

The Health Economic Assessment Tools (HEAT) for Walking and Cycling:

What is it about and having a look at its online interface



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Thanks to: WHO/Europe - Francesca Racioppi / Christian Schweizer, Cavill Associates

Standard approach to transport HIAs

- where are the health benefits?



Costs	Benefits
Construction	Congestion
Maintenance	Journey ambience
Inconvenience	CO ₂
Casualties	Prevented premature mortality
Environmental effect	Absenteeism
	Morbidity

What is HEAT?

“For a given volume of walking or cycling within a defined population what is the economic value of the health benefits?”

(prevented premature mortality only)

Online tool www.heatwalkingcycling.org

HEAT approach

- Practical tool designed primarily for transport planners
- Recognises importance of economic analysis in transport: benefit-cost ratio is king
- Evidence-based
- Transparent
- Adaptable
- 'Do once and share'

A collaborative project



Federal Ministry for the
Environment, Nature Conservation
and Nuclear Safety



Schweizerische Eidgenossenschaft
Confédération suisse
Confederazione Svizzera
Confederaziun svizra



THE PEP

Transport, Health
and Environment
Pan-European Programme



Harry Rutter, Francesca Racioppi, Sonja Kahlmeier, Nick Cavill, Pekka Oja, Heini Sommer, Hywell Dinsdale,
Charlie Foster, Paul Kelly, Thomas Götschi, Christian Schweizer

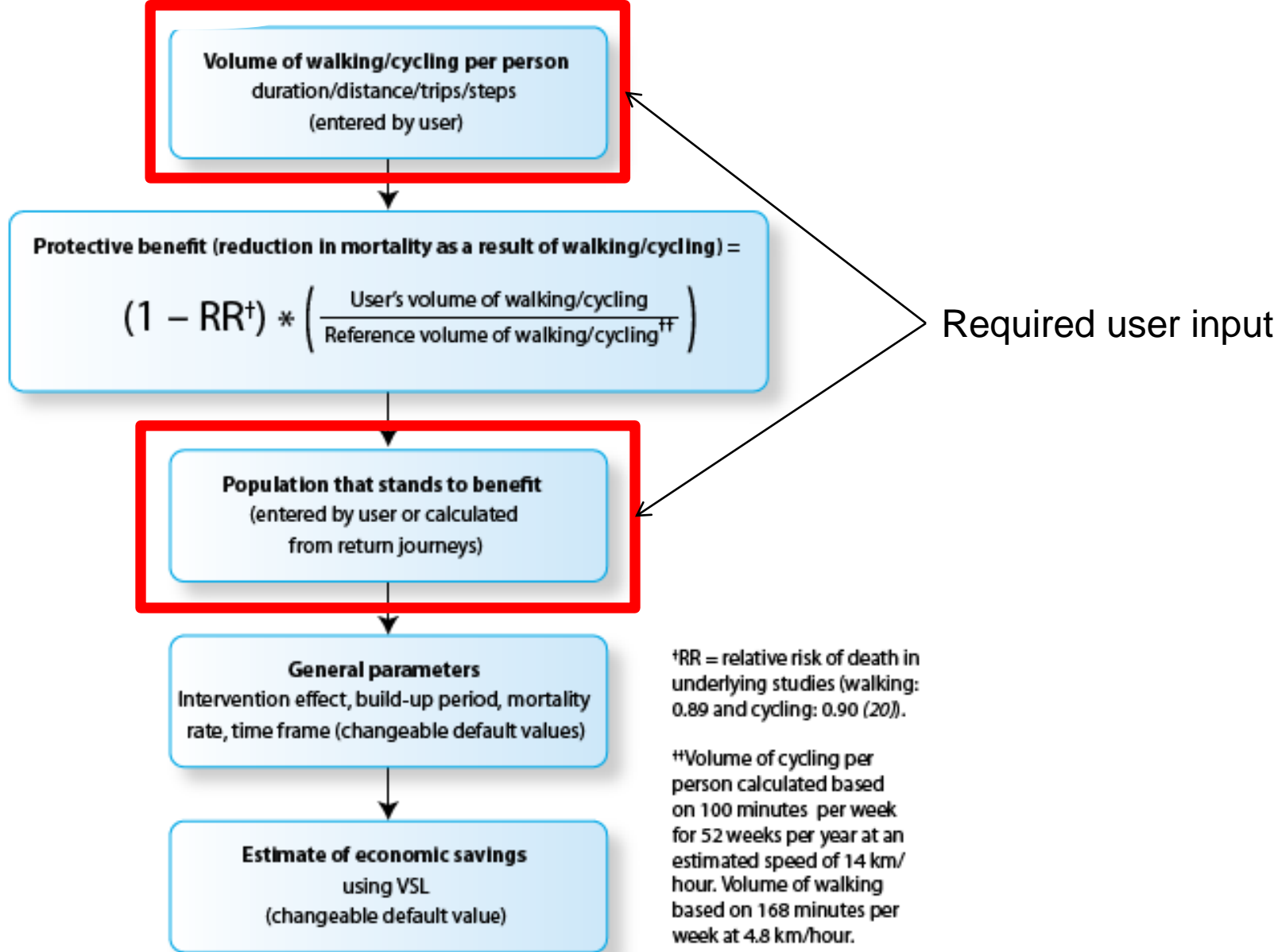
Karim Abu-Omar, Lars Bo Andersen, Hugh Ross Anderson, Finn Berggren, Tegan Boehmer, Nils-Axel Braathen,
Dushy Clarke, Andy Cope, Audrey de Nazelle, Mark Fenton, Jonas Finger, Francesco Forastiere, Richard Fordham,
Eszter Füzeki, Frank George, Regine Gericke, Mark Hamer, Max Herry, Marie-Eve Heroux, Gerard Hoek, Luc Int Panis,
Michal Krzyzanowski, I-Min Lee, Christoph Lieb, Brian Martin, Markus Maybach, Christoph Schreyer, Marie Murphy,
Nanette Mutrie, Mark Nieuwenhuijsen, Laura Perez, Gabe Rousseau, David Rojas Rueda, Candace Rutt, Tom
Schmid, Elin Sandberg, Mulugeta Yilma, Daniel Sauter, Peter Schantz, Peter Schnohr, Dave Stone, Jan Sørensen,
Gregor Starc, Marko Tainio, James Woodcock, Wanda Wendel Vos, Paul Wilkinson

Expertise involved – advisory groups

	2007	2010	2013	2014
■ Epi / public health	■	■	■	■
■ Env. science		■	■	■
■ Air pollution			■	■
■ Transport planning	■	■	■	
■ Health economics	■	■	■	■
■ Transport economics	■	■	■	
■ Policy making	■	■		
■ Practice/advocacy	■	■		

HEAT's potential uses

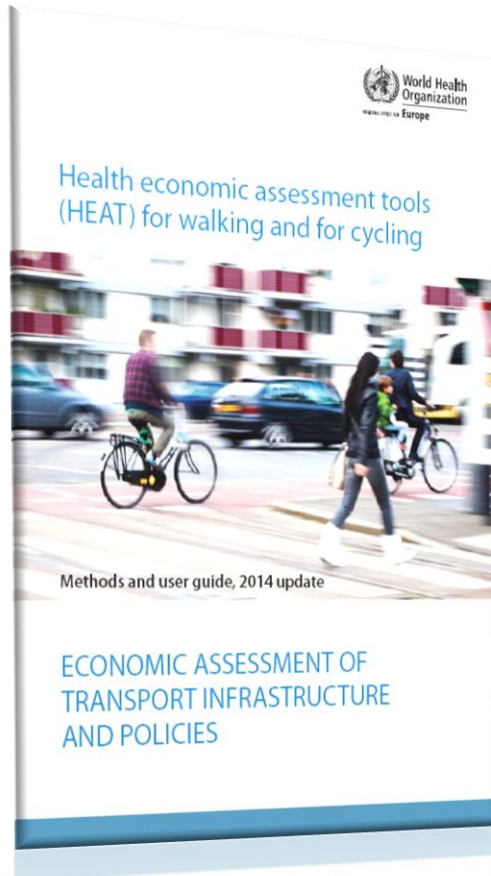
- **Planning new projects**
 - Value the estimated use of the scheme
- **Evaluating existing projects**
 - Value of health benefits of increased use
- **Assessments of current use**
 - E.g. how much is walking or cycling worth in my city?
- **Modeling**
 - Projections of future levels



Understanding Monetization with Value of Statistical Life

- It is not the value of an identified person's life!
Economic value used for a “statistical” death
- Commonly used in transport, safety and environmental economic appraisals
- Extrapolated based on an ex ante valuation of a small reduction in statistical mortality risks over a given time period
 - Based on Willingness to Pay (WTP)
how much a sample of people would be willing to pay for a policy that would reduce a certain risk, e.g. mortality from traffic accidents
- Societal value of reduced premature mortality - not equivalent to health costs or figures used in budget math
- Varies from country to country, depending on economic context (limited international comparisons)
- HEAT: European Region € 2.5 Mio. / EU28 € 3.4 Mio., national values

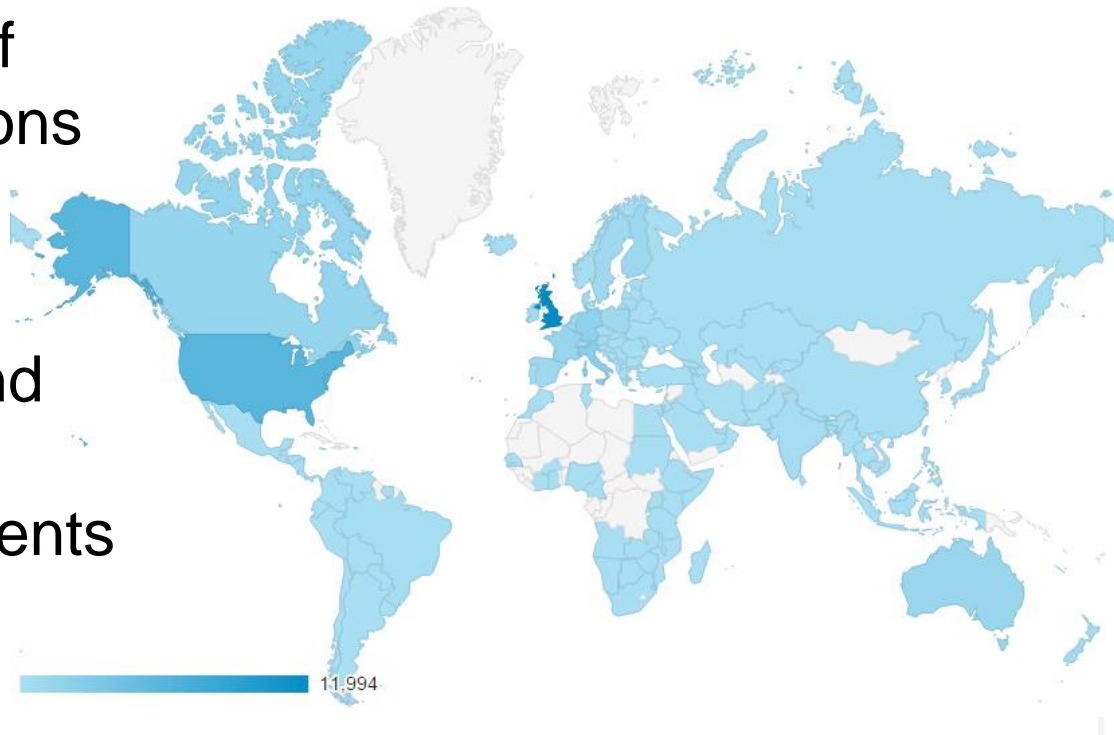
Method and user guide



- Updated August 2014 (English only)
- Next version forthcoming
Including module on air pollution effects in travellers

Success: worldwide use

- Project website visited over 38,000 times by over 25,000 visitors since 2011
- Variety of applications
- Method adopted by UK and Swedish governments



1.		United Kingdom
2.		United States
3.		Italy
4.		Germany
5.		Canada
6.		France
7.		Australia
8.		Finland
9.		Poland
0.		Spain
1.		Belgium
2.		Sweden
3.		Netherlands
4.		Switzerland
5.		Denmark

Session outline

- **Examples of using HEAT for assessment and policy making**
David Rojas Centre for Research in Environmental Epidemiology CREAL, Spain
- **City case study Brussels**
Frederik Depoortere Brussels-Capital Region
- **Brief live demo**
Sonja Kahlmeier University of Zurich
- **Discussion** (experiences, strenghts, weaknesses)

Live demo

- Hypothetical scenario

If in a city of 150.000 inhabitants, 20% would walk 10 minutes more per day...

www.heatwalkingcycling.org