

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

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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.

[Dr Alison Collins - Ministry for the Environment](#)



[Prof Gary Evans - Ministry of Business, Innovation and Employment](#)



[Vince Galvin - Statistics New Zealand](#)



[Prof Ken Hughey - Department of Conservation](#)



[Dr Gill Jolly](#)



[Prof Simon Kingham - Ministry of Transport](#)



[Prof Tahu Kukutai](#)



[Prof Ian Lambie - Justice Sector](#)



[Prof Stuart McNaughton - Ministry of Education](#)



[Dr Rob Murdoch - Ministry of Business, Innovation and Employment](#)



[Prof Richie Poulton - Ministry of Social Development](#)



[John Roche - Ministry of Primary Industries](#)



[Prof Hamish Spencer - Ministry of Business, Innovation and Employment](#)



[Hema Sridhar - Ministry of Defence](#)

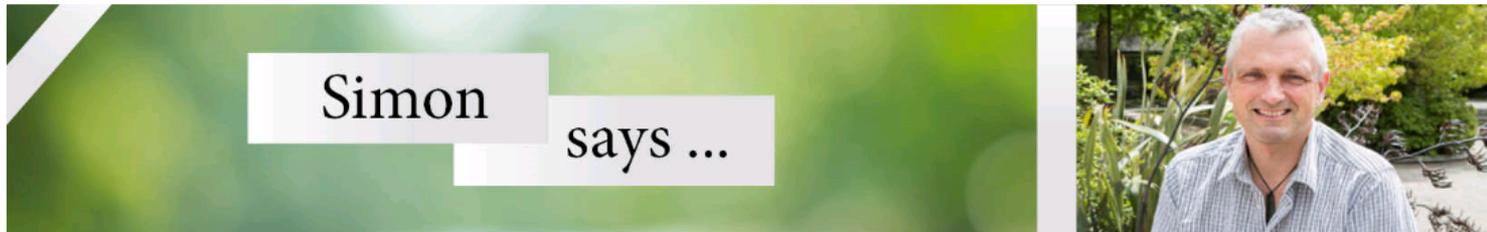


Research dissemination



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

Paper: Keall M, Chapman R, Shaw C, Abrahamse W and Howden-Chapman P, 2018, Are people who already cycle and walk more responsive to an active travel intervention? *Journal of Transport & Health*,

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 to 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

Paper: Yu C-Y, Xu M, Towne S, Iman S, 2018, Assessing the economic benefits and resilience of complete streets in Orlando, FL: A natural experimental design approach. *Journal of Transport & Health* 8, 1

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.

Economic prosperity

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

Healthy and safe people

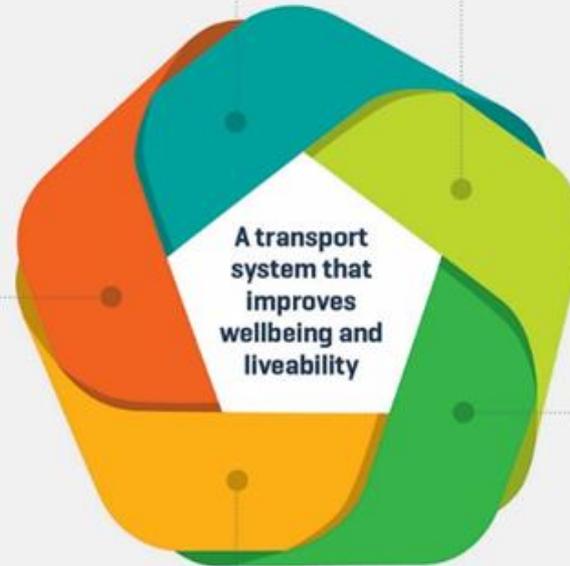
Protecting people from transport-related injuries and harmful pollution, and making active travel an attractive option.

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.



A transport system that improves wellbeing and liveability

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

Transport policy in NZ



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

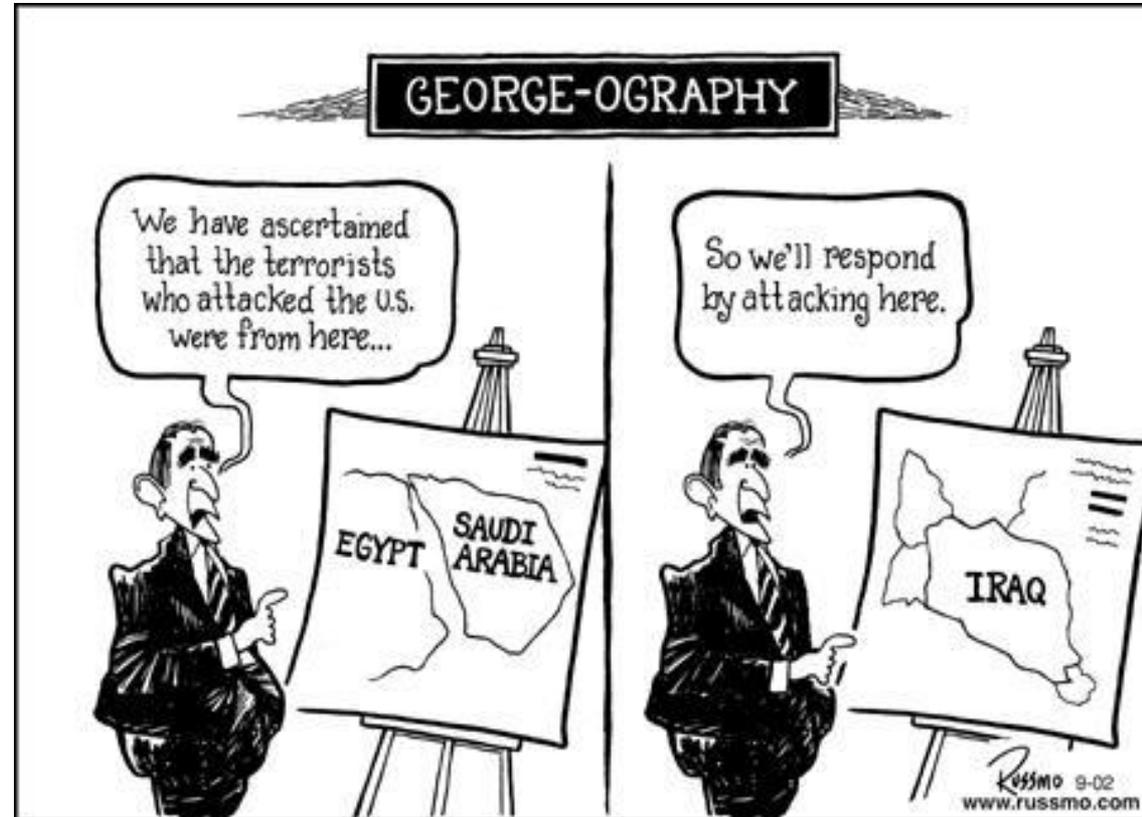


Good evidence base
.. leading to... Good policy

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)

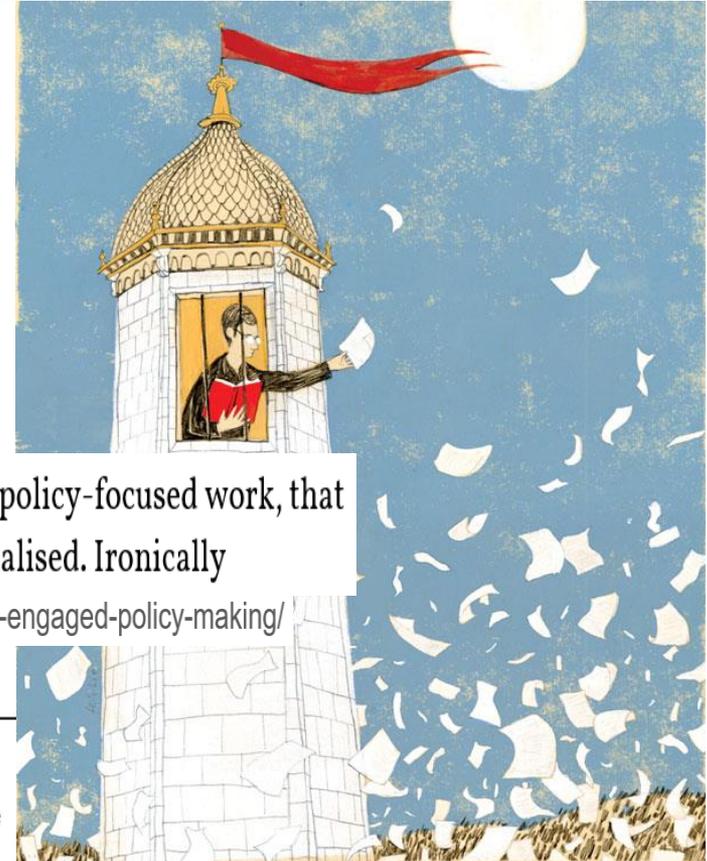
Under the PBRF system of performance evaluation, academics who engage with policy-focused work, that is inherently less likely, or slower, to generate high-impact publications, are penalised. Ironically

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

Climatic Change (2012) 112:233–242
DOI 10.1007/s10584-011-0205-7

They are often introverts

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



Why don't policy makers engage better?



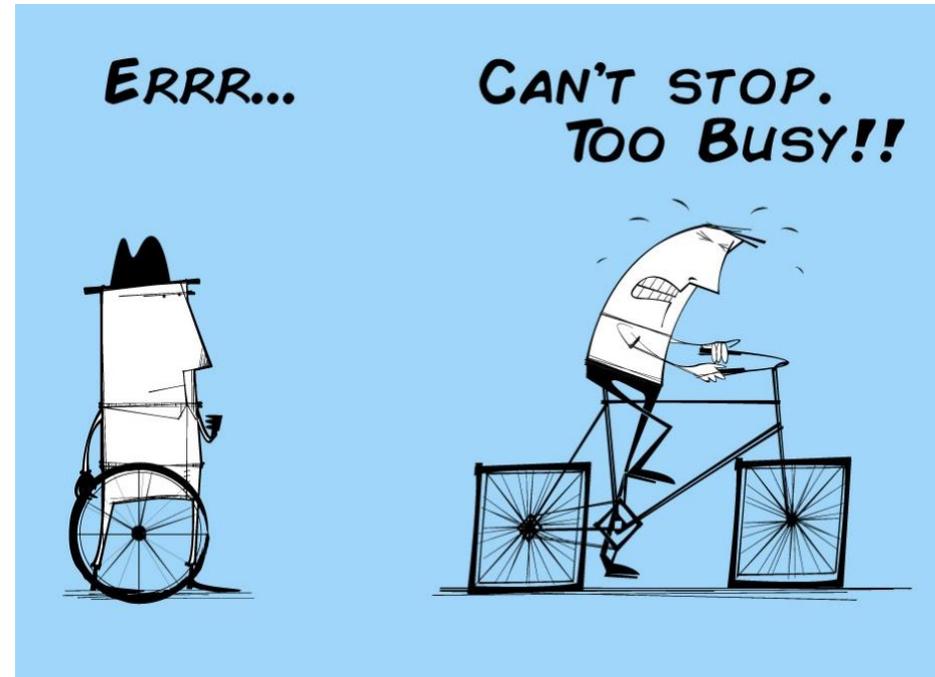
They are busy

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

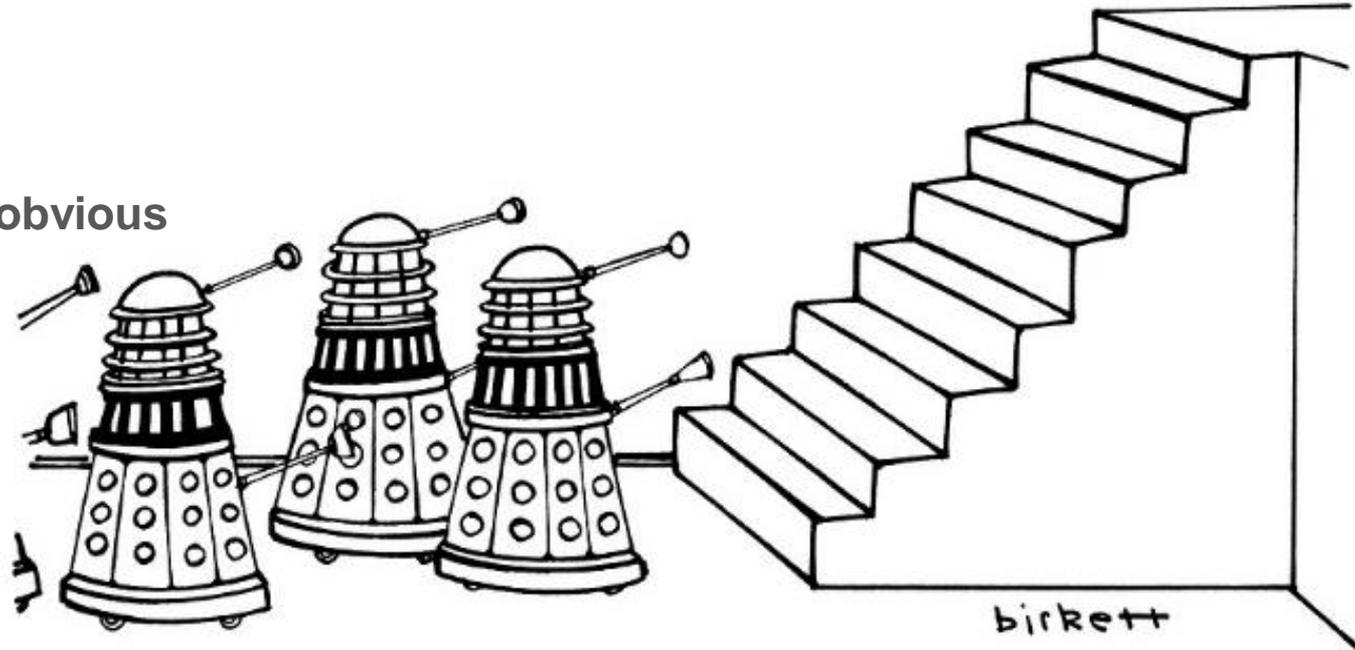
- ▶ Not just journal articles and PBRF scores

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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Thank you



Models of engagement

Scholarships	e.g. summer, Masters, PhD
Pros	Cons
<ul style="list-style-type: none">• Cheap	<ul style="list-style-type: none">• Potential quality issues
<ul style="list-style-type: none">• Quick implementation	<ul style="list-style-type: none">• Time advertising, assessing and selecting
<ul style="list-style-type: none">• Build sector capability	<ul style="list-style-type: none">• MoT/NZTA contact to maximise value

Models of engagement



Staff secondments (or researcher in residence)	e.g. Unis to MoT, and/or vice-versa
Pros	Cons
<ul style="list-style-type: none">• Staff see workings of other organisation	<ul style="list-style-type: none">• Less value if 'virtual' secondment
<ul style="list-style-type: none">• Builds networks leading to ongoing relationships	<ul style="list-style-type: none">• Risk of no output
	<ul style="list-style-type: none">• Risk of negative experiences

Models of engagement



Funded University posts	e.g. Twyford-Genter-Jones Professor of Transport
Pros	Cons
<ul style="list-style-type: none">• Can deliver priority research if 'control' held by govt and/or expectations/outcomes clear	<ul style="list-style-type: none">• Can be wasted if no 'control' by govt and/or expectations/outcomes clear
<ul style="list-style-type: none">• Good if research team established	<ul style="list-style-type: none">• Restricted to skills at one Uni
<ul style="list-style-type: none">• Can link to upskilling of MoT/NZTA staff at University	

Models of engagement



MoT/NZTA Funded Research Lab	e.g. funded research staff
Pros	Cons
<ul style="list-style-type: none">• Flexible work program	<ul style="list-style-type: none">• Requires active engagement of MoT/NZTA
<ul style="list-style-type: none">• Short, medium and long term projects	<ul style="list-style-type: none">• Restricted to skills at one Uni
<ul style="list-style-type: none">• Responsive analytics	<ul style="list-style-type: none">• Needs clarity of expectations
<ul style="list-style-type: none">• Could be co-funded (free senior staff)	<ul style="list-style-type: none">• Expensive

Models of engagement



Transport aligned research funding	e.g. MBIE/HRC funded research
Pros	Cons
<ul style="list-style-type: none">• Existing funding	<ul style="list-style-type: none">• Reliant on others
<ul style="list-style-type: none">• No extra management	<ul style="list-style-type: none">• Transactionally high (for researchers)
	<ul style="list-style-type: none">• No clear role/rights of 'end users'

Models of engagement



New Transport funded research	e.g. MoT/NZTA funded research
Pros	Cons
<ul style="list-style-type: none">• Directed by MoT/NZTA	<ul style="list-style-type: none">• Expensive!
<ul style="list-style-type: none">• Not reliant on others	<ul style="list-style-type: none">• Research process management
	<ul style="list-style-type: none">• Transactionally high (for researchers)

Models of engagement



**Centre of Research Excellence (CoRE)
or National Science Challenge (NSC)**

e.g. MBIE funded research program

Pros

- Big picture, big projects
- Cross-disciplinary
- Multiple research groups
- Long term commitment

Cons

- Expensive (but not MoT/NZTA!)
- May become inflexible over time
- Unclear role of 'end users'
- Diluted focus (not transport driven)
- Too late for new NSC