating on behalf of our patients and communities, as climate change has become a real, urgent and fundamental threat to their health and wellbeing. Measures taken to mitigate against climate change offer large opportunities to improve health. Based on the need to limit global warming to 2°C, New Zealand should very rapidly reduce its greenhouse gas emissions by 2020⁶⁻⁷. Healthy transport choices for Wellington must be part of this.

OraTaiao: The NZ Climate & Health Council's response to the GW RLT Plan 2015

Our Council maintains that many of the 16 prioritised significant activities listed in the RLT Plan will not help to achieve the listed objectives. These activities are predominantly new roading projects and are dominated by Roads of National Significance (RoNS). Our Council does not support the spending of large sums of public money on new motorways. Particularly is this so when the recent GW Public Transport Spine Study (PTSS) rejected Light Rail for Wellington City's public transport spine on the basis of expense. Of the \$1.392 billion of prioritised projects over the 6 year period 2015-2021, \$1.181 billion (85%) is for state highways and local roads, \$168 million (12%) is for public transport and \$43 million (3%) is for cycling and walking (refer Table on pages 156/157 in the RLTP)

OraTaiao maintains that this money would be better invested in higher quality climate – friendly and healthy electric public transport (like light rail and trolley or other electric buses), walking and cycling modes.

Of the 16 listed prioritised significant activities, only one (#10) is related to active transport (the safe, wide seaward walking and cycling trail from Petone to the City). This trail is well overdue and needs higher priority than its tenth position.

Activity #9, the passenger rail improvements, is favoured by us, as is #11 integrated ticketing (with the proviso that be suitable for high capacity transport, be fast & efficient).

Activity #7, SH58 (Haywards Hill) remedial work would only be supported if safe cycle & walking facilities were included. #14 & 16 (Port access work and Wellington Resilience programs) are not described in enough detail for us to assess their worth.

Activity #4, Bus Rapid Transport we believe would be inferior to modern light rail transport for Wellington's public transport spine (see reasons later below).

All the other projects involving road-building we think are inappropriate.

Other concerns our Council has with the 16 planned activities are as follows:

- The RLT Plan states “Climate Change impacts are likely to increase the frequency of risks” (to Wellingtons transport), but the 16 projects it lists are overwhelmingly aimed at new roading, without GW acknowledgement that new roads induce more cars and trucks which increase climate-hostile emissions
- The RLT Plan activities do not mention the urgent need for huge reductions in fossil fuel use if global warming is to stay below 2 degrees C.
- Although there is mention in the RLT Plan that younger people are now less likely to hold drivers licences, this was under-emphasised. In fact, the future users of Wellington roads (the young) are abandoning car licencing in droves: between 2008 and 2013, the number of Wellington 16 year olds obtaining their licences dropped 73%, and 17, 18 and 19 year olds by 53-60% (source NZTA). With the need to consider the climate and reduce emissions combined with fewer future car-drivers, the motorways and tunnels planned under RoNS for Wellington may, in the longer term, become expensive white elephants

Public Transport

The GW RLT Plan states **“The Greater Wellington Regional Council (GWRC) has made maintaining and growing patronage and mode share one of the fundamental goals for Wellington’s public transport system”**.

In considering the future shape of public transport for the Wellington region, this GW RLT Plan has been guided largely by the recently completed Public Transport Spine Study (2014) Our Council believes that a high quality public transport spine linking all the main Wellington population centres is essential for both immediate health gains and longer term health gains related to climate change.

Our Council has concerns about the assumptions and motivations of the RLT Plan and the GW Public Transport Spine Study which informs it.

- It assumes that the NZTA’s Roads of National Significance projects (RONs) for Wellington will go ahead.
- It considers public transport in isolation, and fails to integrate its findings with other recent GW studies (such as the Opus Arup Wellington Transport Models TN24 Baseline Forecasting Report December 2012¹, and the joint Wellington Regional Strategy, Waikato Regional Council and Auckland Council’s 8 February 2013 report ‘The Costs of Physical Inactivity: Towards a regional full-cost accounting perspective’²).
- A Health Impact Assessment (HIA) carried out as part of the GW RLT Strategy (2006) recommended to “ increase the proportion of funding for public transport, walking and cycling, and reduce the proportion of funding for new roading, as new roading is not likely to promote health, while other modes of transport are”
- It dismisses the Light Rail Transport (LRT) option with highly inflated costs and few benefits

By contrast, our Council strongly supports the principles in the Better Buses 5 point plan (to be introduced as a Notice of Motion to Greater Wellington Regional Council to be included in the Regional Council's draft 2015/16 Annual Plan), where the 'better, cleaner, cheaper buses plan' proposes:

1. Trialling zero fare Saturday buses
2. Trialling free transfers
3. Half-price student fares
4. Cleaning up the bus fleet
5. Safer school buses

We agree with all of these proposals, as ways to address bus affordability, accessibility and pollution standards that will encourage increased bus use by Wellington residents. We think the trials (1. and 2.) need to be done in their entirety and at full intensity. We are aware of efforts by the Wellington City Council (WCC)'s Long Term Plan's to part-trial some aspects of these (<http://www.stuff.co.nz/dominion-post/news/66373604/Cheaper-bus-fares-on-trial-for-Wellington>) – but we fear the WCC move, especially with the trialling for Saturday buses, is too short and needs to be zero fares, and is thus being set up to fail.

Light Rail Transport

We share the vision for public transport that works so well that people want to take it: This is a high-frequency, attractive and all-electric passenger transport system that beats the bus congestion issue, with light rail put back into consideration as the best high-capacity solution.

Light Rail Transport has the following advantages over Bus Rapid Transport (BRT) for Wellington:

- LRT is better for the climate. LRT will run purely on electricity, which in NZ is largely derived from renewable sources. Buses are planned to be fossil-fuelled, at least at first, as electric cables are deemed unsafe in the existing tunnels. Battery-driven buses are not deemed powerful enough, at least at present.
- LRT is safer for pedestrians and cyclists. Trains do not weave on their tracks like buses do on roads. They are predictably running along a well-defined route; they also allow large enough passenger capacity. By contrast, the bus options include large or articulated vehicles which make it difficult for the driver to see vulnerable bikers and walkers
- Wellington already has a high injury rate for cyclists, and there have been major concerns about safety for pedestrians around buses in the CBD.
- Better capacity. Large numbers of passengers per hour can be carried immediately on creating the rail infrastructure (approximately 10,000 per hour moving in one direction). It is also possible to quickly increase the number of trains to build capacity.
- By contrast, Wellington's geography with narrow streets is not suitable for BRT as planned in the PTSS: buses will have to share road space with cars at some points – therefore making the term 'rapid' a misnomer.
- Wellington city's infrastructure grew up around rail starting in 1886 and spreading to encompass much of the city till 1962. This could be revived with LRT.

- Better passenger appeal. Overseas experience shows LRT is seen by passengers as clean, fast, efficient and contemporary.
- Better for bicycles. Trains can easily accommodate numerous bicycles on board, thus integrating cycling with PT which is an essential requirement for PT. It has not been possible to carry bicycles on buses in Wellington.
- Better for people with disabilities. Trains make for safer and more comfortable travel. This is also important for those travelling with babies and young children in pushchairs. Easier access is important for wheelchair access for frail elderly and people with disabilities.
- Lower costs. LRT can be taken east via Constable Street. Therefore, because LRT does not need new tunnels or much road widening, this option will be cheaper. RONS is very expensive (see above)—its funding should be diverted to cover LRT, walking, cycling and other healthy & climate friendly transport infrastructure. The PTSS has distorted the cost comparison between LRT and BRT by including an unnecessary tunnel into the LRT assessment.
- Better urban design. It will be easier to retain Wellington's urban appeal without major widening of roads, ugly flyovers etc. Green areas on either side of the rail tracks will be possible – being much more appealing than asphalt and concrete.
- Higher property values. Overseas experience shows these to be greater around LRT routes.

Urgency for dedicated public transport system

Notwithstanding the above reasons favouring light rail, it is essential that Wellington secures a congestion-free dedicated public transport system urgently, without delay. We share the vision of public transport that works really well, places that people want to be, and streets so safe people want to ride. Work should begin within months to ensure that:

- buses have priority travel through the main commuter routes,
- there is a safe cycling network throughout the city with physical separation from motor traffic where possible, with designated cycle-only paths in place along the main commuter routes, or speed limits are reduced to 30kph where cyclists are expected to share the road,
- streets are people friendly: pedestrianising the Golden Mile and improving pedestrian facilities city-wide to create people-friendly streets in key retail and housing areas,
- private car parking on the main commuter routes is heavily restricted to create space for priority buses and cycle-only paths., with rapid expansion of car share vehicles in Wellington.

Meanwhile, work to establish comprehensive light rail transport in Wellington must be accelerated.

And the funding for these items should transfer from the \$1bn allocated to Wellington City Roads of National Significance.

Climate Change and Wellington Transport

In New Zealand (and globally), emissions of greenhouse gases (mainly CO₂) from fuel combustion are increasing more rapidly from transport than from any other source (NZ Ministry for the Environment (2013) in its GHG inventory 1990-2011). Road transport causes 1/6th of New Zealand's total gross greenhouse gas emissions⁸, and the largest of GW's territorial councils, the Wellington City Council (WCC) states in its Action Plan on Climate Change (2010) that 35% of Wellington's greenhouse gas emissions are from land transport. Wellington City Council's listed number one action to prevent this is "to reduce road travel". A common theme expressed in consultation by the City Council was the "need to focus on the alternatives to the private car e.g. public transport, walking and cycling" (<http://wellington.govt.nz/~media/your-council/plans-policies-and-bylaws/plans-and-policies/a-to-z/climatechange/files/climatechange2010.pdf>).

Transport planning for the Wellington region must keep climate change at the forefront. As the Mayor of Wellington recently commented (2013) on the Council's Climate Change policies: "We need to take a climate change lens to all of Council's activities and programmes" (<http://wellington.scoop.co.nz/?p=55437&cpage=1>).

The Greater Wellington Land Transport Strategy states "More vehicles will run on renewable fuels that are non-polluting. People's travel choices will recognise the risk and impact of climate change and diminishing non-renewable resources". <http://wellington.govt.nz/~media/your-council/plans-policies-and-bylaws/plans-and-policies/a-to-z/climatechange/files/climatechange2010.pdf>

These strong statements about the need to consider the climate in transport decisions, made by both the Wellington City Council and the Greater Wellington Regional Council (above), are at odds with the absence of climate change considerations in their PTSS and now in this RLT Plan 2015.

Other Wellington Transport Health Costs

Current transport provision in Wellington is heavily reliant on private motor cars. This comes with high health costs for ourselves and our taxpayer health system. The PTSS, although its stated aims were to increase public transport, made predictions of very low increased uptake. This is because it made its assumptions on the completion of the RONS project with its emphasis on encouraging private transport.

More private car transport will encourage:

- More physical inactivity. All new major roading projects will encourage car use by induction and thereby restrict physical activity. The Wellington Regional Strategy Committee recently joined Auckland and Waikato Councils to examine the full costs of physical inactivity in their regions.² The study indicated that physical inactivity is costing the country approximately \$1.3 billion, or 0.7% of total GDP (2010), including \$140 million in Wellington. The study conclusions were "Physical inactivity is as serious a risk factor as smoking or obesity in causing a range of chronic diseases like heart disease, cancer and diabetes. Physical inactivity is globally recognised as the fourth-leading cause of death and a global public health priority. Local government plays an important role in motivating and providing the infrastructure for people's physical activity, including providing transport infrastructure, active transport opportunities such as cycling, walking, public transport, walking buses, urban design and land use planning." The report also states: "Local government has a significant

role to play in providing opportunities for residents to increase their physical activity levels.”(page iv).

Further details are in the GWRC media release with the full report at <http://www.gw.govt.nz/physical-inactivity-costs-almost-one-percent-of-gdp/>.²

- More air pollution. The burning of fossil fuels releases pollutants into the air from the exhausts of vehicles. These are dangerous to human health. Included are particulate matter (carbon and other particles), poisonous chemicals and gases including volatile organic compounds and ozone. Respiratory and cardiovascular diseases and some cancers are known to be associated with these pollutants. It is estimated that there are 25 premature deaths in adults each year in the Wellington region from exposure to particulate emissions from motor vehicles, with 35,000 restricted activity days⁹.
- More road traffic accidents. These are a frequent cause of death and injury; and more road traffic means more accidents. The risks are much decreased with public transport.
- Poor urban design. This may negatively affect well-being and mental health, eg.. large, ugly structures like the planned flyover create dead-space below. This could also attract crime. In addition, more wide roading east of the Mt Victoria tunnel will encroach on the Town Belt, reducing recreational space.

Public and active transport solutions create significant health gains

The health benefits from addressing climate change are potentially huge. These will be gained by shifting fossil-fuelled vehicles off the roads. The World Health Organization states “A shift to active transport (walking and cycling) and rapid transit/public transport combined with improved land use can yield much greater immediate health “co-benefits” than improving fuel and vehicle efficiency” (see WHO summary of co-benefits of health of climate change mitigation at http://www.who.int/hia/hgebrief_transp.pdf).

Better provision of active and public transport will provide other more immediate and major health benefits as well as the longer term health gains from slowing climate change. Increasing physical exercise is well known to reduce the current epidemics of obesity, diabetes, cardiovascular disease (heart disease and strokes) and some cancers. Regular exercise also gives health co-benefits for those increasing numbers of people suffering from the common causes of disability like musculoskeletal disease (back and neck pain and arthritis) and psychological disorders.

Using public transport often incorporates active transport as a part of the journey and therefore encourages physical activity. In addition, at average occupancy, public transport produces less harmful emissions compared with car use. Public transport can often meet the needs of people where active transport may be less feasible –for example people who are aged, have physical disability, those with young dependents, and those needing to travel long distances. Improved mobility for women, children, the elderly, and low income groups enhances health equity. More affordable high quality “congestion free” public transport networks are part of this.

With cycling, comprehensive modelling indicates that transforming New Zealand's urban roads over the next 40 years, using best practice physical separation on main roads and bicycle-friendly speed reduction on local streets, would yield benefits 10-25 times greater than costs (Macmillan et al. 2014 <http://ehp.niehs.nih.gov/1307250/>¹⁴). Similar health gains might be expected with increased uptake of walking.

Further detail on the reasons behind our Council's stance is provided in the following pages, and in the New Zealand College of Public Health Medicine's policy statement on Transport at http://www.nzcpmh.org.nz/media/64538/2013_08_02_transport_policy_statement.pdf.

Financial costs

The proposed RONS infrastructure inherent in the RLT Plan and PTSS for Wellington, with its still possible new flyover, Mt Victoria and Terrace tunnels and widening of Ruahine Streets and Wellington Rd. are calculated to be major costs to the taxpayer. They all have low benefit:cost ratios (BCRs). Our Council believes that the money put aside for these major roading projects would be much better spent on healthier transport options.

There are also important cost relationships between private vehicle use and public and active modes. The household and regional levels in turn also interconnect, as follows:

(i). Household investment in private car ownership means people are less likely to use public and active transport because of perceived additional cost (e.g. paying fares for each member of family to take a trip together by bus versus using their car. This is especially so for those on low income and/or the area is poorly served by public transport and safe cycling routes). This reduces demand to improve active and public modes. On the other hand, public transport investment helps decongest private car routes for those who need to use a car. Public transport investment is thus beneficial for all modes of transport.

(ii). Regional investment favouring private car infrastructure stimulates greater use of private vehicles and less use of public and active transport, which makes these less viable and less likely to be retained. This is a vicious cycle that ultimately does not address road congestion. Good public take-up of public transport needs frequent and regular service to make it viable. Low public transport service reduces demand, locking people into private car investment and dependency: this has high costs to personal and public health, and climate health.

And it is time to take any prospect of a Basin Reserve flyover off the table, and focus on developing better, more sustainable solutions.

Summary stance, and request for oral submission

Our Council commends GW for the RLT Plan's aim to produce "a transport system that is resilient, reliable and easy to use". But we believe this RLT Plan, with its almost exclusive emphasis on new roading projects favouring private vehicles, downgrades public and active transport modes, and so will not achieve this aim.

To be resilient, modern cities must address man-made climate change and its causes. Our Council has major concerns that the climate and health implications of the plan have not been addressed. We call on GW to perform an updated Health Impact Assessment of any of

its major transport plans, taking into account Climate Change and the wide health effects of transport policies on the community.

Our Council therefore recommends that the Regional Transport Committee (RTC) reject the GW RLT Plan 2015 in its present form.

OraTaiao: The New Zealand Climate and Health Council is grateful for this opportunity to make this submission, and we keenly anticipate an opportunity to speak directly to these issues in hearings on the Regional Land Transport Plan 2015. **We wish to have the opportunity to present our views in person to the Road Transport Committee.**

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