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How to encourage people towalk or cycle in urban areas

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Making Walking Count: an international survey tool to understand walkers' needs in their local neighbourhoods

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Abstract

This article presents some of the results to date of the Making Walking Count project. Making Walking Count (MWC) has been developed in partnership with experts representing more than 30 countries through the Walk21 conference series and the COST 358 Pedestrian Quality Needs (PQN) project. Based on the International Charter for Walking, it is part of the broader Measuring Walking project to establish international guidance and standards on the methods and indicators for measuring walking in our communities.

Making Walking Count is a survey, analysis and reporting framework, designed to explore residents' attitudes toward walking generally and their walking behaviour in their own neighbourhood in particular. Making Walking Count is also an international benchmarking tool to enable learning between cities and communities. Initially undertaken in four world cities, the tool is now being used successfully in communities of various sizes, to understand and benchmark the needs of local people and to ensure a user perspective to inform decision making and to identify the best spend for investments in walking infrastructure, information and encouragement programmes.

With results from the Making Walking Count: Four Cities Benchmarking Report, this paper looks at how the survey provides important local information to specifically understand how to encourage more people to choose to walk in their local neighbourhoods and to steer

wise investment decisions. At the same time, it illustrates how we can build a more global understanding of why people do or don't choose to walk and provide a useful benchmark to measure the effectiveness of interventions aimed at increasing walking.

1. Introduction

One of the biggest challenges when inviting people to walk in their local neighbourhoods is actually knowing why they do or don't walk there now. Provision of infrastructure does not automatically lead to people choosing to walk, though it is critical to it (De Bourdeaudhuij et al, 2003). It is also important to quantify the anecdotal assumptions that the weather, need to carry things, race to be on time and perception of safety have on decisions.

Walking is ideal for short trips and indeed often the healthiest, cheapest and most reliable travel mode for these journeys. However, traditional travel surveys often fail to adequately capture short journeys, less than 10 minutes just isn't counted, (typically a third of all walking trips) or the walking component of multi-modal journeys (generally two walking stages to every one on another mode). The walking stage of a trip on public transit is often not recorded as it is not the 'main mode' i.e. that on which they travel furthest or longest.

However, walking for short trips is critical to support local economies and public transport networks to destinations further afield. Enabling people to choose to walk 'from their front door' enables them to choose to spend time and money in local neighbourhoods and build social capital as they do, by taking advantage of the spontaneous opportunities to meet and talk with other people.

Understanding the motivations for making these journeys and the barriers people face when choosing (or not) to do so can directly inform appropriate interventions. For example, there is little point asking people to walk to their local shops if there are no local shops to walk to. Or if people are doing 'no walking' in their day, due to a commute that starts and ends in their car on their private driveway, via a parking space in their building of work, it is necessary to consider opportunities to encourage more walking 'at work'.

Making Walking Count is a means of understanding how people are choosing to move in their cities and local neighbourhoods as well as providing an internationally consistent starting point for comparison and learning between cities. It deliberately measures all walking trips, especially the short trips that are lost from other travel and transport surveys.

The tool is a direct response to political and professional frustrations where traditional surveys underestimate walking and ignore time spent in the public realm. This situation results in a lack of knowledge among those who have the power and authority to invest in walking. Decisions are made without the true picture of walking levels, what the potential is for more people to walk and how this potential can be realised.

'Good decisions are based on reliable information which in turn is gathered with adequate measuring tools. Measuring is one of the hinges to success, (Methorst et al, 2010).

2. Background

The Making Walking Count survey, analysis and reporting framework is part of a broader Measuring Walking project that has been developed by a group of walking experts through the international Walk21 Walking and Liveable Communities Conference series and the European COST 358 Pedestrian Quality Needs (PQN) project involving 20 countries.

In 2006, the conclusions from the 7th annual Walk21 conference included the need for 'setting international guidelines for the collection, analysis and dissemination of qualitative and quantitative techniques for measuring walking' (Walk21). From this grew the Measuring Walking project, facilitated through a series of pre-conference workshops at the Walk21 conference each year and developed in detail through the PQN project. This global discussion on measuring walking is aimed at developing international guidance and standards about both data collection methods and key indicators for walking, including spending time in public space (sometimes known as sojourning). This will enable data to be collected, evaluated and acted upon consistently for maximum effect.

In the early stages of the PQN project, the team conducted a survey of countries about the data collection situation in Europe. The survey of 10 countries revealed that not only was little data about walking actually collected but also showed the wide range of methodological approaches used. Information usually stemmed from collision data, single projects or case-studies. Where statistics were available, walking was not properly accounted for, very often because traditional surveys don't record short trips (e.g below 1km). And yet, walking is ideal for short trips and short trips are the lifeblood of local economies and communities.

The result of the extensive work undertaken through the PQN project to develop standardised approaches to managing walking, is the TQM (Total Quality Management) Assessment Model to measure walking. It serves as a reference point to ensure walking and public space are considered in a comprehensive and considered way. (See Appendix) The report also identifies a product family founded on standardised key performance indicators and methods.

An international set of measurable indicators for walking gives politicians a visible understanding of the impact from their investment decisions and practitioners a foundation for deciding policies, identifying priorities and determining the focus and results of their projects.

As part of the global Measuring Walking project and in response to the findings of the PQN project work, Walk21, in partnership with a number of cities and organisations (see list in References), developed the MWC survey tool to be a common, practical measuring tool to help define and benchmark walkability, to compare results between cities and to monitor the impact and effectiveness of investment.

MWC provides a user-centred approach to both the true levels of walking activity undertaken in cities and the residents' perceptions and attitudes to walking, in general and within their local neighbourhoods.

3. Methodology

While the project has been conceived and developed at an international level, it focuses on walking at a neighbourhood level. The survey has been designed and tested to be applicable for both a big city and small community. The questions it asks are about walking in your local neighbourhood and so the scale of urban conurbation is not critical to its validity. Careful sample sizing and stratification are key to ensure appropriate representation of the different neighbourhoods in a community and statistical significance of the data.

MWC measures walking on multiple dimensions as walking itself is a multi-dimensional activity. A comprehensive understanding of these dimensions can ensure the effectiveness of initiatives and success for local projects while avoiding wasted investment on projects that don't make a difference.

3.1. Survey stratification

The MWC survey is designed to capture a representative sample of the city's people and neighbourhoods within an internationally comparable framework, while being responsive to local imperatives or variations. It specifically seeks the views of young people (secondary school students) and seniors, and it ensures a minimum sample of both groups to reflect their greater dependence on walking for daily, independent mobility. Adults between these two ages groups make up the biggest sample within the survey.

As the survey is neighbourhood based, it can be conducted in any community, from small villages to world cities. The geographical sampling framework is determined by the need to reflect the different neighbourhoods within a city, while ensuring a statistically significant sample size for each neighbourhood type. Our starting point was a traditional city divided into 3 zones; central, inner and outer zones. This is easily modified to accommodate a city with multiple centres, boroughs or districts within a city, suburban, 'semi-rural' or rural areas, or to survey whole villages, towns or communities. Alternatively a selection of specific neighbourhoods can be surveyed to inform specific policy or programme decisions.

Careful analysis of local needs and objectives are considered in the decision making process as it is important to accommodate them while maintaining the capacity to compare data between cities.

The survey is conducted by telephone interviews and/or an online survey tool. Methods are again locally responsive, for example, in one city they worked with citizen panels to provide input.

3.1. Walking Indicators

The tool is structured around a common set of measurable indicators for comparison between communities. These indicators are outlined below.

	Indicator	Measure
1	Walking activity	Number of trip stages walked Time spent walking Children's travel to school
2	Activity in the public realm	Time spent in the public realm
3	Local accessibility	Residents' stated proximity to: · a local fresh vegetable shop · green space · sports facilities · a café or restaurant · public transport
4	Motivations for walking	What motivates city residents to walk?
5	Barriers to more walking	What poses a barrier to walking, both personal and environmental?
6	Perception of the walking environment	How do residents perceive their local walking environment?
7	Measures to improve the walking environment	What would encourage more walking?
8	Transport spending priorities	Residents' priority for transport spending

Figure 1. International Walking Indicators

4. Analysis of the Survey Results

One principle of the MWC tool is that the data is analysed for two distinct audiences. The results from the Making Walking Count survey are available to the city as a comprehensive city report, presenting and interpreting the data across the eight indicators and in comparison to available population data. This data can be broken down by city-specific parameters to provide answers to local questions.

In addition to the individual city reports, Walk21 has prepared the Four Cities Benchmarking Report which presents and compares the data from the surveys undertaken in London, Copenhagen, Barcelona and Canberra. A weighted average of indicators is compared across the cities. This comparison is critical to see how differing contexts and cultures create different walking dynamics. From the Four Cities Benchmarking Report we can see how people are responding to the different walking environments in their cities, with quite different walking habits, motivations and perceptions.

5. Highlights from the Four Cities Benchmarking Report

The data from the surveys of London, Copenhagen, Barcelona and Canberra has been collated and compared, presenting some interesting results, reflecting the distinct physical and cultural environments of the cities. It is important to note, that the Four Cities Benchmarking Report, while comparing data, does not seek to suggest one city is 'better' than another for walkers but rather to identify what is working and why in each city and where investment would be most effective to support more walking in the future. Over time it is hoped that communities with similar profiles to each other can benefit from the measurement of the impact that proactive policies have had on walking levels.

In Barcelona respondents report the highest levels of walking for a utilitarian purpose, while in Canberra, more people are 'going for a walk' to benefit their health. Canberra also reports the lowest levels of accessible local services, shops, cafes and public transport. It would therefore be difficult to promote walking to local services when they

are not readily available within a perceived walking distance. In the short-term, interventions within people's workplaces may prove more successful at increasing daily levels of walking in Canberra. Barcelona could learn from Canberra about how to encourage more people to walk to benefit their health.

The comparison also highlights that people in Copenhagen and Barcelona walk 'less consciously' i.e. they are not highly articulate about their motivations, they just walk. Conversely, in London and Canberra, respondents were highly articulate about the reasons they walk, suggesting a high consciousness of 'choosing to walk' rather than it just being part of the pattern of daily life.

In Copenhagen, people prefer to ride their bicycle than to walk and walking to their bicycle is one of the main reasons people do walk. In London, many people say they don't feel safe walking and cite this as their biggest barrier, at the same time identifying improved street lighting and security as what would encourage them to walk more.

Canberra reports the highest percentage of respondents making no trips involving walking on the day surveyed - 28% (compared to 6%, 9% or 11%). This reflects a high level of private vehicle usage from a private driveway to dedicated parking at their destination(s) and home again.

5.1. Walking Accessibility

Short walking trips can only happen if people have accessible destinations. The following table illustrates that Barcelona has the highest density of local services, shops, cafes and public transport within walking distance of where people live, while Canberra has the lowest levels of accessibility. Density creates a city of short distances, which is thus also more walkable. Access to green space is a feature of the garden city Canberra was designed to be, but its vehicle-centric design has created greater distances to services.

Notably, Copenhagen and London report fairly equal levels of accessibility.

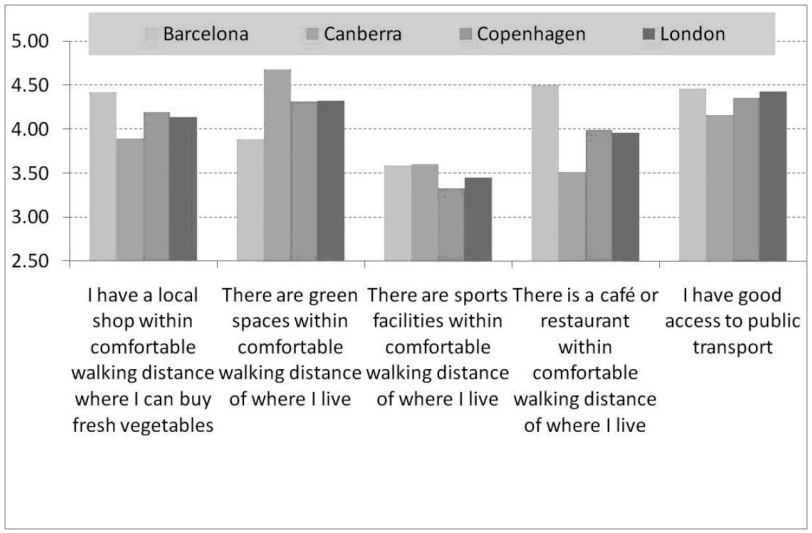


Figure 2. Local Accessibility for Adults (5.00 = Strongly agree)

5.2. Walking Activity

Consistent with the accessibility of services illustrated above, Barcelona has the highest levels of walking all the way to the destination and for utilitarian purposes. This affirms the importance of accessible local services to support short local trips on foot. Interestingly, cities with the highest levels of utilitarian walking (to the destination), London and Barcelona, also report the lowest levels of just 'going for a walk', i.e. without a specific destination. It is possible that people don't feel the need to do 'extra' exercise as it has been integrated into their life. Or perhaps people don't choose to walk for its own sake as the environment is not as comfortable as they would like. (This is explored in other questions). Residents of Copenhagen spend consistent amounts of time walking for all the trip types, but in comparison to the other cities, substantially more time to access private transport, i.e. their bicycle. (This unusual result is being explored further by the City of Copenhagen).

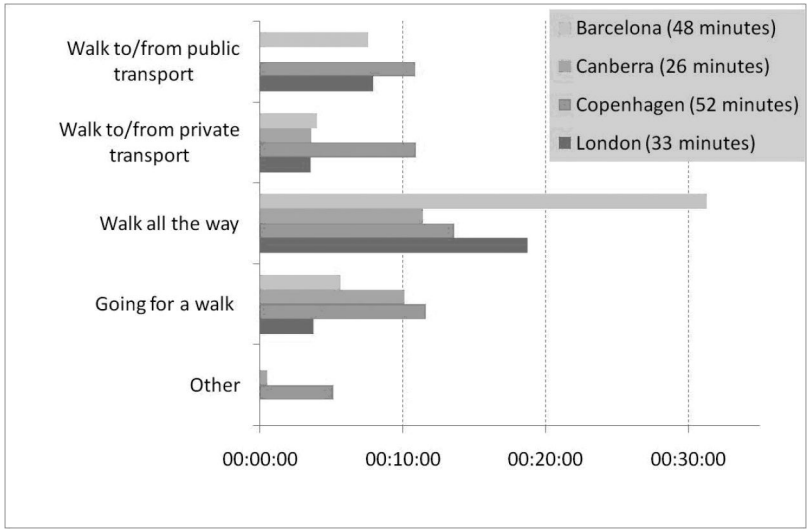


Figure 3. Daily minutes walked by trip type (All respondents)

5.3. Motivations

Across all the cities and across all respondents, people are motivated by positive associations with walking, i.e. the exercise benefit, the enjoyment of being outdoors, pleasure and relaxation.

Young people and adults express very similar positive motivations for walking. In addition, young people put more importance on being with their friends as a reason to walk and spend time in public space. As highlighted above, respondents in Canberra particularly, but also London, were highly articulate about their reasons to walk - suggesting a higher consciousness of 'choosing to walk', rather than it just being part of daily life.

Despite time being identified as a key barrier to walking (see below), London respondents, more than any other city, said they are motivated to walk as it is quicker. Understanding real journey times for walking can be critical to encouraging more people to walk, especially short trips, as these are often misjudged. This is the basis for addressing perceptions over reality by providing people with journey time information on mapping and journey planners, for example the Legible London wayfinding system (AIG, 2006, 2007).

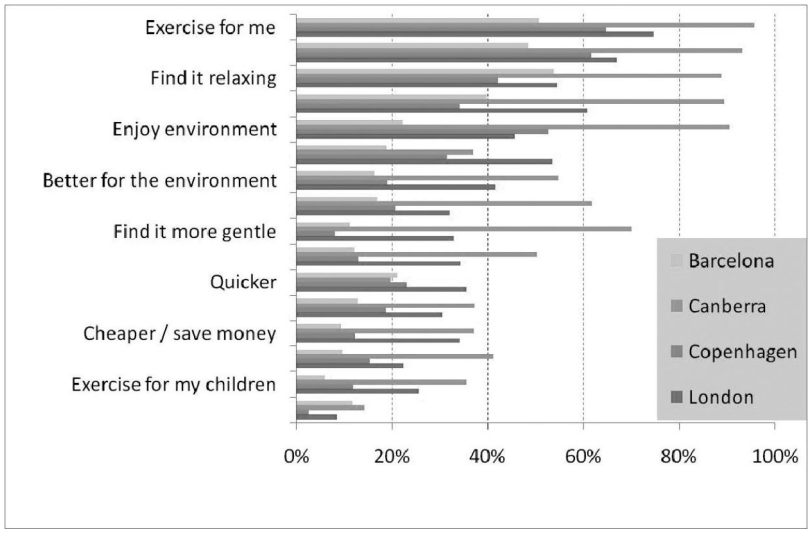


Figure 4. Motivations for walking (Adults)

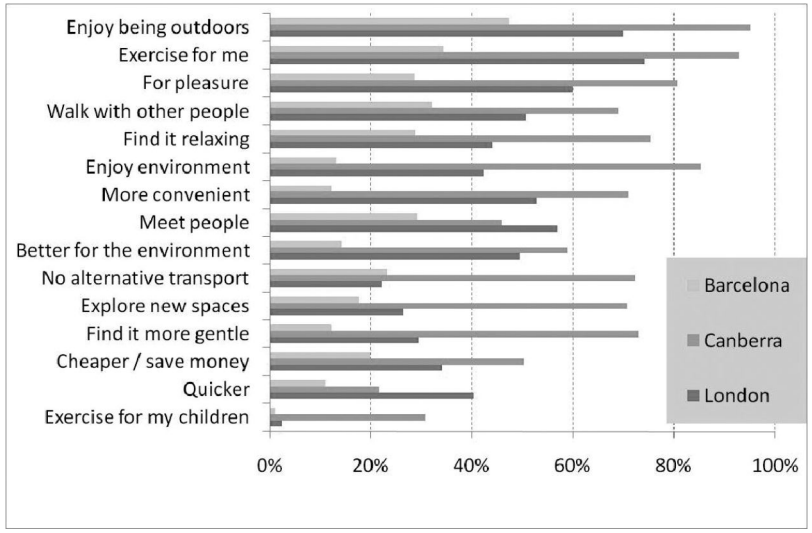


Figure 5. Motivations for walking (11-15 years)
**Young people were not allowed to be surveyed in Copenhagen.*

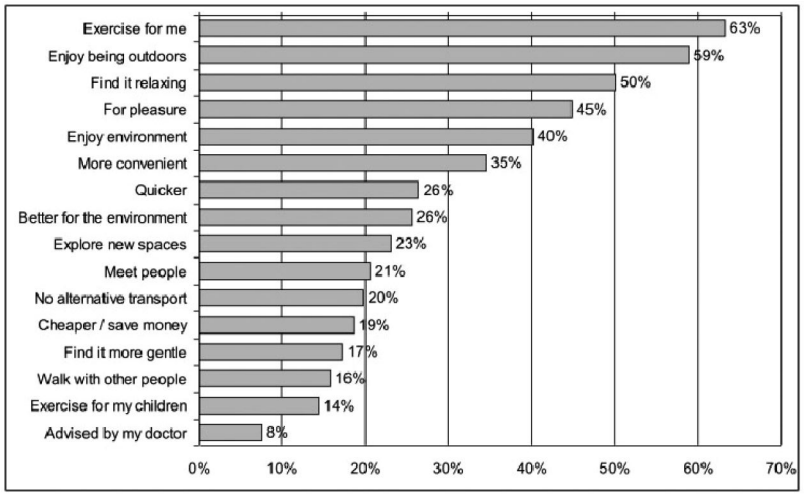


Figure 6. Motivations for Walking: arithmetic mean of adults in London, Copenhagen and Barcelona.
**This was a multiple choice question, thus percentages won't add up to 100.*

5.4. Barriers to Walking

People experience a range of factors that can deter them from choosing to walk, even over small distances.

The MWC tool distinguishes between the barriers within the environment people experience and those within an individual's daily activities, habits and perceptions.

5.5. Personal Barriers

Time is the biggest personal barrier, mostly that 'it takes too long' but also, by a subtle difference, that people are 'in a hurry'. Copenhagen is exceptional in that people prefer their bicycle to walking and London is notable as some people feel less safe walking there.

Carrying shopping is cited as another key barrier. This is lowest in Barcelona, with accessible local shops and highest in Canberra where shops are less accessible. When people walk to local shops, research in London shows that they shop more frequently (therefore potentially carrying smaller amounts) and ultimately spend more money in their local centres. People who drive to shop, may spend more per trip, but come less often and overall spend less time and money in their local community.

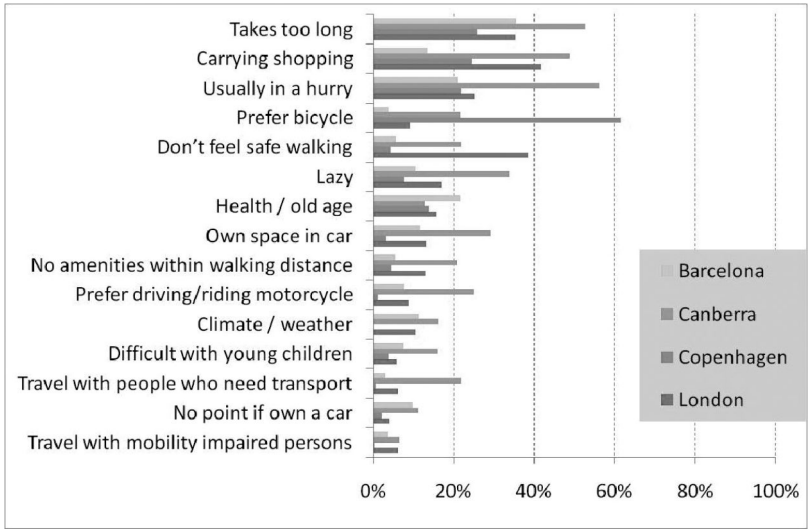


Figure 7. Personal barriers to walking (Adults)

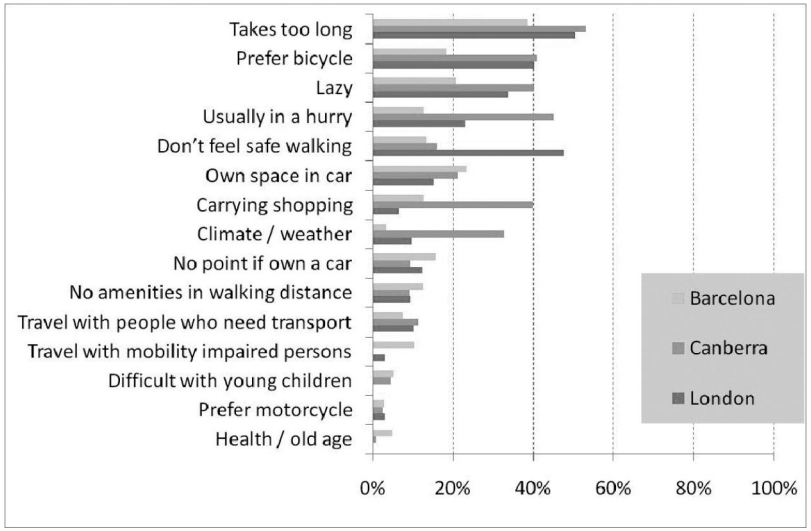


Figure 8. Personal barriers to walking (11-15 years)
**Young people were not allowed to be surveyed in Copenhagen.*

5.6. Environmental Barriers

Each of the four cities illustrated in this article cite consistent concerns about the walking environment, but with some strong individual distinctions. Traffic and maintenance of the public space are the key shared concerns, while people find the pavements too narrow in Barcelona and Canberra is poorly lit. For Londoners, it is again about personal security and safety crossing the road, while in Copenhagen not having amenities in walking distance, too much traffic and air pollution prevent people from walking.

Overall however, people do feel positively about their neighbourhood and perceive their environment as pleasant or very pleasant to walk in.

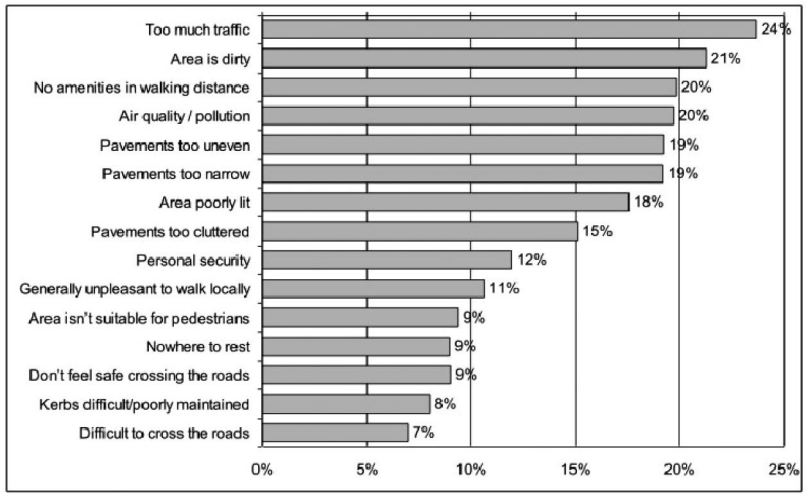


*Figure 9. Environmental Barriers to walking: arithmetic mean of London, Copenhagen and Barcelona. *This was a multiple choice question, thus percentages won't add up to 100.*

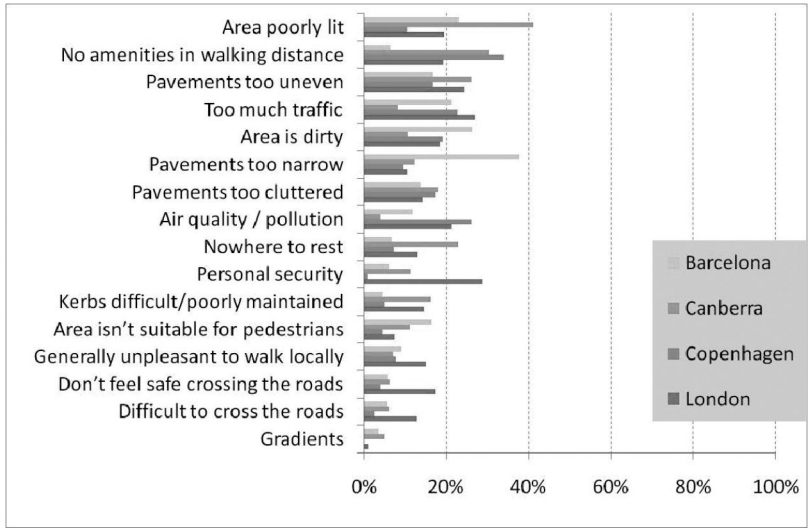


Figure 10. Environmental barriers to walking (adults)

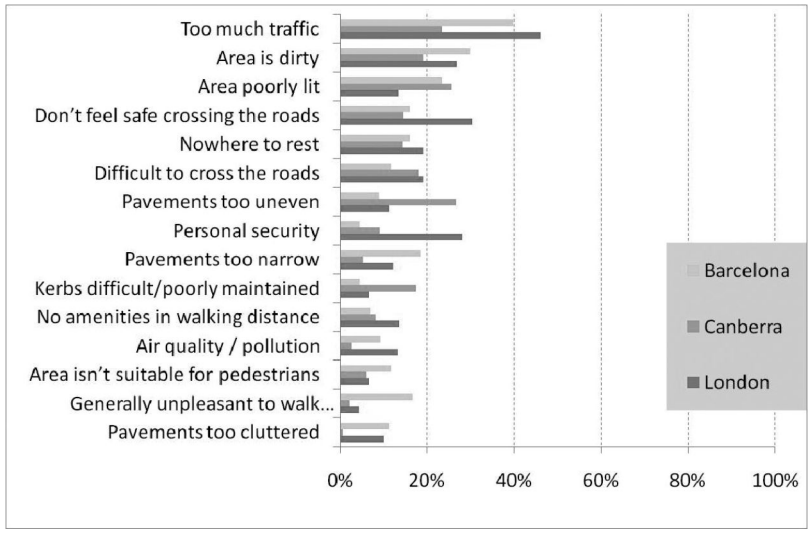


Figure 11. Environmental barriers to walking (11-15 years)

6. Improvements to the walking environment

Residents in the four cities (and in fact in all the MWC surveys undertaken to date) are clear about what's needed to improve the environment for walking: make it safer and make it greener. Safer means both road safety and personal security, i.e. better lighting, less traffic and more crossing points.

Greener interventions encompass enhancing the available routes and streets, as well as improving air quality.

Consistent with this and their identified barriers to walking, residents of London, who don't feel safe walking, strongly identify improved lighting and personal security as the improvements they would like to see, particularly in the outer suburbs. While residents of Copenhagen don't give as much value to improved security, they align with London and other cities on the appeal of more green spaces, places and streets to improve conditions for walking.

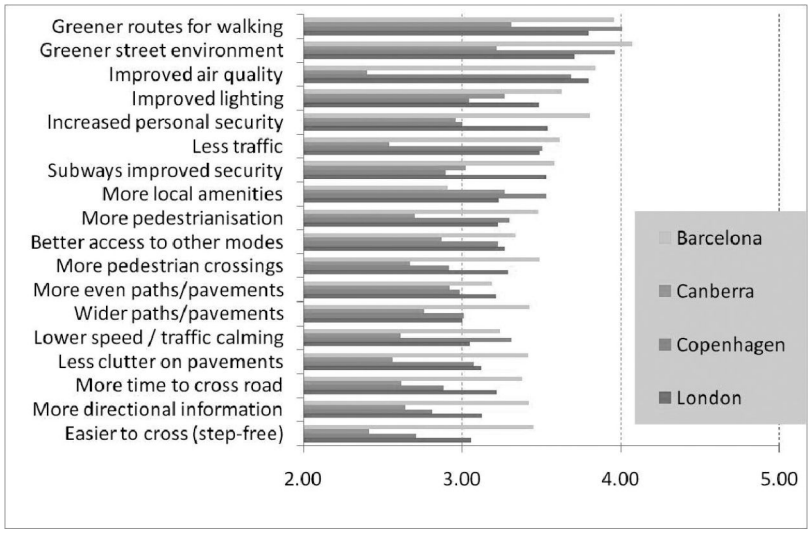


Figure 12. Improvements to encourage walking (Adults)

7. Conclusions

There is still work to be done to both refine the available tools to ensure communities measure walking consistently and to promote the importance of and need for data about walking to inform decision making around the world. To sustain the global renaissance of interest in walking, it is important to build not only the body of evidence about the benefits of counting and encouraging walking, but to also provide the tools for municipalities to measure the impact of future investment decisions.

It is critical to capture all the journeys people make on foot to accurately quantify how much walking is actually happening in our cities and towns and provide a true understanding of its place in the transport system and social fabric of our communities. Walking is ideal for short, localised trips and its value for these journeys must not be drowned out by bigger, louder modes to destinations further afield.

Walk21 will continue to work with experts from around the world, through its international conference series and the Measuring Walk-

ing project to champion international awareness of how to measure walking with a consistent methodology and how to enable that data to inform effective investment decisions.

The MWC tool enables us to build a global understanding of what walkers need with consistent and comparable data. At the same time, city officers can learn from the city comparisons available with a standardised survey while segmenting their own data across their different neighbourhoods and population profiles to identify specific needs and opportunities to invest effectively in walking policies, programmes and infrastructure.

8. References

AIG FOR CENTRAL LONDON PARTNERSHIP (2006). Legible London: A wayfinding study, London, UK

AIG FOR TRANSPORT FOR LONDON (2007). Legible London: Yellow Book, London, UK

DE BOURDEAUDHUIJ, I. et al, (2003) Environmental Correlates of Physical Activity in a Sample of Belgian Adults American Journal of Health Promotion, Sep 2003, Vol. 18, No. 1, pp. 83-92.

METHORST, R. et al, (2010) PQN Final Report, Cheltenham UK: Walk21

WALK21, (2012) Making Walking Count: Four Cities Benchmarking Report, Cheltenham, UK: Walk21

Partners in developing MWC Survey Tool:

Walk21

Mobiel21

Colin Buchanan

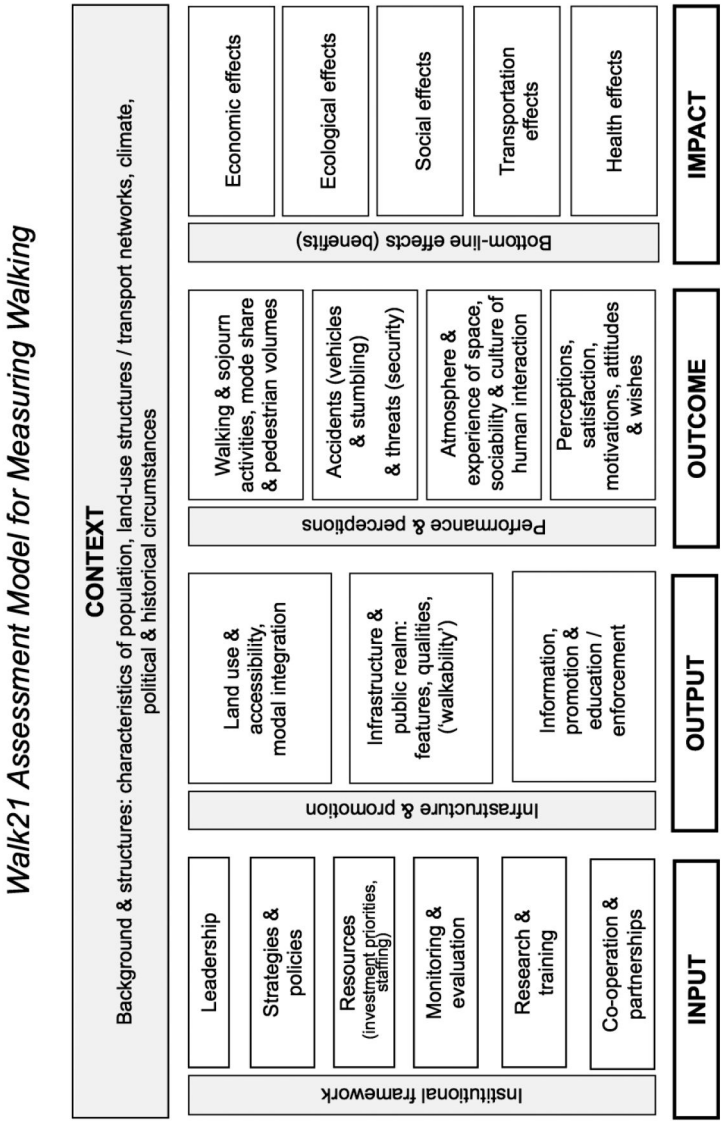
Accent

Transport for London

City of Copenhagen

Urban Mobility Research

9. Appendix



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