

Turning the Tide - from Cars to Active Transport

Authors: Sandra Mandic, Andrew Jackson, John Lieswyn, Jennifer S Mindell, Enrique García Bengoechea, John C Spence, Ben Wooliscroft, Celia Wade-Brown, Kirsten Coppell, Erica Hinckson



Physical Inactivity Worldwide

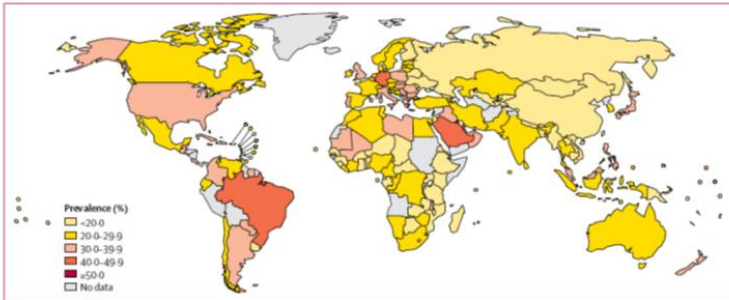


Figure 4: Country prevalence of insufficient physical activity in men in 2016

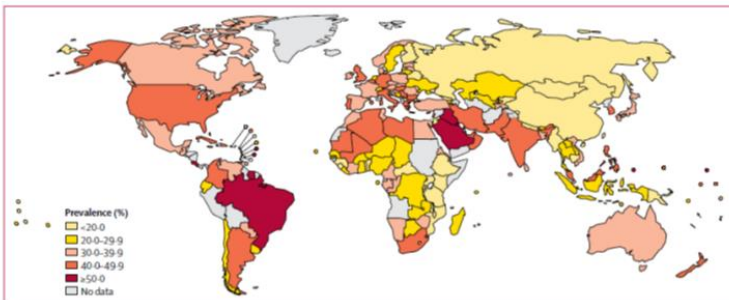
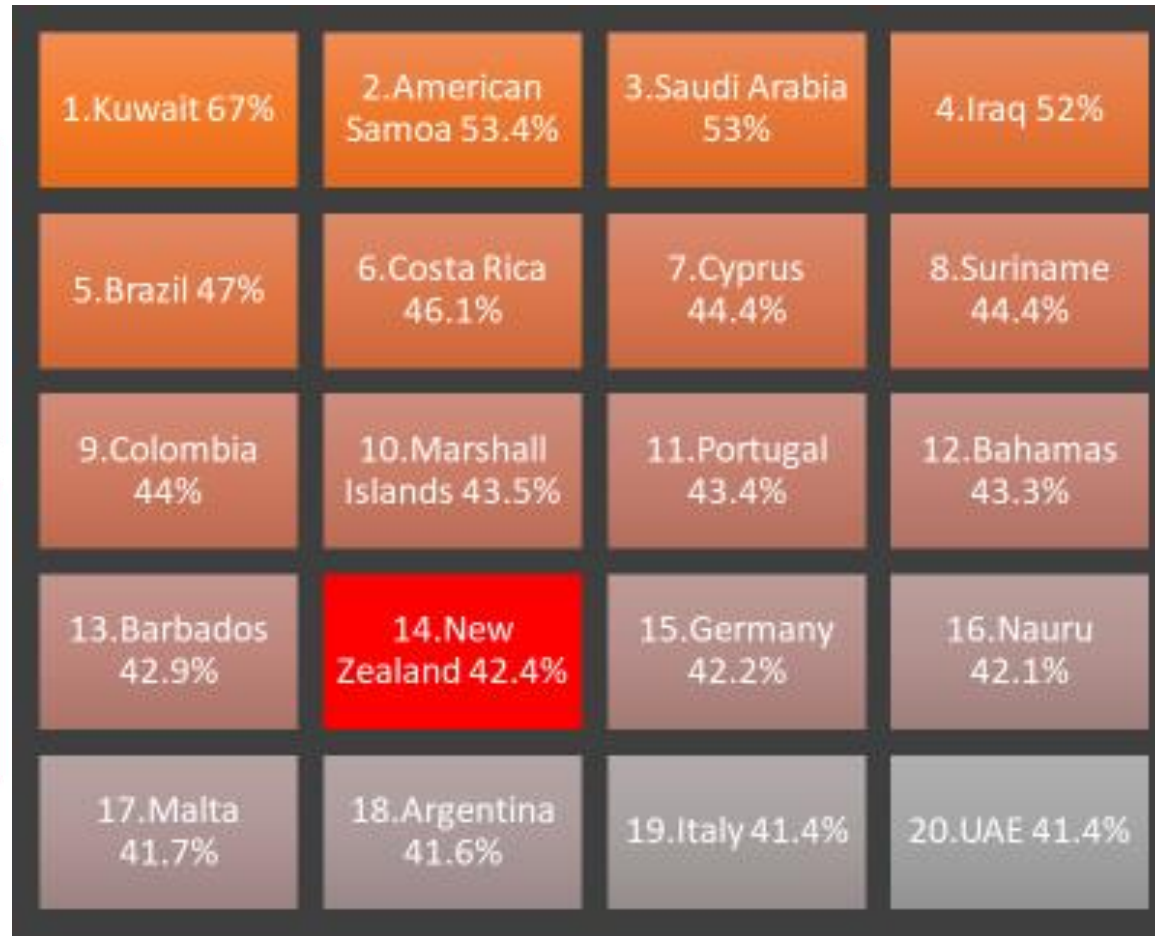


Figure 5: Country prevalence of insufficient physical activity in women in 2016



Worldwide trends in insufficient physical activity from 2001 to 2016: a pooled analysis of 358 population-based surveys with 1.9 million participants

Regina Guthold, Gretchen A Stevens, Leanne M Riley, Fiona C Bull

... New Zealand is 14th out of 168 countries...

Transport in New Zealand

AUCKLAND

Driving rate: 80%

HAMILTON

Highest driving rates **85%**



WELLINGTON¹⁶

Highest public transport rates **18%**



DUNEDIN & WELLINGTON¹⁶

Highest walking rates **9%**

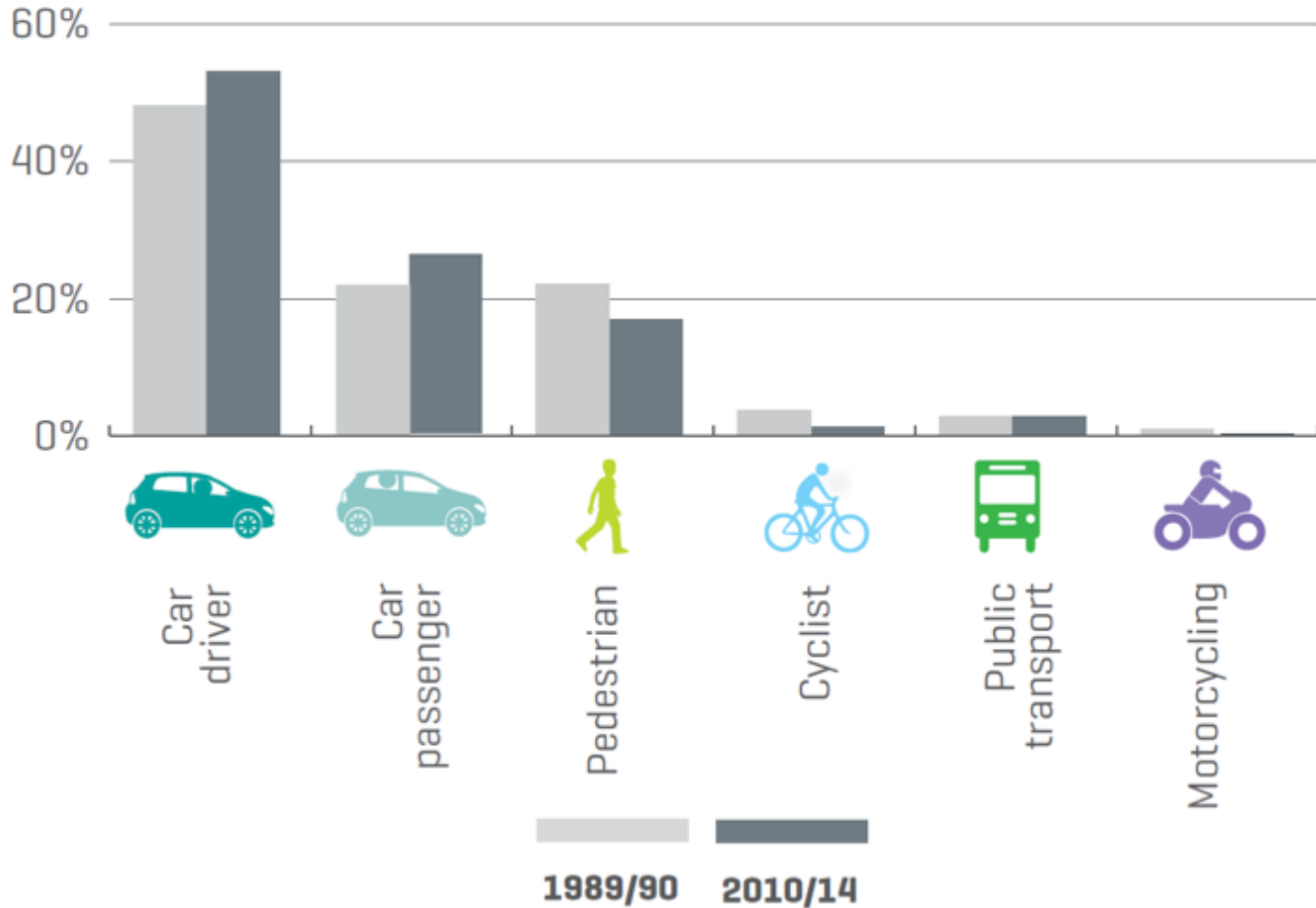


CHRISTCHURCH

Highest cycling rates **7%**



Over time, car use has grown. Use of all other modes has declined.





Economic Cost

Auckland's
congestion cost
estimates:

NZD \$0.25 to \$1.25
billion a year

Time and cost of transport

Show:

Chart

Map

Table

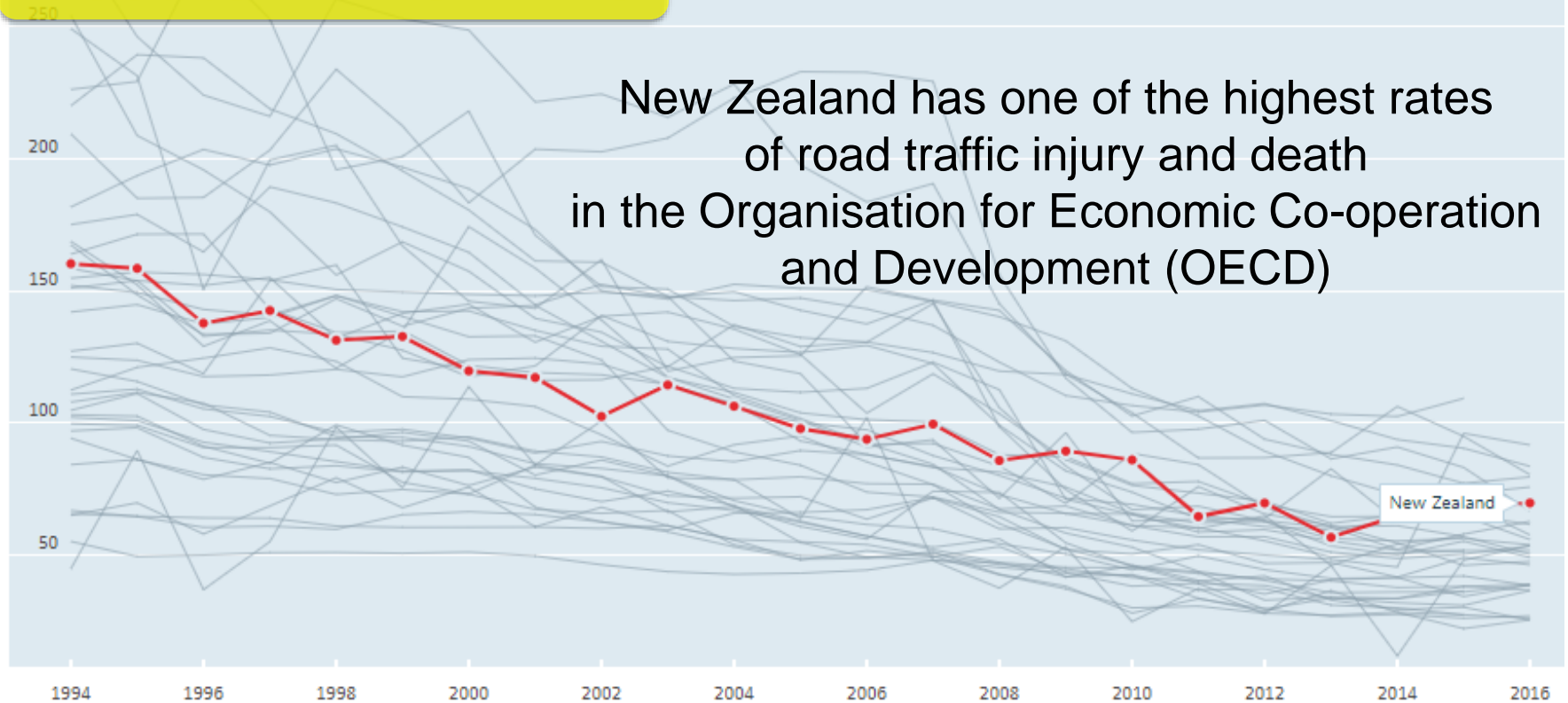
fullscreen

share

download

My pinboard

Cost to Human Life



Perspectives

Deaths

Compare variables

Per 1 000 000 inhabitants

Countries

Highlighted Countries (1)

Time

yearly

quarterly

monthly

latest data available



Cost to Natural and Built Environments

Transport contributes to 17% of New Zealand's greenhouse gas emissions (MoT, 2017)



Replace vital infrastructure lost to climate change in the next half-century

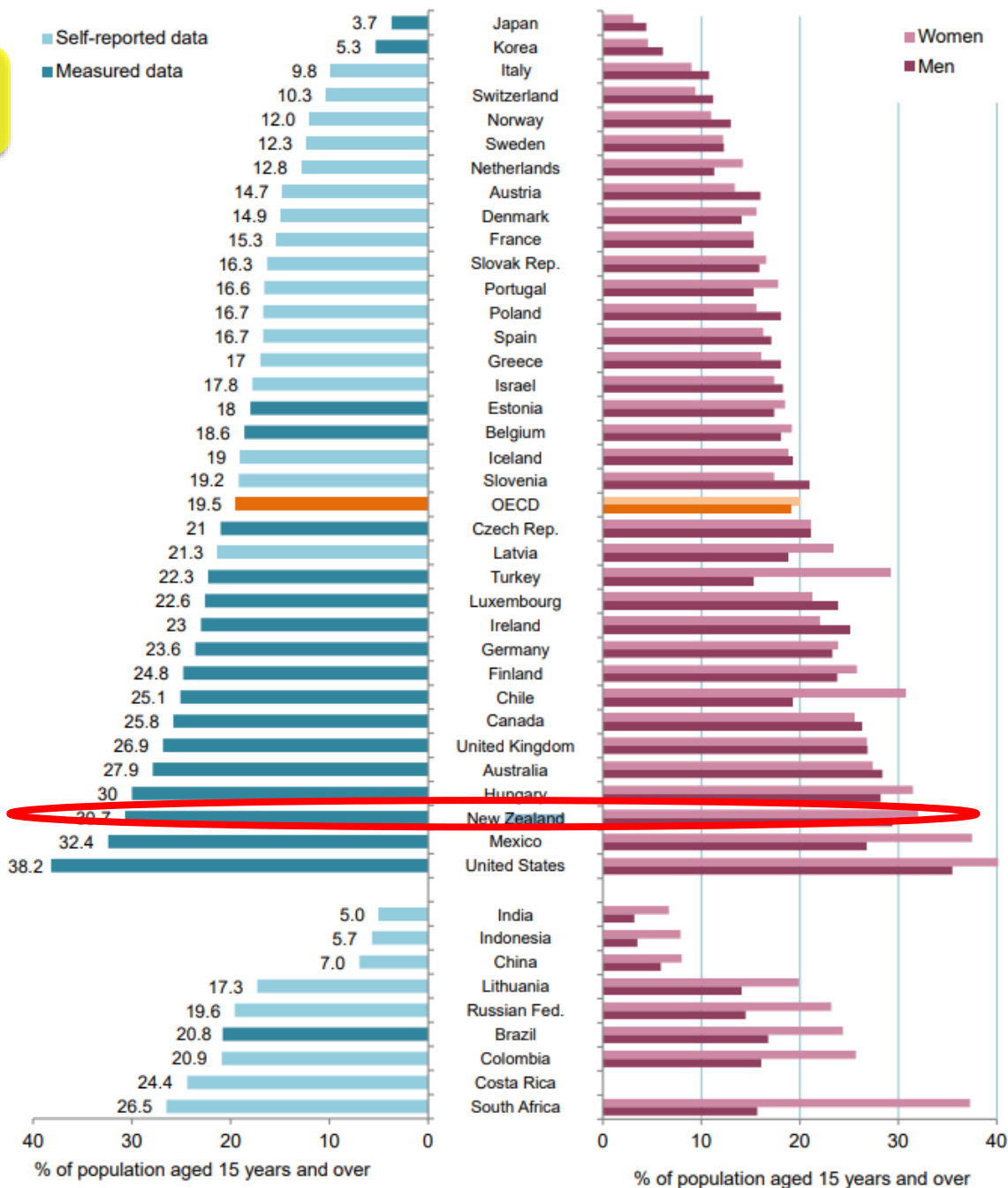
Cost of weather events

Estimated cost: NZD \$5-8 billion

Health Cost

New Zealand is the third obese country in OECD*

*OECD: Organisation for Economic Co-operation and Development



Increasing active transport → ↑ Physical activity

Benefits of Active Transport



Population
health



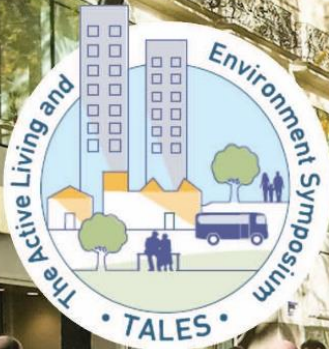
Less reliance on
motorised transport



Equitable health and
wellbeing of
individuals, families
communities and
nation as a whole

Examples around the World





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www.otago.ac.nz/active-living-2019

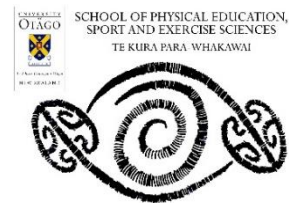


The Active Living and Environment Symposium

Linking Transport, Health and Sustainability

University of Otago | Dunedin | New Zealand | 13-15 February 2019

Transport
Research Network
(Otago)



William
Evans Fund
(Otago)





Prof Jennifer Mindell
(UCL (University
College London), UK)



Prof John Spence
(University of Alberta,
Canada)



Dr Enrique García
(University of Limerick,
Ireland)



Prof Simon
Kingham
(Ministry of
Transport)



Mr Martin
Dutton
(Ministry of
Health)



Prof Erica
Hinckson
(AUT)



A/Prof
Melody Smith
(Auckland)



A/Prof Ben
Wooliscroft
(Otago)



A/Prof
Sandra
Mandic
(Otago)



Dr Christina
Ergler
(Otago)



Mr Andrew
Jackson
(Consulting
Jackon Ltd)



Ms Celia Wade-
Brown QSO
(Living Streets
Aotearoa)



Ms Claire
Pascoe
(NZ Transport
Agency)

13 Invited speakers
24 Research and
policy/practice abstracts
Full 3-day programme



'Turning the Tide' Authors



A/Prof Sandra Mandic
(University of Otago)



Mr Andrew Jackson
(Consulting Jackson Ltd)



Mr John Lieswyn
(ViaStrada)



Prof Jennifer Mindell
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Dr Enrique García Bengoecha
(University of Limerick, Ireland)



Prof John Spence
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A/Prof Ben Wooliscroft
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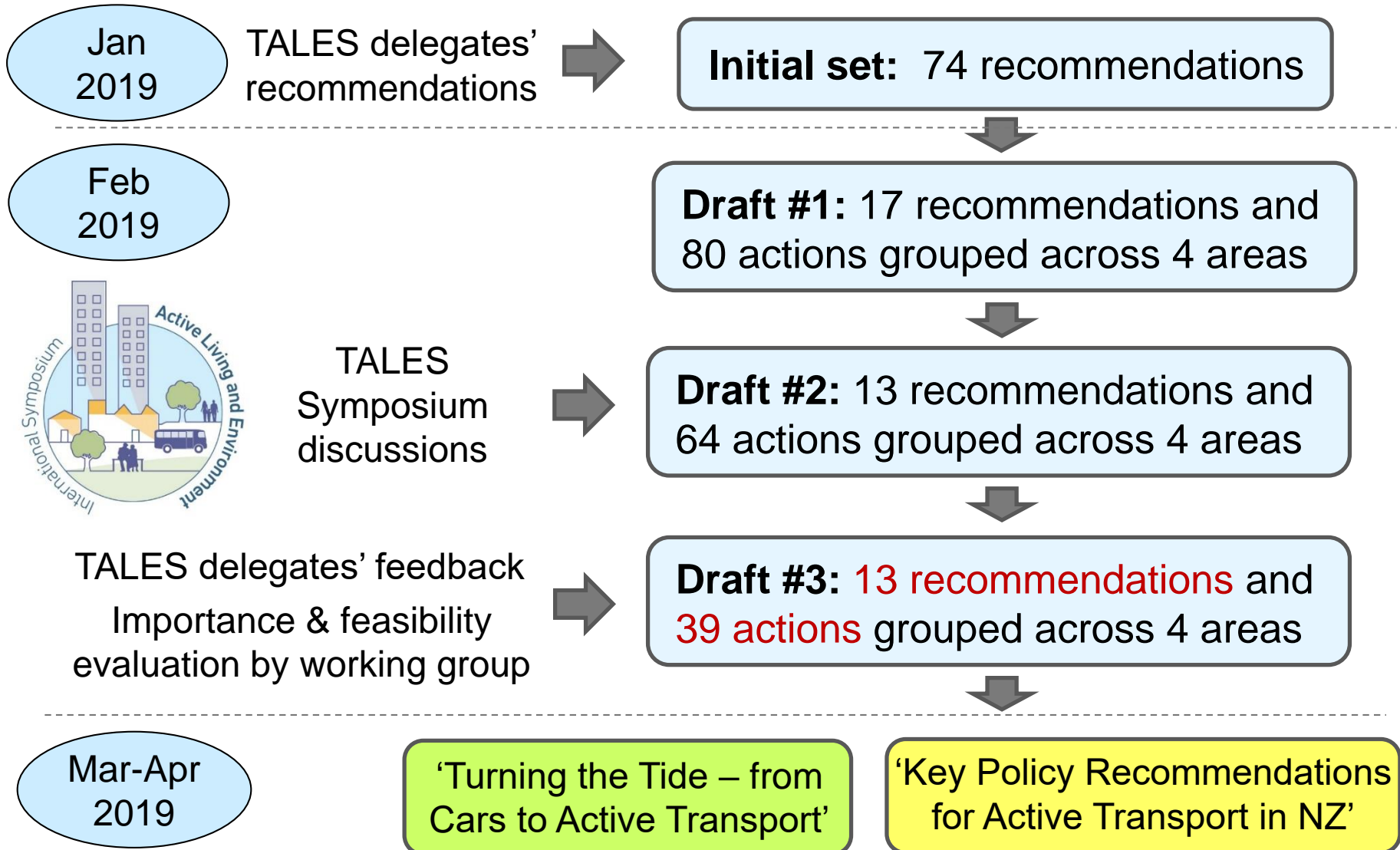


Prof Erica Hinckson
(Auckland University of Technology)

Development of Recommendations

Input

Output



“Transforming Cities into Active, Healthy and Sustainable Places”



Speaker:

Hon Julie Anne Genter,
Minister for Women,
Associate Minister of Transport
and Associate Minister of Health



Facilitator:

Prof Simon Kingham,
Ministry for Transport

Panellists:



Prof Jennifer Mindell
(UCL (University College London, UK))



Ms Celia Wade-Brown
QSO (Living Streets Aotearoa)



Mr Gareth Fairweather
(Ministry of Transport)



Mr Martin Dutton
(Ministry of Health)



Ms Sara Templeton
(Christchurch City Council)



Ms Louise Baker
(WSP Opus)



Dr Mark Smith
(Community Member)

“Transforming Cities into Active, Healthy and Sustainable Places”



Evaluation of Importance and Feasibility of Each Recommended Action

Component	Item	Response categories
Importance	Is it really important (will it make a big difference)?	5 = Strongly agree
		4 = Somewhat agree
Feasibility	Is technically feasible (achievable)?	3 = Neither agree nor disagree
	Is publicly / politically acceptable?	2 = Somewhat disagree
	Is relatively affordable?	1 = Strongly disagree
	Can be done quickly?	

Summary of Key Policy Recommendations for Active Transport in New Zealand

A Evaluation, Governance and Funding

- A1. Set and monitor shared targets for the proportion of trips by active modes and public transport
- A2. Ensure that the value of active transport is recognised in policies and investment decisions to allocate the necessary funding for this task
- A3. Continually update the information available on health and economic impacts of specific active transport interventions

B Education and Encouragement/Promotion

- B1. Promote active transport to and from schools
- B2. Promote active transport to and from workplaces
- B3. Make public transport more affordable and accessible
- B4. Improve motorist education

C Engineering (Infrastructure, Built environment)

- C1. Require and fund a universal, interconnected active transport network
- C2. Design and transform towns and cities for people to ensure positive health and environmental outcomes

D Enforcement and Regulation

- D1. Change the decision making framework/planning results (that affect transport options) to enable good health and wellbeing at a population level
- D2. Change regulations to improve road safety for active transport
- D3. Regulate for healthy transport options to and from schools
- D4. Improve and enforce regulations for better air quality

(13 recommendations and 39 suggested actions grouped across four broad categories)

1. We Need to Make a Commitment to Change

A Evaluation, Governance and Funding

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- A3. Continually update the information available on health and economic impacts of specific active transport interventions

Recommended National Targets for NZ



2019

By 2050

12%



25%

1%



15%

3%



15%



83%



45%

Turning the Tide – from Cars to Active Transport (2019)

2. Nationally Coordinated and Funded Programme of Education and Promotion of Active Transport

B

Education and Encouragement/Promotion

- B1. Promote active transport to and from schools
- B2. Promote active transport to and from workplaces
- B3. Make public transport more affordable and accessible
- B4. Improve motorist education

3. Commitment to Design Cities for People and not for Cars

C

Engineering (Infrastructure, Built environment)

- C1. Require and fund a universal, interconnected active transport network
- C2. Design and transform towns and cities for people to ensure positive health and environmental outcomes

4. Regulatory System that Encourages the Use of Active Transport

D Enforcement and Regulation

- D1. Change the decision making framework/planning rules (that affect transport options) to enable good health and wellbeing at a population level
- D2. Change regulations to improve road safety for active transport
- D3. Regulate for healthy transport options to and from schools
- D4. Improve and enforce regulations for better air quality

2019

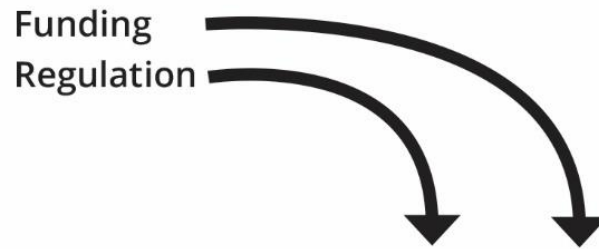
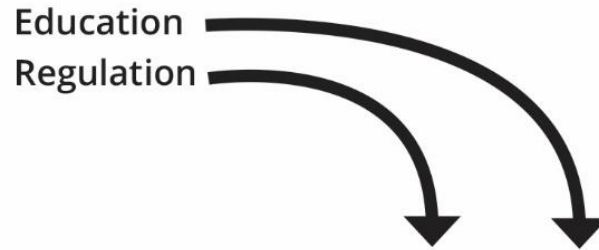
TRIPS

83% car
12% walking
1% cycling
3% public transport

OUTCOMES

50% of New Zealanders physically inactive with 30% increased chance of morbidity
14 billion tonnes of transport carbon per year
300 deaths attributable to transport related poor air quality
Rising congestion

**Turning the Tide
- from Cars to Active Transport**



2050

TRIPS - TARGET

45% car
25% walking
15% cycling
15% public transport

OUTCOMES

Fewer premature deaths each year due to more physical activity
Reduction in carbon
Reduction in deaths attributable to transport related poor air quality
Great access for all

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Authors' affiliations: *University of Otago, Dunedin; †Consulting Jackson Ltd, Wellington; ‡ViaStrada, Christchurch; †UCL (University College London), London, United Kingdom; †University of Limerick, Limerick, Ireland; †University of Alberta, Edmonton, Canada; †Living Streets Aotearoa, Wellington; †Auckland University of Technology, Auckland.

Key Policy Recommendations for Active Transport in New Zealand

We welcome this Government's increased focus on wellbeing, walking, cycling, public transport and a Vision Zero approach. It extends previous efforts to promote active transport in New Zealand, including the National Walking and Cycling Strategy (2005), a Guide for Decision Makers (2008)¹ and a Cycling Safety Panel's action plan (2014).² Despite these efforts, rates of active transport in New Zealand have continued to decline,³ with negative impacts on health and the environment.

We need to set ambitious goals and monitor progress to ensure that any changes made are connected and effective. The Key Policy Recommendations for Active Transport document is a summary of multi-sectoral discussions held at The Active Living and Environment Symposium (TALES) 2019⁴ in Dunedin, New Zealand on 13-15 February 2019. Our report is not intended to be a comprehensive and systematic review. Our goal was to establish a set of priority recommendations to guide decision-making in central and local government, public health units and regional sports trusts in New Zealand and any other organisation that may have a mandate around transport and environment. Recognising that some of our recommendations may be in progress, we urge more rapid implementation in those cases.

The document outlines key policy recommendations and associated actions grouped across four broad categories (Figure 1). The full report⁵ is available on the TALEs Symposium 2019 website.⁶

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B Education and Encouragement/Promotion

- B1. Promote active transport to and from schools.
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C Engineering (Infrastructure, Built environment)

- C1. Require and fund a universal, interconnected active transport network.
- C2. Design and transform towns and cities for people to ensure positive health and environmental outcomes.

D Enforcement and Regulation

- D1. Change the decision making framework/planning results that affect transport options to enable good health and wellbeing at a population level.
- D2. Change regulations to improve road safety for active transport.
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- D4. Improve and enforce regulations for better air quality.

Figure 1. Summary of key policy recommendations for active transport in New Zealand

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Reports are now available on the Active Living Laboratory website:
<https://www.otago.ac.nz/active-living/otago709602.html>

Dissemination of Recommendations

Discussions with stakeholders



Active Living Laboratory website:

www.otago.ac.nz/active-living/otago709602.html



TALES Symposium website:

www.otago.ac.nz/active-living-2019



In the first month...

- 9 presentations, reaching 232 stakeholders
- 20 media commentaries



Turning the Tide - from Cars to Active Transport

This cross-sector effort resulted in a document that has the potential to:

- Stimulate the development of a new active transport strategy for New Zealand,
- Prompt setting of targets and monitoring progress/outcomes, and
- Inform New Zealand's response to WHO's Global Action Plan on Physical Activity 2018-2030.



1. Commit to change
2. Nationally coordinated and funded education and promotion of active transport
3. Commit to design cities for people and not just for cars
4. Regulatory system that encourages active transport

Acknowledgments



Transport
Research
Network

William
Evans
Fund



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