Belfast
A World Health Organization
Healthy City



Walkability Assessment

for Healthy Ageing

March 2014

Preface

The population in the World Health Organization (WHO) European Region is ageing rapidly and the proportion of people aged 65 and older is forecast to increase from 14% in 2010 to 25% in 2050. People in nearly every part of the region are living longer, but their chances of spending these later years in good health and well-being vary within and between countries.

According to the Northern Ireland Neighbourhood Information Service (NINIS) the 2011 Census reported 19% of the overall Belfast Local Government District (LGD) population were aged 60 or over. While this is a slight decrease of 1.8% compared to the 2001 Census report, there is notably a 17% increase in the number of residents aged 85+. An Age-friendly area profile is available on the NINIS website generating key statistics of older people in Belfast Local Government District area. Older adults are recommended to engage in physical activity adding up to at least 150 minutes (2½ hours) of moderate intensity activity per week, in bouts of 10 minutes or more. The Health Survey NI 2011/2012 revealed that 61% of adults in Northern Ireland were overweight or obese; a supportive built environment could help reduce this.

Knowledge Exchange, Spatial Analysis and Healthy Urban Environments (KESUE) is a 12 month project that aims to take existing academic research on measuring the walkability of the built environment and apply it to the real world. The importance of walking as a mode of active travel and the impact of a walkable environment on remaining active is well researched. This pilot project is one way the KESUE information has been used and a valuable starting point for further developing its use. I look forward to the next step, validating the tool for widespread use as a walkability assessment tool to be used for planning and developing the built environment.

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Foreword

The world is experiencing a rapidly ageing population. Recognising this trend in 2005, the World Health Organization (WHO) Global Network of Age-friendly Cities and Communities was established. Its purpose is to provide a new approach to ensure older people's needs are met and promote active ageing. Its focus is on creating an environment where older people continue to participate in social, economic, cultural, spiritual and civic affairs.

This report gives an overview of a pilot project which developed an age-friendly assessment tool to gauge how accessible the built environment is for older people, conducted as part of Belfast's application to be a WHO Age-friendly city. This pilot project, carried out in consultation with the Healthy Ageing Strategic Partnership (HASP), demonstrates a way of engaging with older people to gain their opinions and use their experience and knowledge to progress the city towards its goal as an age-friendly city. It engaged local older people to assess the walking environment in their area, using a tool developed following a review of relevant models and literature.

This report presents the tool and outlines findings from the project, including priority elements identified by older people as essential for an environment that encourages and supports older people to remain active. Recommendations from the report outline key areas for action, including suggestions for how local government can involve older people in the design of their city.

Engagement with older people is important to ensure needs are understood and older people's knowledge and lay expertise utilised. Evidence also shows that systematic assessment of the environment forms part of effective decision making. The next step for this project is to explore options for validating the tool, through engagement with academic partners and further piloting. It is intended this will create a tool for use across Belfast as an age-friendly city.

An age-friendly environment supports people of all ages to use their local neighbourhood. Creating a barrier free built environment will create possibilities for improved connectivity, enhancing opportunities for social contacts and physical activity levels for all, and is something which Belfast will strive to achieve.

It has been a privilege to work with the older people's groups on this project, and we wish to express our sincere thanks to all participants, including staff. We also wish to give special thanks to all those who contributed to shaping this project and making it a success. Special thanks must also go to Anne McCusker within the team, who led the project and developed this report, and to placement student Clare McIlhatton, who supported delivery of the project.

Joan Devlin
Chief Executive, Belfast Healthy Cities

Executive summary

The Walkability Assessment for Healthy Ageing (WAHA) tool was designed for use by older people and organisations to evaluate the age-friendliness of the built environment on local streets and in parks. The project was piloted in the Sydenham area of east Belfast and in parks across Belfast by older people with various mobility levels.

The tool was designed to look at the impact of the built environment on the levels of physical activity of older people. Using the WHO Checklist of Essential Features of Age-friendly Cities and existing walkability assessment tools as a guide for criteria, a questionnaire was developed which enabled older people to perform self-assessments of their local area.

The results identified many positive aspects, as well as common barriers in the built environment that may prevent older people engaging in physical activity in their local area. Key findings for developing a more walkable environment for older people include **consistent provision of maintained pavements and dropped kerbs, public seating, street lighting and pedestrian crossings.** The project also highlighted the importance of the personal safety of older people.

A key recommendation of the report highlights the need to formally engage older people in policy and decision making on planning and physical development in the city. Older people need to be included as stakeholders in planning, road and regeneration initiatives with Belfast City Council's relevant committees.

As part of the pilot eight walks were conducted. The recommendations suggest modifying the tool in partnership with academic colleagues would enhance its use in planning services and new initiatives such as active travel. This will be the next step in developing this area of work in Belfast and Northern Ireland.

A walkable environment supports and encourages people of all ages to use the local neighbourhood, which in turn enables older people to maintain social networks and also their independence. Social networks and community involvement support both physical and mental health, for example through reduced isolation, increased sense of personal safety, higher levels of physical activity and a sense of belonging.
The project highlights that creating a supportive environment can be achieved with relatively minor adjustments. The benefits, however, are significant, enabling older people to remain active for longer in their communities in later life.

In relation to the template there are two areas to consider:

- Promote use of the assessment tool in policy development and identify an age-Friendly pilot area
- Modify the tool in partnership with academic colleagues for use in planning services and new initiatives such as active travel

Recommendations to consider for use of the tool:

- Engage older people in the design of their city
- Promote consistent provision of dropped kerbs and tactile paving
- Promote high quality and well maintained pavements
- Engage older people in design and planning provision of public seating
- Identify opportunities to review placement of pedestrian crossings and crossing times
- Awareness on fear of being out alone
- Engage with key agencies to ensure appropriate signage
- Reduce dog fouling
- Consistent provision and standard of public toilets

The full recommendations are included in the conclusion of the report.

Contents:

1. Introduction and Context

Healthy Ageing has been on the World Health Organization (WHO) European Healthy Cities Network agenda since 2003, when Healthy Ageing was introduced as one of the Phase IV core themes. The focus of the work in Belfast was an intersectoral action plan, addressing the wider determinants of health for older people, which was developed as a sister document to the health and social care strategy for older people being taken forward by the then Eastern Health and Social Services Board. This plan, InterAction, was developed in close collaboration with stakeholders in the public and voluntary sector, and identified actions, a number of which have since been mainstreamed. Among the projects pioneered was a buddying scheme for public transport, which has since become part of the work of Volunteer Now. This work identified the need for a strategic focus on healthy ageing across agencies within Belfast and led to the establishment of the Healthy Ageing Strategic Partnership (HASP). Initial membership involved key public and voluntary sector agencies and focused on improving communication across organisations. In 2011 HASP became part of the Belfast Strategic Partnership, which identifies better services for older people as a cross cutting theme.

In 2011, Belfast expressed interest in joining the WHO Global Network of Age Friendly Cities. The Lord Mayor of Belfast signed the Dublin Declaration in 2012, a commitment by Belfast to join the WHO Global Network of Age Friendly Cities.[i] HASP is leading the four stage application process, which involves the development of a 3 year action plan focusing on areas outlined in the WHO Global Age-Friendly guide.[ii] The quality of outdoor spaces and buildings has been identified as one of eight key priority areas on the Checklist of Essential Features of Age-friendly Cities.[iii] Key issues within this area include the promotion of physical activity amongst older people and staying active in their local community. WHO has reported that a greater number of older people die from noncommunicable diseases such as heart disease, cancer and diabetes, than any other cause.[iv] Studies emphasise that this can be prevented through supportive environments which are healthier places for people of all ages.[v]

A key element in reducing the impact of such diseases is encouraging older people to remain physically active and participate in civic society. A focus on older people as assets in our society, with good quality of life in later years and remaining active has been identified as a priority by older people in Belfast. Participation in physical activity can reduce social isolation, which is complemented by an accessible built environment.

The Inclusive Mobility and Transport Advisory Committee (Imtac) is a committee of disabled people and older people along with transport professionals who advise Government and others in Northern Ireland on issues that affect the mobility of older people and disabled people. Activities include undertaking access and mobility audits of city and town centres, which consider inconsistent use of tactile paving, crossing layout and multiple obstructions on pavements.[vi] This pilot project seeks to complement work being done by Imtac to ensure a more accessible Belfast for all.

2. Project outline and rationale

The built environment includes a mix of land-use patterns, transport systems, urban design, green spaces and all buildings and spaces that are created by people. Most daily physical activity occurs during everyday activities within the built environment rather than during specific leisure activities. Hence the quality of the built environment has a significant role in facilitating more active lifestyles by reducing barriers to, and creating opportunities for, physical activity. There is increasing evidence that adapting the built environment has the potential to encourage increased physical activity to levels that are beneficial to health.[vii] Older people are more vulnerable to barriers in the built environment, which in turn can determine their ability to carry out daily activities. Assessment of and provision for older people's needs is important to generate evidence that can inform policy and practice aimed at addressing these needs. Provision of supportive environments for older people will lead to a built environment accessible for the general population.

For example, contact with green spaces has benefits for mental health.[viii] However the design and features of green spaces are influential in an individual's perception of safety, which will largely determine usage. The level of concealment and presence or absence of people is of particular importance, especially for many women.[ix] Perception of the built environment will greatly influence an older person's decision to walk around their local environment. Experience of a fall or a fear of falling may inhibit an older person's participation in physical activity; the quality of pavements has particular influence on this.

This pilot project was undertaken by Belfast Healthy Cities in autumn 2013, as part of the Healthy Ageing Strategic Partnership (HASP) action plan being developed as a requirement for accreditation as a WHO Global age-friendly city. The project looks at the built environment of a local area and how it supports walking among older people. Piloted in Sydenham, east Belfast and parks across the city, it gathered older people's views on the walkability of their local area. Qualitative information was gathered using an assessment tool developed in accordance with the WHO Age-friendly cities checklist, Geographic Information System (GIS) information, Northern Ireland Neighbourhood Information Service (NINIS) data and available literature.

Walking routes across Belfast were mapped as part of the Knowledge Exchange Spatial Analysis and Healthy Urban Environments (KESUE) project undertaken by Queen's University Belfast.[x] This project developed a GIS database of the Real Walkable Network in the city, and offers a basis for identifying how walkable different parts of the city are, and also how walking routes can be improved and walking promoted more strongly.

This pilot project aims to build on the information provided by the KESUE study and add qualitative data to identify street level barriers to accessibility for older people. The GIS maps produced can be used in conjunction with the census statistics at Super Output Area level to identify age vulnerable areas across Belfast. The Age-friendly Belfast section of the NINIS website also provides key statistics on older people in Belfast at the Local Government District level.[xi] Using the GIS maps combined with the NINIS statistics Sydenham was identified as an age vulnerable

area and selected as a key area for piloting the assessment tool. A number of Belfast City Council parks were also included in the assessment, as they were identified as areas which are potentially frequently used by older people for leisure and therefore a valuable asset in the community.

3. Methodology

A draft project outline was developed and discussed with key partners to guide the development of the project. Partners included members of HASP, East Belfast Partnership, Engage with Age, and Belfast City Council (Parks and Leisure Department). The views of Imtac and the Department for Social Development (DSD) were also sought. The project outline was presented to the East Belfast Seniors Forum, confirming support and providing advice for potential participant groups. Following this a number of potential groups were identified. Confirmed pilot participants included a walking group facilitated by Engage with Age; Mullan Mews and Sydenham Court supported housing schemes, Royal National Institute of Blind People (RNIB), North Belfast Seniors Forum and The Health Education and Relaxation Therapy (HEART) project, based in the Maureen Sheehan Centre in west Belfast. All groups had established walking groups, except Sydenham Court and Mullen Mews supported housing schemes, who were interested in setting one up.

The sessions were carried out in autumn 2013 and linked to the regular programme of each group. Initial introductions included a brief overview of the aim of the project and the context within which the results would be used. Participants were given an opportunity to view the questionnaire and familiarise themselves with assessment criteria. The group then took part in a short ten minute walk around their local area or park, at their own pace. Research around older people and physical activity has deemed 800m a crucial distance for walking and remaining active.[xii] Questionnaires were completed following the walk, with group discussion on positive aspects and challenges of the local built environment that participants faced on a daily basis. The group discussion allowed participants the opportunity to raise issues that had not been included in the questionnaire and proved very helpful.

4. Healthy Ageing Walk Assessments

Sydenham Court Supported Housing scheme is located at the bottom of a steep hill which presents an immediate barrier to residents, all of whom are living with dementia and have different degrees of mobility. A ladies' group and a men's group of residents meet weekly and walk to a local coffee shop. The route from Sydenham Court to the coffee shop was surveyed with each group; it was noted that there was a general lack of lowered kerbs, which made it difficult for the older people to manoeuvre the paths and roads. Previous falls meant there was a general fear of slipping or falling among group participants. A lack of seats along the route was felt by participants to be off putting for anyone walking the short distance to the shop or local coffee shop, as the route did not provide any resting places for those needing a rest. On the day of the assessment one potential participant decided not to attend, as the hill and lack of seating made them feel less confident about being able to complete the walk. Participants felt that while certain aspects of the built environment cannot be transformed, the introduction of seating along main walking routes would encourage older people with mobility issues to engage in physical activity.

Sydenham Court Supported Housing: Sydenham Court & Holywood Road

Tree roots sticking up through pavement

Obstructions on pavement – parked cars, salt bins and lamp posts

Uneven pavements

Sydenham Court Supported Housing: Sydenham Court & Holywood Road

Identified barriers:

Lack of dropped kerbs, uneven pavements and raised man holes.
Cars parked on pavement leaving it too narrow to pass in places.
Obstructions on pavements include lamp posts positioned at differing points along route, tree roots sticking up through tarmac, pot holes and a bus shelter in the middle of the footpath.
Lack of seating along route.
Lack of railing along the route to help older walkers feel safe, currently use fences of private properties for support or resting spots.
Lack of safe crossings, not enough time to cross at pedestrian light and heavy traffic on main road.
Fear among participants to go out in the dark.
Few others out walking along the route, increased fear for personal safety.
Ice, leaves and dog fouling increased concern about falls.

Positive aspects of area:

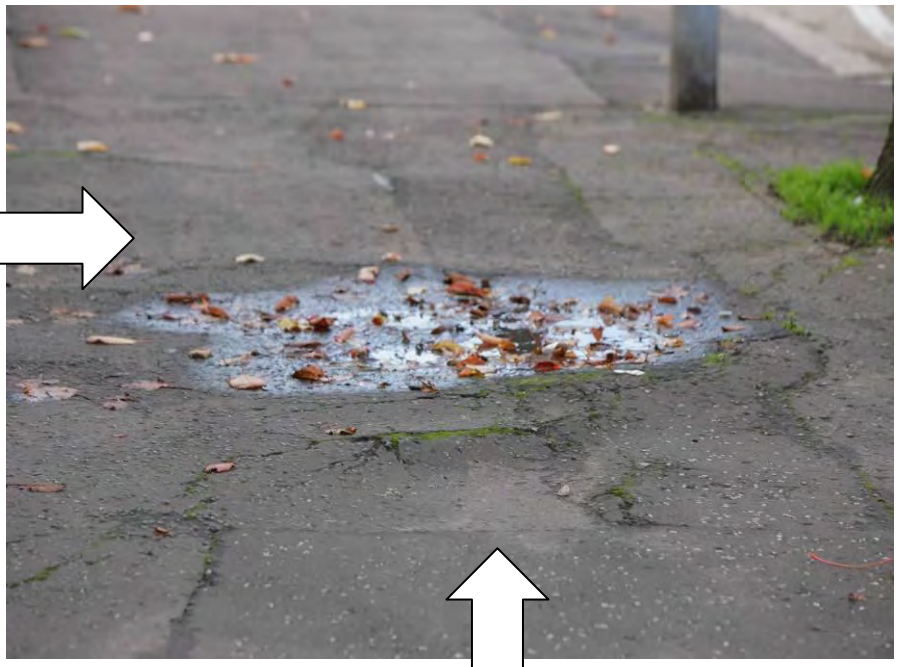
Cleanliness and appeal of the area is good.
Streets are accessible.
Generally feel safe in the area but not at night.
Not too many dogs.
Drivers give way.
Pavements on main road wide enough for multiple users.

Mullan Mews Supported Housing is located near the busy Woodstock Road in east Belfast. While tenants have early stage dementia they remain independent, and some take daily walks to shops located on the Woodstock Road. The quality of the built environment is a key factor that enables tenants to remain an active part of their local community, and a supportive environment is of particular importance for people living with dementia. The assessment of the built environment included a ten minute walk by a group of tenants followed by a discussion to identify positive elements and barriers in the local area.

Generally the assessment of the area was positive; however, participants observed a lack of lowered kerbs in the vicinity of the housing scheme, and both tenants and staff viewed this as a potential hazard. While there is a pedestrian crossing along the main Woodstock Road it is not adjacent to the shops that the tenants use, therefore they generally attempt to cross the road closer to the shops. Tenants reported that drivers generally give way as they manoeuvre across the road with their rollators and other walking aids. Staff noted that difficulty negotiating pavements was a factor that had forced some residents to give up independent mobility.

Mullan Mews Supported Housing: Woodstock Road

Leaves are a hazard when wet



Slanted pavements

Cars parked on kerb

Gullies along footpath, not a problem for everyone, difficult to manoeuvre with a rollator

Mullan Mews Supported Housing: Woodstock Road

Identified barriers:

High kerbs; not bad but have to jerk rollator up – could trip, makes participants nervous.
Cars parked on kerbs.
Slanted pavements and fallen leaves – walk through if dry, hazard when wet.
Pedestrian crossing is not adjacent to the local shop; therefore tenants generally attempt to cross the road at the shops. Generally drivers give way as they make their way across the road with rollators and other walking aids.
Gullies along footpath, a problem for walkers with rollators.
Lack of seats along the route, however participants did not feel they were necessary given the distance.
General fear of going out in the dark or alone in case get lost

Positive aspects of area:

Participants found the walk refreshing and like going out together.
Drivers are helpful and drivers stop to let you pass.
Generally feel safe in the area.
Overall, where available, pedestrian crossings are generally safe for people of different abilities, have appropriate tactile surfaces at crossings, traffic lights are clearly visible, there is a clear sound signal and adequate crossing times.
Walking environment and street connectivity within area is good, linking local shops to main road.

Engage With Age Winter Wanderers walking group assessed the area from Medway Court sheltered housing, along Dee Street, Newtownards Road and back to Medway Court. The group walk regularly and were also involved in the assessment of Botanic Park.

There were road works in progress on Dee Street at the time of the assessment, which caused barriers to participants with walking aids. However, participants felt that when the road works are completed it will improve access in the area.

Generally the area was clean; however, a lack of dropped kerbs caused barriers along the route. One of the participants noted the area appeared to be designed for cars and not people, as many of the identified dropped kerbs were at driveways and shop delivery areas.

The walk was conducted at dusk as the participants stated they felt vulnerable being out after dark. While participants reported they felt safe taking part in the walk assessment, darkness is a factor which prevents older people walking around their neighbourhood in the evening, alone or in a crowd.

Engage With Age: Medway Court

Lack of dropped kerbs along route in residential area

Uneven surfaces and lack of dropped kerbs at the entrance to supported housing scheme.

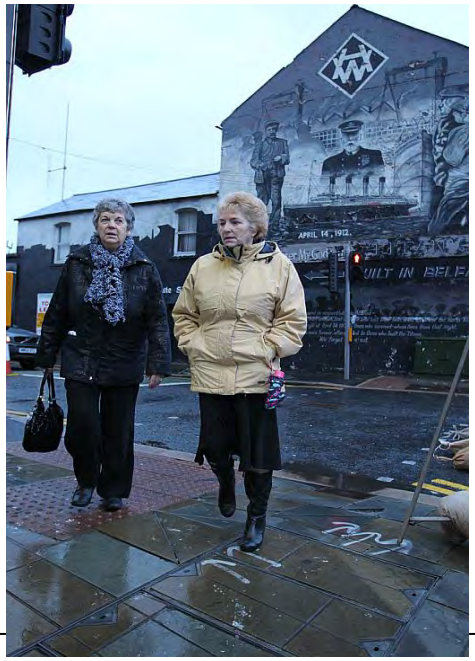
Engage With Age: Medway Court

Identified barriers:

Lack of dropped kerbs.
Some obstacles on pavements such as parked cars, motorbikes, sandwich boards and bins.
Poor provision of street lighting on the route assessed.
Pedestrian crossing times were not long enough for participants.
A lack of public seating along main routes.
Older people do not feel safe being out at night.

Positive aspects of area:

Road works currently updating pavements, kerbs and road surface on Dee Street.
Area generally clean, little dog fouling or litter.
People in the area are friendly.
Streets are well connected for access to shops.
Pavements on Newtownards Road well maintained.



4.1 Assessment of parks

North Belfast Seniors Forum assessed Waterworks Park. The group are familiar with the park and their walking group use it regularly. The group felt that paths in the park are well maintained, however there is a steep hill in the park, and participants suggested that the path in this section should have seats or be widened, to ensure others can pass if older walkers are stopping to catch their breath.

Seating was readily available and walkers noted there had been recent additions to the number of seats in the park. However, in some places seats were felt to be too high off the ground so those resting on the seat found their legs were dangling. The immediate area around the seats was not concreted resulting in puddles of dirt surrounding the seats, which was off putting for users. There was a significant fear of being out alone, both during the day and at night time, following reports of a number of attacks on older people in the area and instances of older people being followed from the city centre. Participants felt that dog fouling was a big problem both on the street and in the park.

While it was evident there are improvements being made to the park there are minor adjustments to the built environment that could be made to ensure older people continue to remain both physically active and visual in the community. These include more dog fouling bins and enforcement of fines, minor adjustments to the placement of park furniture and a visible uniformed park warden.

North Belfast Seniors Forum: Waterworks Park

New seating has been added to the park; however grass has worn away and the area in front of the seat is now mucky and slippy.

Dog fouling was a significant issue in all areas of the park

North Belfast Seniors Forum: Waterworks Park

Identified barriers:

Lack of lowered kerbs.
Fear of falling due to previous falls.
Lack of seating and positioning of seats in parks, seats in parks need to be clearly defined with a yellow strip along side and back.
Lack of appropriate signage in parks, current signage damaged.
Steep gradients in parks and residential areas.
Dog fouling.
Fear of being mugged due to reports of recent attacks on older people.
Pedestrian crossings are available at some of the entrances to the park, however there needs to be longer crossing times to accommodate older people.
Public toilets are insufficient, situated at the bottom of the park and poorly maintained.

Positive aspects of area:

Friendly local area and staff in local shops and Post Offices have been warning older people to stay safe.
Drivers stop and give way.
Park paths well maintained, wide enough for multiple users including those with wheelchairs and rollators.
Good visibility in park with few high hedges.
Routes around park provide are a good distance to walk.

Engage With Age Winter Wanderers walking group assessed Botanic Park. Originally it planned to assess Victoria Park, however due to building work in the park this was not possible.

The group walk regularly, are familiar with a number of parks across the city and have a wide membership with varying levels of mobility.

Some inclines within the park proved a challenge for members of the group; however, the variety of paths and availability of seating meant walkers could take their time.

Some participants said they would feel vulnerable if they were out alone and not as part of a group. A visible park warden was suggested as a means of enhancing perceived safety, making people feel safer.

Identified barriers:

An incline at the entrance to Botanic park from the Physical Education Centre (PEC) car park of Queen's University Belfast proved a challenge for some members of the group.
Insufficient number of public toilets.
Sense of fear if not in a group.
Leaves on paths may leave the surface slippery.

Positive aspects of area:

Well maintained paths.
Lots of available seating.
Generally clean and very appealing.
Beautiful flower gardens.
Well maintained toilets.
Provides an opportunity to get together and chat as part of the walking group.

Engage With Age: Botanic Park

Plenty of available seating

Well maintained paths ensure the park is accessible by all

Leaves on paths may leave the surface slippery

The Heart Project walking group assessed Falls Park in west Belfast. Although turnout was limited due to bad weather on the day of assessment, the overall view of the group was that the appeal of the park is excellent; paths are well maintained and wide enough for multiple users.

There is no pedestrian crossing adjacent to the park entrance, making it difficult to cross the main road which is particularly busy.

Generally the assessment of the park was positive; however, common barriers were identified such as poor lighting highlighting safety concerns and a sense of fear, lack of separate cycle lanes and insufficient public toilet provision.

Identified barriers:

No pedestrian crossing at Falls Road entrance to park.
Poor lighting in the park, sense of fear in the evening.
Lack of separate cycle paths.
Public toilet provision was not sufficient.

Positive aspects of area:

Overall the park is clean and appealing and has pretty flower beds.
Good visibility within park.
Park is used by others.
Seating is well maintained and comfortable.
Provides a good opportunity to catch up with friends.

The Heart Project: Falls Park

Overall the park is clean and appealing and has pretty flower beds.

Good visibility within park

Royal National Institute of Blind People (RNIB) assessed Ormeau Park in south Belfast. Generally, the group felt the paths were well maintained and there were a high number of seats available in the park. However, a lack of signage or textured paving meant many partially sighted members in the group said they would have got lost without guides. Participants suggested that a yellow strip along the back and side of the seats would be helpful to ensure partially sighted walkers could distinguish the height and positioning of the park furniture. This could also be applied to dog bins and signposts. One participant, who has a guide dog, suggested a similar bag dispenser and easily identified dog bins as found at the Stormont estate, which was a positive example.

Participants felt that tactile paving would be a way to distinguish the path routes, as a lack of landmarks would make it difficult for visually impaired walkers to manoeuvre the park alone.

There were a high number of comfortable seats available at suitable intervals. Overall the park was well maintained, a gate with reflective sign from the car park onto the main path was clearly identified by all and participants felt that similar adaptations to signs throughout the park would be desirable. Participants were accompanied on the walk by the park manager who was able to hear first-hand the comments from the assessment.

Royal National Institute of Blind People (RNIB): Ormeau Park

More signage needed to navigate the park

A yellow strip is a good way to clearly identify park furniture and barriers for partially sighted park users

Good provision of seating

Park furniture needs a yellow strip along the top or side to be clearly identified

Royal National Institute of Blind People (RNIB): Ormeau Park

Identified barriers:

Path surface was problematic at times.
Dogs running free in parks.
Park furniture needs a yellow strip along the top or side to be clearly identified, as well as signposts or a sufficient size key, dog bins and seats.
The park had a lack of landmarks identifiable by the visually impaired, causing difficulties when walking alone through the park.
Shared paths mean bikes can be an issue as visually impaired walkers cannot always hear them coming.

Positive aspects of area:

Path mostly well maintained.
Nice park, plenty of trees and walk routes.
Gate with reflective sign was clearly identified.

RNIB also took part in an assessment of Belfast city centre, meeting at Linenhall Library, walking down Royal Avenue, through Corn Market and along Arthur Street, Upper Arthur Street, finishing on May Street.

The group's general impression of the city centre was very positive, pavements were well maintained and non-slip on Donegall Place and Donegall Square. However, there were a large number of sandwich boards, bollards, and other street furniture on the route which was hard to identify for the visually impaired participants. The group noted that a simple addition of a yellow strip along the top of bollards and bicycle stands would make them easily identifiable and make the city centre more user friendly for people with visual impairments.

Participants found that on side streets beyond Royal Avenue, the quality of pavements greatly decreases from this user group's perspective. Upper Arthur Street had badly cracked and uneven pavements with a number of obstructions including bins and lamp posts. On a crossing at May Street, a driver was observed driving through a red light as the walkers had started to cross the road. Tactile paving was available at crossings; however the group felt that the appropriate level of paving differs greatly within the city centre.

Seating was widely available on Royal Avenue, but was at times difficult to identify for people with visual impairments as seats were made of stainless steel and had no back rest. The walking environment was felt to link well to shops. However, prior to the redevelopment of Donegall Place the partially sighted members of the group had used breaks in kerbs as location markers. While the new smooth pavement is easy to walk on, it has presented a challenge for many.

Older people stated they have a fear of going out alone and therefore benefit greatly from befriending schemes.

RNIB: City Centre

Identified barriers:

Street furniture was not easily identified.
Drivers do not always give way.
Some pavements had obstructions such as parked cars, bins, bollards and bicycles.
Better street lighting would increase sense of personal safety.

Positive aspects of area:

Crossings had clear sounding signal or moving knob signal.
Royal Avenue was well maintained and had a large variety of seating available.
Good street linkage to shops and places of interest.
Pedestrian crossings had a rotating knob alerting partially sighted pedestrians of an appropriate time to cross the road.

Some pavements had obstructions such as bins, lamp posts and bicycles. Partially sighted pedestrians reported this was difficult to manoeuvre and had to leave the pavement and walk in the cycle lane.

5. Conclusion and recommendations

The information from the case studies suggests involving older people in carrying out the assessments is a successful way of engaging them and gathering their views on the built environment surrounding their home and parks in the local area. A number of common themes have been highlighted from the case studies as recurring issues for older people in relation to the built environment; these include a need for greater partnership with older people in the planning and design of the city, the quality of the pavements, a desire for more community space, public toilets, access to transport and public seating. Personal perceptions of how safe and accessible the built environment is will influence participation in the community, efforts to address the needs of older people, improve the quality of life for all.

In relation to the template there are two areas to consider:

- **Promote use of the assessment tool in policy development and identify an Age-Friendly pilot area:** This assessment tool could potentially be used by HASP as a template to age proof an area of the city. Consideration needs to be given for the use of the tool to age-proof an area in relation to the built environment, Streets Ahead Phase III and review of leisure.

- **Modify the tool in partnership with academic colleagues for use in planning services and new initiatives such as active travel.**

This pilot project, engaged older people to assess the walking environment in local neighbourhoods and parks across the city. It identified many positive aspects, as well as common barriers that may prevent older people engaging in physical activity in their local area. The small scale of the pilot project was a limitation of the study; Belfast Healthy cities are currently discussing the option of validating the tool in partnership with Queens University Belfast.

Recommendations in relation to use of the tool to consider:

- **Engage older people in the design of their city:**
    - Officials to formally engage older people in policy and decision making on planning and physical development in the city.
      Include representatives from the G6 (a group made up of representatives from 6 older people's area forums throughout Belfast) as consultees in relation to planning, road and regeneration initiatives with BCC relevant committees.

    - Build capacity of older people to engage with elected representatives and committees

- **Promote consistent provision of dropped kerbs and tactile paving:**
  The standard of pavement maintenance and dropped kerbs at appropriate crossing points varies throughout the city centre, in Sydenham and adjacent to local parks. The path surface in parks was considered to be generally good, however the RNIB group found some parts of the path in Ormeau Park challenging. Guidance on the Use of Tactile Paving and Inclusive Mobility

Standards is currently in place in relation to the built environment; a consistent standard for all paths needs to be agreed, provided and monitored by the Department of Regional Development and Belfast City Council Parks and Leisure Department in consultation with HASP.

- **Promote high quality and well maintained pavements:**
    - *Guidance on fear of falling:*

Leaves, ice and obstructions on paths and pavements as well as experience of previous falls has made older people who took part in the assessment apprehensive of falling. Consideration given to promotion and extension to other agencies of awareness of falls prevention and personal safety work being done by BHSCT and PCSP. HASP to work with DRD and Parks and Leisure Department to ensure paths and pavements are kept clear of leaves and gritted when necessary.

    - *Pavements free from obstructions:*

A number of obstructions on pavements such as parked cars, bins, bus shelters and lamp posts make it increasingly difficult for walkers to navigate a clear path. Designated areas for pavement cafes need to be clearly marked. HASP to work with agencies to promote an integrated approach to developing and ensuring age-friendly paths, street furniture, street clutter and design.

    - *Clearly marked street furniture:*

Items of street furniture including public seats, bins, bollards and bicycle stands need to be clearly marked, using luminous strips to highlight them, particularly for the visually impaired, in parks and on streets. Implementation and monitoring by BCC / DSD / DRD of clearly marked street and park furniture future provision.

- **Engage older people in design and planning provision of public seating:**
    - There has been a great improvement in the provision of public seating in the city centre but there is a gap along main routes in local areas. Increased public seating will provide a resting place and informal social meeting point for older people using local shops and services along the route.
    - Provision of seating in public parks varies, it was identified more seating is needed in Waterworks and Falls Park, with consideration given to placement of seats. There was good provision in Botanic and Ormeau parks. Representatives from G6 and RNIB should be involved in the planning and positioning of increased public seating with DSD, DRD and Belfast City Council Parks and Leisure Department.

- **Identify opportunities to review placement of pedestrian crossings and crossing times:**

The placement of some pedestrian crossing along the Woodstock Road was not conveniently placed, resulting in older people attempting to cross the road at an earlier point. It was also reported that longer crossing times are needed for older people to walk across the road safely. There are no pedestrian crossings at the entrance/s to Falls Park. Consultation on pedestrian

crossing placement and a review of crossing times across Belfast should be undertaken by DRD in partnership with HASP and G6 members.

- **Awareness on fear of being out alone:**
    - Concerns for personal safety and a fear of being out alone both during the day and at night were reported by all groups. Better street lighting was suggested as a way of improving a sense of personal safety in the city centre at night. HASP should seek to engage with DRD, DSD and Belfast City Council to highlight the importance of lighting for older people.
    - Older people expressed concerns about being out alone during the day after a number of incidents when older people were followed home from a city centre Post Office and mugged. There needs to be greater awareness by local businesses, PCSP, park wardens and service providers to promote personal safety of older people.

- **Engage with key agencies to ensure appropriate signage:**
  A lack of appropriate signage or graffiti on signs made it difficult for park users to navigate paths, particularly for the visually impaired. Assessments by the visually impaired participants suggested incorporating yellow strips along signs would ensure easier identification. HASP and G6 should engage with DSD, DRD and Belfast City Council in developing appropriate design and placement of signage.

- **Reduce dog fouling:**
  Dog fouling was a major issue highlighted in parks assessed. It was stressed that this discourages use of parks, and in addition dog mess causes a trip hazard, in particular for partially sighted people. HASP should engage with Belfast City Council to tackle this problem, for example, a greater number of bins could be provided and dog owner penalties enforced more strictly. Bins for dog foul should be clearly marked with luminous strips to support safe use of public space by the visually impaired.

- **Consistent provision and standard of public toilets:**
  It was found that public toilet provision and standard varied across the city and throughout parks. HASP need to link with Belfast City Council to ensure a consistent standard across all areas of the city and parks.

6. Appendix A:

Evidence review

A review of local and international literature was undertaken to identify examples of good practice models for assessing the built environment for age-friendliness and walkability. This provided background evidence for the development of the tool.

The Scottish Walkability Assessment Tool (SWAT) was designed to objectively record aspects of the physical environment believed to be related to walking in urban Scotland. In order to determine whether environments support physical activity, information on these physical characteristics were gathered via self-reported perceptions from local residents and from more objective measures based on audit tools used by trained auditors. The tool looked at aspects of the built environment which are considered influential for physical activity levels of the whole population such as functional walking surface, personal and road safety, aesthetics of areas, land use mix, service access and availability of travel options. The study took place in Glasgow covering a 25km street area. It was part of the Walking for Well-being in the West (WWW), participants assessed their local environment using SWAT and GIS information.[xiii] This assessment tool was developed as part of work carried out by the Scottish Physical Activity Research Collaboration (SPARColl).

Newcastle Elders Council has been operating since 2001 in Newcastle-upon-Tyne as the older people's forum for the city, run by older volunteers to influence policy and raise awareness of issues facing older people. The organisation has undertaken a number of audits of the city centre, parks and recreation areas by older people. Mirroring the WHO Global Age-friendly Cities checklist of points of interest included areas of the city and buildings to provide a comprehensive report on 'older person friendliness' of the city centre. The audits assessed features of the city centre such as bus stations, pedestrian access, streets and street furniture, open spaces, public lavatories and sign posting and information. The findings highlighted a need to improve access to public buildings, public transport routes and greater partnership with older people in the planning and design of the city.[xiv] Developing the project in partnership with the local community increased the sense of ownership, ensuring developments were influenced by local people and sustained support.

Old Moat ward in Manchester carried out a study to identify ways of improving the physical and social environment while testing the age-friendly cities model developed by the WHO[xv]. The Age-friendly Manchester project will use initial findings from Old Moat ward to replicate the project in other areas of the city. Three groups of volunteers were recruited to assist with the research and to provide specialist knowledge of the area, either as a resident or as a representative of a service provider or external stakeholder. Assessments were conducted via focus groups, project champions and community auditors looking at transport, outdoor spaces and buildings, community support and health, communication and information, housing, social participation, respect and social inclusion and civic participation and employment. Key concerns identified included the quality of the environment, the deterioration of the physical environment, and a desire for more community space. Southway Housing Trust with the support of Manchester City Council Valuing Older People Team commissioned the research in 2012 and from it a three year action

plan was developed in consultation with older people in Manchester. The action plan set to improve access to public green space, improve participation in outdoor leisure, and a desire for more community spaces to develop formal and informal activities.

Age Friendly Town Plans, Ireland action plan engaged graduates from the Planning Institute to identify barriers to age-friendliness in Kilkenny and an inter-generational schools project assessed Ennis, Co Clare[xvi]. A baseline survey carried out in Kilkenny identified the most prominent issues for older people concerning public spaces included public toilets, pavements, access to transport and public seating. An action plan was developed to address these and other issues as identified in the baseline survey for Kilkenny. The project is led by the Ireland Age-friendly county programme and involves older people across Ireland.

Towards an Age-Friendly New York City presents findings from a city wide adaption of the WHO Age-Friendly checklist. The city was assessed by its older residents in order to identify potential areas for improvement.[xvii] While findings presented in the report are specific to identified areas in the WHO Global Age-friendly cities checklist the report also highlights the opportunity to create building blocks for the City to improve and to sustain the lives of older New Yorkers. Acknowledging also that, efforts to address the needs of older people, improve the quality of life for all, the report notes that modifications that make a city more "age-friendly" are good for children, parents, and all communities.

Neighbourhood Environment Walkability Scale (NEWS), Australia: The PLACE (Physical Activity in Localities and Community Environments) study was conducted in in the city of Adelaide, Australia in 2003 as a baseline and in 2007 as a follow-up. The aim of the PLACE study was to investigate how neighbourhood environmental characteristics, in particular walkability, influence residents' physical activity patterns. Influencing factors affecting walkability include dwelling density, street connectivity, land use mix, and net retail area ratio. Data were derived from street centreline files, land use, zoning, shopping centre locations, and census, and were compiled in Geographic Information Systems (GIS). Perceptions of how walkable a neighbourhood is significantly affect levels of walking for transport and for leisure.[xviii]

Appendix B:

Belfast Healthy Cities

Age-friendly Walkability Assessment Questionnaire

Outdoor spaces - Parks

General impression of the area:	**Excellent**	**Good**	**Average**	**Poor**	**Very Poor**
Cleanliness					
Overall appeal					
Paths:	**Excellent**	**Good**	**Average**	**Poor**	**Very Poor**
Well maintained with few cracks					
Free of obstruction –cars, bins etc					
Non-slip					
Wide enough for wheelchairs or for safely passing other pedestrians					
Dropped curbs to road level at entrances and street crossings					
Outdoor safety:	**Excellent**	**Good**	**Average**	**Poor**	**Very Poor**
Drivers give way at entrance crossings					
Separate cycle paths					
Good street lighting					
Good visibility with no high hedges, dark corners					

Park is used by others					
Pedestrian crossings:	**Excellent**	**Good**	**Average**	**Poor**	**Very Poor**
Available at park entrance and at busy locations					
Safe for people with different levels of ability					
Appropriate tactile surfacing at crossings					
Traffic lights are clearly visible					
Sound signal clear					
Adequate crossing time					
Public Toilets:	**Excellent**	**Good**	**Average**	**Poor**	**Very Poor**
Sufficient in number					
Clean					
Well maintained					
Accessible					
Seating:	**Excellent**	**Good**	**Average**	**Poor**	**Very Poor**
Available at suitable intervals					
Well maintained					
Comfortable					

Additional comments:

Positive elements of the walk

Challenges in the environment

If you do not feel safe in your area, how could this be changed?

Area being assessed:	
Is the local shop within walking distance of where you live?	Do you walk there often?

Appendix C:

Belfast Healthy Cities

Age-friendly Walkability Assessment Questionnaire

Outdoor spaces – local streets & pavements

General impression of the area:	**Excellent**	**Good**	**Average**	**Poor**	**Very Poor**
Cleanliness					
Overall appeal					
Pavements:	**Excellent**	**Good**	**Average**	**Poor**	**Very Poor**
Well maintained with few cracks					
Free of obstruction –cars, bins etc					
Non-slip					
Wide enough for wheelchairs or for safely passing other pedestrians					
Dropped curbs to road level at crossings					
Outdoor safety:	**Excellent**	**Good**	**Average**	**Poor**	**Very Poor**
Drivers give way at crossings					
Separate cycle paths					
Good street lighting					
Good visibility with no high hedges, dark corners					
Street is used by others, feels busy					

Pedestrian crossings:	**Excellent**	**Good**	**Average**	**Poor**	**Very Poor**
Available at busy locations and at local shops and services					
Safe for people with different levels of ability					
Appropriate tactile surfacing at crossings					
Traffic lights are clearly visible					
Sound signal clear					
Adequate crossing time					
Seating:	**Excellent**	**Good**	**Average**	**Poor**	**Very Poor**
Available at suitable intervals					
Well maintained					
Comfortable					
Walking environment & shops:	**Excellent**	**Good**	**Average**	**Poor**	**Very Poor**
Streets are situated together and are accessible					
Separate queues in shops for older people					
Streets link me to places I want to go					

Additional comments:

Positive elements of the walk

Challenges in the environment

If you do not feel safe in your area, how can this change?

Area being assessed:	
Is the local shop within walking distance of where you live?	Do you walk there often?

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