Turning Active Transport Research into Policy: A View from the Chief Science Advisor

Simon Kingham
Kaitohutohu Matua Pūtaiao | Chief Science Adviser

Active Living and Environment Symposium 2019, Dunedin, 13-15 February 2019
Abstract

There is an increasing body of quality research being done in New Zealand and internationally on the role of transport in active living. In New Zealand, the transport sector is seeking to align policy with evidence. So how can research best inform policy? How can the ivory tower best talk to Wellington? This research will seek to identify how research can best inform policy. In addition to drawing on experience within the Ministry of Transport it will also reflect on two ongoing examples of research in Christchurch to examine how this can/cannot work. One is working with the local council to assess the impact of one of Christchurch’s new cycleways on cycle use. The second is assessing how the transport environment around a school is impacting travel to school, working with a range of local parties including the council, school and New Zealand Transport Agency.
Ahorangi, University of Canterbury

Ahorangi | Professor Simon Kingham
Kaihautū, Te Taiwhenua o te Hauora | Director, Geohealth Laboratory
Tari Mātai Matawhenua | Dept of Geography
Te Whare Wānanga o Waitaha | University of Canterbury

Teaching and research interests
► Impact of the urban environment on individual and community health and wellbeing.
  ► Transport
  ► Public health
  ► Strong community engagement/end user focus.
  ► Geospatial science
Kaitohutohu Matua Pūtaiao, MoT

Kaitohutohu Matua Pūtaiao | Chief Science Advisor
Te Manatū Waka | Ministry of Transport

2 days a week
► Usually Tuesday and Wednesday

Purpose
► provide advice to the Ministry on areas that would benefit from scientific input
► champions the Ministry’s use of evidence throughout the policy process and its development of wider sector strategies.
# Chief Science Advisor Forum

**He Rauhinga Tohu Putaiao**

The Prime Minister’s Chief Science Advisor convenes a forum of Chief Science Advisors from across government, with additional support from co-opted members to ensure that the forum can provide a full range of advice, and an extensive range of contacts as needed.

<table>
<thead>
<tr>
<th>Name</th>
<th>Ministry/Role</th>
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<tbody>
<tr>
<td>Dr Alison Collins</td>
<td>Ministry for the Environment</td>
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<tr>
<td>Vince Galvin</td>
<td>Statistics New Zealand</td>
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<td>Dr Gill Jolly</td>
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<td>Prof Tahu Kukutai</td>
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<td>Prof Stuart McNaughton</td>
<td>Ministry of Education</td>
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<td>Prof Richie Poulton</td>
<td>Ministry of Social Development</td>
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<tr>
<td>Prof Hamish Spencer</td>
<td>Ministry of Business, Innovation and Employment</td>
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<td>Prof Gary Evans</td>
<td>Ministry of Business, Innovation and Employment</td>
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<tr>
<td>Prof Ken Hughey</td>
<td>Department of Conservation</td>
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<td>Prof Simon Kingham</td>
<td>Ministry of Transport</td>
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<tr>
<td>Prof Ian Lambie</td>
<td>Justice Sector</td>
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<tr>
<td>Dr Rob Murdoch</td>
<td>Ministry of Business, Innovation and Employment</td>
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<tr>
<td>John Roche</td>
<td>Ministry of Primary Industries</td>
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<tr>
<td>Hema Sridhar</td>
<td>Ministry of Defence</td>
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Simon says

Simon Kingham is the Ministry’s Chief Science Adviser and highlights interesting transport research in this weekly column.

Simon Says 26: Are people who already cycle and walk more responsive to an active travel intervention?
w/c: 17th September 2018


Comment/Summary:

This study was part of an evaluation of the NZs Model Communities Programme. It aimed to see who (in relation to pre-existing physical activity levels) benefited most from a programme that sought to shift that people already reporting some physical activity in terms of walking and cycling were significantly (24 times) more likely to increase their active travel compared to those who did not report any cycling & achieve "maximum benefit to population health, interventions need to consider physically inactive people in particular and encourage active travel amongst this group".

Overall, the main message is that transport interventions designed to increase physical activity may have a much larger effect on people who are already active.

Simon Says 25: Assessing the economic benefits and resilience of complete streets in Orlando
w/c: 10th September 2018


Comment/Summary:
Transport Outcomes Framework

**Inclusive access**
Enabling all people to participate in society through access to social and economic opportunities, such as work, education, and healthcare.

**Healthy and safe people**
Protecting people from transport-related injuries and harmful pollution, and making active travel an attractive option.

**Economic prosperity**
Supporting economic activity via local, regional, and international connections, with efficient movements of people and products.

**Environmental sustainability**
Transitioning to net zero carbon emissions, and maintaining or improving biodiversity, water quality, and air quality.

**Resilience and security**
Minimising and managing the risks from natural and human-made hazards, anticipating and adapting to emerging threats, and recovering effectively from disruptive events.

Transport research in NZ

There is a lot of transport research being done
- At Universities and other research organisations
  - Although no organisation does everything and/or dominates
- In a range of disciplines
  - Engineering, Psychology, Geography, Health, Business, IT, etc
- At a range of levels
  - From student projects to multi-million dollar research projects
- Usually multi-disciplinary
  - Often within non-transport projects
- Not always easy to find it
- Difficult to work out how much
There is a lot of transport policy being planned and implemented
► MoT, NZTA, TLAs
► Evidence base is variable
  ► *Sometimes/usually sub-contracted to consultants*
Evidence based policy

Good evidence base
.. leading to… Good policy

But this doesn’t always happen
➤ Why not?
Researchers and policy makers not always linked
Link policy makers with research(ers)
Policy makers and researchers
Why don’t researchers engage better

They are busy
They don’t know who to talk to
► MoT website not hugely helpful
There are no/few rewards for engaging
► Journal articles
► Performance Based Research Fund (PBRF)

Under the PBRF system of performance evaluation, academics who engage with policy-focused work, that is inherently less likely, or slower, to generate high-impact publications, are penalised. Ironically

https://sciblogs.co.nz/politecol/2016/07/14/academics-less-engaged-policy-making/

They are often introverts

Personality type differences between Ph.D. climate researchers and the general public: implications for effective communication

C. Susan Weiler • Jason K. Keller • Christina Olex
Why don’t policy makers engage better?

They are busy
They don’t know who to talk to
► Hidden in all sorts of places
► Not always obvious who are experts

Academic literature is hard to read
► Jargon
► Technical
► Theoretical
► Irrelevant
Research meets and informs policy
Why should we engage?

See research *actually* inform policy
- Not just journal articles and PBRF scores

Make a difference

Moral responsibility?
- Tax payer funded

To avoid missing the obvious

“Well, this certainly buggers our plan to conquer the Universe.”
How should we engage?

Opportunities
- Scholarships
- Secondments
- Funded posts
- Funded groups/labs
- National Science Challenges / Centres of Research Excellence
- Transport in existing funding streams (HRC, MBIE etc)
- New ‘transport’ funding!? 
Example: GeoHealth Laboratory

UC GEOHEALTH LABORATORY
Example: Cycle way use

Uni-Cycle

Puari ki Pū-taringa-motu: The Uni-Cycle route runs from the University of Canterbury to the central city.

The route is now complete, featuring 5.6 kilometres of cycleway as well as improved lighting, footpaths, upgraded intersections and landscaping.
Example: School Transport in east Christchurch
Engagement: Keys to ‘success’

Keys to ‘success’

► Transport sector (e.g. MoT, NZTA, TLA) involved at project development stage
► Ongoing stakeholder involvement in project
► Genuine willingness to engage
► Clear policy implications of research
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@SimonKingham

Thank you
Models of engagement

<table>
<thead>
<tr>
<th>Scholarships</th>
<th>e.g. summer, Masters, PhD</th>
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<tbody>
<tr>
<td><strong>Pros</strong></td>
<td><strong>Cons</strong></td>
</tr>
<tr>
<td>• Cheap</td>
<td>• Potential quality issues</td>
</tr>
<tr>
<td>• Quick implementation</td>
<td>• Time advertising, assessing and selecting</td>
</tr>
<tr>
<td>• Build sector capability</td>
<td>• MoT/NZTA contact to maximise value</td>
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## Models of engagement

<table>
<thead>
<tr>
<th>Staff secondments (or researcher in residence)</th>
<th>e.g. Unis to MoT, and/or vice-versa</th>
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<tbody>
<tr>
<td><strong>Pros</strong></td>
<td><strong>Cons</strong></td>
</tr>
<tr>
<td>• Staff see workings of other organisation</td>
<td>• Less value if ‘virtual’ secondment</td>
</tr>
<tr>
<td>• Builds networks leading to ongoing relationships</td>
<td>• Risk of no output</td>
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<td></td>
<td>• Risk of negative experiences</td>
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<tr>
<th>Funded University posts</th>
<th>e.g. Twyford-Genter-Jones Professor of Transport</th>
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<tr>
<td><strong>Pros</strong></td>
<td><strong>Cons</strong></td>
</tr>
<tr>
<td>• Can deliver priority research if ‘control’ held by govt and/or expectations/outcomes clear</td>
<td>• Can be wasted if no ‘control’ by govt and/or expectations/outcomes clear</td>
</tr>
<tr>
<td>• Good if research team established</td>
<td>• Restricted to skills at one Uni</td>
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<td>• Can link to upskilling of MoT/NZTA staff at University</td>
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# Models of engagement

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<thead>
<tr>
<th>MoT/NZTA Funded Research Lab</th>
<th>e.g. funded research staff</th>
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<tbody>
<tr>
<td><strong>Pros</strong></td>
<td><strong>Cons</strong></td>
</tr>
<tr>
<td>• Flexible work program</td>
<td>• Requires active engagement of MoT/NZTA</td>
</tr>
<tr>
<td>• Short, medium and long term projects</td>
<td>• Restricted to skills at one Uni</td>
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<tr>
<td>• Responsive analytics</td>
<td>• Needs clarity of expectations</td>
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<tr>
<td>• Could be co-funded (free senior staff)</td>
<td>• Expensive</td>
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<table>
<thead>
<tr>
<th>Transport aligned research funding</th>
<th>e.g. MBIE/HRC funded research</th>
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<tbody>
<tr>
<td><strong>Pros</strong></td>
<td><strong>Cons</strong></td>
</tr>
<tr>
<td>• Existing funding</td>
<td>• Reliant on others</td>
</tr>
<tr>
<td>• No extra management</td>
<td>• Transactionally high (for researchers)</td>
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<tr>
<td></td>
<td>• No clear role/rights of ‘end users’</td>
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<table>
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<tr>
<th>New Transport funded research</th>
<th>e.g. MoT/NZTA funded research</th>
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<tr>
<td><strong>Pros</strong></td>
<td><strong>Cons</strong></td>
</tr>
<tr>
<td>• Directed by MoT/NZTA</td>
<td>• Expensive!</td>
</tr>
<tr>
<td>• Not reliant on others</td>
<td>• Research process management</td>
</tr>
<tr>
<td></td>
<td>• Transactionally high (for researchers)</td>
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<tr>
<th>Centre of Research Excellence (CoRE) or National Science Challenge (NSC)</th>
<th>e.g. MBIE funded research program</th>
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<tbody>
<tr>
<td><strong>Pros</strong></td>
<td><strong>Cons</strong></td>
</tr>
<tr>
<td>• Big picture, big projects</td>
<td>• Expensive (but not MoT/NZTA!)</td>
</tr>
<tr>
<td>• Cross-disciplinary</td>
<td>• May become inflexible over time</td>
</tr>
<tr>
<td>• Multiple research groups</td>
<td>• Unclear role of ‘end users’</td>
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<tr>
<td>• Long term commitment</td>
<td>• Diluted focus (not transport driven)</td>
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<td></td>
<td>• Too late for new NSC</td>
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