The UKCRC Centre of Excellence for Public Health (NI) led a multidisciplinary team to win a prestigious Medical Research Council award to evaluate the Connswater Community Greenway (CCG) (www.communitygreenway.co.uk) and its impacts on physical activity and the health of the local population in east Belfast.

The CCG is a major environmental improvement project in east Belfast funded by a Big Lottery Living Landmarks Award. The regeneration will connect 379 acres of public open space, building 43 bridges and 19 kms of cycle and walkways. Approximately 40,000 people living along the CCG will have improved opportunities for physical activity and therefore support for a healthier lifestyle. Residents include those in some of the highest areas of social deprivation in Northern Ireland.

The PARC Study has successfully pulled together a research team comprising of academics from public health, economics, sociology, psychology, statistics and spatial planning. This natural experiment will contribute significantly to the evidence base and has created interest in the wider public health research community.

This issue of the PARC Study ezine will explore the role of the built environment (i.e. the world around us) and how it affects the amount of physical activity that we do.

### Physical Activity and Where We Live

There has been increasing recognition of the role that the urban environment has to play on our physical activity levels. Factors such as the number of houses (residential density), closeness to shops and other amenities, and the accessibility (intersection density) of the area can have an influence on the amount of physical activity we do in our surrounding neighbourhood.

Researchers are developing tools, such as the ‘Walk Score®,’ to help us better understand which environmental factors are important for encouraging physical activity and which cause a barrier.

Using the ‘Walk Score®’ tool, the CCG office (Newtownards Road) is an example of a ‘very walkable’ area scoring 87/100 (see figure 1). This is due to its close proximity to local shops and services, and a large number of interconnecting footpaths and roads.

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**Figure 1**: The Walk Score for the CCG office (Newtownards Road).
(www.walkscore.com)
Are People in East Belfast Physically Active?

The PARC Study surveyed 1209 local residents in the vicinity of the CCG between February 2010 - January 2011. The household survey showed that over 50% of adults in east Belfast currently do not do a sufficient amount of physical activity, which is similar to the rest of the Northern Ireland population. The majority of this physical activity is accumulated in the workplace, with active travel and recreation also playing a part.

How much physical activity should we do?
The Chief Medical Officer’s guidelines state that adults should:
- do at least 150 minutes of moderate intensity physical activity (e.g. walking) each week in bouts of 10 minutes or more;
- or 75 minutes of vigorous intensity activity (e.g. football) across the week or combinations of moderate and vigorous intensity activity;
- muscle strengthening on at least 2 days per week; and,
- minimise the amount of time spent sedentary (sitting) for extended periods.

To find out more visit: www.getalifegetactive.com

Barriers to Physical Activity

Respondents to the household survey identified certain barriers to physical activity including lack of time (56%), being too tired (53%) and poor weather (51%). However, a number of benefits to being active such as feeling better, improved mood and personal accomplishment were also identified.

The social environment (i.e. the people around us) is another important factor in encouraging physical activity. Results from our survey show that there is a strong element of social engagement in east Belfast with over 40% of people doing some form of unpaid/voluntary work for a local group or organisation (e.g. 45% raise money for charity, 36% provide practical help at church, school).
What Role does Green Space Play in Physical Activity?

Participants in the PARC Study household survey felt positive about the environment around them and found it was pleasant to walk around (78%), and convenient to public transport (89%) and shops (82%). Some of the negative aspects in regards to the local environment included a lack of safety to walk after dark (55%), traffic noise (48%), roads dangerous for cycling (60%), and a lack of green space (32%).

![Activity Level](image)

Using SOPARC methods (Systems for Observing Play and Recreation in the Community) we observed the number of people using the parks and green space at 8 sites (including Victoria Park, Orangefield Park, Cregagh Glen) in east Belfast in August 2010 and February 2011.

Twenty two local volunteers helped us to collect information on the number and characteristics of park users and what activity they were doing.

![Figure 5](image)

**Figure 5:** Findings from the SOPARC Study - Activity Level.

Figure 5 (above) shows that walking is the most popular activity, especially among females (77%). Also, a higher proportion of men than women participate in vigorous-intensity activities (21%), such as, football, running.

Our results found that among park facilities, paths were used by most people and there was limited use of the play park facilities (figure 6). These results will be used to help map and tailor physical activity interventions for specific groups in the CCG area.

![Use of Facilities](image)

![Figure 6](image)

**Figure 6:** Findings from the SOPARC Study - Use of Facilities.

**Figure 7:** The 22 local volunteers who helped us with the data collection.

A big thank you to you all!
How ‘Walkable’ is East Belfast?

The Built Environment Working Group led by Dr Geraint Ellis has developed a ‘walkability index’ for the CCG area. A single measure of how ‘walkable’ each super output area (SOA) is has been based on:

- Residential density;
- Intersection density;
- Land use mix;
- Retail floor area ratio.

Highly ‘walkable’ areas (e.g. Woodstock, Ballymacarett) are typically characterised by:

- Close to city centre;
- High residential density;
- Highly mixed land use;
- High number of road intersections.

Low ‘walkable’ areas (e.g. Braniel, Cherryvalley) are characterised by low residential density, typically suburban and a low number of road intersections.

The PARC Study team, in collaboration with Belfast and Derry City Council, has successfully received funding to extend the walkability model to the entire area of both Belfast and Derry City Councils. It will serve as a useful tool for planning and targeting interventions in the built environment for maximum impact on active travel, as well as contributing to new evidence for park management and public transport.

Figure 8: Map Showing the ‘Walkability’ of the CCG Area.

Update on the Connswater Community Greenway

A number of events and activities have taken place on the Connswater Community Greenway over the last year. Community clean ups have take place at the Hollow (Elmgrove) and local community groups have availed of the CCG community activity grants to hold events such as the ‘Walkway Duck Doo’ and the EBCDA ‘Tryathlon’.

Belfast City Council is in discussion with the Connswater Joint Venture (JV) in relation to contractual issues at present. All funders remain fully committed to the delivery of the project and the team is confident that contractual issues will be resolved in the near future to allow its construction to proceed.

Keep up to date with the latest papers and summary findings from the PARC Study at the Connswater Community Greenway website: (www.communitygreenway.co.uk).