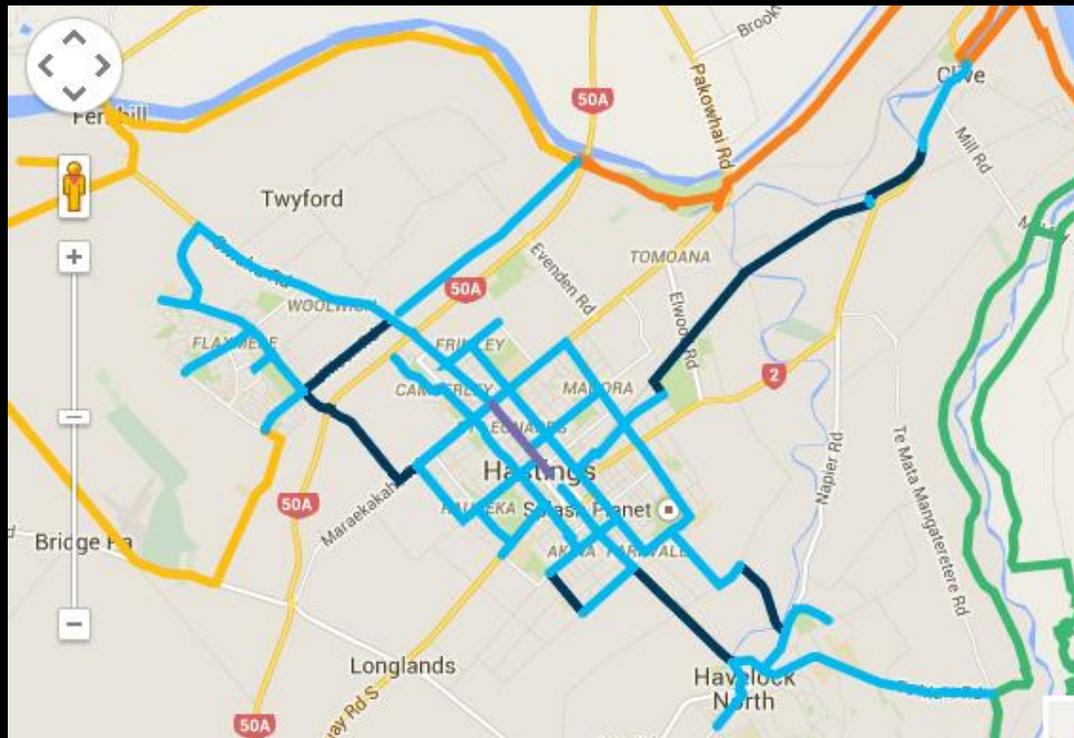


Can the cycle save the city? Learning from the ACTIVE study

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
-
- The diagram uses three large curly braces on the right side to group the list items into three categories:
- Health co-benefits:** This category includes the first three items: "reduced chronic diseases", "fewer accidents", and "less noise".
 - Other social co-benefits:** This category includes the next three items: "improved air quality", "reduced road severance", and "Improved access".
 - Economic co-benefits:** This category includes the final four items: "reduced vehicle congestion", "reduced energy consumption", "increased energy security", and "increased economic resilience".

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.LETSGO.ORG.NZ

www.letsgo.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

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Urban interventions:

U  International Journal of
Environmental Research
and Public Health

MDPI

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 Grams ¹, Karen Witten ^{2,4}, Edward Randal ^{2,3} and Alistair Woodward ^{2,5}

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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:

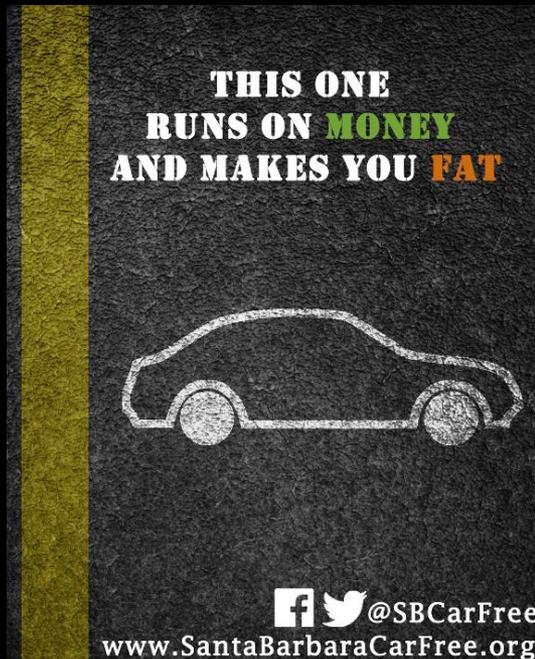
Research evidence and policy (2)



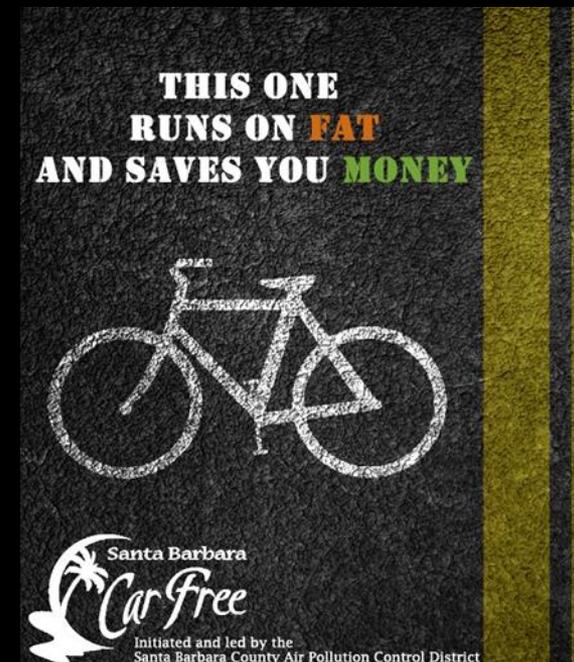
- GPS is **exemplar** of informed thinking about sustainability and well-being, translated into a policy framework
- But **if** we're to stabilise climate, then **carbon emission reduction has to be the top priority** for transport interventions
- Investments to **support cycling can play a part** in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

