Walking Maps

Department for Transport

Walk England

CONTENTS

FOREWORD

Maps have become an integral part of our lives. They often play a key role in the way businesses function, give people the confidence to walk further and more regularly, discover new places and lead healthier lives. The Department for Transport is keen to encourage walking to benefit both the individual and the communities in which we all live and work.

Producing a map is not as straightforward as people may assume and the needs of pedestrians have often been overlooked. This guidance has, through research and case studies, considered the needs of people on foot and focuses on the processes to follow, the questions to ask and the pitfalls to avoid in drawing up a walking map. The principles, tools and examples in this guidance could also help employers and developers draw up travel plans for their organisations.

This document is the first publication for Walk England, a body supported by The Big Lottery Fund and The Department for Transport to encourage people to walk more regularly. More information about their important work is at www.walkengland.org.uk. I congratulate them on their efforts and am confident this guidance will create more walking maps, inspiring more people to discover new places on foot. As a result, I am confident we can help create a healthier, more active nation.

Rosie Winterton

Rosie Winterton MP
Minister of State for Transport

BACKGROUND

The Department for Transport made a commitment in the Walking and Cycling Action Plan (Chapter 3 – Influencing Travel Behaviour, Action 33) to '*Bring together those who have produced state of the art walking maps to produce good practice guidance on the benefit of such maps*'. Walk21 was contracted in January 2006 to coordinate the writing of a guidance document. In February 2006 a group of 28 specialists in the field – including local authority officers, consultants and non-governmental organisations – came together to pool experience and knowledge and contribute case studies to assist with the drafting of the guidance.

It is clear that mapping, in various forms both on and off site, is a common and powerful tool used by a variety of organisations for many different reasons. This publication is principally concerned with maps produced for pedestrians to support and encourage walk journeys.

Many UK cities, towns and even some villages produce local maps for visitors with the common goals of helping orientation and waymarking, promoting attractions, encouraging exploration and giving confidence. Many of the examples cited in this guidance are from large cities and metropolitan areas, as very often they have been the ones with the resources to combine their production with detailed behavior studies and evaluation methodologies. It is hoped however that the case studies will collectively be of benefit to the wide range of organisations with potential interest in developing effective maps for walkers.

It is acknowledged from the beginning that there are many audiences for maps, and places differ markedly. It would be inappropriate therefore to offer a 'one-size-fits-all' solution for walking maps – maps need to be tailored to each unique local situation and the needs of their audience fully considered. This document therefore focuses on case studying useful and interesting approaches to walking maps, highlighting pitfalls to avoid and offering a

checklist/series of questions to guide the process for producing effective mapping.

It is hoped that this guidance will be updated regularly informed by best practice as it develops and as further research is released.

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INTRODUCTION

"Mapping is a key form of communication in the public realm".

Defining maps and waymarking

A map is defined, for the purposes of this guidance, as any kind of simplified depiction of a place either on-site or off-site and intended as a navigational aid to highlight the relations between objects, and enable people to pinpoint their own location and that of the places they want to get to.

'Waymarking' is used to describe on-site directional signs or fingerposts. (Supplementary best practice is recommended to follow and explore waymarking issues in more detail complementary to this guidance).

The audience for this guidance

This guidance has been written primarily with the needs and interests of local authority officers in mind. It is hoped that senior officers will also find it helpful in working towards corporate strategic targets. Planners, tourism departments, inward investment staff, school travel officers and technicians should find it useful for its guidance on processes to follow, questions to ask, pitfalls to avoid and detailed examples of schemes which have worked elsewhere.

As a secondary target group, private sector organisations may benefit from this guidance to assist with understanding how people move around spaces or how they can be supported to make connected journeys. The principles, tools and examples may also be useful to assist with travel plan commitments for work places, public buildings and new developments.

The purpose of this guidance is to:

- Make the case to support the production of effective walking maps

- Raise awareness of the questions to ask when planning maps for walkers (rather than answer them all!)
- Support creativity, innovation and local adaptation of the guidance so that mapping and waymarking systems are developed to target specific audiences and situations.
- Identify potential sources of funding for developing walking maps (via case study examples).

A BRIEF HISTORY OF WALKING MAPS

Drawing maps to represent places has a long history. In northern Italy, for example maps carved on rock have been found dating back at least 2,500 years, and, in China, a 2,300 year old map was found, in 1970, giving the locations and distances between 5 mausoleums.

Most maps, designed for walkers over the last 50 years or so, at least in our towns and cities, have presented information on a street map base which was originally drawn for the needs of drivers to illustrate the road network. These have had arguably more limited levels of success than the earlier maps which used design tools, some of which are enjoying a renaissance more recently, for delivering information to people on foot. In particular the techniques of mixing 3D images of buildings and 2D mapping; aerial perspective; and strip maps.

The plan of Jerusalem (below), based on a 14th century manuscript, is an example of how miniature pictures of major buildings have been combined with 2 dimensional mapping.[i]

Image taken from Historical and Curious Maps published by The Pepin Press www.pepinpress.com

A map of 1730s Paris, published in France in 1878, has 3D buildings and river traffic, and appears almost more like an aerial photo[ii].

Image taken from Historical and Curious Maps published by The Pepin Press www.pepinpress.com

Early European maps of particular routes were drawn as a strip, in sections, with no need for scale or orientation. They assume that the traveller would proceed from the bottom of the page to the top, so the map in fact always points in the direction of travel. One serious drawback of this approach is the potential of "falling off the edge": once off the route, essentially the walker is off the map and there is no help or guidance.

From Britannia: Volume The First, *one of the first route maps to be published (1675) by John Ogilby.*

THE CASE FOR WALKING MAPS

There is a strong case for producing maps specifically for pedestrians. These include the economic, environmental, health, tourism, transport and regeneration perspectives:

Economic

If people know where they are, they are more likely to be comfortable and relaxed. In turn they'll stay longer and spend more. Highlighting shopping areas to direct people to spending opportunities is a popular motivation for developing walking maps.

A study of ten traffic restraint schemes in eight European cities, in 1988, showed that improving conditions for pedestrians led to the shops having a higher turnover.[iii]

More recent research, in London's Kensington High Street[iv], found that the majority of people arrived on foot (49%) and that walkers made more shopping trips than the car drivers. They also found that total spend was dominated by public transport users (49%) and walkers (35%). Car users and their passengers accounted for only a tenth of total spending (and this was before London's congestion charging was introduced).

Case studies: Bristol Legible City; Walk this Way.

Environmental

Mapping and waymarking projects frequently form part of initiatives to clear away street clutter and improve the look and the safety of particular networks of routes.

Case studies: Angel, Islington; Peterborough.

Health

The physical and mental health benefits of walking are leading to some doctors prescribing walking for their patients. Having a good map can give novice

walkers the confidence to get up and get out.

Case studies: Walking for Health; Merseyside Calorie Maps – after using the maps 27% of people reported increasing their walking to over 30 minutes); Salisbury/Wilton; Worcester/Warndon; Urbanwalks.

Promoting tourism and projecting a positive image

A good quality map can act as an ambassador for a place and shape visitors' and residents' attitudes and perceptions of a particular place. Walkers are often described by organisations such as Living Streets as 'Indicators of how much an authority cares about its citizens'. A map is often the primary medium used by authorities to communicate its messages. Research suggests that a good map announces an authority that cares for both the space it looks after and the people using it.

Case studies: Newcastle/Gateshead; Bristol Legible City; Spatial Metro, Norwich, St James' Park Royal Parks.

Promoting sustainable transport

Most good walking maps permit the user to integrate journeys on foot with other means of travel (where available).

Case studies: Worcester/Warndon; Salisbury and Wilton; Newcastle/Gateshead

Linking new residential/commercial areas

Maps are a very good way of showing the relationship between the whole and its parts. At a glance, map users can see how close they are to accessing facilities on foot.

Case studies: Salisbury and Wilton; Bristol Legible City.

PRINCIPLES FOR AN EFFECTIVE WALKING MAP

The objectives of a good walking map

- To be a reliable and accurate source of information to support and encourage users to make the right choices on their walk journeys.
- To help the user understand where they are, where they want to go/ explore and how to get there. (Getting lost within limits may be acceptable and even fun, but it should be within the map users' control. It is not an excuse for bad mapping).
- To give the user a feel for what the place is like.
- To convey an impression about the priorities and aspirations of the organisation that have developed the map; their attitude to the map user, the place being mapped and the relationship between the two.

1. Communicate effectively with the user

"Start by thinking: 'Audience, audience, audience'. Don't start with the map."

A map is a means of communication. Right at the start, therefore, it is essential to establish who the audience is and what information would help them. Try to understand how and why people want to move around and what they need to know at which points in their journeys. Research suggests that a good understanding of user behaviour, their motivations and the gaps in the current available information is more likely to lead to the development of a more effective walking map.

An effective map should aim to be:

- Relevant
- Interesting
- Engaging
- Portable
- Legible/understandable

- Inclusive
- Available and known about

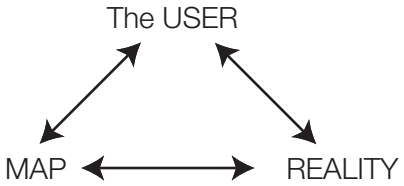
"Being able to read a map is NOT instinctive, nor even easy for many people"

Effective communication using written words relies upon literacy. A House of Commons report in 2005 found that up to 12 million adults have the reading and writing skills expected of children leaving primary school.[v]

Given this fact, and the fact that many map users are often in a hurry or are trying to read the map outside and in all weathers, it is good practice always to keep text as clear and simple as possible. The Plain English Campaign provides useful guidelines (www.plainenglish.co.uk)

Map-illiteracy is probably even more common than ordinary illiteracy. Furthermore research suggests that map illiteracy is further compounded by the lack of complementary ordinary directional signage on the ground."[vi] (Wekerle and Whitzman).

Understanding and using a map requires a combination of cognitive processes so that the user can match the conventions of the map with the actual environment it represents. Many people find it difficult to locate themselves on a map in particular as it requires the capacity to juggle and understand the relationships between oneself, the 2D representation of reality on the map and the reality of the space represented. This has implications for design, consultation and evaluation.



On many tests of spatial ability, men outperform women when considered statistically across a large population. But this does not mean that it is possible to pre-judge the performance of individuals based on gender: some men struggle with maps; and some women excel. This too has implications for consultation and evaluation.[vii] [viii]

Research shows that the style and design of a map hugely affects its readability. Children as young as four have demonstrated that they can understand

schematic versions of objects in the real world, if the map is made of small sized pictures of the target objects.[ix]

2. Be consistent and ensure continuity

Using the map should be a single, seamless experience. There should be:

- Consistency between organisations, so that the information is logical for the users – with no unnecessary demarcations between different landowners/operators.
- Continuity within the map and between on-site and off-site information. For example the name of a destination should be the same on the map and on the waymarking. Once a destination has appeared on waymarkers, they should continue showing it until they reach it.
- No "falling off the edge". Relationships must be managed between neighbouring authorities so that styles of e.g. waymarking are not totally different across a boundary. This tends to reassure walkers that they are still on track.

3. Encourage exploration

A good walking map can:

- Provide incentives to extend a walk or encourage a walk trip instead of a ride or drive. In a survey in Central London, conducted for Transport for London in 2003, after the introduction of 2 new walking maps, designed to encourage longer journeys on foot, 5% of people spontaneously mentioned the maps as a trigger to encourage walking. This rose to 11% among tourists.

Case studies: Angel, Islington – developed a 3D map of the bus route put at every stop tempting people to walk instead of waiting and gives confidence.

- Appeal to different motivations – tranquillity, interest, searching for a short cut etc.

Case studies: Spatial Metro, Norwich; Salisbury and Wilton; Exeter Green Circle

- Manipulate the experience and impression people have of a place by routing them through specific places and managing their exposure to sensitive or disappointing areas.

Case studies: Bristol Legible City; Spatial Metro, Norwich

- Give confidence to encourage different routes to be tried. Many users of health walk maps for example report that they didn't previously know about the paths mapped, even though these routes were local.

Case study: Walking for Health; St James' Park

- Improve safety by showing pedestrian crossing information for example. More than half of all pedestrian casualties are crossing a road more than 50 metres from a crossing – more like three quarters amongst children. That may be because there was no suitable crossing, but there may well be cases where they would have used a crossing if they'd known where it was. Even if they don't have an accident, they may be more comfortable or more confident about the route if they know where safe crossings (including the location of zebras, pelicans, puffins, other traffic lights, islands/refuges, etc as well as under-passes and over-bridges) are – especially on busy main roads. That applies to rural routes that cross main roads as well as urban areas.

4. Characterise local identity

It is possible to use walking maps to promote the local distinctiveness of a place and indeed when they do, maps tend to be more memorable and legible.

Case studies: Mitchell's Fold; Exeter Green Circle; Spatial Metro, Norwich, St James' Park

5. Plan for Updateability

Keeping a map accurate is often neglected and can be expensive. It makes sense to match, as far as possible, the durability (and expense) of a walking map with the permanence of the features being mapped as well as a good understanding of demand. Features will change and some places, such as the City of London insist that developers who change the landscape significantly pay for the map signs to be updated; others, such as Norwich (Spatial Metro) achieve it by developing a virtual mapping system.

It is increasingly possible for map information to be stored as data on a computer and printed only as needed, even by relatively small organisations. It is far cheaper this way to make adjustments to the data as well as being able to share information on web-based GIS (Geographical Information Systems).

6. Use a hierarchy of information

One of the arts of planning maps is to give the users the right information at the right time. Too much information all at once is overwhelming. Decisions must be made about what sort of things are better put on a map and what would be better on waymarkers (if available). (Also known as progressive disclosure).

Research in London showed that people predominantly used a map to plan their journey and then used other devices along the way.[x]

Case studies: City of London; Angel, Islington; Bristol Legible City; Coventry

It is crucial to break the task of helping people find their way into manageable chunks – first finding the right general area, and then the specific thing they want. In addition to splitting information between off-site and on-site maps and markers, it is sometimes useful to have split the information on hand-held paper versions between two or more maps rather than have everything on one map.

Case studies: Coventry; Spatial Metro, Norwich; Exeter Green Circle

PROCESSES

1. Target market users

"A walking map should be for WALKERS not a road map overlaid with walkers' information. Think hard about what to leave off (such as road categorisations) as well as what to show (such as cul-de-sacs which walkers CAN get through)."

There is a thirst for maps and good maps are much sought after. Transport for London's research on their central London walking maps showed that among people who didn't know about their (newly produced) maps, 46% were "very interested" in them. There was even greater interest in the map among the tourist sample than among commuters (61% compared with 41%), and stronger interest among women and younger people.[xi] Central London's Walk this Way series had to be reprinted more often than expected and Bristol Legible City have distributed 1.5 million copies of their paper map in three years.

The audience for walking maps is not a single mass of people with one set of needs, therefore it is crucial to be clear at the outset what the mapping project is trying to achieve. The aims of a map will determine the market. In some cases maps have a wide remit in others they are highly specific.

It is obvious but nonetheless true, that the target market has a big effect on possible sources of funding. For example, it will be difficult to convince primary care trusts to fund a map that is aimed at encouraging tourists to walk between attractions. Political and budgetary considerations can often determine both the scope and the timescale of a mapping project.

An audience will not usually have unlimited time, attention and patience. Sometimes users will be under time pressure – trying to get to work or to a hospital appointment for example, and sometimes they will be under stress: possibly partly as a result of the accumulation of wrong wayfinding decisions. Users need clear, relevant information.

It is important to realise the characteristics of a particular market/target audience and how to engage each audience with appropriate information.

People cannot necessarily be pigeonholed into just being “walkers” or “cyclists” or “bus users”. The same people may well want to walk *and* use public transport on the same journey, but will not want to carry handfuls of maps. If scale allows, integrated mapping can be a powerful solution.

Research suggests that dividing people into “locals” and “tourists” is not generally very helpful or specific enough. Many people know the areas they frequently visit but have only a hazy notion of what lies off these familiar routes. They are not (and do not want to be seen as) tourists but can be attracted to walking maps.

Understanding an audience and what they need should be constantly cross-checked throughout the process. Ideally relationships with the audience should be developed to test maps during development as well as at the end – imagine some different scenarios with hypothetical users: a shopping trip, a family leisure trip, a business visitor for example and build their potential use of a walking map into the development process. Remember that some audiences for walking maps may include people orientating themselves at night. Published mapping information may require further thought on which routes to promote and which areas have street lighting, do the routes go through gates which shut at a certain time for example?

Case studies: Bristol Legible City, Worcester/Warndon; Newcastle/ Gateshead

2. Cater inclusively for people with different abilities and backgrounds

It is important that maps and waymarking are user-friendly to as many people as possible whatever their ability or background. It is estimated that 12-13% of people in UK have some form of disability[xii]. If we add in the people they travel with – that equates to a sizeable potential audience to use or share these maps.

The number of people for who English is not their first language differs very widely in different parts of the country, and at different times of year – as tourists come and go. The key finding of a 2001 report for the then Department for Education and Employment was that there are no reliable data on the number of people living in GB whose first language is not English, but at least three million people living in the UK were born in countries where English is not the national language.

Traditionally, maps have been expensive to produce and in order to maximise return on the investment, map makers have tried to make sure that their maps have as wide a market appeal as possible. In general, the "special needs" market has been considered as a separate audience and one which has rarely been catered for because it has been judged too small to support the initial investment. However following the Disability Discrimination Act, the advent of more flexible software packages and the falling costs of map reproduction techniques, it is now realistic to produce inclusive and accessible walking maps for users with a range of different abilities and backgrounds. Several providers are now working with interactive maps on the web, which allow the map user to select the features they want their version of the map to show. See:

- 'Inclusive Information' a report written by The Dog Rose Trust to detail the options for providing inclusive information and available at www.theaccesscompany.com
- 'By All Reasonable Means' a report published as part of DEFRA's Diversity Review based on the Paths without Prejudice and Sense and Accessibility working papers produced by the Countryside Agency in 2001. See www.countryside.gov.uk/LAR/Recreation/DR/Resources
- Explore Kent – an inclusive interactive map facility. See www.explorekent.co.uk

For people with mobility disabilities, getting information in advance of a specific journey can be a particular advantage. It can enable route planning to avoid steps or stairs, and to make use of accessible toilets and benches/resting places.

Experiments with blind adults, testing their wayfinding ability, showed that appropriate maps can be very useful to them. Blind adults had a better practical knowledge of routes when they had studied tactile maps than when they had learned either through direct experience or from verbal directions.[xiii] And there are approximately 2 million blind and partially-sighted people living in the UK.[xiv]

Tactile maps present spatial information to the user through their sense of touch rather than sight, using a combination of textures and tactile shapes. In order for them to be readable by touch they need to be very much simpler than a conventional map. It has been found helpful to highlight landmarks to enhance their tactile distinctiveness, and make sure that landmarks in the same category are represented using the same shape or texture[xv]. The more successful tactile maps are ones where the background "noise" – in the form of irrelevant textures – is kept to a minimum. (See Case Studies Coventry and Mitchell's Fold)

Tactile maps are the most publicised way of creating something to help wayfinding for blind or visually impaired people. There is however a wide variety of other sensory design solutions for waymarking – from tactile underfoot surfaces to sound beacons and from talking signs to Braille and large print signs with instructions. Landmarks provide a useful framework for mapping and waymarking, and they don't have to be seen – some may give off a smell (a pie factory, a coffee shop, a brewery) or a noise (fountains, children's playgrounds, busy roads). Using all the senses in design is an advantage to everyone not just to people with disabilities. By using approaches which rely on senses other than sight research suggests we can communicate more fully with more people, and what started out as an attempt to include blind and partially sighted people can actually make a richer and more interesting experience for all.

Many of the features of maps and waymarking systems which have been designed with people with disabilities in mind are actually better for everyone. For example, waymarking for visually impaired people needs a good level of lighting, but this benefits everyone – not least because of the greater sense of security. Similarly the Central London Photo Map (see Cross River Partnership's Accessible Photo

Maps), created for wheelchair users and for people with learning difficulties has proved popular with people who do not speak English.

There is no substitute for trying out designs with real people but suggestions for accessible fonts and print sizes, colour contrast, formats, layouts etc designed for partially sighted people can be found in various publications including: Inclusive Mobility: A Guide to Best Practice on Access to Pedestrian and Transport Infrastructure *Oxley*, 2002 and The Sign Design Guide *Barker and Fraser* 2000

Case studies: Angel, Islington; Coventry, Dog Rose; Mitchell's Fold, Dog Rose; Photo map

3. Consult and research to foster engagement

"When we were asked to produce a new map of the area, we looked around and found that there were already 12 different existing maps".

The most popular walking maps among the case studies featured in this guidance are the ones that have been the result of thorough consultation.

Consultation can bring huge and often unexpected benefits. It will often teach things about an area which are previously unknown and can reveal a wide variety of people's perceptions and experience. It will also engender a sense of shared interest and commitment to a place and will help to promote the final product through the consultees' networks and amongst their friends and relations.

Quality however takes time and resources. Many of the case studies mention that effective consultation cannot be rushed, and that it will almost always take longer than planned. Testing and trying out ideas is expensive as well as time-consuming, but it can be more expensive to get it wrong. Consultation must be built into the business case at the start.

City ID's experience in Newcastle/ Gateshead (see Case Study: Walk Ride) has been that very extensive consultation at every level has enabled them to satisfy the public, the politicians, the transport providers and the other stakeholders very effectively. So much so that there is now an expectation that there won't be a need to redraw the maps for 10 years. The Salisbury and Wilton mapping project

found that just the design process took 3 months, and went through several draft stages because they were keen to consult on the detail.

The best consultative processes are not a matter of producing a draft map and then trying it out on potential audience members, but beginning at the start of the project, once the audience is established, and working with them at every stage.

In the example of Sustrans' "Travelsmart" work in Worcester (see Case Study: Warndon Local Travel Map) and other Sustainable Travel Towns, their baseline research at the outset informs years of work, and proves to be invaluable in establishing people's current travel habits and the potential growth area for walking.

A useful start can be to gather data to build up a picture of the strategic walking routes in the area. In Peterborough, this has been used to inform a whole set of actions from waymarking to mapmaking to route improvement and maintenance.

It is very limiting for a project to follow the 'traditional' consultation route, since that will tend to lead to the production of the same sorts of map that we have traditionally had and which arguably provide little support for walking journeys.

In order to enable a wider use of maps there is a need to reach out and work with the excluded and the map illiterate. Finding mapping solutions which also suit them will add to the current stock of good practice and push back the boundaries still further. One possibility might be to consider targeting people who are map illiterate and mentoring with skilled trainers.

Any map needs to be tried with various possible users, including people with sensory disabilities. There is no terrifying mystique about inclusive design and planning, but there is now a considerable body of knowledge and experience developed over the years by organisations and individuals who have devoted time and energy to trying things out with users who have sensory and mobility disabilities. Consultation and trials with these target users is crucial, but it is only fair to do as much homework as possible in advance so that the consultees do not have to educate from scratch on the basics.

The Coventry and Mitchell's Fold case studies show two practical examples of very effective working in partnership.

For the Photo Maps, in central London, several disability organisations were included throughout the consultation. Much of which was done via e-mail, mail and phone calls.

In addition to consulting the potential audience for the map and the partners in its production, it will often be important (and useful) to consult:

- Local business stakeholders and integrate their interests as far as possible onto maps and signs. If this is not done effectively they will put up their own signs later and it can become a total mess.
- People such as traffic wardens/ parking attendants, neighbourhood wardens, and street rangers, who are working on the street and often act as informal, roaming direction guides, and who therefore know the problem areas and the commonly asked-for destinations
- Cyclists and motorists. Walking promotion is part of the sustainable transport, alternative solutions to the car.

The decisions on who, when and how to consult will directly affect the look and feel of the final map. The needs of walkers are likely to be quite specific to a target group and responsive to the area being interpreted. Consultation needs to be inclusive, reach beyond 'the usual suspects' and use techniques that ensure their needs are met with the final design.

The Quaylink project in Newcastle/ Gateshead (see Case Study: Walk Ride) took an open approach to local consultation by asking people on the street "What makes maps work well?" City ID rented space in central Newcastle and held open workshops, where people could share ideas. This included councillors and the bus company. Furthermore people could see and comment on the project as it progressed too.

The Walk this Way project included consultation with local school children during the design work stages to

determine the content for their Young people's guide.

A framework for consulting needs to be developed and sufficient time given to ensure people have the opportunity to verify and support mapping projects by making sensible contributions and committing to work with the results.

Case studies: Salisbury/Wilton; Bristol Legible City; Angel, Islington

Some projects have attempted to track people's actual movements rather than asking them where they have been and what they have wanted to find. In Norwich, (as part of the Spatial Metro project) visitors were given a GPS (Global Positioning System) device and their movements were tracked. 90% of them visited the toilets, MandS and McDonalds. This sort of data can be a welcome antidote to cultural elitism: it is not what a city's head of cultural services perhaps would have guessed or wanted but it brings a sense of reality to discussions about what to include on maps. It may also add weight to the argument that visitor spending is currently very localised and could be spread around by better mapping and routing.

4. Format and production

Understanding what to include on a map for walkers and how they need the information so that it is legible, will determine the format and production decisions. Experience collated from the case studies identifies a number of key issues to steer format and production decisions:

The same map style will not work everywhere. This is true even within one small area: for example South Islington (see Case Study: Your way at the Angel) has many areas densely packed with buildings which would make a full 3D map too busy – difficult to read and often hiding the narrower roads and alleys (which could be convenient pedestrian cut-throughs) However, the map of the Angel area of Islington, produced by the same borough, is all 3D which works well in this case because it is focused on one main street.

Manage data efficiently. In some mapping projects a major emphasis has been to collect and maintain data in digital

formats, which can then be used in many different ways for different audiences on different occasions. For example the Spatial Metro, Norwich project has produced physical maps for waymarking and special themed maps for one-off events. In Peterborough the data is being collected and used for a wide range of work from waymarking to mapmaking and route management.

Format and style affect accessibility and usability of a map and the way the place being interpreted is perceived. A very pictorial map of London was shown to make it seem a much 'nicer' place to walk about in than the "clinical" look of the standard A-Z. However the pictorial approach was also seen much more as a leisure map and less relevant to everyday journeys.[xvi]

Orientation of waymarking maps. Much as it may irritate people who are skilled at map-reading, the consensus is that in practice many more people can use maps on signs successfully if the map is rotated to ensure that the top of the map corresponds with the direction the viewer is facing (so called "heads up mapping").

To make sense of a misaligned map, the user must recognise the misalignment and compensate for it which requires considerable mental effort (and time) for many people. "You are here" maps which are not aligned with the environment frequently result in people heading off in the wrong direction, and the greater the misalignment the greater the mistakes people make.[xvii]

Map misalignment has been shown to affect older adults more than young ones.[xviii] Although more expensive to produce, because each location has to be separately designed, "heads up" mapping is far more user-friendly e.g. Bristol Legible City; City of London.

User-friendly map symbols. The mark of success for a symbol is whether it correctly communicates information to the user. By and large, the most effective map symbols should not need to rely on a separate key, since when the user turns their attention to the key they lose focus on processing the map as a whole. "The more a symbol can be made like an icon, the quicker users are able to search for it".[xix]

GPS and traditional mapping. Global positioning system (GPS) technology allows mobile phones and Personal Digital Assistants (PDA) to be linked to the satellite system so that a person can pinpoint their position to within a few metres on the earth's surface. The satellite system can occasionally fail and buildings in built up areas can obscure the signal but generally speaking in theory this means no one should ever need to be lost again. However the technology still relies on the user being able to relate where they are to where they want to be. On site and off site mapping are therefore likely to remain key (if not grow in importance) to help orientate and support lost, frustrated and anxious people with or without GPS assistance for many years to come.

Design Influencing Factors

- A good walking map should fulfil its original stated objectives and reflect local needs and circumstances
- The choice of medium for a walking map production will need to respond to an understanding of how and where the target market will use it.
- Collate and manage data efficiently from a variety of sources but agree who owns the data and who is responsible for keeping it up to date.
- Establish logical boundaries for the map and an appropriate scale (bearing in mind the average walk journey is 14 minutes and 1km long)
- Consider the stability of the landscape that is being interpreted and how long the environment is likely to stay the same.
- Consider distribution of the map early on to make sure the target market will have access to it.
- If the map is to be available online in a functional format (rather than just as a straight PDF) it will affect the way the data is managed and presented from the start.
- The map format and design will need to be realistic to fit the available budget

- Consider how people currently orientate themselves, in the landscape without the map (Bear in mind the different senses, as well as sight) Identifying the points of reference that “anchor” internal maps will be useful to a designer. See Case Study: Mitchell’s Fold.

- Consider the potential for vandalism and remember to budget for the maintenance and update of any walking map. See Case Study: City of London.

- Keep an open mind – the role of PDAs (personal digital assistants) and GPS (global positioning systems). See Case Study: Spatial Metro, Norwich.

Case studies illustrating different format options:

- Pop out maps – useful for a local audience who don’t want to open out a large map and be thought of as tourists. 125mm x 95mm flicks out to 250mm x 215mm e.g. www.popoutmaps.com/.

- Oblique aerial photos with overlays – Exeter Green Circle – has received very positive feedback

- Maps with 3D buildings – Bristol Legible City; Walk Ride, Newcastle/ Gateshead; Angel, Islington; Merseyside Calorie Maps

- Tactile maps – Mitchell’s Fold; Coventry (worked very well to put blind/partially sighted people on a level footing in discussions with sighted people)

- Photo journey style – Photo maps

- On-site waymarking signs – City of London; Bristol Legible City; Walk Ride; Angel, Islington

- A "Family" approach – helps people to recognise that online stuff, waymarking signs and paper maps are all related – Bristol Legible City

- Web-based material – Walk this Way; Photo maps; Salisbury and Wilton (viewable); ShapeWalks is a web site that offers visitors to Cambridge either ready-made walking tours or the ability to create their own customised personalised tours.[xx]

- PDA-enabled (personal digital assistants) Spatial Metro, Norwich

5. Distribution and management

"The most brilliant map ever devised will be useless and lifeless if it lies in a cupboard and is never consulted."

The majority of examples researched in preparation of this guidance stressed the importance of getting the map out to the audience and several admitted not allocating sufficient resources to making sure this happened effectively. Many projects aiming to increase access and to be inclusive fall down on their marketing. Although time, energy and resources are poured into producing a map or guide to accessible routes, not enough of the target audience ever actually get to know about it.

Sufficient time and resources must be dedicated to promoting a walking map effectively and keeping it in the public eye. Those projects with a wide and thorough consultation process were at an advantage in having built up an interest in the product and a database of partners and supporters who could then promote the map through their networks.

Case studies: Merseyside Calorie Maps; Walking for Health; Mitchell's Fold; Salisbury/Wilton

Other providers, such as Urbanwalks, achieve their distribution through more traditional marketing techniques.

Factors influencing distribution mechanisms:

- Reaching the target audience is key and should be considered as soon as possible – at the point of

considering their needs and before choosing the medium

- It is strongly recommended that walking maps should be free (and free to partners to use) rather than charged for
- Many people may want to have the walking map in advance of their visit – this applies especially to people with particular mobility needs – if information such as dropped kerbs, ramps, lifts, resting places, accessible toilets etc is to be included on the map. (Photo maps; Walk this Way; Mitchell's Fold)
- Walking maps need to be available on trains/buses as well as at stations (Walk Ride)
- Distribution can be active as well as passive. E.g. delivered door to door (Warndon)
- Get to the places where people are and not just libraries – doctors' surgeries (Walking for Health); supermarkets and estate agents are also good potential outlets. With new residential developments in Salisbury all new houses get a copy of the local walking map. This could be a useful example for other areas of housing growth.
- Future-proof the map as far as possible, but consider inequalities and accessibility. Understand new technology options for map distribution such as the mobile phone and on the move e-mail (Spatial Metro, Norwich).
- Give the right level of information at the right time (Progressive disclosure). Don't overload the user with too much information (Spatial Metro, Norwich)
- Date the map and include information about how to get updates.

6. Evaluation

"If we don't know where we started – we won't know what we've achieved"

Often, new mapping is introduced simply on the assertion that 'we need a new map' but without any significant evaluation of

why, what exists already, what users need or, indeed, whether the proposed solution actually delivers what it sets out to do. To be effective, therefore, a new system needs to go through a rigorous evaluation process before being 'signed off' as the final product and delivered in print, electronic format or on street signs.

Baselines

The first rule of evaluating whether a new initiative works is to know what the situation was before it was introduced. This provides a baseline against which any improvement can be measured. This 'initial evaluation' will also be critical to forming the right solution for the ultimate product. The following sequence of steps will underpin that process:

- Product Audit: what exists, how and where it is used?
- Champion Audit: who currently produces maps (bus companies, tourism authorities, Councils), what do they aim to achieve, how happy are they with their products and to what degree are the champions comfortable to 'buy in' to a new, unified approach?
- Destination stakeholder evaluation: workshop session involving key players (retailers, tourism, cultural industries, key businesses) to determine what they think exists, how effective it is and what improvements need to be made
- User evaluation I: run a workshop session involving a representative group of local people, ask them to go out into the locality and find a range of destinations without using a map, then plot a schematic plan of their routes. Run a workshop with them on how they navigated their way around and what elements they would require in the 'ideal' mapping solution
- User evaluation II: repeat the previous exercise but for people who have never previously visited the area
- User evaluation III: review special needs for mapping with representatives of disability groups and other people with particular navigation requirements

Direction

Having established what exists, it is then vital to determine how to proceed in terms of:

- Defining the audience (a "one solution fits all" approach will invariably fail some users)
- Defining the area to be addressed ('falling off the edge of the world' versus trying to 'map the whole world')
- Defining the approach (geographic or cognitive)
- Defining the product (what media suit the situation best)

Testing

Starting from the baseline information and assessing the directions outlined above should lead towards the production of a draft solution. This can then be refined through the following steps:

- Testing with the user groups previously consulted. This could involve a combination of going back to the same people to find out whether the product meets their needs and wants – and also forming new user groups to 'cold test' the map in the locality
- User group testing (and further refinement) could then be followed by a limited public trial. In the case of installed waymarking and maps on the street this could be in the form of a pilot sign with brief explanation inviting comments by post, e-mail, text etc. Similarly, e-maps could be tested on the visitor web site while paper maps could be tested over a limited time period. The period of testing for all modes will be critical – long enough to gain sufficient feedback but not too long to make respondents think you are ignoring their views.

Delivery

A key to this element being successful is 'buy in'. The following issues are therefore important:

- As many map-producing organisations as possible should be persuaded to use the format as '*the* map'. If the baseline phase was

effective they will feel ownership of something which they helped to produce

- As many stakeholders as possible should adopt and promote it – hand it out to customers, use it on their web site
- User organisations (disability groups, amenity societies, health groups) should promote it to their membership, not just as a map but as a vehicle to deliver their agenda – it may be possible then to augment the basic map with specific information relevant to the user
- The parent organisation needs to champion the product and drive the buy in process

Full life evaluation

The development process will have established a body of knowledge and support for a mutually owned product. Once the final mapping product is in place, it needs to be kept fresh and this can be achieved through:

- Feedback
- Periodic engagement with the user group
- A standing group of stakeholders consulted annually via an email questionnaire
- Periodic surveys of users through, perhaps, the tourist information centre.

It is also important to build a longer view of benefits (full life evaluation) which cannot reasonably be captured in the immediate short term. These benefits can go far beyond the most obvious advantages of good mapping and, with an appropriate level of stakeholder buy in, can include measures of:

- Greater visitor numbers and more money spent
- Increased flow of people on foot past (or to) a particular destination
- Changes in the quality of experience for the users (see more, learn more)

- Reduction in vacancies
- Higher levels of participation (e.g. in heritage, culture)
- Additional economic activity
- Additional 'street animation'
- Enhanced local and visitor awareness of undiscovered assets
- Enhanced profile for the city (Bristol experience)
- Increased property values
- Health savings

Finally, it is important to benchmark what is being achieved against what other towns and cities are doing and to adjust performance appropriately. Just as some of the cities quoted in the case studies (e.g. Norwich) have worked with other European cities on mapping projects, there may be a case to develop a 'mapping cities reference group' either as a fresh initiative as a by-product of this guidance or through an existing organisation (English Historic Towns Forum, Local Government Association etc).

Case studies: Exeter Green Circle; Merseyside Calorie Maps; Walk this Way; Warndon; Angel, Islington

APPENDICES

1. Signposts to useful contacts, web sites and publications

Contacts from the stakeholder day

Jim Walker	Walk21, The Basement, 39 Chesterton Road, London W10 6ES	07801 334 915	jim.walker@walk21.com
Michael Loveday	Norwich Heritage Economic and Regeneration Trust, PO Box 3130, Norwich, NR2 1XR	01603 305575	michaelloveday@heritagecity.org
Nicky Rowbottom	The Access Company, 24, The Green, Henham, Beccles, Suffolk, NR34 8AJ	01502 578470	nicky.rowbottom@btinternet.com
Claire Spink	DfT Dept for Transport, Great Minster House, 76 Marsham Street, London, SW1P 4DR	020 7944 2290	Claire.spink@dft.gsi.gov.uk
Simon Pickstone	Sustainable Travel Officer Travelchoice Team Peterborough City Council 3rd Floor, Midgate House, Midgate, Peterborough, PE1 1TN	01733 317476	Simon has since left Peterborough City Council
Geoff Hobbs	Salisbury, Assistant Transport Planner, Salisbury Joint Transport Team	01722 434 581	ghobbs@salisbury.gov.uk

Tina Speake	Bristol City Council, Design/Project Officer, City Centre Projects and Urban Design	0117 922 2915	tina_speake@bristol-city.gov.uk
Graham Hadley,	Principal Planning Officer, City Planning Group, Planning and City Development Department, Westminster City Council	020 7641 2503	ghadley@westminster.gov.uk
John Munns	DFT (Traffic Signs Branch) Great Minster House, 76 Marsham Street London SW1P 4DR	020 7944 2491	john.munns@dft.gsi.gov.uk
Alex Allen	Sustrans, 2 Cathedral Sq, College Green, Bristol BS1 5DD	0117 926 8893	alexandraa@sustrans.org.uk
Gavin Jackman	Ordnance Survey		gavin.jackman@ordnancesurvey.co.uk
Veronica Reynolds	WHI ('Walking the way to Health Initiative')	01491 875530	veronica.reynolds@tiscali.co.uk
Jamie Wallace	Walkit	020 7261 9668 and 0776 263 1223	j.wallace@walkit.com
Andy Ramwell	URBAN WALKS	07768 011865	a.ramwell@urbanwalks.co.uk

Alain Chiaradia	Space Syntax	020 7813 4364	a.chiaradia@spacesyntax.com
Matt Jephcote	Graphic/Information Designer, City Id, 23 Trenchard St, Bristol BS1 5AN	0117 917 7000	
Richard Nicoll	Saatchi		richard.nicoll@saatchix.co.uk
Paul Dodge	FWT Studios Ltd, 764 Holloway Road, London N19 3JQ	020 7281 2161	Paul.Dodge@fwt.co.uk
Rosemary Reed	FWT Studios Ltd, 764 Holloway Road, London N19 3JQ	020 7281 2161	
Gary Cliffe	Walk London c/o City of London	07799 837030	gary.cliffe@btinternet.com
Steve Chilton	Learning Support Fellow, School of Health and Social Sciences, Middlesex University, Chair of the Society of Cartographers	020 8411 5355,	steve8@mdx.ac.uk
Julia Ionides	Dog Rose Trust, 83 Greenacres Ludlow Shropshire, SY8 1LZ	01584 874 567,	info@dogrosetrust.org.uk
Des de Moor	Ramblers' Association, 2nd Floor Camelford House, 87-90 Albert Embankment, London SE1 7TW, UK	020 7339 8500	desd@ramblers.org.uk
Simon Barnett,	Walkability Officer, Living Streets	020 7820 1010	Simon.Barnett@livingstreets.org.uk

Ruth Howard	DEFRA Rights of Way Countryside Division, Zone 1/02, Kite Wing, Temple Quay House, Bristol BS1 6EB	ruth.howard@defra.gsi.gov.uk
Mathew Mace	Central London Partnership Mapping and Wayfinding Project Officer	mmace@c-london.co.uk

- Joint Mobility Unit. One of the UK's leading access consultancies, part of the Royal National Institute for the Blind (RNIB). See www.jmuaccess.org.uk/
- Living Streets initiative – a nation-wide campaign to win back the streets for everybody. See www.livingstreets.org.uk

Websites

- Inclusive access – www.countryside.gov.uk/LAR/Recreation/index.asp
- Transport 2000 and DfT "Walking the Way Ahead" report – www.dft.gov.uk/consultations/archive/2003/omf/walkingthewayahead
- Bristol Legible City – www.bristollegiblecity.info/r2.html
- Walking the Way to Health – www.whi.org.uk
- Plain English Campaign – http://www.plainenglish.co.uk

Books/reports

- Mental Maps *Gould and White* 1974
- Envisioning Information *Tufte* 1990
- You Are Here *Katharine Harmon* 2004
- Inclusive Mobility: A Guide to Best Practice on Access to Pedestrian and Transport Infrastructure *Oxley*, 2002
- Encouraging walking: Advice to local authorities *DfT* 2000
- Walking Maps Research for TfL Street Management *Vanessa Hyland, Angela Campbell, The Resarch Business International Ltd* 2003
- Producing Independent Health Walking Materials *Walking the Way to Health Initiative*
- Wayfinding Behaviour, Cognitive Mapping and Other Spatial Processes *ed. Golledge* 1999
- The Agile Rabbit Book of Historical and Curious Maps *Van Roojen* 2005
- Another Eyesight, Multi-Sensory Design in Context *Ionides and Howell* 2005
- The Sign Design Guide *Barker and Fraser* 2000
- The Cambridge Handbook of Visuospatial Thinking *ed. Shah and Miyake* 2005
- My Map Book *Fanelli* 1995
- Mapping, an illustrated guide to graphic navigation systems *ed Fawcett-Tang* 2005

END NOTES

i The Agile Rabbit Book of Historical and Curious Maps *Van Roojen* 2005 p. 51

ii Ibid.p. 64

iii Quality Streets 1988.

iv Colin Buchanan and Partners (2001)

v *Skills for Life: improving adult literacy and numeracy* www.publications.parliament.uk/pa/cm200506

vi Wekerle and Whitzman, Safe cities, p. 55. Quoted in www.dft.gov.uk/stellent/groups/dft_mobility/documents/page/dft_mobility_506790-03.hcsp

vii www.ldeo.columbia.edu/edu/DLESE/maptutorial/01_About_Spatial_Thinking/09a_SpatialvsVerbal.html

viii Why Women Can't Read Maps and men can't ask for directions. Study of 48 individuals showing that men and women use different brain areas to achieve similar IQ results, Prof Richard Haier, of the Department of Pediatrics, Univ of California, Irvine and the University of New Mexico. http://today.uci.edu/news/release_detail.asp?key=1261

ix Uttal 1994 and 1996 "Preschoolers and adults scale translation and reconstruction of spatial information acquired from maps" in British Journal of Developmental Psychology 12, 259-272. Quoted by Newcombe and Learmonth in The Cambridge Handbook of Visuospatial Thinking *ed. Shah and Miyake* 2005

x Walking Maps Research for TfL Street Management *Vanessa Hyland, Angela Campbell* Sept 2002

xi Walking Maps Research for TfL Street Management *Vanessa Hyland, Angela Campbell* May 2003

xii Ibid

xiii Espinosa and Ochaita 1998 Journal of Visual Impairment and Blindness 90, 157-9 quoted by Holly Taylor in The Cambridge Handbook of Visuospatial Thinking *ed. Shah and Miyake* 2005

xiv Inclusive Mobility: A Guide to Best Practice on Access to Pedestrian and Transport Infrastructure *Oxley*, 2002

xv Bentzen 1996 Choosing Symbols For Tactile Maps. Journal of Visual Impairment and Blindness 90, 157-9 quoted by Holly Taylor in The Cambridge Handbook of Visuospatial Thinking *ed. Shah and Miyake* 2005

xvi Walking Maps Research for TfL Street Management *Vanessa Hyland, Angela Campbell* Aug 2002 and Sept 2002

xvii Levine Marchon and Hanley 1984 quoted by Holly Taylor in The Cambridge Handbook of Visuospatial Thinking *ed. Shah and Miyake* 2005

xviii Holly Taylor in The Cambridge Handbook of Visuospatial Thinking *ed. Shah and Miyake* 2005

xix Aubrey, Li and Dobbs 1994 Journal of Gerontology: Psychological Sciences 49, pp29-31, quoted by Holly Taylor in The Cambridge Handbook of Visuospatial Thinking ed. Shah and Miyake 2005

xx See www.stridedesign.net/shapewalks/home.aspx

2. Case studies

Index of key words

Case study	Key words	
Bristol Legible City	Economic motivation – promoting tourism Consultation Online availability	Distribution
City of London,	Environmental motivation Updateability	Confidence boosting
Coventry, Dog Rose Trust	Inclusive access (blind and partially sighted people) Hierarchy of information	
Exeter Green Circle	Encourage walking Evaluation	Hierarchy of information Iterative process
Merseyside Calorie Maps	Health promotion Distribution	Consultation Evaluation
Mitchell's Fold, Dog Rose Trust	Inclusive access (blind and partially sighted people) Consultation	Distribution
A New Perspective to London	Provided at the introduction of the congestion charge to provide a positive encouragement for drivers to walk	
Walk Ride Newcastle/ Gateshead,	Sustainable travel Partnership working	Consultation
Peterborough	Auditing and prioritising a network of strategic walking routes	

Photo maps	Inclusive access – particularly for people with learning disabilities and wheelchair users Consultation	Online availability
Salisbury and Wilton	Promote walking Consultation	Sustainable travel Distribution and promotion
Spatial Metro, Norwich	Flexibility of format Consultation Available on palm-top devices	Updateability Promoting tourism Hierarchy of information
Urbanwalks	Distribution Health promotion	
Walk this Way	Promoting tourism Online availability	Consultation Evaluation
Walking for Health	Health promotion Confidence boosting	Some online soon
Warndon Local Travel Map	Health promotion Distribution Evaluation (iterative process)	Integrated sustainable travel Consultation
Your Way at the Angel, Islington	Environmental motivation Different styles for different areas	Consultation Evaluation
St James' Park	Customer focus Orientation	Evaluation

WALKING MAPS

CASE STUDIES

Bristol Legible City

City of London Waymarking

Consultation in Coventry for the Phoenix Initiative

Exeter Green Circle as part of the Exeter Walking Project

Merseyside Calorie Maps

A Walk to Mitchell's Fold

A New Perspective to London – Walking Maps

Walk Ride (as part of the Quaylink Project)

Peterborough Strategic Prioritised Walking Network

Cross River Partnership's Accessible Photo Maps

Salisbury and Wilton Walking Map

Spatial Metro

Urbanwalks – a national walking initiative

Walk This Way

Walking for Health Walking Maps

Warndon Local Travel Map

Your Way at the Angel

St James' Park

Bristol Legible City

1. Category of map	Paper map, waymarking, Touch Screen information points
2. Place	Bristol www.bristollegiblecity.info/overview.html
3. Client Contact Phone Email	Partnership led by Bristol City Council Tina Speake, Design/Project Officer, City Centre Projects and Urban Design 0117 922 2915 tina_speake@bristol-city.gov.uk
4. Contractor Contact Phone Email	City ID, 23 Trenchard St, Bristol BS1 5AN Mike Rawlinson 0117 917 7000 mike.rawlinson@cityid.co.uk
5. Timescale	6 months from conception to production
6. Objectives	Walking map • to provide the visitor with a free walking map of the centre of Bristol • to introduce and be a link into the waymarking system • to reinforce seamless waymarking Whole project • in the early 90s Bristol's economy was dipping, members of the City Council, recognising the competition from Bath for visitors, wanted to give Bristol a lift. Now Bristol has more visitors than Bath! • reinforce the city centre's cohesion and identity • link 3 major regeneration areas • give people confidence in the information • underpin the local economy and environmental quality by enhancing the city centre's infrastructure • reinforce image of Bristol as a place that is welcoming, vibrant and easily understood by visitors, more successful for its businesses and more enjoyable for everyone • help people get about and find things, • provide a consistent system of visitor information that is used by all

Bristol Legible City	
7. Market/target audience	Tourists Business visitors Students Visitors to the hospitals etc
8. Consultation (with whom, how and at what stage/s?)	With stakeholders at every stage: • Tourist information bureaux • Shopping area managers • Regeneration boards • Marked destinations • On street testing for icons, orientation, legibility
9. Format and design (fold out? How big? 3D? etc)	• **City centre paper map** includes details of railway and bus terminals, waterways and ferries, taxi locations, car parks, hospitals and neighbourhoods. On the reverse, a further map extending to the west + written information about travelling by foot, bike or ferry, bus, train or car. Useful phone numbers and tourist information advice. A3 tear off pad with a reorder form Integrated visual language (names, colours, and type styles) helps the user trust that the message is relevant and accurate A key on the paper maps but not on the on-street maps – relying instead on icon recognition.

Bristol Legible City

- **Waymarking**
  "Heads-up' pedestrian maps on the street, using a detailed street map that includes pavements, crossings and steps. A wheelchair user can easily see that the short cut on the map contains steps and should be avoided.
  Certain landmarks are picked out and represented with 3D illustrations – all drawn according to the viewer's viewpoint.
  Each sign also has an abstract city map to indicate where you are in the context of the whole city centre.
  Direction signs
- **Extending to the east**
  A waymarking and mapping project being undertaken in-house, extending to the east side of the city, including much more community-focused destinations and information e.g. community centres, shopping streets. Smaller signs but same quality. Based very much on community consultation
- **Welcome points/Arrival maps** at airport, train and bus stations – including regional info
- **i+ Touch Screen information points**
  Popular, on street, touch-screen information kiosks giving live information about the location e.g. BBC news, tourist information, journey planning, web cams, details of where to shop, events and what to do + games to play and free email facility. System created and managed on an ongoing basis by Cityspace www.cityspace.com/

Bristol Legible City

10. Distribution	• Paper maps – 1.5 million printed and available **free** through the Bristol Tourist Information Bureau and satellite visitor info points; train stations; many business' reception desks; hotels; universities; shops and libraries. Kept in a warehouse and Tues mornings you can go and collect them. • Special print run of 250,000 to celebrate Brunel's bicentenary. Highlights things along the main walking route particularly associated with him.
11. Evaluation (method and results)	Evaluated by giving it to visitors who didn't know the city, arriving by train. Judged by them to be very successful, and to link in well with waymarking signs.
12. Cost (and source of funds)	Partnership with Adshel. £25,000 to develop; £18-20,000 first print run of 600,000 In 2005 £9,000 for a further 250,000 (to last a year or so)
13. Lessons learnt	• It's been successful and everyone knows about it. • Hard to keep the funding going, but they are committed to keeping it free and not to include advertising on it. • Minor updating always necessary. • Not that accessible for visually impaired people. Version available with bigger font but it makes the map huge. Could do a booklet-format version, if demand and funding allowed.
14. Images	See overleaf

Excerpt from the paper map.
© Bristol City Council – Bristol Legible City

City of London Waymarking	
1. Category of map	Waymarking
2. Place	City of London – the square mile
3. Client name Contact Phone Email	City of London Corporation Melanie Charalambous 020 7332 3155 Fax 020 7332 1806 Melanie.charalambous@corpoflondon.gov.uk
4. Contractor Contact Phone Email	Placemarque and Woodhouse for the sign making Sue Manley 020 7407 3455 Fax: 020 7407 3477 sue@placemarque.com
5. Background	Placemarque approached the Corporation with a proposal to redo the signs, this turned into a v successful collaborative approach.
6. Timescale	Installation commenced in April 2006 and took approx 4 months, the ones with digital displays installed in July 2006
7. Objectives	To reduce clutter and improve the older system. There are over 400 signs, dating from the late 80s, whose design had been prone to vandalism, to be reduced by half. To improve confidence To introduce a map-based system to allow more choice of route To signpost particular destination points To sign the link between underground stations and destination points To give pedestrians a reliable and up-to-date way of navigating around the square mile. To make the system long lasting (c20 years) and high quality.
8. Market/target audience	All of the City community, tourists and business visitors

City of London Waymarking

9. Consultation (with whom, how and at what stage/s?)	• Pre-project consultation with other projects – Bristol, South Bank (London), Birmingham, Liverpool • Inclusive Access specialists in the Corporation • Input from PR dept of Corporation and Tourist Info Centres to find out what people need • Worked with major destinations – Barbican, Museum of London, Tower Bridge on symbols and to make sure they were happy with map • Placemarque took a very pragmatic approach – walking the streets and deciding what needed to go where • Before and after user surveys undertaken
10. Format and design (fold out? How big? 3D? etc)	• 4 "tourist" maps of the whole city c2m wide. Extends a little beyond the city boundary in all directions. Used O.S. base mapping. • 60 "node" signs, situated at major road junctions. 2.5m tall, with a section of the map and a key to the symbols. Mapping is "heads up" and signs are double sided. Directional, updateable fingers above, with walking times (may be up to 20 mins away). A fossil-filled stone panel at base with logo: "City of London" crest. • 180 finger posts, 3 m tall, with fixed and rigid anodised aluminium fingers. Text engraved and backfilled. Solar powered lighting from solar panel in finial. All destinations within 1 or 2 minutes walk, so no time indication. • All maps produced in coloured vitreous enamel. • Black streets, white lettering, blue water, green grass. PR dept wanted nothing too bold • Info marked and signed – places of interest; churches; livery halls; public toilets; stations; police stations; major office developments e.g. Tower 42, Lloyds building; libraries. • Symbols – as well as standard Underground and Bus symbols – special ones for police stations, London Wall remains, St Paul's, Tower Bridge.

City of London Waymarking

	• 12 of the node signs have digital displays above the map – for up-to-date travel information (from Transport for London's website), what's happening in the city – e.g. Lord Mayor's Show, Flower Show etc. These were positioned at key tube and train stations. • Paper map production has been taken on by PR dept of the Corporation. Will be a series of 11 maps with the whole city on one side and a district on the other. Not done yet.
11. Distribution	Happy to share data and info with others. Would add value if others adopted same approach. Copyright now all in CoL's ownership, having used OS base mapping, extensively updated by consultants.
12. Evaluation (method and results)	Officers wrote an evaluation report at start. Before and after user surveys being undertaken
13. Cost	**Total** £1.4 million (inc installation and removal of old signs) **Production** Maps of the whole city – c£22,000 each for 4 of them Node signs – c£5,000 each for a batch of 60 Node signs with digital info display £18,750 each for a batch of 12 including software and maintenance for 5 years (at key tube and train stations – St Paul's, Liverpool St) Finger posts – c£2000 each for a batch of 180 Wall-mounted direction signs where no room for finger posts – c£1000 each **Installation** c£1000 each **Consultants** £110,000 **Staff costs** 15% **Contingency** 10% **Updating budget** held by technical services – £50,000 pa but includes other signs too. The budget came from a parking meter surplus – lucky timing because it will probably never happen again.

City of London Waymarking

14. Lessons learnt	• Technical input to wayfinding would reassure, in terms of what to sign and where to put them – like Space Syntax. • Gives great possibility to reduce on street clutter. One node sign replacing 3 old fingerposts. Increases confidence because looks quite modern. Noticeable because tall and (fingerposts) lit at night. • System updateable because fingers changeable, though maps less so. Developers pay for replacement/relocation/ updating. Electronic signs give a lot of potential for upgrading. • Accessibility – on visual side opted for good colour contrast, would have liked to have them all lit but too expensive. Cost and demand ruled out listening posts. Height of maps and keys designed with wheelchair users in mind. Use of symbols is good for people with learning difficulties. • Can be easily adapted to incorporate an interpretive panel (as it is at Temple Bar) • Hard to find more than 2 manufacturers to tender for production because anodised aluminium is a very specialised field. • Electronic signs delayed by almost a year because breaking new ground. • The City is too crowded a place to use 3D mapping – tried out St Paul's, but it's too tall, it covered up 2 lanes behind it.
15. Images	See www.cityoflondon.gov.uk/corporation/LGNL_Services/Environment_and_planning/Urban_design/city_signage.htm

Consultation in Coventry for the Phoenix Initiative

1. Category of map	Maps raised on swell paper in A3 and A4 formats. Large scale tactile map in full colour, digitally printed with tactile silk screen overlay.
2. Place	Coventry City Centre www.visitcoventryandwarwickshire.co.uk/information/info-maps.asp
3. Client name Contact Phone Email	Coventry City Council Council House, Earl Street, Coventry, CV1 5RR They worked with CV One who were managing the Phoenix Initiative. Contacts at the time (late 1990s) were: Chris Beck (Director of the Phoenix Initiative) and Peter Collard (Project Liaison Manager for CV One).
4. Contractor Contact Phone Email	The Dog Rose Trust 83, Greenacres, Ludlow, Shropshire, SY8 1LZ 01584 874567 dogrose.trust@virgin.net and Matthew Lloyd, Think : graphic design, Palmers House, Corve St, Ludlow, Shropshire SY8 1DB Tel 01584 878658
5. Objectives	To create tactile maps to show the visually impaired members of the Disabled Persons Access Group the changes that were taking place in the city under the Phoenix Initiative
6. Market/target audience	Visually impaired people in the city
7. Consultation (with whom, how and at what stage/s?)	The Trust was brought in to create tactile maps so that the visually impaired members of the Group could take part in discussions on an equal footing with the sighted members. This took place over the two years of the Phoenix Initiative when the centre of Coventry was being redeveloped.

Consultation in Coventry for the Phoenix Initiative

8. Format and design (fold out? How big? 3D? etc)	Maps raised on swell paper in A3 and A4 formats. These were drawn from architects' and landscape architects drawings so involved some complex reductions in scale. In order for them to be readable by touch they needed to be very much simplified. These were circulated to the visually impaired members and anyone else who wanted them both before and after the appropriate meetings. A tape with an audio description of the map was included. One of the maps drawn was then developed into a large scale tactile map by *think: graphic design* to show the changes that had taken place under the Phoenix Initiative. This was produced in full colour, digitally printed with tactile silk screen overlay. It was put into a stand, not entirely suitable, that was there already in the city. It was planned to have more of these around the city, based on the drawings already done, but this did not happen.
9. Distribution and cost to user	Cost to user: nil
10. Evaluation (method and results)	The maps enabled heated and useful discussion at the Group's meetings!
11. Timescale	Spread over two years.
12. Cost (and source of funds)	Millennium Commission and other funding for the development work and the Group was funded by Coventry City Council
13. Lessons learnt	It takes a long time to draw tactile plans from architects drawings and it is therefore expensive; convincing the client of the necessity is hard.
14. Images	See opposite

The Phoenix Initiative Tactile plan with Eric Sayce, Harry and a member of the Phoenix Initiative Staff.“ Copyright Coventry City Council

© think: graphic design

Exeter Green Circle as part of the Exeter Walking Project

1. Category of map	5 Map leaflets in a folder
2. Place	Exeter
3. Client name Contact Phone Email	Exeter City Council, Devon County Council and Sustrans in partnership Peter Grainger Sustrans – Exeter 01392 435 648 peter.grainger@sustrans.org.uk
4. Contractor Contact Phone Email	Wire-eater Daniel Loveday 01392 467776 wireater@dircon.co.uk
5. Timescale	2001-2004 for development of route, signing and maps
6. Objectives	To encourage walking by providing a long-distance local and varied route through green spaces, to be done whole or in parts.
7. Market/target audience	Local residents and tourists equally
8. Consultation (with whom, how and at what stage/s?)	
9. Format and design (fold out? How big? 3D? etc)	5 coloured map leaflets in a folder. Each map leaflet 210 x 396 mm (a third longer than A4) folded in four. One side – a map superimposed on an oblique aerial colour photo, with photos of key landmarks. On the other – a traditional map with a numbered list of route instructions for junctions/turning points. Shows distance and approx. walking time at 2mph. Shows links with bus routes Also available on-line as pdf files www.exeter.gov.uk/index.aspx?articleid=1502

Exeter Green Circle as part of the Exeter Walking Project	
10. Distribution and Charge to user?	Via Tourist Info Centres, libraries, stations and some hotels/cafes. Free to user.
11. Evaluation (method and results)	Annual manual counts of users at several locations on route (no details of data available) and check of numbers of leaflet packs distributed (approximately 17,000 packs distributed in 20 months since opening of route; estimated that at least 12,000 have been picked up). Evaluated by Exeter City Council one year after route opened via questionnaire survey to a selected panel of local community residents. This showed 53% of the panel had heard of the Green Circle; 47% of them had seen the leaflets – of whom the majority thought they provided enough information, were easily available and provided easy to follow instructions. 39% of the panel had walked some of the route, 50% had not and 11% didn't know. 75% of people who had walked part, or all, of the Green Circle were very satisfied or satisfied with the signposting and way marking.
12. Cost (and source of funds)	Design and printing cost approximately £12,000 for 20,000 packs. Additional research and development time approximately £6,000. 50% New Opportunities Fund via Sustrans, 40% Exeter City Council and 10% Devon County Council.
13. Lessons learnt	Needs team effort between researcher and designer to get details accurate and attractive. The process is iterative and takes a long time. The signing of the route has to match the leaflets.
14. Images	See www.exeter.gov.uk/index.aspx?articleid=1502

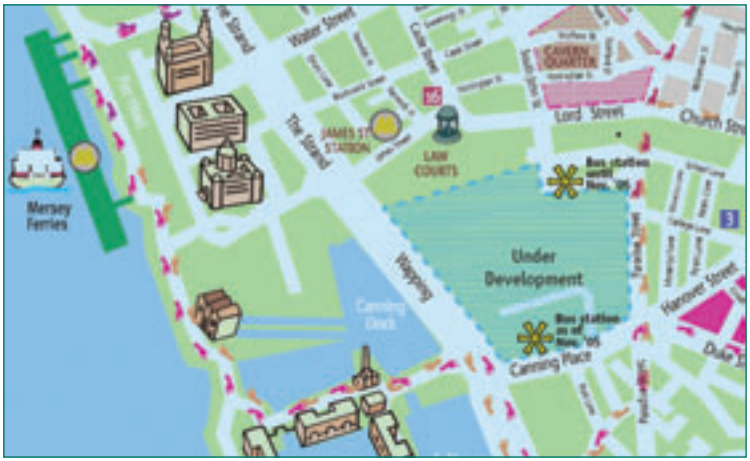
Merseyside Calorie maps

1. Category of map	Paper maps
2. Place	Merseyside
3. Client name Contact Phone Email	Merseyside TravelWise Sarah Dewar 0151 330 1290 sarah.dewar@merseytravel.gov.uk
4. Contractor Contact Phone Email	Calculation of the calories steps Prof Jo Doust (University of Brighton) 01273 643715 J.H.Doust@brighton.ac.uk Design of Birkenhead, Bootle and Southport maps Hesketh Design, Cliff Juniper, 01942 221696, cj@hesketh.co.uk Design of Liverpool map Liverpool City Council design dept, Tom Miller, 0151 225 2726, tom.miller@liverpool.gov.uk
5. Objectives	• Co-ordinated easily recognised maps. • Raise awareness of the health benefits of walking • Encourage walking for short journeys and transport trips • Encourage physical activity • Raise association of TravelWise and walking • Promote walking as enjoyable • Encourage walking for leisure and tourism • Provide accessible and attractive information on where to walk and walking routes • Walking to public transport has benefits as daily exercise

Merseyside Calorie maps	
6. Market/target audience	• Employees of workplaces with Travel Plans and other companies • Shoppers and Tourists • Frustrated Car Drivers • Students • Public Transport Users • Health Concerned • Black and Ethnic Minority groups
7. Consultation (with whom, how and at what stage/s?	Local Authorities and Primary Care Trusts Physical Activity or Walking Specialists at the planning, design and dissemination stages. The Countryside Agency and Walking your Way to Health Initiative have also been kept informed during the process.
8. Format and design (fold out? How big? 3D? etc)	Map which folds out to A3 size and is folded down to 150 x 105mm. Simple maps which show walking routes, places of interest and landmarks
9. Distribution and cost to user	Distributed to Merseytravel/Local Authority information racks and to local hotels, libraries, museums, Local Authorities 'one-stop shops', GP's waiting rooms, Local Community centres, Merseytravel Travel centres, workplaces/schools with or developing travel plans. Cost to user: free
10. Evaluation (method and results)	Maps include a tear off evaluation form (free to return). Returned forms entered into a monthly prize draw for a radio pedometer. Feedback so far: (97 replies) shows that before using the maps 64% of respondents walked for less than 30mins (36% walking for 30mins or more). After using the maps 37% of respondents walked for less than 30mins (63% walking for 30mins or more). 55% of respondents are female: 38% male and 7% failed to tick the box
11. Timescale	6 months

Merseyside Calorie maps	
12. Cost (and source of funds)	The cost for Birkenhead, Southport and Bootle maps in total was £6,000 including calculation of calories, design and printing of 5,000 copies of each map
13. Lessons learnt	Make sure that there are a variety of types of routes Site visits are essential to determine exact location of buildings
14. Images	See below and www.letstravelwise.org/walking/

Details from the map

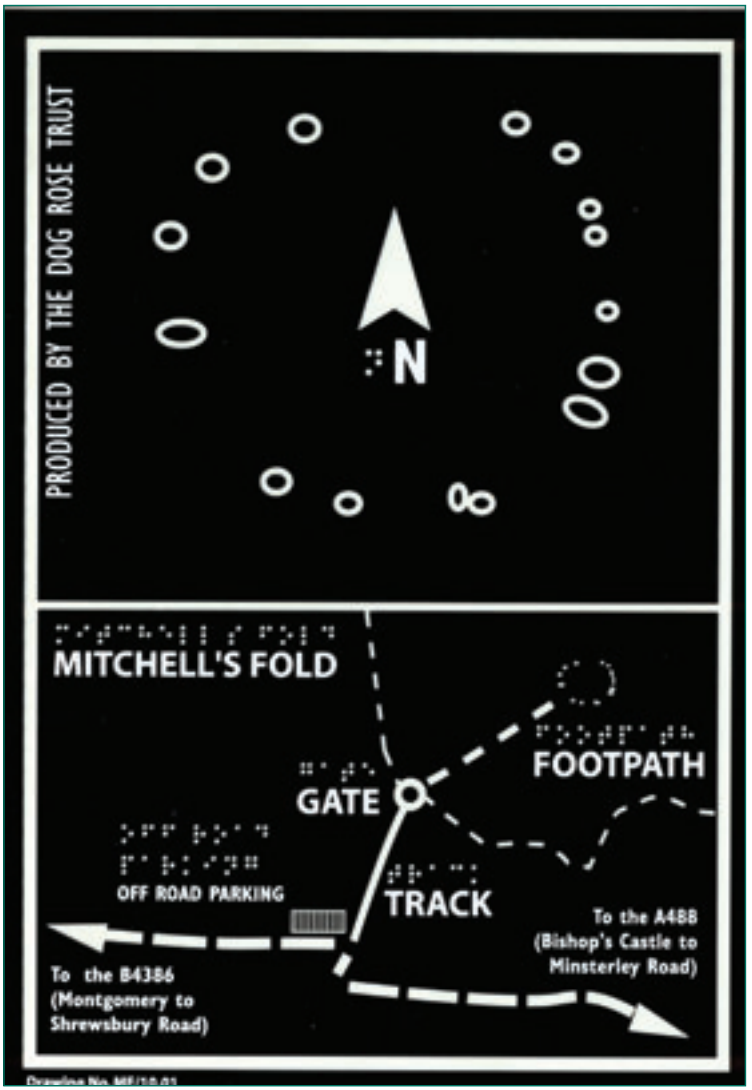


Based on Ordnance Survey Mapping © Crown copyright reserved.

A Walk to Mitchell's Fold	
1. Category of map	Tactile plan Audio guide
2. Place	South Shropshire
3. Client name Contact Phone Email	
4. Contractor Contact Phone Email	The Dog Rose Trust Julia Ionides 83 Greenacres, Ludlow, SY8 1LZ 01584 874567 dogrose.trust@virgin.net
5. Objectives	To provide an audio walk and tactile plan of Mitchell's Fold, an ancient stone circle in South Shropshire.
6. Market/target audience	Visually impaired and other visitors to South Shropshire
7. Consultation (with whom, how and at what stage/s?	Early consultation with visually impaired people and countryside rangers and other interested parties to determine how to interpret the stone circle and the surrounding area. During this consultation process, some members of the group wore blind folds as they walked up the hill to the circle and experienced the area in a different way. After the audio guide and plan were produced, a live interpretation day was held in a village hall with visually impaired people both in the area and from walking groups from further away. Talks were given on the various subjects covered on the guide – natural history, myths, geology and so on and then the group walked to the circle to experience it for themselves. Everyone took away a CD and tactile plan.

A Walk to Mitchell's Fold

8. Format and design (fold out? How big? 3D? etc)	The tactile plan is A4 format, white on black, with raised silk screen printing. The audio guide was a 60 minute CD with a blind colleague as the interviewer and an actor/musician as the narrator, together with the experts on the subjects covered later on the live interpretation day. The CD was recorded on site to capture the sound of the area, together with a musician playing the medieval bagpipes to create a mysterious atmosphere.
9. Distribution and cost to user	The distribution of the CD and the plan has been via magazines and audio programmes for the visually impaired as well as word of mouth. They were distributed free as the work had been funded by Lottery Awards for All.
10. Evaluation (method and results)	Because of the spread of visually impaired people in this rural area, it has not been easy to do a thorough evaluation. At the live interpretation day people were asked for their views about the tactile plan and its readability and also for comments afterwards when they had listened to the CD. Since then copies have been sent out to people who might never visit the site but will feel as if they had done so.
11. Timescale	6 months.
12. Cost (and source of funds)	Lottery Awards for All and Shell Better Britain for repair of the road up to the circle and for the Live Interpretation Day. Cost: £1500
13. Lessons learnt	That the consultation process takes longer than expected, especially where people with disabilities are concerned. The live interpretation day was so successful everyone wanted another one but there was no funding for this so try and get more funds in future!
14. Images	See opposite



A New Perspective to London – Walking Maps

1. Category of map	Paper maps
2. Project name	A New Perspective to London – 15 minute maps
3. Place	Central London – Two of these maps were introduced in April 2003 Waterloo and City Euston, Kings Cross and West End
4. Client name Contact Phone Email	Transport for London Adrian Bell, Sustainable Mobility Manager, Project development Group, Surface Transport, 0207 027 9181 Adrianbell@streetmanagement.org.uk
5. Contractor Contact Phone Email	In-house
6. Objectives	The maps were developed at the introduction of congestion charging, to provide a positive encouragement to walk for drivers who were not going to use their cars any more.
7. Market/target audience	Commuters arriving at main rail termini into central London, needing to complete their journey in the congestion charge zone.
8. Consultation (with whom, how and at what stage/s?	Very thorough market assessment at Waterloo station – testing format, usability and design styles (see below)
9. Format and design (fold out? How big? 3D? etc)	Paper map Coloured pictorial style 790mm x 620mm, folded down to 97mm x 200mm Some map sections were replicated as wall-mounted maps at tube stations

A New Perspective to London – Walking Maps	
10. Distribution and cost to user	Free to user Distributed through all main line stations and London Underground stations within the area of the map
11. Evaluation (method and results)	• In summary: pictorial maps were seen as simple, easy and fun and people were found to be more likely to be more encouraged to walk with this map than with any other type. It influenced the mapping project at the Angel, Islington. • One of the maps was orientated with north at the bottom of the sheet because it was encouraging people to walk from Euston station to Charing Cross (i.e. from north to south). This uses the same approach as the early strip map idea, (see main document, section on history), ensuring that the top of the page corresponds with the direction the map user is facing. There was controversy from experienced map-readers who didn't like north being in the "wrong" place. But it didn't seem to affect the map's usability. • The pictorial map treatment was recognised as reassuringly close to the walking experience: with accurate visual references and actual road layout and shapes. It was perceived as inviting and not threatening, with simplified road networks and a nostalgic/quaint style; relative distances were easier to understand; and it was considered to be visually intriguing – colourful, distinctive and involving.

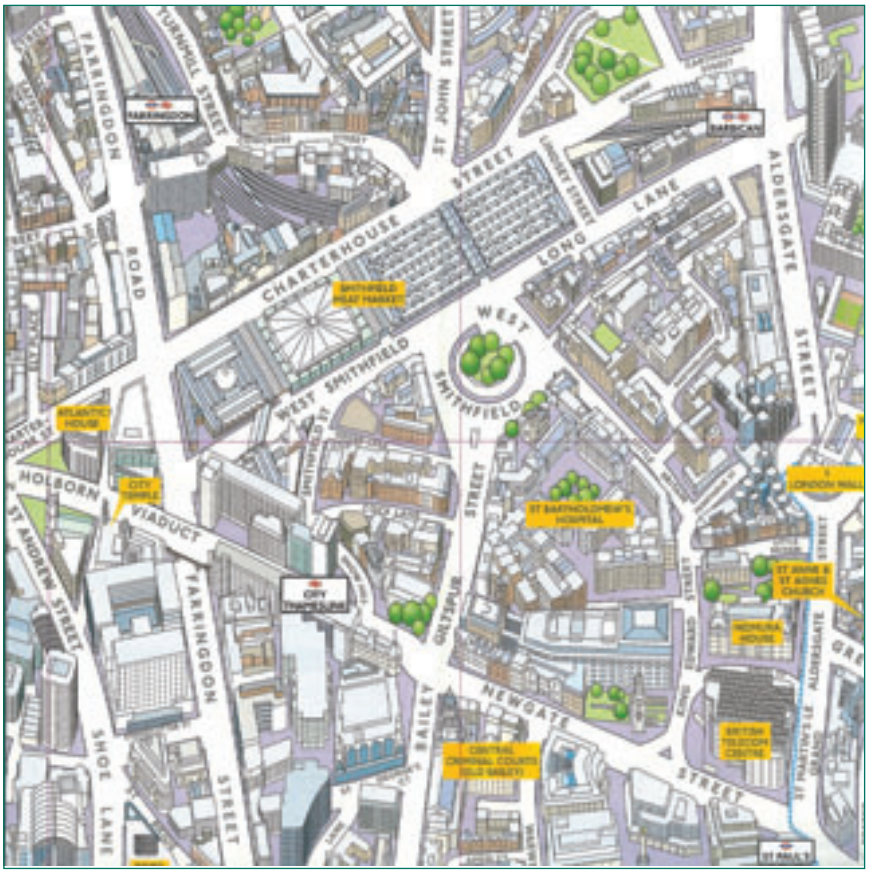
A New Perspective to London – Walking Maps

	• Transport for London commissioned an on-street survey in 2003. When asked how much it met their expectations of a map **compared with other sources of information** this was the breakdown of responses. – Clear (21%) – Shows landmarks (17%) – Recognise the buildings (16%) – Shows tourist sites (9%) – Informative about the area (9%) – Easy to understand (8%) – Easy to read (6%) – Gives an overview – shows the shape of things (6%) – 57% people thought it was the right size and 42% thought it was too big. A fold out leaflet format in tough paper was judged to be the ideal format or a spiral bound notebook or wallet sized fold out map for more discreet use.
12. Timescale	3 months – on direct instruction from the Deputy Mayor
13. Cost (and source of funds)	Unknown
14. Lessons learnt	The project came about following instruction from the Deputy Mayor who set up a steering group with architect Sir Terry Farrell and Director of the London Walking Forum Jim Walker The prevailing culture inside TfL assumed traditional mapping would be clearer. Face to face research was needed to prove that this wasn't the case. There wasn't time to verify all the walking routes on the ground such as alleyways between buildings, so essentially it's still a street map. This means that some useful cut throughs, which could be used on foot, aren't shown.

A New Perspective to London – Walking Maps

15. Images	See below

Detail of the map



Walk Ride (as part of the Quaylink Project)

1. Category of map	Paper walking maps (part of a suite of maps at different scales) Ride maps at the bus stops
2. Place	Newcastle Gateshead
3. Client name Contact Phone Email	3 scheme partners:– Newcastle City Council, Gateshead and Nexus, the Tyne and Wear Passenger Transport Executive Keith Taylor, Project Manager – Quayside Transit, Regeneration Directorate, Newcastle City Council, Civic Centre, Newcastle upon Tyne, NE1 8PD 0191 211 6145 ktay@newcastle.gov.uk
4. Contractor Contact Phone Email	City ID, 23 Trenchard St, Bristol BS1 5AN Mike Rawlinson 0117 917 7000 mike.rawlinson@cityid.co.uk
5. Timescale	From brief to delivery in 6 months (Jan 05 – July 05), after a scoping study done when Newcastle/Gateshead bid to be European Capital of Culture.
6. Objectives	**Map** • Complement, promote and publicise the electric bus service • Combine walking and electric bus use • Provide a unifying map which all providers/partners use • Provide a new way for people to find their way around Newcastle Gateshead • Make a consistent recognisable style which can be transferred to other media – to the web, to permanent display boards <u>Overall scheme</u> Part of a major scheme of design to promote the new public transport service providing sustainable transport in Gateshead and Newcastle.

Walk Ride (as part of the Quaylink Project)

7. Market/target audience	• Visitors to the area (includes landmarks which are recognisable for visitors – e.g. football ground, Gray's Monument, Millennium Bridge) • Local residents and users of the bus service
8. Consultation (with whom, how and at what stage/s?)	• CityID's original scoping study consulted with tourism panel of Newcastle City Council and with Newcastle Gateshead Initiative • On-street research for detail – "What makes maps work well?" • Open workshops in Newcastle: CityID took space in central Newcastle where people could drop in and bounce ideas around – councillors, bus company. People could see and comment on progress on the project. • Inclusive access specialists for legibility
9. Format and design (fold out? How big? 3D? etc)	• Part of a suite of maps at different scales – from the European context to detail of transit maps for particular buses • Four walk maps cover the area. They are square – bigger than A3. • There are also ride maps at the bus stops using "heads up" mapping • Drawn from aerial photos and by-passed the OS. All copyright will be assigned to the Local Authority (currently joint copyright with CityID) • Design concept went right across the board from maps to bus livery
10. Distribution (and cost to user?)	• 500,000 produced • Free to user • Given out from the buses, TICs as a "talkpiece" with stickers "here" and "there", libraries, bus and train stations, travel centres. • Soon will be available from dispensers on the buses • New timetable will contain the map • People roll it up not to have to fold it.
11. Evaluation (method and results)	No formal evaluation yet, but response so far very positive.

Walk Ride (as part of the Quaylink Project)

12. Cost (and source of funds)	Mapping design and production was around £300,000 as part of a £7.7 million project (£2.5 million on new buses) Quaylink was a major transport scheme with budget contribution from DfT.
13. Lessons learnt	• Give yourself more time • Make sure all the funding is in place before you start • Know what you want • Useful to have had the scoping study • Need sensitivity and diplomacy on both sides when two local authorities work together
14. Images	See below

Detail from the paper map

Peterborough Strategic Prioritised Walking Network

1. Category of map	GIS based system of maps
2. Place	Peterborough, Cambridgeshire.
3. Client name Contact Phone	Sustainable Travel Team Transportation, Midgate House, Peterborough, PE1 1TN 01733 317476
4. Contractor Contact Phone Email	Intelligent Space Partnership ltd. Elspeth Duxbury (Director) 020 7739 9729 eduxbury@intelligentspace.com
5. Objectives	Develop a strategic prioritised walking network capable of: • informing a future structured on-street review process, • informing planners and other practitioners involved in work impacting on the network (for example, maintenance, development control and infrastructure schemes) • inform and guide investment in the network
6. Market/target audience	Broad range of organisations, practitioners and professionals involved in work in the public realm; ranging from investors and funding organisations through to planners, maintenance teams and officers implementing schemes impacting on the public realm.

Peterborough Strategic Prioritised Walking Network

7. Consultation (with whom, how and at what stage/s?	This work is essentially a desk-based strategic review of the pedestrian networks in the city. This has been developed using Intelligent Space Partnerships Fathom software to provide a model of the pedestrian routes within the city. Data has been obtained through consultation with relevant groups to help identify and classify each destination in addition to Ordnance Survey base map data. At present the groups which have been approached fall loosely within the seven 'types' of network which are being mapped. These are: • Health (NHS, Primary Care Partnership) • Retail/Commercial (Work Place Travel Plan Officers, Community Regeneration) • Education (Safe Routes to School Project, Road Safety Team) • Transport (Passenger Transport Team) • Office/Employment (Work Place Travel Plan Officers) • Leisure (Community Services, Tourism, Sports Development) • Cultural (Community Services, Tourism/Culture, Libraries) NB At this point the work is a strategic analysis of the existing network which will inform a detailed review in the future. Consultation in the broader sense is planned in this latter stage. This data will provide the technical foundation from which a more detailed area-based consultation process can be launched.
8. Format and design (fold out? How big? 3D? etc)	GIS based system of maps incorporating a weighting system according to types of destination being served by each respective route. Each of the 7 networks are mapped separately to inform scheme-specific work and can be 'overlaid' to provide an overall strategic prioritised network which can be used to inform overarching planning and investment processes.
9. Distribution and cost to user	Aiming to obtain 'buy-in' from any organisation which might be involved with work impacting on the network. This data will be made available to facilitate their planning and decision making processes so that potentially everybody is 'singing from the same hymn sheet' when it comes to managing the walking network.

Peterborough Strategic Prioritised Walking Network	
10. Evaluation (method and results)	This project has not been delivered yet (so evaluation of the actual process is still pending) but it will be feeding into the complex package of LTP measures aimed at facilitating modal shift. Specific targets have been set within the LTP to achieve greater numbers of people using sustainable transport modes. In addition to this any changes brought about by this work will be reflected in the differences between the interim and baseline travel behaviour survey data. The baseline was set before the project was launched. Screenline pedestrian monitoring stations have also been set up in a cordon around the city centre to monitor numbers of pedestrians. This data will provide evidence of a shift in modal share as a result of this project and the broader sustainable travel projects.
11. Timescale	Construction of an initial strategic prioritised network has been extremely rapid with a start to end time of approximately 8 weeks. This data will, however, require occasional updating at a pace comparable to the speed of development within the city.
12. Cost (and source of funds)	30K Capital and 10K Revenue (DfT Sustainable Travel Demonstration Towns Funding).
13. Lessons learnt	Still in progress. The major test will be leveraging 'buy-in' from practitioners.

Cross River Partnership's Accessible Photo Maps

1. Category of map	Online pdfs to download onto A4
2. Place	Two circular routes around Waterloo and Westminster in London.
3. Client name Contact Phone Email	Cross River Partnership (CRP) Anita Gardiner 020 7926 0081 agardiner@lambeth.gov.uk
4. Contractor Contact Phone Email	Enabled London Alick Mackenzie 020 7749 4867 alick@enabledlondon.com
5. Objectives	To promote London as an accessible place to visit. To promote the most accessible routes from stations to major tourist attractions
6. Market/target audience	• Mainly international tourists and domestic visitors to London, particularly those with learning disabilities and wheelchair users • Also anyone who would appreciate information on step-free access • As the maps are in the form of a photo journey, it is also useful for those whose first language isn't English
7. Consultation (with whom, how and at what stage/s?)	• Consultation throughout via e-mail, mail and phone calls with disability organisations and stakeholders: RNIB, Tourism for All, Access in London, GLA, Westminster City Council, Lambeth Council, City of London, LDA, London Underground, Association of Train Operating Companies, Westminster Learning Disability Partnership, Southern Railway, Visit London, Southwark Council, South Bank Employers' Group. • Also at LDA's Accessibility Working Group meeting in November 2005. Initial consultation via CRP's Tourism Sub Group.

Cross River Partnership's Accessible Photo Maps	
8. Format and design	• Online pdfs to download onto A4. • Each stage of the journey is around 2 pages of A4 (although some are longer). • To aid those with visual impairments, there are contrasting colours on the time bars and a minimum font size.
9. Distribution and cost to user	• Distribution via Visit London website downloads. • Also available on CD from CRP. • Limited hard copies to be produced. • No cost to user except printing and download cost.
10. Evaluation (method and results)	Project evaluated as part of CRP's SRB6 end of term evaluation. Feedback from disability charities. Feedback forms to be made available on Visit London's website (pending – project not yet complete)
11. Timescale	September 2005 until March 2006.
12. Cost (and source of funds)	£14,000 to produce the maps in electronic format and have them tested. Additional money for printing hard copies and distribution. Source of funds: primarily Single Regeneration Budget.
13. Lessons learnt	This map work has not been done in London before so has taken a while to get the format and details correct. The main lessons have been the length of time involved and the associated rise in costs with making the maps more detailed than originally planned. From the consultation, the most legible format was learnt.
14. Images	Available to view on Visit London's website www.enabledlondon.com/WordBank/EW_ME_mainline.pdf

Salisbury and Wilton Walking Map

1. Category of map	Paper map and cards describing routes in a folder The map can be viewed via the following web link: www.salisbury.gov.uk/salisbury-wilton-map.asp
2. Place	Salisbury and Wilton
3. Client name Contact Phone Email	Geoff Hobbs Salisbury District Council 01722 434 581 ghobbs@salisbury.gov.uk
4. Contractor Contact Phone Email	Map: Pindar PLC Andrew Cowdroy 01296 390121 a.cowdroy@pindar.com Route Cards: SDC Print Unit Russell Wardley 01722 434 208
5. Objectives	1. To encourage residents of Salisbury to walk further, more often, as a means of transportation in its own right for short journeys, so contributing to a healthier lifestyle 2. To encourage visitors to the city to explore beyond the city centre tourist honeypots, taking in riverside walks and local environment
6. Market/target audience	• Local residents (for utility, recreation, walking for health purposes), schools (as part of Travel Plans), • Residents occupying dwellings in new major developments, • Tourists and visitors.
7. Consultation (with whom, how and at what stage/s?	• Salisbury Walking Forum were consulted at every stage (on the objectives, market, design and proof reading). The Forum is a partnership of Salisbury District Council (Transportation, Recreation, Environmental Health depts), Wiltshire County Council (Road Safety, Rights of Way and Travelwise), local Ramblers branch, walking for health groups, Shopmobility and local residents. • Circular walks were tested, route card directions were piloted, stiles removed.

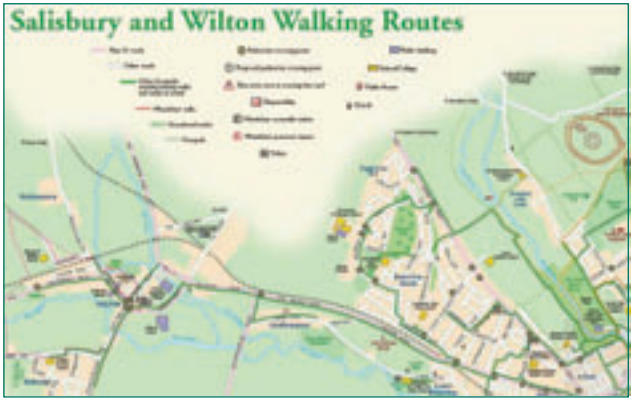
Salisbury and Wilton Walking Map

8. Format and design (fold out? How big? 3D? etc)	Paper map and DL size route cards for leisure/ health walks. • Paper map is A2 folding down to DL (110mm x 220mm), • 2-D map on one side with city centre inset covering whole urban area and its immediate countryside setting. • Walking network of utility routes shown, overlaid with 16 leisure/ health walks – colour coded to match route cards. Shows 3 'wheelchair walks'. • Reverse promotes walking for all purposes, using photos and web links of where to get more information.
9. Distribution and cost to user	Available free from council offices, library, GPs surgeries, leisure centres, Salisbury Hospital, tourist information centres and at events such as health fairs and green travel events.
10. Evaluation (method and results)	• Record of numbers of walking maps and full packs (map and route cards) – 8,500 maps distributed in 2 years since launch. • Walking for health group members have found map to be excellent • Formal evaluation planned during 2006.
11. Timescale	• Idea conceived summer 2002. • Routes and network were planned during 2003. • Funding for design and print work secured by November 2003. • First draft design was produced in December 2003, three subsequent drafts produced. • Final map printed in March 2004, launched in April 2004.
12. Cost (and source of funds)	• £6,280 for design and print of 5,000 maps and 3,000 sets of DL route cards and DL folders. • £3,300 from *Awards for All* grant with balance coming from District Council resources. Large part of this was design work. Have subsequently done reprint of 11,000 copies.

Salisbury and Wilton Walking Map

13. Lessons learnt	• Getting the detail right is very important. • Design process takes at least 3 months; expect to go through several draft stages if consulting on the detail. • Include all named features that pedestrians may wish to access (schools, churches, suburban pubs, public offices, tourist attractions). • **Don't use a standard road map base – the walking routes should stand out not the road network.** • Try to use colour to enhance/highlight prominence of the city/ or towns' natural features (parks/ countryside, rivers etc). • Helpful to show all pedestrian crossing points, particularly on busier roads. • Promoting the map takes quite a lot of sustained effort – needs to be continuous to keep it in the public eye.
14. Images	See below and weblink www.salisbury.gov.uk/salisbury-wilton-map.asp

Detail from the Salisbury and Wilton Map



Digital Cartography by Pindar PLC – www.pindar.com

Spatial Metro	
1. Category of map	Cognitive mapping approach based on Metro or London Underground Mapping style – applied to web, paper copies, in-situ and Personal Digital Assistant (PDA) applications
2. Place	A trans national project with Norwich (UK) as lead partner and including Koblenz (D), Rouen (F), Swiss Pedestrians Assn and cities of Zurich and Biel (CH), Bristol (UK) and Universities of Delft (NL), East Anglia (UK) and Koblenz (D).
3. Client name Contact Phone Email	Norwich City Council Former project director: (now consultant) Michael Loveday 01603 305575 michaelloveday@heritagecity.org Current Norwich City Council project manager: Clarisse Forgues 01603 212545 clarisseforgues@norwich.gov.uk
4. Contractor Contact Phone Email	SaatchiX Contact Richard Nicoll 020 7462 7302 richard.nicoll@saatchix.co.uk

Spatial Metro

5. Objectives	• To provide a cognitive mapping system which identifies 'the offers' within a city at a glance and then assists navigation by establishing a series of thematic routes (retail, culture) • To achieve a solution which is transferable • To facilitate journey planning through the internet • To provide portable, paper maps • To provide in-situ maps to reinforce conventional geographic mapping • To develop a mapping solution which can be used with PDAs and potentially mobile phones • To provide a solution which can deliver the basics in a relatively permanent way (retail, heritage culture) while also having the ability to provide mapping for one off events – a cultural festival • To augment the routing system by physical measures such as paving, art, lighting, landscaping etc
6. Market/target audience	• Everyone
7. Consultation (with whom, how and at what stage/s?	• Transnational specialist workshops (local authority focus) • Specialist consultation workshops within towns involving key sector players (a retail workshop, a cultural industries workshop) • Transnational workshops involving sector specialists from each town • Bench testing – see below
8. Format and design	Web, paper, in-situ, PDA – the project is working closely with the School of Computing at the University of East Anglia to develop virtual reality models (See image link below) with potential applications in all formats
9. Distribution and cost to user	Web, paper through arrival points and tourism venues, in-situ, PDAs. Potential for specialist applications

Spatial Metro	
10. Evaluation (method and results)	The Project Programme requires the production of an evaluation report by the conclusion of the work in 2007. This work stream is being led by the Technical University of Delft. Two pilots were run in Norwich during Heritage Open Days where a '12 Iconic Buildings' and a 'Kids Horrible Heritage' Metro route were produced and evaluated, using an integrated combination of street interviews and GPS research.
11. Timescale	A 3 year duration Interreg Project within the NW Europe Region
12. Cost (and source of funds)	The total project budget is €12M but this includes physical measures to reinforce routes
13. Lessons learnt	In the year or so before the establishment of the Spatial Metro Project, Norwich had been developing a more conventional, geographically based way marking system for the City Centre based on a system of in-situ map based signs and finger posts. This is essentially a geographically based system relying on navigation via destinations identified through a grid referenced map. The Metro system is, in contrast cognitive in that it creates a mental map of the City and seeks to identify the 'offer' overall and the relationship of the component elements but does not do this on a geographic basis. Ideally it would have been best to develop both systems in tandem but this has not been possible. A key lesson, therefore has been that it is entirely possible to have different mapping systems operating in a city (e.g. the tube map and A to Z work together in London) but it is essential in delivering both systems to ensure that they are co-ordinated effectively.
14. Images	See www.spatialmetro.org/Files/Walking%20Metro%20Plan%20to%20test.pdf

Urbanwalks – a national walking initiative

1. Category of map	Paper based leaflets Electronic PDF files
2. Place	Over 55 different leaflets produced across England and Wales e.g. Manchester, London, Brighton, Bournemouth, Penzance, Durham, Blackburn, Southampton, Leeds, and Cardiff.
3. Client name Contact Phone Email	Clients in both the public and private sectors. E.g. Department of Health, Sport England, Sainsbury's, ITV, Halton Borough Council, Durham Primary Care Trust, the Manchester Metropolitan University, and the Health Development Agency.
4. Contractor Contact Phone Email	Urbanwalks UK Limited Andy Ramwell, 348 Moorside Road, Swinton, Manchester M27 9PW. 0870 242 7507 a.ramwell@urbanwalks.co.uk
5. Objectives	• To offer people a cost effective method for accessing short walk opportunities within their everyday environments. • To supply a product with local information to large groups of potential users (normally workplaces and communities) • To convey a particular message with a dedicated advertising page • To produce leaflets in corporate colours (the marketing opportunity has been the primary reason for some clients, HOWEVER the messages are always related to physical activity or health).
6. Market/target audience	• Urbanwalks leaflets are normally aimed either at employees, office workers or whole communities in local areas. • A typical print run is 5,000 leaflets. • The leaflets can be used by all ages although as they promote independent routes they are mainly aimed at adults. All routes are risk assessed and are as inclusive as possible e.g. using drop kerbs and pedestrian crossings where they exist. • Leaflets are produced geographically or thematically for particular user groups.

Urbanwalks – a national walking initiative

7. Consultation (with whom, how and at what stage/s?	Consultation has depended on the type of contract and the end user. It is undertaken using a standard template, through face to face meetings or workshops with interested parties and partners. When the client has a clear objective and target group this requires less consultation.
8. Format and design (fold out? How big? 3D? etc)	• Paper based leaflets and electronic PDF files. • The standard six walks paper leaflets are A3 size displayed as a 12 page tri-fold and printed in full colour on 200g silk paper. • PDF files are supplied to go onto mainly Intranet sites for users and are accessible via a free Adobe reader. • Can be in a bilingual booklet form • Leaflets can be customised to corporate colours + advertising message
9. Distribution and cost to user	• Distribution varies depending on the end user group, over 500,000 leaflets delivered to date. • Promotion via local networks and local media • Free to end users.
10. Evaluation (method and results)	Standard questionnaire and advice for clients on how to evaluate their project. The Welsh Assembly pilot is currently being evaluated.
11. Timescale	Typically takes around 4 weeks to complete including consultation, mapping, design, print and distribution.
12. Cost (and source of funds)	• Standard costs for the Urbanwalks 6 route walks leaflets range from £3500-5400 for print runs up to 10,000. • Organisations use the leaflets to attract funding from a wide variety of partners. • Many organisations like the fact that others can use the same format in an area, to produce other leaflets using other sources of funding. This means that areas can build up a portfolio of walks and complementary activity even though the partners may produce the leaflets for many different reasons.

Urbanwalks – a national walking initiative

13. Lessons learnt	• There is a demand for something that encourages walking in an easy to use and easily recognised format. • The leaflets offer a quick and cost effective method to reach large swathes of a population to deliver a message and give people a practical opportunity to translate it into action. • There is a growing desire among agencies to be seen to be taking action around physical activity and walking • Helps raise the profile of physical activity and engage people and agencies in getting people more active. • The leaflets are not pigeonholed as just health or tourist trails, therefore the concept can be used by many different agencies for a variety of reasons. • The choice of the branding to reflect 'urban' allows the leaflets to be considered across a broad spectrum of policy agendas. • Many smaller agencies that have produced a leaflet like the fact they still feel part of a wider movement due to similar leaflets being used in many different areas.
14. Images	See www.urbanwalks.co.uk/

Walk This Way

1. Category of map	Online pdfs of 5 walking guides and maps
2. Place	Central London Walking guides covering areas around the Thames, including the South Bank and Bankside areas. The guides are called: South Bank Riverside London Golden Jubilee Bridges Millennium Bridge A Young Person's Guide
3. Client name Contact Phone Email	Cross River Partnership (CRP) Anita Gardiner 020 7926 0081 agardiner@lambeth.gov.uk
4. Contractor Contact Phone Email	South Bank Employers' Group (SBEG) Elizabeth Williams 020 7202 6912 Elizabeth.williams@southbanklondon.com
5. Objectives	To promote history and architecture in London and to spread the economic benefits of tourism by promoting walking 'off the beaten track'.
6. Market/target audience	• International tourists, • Domestic visitors to London • Those working or living in London. • The Young Person's guide tailored for 8 – 14 year olds.
7. Consultation (with whom, how and at what stage/s?	• The Young Person's Guide included consultation with local school children during the design work stages to determine the content. • Other guides included consultation with CRP's Tourism Sub Group on regular occasions.

Walk This Way	
8. Format and design	• Online pdfs to download. • Guides were produced in brochure format. • Some have been re-printed but many hard copies have now run out, so due to limited funding, the only format available is online.
9. Distribution and cost to user	• Distribution widely across London's leisure and hospitality establishments and via SBEG's website downloads. • Online request form ensured some worldwide distribution. • Limited hard copies left including the Young Person's guide (the last in the series to be produced) and the South Bank guide which was reprinted. • No cost to user except download cost.
10. Evaluation (method and results)	Feedback forms are available on SBEG's website. There has been a wonderfully positive response to all the guides over the years. They are sent out internationally and in the UK every week. People regularly make the effort to phone to say how much they have enjoyed them.
11. Timescale	Autumn 2001 until Spring 2006.
12. Cost (and source of funds)	£135,000 SRB over five years to produce, market and distribute the guides. £9,000 to produce the maps in electronic format and its associated marketing. Source of funds: Single Regeneration Budget with match funding from South Bank Employers' Group.
13. Lessons learnt	This was a very popular series – proved by the number of guides that have been distributed and needed to be reprinted. The guides were mentioned in the Mayor's 2003-06 Tourism Strategy as an example of best practice.
14. Images	See www.southbanklondon.com/walkthisway

Walking for Health walking maps

1. Category of map	Paper maps; Waymarkers
2. Place	Hundreds of these maps have been produced in different places, facilitated and funded by Walking for Health Initiative and by both Primary Care Trusts and Local Authorities. See www.whi.org.uk as more maps are put online.
3. Contact Phone Email	Stella Goddard, Healthy Walking Manager Tel: 01949 876888 Mobile 07900 608053 stella.goddard@naturalengland.org.uk
4. Contractor Contact Phone Email	various
5. Objectives	To encourage walking for health
6. Market/target audience	Sedentary/people who currently walk little
7. Consultation (with whom, how and at what stage/s?	Local health walks groups, Local Authorities, Primary Care Trusts. Before production and continuing
8. Format and design (fold out? How big? 3D? etc)	Various
9. Distribution	Various local outlets. Some soon to be available on the web.
10. Evaluation (method and results)	Tear off coupon and incentive to return
11. Timescale	Various

Walking for Health walking maps	
12. Cost (and source of funds)	Various, but usually ranging from £2.5 to £5K (Primary Care Trusts, Local Authorities, Walking the way to Health)
13. Lessons learnt	
14. Images	See below and www.whi.org.uk

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Warndon Local Travel Map

1. Category of map	Paper map
2. Place	Worcester
3. Client name Contact Phone Email	Worcestershire County Council Cat Ainsworth 01905 768408 cainsworth@worcestershire.gov.uk
4. Contractor Contact Phone Email	Cycle City Guides/Sustrans Alexandra Allen (Sustrans) 0117 926 8893 alexandraa@sustrans.org.uk
5. Objectives	Create a high quality neighbourhood map to promote integrated sustainable travel, by foot, by bike and by bus.
6. Market/target audience	Local households, targeted through an Individualised Travel Marketing (ITM) campaign, schools and businesses. The experience of successful behaviour change programmes shows that it is often more effective to promote walking alongside all alternatives to the car, rather than on its own. Travel behaviour research conducted in the UK through the Sustainable Travel Demonstration Towns and in other countries has demonstrated that lack of information is the greatest subjective barrier to increasing use of public transport, and that poor perceptions of relative travel time form the single greatest subjective barrier to walking and cycling in place of the car for local trips. Previous ITM programmes have demonstrated that people are more likely to change their travel behaviour if they are provided, on request, with up-to-date information that is tailored to their individual situation and that the greatest behaviour change has been from short car journeys to walking. This shift has been promoted in part by similar integrated travel maps, which have been among the most popular items in all ITM projects to date.

Warndon Local Travel Map

7. Consultation (with whom, how and at what stage/s?)	• The need for a local map was identified through an audit of available materials in the local area, in preparation for the ITM campaign. • This map, the first of a series in Worcester, was designed in response to the generally low availability of high quality local information on walking routes/facilities and public demand for such information. • The content of the map was generated in co-operation with the local bus provider and County Council employees working to promote sustainable transport.
8. Format and design (fold out? How big? 3D? etc)	Paper map 396mm x 419mm folding to DL (110mm x 220mm). • Map scale 1:10,000 on one whole side of the map. • Included colour coded bus routes, location of all bus stops, all signed cycle routes and public rights of way (including bridleways), all safe crossing points (pelican/toucan/zebras), as well as local amenities (e.g. schools, post offices, playgrounds and cycle parking etc.) • Information side included local services and travel guide, information on new public transport services, suggested walking opportunities in the area and contact details for further information.

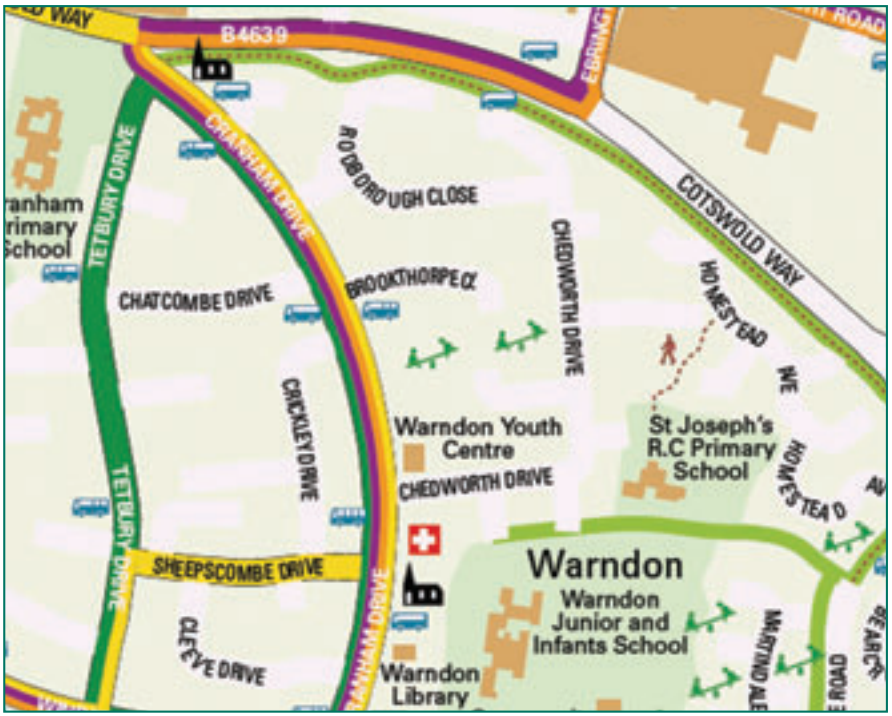
Warndon Local Travel Map

9. Distribution and cost to user	• ITM uses direct contact with households to identify and meet their individual needs for support, and to motivate people to think about their day-to-day travel choices. • Participating households receive an order form enabling them to order from a unique range of local travel information materials and other services, assembled by the local authority, public transport operators and other project partners, including this local travel map. Items requested by the households are assembled into personalised packages and hand-delivered to the households concerned. • The way in which these maps were distributed was through a dialogue-based direct marketing approach, ensuring that the maps reached those individuals most likely to benefit from them. The emphasis throughout was on enabling and supporting individual choices through better information and services rather than 'selling' sustainable travel modes or negative marketing of car travel. • This service is provided completely free of charge.
10. Evaluation (method and results)	• More than 1,600 copies of this map were delivered through the ITM programme to the target population (6,300 households in the local area), making it the second most popular requested item (after stop-specific bus timetable information). 1,400 copies were distributed to local schools and businesses. The map has been reprinted with minor amendments to meet demand. • The ITM programme will be evaluated through follow up telephone surveys in Spring 2006 to establish any changes in walking, cycling and public transport use across the area, using the baseline research conducted in 2004 and a control group to ensure background changes are taken into account. • Other ITM projects have achieved significant changes in travel behaviour among the target populations. In Bristol, for example, there were substantial relative increases in walking (of between 5 and 16%), cycling (0.5% to 42%) and use of public transport (13 to 18%), leading to relative reductions in car trips of between 9 and 12%.

Warndon Local Travel Map

11. Timescale	The preparation of the map took three months. They were distributed through the ITM programme between September and December 2005.
12. Cost (and source of funds)	The map (with 3,000 copies printed) cost £4,800 and was funded as part of Worcester's *Choose how you move* Sustainable Travel Demonstration Towns programme.
13. Lessons learnt	• Although these local travel maps provide a useful resource to individuals, they supplement rather than replace the need for further walking-specific information materials and maps. • The local community information provided on the reverse of the map has received extremely positive feedback. • Feedback on this map and the ITM programme has suggested the following lessons: – Health and financial benefits have been found to be an important factor in the choice to walk or cycle rather than take the car. Therefore, later versions of this map, and further maps in the series, will include information and sources of advice on these benefits. – Whilst this map includes a scale marking, feedback suggested that grid markings would facilitate route and distance planning. Grid markings will be included in all future maps in the series. – To facilitate navigation, a street index has been included on the second map in the series. However, due to lack of space to print names of the smallest roads, this is not an exhaustive index. The benefit of including all street names has been balanced with the need to keep the map a manageable size. – It was felt that this local map could also encourage vibrant communities and reduce the need to travel by identifying local facilities and amenities. Therefore, future editions will include additional community information, for example, social facilities, pharmacies, recycling centres and allotments.
14. Images	See opposite

Detail from the map



Your Way at the Angel

1. Category of map	Paper maps, waymarking
2. Place	The Angel, Islington
3. Client name Contact Phone Email	Islington Borough, Transport Planning Anthony Bailey, Senior Transport Planner 020 7527 2041 anthony.bailey@islington.gov.uk Plus partners Transport for London, the Central London Partnership and The Angel Town Centre Board
4. Contractor Phone Email	Wood and Wood Environmental Design, The Old School, Exton Street, London, SE1 8UE 0207 928 0412 alex@wwdesign.com roger@wwdesign.com http://wwdesign.com/
5. Timescale	In Sep 2004 8 boards were installed in the pilot waymarking project at the Angel. Then between Nov 2004 and April 2006 an further 32 waymarking boards have been installed across the borough, 5 different handheld maps produced and thousands of items of street clutter removed.
6. Objectives	• To encourage walking by making it easier to find your way around the area/borough • To improve the visual appearance of the area/borough • To promote the area/borough and its attractions to visitors and local people
7. Market/target audience	• Visitors to the borough • Residents in the borough • Business in the area

Your Way at the Angel

8. Consultation (with whom, how and at what stage/s?)	• Pre-project investigation into the Bristol Legible City project. • Consultation with groups of people with disabilities. • The Angel Town Centre Board and other local area representatives • Living Streets • The Police • Internal consultation with Planning, Communications and Urban Design departments • The final design for the waymarking boards was decided on at the highest level with the Leader of the Council, the Chief Executive, Councilors and Council Directors all taking part.
9. Format and design	• Hand held pocket map – 3D graphics + photos of key landmark buildings. On the back a comprehensive business directory, listing all shops, services and attractions, with grid references. Cover design similar in style to the boards, to create a coherent image. Also includes a potted history of the area and approximate walking times to key destinations. Experience showed that the 3D map style works on linear maps such as the Angel map which focuses on a single main road, in this case the A1. In more built up areas such as the South of the Borough the 3D style did not work so well due to streets being obscured by the buildings. A more simplified map style was then developed using a road map base with only key buildings shown in 3D. This approach was used for both board maps and handheld maps. Produced c50,000 of each map

Your Way at the Angel

	• Waymarking map boards – main source of information a modified version of the pocket map. 2D arrow signage included above the map. Signage on each board limited to 4 locations and a place name, in order to provide directions only to key destinations. Sited outside stations and bus stops, near key buildings, at key entry points to the borough and in areas of high pedestrian usage. Orientation of the boards is decided using Urban Design principles such as keeping the boards in line with other street furniture, respecting pedestrian desire lines and ensuring that sight lines are not obscured (for motorists and pedestrians). • Materials were chosen to make the boards as durable and resilient as possible to the elements and vandalism. The maps behind the toughened glass panels can be changed if updates are needed and if necessary the top and bottom panels (vitreous enamel) can be changed. At times the boards have been targeted by vandals (stickers, graffiti and fly-posting) but thanks to a robust cleaning regime and the durability of the materials the boards remain clean and smart. • Letter fonts, contrast and colours on map and boards were designed with the needs of people with visual impairments in mind. Height of the boards set a level accessible for wheelchair users.
10. Distribution	Maps are distributed at council offices, libraries, community centres, local businesses and tube/train stations. High demand is reported from tube stations in particular.

Your Way at the Angel

11. Evaluation (method and results)	Questionnaires on the boards at the Angel, conducted by MORI showed that 48% thought the Angel wasn't well signposted before; 83% were satisfied or very satisfied with the waymarking signs; 66% of those who'd used the signs said they had helped with their journey and 47% said they had been encouraged by the signs to walk to their destination. This last figure is particularly significant considering that the boards are used by thousands of people each day. General feedback from councillors, members of the public and council staff has been very positive.
12. Cost	From an initial £20,000 budget from the Central London Partnership in 2003, a total of £450,000 has been attracted to the project from a multitude of funding partners including Transport for London, Neighbourhood Renewal Fund, EC1 New Deal and the Primary Care Trust.

Your Way at the Angel

13. Lessons learnt	• This project's success with pedestrians, residents, businesses and visitors to the borough attracted external funding so that the council has been able to repeat the exercise for other areas – now covering almost the whole borough. • Experience showed that the 3D map style works on linear maps such as the Angel map, which focuses on a single main road, in this case the A1. In more built up areas such as the South of the Borough the 3D style did not work so well due to streets being obscured by the buildings. A more simplified map style was then developed using a road map base with only key buildings shown in 3D. This approach was used for both handheld maps and the maps on the boards, and goes back towards the mapping style developed in Bristol. • Some of the maps had to be combined (e.g. Angel Map combined with Goswell Road Map) before they could be put on the boards. This was mainly because some of the board locations fell on the boundary of where two maps joined. (See example pdf). • It is important to develop a robust set of criteria for including locations on the maps or as directions at the top of the boards – otherwise it can be difficult to justify why certain locations have been included and others have not. • When choosing the board sites it is important to involve all the relevant Highway Authorities, Planning (for Heritage Sites) and Engineers – otherwise a lot of work can be wasted if an objection is made by someone at the last minute. • Other boroughs are also seeking to learn from it.
14. Images	See opposite

The 3D buildings work well since it is focused on one main street.

© Islington Council

St James' Park London

1. Category of map	Walking map sign
2. Place	The Royal Parks (St James's Park in the first instance, to be rolled out later in Green Park, Hyde Park, Kensington Gardens, Regent's Park, Greenwich Park, Richmond Park, Bushy Park)
3. Client name Contact Phone Email	Simon Higgins, Royal Parks Marketing Manager 020 7298 2127/07976 920470 shiggins@royalparks.gsi.gov.uk
4. Contractor Contact Phone Email	Postermaps Nick Gibbard 01326 311014/07811 216043

St James' Park London

5. Objectives	The Royal Parks is in the process of re-focussing itself as a customer-centric organisation. To this end, they have developed a 3 step process to delivering 'The Royal Parks Experience'; of which in-park mapping, signage and interpretation is a highly visible component. The steps are: 1. Basic customer focus 2. Exemplar in customer focus and care 3. A tailored offer providing a unique and compelling visitor experience. Visitors have a greater expectation in terms of what should be provided to aid their enjoyment. These Stage 1 maps are intended to have a two-year life during which time we will carry out research to evaluate their effectiveness. (from 2007) This will give baseline data in order to evaluate what they understand to be a key factor in visitor orientation, and ultimately satisfaction. The objectives of this are as follows: 1. To refresh out-of-date information on park maps 2. To improve visitor orientation 3. To encourage people to spend longer in the parks By 2009 stage 2 will be completed, when it is anticipated that a new set of maps will be produced. (A development and evolvement from the maps produced in stage 1) They will also be considering moving and/or renewing street furniture at this time (budget constraints do not allow for this in stage 1). They intend to rotate maps to give 'point of view' presentation. This will also require significant work in the repositioning and addition of new street furniture.

St James' Park London

6. Market/target audience	There are a number of different requirements. Base maps are potentially of use to all visitors; however they see primary users as day trippers. Royal Parks anticipate that they should help this group to: 1. Get from A to B 2. Find facilities eg 'refreshments and toilets' 3. Get to key attractions 4. Find less well known but delightful areas of the parks The maps are designed to be legible and accessible. Royal Parks are also developing a range of other initiatives targeted to 'Londoners'. The basic premise of all these initiatives is that they want to encourage people to use the parks to improve their health. In addition to parks information Royal Parks will be supplementing the maps with the following information: • Nearby station locations (not just directional pointers), and walk times. It is hoped that TfL will be putting these maps into underground stations so it's vital that visitors know how to reach us from the station. • Walk times – to give indication of scale of site and specifically to encourage people to walk through, rather than take train/ underground/bus to cross these green spaces. • Bus routes • Cycle routes • New attractions • Jubilee Walkway route • Diana Memorial Walkway route

St James' Park London

	• Experience Partners – the objective being to educate park visitors of attractions in and around the parks, and to encourage them to spend more time in the vicinity. **St James's Park Experience Partners:** Guards Museum Inn the Park Churchill Museum and Cabinet War Rooms Changing of the Guard Mall Galleries Household Cavalry Museum Royal Collection ICA Galleries All 8 maps will be designed to include some peripheral streetscape, to allow for the addition of local partners as partnerships are developed. All 8 maps will be designed for use across all printed and on line communications.
7. Consultation (with whom, how and at what stage/s?)	A number of consultants and advisers have been used throughout the whole exercise including; • Park Managers • Royal Parks Senior Management Team • The Access Company/Walk London • Transport for London • Intelligent Health • Central London Partnership • Legible London
8. Format and design (fold out? How big? 3D? etc)	The maps will be in showcases measuring 150cms x 100cms. Leaflets will be A5, folding out to A2. The graphics used give a 3D impression.
9. Distribution and cost to user	The maps will be situated in showcases in and around the parks. They will be available for download on www.royalparks.org.uk . Map leaflets are being produced. All these materials are free to the end user.

St James' Park London	
10. Evaluation (method and results)	These Stage 1 maps are intended to have a two-year life during which time we will carry out research to evaluate their effectiveness. This will give Royal Parks baseline data which is vital in order to evaluate what they believe is a key factor in visitor orientation, and ultimately satisfaction.
11. Timescale	Production and installation completed 2007.
12. Cost (and source of funds)	£48k for cartography, typography and design of 8 maps. (St James's Park, Green Park, Hyde Park, Kensington Gardens, Regent's Park, Greenwich Park, Richmond Park, Bushy Park)
13. Lessons learnt	The input and involvement of a number of different stakeholders has resulted in satisfying the original objectives.
14. Images	see www.royalparks.org.uk

Department for Transport

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