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Friday, 1 April 2016

OraTaiao submission to the Transport and Industrial Relations Select Committee's
Inquiry into the future of New Zealand's mobility

A: Summary

This submission starts by summarising our main recommendations, introduces OraTaiao, analyses essential zero emissions transport components in terms of the Inquiry's criteria (attached table), and gives more detail on our recommendations.

We would like the opportunity to speak to our submission, thank you.

Our four main recommendations are:

1. Reframe the Inquiry with the **outcome of 'better access'** to jobs, education, recreation, goods and services (not 'mobility' which is just one component), so that the Inquiry considers virtual access, land use planning, and access for New Zealanders who are disabled and/or from low socioeconomic households¹.
2. Recognise **climate changes and the global commitment to zero emissions future as the most important influences** on access (including personal mobility and freight transport).
3. **Promote wise stewardship of government finances by encouraging cross-sector approaches**, so that better access (including transport planning) also leads to better population health, reduced socioeconomic inequity and greater resilience.
4. Change the Inquiry's Terms of Reference, to ensure the inquiry contributes to setting New Zealand on a clear path now to a **zero emissions transport future** by:
 - i. **Considering how to develop good active transport routes in all urban areas, so physical activity is 'norm' for <2km urban trips** – including safe attractive separated walking & cycling routes for all ages, slower speeds where cyclists share urban roads, and expanded access to electric bicycles, especially low income households.
 - ii. **Considering the best way to ensure comprehensive clean energy public transport networks (all electric light rail, electric heavy rail & electric buses) in all urban areas for longer trips** – with increased electricity supply from renewable sources (not fossil fuels) and affordable flexible fares.
 - iii. **Exploring how to provide large networks of car share vehicles within a few minutes' walk in all urban areas, on a scale similar to taxi fleets** – complementing active and public transport by enabling real choice for each journey.

¹ Access to jobs, education, recreation, goods and services – increasingly includes virtual access (rather than real-time journeys, especially for younger New Zealanders), and includes land use planning that recognises the importance of reducing distances between homes, jobs, study centres, shops and recreation, and multiple uses of space.

B: Who we are

OraTaiao: The New Zealand Climate and Health Council (OraTaiao, The Council) is an incorporated society of over 420 health professional members calling for urgent and fair climate action – with real health gains now and for our future. We know that climate changes fundamentally threaten human health and wellbeing – and that well-designed climate action can mean greater health and fairness in both the short and longer term. Within its membership, OraTaiao has some of the world’s leading climate-health experts, and is consolidating linkages with health bodies and other climate-health organisations in New Zealand and internationally.

C: Our recommendations in more detail:

We have analysed the three essential components of zero emissions transport (active and clean energy public transport networks complemented by expanded car share vehicle availability), in terms of the Inquiry’s current criteria, in the attached table.

These three essential components create an environment where New Zealanders in urban areas can easily make healthier, cheaper, zero emissions choices for most journeys, resulting in considerable reductions in government expenditure. Thinking in terms of access, rather than mobility, reduces the extent of journeys² and includes more New Zealanders.

We have also analysed a fourth measure – encouraging electric vehicle uptake especially by purchasing electric vehicles for government fleets with flow-on expansion of the second-hand market. However, this has a smaller and much slower impact on most criteria, as replacement of NZ’s overall private vehicle fleet is likely to take more than a decade, private vehicles are relatively inefficient travel, and they do not enable increased physical activity.

We strongly recommend an immediate moratorium on motorway expenditure until the three essential components of zero emissions urban transport are well in place, and New Zealand’s private vehicle is mainly electric from renewable sources. Reduced volumes of relatively inefficient private vehicles and increased population health may mean motorway expansion spending will continue to be low for decades to come. Instead, increasing the resilience of existing transport infrastructure in the face of rising sea levels and more extreme weather events more often, will demand greater expenditure.

Other useful access measures include greater use of information technology to inform travellers, better connect services and customers within local areas, and encouraging carpooling to reduce single occupant car use. Encouraging the development of local biofuels (with waste products and without displacing food production) has the potential to supply rural transport and agricultural machinery – completely transforming New Zealand’s transport to zero emissions. Finally, we recommend that freight be predominantly transported by electric rail and coastal shipping, not trucks. This would mean much lower climate-damaging emissions, safer roads and roads that last longer – with substantial economic, social and infrastructure gains.

We have not explored international shipping nor international aviation in this submission. However we recommend that the committee takes a whole-of-New Zealand approach to seaport and airport planning, recognising that international travel and freight create very high climate-damaging emissions and are likely to come under global scrutiny soon.

² ‘Private transport needs to be shaped by the three Rs of travel demand management – Removing unnecessary trips, Reducing trip lengths and Replacing car trips. For people to reduce their (private) car use, alternative modes of transport are needed that are convenient, reliable and attractive.’

NZ College of Public Health Medicine (NZCPHM). NZCPHM Transport Policy Statement. Wellington: NZCPHM, 2013. http://www.nzcpmh.org.nz/media/64538/2013_08_02_transport_policy_statement.pdf

Finally, this submission links with the New Zealand College of Public Health Medicine's Transport Policy Statement and its Transport Learning Resources, which provide source evidence.

Please refer to these at

http://www.nzcpmh.org.nz/media/65906/2013_10_01_transport_learning_resources.pdf
and http://www.nzcpmh.org.nz/media/64538/2013_08_02_transport_policy_statement.pdf.

Primary contact point for correspondence and feedback:

Liz Springford phone 04 9709 126 or 021 0617 638, email: liz.springford@gmail.com
c/- 16 Chatham Street, Berhampore, Wellington 6023

Thank you for this opportunity for OraTaiao to make our written submission to the Transport and Industrial Relations Select Committee's Inquiry into the future of New Zealand's mobility.

Yours sincerely,

Dr Rhys Jones MB ChB, MPH, FNZCPHM, Public Health Physician/Senior Lecturer, University of Auckland, Auckland;

Co-convenor, OraTaiao: The New Zealand Climate and Health Council

Dr Alexandra Macmillan, MB ChB, MPH(Hons), PhD, FNZCPHM, Public Health Physician/Senior Lecturer Environmental Health, University of Otago, Dunedin

Co-Convenor, OraTaiao: NZ Climate & Health Council

Liz Springford, BA, MPP(merit), Policy Analyst, Wellington;

Executive Board Member, OraTaiao: The New Zealand Climate and Health Council

Dr R Scott Metcalfe, MB ChB, DComH, FNZCPHM, Public Health Medicine Specialist/Chief Advisor, Wellington; Executive Board Member, OraTaiao: The New Zealand Climate and Health Council

Mr Russell Tregonning, MB ChB, FRACS, FNZOA, Orthopaedic Surgeon/Senior Lecturer School of Medicine, University of Otago Wellington, Wellington; Executive Board Member, OraTaiao: The New Zealand Climate and Health Council

for OraTaiao: The New Zealand Climate and Health Climate Council

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Table: OraTaiao’s main recommendations evaluated against the Inquiry’s current goals

OraTaiao’s main recommendations evaluated against the Inquiry’s current goals	Enhance productivity	Reduce transport & related costs	Optimise infrastructure	Increase accessibility & social connectedness	Save lives	Reduce injuries	Reduce environmental footprint (climate-damaging fossil fuel emissions & other pollution)
<p>1. Ensure good active transport routes in all urban areas, so physical activity is ‘norm’ for <2km urban trips</p> <p>This includes safe attractive separated walking & cycling routes for all ages (and slower speeds where cyclists share urban roads), and expanded access to electric bicycles, especially low income households.</p>	<p>✓✓✓</p> <p>Healthier NZers = more productive workforce (less sick days, more in work)</p> <p>Employers, employees & tourists attracted by ease of access.</p>	<p>✓✓✓</p> <p>Reduced demand on Vote Health & Vote Transport, and reduced household costs (lower cost energy from food) even as fossil fuel prices increase.</p> <p>Benefit-cost ratio of \$20+ from every \$1 spent on Auckland cycling infrastructure.</p> <p>Reduces NZ’s high ghg cost exposure</p>	<p>✓✓✓</p> <p>Less space required for cycling/walking than vehicular travel & car parking.</p> <p>Lower maintenance from much less wear & tear.</p>	<p>✓✓✓</p> <p>Increases access for younger & older NZers unable to drive and/or afford private cars (better access to affordable bicycles, especially electric, is important for lower income households)</p> <p>Social interaction & community connections substantially increased.</p>	<p>✓✓✓</p> <p>Significant reduction in deaths from lifestyle-related ill-health with Ministry of Health’s min. rec 30 minutes exercise easily integrated into daily lives.</p> <p>NZCPHM estimates 1 in 8 deaths are attributable to physical inactivity. (NZCPHM Physical activity and health Policy Statement, 2014, http://www.nzcpm.org.nz/media/81766/2014_11_28_physical_activity_and_health_policy_statement.pdf)</p>	<p>✓✓✓</p> <p>Fast health gains – better physical & mental health & quality of life.</p> <p>Healthcare costs of conditions caused by physical inactivity estimated at 1-2.6% of total health care costs.</p>	<p>✓✓✓</p> <p>This is arguably the most important Inquiry goal as the international community (incl NZ) has now committed to a zero emissions future.</p> <p>NZ is one of the world’s highest per capita emitters with 40% of NZ emissions from transport, which is also NZ’s fastest growing source of ghg emissions. With pine forest harvesting in scheduled in 2020s, NZ is highly financially exposed</p> <p>Active transport is essentially zero ghg emissions transport, plus pollution-free</p>
<p>2. Renewable energy public transport spines in all urban areas for longer trips</p> <p>This means public transport which is all electric light rail, electric heavy rail & electric buses (with increased electricity supply from renewable sources, not fossil fuels) and affordable flexible fares.</p>	<p>✓✓✓</p> <p>Although not as dramatic as active transport, public transport still leads to greater daily physical activity and thus increases productivity.</p> <p>Passengers are often able to multi-task – so travel time can become work or study time, or relaxation.</p> <p>Ease of access similarly attractive for employment and tourism.</p>	<p>✓✓✓</p> <p>Using renewable NZ-generated energy substantially reduces NZ oil import costs, reducing export earnings pressure, and reducing economic vulnerability to oil cost fluctuations.</p> <p>Reduces NZ’s high ghg cost exposure esp. during 2020s forest harvesting.</p> <p>Some health savings.</p>	<p>✓✓✓</p> <p>Public transport is a much more efficient in transporting large numbers of people. One bus carrying 50 passengers takes up much less space than 50 cars – both whilst moving & parked. Rail has even greater capacity.</p> <p>Pressure to use scarce land well will grow as NZ population increases.</p>	<p>✓✓✓</p> <p>Increased access for younger & older NZers unable to drive and/or afford private cars. Proportion of older NZers is growing, and drivers’ license acquisition amongst younger NZers is decreasing.</p> <p>Social interaction & community connections substantially increase with public aka shared transport – including capacity to connect virtually with friends & family whilst travelling.</p>	<p>✓</p> <p>Some increase in daily physical activity and therefore increased life expectancy.</p>	<p>✓</p> <p>Some increase in daily physical activity, therefore better health.</p>	<p>✓✓✓</p> <p>By ensuring all public transport is powered by renewably-sourced electricity and becomes the norm for urban trips above 2km, this is also effectively zero emissions transport.</p> <p>By rapidly phasing out dirty diesel public transport and reducing private petrol vehicle reliance, other health-damaging air pollution will also be reduced.</p>

OraTaiao's main recommendations evaluated against the Inquiry's current goals	Enhance productivity	Reduce transport & related costs	Optimise infrastructure	Increase accessibility & social connectedness	Save lives	Reduce injuries	Reduce environmental footprint (climate-damaging fossil fuel emissions & other pollution)
<p>3. Car share vehicles within a few minutes' walk in all urban areas on a scale similar to taxi fleets.</p> <p>Vehicles are preferably electric, with diversity in vehicle size and type available.</p> <p>Car share is the essential third component of an essentially zero emissions transport network, complementing active and public transport.</p> <p>Car share frees up households and companies from private vehicle ownership yet enables easy car access when a car is the most appropriate for a trip. Car share enables real choice of the best way to travel each journey.</p> <p>Car share is seriously underdeveloped in NZ and needs partnership to quickly grow to scale.</p>	<p>✓✓✓</p> <p>Each car share vehicle is estimated to remove xx private owned cars.</p> <p>Private vehicle storage (parking buildings, private garages and cars parked on roadways) is highly inefficient land use with low/zero productivity.</p> <p>There are also corporate and household savings from avoided car ownership.</p> <p>Although not as dramatic as active transport, car share still leads to greater daily physical activity and thus increases productivity.</p>	<p>✓✓✓</p> <p>By reducing private car ownership, household transport spending is freed up for savings, investment & potentially more productive expenditure.</p>	<p>✓✓✓</p> <p>Pressure for best possible use scarce land and other resources will continue to grow as NZ population increases, and climate changes cost NZ & global economy more.</p>	<p>✓✓✓</p> <p>Car share increases active and public transport use, by eliminating transport expense locked into private car ownership.</p> <p>Increased access for younger & older NZers unable to afford private cars.</p>	<p>✓</p> <p>Some increase in daily physical activity and therefore increased life expectancy.</p>	<p>✓</p> <p>Some increase in daily physical activity, therefore better health.</p>	<p>✓✓✓</p> <p>Both our per capita climate-damaging ghg emissions and our per capita rate of private car ownership are amongst the world's highest.</p>
<p>4. Electrify central & local government fleets plus other steps so that NZ's reducing private vehicle numbers are renewably powered (including encouraging local biofuels that do not displace food production).</p>	<p>✓</p> <p>The costs of running government, business and private vehicles will be reduced, although car purchase and battery replacement costs will somewhat offset this. The costs of ghg emissions will reduce.</p>	<p>✓</p> <p>The costs of running government, business and private vehicles will be reduced, although car purchase and battery replacement costs will somewhat offset this. Ghg emissions costs will reduce, plus reliance on expensive oil imports.</p>	<p>✓</p> <p>Replacement of NZ's outdated inefficient fossil fuel dependent high-emitting vehicle fleet is a useful infrastructure investment – although impact is less than public and active transport investment, and car share expansion.</p>	<p>✗</p> <p>No significant impact.</p>	<p>✓</p> <p>Electrifying NZ's overall vehicle fleet is limited to saving lives by reducing urban air pollution and reducing climate changes in the longer term.</p>	<p>✓</p> <p>Electrifying NZ's overall vehicle fleet is limited to reducing injury by reducing climate changes in the longer term.</p>	<p>✓</p> <p>Reduces NZ's fossil fuelled vehicle fleet – although impact is less than public and active transport investment, and car share expansion.</p>

Sources:

NZ College of Public Health Medicine's Transport Policy Statement 2013, http://www.nzcpmh.org.nz/media/65906/2013_10_01_transport_learning_resources.pdf

NZ College of Public Health Medicine's Transport Learning Resources, http://www.nzcpmh.org.nz/media/64538/2013_08_02_transport_policy_statement.pdf