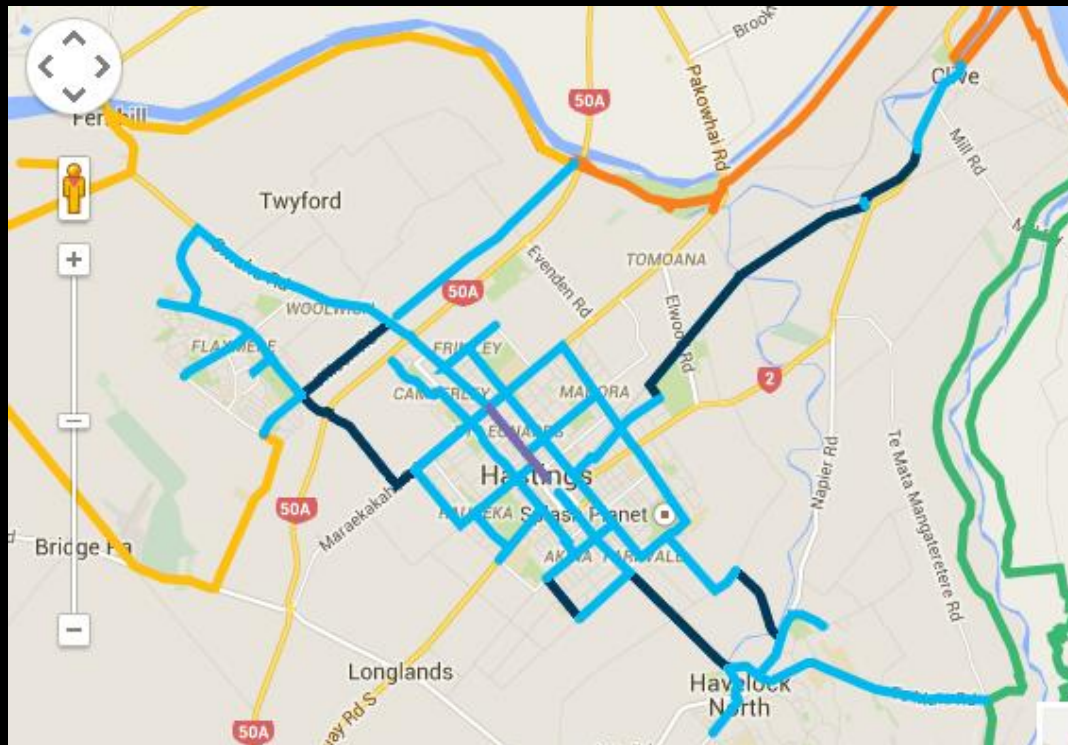


Can the cycle save the city? Learning from the ACTIVE study

Ralph Chapman (VUW and NZCSC)

NZ Centre for Sustainable Cities seminar

5 Sept 2018



<http://www.iway.org.nz/routes-maps/>

The ACTIVE strand



The ACTIVE project: **evaluated** the NZTA-funded **Model Cities Programme** – investing in infrastructure & education/promotion to increase active travel

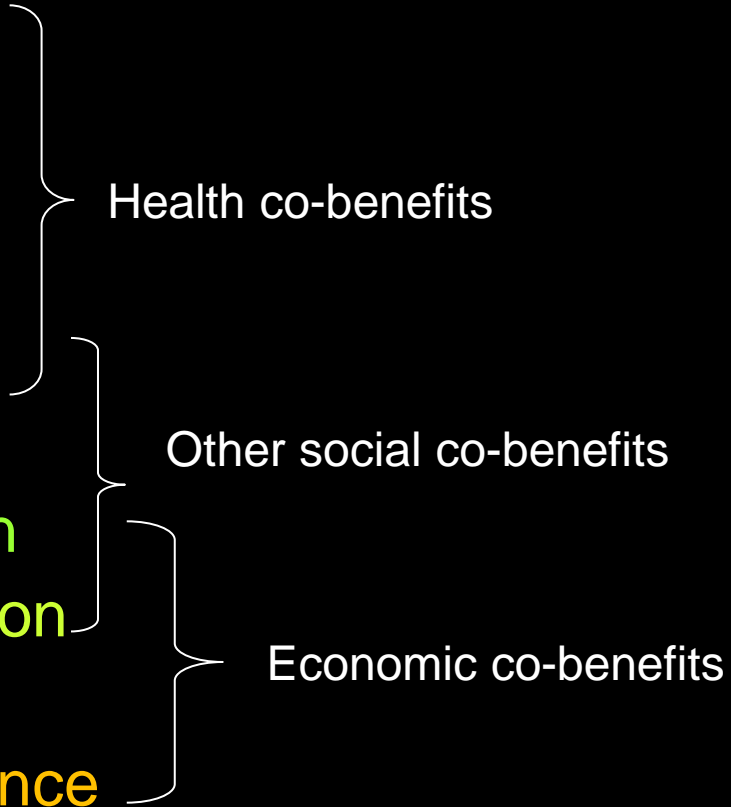
- ‘ACTIVE’ = ‘Active travel investment for vitality and equity’: a multi-part study
- Core team: Keall, Chapman, Howden-Chapman, Witten, Woodward



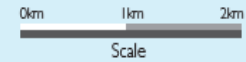
Why a particular interest in active travel?

Co-benefits go beyond CO₂ reduction

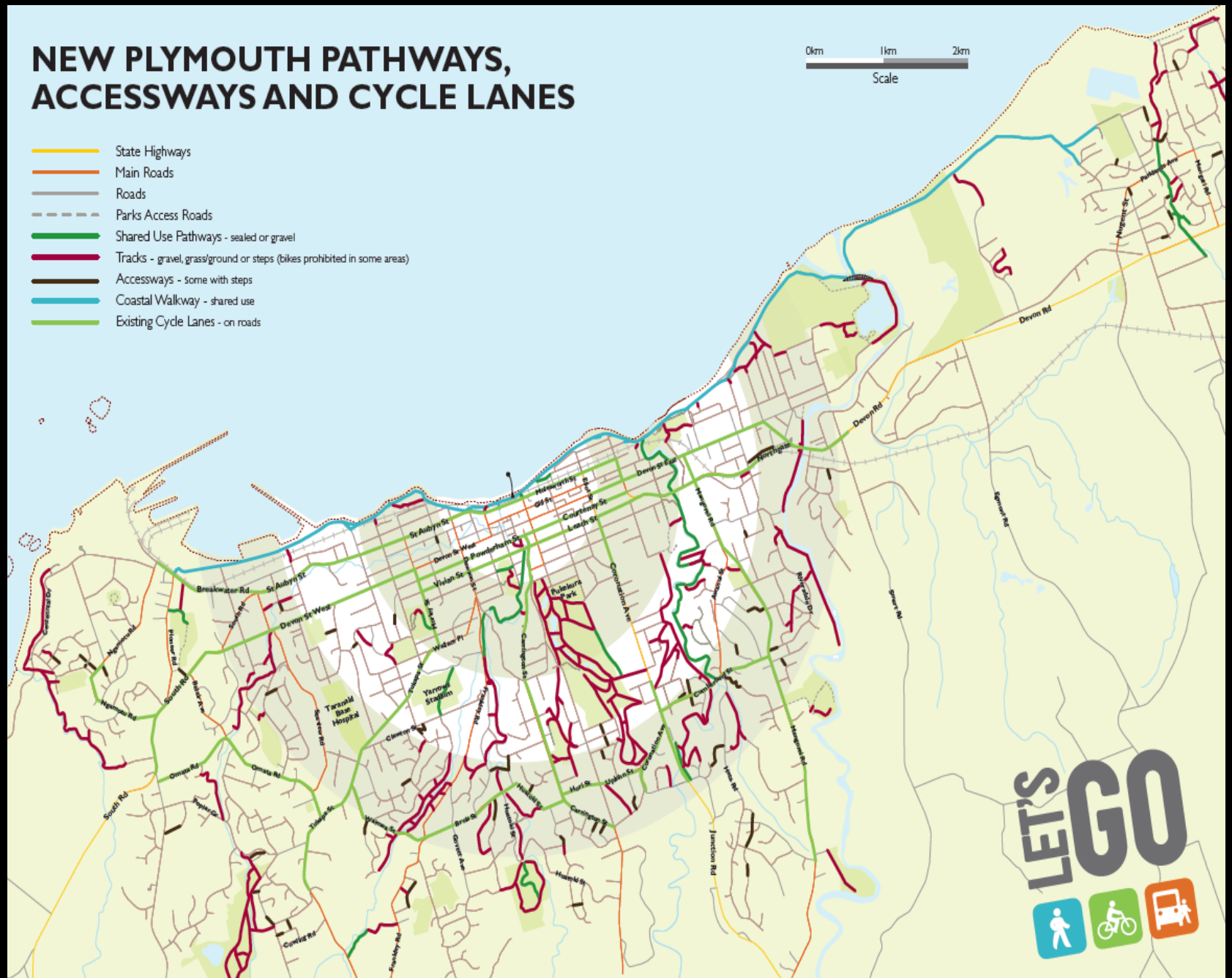
Benefits of a policy to increase cycling and walking:

- reduced chronic diseases
 - fewer accidents
 - less noise
 - improved air quality
 - reduced road severance
 - Improved access
 - reduced vehicle congestion
 - reduced energy consumption
 - increased energy security
 - increased economic resilience
- 
- Health co-benefits
- Other social co-benefits
- Economic co-benefits

NEW PLYMOUTH PATHWAYS, ACCESSWAYS AND CYCLE LANES



- State Highways
- Main Roads
- Roads
- Parks Access Roads
- Shared Use Pathways - sealed or gravel
- Tracks - gravel, grass/ground or steps (bikes prohibited in some areas)
- Accessways - some with steps
- Coastal Walkway - shared use
- Existing Cycle Lanes - on roads



Infrastructure and promotion



www.iway.org.nz

Hastings off-road
cycleway

New Plymouth
schools promotion

**RIDE SCOOT
WALK & BUS
WITH US**

LET'S GO
WALK RIDE BUS

CHECK OUR ROUTES TO SCHOOL AND BE IN TO

WIN!

Parent signed
(once trip complete): _____

www.lets-go.org.nz

www.lets-go.org.nz

ACTIVE project outputs

(all team efforts;
lead as below)

- Methods
 - Ralph
- Main results
 - Michael
- Urban interventions
 - Philippa
- Cost-benefit analysis
 - Ralph
- Carbon benefits estimation
- Behaviour of the sedentary
 - Michael

STUDY PROTOCOL

Open Access

Increasing active travel: aims, methods and baseline measures of a quasi-experimental study

Ralph Chapman^{1*}, Philippa Howden-Chapman², Michael Keall², Karen Witten³, Wokje Abrahamse¹,
Alistair Woodward³

JECH Online First, published on June 1, 2015 as 10.1136/jech-2015-205466

Research report

Increasing active travel: results of a quasi-experimental study of an intervention to encourage walking and cycling

Michael Keall,¹ Ralph Chapman,² Philippa Howden-Chapman,¹ Karen Witten,³ Wokje Abrahamse,⁴ Alistair Woodward³

Urban Design and Planning
Volume 168 Issue DP4

Urban interventions: understanding health co-benefits
Howden-Chapman, Keall, Conlon and Chapman

ice | proceedings

Proceedings of the Institution of Civil Engineers
Urban Design and Planning 168 August 2015 Issue DP4
Pages 196–203 <http://dx.doi.org/10.1680/udap.14.00049>


Paper 1400049
Received 02/10/2014 Accepted 19/03/2015
Published online 06/05/2015
Keywords: public health/public policy/transport planning

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Institution of Civil Engineers

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Urban interventions:

U  International Journal of
Environmental Research
and Public Health



Article

A Cost Benefit Analysis of an Active Travel Intervention with Health and Carbon Emission Reduction Benefits

Ralph Chapman^{1,2,*}, Michael Keall^{2,3}, Philippa Howden-Chapman^{2,3}, Mark Grams¹, Karen Witten^{2,4}, Edward Randal^{2,3} and Alistair Woodward^{2,5}

- 1 Environmental Studies Programme, School of Geography, Environment and Earth Sciences, Victoria University of Wellington, Wellington 6140, New Zealand; mawkie@gmail.com
 - 2 NZ Centre for Sustainable Cities, Wellington 6242, New Zealand; Michael.keall@otago.ac.nz (M.K.); philippa.howden-chapman@otago.ac.nz (P.H.-C.); karen.witten@massey.ac.nz (K.W.); edward.randal@otago.ac.nz (E.R.); a.woodward@auckland.ac.nz (A.W.)
 - 3 Department of Public Health, University of Otago, Wellington 6242, New Zealand
 - 4 Massey University, SHORE and Whariki Research Centre, Auckland 1141, New Zealand
 - 5 School of Population Health, University of Auckland, Auckland 1142, New Zealand
- * Correspondence: ralph.chapman@vuw.ac.nz; Tel: +64-21-725-742

Received: 30 March 2018; Accepted: 6 May 2018; Published: 11 May 2018



Abstract: Active travel (walking and cycling) is beneficial for people's health and has many co-benefits, such as reducing motor vehicle congestion and pollution in urban areas. There have

Looking back, reflecting

- Intervention increased **active trip rates** by **~ 30%** relative to control areas
- **Benefit / cost ratio** found to be roughly **around 10:1**
- **Health** benefits of active travel **dominate** in a CBA
- Even if **carbon** emissions reductions are valued more realistically, **carbon reduction benefits** are a lot **smaller** than health savings
- **Other** co-benefits remain **hard to value** – e.g. congestion reduction, or amenity. But they too are likely to be **much smaller than health** savings



Ride On mag

Looking forward:

Research evidence & the policy environment (1)

- Research should be **robust**, to gauge real benefits & costs
- Policy makers need **assurance investments are worthwhile**
- Critical that co-benefits are included **in estimating social returns**
- Govt Policy Statement (2018) has broader co-benefit framework: adds **health, access & environmental impacts** to economic & safety

Looking forward:

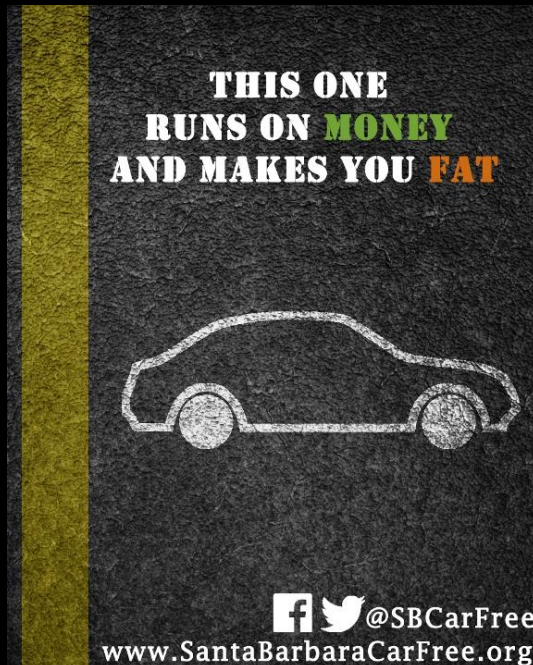
Research evidence and policy (2)



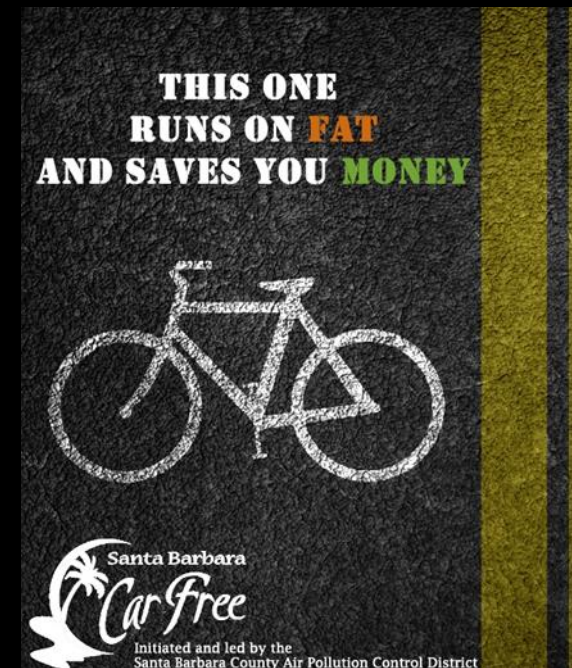
- GPS is **exemplar** of informed thinking about sustainability and well-being, translated into a policy framework
- But **if** we're to stabilise climate, then **carbon emission reduction has to be the top priority** for transport interventions
- Investments to **support cycling can play a part** in transforming the city, and cutting emissions

Summing up

- ACTIVE gives better understanding of wider benefits of increased cycling in the city
- But we need **much more active travel investment** and policy to **'save'** the city (esp. from climate change)



So: take every opportunity to **increase active travel** and **make our cities more sustainable**



Thanks

Any questions or comments?

