

Treatment of walking in travel surveys: the case for an international standard

Miles Tight,
Professor of Transport, Energy and Environment,
University of Birmingham, UK

Background

- Walking is a fundamental mode of travel and an essential part of any successful transport system
- Walking provides a wide range of benefits in terms of health, social inclusion, environmental improvements, liveability of cities and economic opportunities.
- Collecting information about walking is essential and provides crucial input for planning interventions and investment decisions.
- At the same time, walking presents particular challenges for accurate measurement.
 - large differences in data collection methods
 - Questions about validity and reliability of data
 - Some poorly developed methods and tools
 - Data can be patchy or non-existent.
 - Difficulties relating to scale

Objective of work

- To develop a consistent methodology for recording pedestrian activity, to create easy to use auditing tools and guidance on national and local procedures for monitoring walking
- The aim of this project is to establish international standards for the collection, analysis and dissemination of qualitative and quantitative techniques for measuring walking

Key Issues 2013

- Stages, trips, trip chains, whole day mobility?
- Minimal length of stage/trip (distance/time)?
- Minimum age – are children included?
- Definition of a pedestrian?
- Time of year and days of week
- Purpose – all or just commute?
- How is leisure defined – walking for health/hiking?
- Functional mobility vs mobility for its own sake
- Geo-coding – handling small-scale movements?
- Escorting?

2014 work

Focus on:

- Sampling
- Data collection
- Analysis and presentation
- Travel surveys at a regional and city level
- Conclusions

Sampling

- Key issue is limiting data collection to a manageable level
- Solution – to use a ‘layering’ system – information which is essential, but also some indications of additional data which would be useful/possible/desirable

Indicators

- Average daily walking trips per person based on trip stages
- Average daily time walked per person based on trip stages
- Average daily distance walked per person based on trip stages
- Mode share of walking based on trip stages
- Mode share of trips based on main mode should also be included as a baseline. (Reason: some data sets do not include trip stages).
- For trip stages use a minimum distance of 100m as cut off.

Some specifics

- Trip purpose – we suggest including those trips which have a specific destination – leisure, work, shopping etc.
- What about dog walking, hiking etc – should these be included? We have conflicting views!
- Seasonality – aim to cover seasonal effects – maybe structure surveys to collect data in a different ‘season’ each year.

Who to survey?

- Focus on residents within the urban area
- If possible capture other walking in other ways – visitors, commuting from outside the urban area, tourists etc.
- Random selection of people from each household.
 - How to ensure we include children?
- All trips within the city and beyond?

Regional and Local Transport Surveys - OBJECTIVE

Need

- National, regional, and local bodies conduct reliable and valid travel surveys

Rationale

- Describe travel trends
- Information input into travel forecasting
- Effective Operational and Capital Budget planning

Regional and Local Transport Surveys - ISSUES

1. Surveys are not set up across all national, regional, or local levels to collect robust travel data, including that of active travel modes like walking.
2. Smaller municipalities and regions may administer a travel survey on a variety of time horizons and many times with capacity and expertise to only focus on one mode, usually automobiles.
3. Regional surveys are completed for regional planning issues, no consistency in question types or terminologies

Regional and Local Transport Surveys - RECOMMENDATIONS

Adopt a travel survey plan for the region that can be scalable to the needs of the planning agency, yet translates to data collected in other regions.

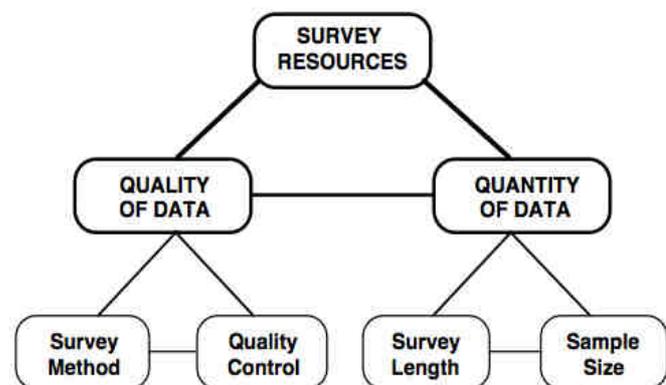


Figure 3.1 Trade-offs in Selection of the Survey Method

Regional and Local Transport Surveys - RECOMMENDATIONS

- Articulate benefits of travel surveys being adopted on regional and local levels
 - Allows for data driven decision making.
 - How does this relate to the ideas of Debate and Decide vs Predict and Provide and how this should play into the travel survey program or planning process (we would rather DD not PP).

Requirements for Methodology and Procedures - OBJECTIVE

Needs

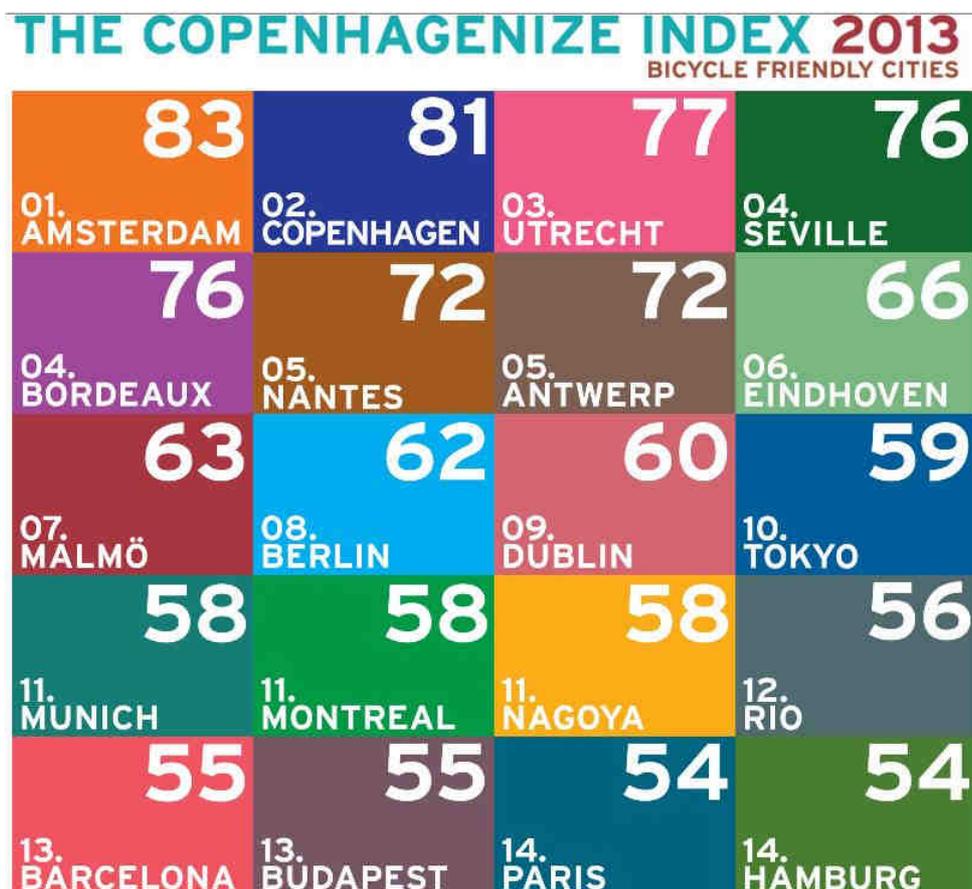
- Needs to be easily implementable
- Cost-effective, with little impact to overall survey budget
- Consistent across jurisdictions

Rationale

- No burden to entry into existing programs
- Allow for easier incorporation of survey changes
- Comparisons and amalgamation of data can be completed

Requirements for Methodology and Procedures - RECOMMENDATIONS

- Explore partnerships to collect or share benefits of data



The 13 Categories

Advocacy: *Rated from no organised advocacy to strong advocacy with political influence.*

Bicycle Culture: *Rated from no bicycles on the urban landscape/only sporty cyclists to mainstream acceptance of the bicycle.*

Bicycle Facilities: *Rated from no bicycle facilities available to widespread and innovative facilities.*

Bicycle Infrastructure: *Rated from no infrastructure/cyclists relegated to using car lanes to high level of safe, separated cycle tracks.*

Bike Share Programme: *Rated from no bike share programme to comprehensive, high-usage programme.*

Gender Split *Rated from overwhelming male to an even gender split or more women than men cycling.*

Modal Share For Bicycles: *Rated from under 1% to over 25%.*

Modal Share Increase Since 2006: *Rated from under 1% to 5%+.*

Perception of Safety: *Rated from mandatory helmet laws with constant promotion of helmets to low helmet-usage rate.*

Politics: *Rated from the bicycle being non-existent on a political level to active and passionate political involvement.*

Social Acceptance: *Rated from no social acceptance to widespread social acceptance.*

Urban Planning: *Rated from car-centric urban planners to planners who think bicycle – and pedestrian – first.*

Traffic Calming: *Rated from none at all to extensive traffic-calming measures prioritising cyclists and pedestrians in the traffic hierarchy.*