



# Welcome

*Pre-conference Workshop Walk21, Vienna, 20 October 2015*

## Measuring Walking (part VII): International Walking Data Standard and its benefit

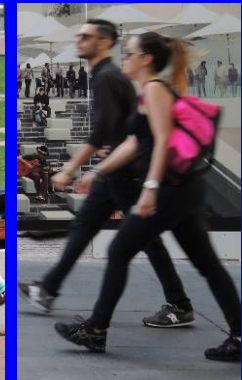
Daniel Sauter, Urban Mobility Research, Zurich, Switzerland



# World Statistics Day

20 October 2015

„better data, better lives“



# Background

## Problems

- Walking data often patchy or not collected at all
- Single issues, arbitrarily measured, unclear validity & reliability
- Methods often not adequate to measure walking

=> *comparisons difficult or impossible*

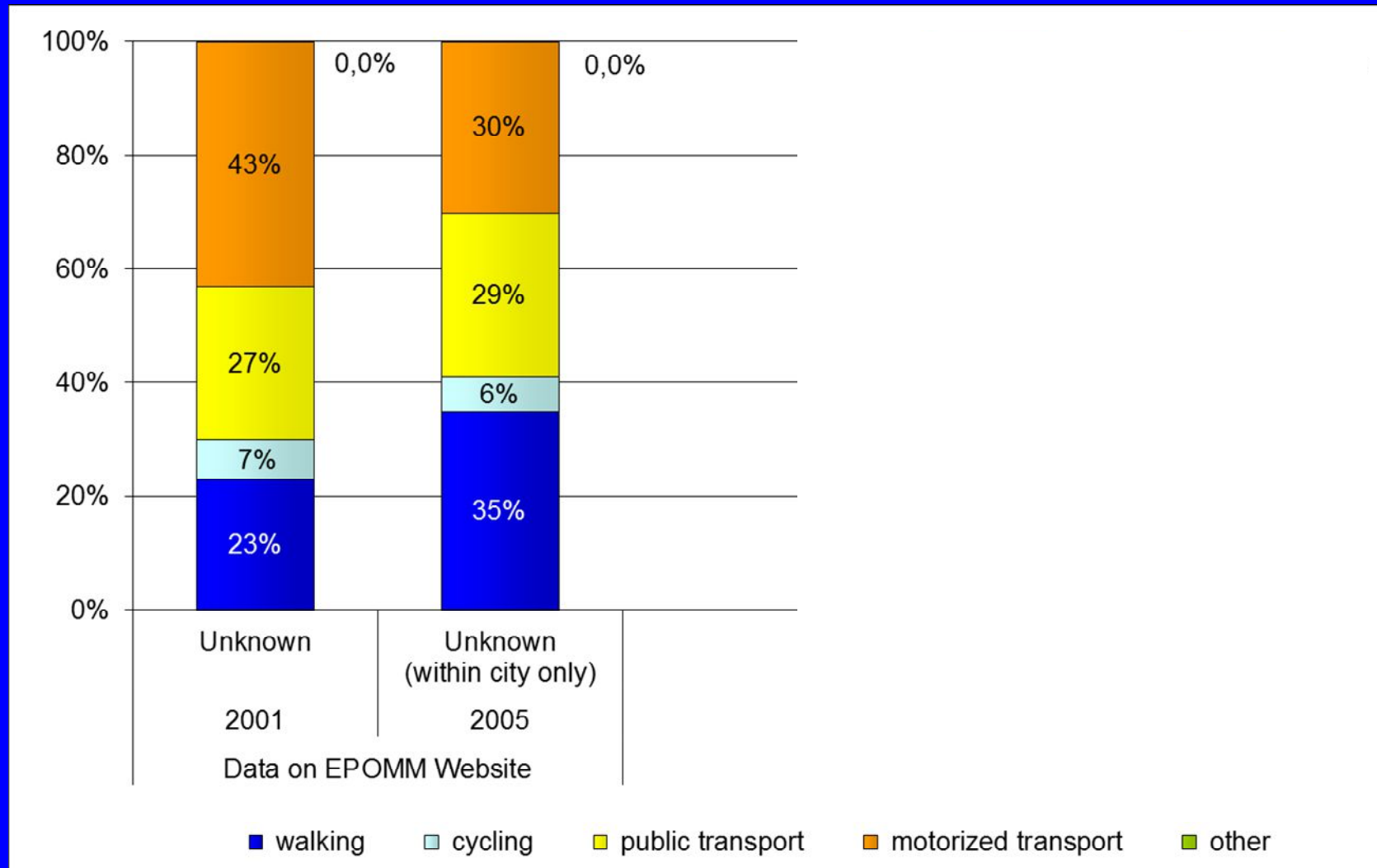
## Promising changes

- Increasing interest to measure walking, changing attitudes
- New evaluation methods, technologies etc. developed
- Insights: “Only what’s measured, gets done” (Larry Frank)  
“Only what’s being counted, counts”

=> *Window of opportunity*

# Which data is correct? Comparison or confusion?

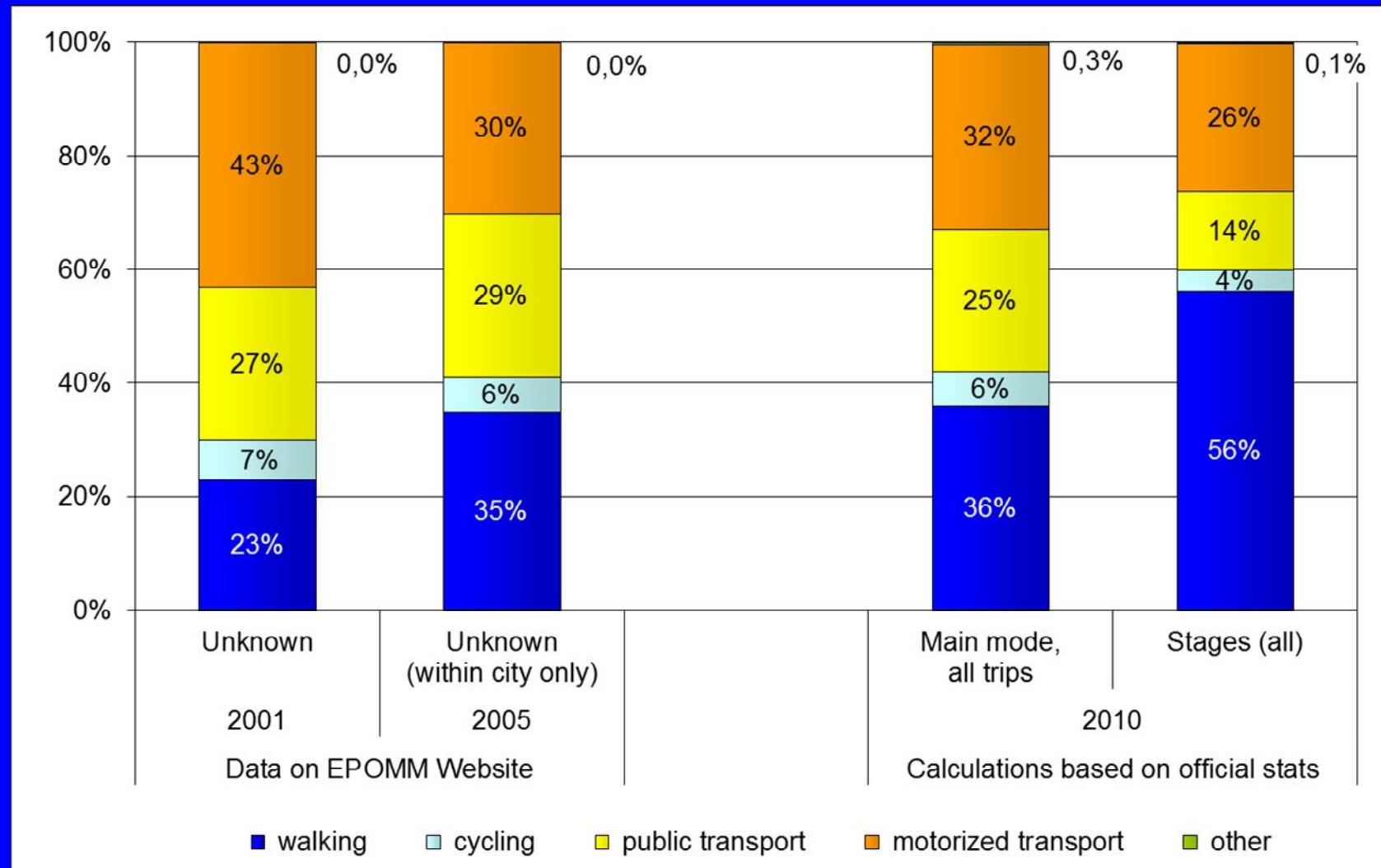
Example City of Zurich: EPOMM\* Modal Split Tool



\* European Platform on Mobility Management Website: [www.epomm.eu](http://www.epomm.eu)

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# Objective

*“Establishing a set of international guidelines for the collection, analysis and dissemination of quantitative and qualitative techniques for measuring walking.”*

*WALK21 conference conclusions Melbourne 2006*

*Following the adoption of the International Charter for Walking*

=> Series of Walk21 pre-conference full-day workshops,  
usually 40 to 70 experts participating



# Toronto 2007: Relevant dimensions (part I)

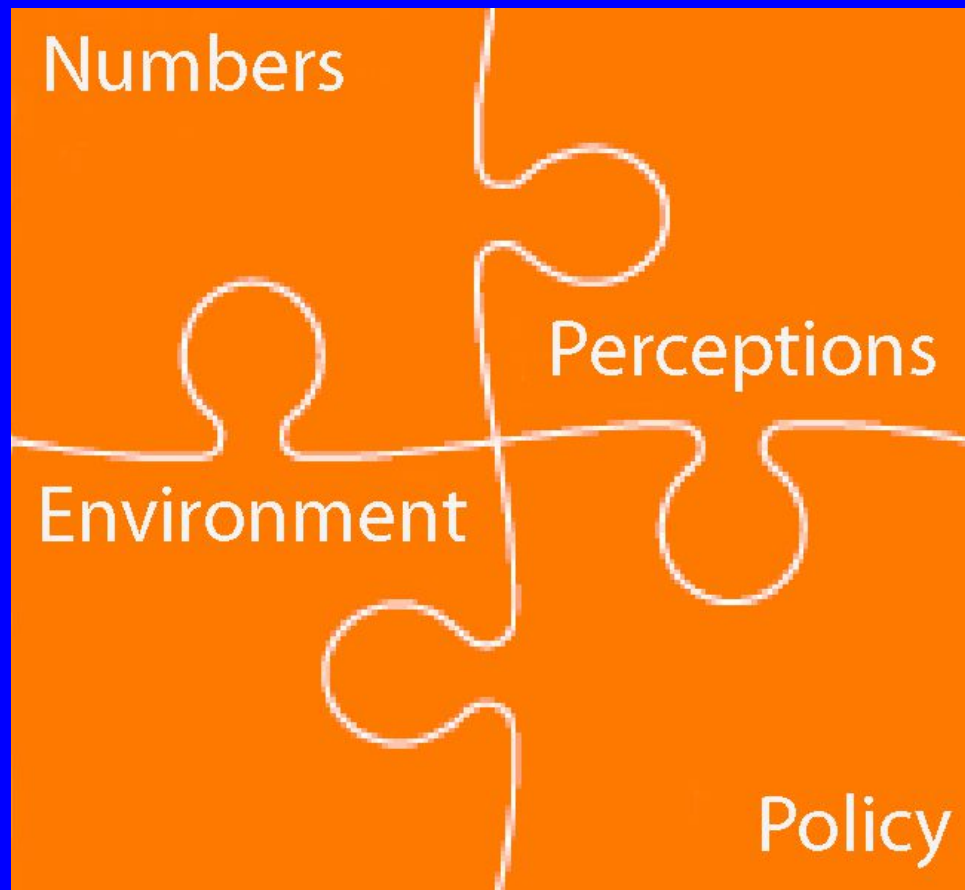
... what and how walking could and should be measured  
=> principal agreement on a list of dimensions



*Daniël Sauter, Urban Mobility Research, Switzerland*

# Main dimensions of Measuring Walking & Sojourning

(based on Toronto workshop 2007)



- How much?
- What are the qualities?
- What are the perceptions?
- What are the institutional conditions?



# Barcelona 2008: Counting pedestrians (part II)

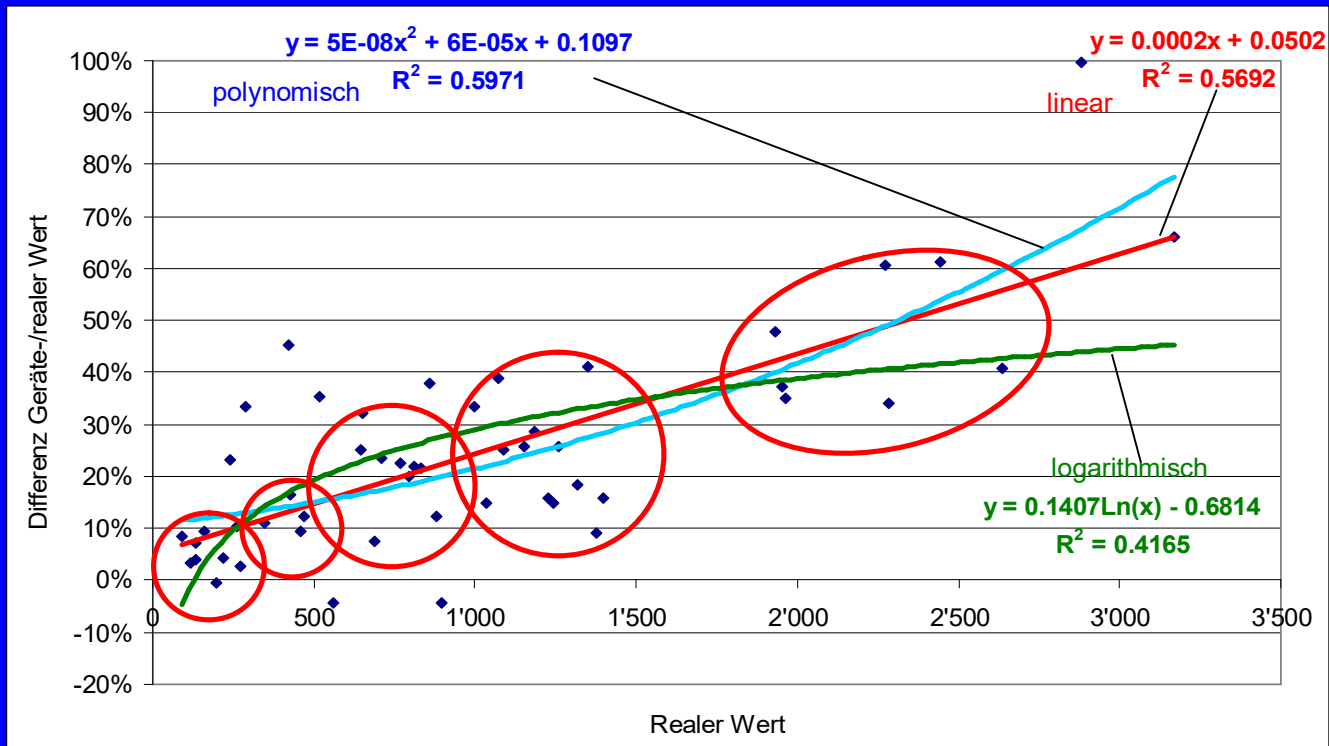
... users & producers of automatic counters exchange experiences  
=> building momentum in a crucial area





# Experience exchange network

Learning from each other: pros and cons of each technology, calibration, influences of weather & other factors, challenges and benefits



# New York 2009: Performance indicators (part III)

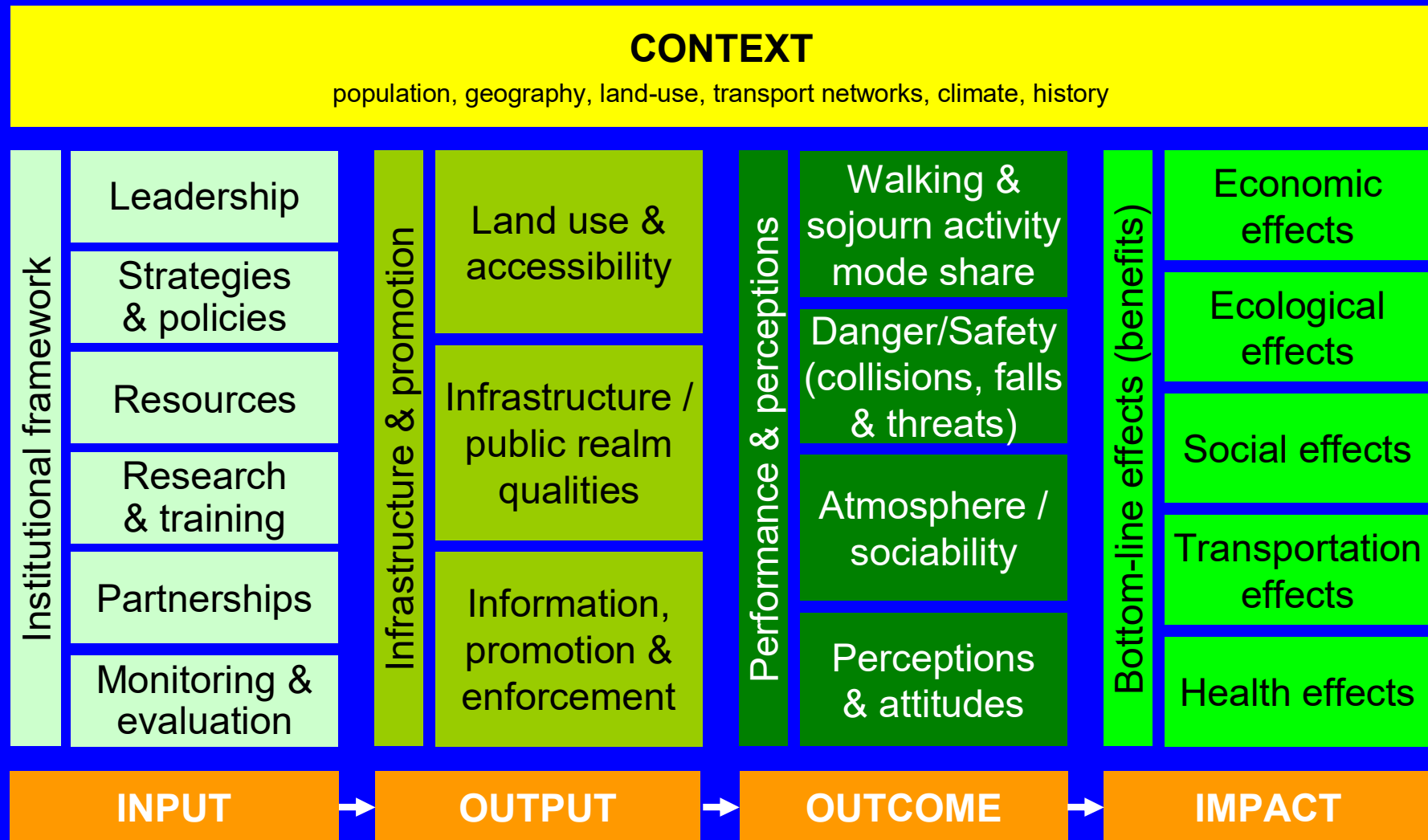
... assemble relevant indicators to measure walking and public space  
=> draft basis of what should be measured





# Walk21 Assessment Model for Measuring Walking

(based on New York workshop 2009)



Version: September 2013

# The Hague 2010: Data collection methods (part IV)

... discuss adequate methods for pedestrian flows, sojourning & trip data  
=> idea about how things should be measured

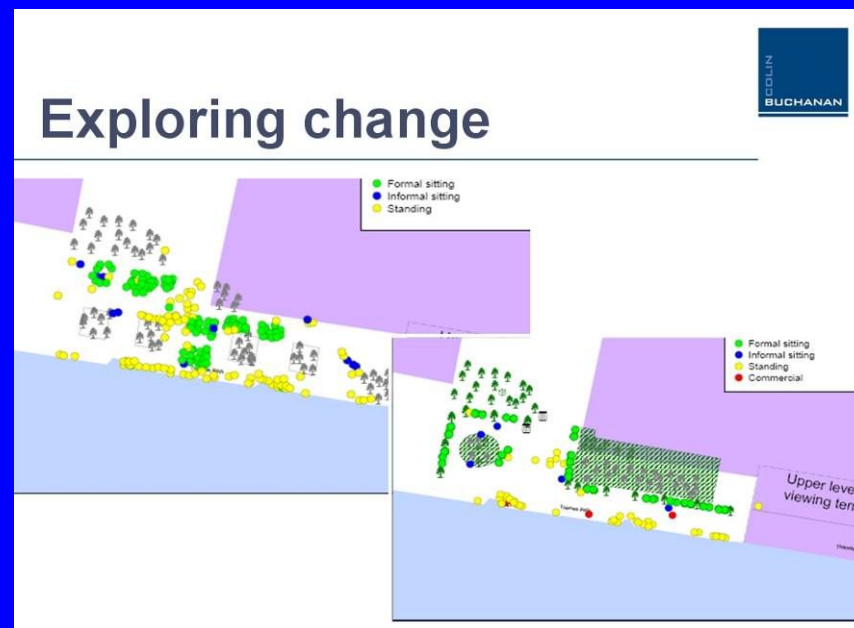




# The Hague 2010

The methodological challenges to measure walking and sojourning.  
We learned about:

- The importance to count Flow AND Presence (Tim Pharoah)
- How to observe sojourning pedestrians (Martin Wedderburn)
- The difficulties to measure trip stages (Daniel Sauter)



## Presence versus Flow

	Presence	Flow
Vehicles	17	27
Pedestrians	36	13



When presence is measured, the ped/veh relationship is reversed

„Never underestimate the difficulties of counting“ (Tim Pharoah)



# Resource

Report on  
Measuring Walking  
with some innovative  
methods

COST Action 358  
Pedestrian Quality  
Needs

<http://www.walkeurope.org/>



COST 358 Pedestrians' Quality Needs

Measuring Walking

PQN Final Report - Part B4: Documentation



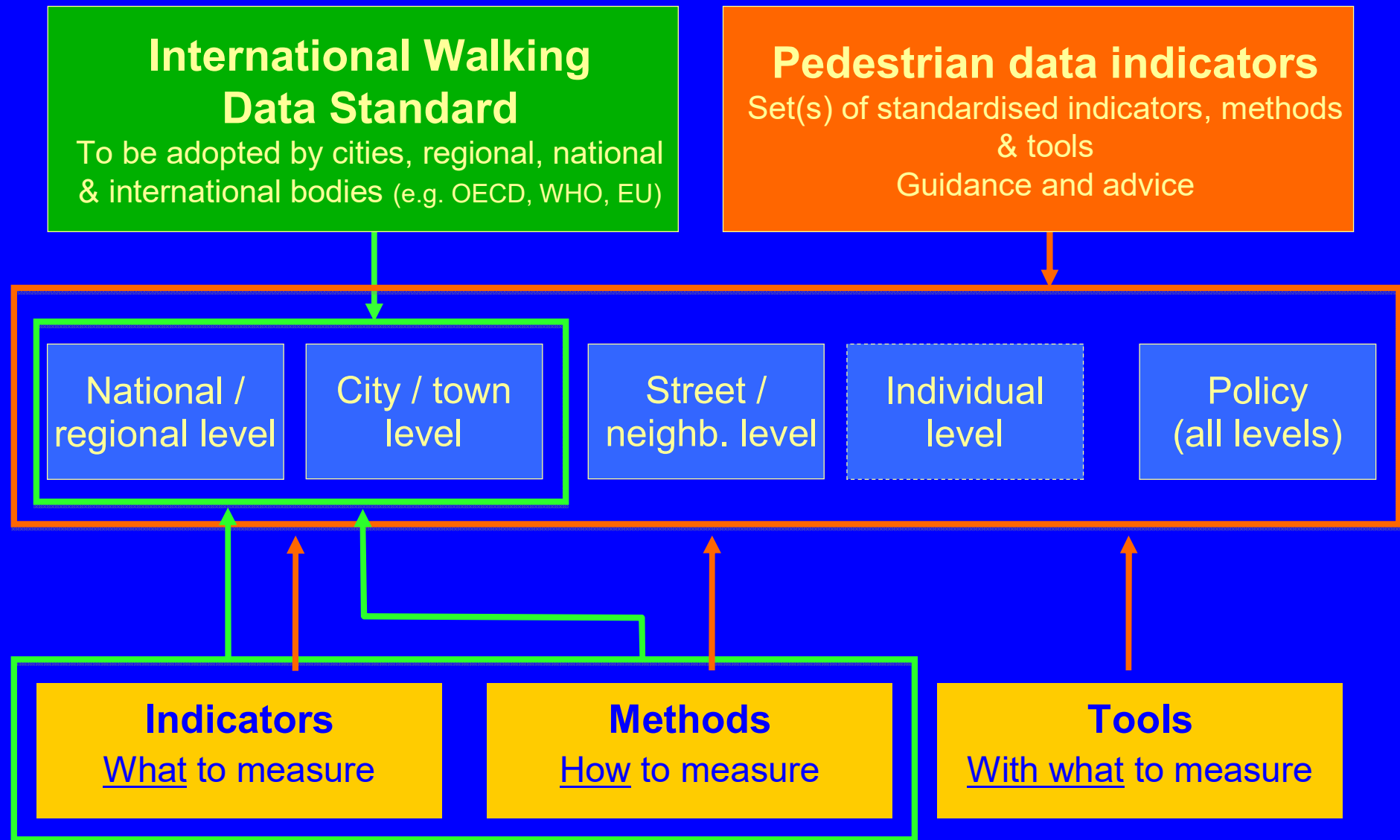
*Daniel Sauter, Urban Mobility Research, Switzerland*

# Munich 2013: Indicator Sets & outline of International Walking Data Standard (part V)

...define indicator sets and related methods  
=> agreement on outline of International Walking Data Standard



# Munich 2013 (original idea)





# Sydney 2014: How data changes perceptions & outcomes (part VI)

...with a special focus on AUS / NZ context and travel survey standards  
=> learning from each other re transport data for health, manual counting, walkability assessments



# Other Indicator Developments (1)

CIVITAS CAPITAL  
Advisory Group 5  
Data and Statistics



City level Sustainable  
Mobility Indicator  
Descriptions

2015

Indicators on:

- Travel Patterns
- Accessibility
- Speed and safety
- Walking
- Cycling
- Public Transport
- Cars and Parking
- Social impacts / Liveability
- Environmental impacts

*European Commission:*

*Complementing European  
Urban Mobility Scorecard*

*New Call for Tender out right now*

## Other Indicator Developments (2)

### World Business Council for Sustainable Development (WBSCD) Sustainable Mobility Project 2.0

#### Indicators:

Affordability of pt for the poorest people  
Accessibility of mobility impaired groups  
Air polluting emissions; Noise hindrance  
Traffic Safety; Access to mobility services  
Quality of public area; Functional diversity  
Commuting travel time  
Economic opportunity; Net public finance  
Mobility space usage  
Emissions of greenhouse gases  
Congestion and delays; Energy efficiency  
Opportunity for active mobility  
Resilience for disaster  
Intermodal connectivity; Intermodal integration  
Occupancy rate  
Comfort and pleasure; Security



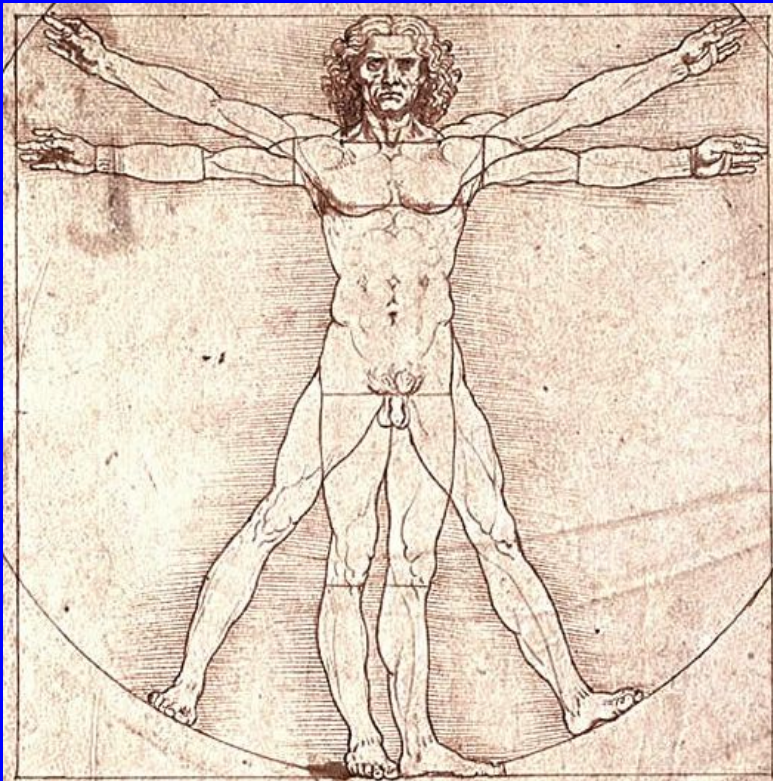


# Program of this morning

- 9:00 Welcome and introduction, history and context
- 9:20 International Walking Data Standard  
Tim Pharoah, Ryan Martinson, Martin Wedderburn
- 9:50 Demonstration what travel surveys can achieve  
Werner Brög: Vienna Walking. Quantifying the importance of walking  
Gregor Stratil-Sauer: Walking in Vienna: Results of the latest travel surveys  
Discussion
- 11:10 How to implement the Walking Data Standard?  
Discussion moderated by Miles Tight
- 11:45 Conclusions of the day
- 12:00 End of workshop

# “Fantasia & scientia” (Leonardo da Vinci)

The qualities of walking go way beyond their measurability



Walking is desire, culture, practice, inspiration, curiosity, fascination, joy, vision, relaxation, intrigue, magic, ... ..

The Art AND Science of walking!



A photograph of two people walking on a cobblestone street. The scene is captured in high contrast, with the subjects and their long shadows rendered in silhouette against the bright, sunlit pavement. The person on the left is walking towards the right, carrying a bag. The person on the right is walking towards the left, carrying a folder or book. The shadows are cast long and dark, indicating the sun is low in the sky. The cobblestone pattern of the street is clearly visible.

*Enjoy the day!  
Thank you !*

*Daniel Sauter, Urban Mobility Research, Switzerland  
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# International Walking Data Standard (1)

	Issues	Data collection	Data reporting (analysis & presentation)
1	Population incl. in survey	Trips of resident population	Trips of residents
2	Age limits	From age 5, no upper age limit	- Total all ages 5/6 years & above - Ages 5 to 17, 18 to 64, 65+ years
3	Survey days	All days of the week and all seasons	All days of the week / All seasons or average season
4	Boundary	All trips except those made abroad	All trips made by residents except international travel
5	Unit of travel	Stages or all modes transformed into stages	Stages AND “Main mode”
6	Duration & length	Time AND distance per day	Time AND distance per day: Mean AND median (percentiles)
7	Threshold	No limits to stage or trip length (in “publicly accessible spaces”)	Minimum threshold of 50 metres/yards

# International Walking Data Standard (2)

	Issues	Data collection	Data reporting (analysis & presentation)
8	Trip purpose	All trip purposes, including work, education, business, leisure, shopping & personal business, escorting, other	All trip purposes
9	Participation	All respondents including those without a (walking) trip stage on the survey day	<ul style="list-style-type: none"> <li>- Share of population with at least one walking stage on the survey day;</li> <li>- Average number of walking stages, trips, walking time and distance of total population</li> </ul>
10	Survey methods & design	---	Describe and document all relevant elements of the survey
11	Reporting period	One-day mobility, preferably captured on the “previous day”, or multi-day mobility	One-day mobility, preferably captured on “previous day”, or multi-day surveys if side effects are controlled
12	Statistical unit	Both options are possible: one person or everyone in household as long as the sample is representative	Make it clear which option was chosen if there are doubts about the response rates or representativeness



# International Walking Data Standard (3)

	Key performance indicator	Standard Level	Elaborate Level
<b>1</b>	Share of people who have made at least one walking stage on the survey day	Whole population	Same as standard level
<b>2</b>	Average number of daily walking trips per person	Whole population	Whole population Mobile persons *
<b>3</b>	Average daily time walked per person	Whole population	Whole population Mobile persons *
<b>4</b>	Average daily distance walked per person	Whole population	Whole population Mobile persons *
<b>5</b>	Mode share of walking based on A stages B main mode C time D distance	Whole population	Same as standard level