The Potential of Pedestrian Signage Systems, Located in the Urban Environment, to Encourage Greater Levels of Walking.

A Study of the Bristol City Centre Pedestrian Signage System.

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Presentation Outline

- Why walking and pedestrian signage?

- Why Bristol?

- The evidence base and dissertation purpose

- Research methodology and findings

- Interpreting the results

- Conclusions and recommendations

Why Walking and Pedestrian Signage?

• National recognition of the need for carbon reductions, modal shift and active travel

• Decline in walking levels over the last decade

• Historical political, financial and resource investment in walking

• Political paradigm shift

• Rise in academic and professional research into factors which encourage walking

• Wayfinding through an unfamiliar environment as a barrier to movement, but limited focus on walking

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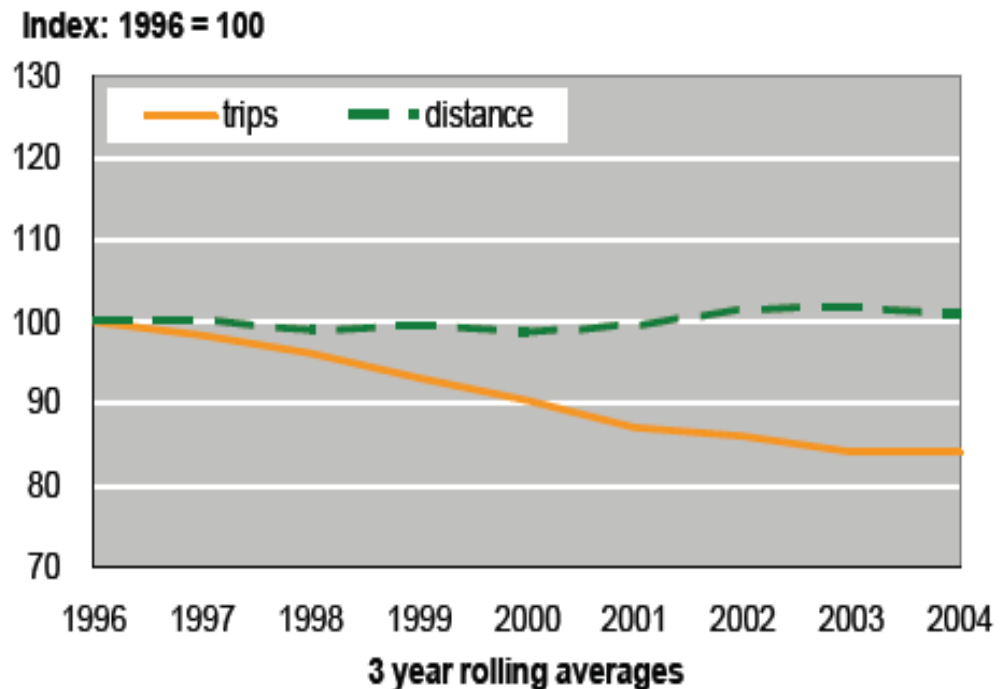
Why Bristol?

"This is an outstanding example of planning innovation and achievement, which fully deserves wide recognition. We were particularly impressed by the use of specially developed maps…that people can readily recognise. " **RTPI, 2002**

- A city with no clear visual identity

- Judged to offer little information/directional assistance to pedestrians

- Bristol Legible City Project

- Pedestrian signage implemented in 2001 and extended in 2002 and 2003

- Aims to encourage walking and aid wayfinding in a complex city centre environment

- National beacon of best practice for pedestrian wayfinding systems

- Never subjected to regular, official and detailed monitoring and evaluation

- Only evaluation conducted in 2002 is primarily anecdotal and inconclusive

Left sign

Bristol Old Vic	West End Shopping
Queen Square	College Green
St. Mary Redcliffe	Bristol Cathedral
Temple Meads Station	City Museum & Art Gallery
	University of Bristol

Centre Promenade
City Centre

freshly made for you

Right sign

Temple Circus
Temple

The Evidence Base and Dissertation Purpose

• The local and national policy landscape

• Legibility (Lynch, 1960)

• Mental Maps (Lynch 1960; Jenkins and Walmsley 1993; Golledge, 1999)

• The Wayfinding Process (Passini, 1981)

• Legible London

• Wayfinding and Transport (Burns, 1998)

• Gaps in the existing evidence base –
  limited focus on pedestrian wayfinding
  and the impact of wayfinding tools
  located in the walking environment
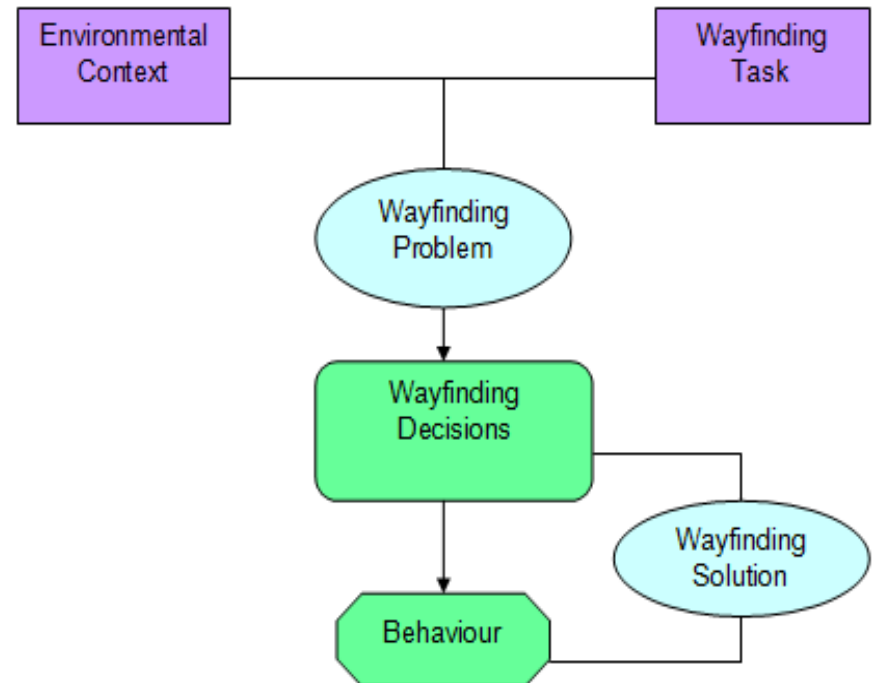
Research Methodology

- The challenges of collecting walking data

- Research framework – eliminating a longitudinal study and employing a hybrid research design

- The case study and survey approach

- Tried and tested: Legible London

- Questionnaires

    - Convenience sampling

    - Face to face

    - 100 (at city gateways)

- Interviews

    - 10 participants identified from questionnaires

    - Frequent and infrequent walkers

- Limitations

Key Findings

Questionnaires

- Opportunity: 79% of questionnaire respondents were travelling to a destination within a 2km radius

- Positive utilities such as convenience and exercise were most influential in the decision to walk

- Familiarity with environment was not found to be a significant factor in the decision to walk but the fear of getting lost is influential

- Pedestrian signage was not considered to be influential in encouraging walking BUT directness and greater awareness of key locations in a reasonable walking distance are important

- Printed maps and mobile technology are considered to be most helpful for pedestrian wayfinding

- Only 27% of respondents believed that pedestrian focused signage and maps would encourage them to walk more and of these 63% spent none or just some of their total walking time in Bristol

- Different wayfinding tools are needed before and during a walking journey

Key Findings

Interviews

- Positive attitude towards walking *"You feel sort of lively and healthy if you walk"*

- Infrequent walkers are more likely to drive to a destination which is within walking distance and the exact route is not known

"If I was going to a city centre, I didn't know the area and I was looking for somewhere in particular I'd be likely to get quite lost... I'd get hold of a taxi or something"

- The absence of pedestrian signage would deter infrequent walkers from walking to a destination when the route was unknown, but not frequent walkers

- Pedestrian signage alone is not sufficient to navigate to a destination and other wayfinding tools, such as a map, are needed prior to and during a journey

- Pedestrian signage offers reassurance during a journey and supports maps. Spoken direction was also found to be important.

"If I go somewhere like Bristol or bigger it's (signage) *really important 'cause otherwise I'd get hopelessly lost...I've got a really big fear of getting lost and that would stop me walking"*

Interpreting the Results

- The opportunity to walk exists and there is a positive attitude towards walking

- The fear of becoming lost and the need to wayfind through unfamiliar environments adversely influences the decision to walk, especially for infrequent walkers

- Pedestrian signage systems are most important to wayfinding and encouraging walking during the journey. However, it is still significantly less important than maps, spoken direction and mobile technology

- The creation of mental maps and urban legibility is strongly dependent on elements of the built urban environment and spatial representation which is best conveyed by printed maps

- Pedestrian signage is more important in a complex urban environment, located at a decision point such as a junction where there is a heightened fear of becoming lost

- Bristol's pedestrian signage system does not appear to convey the level of information required by the user or in the method most conducive to encouraging walking

- Printed maps appear to be essential for wayfinding and encouraging walking

Conclusions and Recommendations

- Assumption that an understanding of the barriers and facilitators to walking will assist the development of practical measures to encourage greater movement by foot

- Environment must be considered 'walkable'

- The fear of getting lost and the requirement to wayfind is considered to be a barrier to walking

- Wayfinding information is considered important however, in Bristol, the value of pedestrian signage was questioned

- Potential of pedestrian signage alone to encourage walking is limited

- Maps, spoken direction and technology are key for satisfying wayfinding needs both pre-trip and in-trip

- Role for support and reassurance in-trip and promotion of positive utilities

Conclusions and Recommendations

- Implementation of pedestrian wayfinding systems should consider, and extend, beyond just pedestrian signage

- Pedestrian signage should be used in combination with other wayfinding tools

- Wayfinding systems must be context specific

- Consider and utilise technology

- Regular monitoring and evaluation is key
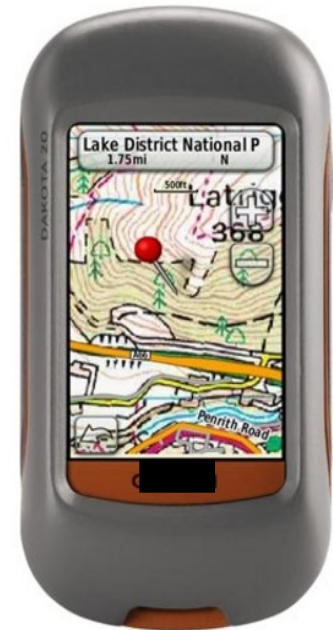
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