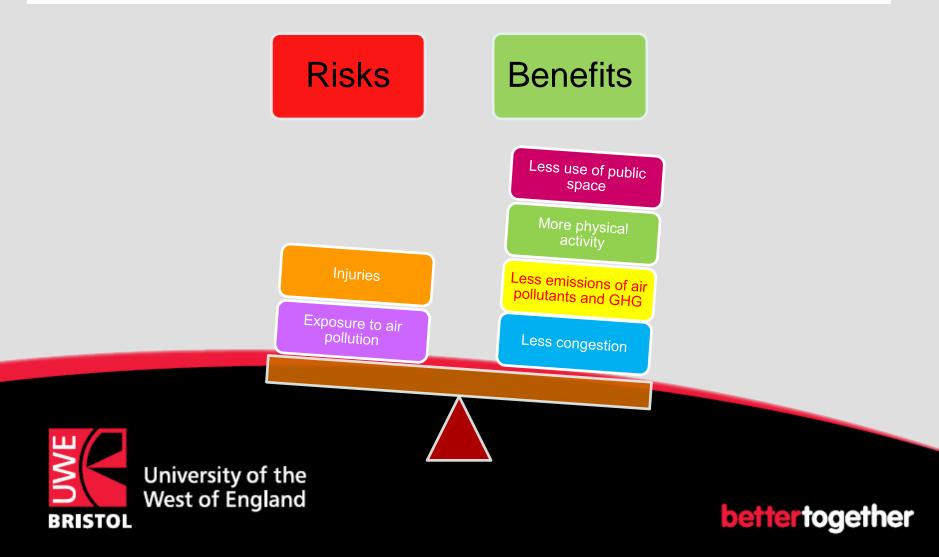
# Bridging the gap between research and practice

Adrian Davis BA, PhD FFPH Public Health & Transport Consultant Visiting Professor, University of the West of England





# A rapidly developing evidence-base





### 'Grand Father' of Public Health Epidemiology: Jerry Morris

Epidemiology is the study of how often diseases occur in different groups of people and why. Morris studied 31,000 bus drivers and conductors

- conductors climbed 500-700 steps per shift
- drivers sat for 90% of their shift
- Found less coronary artery disease (CAD) in conductors

Studied 110,000 postal workers

- Demonstrated that postmen who cycled or walked to deliver mail had fewer CAD events than colleagues with less active jobs



1910-2009







# Regular cycling or walking reduces all-cause mortality by ca. 10 %

Kelly et al. International Journal of Behavioral Nutrition and Physical Activity 2014, 11:132 http://www.ijbnpa.org/content/11/1/132



International Journal of Behavioral Nutrition and Physical Activity

### RESEARCH

### **Open Access**

Systematic review and meta-analysis of reduction in all-cause mortality from walking and cycling and shape of dose response relationship

Paul Kelly<sup>1,2\*</sup>, Sonja Kahlmeier<sup>3</sup>, Thomas Götschi<sup>3</sup>, Nicola Orsini<sup>4</sup>, Justin Richards<sup>5</sup>, Nia Roberts<sup>6</sup>, Peter Scarborough<sup>1</sup> and Charlie Foster<sup>1</sup>

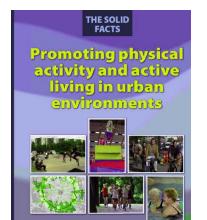
### http://www.biomedcentral.com/content/pdf/s12966-014-0132-x.pdf

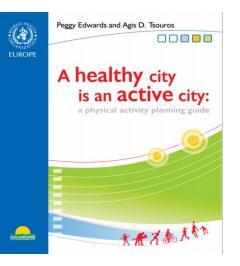
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	☆ Health topics Data Media	centre Publications Countries	Programmes	Governance	About WHO		Search		
		Noncommunicable d	iseases an	d their risk	factors				
	Noncommunicable diseases	Governance: Develo plan to promote physical	•	-	action	<b>0</b>	f ¥ ₀. +		
	Prevention	Assignment given to WHO by the Executive Board							
Management		Further to the decision of the 140th session of the Executive Board to request the				Wahinara	Webinars for online		
	Surveillance	<ul> <li>WHO Director-General to develop a draft global action plan to promote physical activity, the WHO Secretariat is hosting an open web-based consultation on a first draft from 1 August 2017 to 22 September 2017. Member States, UN organizations and non-State actors are invited to submit their comments by email to gappa@who.int. All contributions received will be published on this website.</li> <li>Related links         <ul> <li></li></ul></li></ul>				consultatio	consultation on the		
	Global Coordination Mechanism					action plan	development of the global action plan on physical activity		
	UN Task Force						- First webinar		
	<ul> <li>Governance and policies</li> </ul>					15 Augus	t 2017		
	National NCD plans						<ul> <li>Second webinar</li> <li>6 September 2017</li> </ul>		
	Publications and tools	- Overview of the progress to dev	velop a global actio	on plan					
	Noncommunicable diseases and th		General Assembl	y and WHO Gov Help and Service		S WHO Regiona	al Officas		

- 0 X

# And yet we have guidance and tools but...









Health as the Pulse of the New Urban Agenda United Nations Conference on Housing and Sustainable Urban Development Outo - October 2016



2000

2006

OF LOCAL GOVERNMENTS

2008

2016

Translational research: Translating findings and evidence

"It has been acknowledged that a large gulf remains between what we know and what we practice. Hence a task, if not the main task, is to improve knowledge transfer."

International Public Health Symposium on Environment and Health Research. WHO 2008 *Science for Policy, Policy for Science: Bridging the Gap*, Madrid, Spain, 20–22 October 2008 Report, Copenhagen: WHO Regional Office for Europe

# Evidence in local government

"The successes of the evidence-based healthcare movement have been much trumpeted...Strikingly, local government work on the determinants of health appears to be one arena in which this paradigm was largely absent."

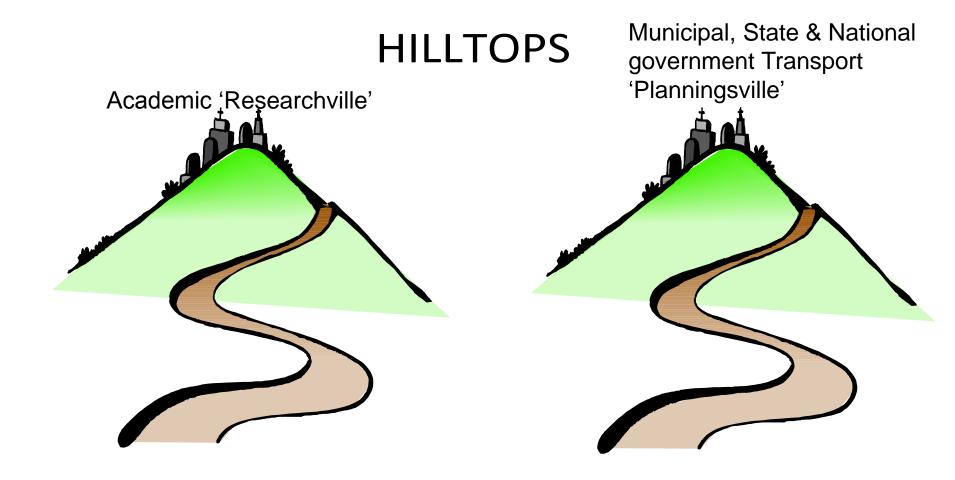
Phillips, G., Green, J 2015 Working for the public health: politics, localism and epistemologies of practice, *Sociology of Health & Illness*, 37(4).

# **Collaboration: A challenge**

### "Sectors are often characterised by specialist discourses of knowledge and expertise in seeking their legitimation and maintenance"

Dageling, P. 1995 The significance of 'sectors' in calls for urban public health intersectoralism: An Australian perspective, *Policy and Politics*, 289-301.

### The two may meet but only occasionally...

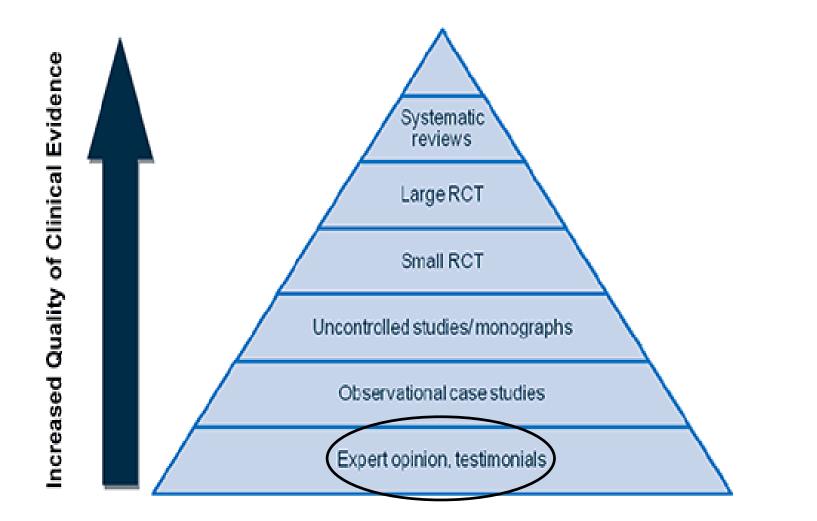


### Meanings of evidence

"Concepts of evidence vary among professionals, disciplinary and social groups: for example, scientists have traditionally adopted different standards of evidence to lawyers."

Rychetnik, L., Wise, M. 2004 Advocating evidence-based health promotion: reflections and a way forward, *Health Promotion International*, 19(2): 247-257.

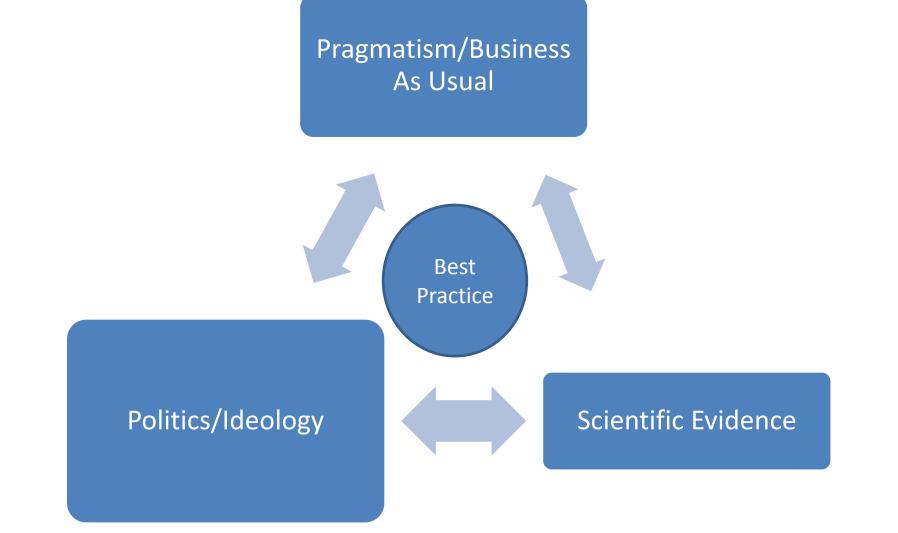
# PH/medical evidence hierarchy





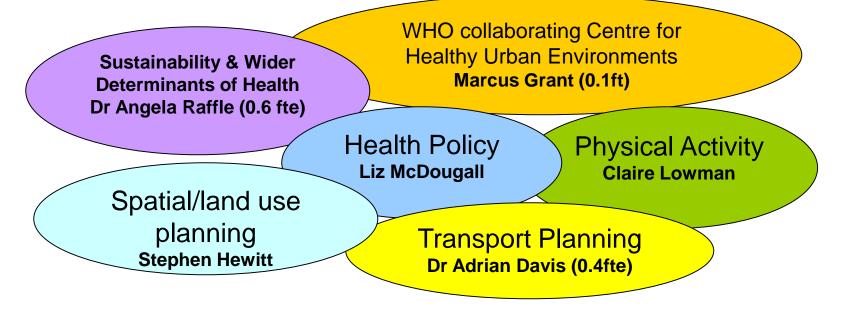
(adapted from Davies 2005 with acknowledged from developments by Hunter, D. 2017, Health in All Policies: Making it Work in Practice - Winter School, Durham University)

### The bounded reality triad of government



Bristol 2008-16: Some successes

# Embedding health specialists: Healthy Urban Team



Highly skilled cross-sectoral and multi-disciplinary Healthy Urban Team



# Healthy Urban Team (HUT)



Work Programme 2010/11 for Bristol City Council's 'Healthy Urban Team'

> Bristol Public Health July 2010



### What is the Healthy Urban Team?

The Healthy Urban Team is a small team of public health professionals who:

- work alongside council, community and voluntary sector and other partner organisations to help make the city a healthier place to live. The team provides:
- health and technical expertise on the health implications of policy
- and project proposals,
- practical solutions for how to embed health into future strategies and developments
- the evidence base for what works





Memorandum of Understanding

This Memorandum of Understanding is between the local authorities of Bath & North East Somerset, Bristol City, North Somerset and South Gloucestershire who together make up the West of England Partnership and the Health Sector for the Partnership Area through the Directors of Public Health for the area.

The purpose of the Memorandum of Understanding is to promote effective co-ordination and cooperation between the organisations in relation to transport and health.

The key principles are of openness, explanation and discussion together with shared responsibility and ownership of problems and solutions.

#### It is not legally binding.

The Health Sector in the West of England Partnership area is currently made up of:

The Four Primary Care Trusts of INHS Bath and North East Somerset, NHS Bristol, NHS North Somerset, NHS South Gloucestershire

 A large number of Service Providers, which are commissioned by the PCTs to deliver NHS services for local residents. These include major Hospital Trusts, providers of community services, General Practices, dentists, opticians, and pharmacies.

We take health to mean not just the needs of individuals with specific linesses and conditions, but also the promotion and protection of good health and the reduction of health inequalities, new and in the truture.

This is a core duty of the Primary Care Trusts and of subsequent bodies that may result from the 2010 Health White Paper.

#### It is here by agreed that:

### Support

Strategy

The Memorandum of Understanding partners will collaborate to promote and protect good health through delivery of the goals and ambitions set out in key Government policy documents and Local Development Frameworks.

The Health Sector will be key partners in the production of the four West of England authorities Joint Local Transport Plan 3 and will provide input, expertise and feedback in order to maximise health gains and minimise the acute and chronic disease burden.

The Memorandum of Understanding partners align, where practicable a programme and phasing of schemes for 2011 to 2026 for inclusion in the Delivery Plan of the Joint Local Transport Plan 3 and review programmes for each 3 year implementation phase.

#### Transport and Health Forum

To promote effective joint collaboration a transport and health forum will be established to seek to ensure that the transport system for the sub-region new and in the future is designed in such a way that it enhances health, wellbeing and prosperity for all residents, and contributes to reducing health inequalities.

It will achieve this by;

- Bringing together relevant expertise and representation from Transport and Health sectors.
- Building strong and constructive working relationships between the Health Sector and the Transport sector.
- Using best available evidence to inform planning and decision making.
- Using the principles of 'Health Impact Assessment' to inform planning at the earliest stages of option development.
- Including access to health facilities for staff, patients and visitors.
- Producing and monitoring the Action Plan.

The Forum will report to the Joint Transport Executive Committee

Directors of Public Health will provide updates for and attend meetings of the Joint Transport Executive Committee on a twice-yearly basis to consider progress on the Action Plan.

Information and Data collection

Information requests between Memorandum of Understanding partners will be managed as quickly as is reasonable depending on the complexity of the request and information available. Requests are to be as specific as possible.

Communications

A joint framework on communications will be established in order to promote levels of engagement and partnership working between the Memorandum of Understanding partners.

Timescale and review

The Memorandum of Understanding shall come into immediate effect. The West of England Partnership authorities and Health Sector for the West of England area will jointly review the arrangements set out in the Memorandum of Understanding at two yearly intervals.

Dated 17 September 2010

NHS Bristol Bash and North East Some set

South Gloucestershire











🖉 Bristol City Council: Roads - speed	l limits: 20mph Speed Limit Pilot Areas - Microsoft Internet Explorer provided by Bristol Cit 📃 🗖	Ρ×
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<ul> <li>Transport and streets</li> <li>Roads, highways and</li> </ul>	20mph Speed Limit Pilot Areas	
<ul> <li>Pavements</li> <li>Roads - speed limits</li> </ul>	<b>Sections:</b> Information about the 20mph speed limit and its benefits   Public engagement leaflets   Frequently asked questions   Your opportunity to respond to the statutory (formal) consultation   Monitoring   Health and community issues   Contact us	
	Information about the 20mph speed limit and its benefits	
	Bristol City Council's Cycling City project, in partnership with the <u>Active</u> <u>Bristol</u> programme are proposing to introduce pilot 20mph speed limits across two residential areas at Inner East Bristol and Inner South Bristol.	
	Pilot area maps	
	Inner East Bristol Pilot Area Wards affected: Ashley, Easton, Eastville, Lawrence Hill, St George West	
	<ul> <li>Inner South Bristol Pilot Area Wards affected: Bedminster, Lawrence Hill, Southville, Windmill Hill</li> </ul>	
	Objectives	
	The primary objective is to make walking and cycling around these areas safe and more attractive thereby	-
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# Translational research

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# TRAFFIC CHOICES BS1

### HOME SCHEMES TRACKER PARTNERSHIPS FAQ

 YouTube

 TRAFFIC

 CHOICES BS1

 CITY OF BRISTOL

As a resident in Bristol, you can have a say in how you think traffic should be managed in your area.
To improve community wellbeing and safety, money is given to Bristol's Neighbourhood Partnerships every year for traffic schemes.

Use the information on this website to help you decide on the most effective schemes for your area.

You can then go to a Neighbourhood Partnership forum to discuss your ideas, or get in touch with the Partnership team. <u>Read more about Partnerships >></u>

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### TO GET STARTED, SELECT AN ISSUE

**James Coleman** 

Research Associate

niversity of the West of England

8/09/2014

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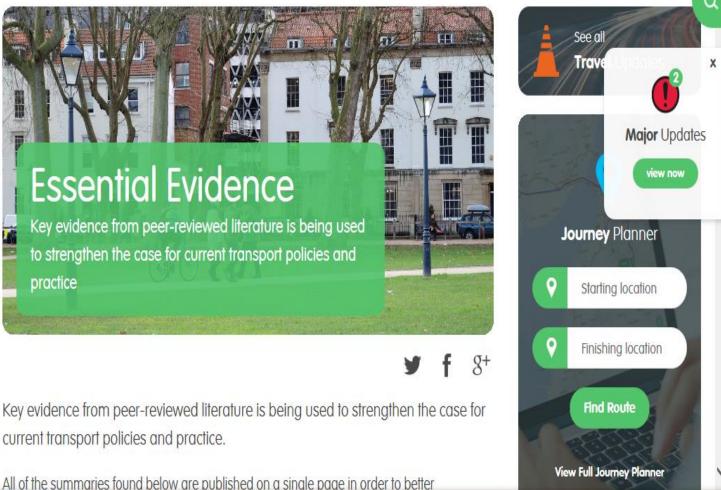


### tw\* Essential Evidence

- Demand Management & Behaviour Change
- Children
- Adults and Walking
- Adults and Cycling
- Public Transport Use
- Air and Noise
- Safety

**Public Policies** 

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### PHYSICAL ACTIVITY THROUGH SUSTAINABLE TRANSPORT APPROACHES

### Use your local universities BMC

Open Access

#### RESEARCH ARTICLE

Views and experiences of behaviour change techniques to encourage walking to work: a qualitative study

Sunita Procter<sup>17</sup>, Nanette Murrie<sup>2</sup>, Adrian Davis<sup>a</sup> and Suzanne Audrey<sup>4</sup>

#### abstract

Background: High levels of physical in activity are linked to several divors: diseases including coronary heart ( disease type 2 diabetes, obeaty, some cancers and poor mental health. Encouraging people to be more some ha powen difficult. One way to morporate physical activity into the daily routent is through he journey to and from work. Although behaviour change to thingues QUCIS are considered valuable in promoting behaviour change, the is very lide in the published literature about the vessa and expremension of hube moving and to use drem. B dely liste in the jubility interactive appart are unless and experiments or main records appart to user unit.
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Keywords: Wallang, Behaviour, change techniques, Qualitative research, Active travel, Physical activity, Workplace Transportation Research Part F 31 (2015) 36-53



#### Support and compliance with 20 mph speed limits in Great Britain

ABSTRACT

#### Alan Tapp \*, Clive Nancarrow, Adrian Davis

Bristol Business School, UWE, Coldharbour Lane, Bristol BS 16 1QY, United Kingdon

ARTICLE INFO

Article history Received 29 August 2014 Received in revised form 19 October 2014 Accepted 6 March 2015

Keywords: 20 mph limits Driver compliance Reasons Behaviour changes

There are a number of challenges relating to both the support of and complianc speed limits. The introduction of 20 mph limits in Great Britain is no exception: the rise in the deployment of these limits in urban settings has created a need to unde these issues in more depth. This paper reports a study undertaken by the autho used a population wide survey of GB drivers to explore how support and complianc interlinked. Whilst as expected many supporters said they would comply with the and many opponents might not comply, more surprisingly it was also found that supporters claimed not to comply, while some opponents of 20 mph limits compliers. Explanations included the strong likelihood of strong moral adherence breaking laws amongst opponent-compliers, and self-enhancement bias ar supporter-non-compliers. This paper explores the incidence of these effects and implications in detail

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Journal of Environmental Psychology 28 (2008) 121 127

#### Context change and travel mode choice: Combining the habit discontinuity and self-activation hypotheses

Bas Verplanken<sup>a,\*</sup>, Ian Walker<sup>a</sup>, Adrian Davis<sup>b</sup>, Michaela Jurasek<sup>b</sup>

\*Department of Psychology, University of Bath, Bath BA2 7AY, UK <sup>b</sup>JMP Consulting, Bristol, UK Available online 1 May 2008





#### Abstract

The habit discontinuity hypothesis states that when a context change discupts individuals' habits, a window opens in which behavior is more likely to be deliberately considered. The self-activation hypothesis states that when values incorporated in the self-concept are activated, these are more likely to guide behavior. Combining these two hypotheses, it was predicted that context change enhances the likelihood that important values are considered and onide behavior. This mediction was tested in the domain of travel mode choices Contents lists available at ScienceDirect



Journal of Transport & Health journal homepage: www.elsevier.com/locate/jth



#### Can social marketing make 20 mph the new norm?

Sarah Toy<sup>a</sup>, Alan Tapp<sup>a,\*</sup>, Charles Musselwhite<sup>b</sup>, Adrian Davis<sup>a</sup>

<sup>2</sup> Bristal Social Moniering Centre, Bristal Business School, University of the West of England, Caldbarbour Lane, Bristal BS161Q/, UK <sup>b</sup> College of Human and Health Sciences, Swansea University, UK ABSTRACT

#### ARTICLE INFO

Article history: Received 21 October 2013 Received in revised form 7 May 2014 Accented 8 May 2014

#### Keywords: 20 mph limits Social marketing Driver behaviou

This paper reports the findings of a study that explored the possible role for social marketing in supporting compliance with 20 mph signs only speed limits. The study, completed in July 2012, involved a review of the literature, the re visiting of case studies of existing and planned 20 mph signs only schemes, mainly within Great Britain, and a qualitative research project with the citizens of Bristol, England

A key finding was the mismatch between people's apparent support for 20 mph limits and their actual driving behaviour. The qualitative research focused on investigating this gap. A range of groups of Bristol drivers and residents were recruited for the research to provide insights into why some people may not comply with 20 mph limits where they are in place, and what could be done to counter this non compliance.

The findings suggest three possible driver types in relation to 20 mph areas: 'champions', 'pragmatists' and 'opponents'. The paper discusses the possible mapping of these types onto Moore's crossing the chasm' variant of Rogers' diffusion of an innovation model. Here, the 'chasm' represents the difficulty in miliance amonest praematists in the same way as champions. Based on this, it is suggested



# Being there – co-located/embedded



- Informal opportunities to get health impacts included
- Being a source of knowledge to hand (eg Joint Local Transport Plan3 and Local Sustainable Transport Fund bids)
- Building trust
- Windows of opportunity
- Cost effective

Proposition: Using most robust available evidence as standard

 Should not all transport departments have someone trained in evidence reviews... to ensure managers and politicians have the best available evidence?

As we have had in Bristol City Council for past 10 years

Researchers need to have impact... they must connect with practitioners...

 "What is the point of universities that are just castles in the sky? The University people must have contact every single week with their City Hall"

Wulf Daseking, former Director of City Planning, Freiburg, 2014

### Thank you

ADRIAN.DAVIS@UWE.AC.UK WWW.TRAVELWEST.INFO/EVIDENCE WWW.EURO.WHO.INT/TRANSPORT WWW.EURO.WHO.INT/PHYSICAL-ACTIVITY WWW.THEPEP.ORG WWW.ELSEVIER.COM/LOCATE/JTH





