

Moving forward on transport and health: knowledge transfer and action

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Collaboration: A challenge

- *“It is only if public health practitioners can influence or deploy the resources of those in other sectors that truly effective activities can be developed (Steensberg, 1997)”*
- *“Sectors are often characterised by specialist discourses of knowledge and expertise in seeking their legitimation and maintenance” (Dageling, 1995)”*

PHOF – Direct links to transport



Active Travel: The Miracle Cure and Preventive Medicine?

‘The potential benefits of physical activity to health are huge. If a medication existed which had a similar effect, it would be regarded as a “wonder drug” or “miracle cure”.’

*Sir Liam Donaldson – Former Chief Medical Officer
(Annual Report of the Chief Medical Officer 2009,
Department of Health, March 2010)*

Benefits and risks: modeling

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Transport Policy

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Benefits of shift from car to active transport

Ari Rabl^{a,*}, Audrey de Nazelle^b

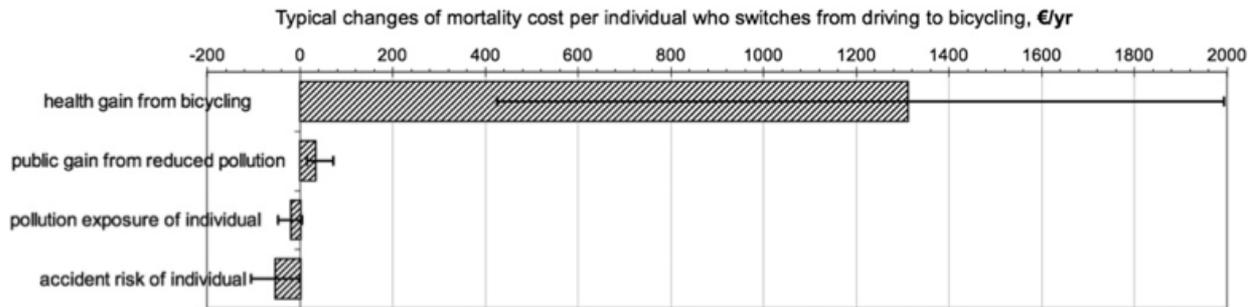


Fig. 2. Results for mortality costs and benefits per individual who switches from car to bicycle for commuting to work (2*5 km roundtrip, 5*46 weeks/yr) in large cities of EU. Error bars indicate confidence intervals.

- Physical activity ‘by far’ the most important
- “Concern about pollution exposure...is unfounded when compared to the benefits of the cycling activity”
- Only includes mortality so total benefits likely to be much higher

Saving the NHS money by keeping more people free of disease and illness

	Yearly National Health Service programme budget expenditure	Expenditure averted by active travel (%)
2012	£107 000 000 000	£15 073 571 (0.01)
2014	£113 516 300 000	£213 350 782 (0.19)
2016	£120 429 442 670	£397 426 586 (0.33)
2018	£127 763 595 729	£581 500 380 (0.45)
2020	£135 544 398 708	£765 574 174 (0.56)
2022	£143 799 052 590	£949 647 968 (0.66)
2024	£152 556 706 482	£1 133 721 762 (0.74)
2026	£161 313 360 374	£1 317 795 556 (0.82)
2028	£171 703 588 984	£1 501 869 350 (0.87)
2030	£182 160 337 553	£1 685 943 144 (0.93)

£17B efficiency saving through increased active travel in UK urban areas

*Model assumes a 3% yearly increase in expenditure.

Table 5: Projected National Health Service expenditure and potential expenditure averted from walking and cycling*

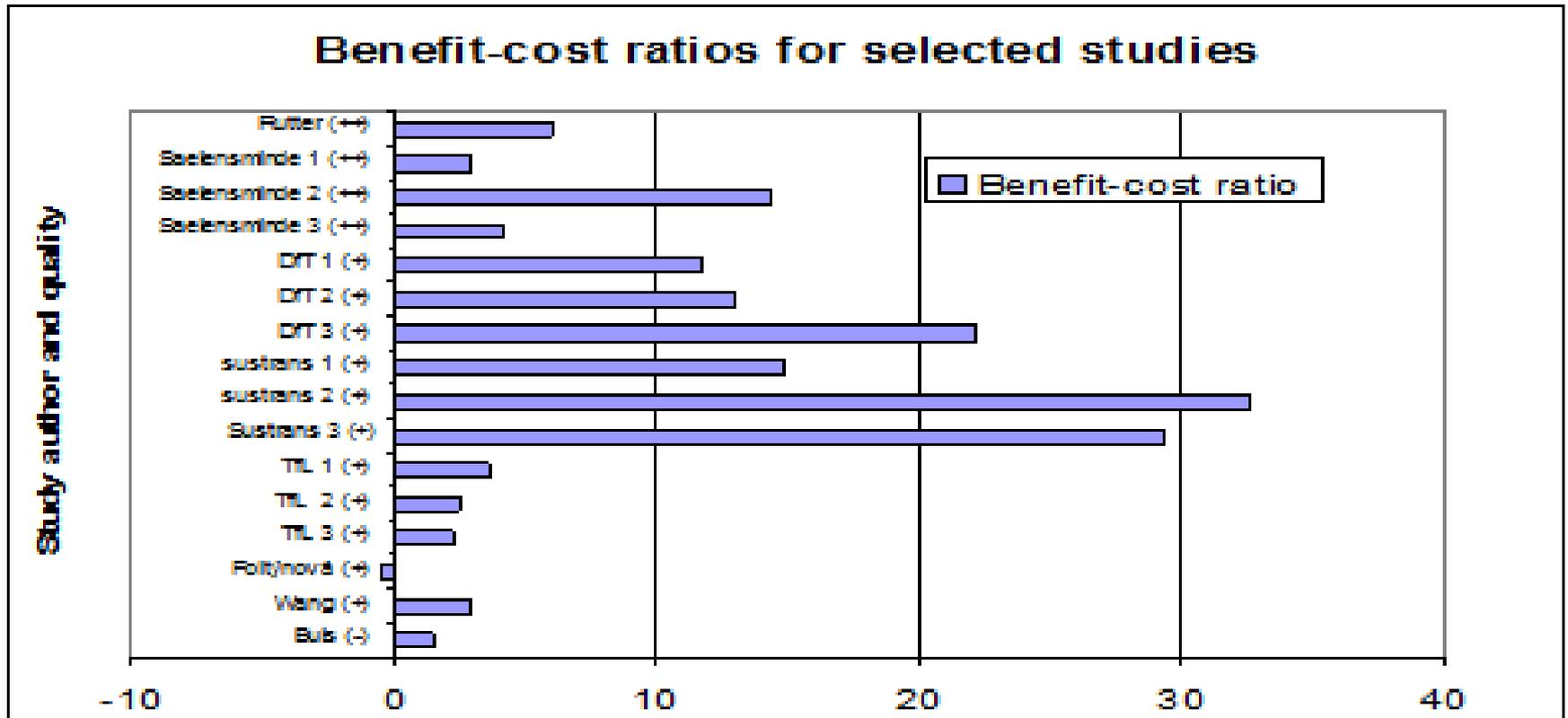
Dept. Transport's WebTAG: categories of value for money

Table 3 Value for money

BCR	Value for money
Less than 1	Very Low
Between 1 and 1.5	Low
Between 1.5 and 2	Medium
Over 2	High
Over 4	Very High

Most walking and cycling schemes score over 4:1

Systematic review: BCRs from various interventions (Cavill et al 2009)



Economics: value for money summary

- Evidence of high value of BCRs should also be considered alongside speed of delivery cycling interventions which for infrastructure projects are usually within 2 years compared to 8-12 for major schemes.
- Implementation can clearly be quicker for behaviour change schemes.
- Small scale schemes often get contracted to local-based companies.

Examples from 5 years of
embedding health into Bristol City
Council's transport department

What could we do better?

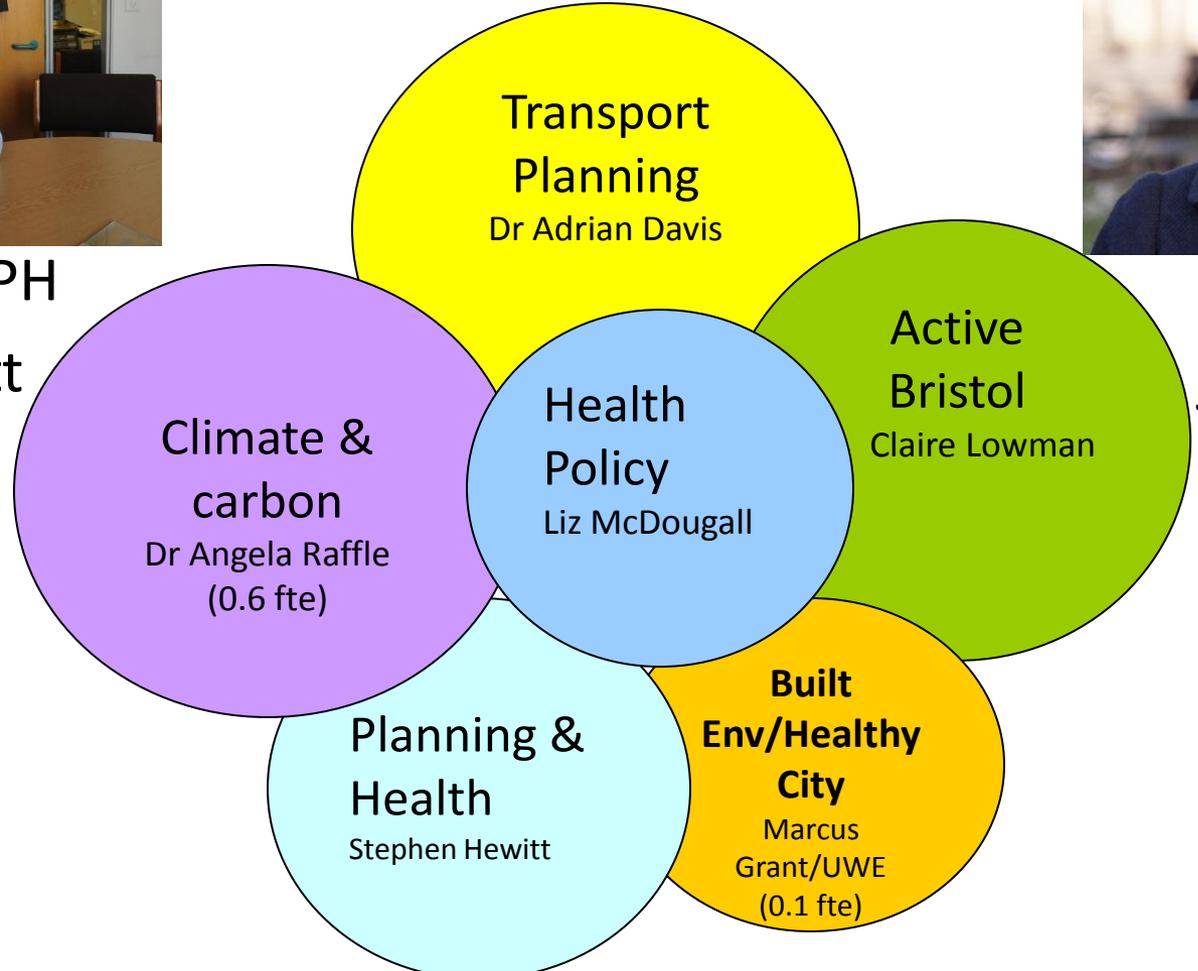
Embed and integrate with transport planning



Ex Bristol DPH
Hugh Annett



Bristol DPH
Janet Maxwell



**Bristol
City
Council**





3. [Evidence hierarchy](#)
4. [Cycling and all cause mortality](#)
5. [Impact of highway traffic capacity reductions](#)
6. [Walking to health](#)
7. [Weight gain and car use](#)
8. [Physical activity - the best buy in public health](#)
9. [Bus use and deregulation](#)
10. [Cycle commuting](#)
11. [Walkable communities](#)
12. [Life change events and physical activity participation](#)
13. [Cycling reduces absenteeism at the workplace](#)
14. [A healthy school journey](#)
15. [Vision Zero](#)
16. [Objective monitoring, children's travel and physical fitness](#)
17. [Using pedometers to increase physical activity and improve health](#)
18. [The role of habit in travel behaviour](#)
19. [Unintended health impacts of road transport policies and interventions](#)
20. [Health Impact Assessment \(HIA\)](#)
21. [Obtaining a driving licence and interventions to influence the decision](#)
22. [Inverse Care Law](#)
23. [Mass Community Cycling Events](#)
24. [Economic Benefits of Cycling](#)
25. [Cycling Safety - Lessons from The Netherlands, Denmark and Germany](#)
26. [Effect of crime and neighbourhood on physical activity](#)
27. [Air Pollution](#)
28. [Public transport and physical activity](#)
29. [Illness arising from road transport](#)
30. [Cost benefit analysis of walking and cycle track networks](#)
31. [Walk in to Work Out](#)
32. [NICE Guidance](#)
33. [Assessment of the Active for Life Campaign](#)
34. [Evidence led policy or the art of the possible?](#)
35. [Urban Environment](#)
36. [Children's independent mobility](#)
37. [Impact of retirement on physical activity](#)
38. [Women and commuter cycling](#)
39. [Social Patterning](#)
40. [Effect of driving cessation on the elderly](#)
41. [The importance of "walkable" green spaces.](#)
42. [A convenient truth: Climate change mitigation from transport is good for health](#)
43. [Child physical activity and effect on body weight](#)
44. [Electrically assisted Cycling](#)
45. [Effective interventions to increase cycle use](#)
46. [Use of non-motorised modes and life stages](#)
47. [Stairs instead of escalators](#)
48. [Attitude-based targeting of mobility types for mode shift](#)
49. [Food deserts](#)



Health economic assessment tools (HEAT) for walking and for cycling



Safe Systems Approach

- Consideration to be given to road safety benefits that can result from:
 - Reducing motor vehicle traffic
 - Encouraging greater use of safer modes of travel such as public transport , walking and cycling
 - Minimising exposure to high-risk scenarios
 - Designing the road for injury prevention
 - Incorporating safety features into road design from the outset
 - Developing and enhancing safer routes for vulnerable road users
 - Managing speeds to prevent conflicts
 - Securing compliance with key road safety rules etc...

Being *there*

- Windows of opportunity - to get health impacts included
- Being a source of EVIDENCE (eg Joint Local Transport Plan³ and Cycling City/City Cycling bids)
- Building trust
- Changing departmental thinking about health
- Cost effective

Lessons learnt

- Leadership from Tier 1 is vital
- Embedded post enables dialogue with all staff.
Regular Tiers 2 & 3 briefings essential
- Public health USPs - leverage in support of transport case for low carbon economy
- Evidence Evidence, Listening Advocacy

How do we measure success?

- Process 'victories'
- Dept. Transport and other funding wins
- Traffic Surveys: mode share improvements
- Casualties down, active travel up (SiN)
- Tracker surveys of attitudes and reported behaviour
- Alert to emerging trends eg peak car and digital natives (young people choosing car free lifestyles)

Thank you

