OVERCOMING BARRIERS AND IDENTIFYING OPPORTUNITIES FOR EVERYDAY WALKING FOR DISABLED PEOPLE

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We are Living Streets, the UK charity for everyday walking. We want to create a walking nation where people of all generations enjoy the benefits that this simple act brings, on streets fit for walking.

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Foreword

It is widely acknowledged that incorporating physical activity into daily life through active travel is an effective way of meeting the levels of physical activity needed for good health. This is even more important for disabled people. Something as simple as walking every day (even with the help of walking aids) has the potential to improve health, prevent disease and reduce the number of secondary conditions that may arise from an initial disability.

However, almost three-quarters of disabled people take part in no sport or physical activity at all; twice that of non-disabled people. They are not only missing the health benefits. Walking outdoors also offers greater choice, control and independence to lead more fulfilling lives through access to jobs, services and family and social life. The crucial questions that need to be answered are: what are the barriers that disabled people face and how can they be overcome?

Living Streets and Public Health England want to help more people to be more active through the simple act of walking. This is why we are pleased to have collaborated on this report to address a clear lack of evidence of 'what works'. It offers a taster, a sample of views from people living with the disabling impact of the built environment. We hope that it will inform and stimulate further interest in this important, but under-researched area.

Joe Irvin
Chief Executive, Living Streets

EXECUTIVE SUMMARY

Context

This report investigates the barriers to and the opportunities for increasing the functional walking of everyday journeys by disabled people. It does so by adopting a social model of disability which allows the identification of common physical, organisational and attitudinal constraints to walking trips (and walking as part of longer journeys) and suggests ways to overcome them.

Nine per cent of all adults (over the age of 16) in England report having a mobility difficulty. Across the life course mobility difficulties increase with age and significantly over 70 years old. However, nationally disabled people represent almost a fifth of the English population. People with sensory impairments, such as hearing loss and blindness or with learning difficulties or mental health conditions may be capable of functional walking yet, nevertheless, be prevented from walking outside.

Walking outside is an easy way to incorporate physical activity into a daily routine. Being more physically active is particularly important for disabled people because it can improve quality of life and health outcomes related to existing conditions, and reduce the risk of secondary health conditions. However, 72.1 per cent of disabled people take part in no sport or physical activity. This hints at the scale of the challenge and the importance of helping disabled people to walk more

Research and method

There is a lack of published peer reviewed evidence relating to the disabling impact of the built environment on people living with a broad spectrum of physical, sensory, intellectual and behavioural conditions. Research literature has focused on ageing and age related mobility problems instead. Nevertheless, the Government's policy is that physical activity guidelines can and should apply equally to disabled children, young people, adults and older adults once necessary adjustments are made.

This report aims to stimulate interest in the experience of disabled people walking outdoors. The quantitative data outlined above is complemented, here, by a qualitative approach because this enables a more open and in-depth exploration of issues disabled people face and allows patterns to emerge. Focus groups and interviews were conducted with local authority officers (to provide a local government perspective) and disabled people with a range of learning and mobility impairments, and one person who is registered blind. A number of carers also took part. Focus group participants were asked to describe a typical walking journey and any problems that they might encounter.

Participants' ages ranged from 30-78 years; more women took part than men. The views expressed here are those of people who already belong to organisations, who meet outside the home and have day to day experience of walking around their local area. Of course this is only a sample; it is not an exhaustive study. Moreover, the views of people who do not go outside or who may have had a bad experience which now prevents them doing so, will need further investigation.

A local Government perspective

Three distinct themes emerged: the need to think issues through from the beginning to the end; the contrast and to some extent the contradictions between accepted

wisdom and the effectiveness of interventions; and the need for everyone to be involved in promoting behaviour change.

There is a disparity between design guidelines for accessible pedestrian environments and the real world physical barriers faced by disabled people. Instead of relying on the guidance to provide formulaic solutions, it is important to think about who the users are and what physical barrier(s) is being addressed. If one stage of a journey is problematic (e.g. catching a bus) it may compromise the whole trip and remove an opportunity for functional walking outdoors. Providing disabled people with information on local walking routes can help them to develop adaptive strategies and overcome physical barriers.

There is general acceptance in national and local government (and indeed across the public health field) that walking is good for health and it is suitable for everyone. However, that is not a view necessarily shared by disabled people. There is a need for people to understand the health and wellbeing benefits of walking. However, knowing that it is good for you is not enough to promote a change in behaviour. The message should be that walking is fun; it is sociable and can make you feel good in lots of ways.

Where possible a care package should involve family and friends (especially children) in providing support and designing interventions. For disabled people with younger families children can provide a valuable incentive to get physically active – but it is also relevant to older people. Where that support network is not present, thought should be given to how physical activity through everyday walking can be incorporated into the health care package.

Physical barriers
The most common physical barrier to walking identified by the participants was crossing the road. This should not be surprising because crossings connect pedestrian routes, they intersect with vehicular traffic and are the point at which pedestrians are most vulnerable walking. Having enough time to cross, not finding a safe place to cross the road, signalised crossings that do not work, the Puffin design with a low level green man and the absence of dropped kerbs were all mentioned.

Participants preferred wide, level, smooth, uncluttered and well maintained pavements. The condition of the pavement had a direct impact on individual's confidence walking outdoors. Uneven surfaces were associated with the fear of falling; worry was expressed by the need to constantly look down and check footing, reducing the pleasure in walking. This was offset by the attraction fully accessible environments, such as indoor shopping centres.

Obstructions, in particular advertising boards, wheelie bins and parked cars, were commonly encountered and made walking difficult. Like problems crossing the road, obstructions on the pavement could put pedestrians at risk (e.g. by having to step onto the carriageway to go past a parked car). The experience of wheelchair bound participants was that obstructions could make the difference between moving and waiting for an obstruction to be moved. The expectation that there would be obstructions could be enough to prevent a disabled person going out.

Conflict between different road users emerged as both a physical and attitudinal barrier. Cyclists and the use of mobility scooters on the pavement were an annoyance because they can be hard to hear and move fast. This is a problem for many disabled (and older) people and deaf people in particular. Safer roads (e.g. lower speed limits) could help to overcome this barrier by making cyclists more

prepared to use them, as would raising awareness of disabled people's extra need for more considerate behaviour (e.g. slowing down and stopping to let disabled pedestrians pass) particularly those with non-visible disabilities such as dementia and hearing loss.

Adaptations to make the pedestrian environment more accessible can also be problematic. For example, tactile paving helps blind and partially sighted people to navigate, but is a trip-hazard for stroke survivors who have problems lifting their feet. Similarly, the lack of colour contrast in seemingly accessible places can create hazards only a partially sighted person can see. This demonstrates the need to consider the accessibility of pedestrian environment while avoiding a focus on any one disability.

Fully accessible environments support disabled people's confidence as well as their functional mobility. Something as cheap as a hand rail can make a world of difference. However, even here there is need for consistency. One carer described pushing a wheelchair up a zig-zag ramp only to find ten steps at the top. Common sense suggests that accessible walking routes should be considered from their starting point (e.g. a transport hub) to their destination. Up to date information and maps detailing the location of, for example, crossings, steps, ramps, benches and toilets are also helpful.

Providing comfort facilities can improve walking conditions and enable people with limiting conditions to make every day walking journeys. Benches offer places to rest for people who tire easily and could encourage disabled people to walk more. Similarly, the availability of accessible public toilets can encourage or limit walking opportunities. Participants noted that even where toilet facilities are present and advertised as accessible, they may be locked or not large enough for their purpose.

Organisational barriers
Many of the physical barriers identified by participants are the result of organisational thinking. The maintenance of footway surfaces and pedestrian crossings is the responsibility of the local highways authority. The absence, for example, of dropped kerbs at junctions demonstrates a strategic need for local authorities to think about the accessibility and inclusivity of walking routes as part of broader transport or public health policies. However, while creating an accessible walking environment is very important, it may not be sufficient.

Older participants noted that simply getting to the front door can be a challenge. For disabled people, support from care workers or increasingly from family and friends may be the limiting factor. The time a carer has available to accompany a slow-paced client or restrictions on moving or handling above certain weights mean that opportunities to support functional walking and the benefits of being outdoors could be missed. Where carer support is available and is integral to the journey, then convenience and reliability can be the deciding factors. This applies to the mode of transport (e.g. where travelling by car is easier than taking public transport) and the accessibility of the destination.

Participants representing stroke survivors thought that rehabilitation support stopped too soon for some, slowing recovery. The functional ability to walk on a treadmill was not same as having the confidence to walk outside. In contrast, participants with learning difficulties felt that over-protective carers could be limiting their independence. They suggested that travel training for both carers and people with learning difficulties could boost confidence.

Public transport providers also have a key role to play in enabling disabled people to undertake longer journeys providing access to jobs, services and leisure. In the case of bus travel, some buses only have room for one wheelchair and participants noted how two friends in wheelchairs can find it difficult to travel together. This demonstrates how organisational assumptions about disabled people and can limit their travel opportunities and why they should be challenged.

Attitudinal barriers
For participants with learning disabilities (and stroke survivors and wheelchair users too) personal safety and feeling safe was one of the biggest concerns. Being called names by other pedestrians (and in one case being the victim of an opportunistic theft) resulted in some participants feeling of vulnerable, and it reduced their confidence going outside. Nevertheless, participants also talked positively about what they could do to feel safe, such as providing peer support, safe havens, and pre-planning walking routes and choosing 'safe' destinations (the presence of CCTV added to feelings of safety). The sociability of walking was a key motivation for walking.

Recommendations
Engaging disabled people, including those who are not able to go out (and whose opinions are therefore 'hard to reach'), is essential when planning new developments and prioritising of improvements to the built environment. Changes in the organisational approach to highways management, public transport and public health delivery need to go hand in hand with a 'can do' attitude that raises expectations of disabled people and sees them as independent, active individuals choosing to walk local journeys.

Suggestions for national action
- Encourage behaviour change among drivers and safer streets for vulnerable pedestrians (children, older people and disabled people) through the adoption of 20mph as default speed limit in built up areas.
- Promote cross organisational and departmental working to pool resources to fund future investment in walking and cycling.
- Emphasise the need for inclusion of disabled people in discourse on active travel (walking and cycling) and encourage research in this field.

Suggestions for local implementation

1. Work with disabled people to:
- Make walking easy, convenient and fun, for example, through led walks. The need for company comes out strongly and helps to address concerns about personal safety or lack of confidence.
- Provide travel training to improve disabled individual's and their carer's confidence to travel independently.
- Provide information on walking routes and facilities, and safe places for people to get help if they need it.
- Include disabled people in the evaluation of streets and walking routes. Asking people about disability in a public space (e.g. community street audit) may prove too challenging, therefore, also offer the opportunity for anonymous feedback.

2. Adopt a can do attitude through service provision:

- Highways authorities should prioritise maintenance and adjustment of controlled crossings and provision of safe places to cross busy roads for disabled people.
- Developers in partnership with local planners should avoid building barriers into new developments – accessible environments are confidence building and promote physical activity; provide maps and signage to highlighting barriers and facilities, and investigate smart phone solutions.
- Local authorities should develop a strategic and inclusive walking action plan which includes, for example, training to raise awareness of disability issues for people responsible for installing and maintaining the public realm (including subcontractors).
- Highways and planning authorities should involve and consult disabled people when designing and implementing changes to the public realm (avoiding a focus on any one disability).
- Local authorities should take advantage of the public facing role of Civil Enforcement Officers and widen their responsibilities to provide information, advice and assistance to disabled people.
- Check performance against the delivery of disability awareness training (e.g. for public transport operators and other service providers) and raise expectations of disabled people as independent travellers.
- Health professionals should make every contact count. For example, GPs could recommend walking as part of health checks.
- Signpost travel training and information (e.g. on the location of accessible toilets) to encourage short walking journeys for all and independent travel for young disabled people.

3. Raise awareness of disability issues among professionals and the general public by:
- Building representation of disabled people into the development, monitoring and evaluation of transport initiatives and public realm improvements (e.g. floating bus stops).
- Local authorities and local service providers working together to raise awareness of the particular issues facing disabled people (e.g. on pavement parking, mobility scooter etiquette, cycling on pavements).

Contents

1. CONTEXT

The UK Chief Medical Officers' guidance on physical activity 'Get Active, Stay Active' recommends that the easiest way to achieve levels of physical activity required for good health is to incorporate everyday activities, such as walking, cycling or gardening into daily life[i]. However, 72.1 per cent of disabled people take part in no sport or physical activity, compared to 47.8 per cent of non-disabled people[ii]. Inactivity is the fourth largest cause of disease and disability and directly contributes to one in six deaths in the UK making it as dangerous as smoking[iii]. The aim of this report is to explore the barriers and, of course, the opportunities to increase every day walking for disabled people.

1.1 The scale of the challenge

National Travel Survey for England (2014) shows that 9 per cent of all adults (over the age of 16) report having a mobility difficulty. However, nationally disabled people represent almost a fifth (9.4 million people or 18 per cent) of the English population; the highest proportion living in the North East of England (22 per cent)[iv]. Viewed across age and gender reported mobility difficulties (due to limiting illness or disability) increase markedly with age and more women report having difficulty walking than men across all the age groups. Chart 1 below shows how in 2014, 3 per cent of all adults aged 16-49 reported having a mobility impairment compared to 26 per cent of men and 37 per cent of women aged 70 years old and over. This is of particular concern in view of England's ageing population.

Chart 1: Mobility difficulties by age and gender
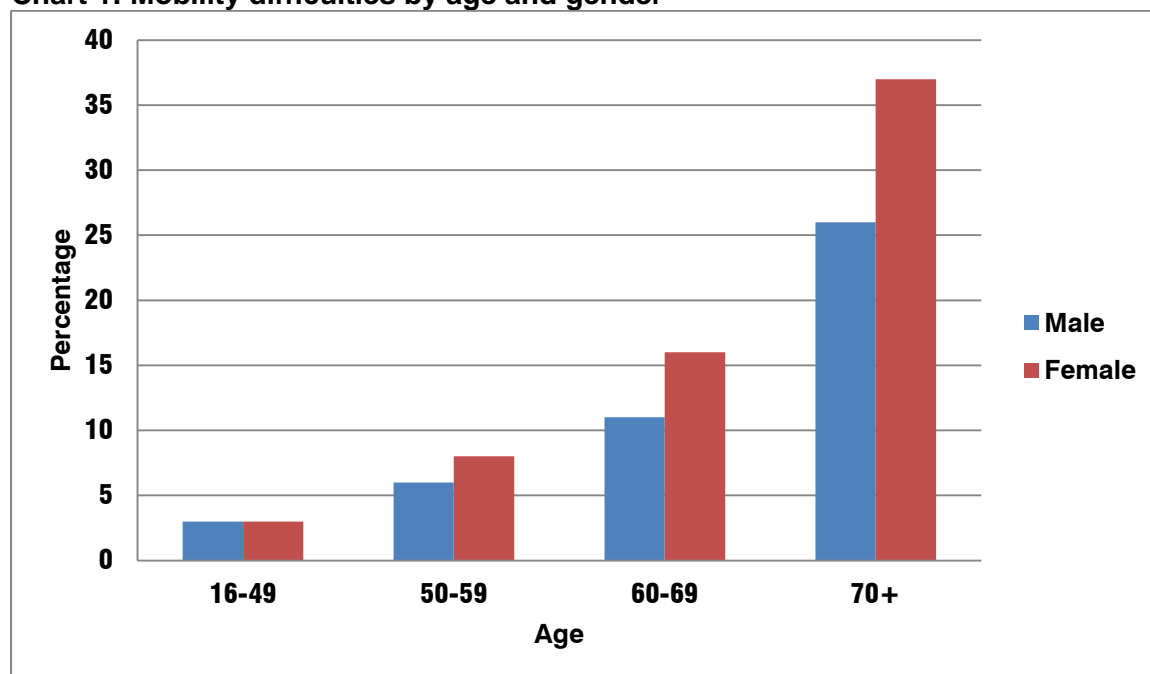
(National Travel Survey, 2014)

The Active People Survey shows the variation in the proportion of people who walk for those with a limiting illness or disability, compared to people with no limiting illness or disability. Table 1 below illustrates how disabled people walk much less (65

per cent), across all frequencies for utility or recreation purposes, than people with no limiting impairment (90 per cent). It is important to note that not all disabilities are visible. Table 2 shows how people with learning difficulties or who are on the autistic spectrum are similarly affected, while people who are deaf or hard of hearing walk the least overall. In the latter case, 23.1 per cent walk five times per week compared to the national average of 46.6 per cent. People with mental health conditions also walk significantly less[1], despite the known benefits to mental health of walking and green spaces.

Table 1: Proportion who walk (disabilities[2]; utility or recreation) for at least 10 minutes at the stated frequency

	All walking		Utility		Recreation	
At least	1 x month	5 x week	1 x month	5 x week	1 x month	5 x week
Limiting impairment	65%	32%	42%	14%	39%	13%
No limiting impairment	90%	50%	61%	24%	57%	17%

(Active People Survey, 2013/14)

The ability to navigate the pedestrian environment with confidence goes hand in hand with enabling equal access and integrating disabled people into wider society. People with mobility difficulties (through illness or disability) are particularly reliant on the quality of pedestrian environment (e.g. footways in good repair, dropped kerbs for those in wheelchairs, proximity to seating and public transport). Often small scale local improvements, where the people affected are involved in developing the solutions to mobility difficulties, can make a big difference to people's lives. For example, when residents of a sheltered accommodation complex in Swinton, Rotherham, took part in a community street audit[3] they recommended extending the hand rail on the steep slope from the complex to the main road to reduce the risk of slips and falls.

Table 2: Proportion who walk (disabilities; any purpose) for at least ten minutes at the stated frequency

Disability	1 x per month	1 x per week	3 x per week	5 x per week
No limiting illness or disability	90.4	81.7	58.2	46.6
Limiting illness or disability (all)	67.1	57.9	39.4	30.7
Blind or visual impairment	57.4	48.4	33.3	25.6
Deaf or hard of hearing	56.9	48.1	30.2	23.1
Learning disability or difficulty	61.0	51.6	34.1	27.2

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[1] Data from APS 2012/13, provided by Department for Transport on request,
[2] The questionnaire asks respondents "if they have a long-standing illness, disability or infirmity, and whether this illness or disability limits their activities in any way. Those who answer yes to both questions have been counted here as having a limiting impairment; the remainder are counted as having no limiting impairment." Department for Transport Local Area Walking and Cycling Statistics: England, 2013/14.
[3] As part of Living streets' Streets Apart project in 2014.

Mental health condition	65.3	56.1	37.1	30.0
Autistic spectrum disorder	65.9	54.8	35.9	28.8
Mobility impairment	57.9	48.5	32.1	24.9

(Active People Survey, 2012/13)

Physical barriers to walking for disabled people overlap with broader inequalities which (though relevant) are beyond the scope of this report, such as socio-economic status and ethnicity. Disabled people are more likely to be on a low income, out of work or have low educational qualifications; they also face a disproportionate likelihood of living in a deprived area[v]. People from lower socio-economic groups are more likely to live in areas that do not support walking and cycling, but in turn are more likely to need to walk and cycle for transport and to access employment[vi]. Disability also varies by ethnicity. For example, adults with impairments from black or black British ethnic backgrounds report the highest number of life areas (for example, education or leisure) in which participation is restricted, while adults from white ethnic backgrounds report the lowest[vii]. Different interpretations may arise dependent on how data is segmented.

1.2 Functional walking and a social model of disability

Disability can be defined medically or socially. From a medical perspective, impairments create differences in mental, physical, and sensory functions, such as: seeing, hearing, communication, walking, or using stairs[viii]. Functional walking categories are used by medical professionals to classify patients' ability to walk at home and outside in the built environment, for example, following a stroke[ix]. The social model of disability says that disability is caused by the barriers that exist within society and the way society is organised.

These barriers fall into three distinct areas (physical, attitudinal and organisational) which discriminate against people with impairments and exclude them from involvement and participation in daily activities[4]. Physical barriers include inaccessible footways and crossings, buildings and services. Barriers created through people's attitudes include discrimination, low expectation and prejudice – the combined 2009/10 and 2010/11 Crime Surveys for England and Wales suggest that around 65,000 disability hate crimes take place on average per year[x]. Organisational barriers are best exemplified through inflexible policies, practices and procedures – disabled people are most likely to mention modified hours or days or reduced work hours as an organisational adjustment that has or could help them into work[xi].

This study is informed by the views expressed by people across the life course – younger people and older people – with a wide range of mobility impairments (and their carers). It discusses the challenges associated with functional walking on a daily basis, through the lens of a social approach to disability.

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[4] http://www.efds.co.uk/resources/case_studies/578_disability_models_and_language

1.3 The potential gains

It has been demonstrated that physical activity contributes to the prevention and management of over 20 chronic conditions, including coronary heart disease (CHD), diabetes, cancer, mental health, osteoporosis and obesity[xii]. Walking on its own or as part of a longer journey is an ideal way to encourage physical activity because it is a convenient way to incorporate exercise into a daily routine; it is safe, affordable and is often sociable too. The health benefits of enabling disabled people to incorporate functional walking into their daily lives are twofold: it can improve outcomes related to existing health conditions, and; it reduces the risk of developing secondary conditions (see section 4.1). Improvements to quality of life include greater choice, control and, ultimately, the independence to lead more fulfilling lives through access to jobs, services and family and social life.

2. METHODOLOGY

2.1 Literature review

A review of published literature was carried out to identify major relevant studies. Databases, including PubMed and Mendeley were searched using variations on the following search terms:

- Functional AND walking AND disability
- Disability AND health AND walking
- Older AND people AND outdoors
- Disability AND built environment

The term 'functional walking' was rejected because it generated results primarily focusing on the mechanics of walking and rehabilitation, which fall outside the scope of this study. A search using the terms 'disability and walking' also found studies which were predominantly about individual disabilities, walking function, care and treatment. Additional terms were added to narrow the search, whilst increasing the yield of relevant studies; these included 'older people', 'walking outdoors' and the 'built environment'.

The literature search found very little published evidence of Investigation into the impact of the built environment on people with limiting mental, physical, and sensory functions across the life course. The relevant studies that were found referred mainly to the functional mobility – and disability – of older people. Whilst this was a little disappointing, the authors believed that there was sufficient similarity between the barriers experienced by older people and by disabled people to use the available evidence to inform the development of the focus group topic guide.

2.2 National policy and guidance

A comprehensive review of Government policy and evidence based guidance was conducted including relevant National Institute for Health and Care Excellence (NICE) guidance. This is included to demonstrate alignment with Government policy to promote physical activity through functional walking for disabled people.

2.3 A local government perspective

An interview was carried out with a Public Health Manager and Transport Officer from Coventry City Council. Both were involved in a collaborative project with the voluntary sector which aims to get 2000 disabled people more active using a mix of social mobilisation techniques. The aim of this interview was to explore a local authority perspective on barriers and opportunities to increase functional walking for disabled people.

2.4 Focus groups

Living Streets moderated four focus groups in the North East of England and in South Yorkshire in April 2015. Participants were recruited from disability groups through existing contacts, for example, from Living Streets' Streets Apart project. Selection was not based on wider criteria, such as deprivation, living arrangements or ethnicity. Participants included people with a range of mobility impairments and learning difficulties, as well as some of their carers. More women participated than men and ages ranged from 30 to 78 years.

As an introduction to the focus group, participants were invited to describe a local journey they had walked, how often they walked, how far, for what purpose and who they walked with. The moderator invited everyone to share positive experiences as well as any problems they faced. This then led on to an open discussion guided by prompts from the topic guide (see Annex) around the barriers and opportunities to everyday walking.

Table 3: Focus group participating organisations and participant details

	Female	Male	Age Range	Carers	Disability
Percy Hedley Foundation - *"Aim to promote the rights, needs and aspirations of disabled"*	4	5	38-62	2	Mobility
Active Independence – *"A group of Disabled individuals"*	6		48-78	1	Mobility
Equal people *"Involvement group for adults with learning disabilities"*	6	5	31-61	1	Learning
Different Strokes – Support group run by stroke survivor volunteers	8	5	30-66	5	Mobility

2.5. Interview

In addition to the focus groups, Living Streets conducted a qualitative (face to face) interview using the same topic guide as in the focus groups with a member of the Newcastle Disabled Forum (whose members had declined taking part in a focus group format), with a visual impairment. The results of this interview were summarised alongside the feedback from the focus groups.

3. LIMITATIONS

This report does not provide a systematic review of journal literature on the impact of the built environment on the functional mobility of disabled people. However, national experts in the field were consulted and asked to provide further evidence. Therefore, it is unlikely that important publications have been missed relating to the barriers and opportunities to promote more walking journeys among this significant proportion of the population.

It is impossible to include every kind of limiting health condition or disability in a study of this kind. The context section highlighted the perhaps surprising fact that people with sensory impairments, learning disabilities or mental health problems may walk much less than people who report having a limiting illness or disability. While representative groups were invited to take part, participants with these impairments declined to take part in focus groups. For this reason an interview was conducted with a partially sighted member of the Newcastle Disabled Forum. Similarly, while every effort was made to include people from across the life course, we were unable to recruit participants in the 18-30 age range (or younger) in the timescale provided. Participants were not selected on the basis of ethnicity or socio-economic status, nevertheless, disabled people are more likely to be out of work or on a low wage, and living in a deprived area as a result of the barriers they face within society.

The focus groups provide a sample of opinions expressed by people who already belong to organisations, who meet outside the home or are already able to travel around their local area. It is therefore possible that their views are not representative of those who are less active in terms of participation in activities outside the home (for example, through the expression of negative or low expectations or limited aspirations about what a disabled person can or cannot do). It is also important to recognise that the experiences of the individuals who participated in the focus groups may not necessarily represent those of other people with the same impairment.

4. FINDINGS

4.1 Literature review

4.1.1 The benefits of physical activity

Incorporating physical activity into daily life through active travel is an effective way of meeting the levels of physical activity needed to maintain good health for everyone. More people walking could help to reduce the risk of several major health conditions by between 20% and 60%, including heart disease, stroke, type2 diabetes, colon and breast cancer and Alzheimer's disease[xiii]. The results of a 12 year study of 334,000 European men and women published in early 2015 found that twice as many deaths may be attributable to lack of physical exercise than deaths caused by obesity – and that a 20 minute walk each day could be enough to reduce an individual's risk of early death[xiv].

Physical activity is particularly important for disabled people because it 'not only… promote[s] health and prevent[s] disease but also to reduce[s] the number of secondary conditions that can result from an initial disability'[xv]. Secondary conditions have been defined as preventable physical, mental, and social disorders resulting directly or indirectly from an initial disabling condition[xvi]. These could include chronic muscle pain or contractions, falls or other injuries, arthritis, cardiovascular disease, pressure ulcers, feeling isolated or depressed, obesity or sleeping poorly[xvii]. In an American study of the prevalence of secondary conditions among disabled people, out of a sample of 2075 respondents 545 of whom were classed as disabled, 87 per cent of those with disabilities reported at least one condition they said was a result of their disability, compared to 49 per cent of those without limitations who reported at least one condition[xviii].

4.1.2 Physical and emotional barriers to being more physically active

Increasing physical activity among disabled children and adults is a challenge across the life course. Reasons for not engaging in physical activity might include fear injury, lack of energy or social influences (e.g. embarrassment). Doctors and other health care professionals may need to address not only physical but also emotional barriers to physical activity with their disabled patients[xix].

Emotional barriers such as fear and lack of company are also a significant influence on people's motivation to exercise[xx]. Studies looking at motivators and barriers to physical activity identify poor health, fear and negative experiences, lack of company, and an unsuitable environment as the issues mentioned more often by those with severely limited mobility than by those with less mobility limitation[xxixxii]. Similarly, in a German study the second most cited reason for not being active was lack of company – leading the authors to highlight that efforts to promote physical activity should emphasise its wider benefits for socialising, enjoyment, relaxation and physical and mental well-being[xxiii].

4.1.3 Adopting a social model of disability

Adopting the social model of disability turns this focus from individual disability (and individual barriers and motivators) to the common *external* problems faced by disabled people instead. In particular, it is based on the premise that the problem is located 'in a society (economy, culture) that fails to meet the needs of people with impairments'[xxiv]. Physical barriers, in this context, could include the lack of ramped access to buildings, the absence of dropped kerbs, pavements in poor repair, lack of seating or accessible public toilets. Research has, for instance, investigated the regulatory framework, urban design and land use planning implications, and economic appraisal of accessibility[xxvxxvixxvii]. There is, however, a lack of published peer reviewed evidence relating to the disabling impact of the built environment on people living with a broad spectrum of physical, sensory, intellectual or behavioural conditions.

4.1.4 Concerns over an ageing population

It is perhaps not surprising that, with an ageing population, a topic which *has* elicited attention in public health and transport/urban design spheres is the physical impact of the built environment on the functional mobility – and disability – of older people. For example, in its 2007 Concept Series the Glasgow Centre for Population Health noted that 'improved opportunities for walking in the local community have particular social inclusion benefits for the elderly and for those with mobility difficulties'[xxviii]. Three themes which emerge from the literature reviewed here are: the role of the built environment in preventing functional mobility of older people (in particular the risk of falls); the importance of walkable environments as a means of enabling older people to maintain functional mobility, and; the need for interventions which also address both the emotional or psychological barriers to functional walking (e.g. fear of falls).

4.1.5 The built environment and the prevention of physical activity

In perhaps the largest study of its kind, the Inclusive Design for Getting Outdoors (I'DGO) project involved over 4,350 participants in two key phases over a ten year period (2003-2103), with a team drawn from research centres in the Universities of Edinburgh, Heriot-Watt, Salford and Warwick. It has published over thirty papers covering issues, such as: dementia friendly outdoor environments[xxix]; the effects of tactile paving on older adults' gait when crossing the street[xxx]; 'outdoor environments, activity and wellbeing'[xxxi], and; the design of lifetime neighbourhoods[xxxii]. Researchers found, for example, that cycling on pavements, obstructions from cars parked on pavements and the absence of street design elements, such as adequate seating and smooth pavements may influence an older person's decision to go out[xxxiii].

Falls are a major health concern. It has been estimated that 35 per cent of people aged 65 years and over fall at least once a year, with approximately 70 per cent of falls resulting in injury[xxxiv]. A study of characteristic falls outdoors among older people (based on a sample of 44 adults aged 65 to 92) found that falls appeared to be slightly more frequent in winter, on uneven pavements and generally occurred when stepping up or down a kerb or when crossing a road[xxxv]. The consequences of falls can be severe. Outdoor falls (and indoors falls) can 'trigger a quite dramatic loss of both physical and mental competence and well being' leading to a loss of independence requiring 'an increased level of support and intervention from the medical and welfare services'[xxxvi].

4.1.6 The built environment and enabling physical activity

Accessible pedestrian environments enable functional mobility and continued independence in older age and reduce the need for health interventions. Investigators from the Gerontology Research Center and Department of Health Sciences at the University of Jyväskylä in Finland noted that the design, management and maintenance of streets and public spaces does not just create attractive and pleasant places, but is essential for the creation of accessible, safe and walkable environments for older people[xxxvii]. A more recent publication (2015) used global positioning systems (GPS) to collect data and analyse the active travel trips from home of 28 adults age 50+ with mobility disabilities; it showed that supportive built environments enable and promote active travel (walking and cycling) 'among mid-life and older adults with mobility disabilities'[xxxviii].

Consideration also needs to be given to the 'door-to-door' journey and the links between buildings, streets, and public transport services. People with different mobility and accessibility needs are more at risk of 'community severance'[5], consequently, an inclusive, accessible outdoor environment is one that allows an older person to travel from their home to any chosen destination without risk or worry[xxxix]. Independent minded people may be undeterred by the barriers they face, but the need to devise adaptive strategies (e.g. planning routes or going more slowly) to cope with both physical and organisational barriers (e.g. arranging for assistance on journeys involving public transport) costs more and takes more time and effort for disabled people[xl].

4.1.7 The need to address physical and emotional barriers to walking

It is clear that the pedestrian environment creates barriers for older people and disabled people that in turn may lead to personal emotional or psychological barriers to functional walking. For example, in a study of stroke patients, falls occurred in all age groups and the fear of falling and reduced confidence were shown to reduce outdoor mobility[xli]. However, as discussed in section 1.2 barriers can also be attitudinal – boarded up windows, graffiti, rubbish, all hallmarks of deprived neighbourhoods, can act as daily reminders of social exclusion[xlii] and deterrents to walking. People with impairments, including seeing, hearing, communication, walking impairments, who are more likely to live in deprived areas (see context section above) are just as likely to fear crime. Recorded incidents of disability hate crimes have risen since 2011-12 and represented 4 per cent of hate crimes (1,985 recorded incidents) in 2013-14; 40 per cent of these recorded crimes involved violence against the person[xliii].

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[5] A term coined by Donald Appleyard in 1972 when he compared peoples' movements living on quiet or busy streets and demonstrated that heavily trafficked streets reduce interactions between neighbours living across the road as well as on the same side of the street. Appleyard, D., Lintell, M. (1972). 'The Environmental Quality of City Streets', Journal of the American Institute of Planners, JAIP, vol. 38, no.2, p 84- 101

4.1.8 Summary

This review of published evidence shows that research has focused overwhelmingly on the built environment and the functional mobility of older people. There is a need to stimulate interest and investigation into the physical barriers to walking faced by people of all ages with differences in mental, physical and sensory functions, and to pay attention to the second and third pillars of the social model of disability: the attitudinal and organisational barriers to functional walking.

4.2 Government policy

The Government's new Sports Strategy 'A Sporting Future: a New Strategy for an Inactive Nation' is clear that there needs to be 'a particular focus on getting disabled people active'[xliv]. It is recognised that 'there is substantially less research on the health benefits of physical activity for disabled people'. However, the Government has taken the position that physical activity guidelines can and should apply equally to disabled children, young people, adults and older adults once adjustments are made for individual physical and mental capabilities[xlv].

The association between environmental characteristics and physical activity, with obesity as an outcome, has not been well studied. Nevertheless, the general picture emerging is that residents of highly walkable neighbourhoods are more active and have slightly lower body weights than their counterparts in less walkable neighbourhoods, as do those living in areas with high land-use mix[xlvi]. With an increasing and ageing population the cost of inaction is prohibitive. In *Claiming the Health Dividend*, a report for the Department for Transport (2014), the direct cost to the National Health Service (NHS) of illnesses resulting from physical inactivity has been conservatively estimated at up to £1billion per annum (2007 prices)[xlvii]. However, the health benefits of increased active transport (walking and cycling) could save the NHS about £17billion over a twenty year period (2012-31).

In early 2013 the Government released its *Door to Door* strategy to encourage a behaviour change towards more sustainable local travel choices[xlviii]. Policy and guidance on walking and cycling (active travel) came together around two important documents:
* Department of Transport: *Moving more, living more: The Physical Activity Olympic and Paralympic Legacy for the Nation* (2014), and
* Department of Transport: *The Draft Cycling Delivery Plan* (unpublished, 2014).

Outlining measures for its post Olympic legacy, the Government said "encouraging physical activity amongst children and young people is key to turning the tide on inactivity, as good habits established when young can last a lifetime." Taking the lead on active travel, the draft Cycling Delivery Plan outlined a vision to make 'walking and cycling become the natural choices for shorter journeys – or as part of a longer journey – regardless of age, gender, fitness level or income'. The Plan, which included proposals for the preparation of local cycling and walking plans, required local authorities to show how they had 'taken steps to meet the needs of people from hard to reach groups – including disabled people [and] older people'[xlix].

The Government has confirmed its commitment to promoting physical activity for everyone by enacting the requirement for a Cycling and Walking Investment Strategy as part of the Infrastructure Act (2015)[l].

4.3 Evidence based guidance and statutory obligations

The Government's position is supported by evidence based guidance and regulation. Current walking levels identified in section 1.1 for adults in England, and people with mobility impairments in particular, are in stark contrast to the guidelines issued by the UK's Chief Medical Officers (2011) and recent World Health Organisation recommendations for public health[li]. These state that adults should be active daily: 'Over a week, [this] should add up to at least 150 minutes (2½ hours) of moderate intensity activity in bouts of 10 minutes or more'[lii]. This is the same as taking a brisk walk for 30 minutes at least 5 days a week. For children and young people the recommendation is that they should engage in 'moderate to vigorous intensity physical activity for at least 60 minutes and up to several hours every day'[liii].

With the transfer of responsibility for public health to local government in England in 2013 came the opportunity to tailor local solutions to local problems. Public health guidelines published by the National Institute of Health and Care Excellence (between 2008 and 2014), show how local authorities can:

- promote and create built environments that support increased levels of physical activity (PH08)
- encourage physical activity for pre-school and school-age children in family community settings (PH17)
- encourage walking and cycling as forms of travel or recreation (PH41), and
- encourage employees to be physically active (PH13).

For example, NICE guidelines on walking and cycling (PH41) notes that promotional programmes should '…include information that people with impairments will require, such as where dropped kerbs are located, the location and design of barriers at access points to cycle paths, and where public transport links and disabled toilets can be found'[liv].

In 2014, Public Health England (PHE) co-produced a physical activity framework with over 1,000 national and local leaders, calling for action from providers and commissioners in: health, social care, transportation, planning, education, sport and leisure, culture, the voluntary and community sector, as well as public and private employers[lv].

Evidence based guidance is supported by statutory obligations. For example, the National Planning Policy Framework (2012) promotes healthy communities (section 8) [lvi] and planning practice guidance on Health and Wellbeing states that "Local planning authorities should ensure that health and wellbeing… are considered in local and neighbourhood plans and in planning decision making"[lvii]. Under the Equality Act (2010) local authorities are also required to 'advance equality of opportunity' and 'remove or minimise disadvantages suffered', for example, through poor quality public realm by people who share protected characteristics, such as ageing and disability.

Planning policy is a key ingredient in the creation of accessible, inclusive places. This is of, course a long term issue: decisions about the built environment that are made today will affect disabled people for years to come[lviii]. Local authorities can encourage people with mobility impairments to live more active lives by ensuring that local journeys – to shops, health services, education, to work (etc.) – are be more

accessible in terms of the quality of the pedestrian environment and the distance to destinations.

4.4 A Local authority perspective

Local authorities are responsible for delivering improvements to public health. In order to provide a local authority perspective, two local authority representatives from the transport and public health teams at Coventry City Council were asked to reflect on the challenges and opportunities for increasing functional walking of everyday journeys among disabled people. Three distinct themes emerged: the need to think issues through from the beginning to the end; the contrast and to some extent the contradictions between accepted wisdom and the effectiveness of interventions; and the need for everyone to be involved in promoting behaviour change.

i. The need for joined up thinking
One of the first points made highlighted the disparity between the available design guidelines for accessible pedestrian environments and the real world physical barriers faced by disabled people. It was suggested that instead of relying on the guidance to provide formulaic solutions, it was important to think through who the users are and what physical barrier is being addressed. Sometimes all that might be needed is a relatively simple solution, such as putting in a dropped kerb.

"Some of those physical barriers, people are still assuming too much provision by guidance, guidance says therefore we must. Physical barriers are just being missed, some don't realise that they'll still cause barriers or problems for some users."
Transport Officer

"I've seen it so often. All that's needed are a couple of dropped kerbs across."
Transport Officer

Picking up on an issue identified in the literature review and policy mapping the Transport Officer talked about the need to think about complete journeys (door to door) and journeys in context. If a disabled person knows that using public transport will be difficult, then they are unlikely to walk to a bus stop or train station. In other words, if one stage of a journey is problematic it may compromise the whole trip and remove an opportunity for functional walking outdoors.

"From a transport point of view, if you find public transport difficult or don't use it much, you're not going to be walking to and from the bus stop or the nearest station. If using public transport is a barrier, it's going to be even less likely that you'll make that journey." Transport Officer

Similarly, knowledge of local walking routes is important. Without that local knowledge it is harder for disabled people to develop adaptive strategies and overcome physical barriers (although mobile devices may offer future solutions). If, for example, someone is driven everywhere, how will they know where the good walking routes are? Walking routes and interchanges with public transport need to be easy to use and direct in order to compete with the convenience offered by the car. Interventions rely on having as complete a picture as possible of the local situation. Public health research in the deprived areas of Coventry identified 'areas of comfort' and travel horizons of approximately half a mile, suggesting the need to target interventions at that level.

"There's the usual lack of dropped kerbs, legibility, whatever the person would need depending on their disability or impairment. Some of the barriers are easier to overcome if you are already familiar with the area or if you're accompanied, therefore if you are less familiar with an area, those barriers are going to be greater." Transport Officer

"If they're used to driving somewhere or being driven they may not realise that there's a green walking route as they don't see it in their daily life. We need to make sure routes in new developments are quick and easy." Transport Officer

"Limited travel horizons. We did some insight work in more deprived areas. There was a big perception of areas of comfort, people don't like going more than half a mile." Public Health Manager

ii. Inherent contradictions

There is general acceptance in national and local government (and indeed across the public health field) that walking is great for health and it is suitable for everyone. However, that is not a view universally shared. The Public Health Team in Coventry prepared walking maps and sent these to every household in the city, and received the most complaints from disabled people who questioned why they were being sent this information.

"We did walking maps and sent them to every house based on research in Bristol, but the biggest complaint was from people with mobility needs saying I'm in a wheelchair, I can't get around, why are you sending it." Public Health Manager

The Public Health Manager questioned the nature of the support provided by local authorities for people with limiting disabilities and, in particular, the widespread use of mobility scooters. Mobility scooters make peoples' (disabled people and their carers) lives easier; it is not easy pushing a wheelchair over cobbled streets for instance. However, if someone is using a scooter, they are not benefiting from being physically active through functional walking. Do the short term gains outweigh the long term benefits of physical activity?

"Massive rise in mobility scooters raises questions about how we support people with limited mobility. People have mobility scooters for a reason. I was shocked at how difficult it is to push a wheelchair, I ended up pushing it down the road. You don't think when able-bodied about cobbles, dropped kerbs." Public Health Manager

Both officers suggested that there is a need for people to understand the health and wellbeing benefits of walking. If walking was a pill 'we would all be taking it'. However, they also observed that 'understanding' is not enough. Walking may be good for us in the long term, but people make their decisions based on how they feel now and their 'immediate gratification'. The subtext of the walking as a pill analogy is that very little effort is involved in swallowing. In order to increase the appeal of walking, it needs to be more than just good for you. The message should be that walking is fun; it is sociable and can make you feel good in lots of ways.

"Something about people understanding the wider health and wellbeing benefits of walking. There's a general lack of knowledge of the benefits of walking. If all the benefits of physical exercise were in a pill we'd all be taking it." Public Health Manager

"There's a long term health benefit, but people don't think in terms of long term benefits, they think about immediate gratification, how do you change the focus and think about walking for fun or another purpose? How do you boost that immediate satisfaction?" Public Health Manager

"If you have mobility problems you're less likely to have a dog. Lots of people's exercise comes from walking for enjoyment. If you're less mobile you have more personal barriers, which are not necessarily to do with walking." Public Health Manager

"People don't realise that walking down to the local shops, that's going to have a big beneficial impact in a whole variety of ways not just in their physical health." Transport Officer

iii. Get everyone involved

It is important to get everyone – family, friends, neighbours and carers – involved in supporting disabled people to walk more everyday journeys. Some interventions will be more labour intensive than others, but tailoring solutions to the individual by including their social networks (and their likes and dislikes) need not increase costs significantly. Family and child focused programmes, for example, can provide the incentive for disabled parents to go out more.

"If a person is already receiving personal support, try to incorporate support to get them out more and develop confidence or find neighbours or friends to accompany them. It depends on the intervention, but some will be more labour intensive. There might be more opportunities for support to be provided alongside other support, it may not need significant extra resource or funding, it's just a case of adjusting support they're already receiving." Transport Officer

"Family support has a lot to do with it. The priorities are surviving, putting food on the table, mortgage, then family. We need more family focussed programmes, driven by kids. If kids don't want to get out and about, you are less likely to." Public Health Manager

"It's not just about professionals, also family and friends, their preferences and assumptions and habits." Transport Officer

4.5 Focus groups

Thirty nine participants aged 30-78 years took part in four focus groups in the North East of England (which has the highest proportion of the disabled population) and South Yorkshire. Thirty participants had mobility and learning disabilities, and nine of the participants were carers. An additional in-depth interview was conducted using the focus group topic guide with a person with a visual impairment and the results are discussed alongside the themes which emerged from the focus groups. Participants were asked to describe their experience of an everyday walking journey (with or without a mobility aid) resulting in wide ranging discussions - with the aid of prompts from the topic guide.

The resulting summary of these discussions is arranged in accordance with the social model of disability under the headings of:
- physical barriers
- organisational barriers

- attitudinal barriers

For example, crossings and uneven footway surfaces were among the most frequently mentioned physical barriers to walking. Under each sub-heading (e.g. crossings) is listed each particular issue (e.g. dropped kerbs) together with illustrative quotes. The physical barriers and issues of personal safety identified by the focus group participants are consistent those addressed by standard design guidance, such as the Manual for Streets (2007)[lix] and the Welsh Assembly Government's Active Travel Design Guidance (2014)[lx].

4.5.1 Physical barriers

4.5.1.1 Crossings

Crossings and crossing the road was the most discussed topic in all the groups.

i. Dropped kerbs

The absence of dropped kerbs on the other side of the road, for example, was a particular problem for people in wheelchairs. A car parked in front of a drop kerb could just as easily prevent access. A participant in a motorised wheelchair said they lacked the confidence to travel independently to the shops because a drop kerb at a junction was too steep:

"I'm scared because… my chair might go"

ii. Time to cross

The limited time available to cross at controlled crossings created anxiety among participants with mobility and visual impairments. For one participant with limited mobility following a stroke this was worsened by the attitude of drivers impatient to continue *their* journey:

"The problem is the pelican lights, they don't give you enough time to cross the road and the cars are revving"

For pedestrians with visual impairments the sounds generated by high traffic volumes are frightening too:

"It is quite busy, frightening. Crazy, mad traffic. All the crossings are signal controlled but you have to be quite brave to go for it. There's not a lot of time to cross. I tend to avoid it. I'll only attempt with a sighted person"

iii. No safe crossings

Driver behaviour combined with the absence of safe places to cross on busy roads was a big concern for participants with limited mobility. Even with the design features, such as build outs which narrow the road carriageway and reduce the distance pedestrians need to travel, it is impossible to step out in the face of steady traffic. Disabled pedestrians are left waiting for a driver to notice them, slow down and stop to enable them to cross the road:

"[It's] getting harder to cross, there are cars and buses in convoys on the main road, getting across is like waiting for Christmas. I cross between the bollards [build outs]. You would think they would wait to see someone waiting to cross?"

iv. Highways maintenance

The maintenance of controlled crossings (the responsibility of local authority highways departments) was raised by participants with learning difficulties. They described what it was like to cross the road when the signal does not work, how they had to judge when it is safe to do so – and the consequences too:

"*One of [signalised crossings] works and one of them doesn't so you've got to wait on the crossing for one of them to go green and the other isn't working <u>so you don't know when to go</u>. So when you go across a car goes beep, beep at you.*"

v. Crossing design
Discussions also focused on the design of pedestrian crossings. For instance, the new puffin crossings are able to detect pedestrians and to allow more time to cross. However, their design also situates the red and green men at a lower level – out of the line of sight of people in wheelchairs when there are other pedestrians around. This lead to the recommendation from wheelchair users that all controlled crossings should have an audio signal.

"*All crossings should have a bleeper as I can't see if the lights have changed from people standing in front of them. Some of the new traffic lights don't have the bleeper.*"

4.5.1.2 Footways
The condition of pavements (from now on 'pavements' are referred to using the technical term 'footway') was the second most common theme discussed in the focus groups.

i. Uneven surfaces
In high footfall areas and residential locations uneven surfaces were the second most common complaint in the focus group discussions. The fear of tripping (e.g. over raised flagstones) was shared by participants with mobility impairments and was raised by the visually impaired participant. It could discourage people from getting off the bus and walking instead. For those who through choice or necessity walked anyway, that worry was expressed by the need to constantly look down and check their footing – reducing their pleasure in walking. This was a particular issue for people recovering from stroke:

"*Dropped foot is common after a stroke so cracked pavements are a big issue, a trip hazard. If someone trips and falls they will be even more frightened to go out.*"

However, indoor shopping centres, such as the MetroCentre identified by participants in the North East, offer a safe alternative to walking in the outdoor environment:

"*Tend to go to the MetroCentre because it's smooth*"

ii. Obstructions
All participants, except those with learning difficulties, mentioned the difficulties caused by temporary obstructions, such as wheelie bins, advertising boards (A-boards) and cars parked on the pavement. Several participants described having to walk in the road; for one this felt safer, for another this was a real 'no-no':

"*Main gripe is tripping hazards and obstacles especially for wheelchairs, A-boards, wheelie bins. It often feels safer walking on the road.*"

"If you have to shuffle past a car on the pavements or perhaps have to dismount the kerb and walk by on the road it can be a no-no."

Obstructions can mean the difference between moving and staying put:

"Some journeys are more pleasant than others when you can actually get on and do the journey and not have to sit for 45 minutes… to move somebody's bin out of the way so you can cross."

iii. Conflict

Cycling on pavements and mobility scooters were seen as a menace. This was a particular concern for carers and is reported in more detail in section 4.3.6.

"Some mobility scooter users on the pavement are an absolute menace, they do need to be told how to use them, they get disabled people a bad name."

"you've got a bike chasing you and a scooter."

iv. Tactile paving

Design considerations intended to help people with one type of sensory impairment may conflict with the needs of people with other types of impairment. Tactile paving, for example, is known to cause discomfort for those with arthritis[lxi]. The raised blisters on steps and at crossings can cause trips and falls too, but their need is accepted:

"For people like us [stroke survivor], if you have problems lifting your feet you end up tripping on them because your feet are skidding. Have to be so careful. They're a pain for us, but we know why they're there. They're a boon for other people."

The issue of shared space or shared surfaces (in particular the absence of kerbs) is contentious for many blind and partially sighted people, but it was not raised in the interview with the member of the Newcastle Disabled Forum who is registered blind. There are two potential reasons for this: a lack of shared space schemes locally, and; the fact that the discussion was also about wider organisational and attitudinal barriers to walking.

v. Colour contrasts

For people with visual impairments, the lack of colour contrast could make it difficult to detect uneven surfaces:

"Walking from the station, the amount of uneven pavements because of trees. They've took the paving slabs away and tried to smooth it with tarmac, but when it's just the unevenness of dark tarmac you don't see the deviations and you end up walking down the road"

Similarly, silver steps at a local museum were hard to distinguish when wet:

"Being partially sighted, colours are a massive issue. The vertical parts of the new museum steps are silver so when it's wet it looks like a flat path, it needs more colour"

vi. Accessibility

Well designed pedestrian environments support functional mobility and boost psychological recovery from limiting conditions. The mother of a participant recovering from a stroke was full of praise for the place where he lived:

"Royal Quays has fantastic pavements, parks, all wheelchair friendly. If it hadn't been so good he wouldn't have got his confidence back so quickly. It's the right place for wellbeing, definitely helped his recovery."

Participants identified how low cost measures, such as the provision of handrails could make a big difference in hilly areas:

"I have trouble if there's no handrail, going up. If there's no handrail, you've got no chance. I once tried and got so far up and got stuck cos there was no handrail."

For carers, the physical demands of pushing wheelchairs up steep slopes influences travel decisions. Volunteers helping multiple residents find it easier to use a car (see more about the caring relationship in section 4.3.6). Where mitigation measures (e.g. ramps) have been put in place, these need to be consistent – as the following excerpt demonstrates:

"You need signage to tell you if a ramp is suitable for wheelchairs… There's a zig zag ramp but when you get to the top there are 10 steps at the top."

4.5.1.3 Comfort facilities
Providing comfort facilities can improve walking conditions and enable people with limiting conditions to make everyday walking journeys.

i. Toilets
The availability of accessible toilets (or lack thereof) was identified as an issue that can limit everyday walking opportunities. Even where toilet facilities are present, they may not be fit for purpose:

"Lots of places are listed [as having toilets] but they're almost permanently locked up. You have to cut your journey short."

"At the restaurant you have to leave the toilet door open to get your chair in."

ii. Public seating
It was suggested that the provision of seating might encourage disabled people to walk more:

"You need to have more seating on pavements in appropriate disability friendly places. If you perhaps put more strategic benches it would encourage them to do it [walk more].Usually at the coast if you put benches a couple of hundred yards apart everyone uses it."

4.5.2 Organisational barriers

4.5.2.1 Assisting independence
Carers attended the focus groups and contributed to the discussions alongside people in their care. The nature of the care needed and provided also formed part of the discussions.

i. Preparation

This report and the focus group discussions examine how the outdoor environment presents barriers and opportunities for walking for disabled people. However, older participants pointed out that just getting out of the front door can be a challenge when you live on your own:

"It's not just the physical environment. The key thing is having somebody to go out with you, to get from the property to the outside, to carry your bag and get the scooter… You can be stuck at home looking at an accessible environment"

From a carer's perspective, there is not enough time or institutional leeway to meet client needs:

"What if somebody would like to walk out and the carer doesn't want to? If you're unsteady [on your feet] the carer has to hold you and they're not meant to move or handle more than a certain weight. There are different issues for different people. For some clients to walk to the front door it's 10 minutes, not fast."

Cuts in funding can mean that older people are increasingly reliant on their families for support:

"… you don't get warden service now so you rely on families. There's not care for old people that there once was. People will come once a week and take them shopping"

ii. Rehabilitation

Rehabilitation to functional walking is an important part of recovery from a stroke. The sudden onset of disability as a result of a stroke can make it seem more life limiting. Participants from the Stroke Support group highlighted how help is available for some and stops too soon for others:

"My Guide volunteers go out with people and identify routes. The volunteer will spend 6 weeks with them, it really builds up people's confidence"

"She was back home [from hospital] too quick, she had lost all her confidence"

"Once you show an aptitude for walking, they don't really want to know"

"I had to go for a test on a treadmill to see how far I could walk, I stayed on and sort of shot myself in the foot"

iii. Convenience and reliability

Where carer support is available and integral to the journey, convenience and reliability may be the deciding factors. The following quotes from carers reveal how ease of travel to and at destinations influences decisions:

"Quite a lot of our residents like to go to the MetroCentre, because you know it is going to be fully accessible on the flat. Quite a lot of staff will take residents to the MetroCentre."

"Choices about where people go tend to be somewhere you know is going to be really accessible"

iv. Letting go

Participants with learning difficulties felt that carers could be limiting their opportunities for everyday walking, especially where destinations were within an

easy walking distance. It was suggested that councils could do more to provide travel training for people with learning disabilities to help boost their confidence.

"I think some people that have got carers, they're very protective of the people they look after, they need to let go of the reins…"

"…We used to do Zumba. We used to get a taxi round there and back. To be honest with you there are no problems at all [on the walking route]"

4.5.2.2 Public transport

Public transport provides an opportunity to promote everyday walking as part of longer journeys. Accessible public transport – in other words: having transport services going where and when one wants to travel; being informed about the services; knowing how to use them; being able to use them; and having the means to pay for them[lxii] – is all the more important because it enables disabled people to live independent lives. While accessibility (as defined above) covers a wide range of issues, focus group participants concentrated on the barriers to being able to use buses and trains.

i. Buses
Bus companies need to balance the demand to move people quickly and efficiently, alongside the specialist needs of some groups of the population (e.g. by complying with the Public Service Vehicles Accessibility Regulations 2000). Historically, bus travel has presented a real challenge for disabled people. For example, in a survey published in 1995, disabled people "who had stopped using mainstream bus services said they would start doing so again if there were lower steps on buses (18%), a lift or ramp for a wheelchair (13%), space on the bus for a wheelchair (7%), the bus moved off more slowly (5%), more frequent bus stops (4%), a door to door service (4%), more frequent buses (3%) and more helpful staff (3%)"[lxiii].

New buses have undoubtedly improved, but the views expressed by focus group participants (only a small group of people), suggest that some barriers to travel remain the same. For instance, lack of space for more than one wheelchair on buses means that friends cannot travel together. If that space is already taken by a pushchair[6], then neither person can travel and this can dissuade wheelchair users from making journeys.

"If there's two people travelling together there's only wheelchair space for one, so one has to get the bus and the other has to wait."

"If they've got a pushchair on they won't let them on anymore"

Stepping on and off the bus is difficult for people with limited mobility. Some buses have vehicle lowering systems, but drivers may not be willing to use them:

"The trouble on buses is that they don't want to lower the step for you, they make excuses and don't even try. They go where it's a very low footpath."

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[6] As recently as 2014, a Court of Appeal judgement ruled in favour of First Group bus company that 'transport firms are not required to force one traveller to make way for the other', and recommended that wheelchair users ask Parliament for a change in the law for the right to reserved spaces on buses. See http://www.theguardian.com/law/2014/dec/08/bus-parents-buggies-wheelchair-users-appeal-first-group

Drivers accelerating before passengers have time to sit down and decelerating before stopping affects the balance of participants with mobility difficulties and visual impairments:

"Bus drivers need to let people get to their seat"

"I used to go up on the top deck, but I found when the bus turned left I was losing my balance when coming down the stairs. Now I sit downstairs."

ii. Trains
Wheelchair users from the North East talked about their experience using the Metro, which was designed to be fully accessible, to travel to the MetroCentre. The volume of passengers was their main concern because it reduced their visibility to the general public and affected their ability to get on or off the train:

"The hazard I have is the general public, because they don't see the chair when I'm on my own and with staff."

"Sometimes I cannot get off the Metro cos it's so full, I haven't got time so I have to get off at the next stop."

The pressure to move quickly was increased by timings at the ticket barrier. For some participants this made the difference between an unaccompanied journey and an assisted journey:

"The timing on the disabled barrier, if I'm on my own I'm not able to do it."

An additional problem was the distance between the train and the platform:

"It's a real struggle getting wheelchairs on and off there, it's just the width, the gap between the carriage and platform, the wheels get stuck"

4.5.3 Attitudinal barriers

4.5.3.1 Personal safety
Participants discussed a wide range of issues in relation to walking outside. For those with learning disabilities, personal safety and feeling safe was one of the most important. It was a concern among stroke survivors and wheelchair users too.

i. Vulnerability
Participants with learning disabilities described how the threat posed by other pedestrians left them feeling vulnerable and impacted on their confidence going outside:

"Stress as well if you're on your own. There was too many gangs taking advantage and calling me names. You get people coming up to you in the street"

Concerns about personal safety and its impact on individuals' confidence were also evident in the stroke support group. In this case the perceived threat was from children:

"I stopped, coming into the station one night, and some kids asked me for money, I said no. I had a panic attack. I just felt so vulnerable. I didn't come back for quite a while."

Another participant related the story of opportunistic theft which happened to a fellow wheelchair user:

"He's had a couple of incidents where people have slashed the bottom of his bag and caught his shopping. People feel vulnerable, especially at peak times of the year like xmas shopping."

ii. Feeling safe
Alongside expressing their fears about their personal safety, participants talked about what they could do to feel safe. Participants with learning difficulties talked about the benefits of peer support and a new Safe Place initiative which provides identified points where disabled people can seek help in the community, such as libraries and shops:

"The more you think about it, why you don't go out, the more you get frightened and you go I can't be bothered today. You should go out and enjoy yourself the more you don't go out. You should go out and enjoy yourself."

"My advice to people who get picked on or bullied, what we can do is get them to a safe place"

Pre-planning a route and choosing 'safe' destinations (the presence of CCTV added to feelings of safety) was another way disabled people could get over their fears. A carer described one resident's journey to the MetroCentre:

"A resident travels independently there by bus and Metro as he knows once he's there it is fine. It's a safe and secure place to shop, with cameras. If you're travelling independently in town, big parts of it are not safe and there are uneven surfaces."

4.5.3.2 Individual motivations for walking
Disabled participants and their carers discussed why disabled people do not walk more. For some it depended on their mental or physical health:

"Anybody who is depressed doesn't want to leave the house, once he stops doing something it is hard to get him motivated."

"Got to take in how I'm feeling on the day, if you didn't have the hazards there it would make it easier."

For other participants it was about making that initial suggestion or finding the right incentive, for example, the sociability of a walking group:

"How many people get told at their Annual Health Check why don't you do more walking or exercise?"

"We do a group walk along the Quayside every year, 30-40 people. There's a flat pavement. People who go year after year walk further each time. The starting point is near a car park or bus stop."

Living alone and having to make the effort to go outdoors could pose a challenge:

"You have to have strong determination and will power"

"There's nobody there to say to them are you going to be sitting there all day or do you want to come out for to come out [and exercise]"

5. DISCUSSION

Disabled people represent almost a fifth of the English population and worryingly 70 per cent of disabled people take part in no sport or physical activity. This is despite the well known health benefits and the Government's policy – supported by evidence based guidelines and statutory instruments – to promote physical activity for everyone. Walking is an easy way to incorporate physical activity required for good health into everyday activities and in this report we ask: what are the barriers and opportunities to increase every day walking for disabled people?

The literature review highlighted two contrasting ways of thinking about how to increase functional walking in this population group. The medical model identifies physical and emotional barriers to functional walking that result from the limitations imposed by individuals' disabilities. The approach adopted in this report is the alternate view that disability is 'socially constructed' by barriers that exist within society and the way society is organised. It provides a useful way to identify many of the <u>common</u> physical, organisational and attitudinal obstacles that disable people living with mental, physical, and sensory impairments.

The review also showed that disabled people's experience of the built environment appears to be missing from academic literature (although the review may have systematically missed qualitative studies in this area). The literature focuses a great deal on ageing and age related conditions instead. In order to address this gap (and in an effort to stimulate investigation in this area), focus groups and qualitative interviews were carried out with disabled people, their carers and local authority public health and transport officers to identity barriers and opportunities for increasing everyday walking.

5.1 Physical barriers

Crossing the road is the number one issue of concern for the disabled people in this study. In particular:

- not having enough time to cross the road safely and in comfort, a lack of safe places to cross the road
- the need for more Puffin crossings (which provide auditory as well as visual cues for people with sensory impairments)
- controlled crossings that do not work, and
- the absence or obstruction of dropped kerbs to enable wheelchair users to cross the road.

This last issue was also picked up by the transport officer in Coventry. The list highlights the need for transport engineers, urban designers, highways authorities (and others) in partnership with public health teams, to think beyond what the manual[7] says. Instead of a prescriptive approach to provision, they should think about what a disabled person might need to complete their journey from a to b (including transitions between walking and public transport). The best way to do this is include disabled people who have first hand experience of the barriers in the design process.

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[7] In particular, the 'Design Manual for Roads and Bridges'.

Participants preferred smooth, level, uncluttered and well maintained footways (pavements). However, many footways are too narrow to accommodate pedestrians comfortably. Large objects, such as wheelie bins or advertising-boards cause additional problems – especially on 'bin day'. Similar to the point above, new residential developments should be designed to allow space for refuse collection (e.g. communal bin storage) and pedestrian movements.

Of course it may not be possible to create an accessible environment to meet everyone's needs. There were several examples from the focus groups where of design considerations intended to help people with one type of impairment conflicted with the needs of people with other types of impairment, for example:

- replacing sets with tarmac helps to smoother surface for pedestrians to walk on, but this can be offset by the lack of colour contrast when the tarmac is wet which makes it harder for visually impaired people to notice where the pavement is uneven,
- a low level green or red man of Puffin crossings is problematic for wheelchair users when obscured by other pedestrians, and
- blister paving on steps and at crossings can cause trips and falls for who have had strokes, but helps visually impaired people to navigate safely.

Tactile paving, especially, is known to cause discomfort for people with arthritis[lxiv], but the need for it was accepted by focus group participants. This underlines the fact that compromise is sometimes necessary – and points to the need for more research into how interventions balance the need of different groups.

The provision of toilets and seating can encourage walking journeys. This is supported by data from a cross-sectional survey of 284 people aged 65 and over which found that the presence of seats, toilets, cafés and shelters in neighbourhood open space were significant predictors of the time participants spent outdoors[lxv]. However, participants in the focus groups highlighted how in their experience 'accessible' toilets can be too small for their wheelchairs and facilities that are supposed to be available are often locked. Both of these situations may cut a journey short and may discourage future outings. It is important to ensure that information about toilets (and seating) is in fact as advertised and kept up to date.

An issue not raised here, but prominent with younger people elsewhere (from the evaluation of Living Streets' Move Makers project) is the importance of street lighting, for example, around concerns about accidents, personal safety and for deaf students the inability to sign to each other in the dark[lxvi]. This demonstrates a limitation to this research and emphasises the need for further work in this area.

Well designed developments (such as Royal Quays and the MetroCentre) were praised by disabled participants as confidence building and for making journeys safe and reliable. They satisfied carers' concerns too. New developments (e.g. housing, employment and retail locations) should be fully accessible, include walkable destinations and consider the door to door journey – in particular, links to public transport.

5.2 Organisational barriers

Many of the physical barriers identified above are the result of organisational thinking. The maintenance of footway surfaces and pedestrian crossings is the responsibility of the local highways authority. Local authority budgets for highways maintenance have, as elsewhere, seen significant cuts and jobs have to be

prioritised. Nevertheless, this report highlights why providing disabled people with safe places to cross the road is important. Local authorities should also ensure that controlled crossings are fully functioning – this benefits not only disabled people (visible or not), but is necessary for active children and older people too.

Similarly, there is room for compromise between keeping vehicular traffic moving and allowing more time for vulnerable pedestrians to cross the road. Highway engineers have the power to adjust the timing on controlled crossings to allow disabled people (and parents with young children or buggies) more time to cross the road at key locations and times. Parking in front of dropped kerbs is illegal and can result in a parking fine. This means that civil enforcement officers have a vital role to play in ensuring that pavements and dropped kerbs are kept clear of parked vehicles. The absence of dropped kerbs at junctions, however, demonstrates a strategic need for local authorities to think about the accessibility and inclusivity of walking routes as part of broader transport or public health policies. This could include the mapping accessible routes and facilities and providing links to websites, such as Disabled Go[8] which helps disabled people find accessible venues around the UK.

Uneven footway surfaces were the second most common barrier to walking identified by the focus group participants. It is generally accepted that 25mm is 'the point at which a highway authorities will consider a trip hazard to require repair'[lxvii]. Together with the cuts to maintenance funding mentioned above, which means that planned footway resurfacing may be cancelled or not scheduled for decades to come[9], it is a problem with no easy solution. However, in 2014 the Government proposed that a 9 per cent weighting in the funding formula for local roads should be allocated for the maintenance and improvement for walking and cycling infrastructure. This will come into force from 2018/19 and could see greater priority given to footway maintenance.

Public transport providers also have a key role to play in enabling easy and convenient longer journeys. Participants who use wheelchairs and travel on the Metro in Newcastle showed that even where a transport system has been designed to be accessible there can be problems (in this case, the gap between the train and the platform and the lack of visibility at the ticket barrier). This may be an instance where the design of station for one group of users has had a negative impact on other users. In the case of bus travel, some buses only have room for one wheelchair – this perhaps assumes one wheelchair plus a carer rather than two friends in wheelchairs travelling together. Organisational assumptions about disabled people and how they travel can limit their travel opportunities and should be challenged.

Health care providers are also limiting walking opportunities. For example, participants recovering from strokes suggested that for their rehabilitation achieving functional walking is not enough; they need to develop confidence going outdoors (e.g. to overcome the fear of falling). For other participants, the built environment can be fully accessible, yet remain inaccessible if they need help to get to the front door (e.g. to put on a coat, collect walking sticks, get bags etc.). If a person is dependent on a carer to get outdoors, they may not have the time or inclination to get them there. Where possible a care package should involve family and friends (especially children) in providing support and interventions tailored to include their preferences too. This latter recommendation is aimed at younger families where children can provide a valuable incentive to get physically active – but it is also relevant to older

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[8] http://www.disabledgo.com/
[9] For example, Brent Borough Council's Highways Asset Management Plan states that their current capital funding allows for 6 miles of footway to be resurfaced each year, and the expectation that footways will be resurfaced **every 84 years**. https://brent.gov.uk/media/9244640/Brent-HAMP-2014.pdf accessed 17.09.15

people. Where that support network is not present, thought should be given to how physical activity through everyday walking can be incorporated into the health care package.

Finally, there is also a need for joined up thinking on mobility scooters. As highlighted by the public health manager in Coventry they are a valuable tool in that they enable independent movement, but they do not encourage physical activity through functional walking. Do the short term gains outweigh the long term benefits of physical activity? What are the implications for long term health costs? This is a big policy question.

5.3 Attitudinal barriers

Parking on pavements is often a matter of consideration. Raising awareness of the problems caused by pavement parking could be seen to be part of the solution. The message is simple: pavement parking is inconsiderate to other road users, such as disabled people (note: the footway is part of the highway and pedestrians are defined as road users too). For example, after an education campaign in Exeter in 2008 residents were angry at being labelled inconsiderate. In their eyes they were doing the right thing by keeping the carriageway clear (for other drivers and emergency vehicles) – and they had to put their cars somewhere. In the narrow streets of Exeter, and countless towns and cities across the country which evolved with the horse and cart as the dominant mode of transport, there is nowhere else to park their cars[10]. Nevertheless, there was popular support for a Private Member's Bill to restrict pavement parking across the whole of England (and Wales) as it is already in London[11].

Cycling on pavements is illegal, although in practice some people do it (e.g. if they may feel unsafe on the road). Better provision for cyclists (e.g. well connected, direct routes, signage and information) and safer roads would help, but it is also about considerate behaviour. Even on segregated paths and shared spaces Rule 62 of the Highway Code states that cyclists should 'take care when passing pedestrians, especially children, older or disabled people, and allow them plenty of room. Always be prepared to slow down and stop if necessary'. Similarly, Rule 66 says that cyclists should be 'considerate of other road users' and ring a bell if they have one[12].

Cycles and scooters can be hard to hear and move fast – which is a problem for many disabled (and older) people and deaf people in particular. Speed, noise and the flow of traffic when crossing the road were issues also raised by participants. Nationally, acceptance and support for 20mph limits in residential areas and as a default speed limit in built up areas is growing and there have been calls for national Government to make it easier for Councils to introduce 20mph limits by reducing the need for costly repeater signs[13]. Speed limit roundels painted on the road surface cost less and can be used to remind drivers to keep to the 20mph limit.

It was evident from the focus groups that disability awareness training is necessary for workers in key services, for example, public transport. Bus drivers should use accessibility features on their buses if they have them (e.g. wide doors, low

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[10] Personal Communication with Chris Rook, Senior Officer (Parking and Enforcement) Traffic Management Team, Exeter County Council 23.07.2014
[11] http://services.parliament.uk/bills/2014-15/pavementparking.html
[12] See https://www.gov.uk/guidance/the-highway-code/rules-for-cyclists-59-to-82
[13] http://www.brake.org.uk/rsw/18-top-level/campaigns/1196-go20coalition

entrances or lowering mechanisms; some buses even have hearing aid induction loops for announcements and conversations with the driver[14]). They should come to a halt and drive off more slowly (e.g. to reduce the risk of falling for visually impaired passengers), and should prioritise disabled passengers instead of leaving them stranded. This is going to become more important with an ageing population as mobility and sensory impairments increase (e.g. after a stroke or through loss of hearing). Clearly parents and buggies are important too, but perhaps a distinction needs to be made between priority seating spaces for disabled people and the storage or the stationing of buggies when children are still in them.

Travel training disabled people (e.g. with learning disabilities) and their carers would be useful to encourage independent travel and more confident or 'risk taking' behaviour. This could include developing buddy systems and walking groups for confidence and support. Too often the easy way out is to book a taxi! Participants thought that an opportunity to recommend walking was being missed at regular health checks, suggesting prompts, such as 'have you thought about walking?'. However, motivations for walking also depended on how it made you feel. Walking should be fun, confidence building and more than just 'good for you'.

Unfortunately abuse and exploitation of vulnerability is a reality for disabled people walking everyday journeys. Participants promoted the use of safe havens or places where they could take refuge and get help if they needed to, such as the Tees-wide Safe Places Scheme[15].

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[14] For example, Transport For London https://tfl.gov.uk/transport-accessibility/people-with-sight-or-hearing-loss
[15] http://www.cleveland.pcc.police.uk/Information/Cleveland-Safe-Places-Scheme.aspx

6. CONCLUSIONS

This report has set out the scale of the challenge to increase everyday walking for disabled people who represent a fifth of the population, and 70 per cent of whom take part in no sport or physical activity. It has reviewed journal literature and found that the role of the built environment in promoting or inhibiting physical activity in older adults is well documented, but the experience of disabled people is largely missing.

By adopting a social model of disability, focus groups with disabled participants and their carers were used to identify common physical, organisational and attitudinal barriers to walking outdoors – and the opportunities to overcome them. Engaging disabled people, including those who are not able to go out (and whose opinions are therefore 'hard to reach'), is essential when planning new developments and prioritising of improvements to the built environment. Changes in the organisational approach to highways management, public transport and public health delivery need to go hand in hand with a 'can do' attitude that raises expectations of disabled people and sees them as independent, active individuals choosing to walk local journeys.

6.1 Suggestions for national action

- Encourage behaviour change among drivers and safer streets for vulnerable pedestrians (children, older people and disabled people) through the adoption of 20mph as default speed limit in built up areas.
- Promote cross organisational and departmental working to pool resources to fund future investment in walking and cycling.
- Emphasise the need for inclusion of disabled people in discourse on active travel (walking and cycling) and encourage research in this field.

6.2 Suggestions for local implementation

Work with disabled people to:
- Make walking easy, convenient and fun, for example, through led walks. The need for company comes out strongly and helps to address concerns about personal safety or lack of confidence.
- Provide travel training to improve disabled individual's and their carer's confidence to travel independently.
- Provide information on walking routes and facilities, and safe places for people to get help if they need it.
- Include disabled people in the evaluation of streets and walking routes. Asking people about disability in a public space (e.g. community street audit) may prove too challenging, therefore, also offer the opportunity for anonymous feedback.

Adopt a can do attitude through service provision:

- Highways authorities should prioritise maintenance and adjustment of controlled crossings and provision of safe places to cross busy roads for disabled people.
- Developers in partnership with local planners should avoid building barriers into new developments – accessible environments are confidence building and promote physical activity; provide maps and signage to highlighting barriers and facilities, and investigate smart phone solutions.
- Local authorities should develop a strategic and inclusive walking action plan which includes, for example, training to raise awareness of disability issues for people responsible for installing and maintaining the public realm (including subcontractors).
- Highways and planning authorities should involve and consult disabled people when designing and implementing changes to the public realm (avoiding a focus on any one disability).
- Local authorities should take advantage of the public facing role of Civil Enforcement Officers and widen their responsibilities to provide information, advice and assistance to disabled people.
- Check performance against the delivery of disability awareness training (e.g. for public transport operators and other service providers) and raise expectations of disabled people as independent travellers.
- Health professionals should make every contact count. For example, GPs could recommend walking as part of health checks.
- Signpost travel training and information (e.g. on the location of accessible toilets) to encourage short walking journeys for all and independent travel for young disabled people.

Raise awareness of disability issues among professionals and the general public by:
- Building representation of disabled people into the development, monitoring and evaluation of transport initiatives and public realm improvements (e.g. floating bus stops).
- Local authorities and local service providers working together to raise awareness of the particular issues facing disabled people (e.g. on pavement parking, mobility scooter etiquette, cycling on pavements).

6.3 Further suggestions

- Prioritise research funding into disability and design/experience of the built environment.
- Explore the barriers to walking among people who are disabled, but capable of functional walking (e.g. with learning difficulties, mental illness or sensory impairments such as hearing loss)

Annex: topic guide

As an introduction to the focus group, participants were invited to describe a local journey they had walked, how often they walked, how far, for what purpose and who they walked with. The moderator invited everyone to share positive experiences as well as any problems they faced. This then led on to an open discussion below around the barriers and opportunities to everyday walking. The discussion was guided by prompts from the topic guide below.

Purpose of your walking journey
To shops, friends, doctors, community centre, hospital, work, school.

Physical barriers:
- Unsuitable walking environment – there is nowhere pleasant to walk, pavements are in poor condition, pavements are too narrow, lack of crossing points, too many obstructions and clutter, lack of dropped kerbs, too hilly, no seats or public toilets
- Lack of opportunities – there is nowhere to walk to nearby; absence of local shops and services.
- Traffic – there is too much traffic on the roads around where I live; it is not safe.
- Pollution – there is too much pollution

Organisational barriers
- Lack of transport – I can't get transport to where I want to walk
- Lack of company – I have nobody to walk with
- Lack of time – my carer does not want/have time/takes too much effort to walk
- Lack of knowledge – don't know where to walk

Attitudinal barriers (including individual motivations)
- Conflict – I worry about being knocked down by cyclists on the pavement
- Personal safety – I worry about being attacked
- Health – It will be painful/tiring because I have health problems; I'm scared of falling or hurting myself; I worry about tripping over broken paving stones
- Lack of interest/motivation – I'm not interested in walking/physical activity

What would make it easier for you to walk more for local journeys?
Better streets – maintenance, lighting, crossings, seating

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