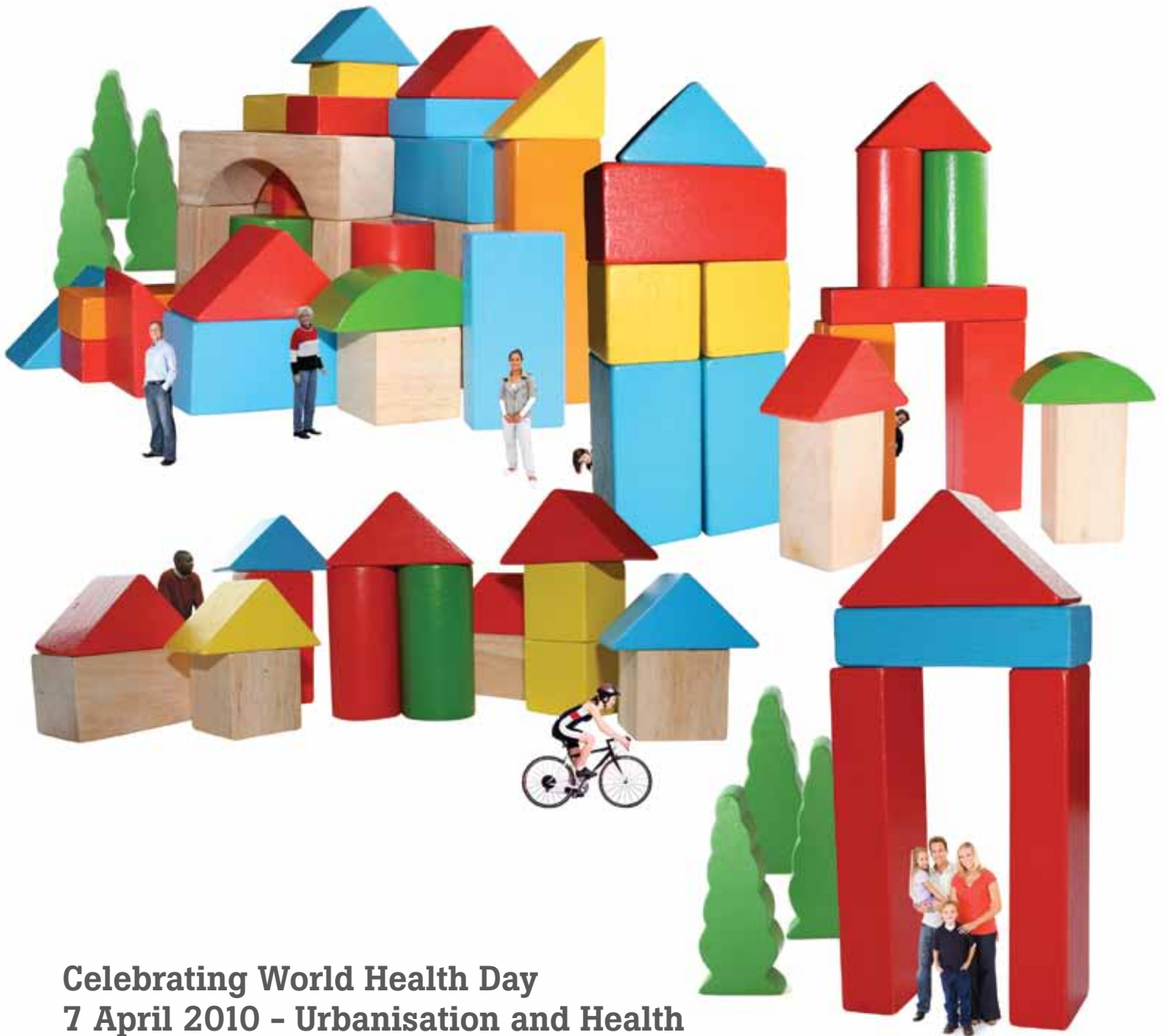


**H E A L T H Y
P L A C E S -
S T R O N G
F O U N D A T I O N S**



**Celebrating World Health Day
7 April 2010 - Urbanisation and Health**



Working together for a healthier Belfast

FOREWORD

Over half of the world's population now lives in cities, and more are moving in: just in the third world, cities grow by 1.2 million people every week. This has significant impacts on cities and their ability to function and support their populations. It also has major impacts on health and wellbeing, as population growth puts pressure on cities' ultimately finite space and resources.

In Belfast and Northern Ireland, rapid urbanization has largely stopped; rather, a key issue is suburbanization. This also has significant implications for city governance, as it affects the population structure, as well as resources and demand for services. Suburbanization also brings its own set of health issues, in particular reduced physical activity, considerable car dependence, and often limited local social networks.

This publication aims to provide an overview of how the built environment contributes to and shapes health and wellbeing. It is published to celebrate World Health Day in Belfast, which this year, 2010 focuses on urbanization and health.

The key message is that all sectors contribute to health, and that healthy people are the foundation

for a healthy, sustainable and prosperous society. By applying a 'Health in All Policies' approach to policies and decisions on the built environment, policy can achieve these multiple aims, improve health and well being and the causes of inequalities in health determinants be tackled.

I commend this publication to you produced by Belfast Healthy Cities in a call by the World Health Organization for all cities to work towards their goal of being healthy, sustainable and prosperous cities.



**Councillor Naomi Long
Lord Mayor**



P R E F A C E

Our health is one of our greatest resources. Healthy people can lead active, fulfilling personal lives and contribute to healthy communities, with strong support networks. The World Health Day celebrates this, and in 2010 offers an important opportunity to consider how urbanization has shaped health and wellbeing.

Land use and spatial planning, open and green space, transport and housing and regeneration are all important health determinants in their own right. However, together they add up to a very powerful health determinant. The built environment shapes virtually all aspects of health and wellbeing through its impact on our everyday lives and the choices we can make. Positive environments, which offer safe opportunities for physical activity, social interaction, stress relief and recreation alongside easy access to jobs, schools and essential services contribute greatly to all aspects of our health and wellbeing. Such places are also important for strengthening health equity, because they improve living conditions for all, but in particular improve opportunities for the most vulnerable groups.

The growing population of cities puts pressure on the physical as well as the social environment, and therefore strengthening urban health offers particular challenges. Globally

as well as locally here in Northern Ireland, urban areas tend to have poorer health outcomes and are often affected by considerable deprivation.

It is helpful to recall that public health and urban planning have joint roots, as both originated to tackle the very poor living conditions and high levels of disease and mortality in 19th century cities. The issues today are different but no less urgent: obesity and air pollution directly affect life expectancy, while mental health problems and declining social networks reduce quality of life. Health inequalities concentrate health risks and contribute to incapacity, benefit reliance as well as social divisions and tensions. There are therefore strong incentives for new, more collaborative ways of working, which can draw on the knowledge and experience of the built environment as well as health sectors.

This publication provides an introduction to the links between health and the built environment. It



can be a helpful tool for developing future collaboration and its strong messages can contribute to improved health and wellbeing.

A handwritten signature in black ink, appearing to read 'E P Rooney'.

Dr Eddie Rooney
Chief Executive
Public Health Agency

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INTRODUCTION

Spatial and land use planning sets the contours of urban spaces and uses, and is therefore one of the most crucial and far reaching functions in society. Not only does this affect the economy, but policies and decisions on the built environment also shape health, as they influence people's ability to access jobs, services and leisure opportunities, be physically active, and build social networks. The quality of the built environment is vital for reducing inequalities in health, which cause both individual suffering and societal loss, through unused human potential.

The key message is that all sectors contribute to health and wellbeing. The healthcare sector provides vital care and education, but a high quality built and social environment can prevent ill health, thus reducing the need for healthcare and supporting considerable cost savings. The second key message is that a healthy population contributes to a prosperous and sustainable society, through greater productivity, innovation and ability to maintain high skill levels. The built environment has a pivotal role both in initiating and maintaining this positive feedback loop, which also supports long term human and environmental health.¹

A prosperous future has been identified as a shared goal across Northern Ireland. Wellbeing and sustainability are also identified as key goals and elements of prosperity. In many cases, synergies and multiple aims can be achieved relatively easily and with minimum cost implications, by widening the evidence base on which actions are built. Collaboration across sectors is key to securing positive outcomes.

This publication aims to support that process of collaboration. It is intended to share evidence on how the built environment contributes to and impacts on health, and on measures that can effectively support health equity and wellbeing, as well as the economy and the environment. It is aimed at a

number of key stakeholder groups, in particular land use, transport and housing planners, regeneration professionals and health professionals. It may also be useful for elected representatives, who are or will be responsible for planning policy and decisions.

What is health?

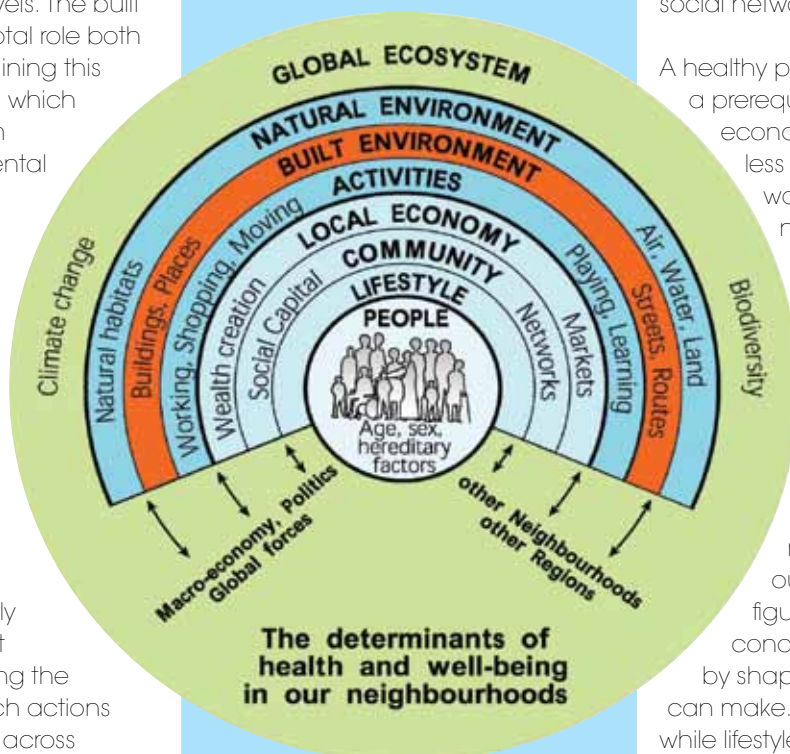
Health is much more than the absence of disease; the World Health Organization defines it as a 'state of complete physical, mental and social wellbeing'. It can also be defined as 'a resource for daily living' rather than an end in itself: healthy people can be active, enjoy positive relationships and lifestyles and contribute to society, through formal employment and productive work as well as more informally, through supporting cultural activity and social networks.

A healthy population is then a prerequisite for a healthy economy. Healthy people are less likely to be absent from work or incapable of work, need less healthcare and, importantly, are less likely to rely on benefits over the long term.

What shapes our health?

Health is the result of many factors, which are outlined in figure 1. The figure highlights that living conditions determine health, by shaping the choices people can make. In short, it illustrates that while lifestyle choices ultimately determine health, wider social factors crucially influence them.

Figure 1.
The determinants of health



Source: Barton & Grant 2006³

The figure shows that the built environment and land use policy are crucial for health and wellbeing. For example, well designed, maintained and safe urban environments encourage people to actively use their neighbourhood and help create strong social support networks. Greenspaces are vital supports for mental wellbeing and can also strengthen the local economy, for example by attracting visitors. A walkable, well connected environment encourages active use of the neighbourhood, including physical activity.² This supports health directly and can also strengthen environmental health through reducing reliance on cars, which contributes to good air quality and safer roads.

What are inequalities in health and how do they arise?

What the figure does not show is how differences in living conditions result in differential health outcomes. Health inequalities are defined as

such differences in health, which are avoidable and therefore can be considered unjust. Striving for equity is not about ensuring that everyone has the same level of health, but about providing fair conditions that allow everyone to attain their full potential.⁴

Income and social status are key determinants of equity, or inequality. The level of income has a decisive influence on material living conditions. Social status affects both self esteem and mental wellbeing, and ability to alter those conditions. People on low incomes and in lower social groups are more likely to die young and suffer ill health, primarily because their physical and social living conditions are poorer.⁵ There is also increasing evidence that having or perceiving low social status can lead to chronic stress, which contributes to physical health risks. Stress is associated for example with a higher risk of heart disease, diabetes and metabolic syndrome. It has also been suggested that negative lifestyles, such as smoking

and problem alcohol or drug use, can be a coping mechanism related to the stress of living with disadvantage.⁶

The built environment can influence health inequalities significantly, although often indirectly. For example, land use that concentrates social housing at the edges of towns and/or with limited facilities and public transport connections may reduce access to work, for people without access to a car. Limited maintenance of the built environment or greenspace can add to the stress of living on a low income. Especially poorly maintained greenspace can negatively impact on people's image of an area and residents' sense of place.⁷



Ways of working that support health and wellbeing

Intersectoral collaboration.

Developing relationships across sectors can strengthen understanding of the core issues of each sector, which in turn can support the development of synergistic solutions. Land use and spatial planning offers an ideal platform for co-ordinating the contributions across sectors, while land use planners possess the key technical skills required to facilitate the process.

Community engagement. Engaging with people and organizations directly affected by a proposal can significantly support health

and wellbeing. Local stakeholders have vital knowledge about the area and its needs, and can contribute to the development of a more effective and successful proposal. Having a say also contributes to mental wellbeing and community confidence, which can increase ownership and positive engagement with development. To ensure effective and positive outcomes, it is important to engage early and allow stakeholders to consider a range of options or scenarios.

Utilising a wide evidence base.

Considering evidence from a

range of fields to inform policy and action planning can help identify key issues as well as solutions that can support multiple aims. It may also be useful to utilize elements of assessment tools to support decision making, for example a Health Impact Assessment approach, or a Health in All Policies approach, which emphasizes seeking solutions that achieve sectoral objectives while also supporting health and wellbeing. External capacity may be available to support these processes, for example from the health sector or the community and voluntary sector.

Health and the Economy

A quarter of the Northern Ireland population is obese, and over half is overweight. Figures in England are similar and obesity costs the NHS an estimated £4.2 billion per year.

If current trends continue, it has been estimated that obesity will cost the UK economy £50 billion per year by 2050, through increased need for healthcare, increased incapacity to work and lost productivity at work.⁸

Air pollution reduces average UK life expectancy by about eight months. Each year an estimated 50,000 people die prematurely

because of air pollution, which also damages ecosystems.⁹

Around 100 people die each year in road crashes in Northern Ireland. UK wide, the estimated value of preventing all casualties was £17.9 billion, of which about £10 billion involves human costs, £5.6bn damage to property, £2.5bn lost output and the remainder public costs and insurance.¹⁰

Missed outpatient appointments alone cost the Northern Ireland NHS £12million in 2007.¹¹ Transport problems have been identified

as one factor why people miss appointments.¹²

In 2006, 34% of households in Northern Ireland were classified as fuel poor. Fuel poverty is predominantly an issue for lower income and older households: 75% of households with an income under £7,000 were fuel poor, dropping to 25% of households in the £15,000-£19,999 income bracket and 8% of households in the £20,000-£29,999 bracket. In total 43% of households with a head aged 60-74 were fuel poor, compared to 28% of households with a head aged 40-59.¹³



LAND USE AND SPATIAL PLANNING

Land use and spatial planning shapes people's everyday living environment and through it people's health and wellbeing. Land use that supports local services and facilities, green and open spaces and good connectivity can underpin improved health and wellbeing. Through supporting local communities it can also contribute to a vibrant and sustainable

vital to support wellbeing as well as job readiness across groups. Such 'community spirit' is an important support for mental wellbeing, and a prerequisite for developing resilient communities with a strong, positive identity and ability to tackle challenges. Cohesive communities are also likely to be less affected by anti social behavior, which provides public cost savings.²⁰

Access, economy and wellbeing

Land use and spatial planning can improve access to jobs and services.

Locating key job hubs close to residential areas, as well as integrating good transport links with land use development, improves physical access to jobs, education and other essential services for all population groups. This can strengthen equity, as it reduces or simplifies travel, which can be a barrier for vulnerable groups. In particular it can benefit people from lower socioeconomic backgrounds, who are less likely to own a car but more likely to have low paid jobs.¹⁴

Mixed land use can also improve access by altering perceptions. Especially in more deprived neighbourhoods, mental images of where suitable jobs are located and what places are safe to go to can affect job search.¹⁵

Vibrant places support the economy.

Vibrant, active places help sustain existing and generate new local business opportunities, as they increase footfall and people's willingness to spend time and money within the local area. As an example, experiments with pedestrianising town centres in England have indicated increased use and associated economic benefits. Even small businesses can help sustain or regenerate a local high street, through generating footfall to other businesses. Squares can support

more informal economic activity, such as markets, which also can be essential for social cohesion and interaction.¹⁶ There is also increasing evidence that house buyers are willing to pay a premium for a positive sense of place, and living in a walkable environment with easy access to key services.¹⁷

Places support equity. Economic development of the type outlined above can also have a positive impact on equity, by creating new job opportunities within the local neighbourhood. Local jobs are particularly significant in more deprived areas, because people in these areas may face a range of barriers to employment elsewhere, from transport to personal attitudes. Positive impacts can be maximized when new businesses and workplaces aim to fit within the area, in terms of offering jobs and services that local people can access and benefit from.¹⁸

Sustainable communities

Social networks thrive in local places and economies. Locally available services and public space encourage active use of the neighbourhood. This physical dynamic supports natural social interaction and can strengthen social capital and social cohesion. Greater housing density can create the 'critical mass' for supporting local provision.¹⁹ Mixed tenure can further support cohesion across socioeconomic groups, which is

Places shape lifestyles. Places that offer local destinations of interest, such as shops, schools, services and greenspace, within a reasonable distance can encourage people to walk and cycle, which is vital for preventing and treating obesity, as well as reducing emissions from motorized travel. Tackling obesity can bring about considerable savings, as it has been estimated that obesity may cost the UK economy £50 billion per year by 2050.²¹

Urban design and wellbeing

Good urban design supports wellbeing and prosperity. Design that focuses on active uses facing the street – whether this includes shops, cultural and community uses or dwellings with windows overlooking the street – creates a welcoming atmosphere that encourages use of the street. It also contributes to place making, which focuses on integrating land uses in a specific space, in ways that respect and meet people's needs. In particular, design that encourages active use of urban space generates social life, which is essential to sustain visitor interest and can help underpin economic development and stability.²²

Careful design can improve community safety. Active frontages and streets that are populated for most of the day provide natural surveillance, which can improve



both actual and perceived safety. Over time this can reduce anti social behaviour and crime, with associated cost savings for the

public sector and police. Safe communities also support mental wellbeing, and are important for social cohesion.²³

What policy can do

Focus on place making. Integrated planning of all elements within a space can strengthen accessibility and create supportive environments that promote wellbeing. Physical elements that support social cohesion and active use can incorporate greenspaces, squares and even well connected streets. Focusing on pedestrians can also support the local economy, as people moving on foot are more likely to visit shops and linger in a place. This is particularly important for people with visual impairments or mobility limitations and therefore also contributes to health equity. It can also help reinforce a sense of place through attention to the shared public realm.

Support and prioritise mixed use development. Mixed use, socially active and cohesive environments can be particularly important for older people, as they can prevent and alleviate social isolation, which is a major risk factor for ill health among older people. They can also support the healthy development of children, as they may have greater opportunities to move around independently and develop friendships with people of different ages.

Safeguard and strengthen greenspace. The existing targets for brownfield development offer a good starting point to protect greenspace across Northern Ireland. Regeneration offers a key opportunity to incorporate

greenspace in urban areas, in ways that can support economic as well as social and environmental regeneration. Commercially less attractive land may be cost effectively transformed into greenspace on a permanent or temporary basis.

Support and promote good urban design. Urban design largely determines the character of an area, which affects how people perceive and use it. Good urban design can support revitalization of an area and a community, while respecting its original character. Creative reuse of buildings is one example of this, which also can contribute to more active street frontages.

Case study:

The London Plan Spatial Strategy

The spatial strategy of the London Plan was originally published in 2004 and republished in 2008 with alterations since 2004. It aims to accommodate London's growth within its boundaries, and takes sustainable development, health and equality as key underpinning principles. Tackling climate change is an overarching objective, and the Plan sets out to develop London as an exemplary, sustainable world city, including working towards carbon neutrality. The strategy promotes community engagement and collaborative working, across sectoral and local authority boundaries.

A key aim of the Spatial Strategy is to guide growth, which it aims to channel to Areas for Intensification and Opportunity Areas well served by public transport. Growth in these areas should be focused on mixed use development, and neighbourhoods should be walkable with services locally based. However, all development is expected to take place within the overarching framework, which aims to preserve open space and respecting the Blue Ribbon Network of blue spaces.

To support equality and social inclusion, the Strategy emphasizes

the need to make links between these growth hubs and nearby areas of deprivation, or Areas for Regeneration. Improving access and tackling quality of life issues in suburbs is a central physical aim, while the Strategy also sets out to support social regeneration through local job creation, skill building and support services such as childcare. It promotes mixed tenure housing, creative reuse of buildings and sustainable construction, as well as retrofitting of older buildings to meet modern energy efficiency standards.

For more information see

<http://www.london.gov.uk/thelondonplan/development/spatial.jsp>

OPEN AND GREEN SPACE

Open and green space supports health and wellbeing by encouraging physical activity, offering opportunities for recreation and relaxation, and providing a natural space for informal social interaction. Strong green infrastructure, providing easy access to local greenspaces, with green links to more traditional 'destination' green and blue spaces can also support a healthy environment, while offering new economic opportunities.

Defining green and open space

Open space can be defined as land of (potential) public value in an urban area, and includes undeveloped land, a wide range of green spaces and blue spaces, or waterways.²⁴ Greenspace is defined in similar terms, although the term emphasizes space with vegetation.²⁵

Human wellbeing

Access to greenspace encourages an active lifestyle. In a Europe wide survey, it was found that people living in neighbourhoods rich in greenspace were three times more likely to be physically active than people who had limited access to greenspace. These areas also had 40% lower prevalence of obesity.²⁶ Measures such as walking trails, cycle tracks and open air gym equipment can further encourage physical activity in greenspace.

Contact with nature underpins mental wellbeing. The relaxing qualities of greenspace are strongly associated with stress relief and an opportunity to escape everyday worries and concerns. These associations are particularly strongly made by people living with deprivation and disadvantage.²⁷ There is also evidence that people living in social housing who have a view of trees are better able to cope with stress than people who do not.²⁸

People with dementia as well as people with learning difficulties benefit from natural environments such as sensory gardens. Contact with nature can also help people coping with mental illness.²⁹ Some findings indicate that people recover faster from surgery if they have a view of nature.³⁰



Low cost access to positive environment supports health equity. The benefits of greenspace are often available at no or nominal cost to users, which is key to strengthening equity. It is vital, however, that greenspace is of high quality and well maintained. Poor quality greenspace can attract anti social behaviour and serve to lower wellbeing through reducing the quality of the neighbourhood and often also its reputation. Currently, provision of good quality greenspace is less common in more deprived areas.³¹

Social wellbeing and prosperity

Social cohesion can be built within greenspaces. Greenspaces offer a meeting place open to all, and are prime spaces for natural encounters between people of different ages and backgrounds. Parks can be a key safe place where older people share a space with young people, reducing anxieties and helping prevent social isolation.³² Greenspaces can also provide a hub for different types of community activity, which supports a sense of belonging and can offer opportunities for concrete collaboration. Community gardens and allotments can, in addition, make a considerable contribution to urban food production, which is likely to become increasingly important in the context of climate change and food security.³³

Strengthening greenspace contributes to economic prosperity. Within urban centres, even small greenspaces offer a vital break from the built environment, which supports mental wellbeing. Importantly, this can also contribute to productivity in nearby workplaces.



Green infrastructure provides a pleasant aesthetic environment, which may attract visitors and support the local economy, including new businesses.³⁴

There is also evidence that green space boosts the value of nearby properties.³⁵

Greenspace can also offer new employment opportunities, for example in maintenance, leisure activities and food production. Especially older, mature parks can be significant economic assets in themselves, worth up to several million pounds in terms of physical infrastructure alone.³⁶

Urban greenspace is vital for environmental sustainability.

Greenspaces are crucial for supporting urban biodiversity. Trees provide shade and act as natural coolants, thus reducing the need for mechanical cooling, which in turn reduces the demand for electricity and energy. They also improve air quality by absorbing pollutants, including CO₂. Not just parks, but street trees, green verges and gardens all contribute to natural drainage, which reduces the risk of localized flooding. In other words, green spaces can help deal with climate change, and support energy policy goals by potentially contributing to lower demand.³⁷

What policy can do

Develop local greenspaces.

Small greenspaces, such as community gardens, play areas and neighbourhood parks play a vital role for wellbeing, as they offer easy access from home, which is essential to enable and encourage frequent use. It is particularly important for less mobile groups, including children, older people, people without cars and people living on low incomes.

The current requirement to incorporate 10% of new development as open space provides a significant opportunity to support health and wellbeing of users and residents, while also boosting the value of the development. Key to this is ensuring that open space is integral to development, and not fenced off or parceled away in the lowest grade sections. Examples could include a community garden or play area in a housing development, or a small garden or parkland within a business development.

Converting derelict land to greenspace or community space temporarily, while regeneration plans are developed, can be cost effective as it can support local health and wellbeing, provide social and environmental benefits and thus control vandalism and further dereliction.

Provide infrastructure to support usage. Integrating greenspaces into the neighbourhood, with several access points and

'shortcut' routes through the greenspace, helps encourage and maximise use. Flexible spaces that support a variety of uses strengthen this, through enabling creative use by different user groups.³⁸

Places that are open throughout the day and ideally lack fences are best placed to support community building as well as other uses. Such openness encourages people to take ownership of the place, and can support responsible use with low levels of vandalism.

Support and develop greenways.

Linear greenways and even tree lined streets offer many of the benefits of greenspace, including sustainable urban drainage. Such measures can contribute to health equity by introducing these benefits to disadvantaged areas at relatively low cost, and without the need for significant land use change. Where for example native fruit trees are introduced, such measures can also support biodiversity, community activity and contribute to improved understanding of how and where food can be produced.³⁹

Prioritise maintenance and safety.

Design, maintenance and safety is paramount to support and encourage use of greenspace. Spaces that are poorly maintained and perceived as unsafe can invite anti social behaviour and add to the stress and health risks of disadvantage, while improved quality and safety in a green or open space can both improve wellbeing and spark social and economic regeneration.⁴⁰

Case study: Commonwealth Orchard

Commonwealth Orchard is a Scottish project which aims to develop community gardens, with native apple, pear and plum trees, across Scotland. The project aims to support local, urban food production, biodiversity and conservation of native species, but also to improve health and build skills and confidence among individuals, communities and businesses. A key factor is also supporting people from a wide range of backgrounds to develop strong bonds and social networks. The name draws on an old meaning of commonwealth, 'common weal' or common good, but the project also aims to create a legacy for the

Commonwealth Games to be held in Glasgow in 2014.

Launched in 2009, Commonwealth Orchard is an initiative of Children's Orchard, a social enterprise based in Glasgow. It has worked with many organizations and sectors, including schools, local authorities and public bodies. By early 2010, it has supported schools, communities and individuals to plant of significant numbers of fruit trees across Scotland, and contributed to planning for many more community gardens. For example

in Edinburgh, the creation of an orchard in a deprived community has encouraged the local authority to seek more potential sites.

The original idea of the Children's Orchard is to work with children to plant fruit trees, for example apple trees in school grounds and community gardens. Its focus is to develop greenspaces, but also give children the skills to enjoy a healthier lifestyle now and over their lifecourse. The project has also been used to develop cross community relationships.

For more information see www.commonwealthorchard.com and www.childrensorcharde.co.uk.



TRANSPORT

Transport is vital for daily living and through this health and wellbeing.

Transport allows people to take up jobs, gain an education and access services, as well as socialize, visit friends and family and participate in society generally. Good public transport can widen access, while reducing congestion and air pollution. Active travel can support this, and can also help tackle obesity through increased physical activity.

Access, economy and wellbeing

Good public transport can help people become and remain economically active. A good public transport system can widen the area for job search and improve people's opportunities to earn a living and participate in society. This is particularly important for people from more disadvantaged backgrounds, who are less likely to own a car, and also often have limited job opportunities due to limited formal qualifications.⁴¹

Accessible systems encourage usage. Key characteristics of accessible public transport systems include:

- a focus on connectivity and linking people with jobs and services, along orbital as well as arterial routes;
- appropriate and reliable scheduling,
- affordable fare structures that support and incentivize use, and
- high quality vehicles and waiting facilities.⁴²

Such systems are particularly well equipped to improve health equity in a sustainable way. The key benefits,

which support individual health as well as public finances, include reduced benefit reliance and reduced need for healthcare.

Improving public transport and active travel can support economic prosperity. Longer term, transport systems that focus on public transport and integrate active travel as a key form of road use can reduce traffic and congestion. This cuts air pollution and CO₂ emissions and contributes to environmental sustainability, while also cutting driver stress. Reduced congestion can bring economic benefits, by limiting work time lost in traffic, improving reliability for freight, and reducing the need for road maintenance.⁴³ Meanwhile, it has also been found that people are willing to pay a premium for living in socially cohesive and walkable environments.⁴⁴

Integrated systems support environmental sustainability and equity. Air pollutants involve a complex mix of gases and sources, but the most serious health impacts are associated with particulate matter, which is emitted above all from motorized vehicles. Reducing long term exposure to particulates can help reduce significant health risks, such as an increased risk of respiratory tract infection, allergies and complications of conditions such as asthma and heart disease.⁴⁵

Reducing air pollution supports equity, as people living in more deprived areas typically have greater exposure to air pollution, often because these areas are located near busy major traffic arteries. UK wide, air pollution shortens the average life expectancy by about eight months and is associated with up to 50,000 premature deaths each year.⁴⁶

Roads, safety and lifestyle

Road crashes are a major cause of ill health; risks are greater for pedestrians, cyclists and motorcyclists. In Northern Ireland, road crashes are the leading cause of death for young men aged 16-24.⁴⁷ While most people killed and injured are car drivers and passengers, the risk is greater for less protected pedestrians, cyclists and motorcyclists. People from more deprived areas are also more likely to be injured in crashes than the average population.⁴⁸

Safe traffic conditions contributes to healthy child development.

Concerns about traffic are a major reason why children are driven to school and have limited opportunities for free physical play outdoors. This is of concern because it is linked to the rising levels of childhood obesity, and because lifestyle habits are formed in childhood and adolescence. Unsupervised physical play, and for teenagers a degree of independent mobility, is also essential for healthy mental and social development.⁴⁹

Safe roads can help older people stay active. Concerns about traffic can discourage older people from walking in their neighbourhood. This can contribute to social isolation and reduces physical activity, which is associated with factors from greater fear of crime to more rapid

cognitive decline and greater need for residential care.⁵⁰

Active travel, wellbeing and sustainability

Active travel can be particularly effective for tackling obesity and depression. Walking and cycling for transport has been identified as perhaps the best way to increase levels of physical activity at a population level, since active travel can be incorporated into daily routines and is therefore relatively easy to sustain. Physical activity also boosts mood and can be as effective as medication in relieving mild to moderate depression.⁵¹

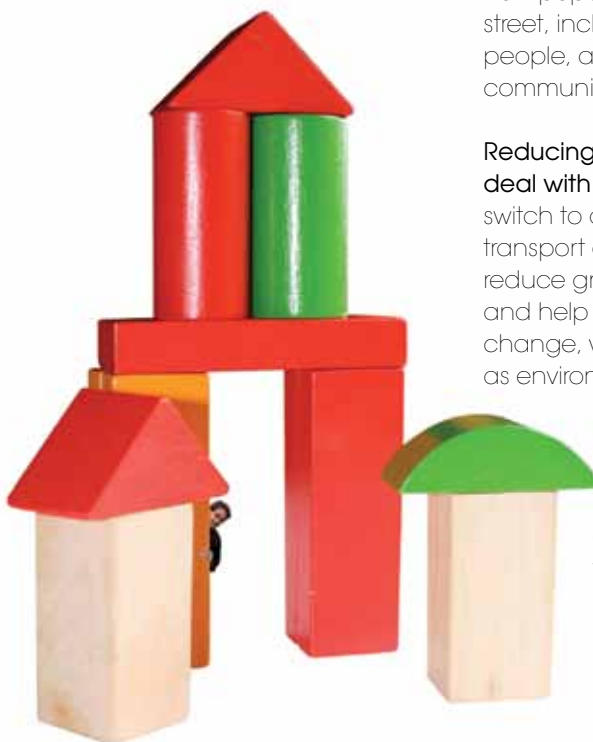
Active lifestyles can strengthen communities and make them safer. Active travel offers important opportunities for social interaction, which can both support mental wellbeing and encourage social cohesion. There is considerable evidence that people living on heavily trafficked streets have fewer

friends and acquaintances in their neighbourhood than people living in light traffic streets.⁵²

The flow of pedestrians and cyclists also creates life on the

street, which improves safety both in itself and through providing natural surveillance. This can, in the longer term, reduce anti social behaviour and the need for security measures. It can also encourage new population groups to use the street, including children and older people, and further strengthen communities.⁵³

Reducing motorized travel helps deal with climate change. Modal switch to active travel and public transport can also significantly reduce greenhouse gas emissions and help deal with climate change, which is a health as well as environmental risk.⁵⁴ Road traffic currently accounts for nearly a quarter of Northern Ireland's emissions of CO₂ and emissions have risen in line with the growing vehicle stock.⁵⁵



What policy can do

- **Strengthen public transport.** Dedicated and systematic public transport planning can strengthen effective provision. Community engagement on transport needs can be a useful way of gaining essential information on desired routes and further encourage uptake, thus supporting viability of services. Ensuring affordability and connectivity is likely to have the greatest impact on inequalities.
- **Strengthen active travel facilities.** Footpaths and cycle lanes that provide a continuous

link between key desired destinations help make active travel a more viable option. Integrating facilities into new development can support a sense of local community and support sustainable development targets, while potentially boosting the property values. Where facilities are retrofitted, gradually creating meaningful stretches is key to encouraging and sustaining use.

- **Improve safety on active travel routes.** Well lit and maintained footpaths and cycle lanes, combined with safe crossing points in desired points, are a key prerequisite for encouraging

active travel. Maintaining footpaths as an integral part of the road network can also provide cost savings, for example through reducing slips in winter, which can reduce pressure on the healthcare system.⁵⁶

- **Improve road safety.** Local traffic calming schemes have had positive results in reducing injuries and encouraging people to use their neighbourhood more actively. In England and the Republic of Ireland, a number of local authorities are piloting 20 miles per hour speed limits to widen the impact of local schemes.



Case study: York Local Transport Plan

The City of York was awarded the status of the UK's leading cycling city in 2004. The city has also managed to limit peak traffic to 1999 levels, while bus patronage increased by 49% between 2001 and 2005 and walking targets were met four years ahead of schedule. In 2007-08, just under 45% of journeys to work were by car, and 18.5% of children were driven to school.

Transport policy in York has focused on developing an integrated, sustainable transport system since the 1980s. However, these achievements are the result of

the city's first Local Transport Plan (2001-06) and ongoing second Plan (2006-11). A key aim of both Plans has been to reduce car traffic in the city, and the city has introduced a 'hierarchy of transport users', which prioritises pedestrians, followed by people with mobility problems, cyclists and public transport users. The Plans have built on key pillars including reducing congestion, improving road safety, improving quality of life and improving accessibility. Promoting health and enabling healthier living has been an explicit objective of both Plans, which also aim to support

sustainable economic performance. Interventions have included improvements to public transport – including bus lane improvements, continuous development of park and ride sites and orbital routes and improved service reliability; investment in walking and cycling routes which are interlinked to public transport, and road improvements that direct traffic away from the city centre.

The Plans are also directly linked to the community plan for York, which emphasizes sustainable development.⁵⁷

Trends

Single parents, young people and people in rural areas are particularly likely to state that lack of suitable transport limits their job opportunities; combining trips to childcare, school and work is particularly challenging.⁵⁸

About 70% of all journeys in Northern Ireland are taken by car, which is

more than in England or Wales. The figure includes almost a fifth (17%) of journeys under one mile.⁵⁹

The proportion of people walking to work in Belfast has increased to 25%, while the number of local bus passenger journeys has grown by 33% since 2005, when Metro was introduced.⁶⁰

Over half of primary school pupils (4-11 year olds) in Northern Ireland and nearly a quarter of secondary school pupils are driven to school.⁶¹ In Britain, 48% of 5-10 year olds walk to school.⁶²



HOUSING AND REGENERATION

Housing supports health and wellbeing by providing physical shelter and a safe space for recreation and self expression. Warm and secure accommodation is a prerequisite for good health, while a supportive physical and social neighbourhood can underpin mental wellbeing and social cohesion.

Housing quality, wellbeing and equity

High quality housing is vital for physical wellbeing. Warm, dry and draughtproof housing is essential to support health, especially for more vulnerable groups such as older people, children and people with chronic conditions. At its most severe, cold and damp housing can increase the risk of a heart attack, especially among older people. Children living in poor housing have an increased risk of respiratory tract infections.⁶³

Good housing also underpins mental wellbeing. A well designed, appropriately spaced dwelling offers a space for rest and recuperation in private, which is vital for mental wellbeing. It can also enable creativity and self expression; homes can be a major source of life satisfaction.⁶⁴ For older people, independent living supports wellbeing and suitable housing is crucial for this.⁶⁵

Warm homes are a key support to improved educational attainment. They can also support people's social networks, by enabling people to socialize at home. Young people may also be safer, as cold homes often encourage young people to socialize outdoors, with associated increased risks to wellbeing.⁶⁶

Energy efficient housing supports health equity. According to the 2006 House Condition Survey, most properties that failed the Decent

Homes standard did so on the thermal comfort criterion.⁶⁷ Energy efficient housing helps reduce and prevent fuel poverty, and is key to reduce the health risks of cold housing, including a greater risk of heart attacks for older people and respiratory tract infections among children. It is also vital for dealing with climate change and improving energy security, which have disproportionate impacts on vulnerable groups.⁶⁸ Domestic emissions, which include housing, currently account for a fifth of Northern Ireland's greenhouse gas emissions.⁶⁹

Energy efficient housing also strengthens health equity by cutting energy costs. This can be vital for low income households, who are most at risk of fuel poverty.⁷⁰

Social wellbeing and prosperity

Good housing creates a positive built environment that supports community cohesion. Housing is a core element of the built environment; well designed and maintained housing creates a framework that can encourage trust, social interaction and a sense of 'community', local identity and cohesion. This is essential for mental wellbeing, while there also is evidence that people who live in a supportive environment typically are in better health, requiring less health and social care, and indeed live longer.^{71,72} A positive local

environment is particularly important for less mobile groups including older people and people on lower incomes, and can reduce the stress associated with lower social status. Social cohesion can also help strengthen informal social control within a neighbourhood, which can reduce anti social behaviour.⁷³ It can also help generate confidence and willingness to take action for developing the area.

Mixed tenure can support health equity and wellbeing as well as the local economy. More socially mixed areas can strengthen social cohesion and equity, through supporting interaction and understanding between people of different backgrounds. They can also create new economic opportunities, by ensuring viable local spending power exists.⁷⁴

Mixed tenure can also improve equity in health by widening access to information about jobs, education opportunities and ways to deal with authorities. Studies indicate that such 'linking' social capital enhances people's life opportunities and their wellbeing, by increasing a sense of control over one's life, but currently tends to concentrate among more educated and affluent groups.⁷⁵ Conversely, concentrating social housing into estates, sometimes with limited links to local job and service hubs, serves to reduce access to information and opportunities. It has also often resulted in concentration of side effects of disadvantage, such as anti social behaviour, which adds to stress and low wellbeing, and can erode trust.⁷⁶



What policy can do

Support high quality housing.

Implementing strict quality standards for new housing can support healthy future environments, while improvements to existing stock can underpin and support regeneration of a neighbourhood.

Improve energy efficiency. Ensuring new housing meets stringent energy efficiency standards can help tackle fuel poverty now and in the future. Encouraging exploration of new approaches, for example passive heating and novel designs, also builds resilience to a changing climate and energy context, and can provide long term savings by reducing the need for retrofitting and adaptation.⁷⁷ Prioritising local and sustainable materials in construction further supports this and can also provide new jobs, for example in quarrying.

Support lifetime homes and integrated specialist housing.

Flexible housing design, which can be adapted to meet the needs of older residents and residents with disabilities, can help manage long term demand in an ageing society and provide savings in adaptation costs. Integrating specialist housing into mainstream housing supports the health and social wellbeing of residents, by enabling social

interaction that can reduce for example fear of crime, and can strengthen social cohesion and trust.

Support greater dwelling density.

Greater density, especially when coupled with easy access to greenspace, local facilities and services, can create new opportunities for developing social support networks, by increasing informal meeting places. Increased densities reduce travelling distances and can encourage active travel, which is important for increasing levels of physical activity as well as reducing energy demand. This, in turn, is a vital component of dealing with climate change and energy security concerns. By encouraging new community hubs, denser housing can also support new economic opportunities.

Support and strengthen mixed tenure residential areas.

Mixed tenure can support health and also underpin regeneration of an area. It does, however, run the risk of increasing polarization and alienating especially more vulnerable social groups. Such approaches have the greatest potential to support health and wellbeing, and regeneration, when housing for different tenures is mixed in an equitable way and supported by community facilities, to ensure equity of access.

Regeneration

Regeneration can significantly support health and wellbeing, by improving the built and social environment. Physical regeneration can kickstart a positive process of building motivation and aspiration, as outlined above. The greatest returns can be expected when this is linked to social regeneration, such as skill building, supporting early years and other measures aimed at improving life opportunities. The social element is crucial especially when regenerating deprived areas, as omitting it and focusing on attracting new residents and investment can lead to gentrification.⁷⁸ This can force existing residents to leave, with potentially significant harm to their health and wellbeing through displacement and disruption to existing social networks. There may also be community tension, especially if income gaps between old and new residents are big and if existing residents feel excluded and unable to benefit from regeneration.⁷⁹

Physical regeneration can support social regeneration and underpin economic regeneration. Initiatives that support social enterprise and community activity, such as capacity building, childcare, education and training contribute to health equity and wellbeing, by improving the skills and opportunities of residents especially in more disadvantaged





areas. Such approaches can also strengthen the local economy in a sustainable way. Retail is vital for a vibrant community and viable economy, but primarily retail led regeneration may be vulnerable in an increasingly volatile economic environment, and if unsuccessful add to blight and dereliction. Jobs created in retail are often also low grade, which can have limited health benefits, as these jobs are characterized by high demand, low control and limited progression routes.⁸⁰

Trends

A third of households in Northern Ireland were classified as fuel poor in 2006.⁸¹

Over 40% of properties in west Belfast are social rented, compared to 16% in east and 19% in south Belfast.

Housing need projections indicate a 30 % rise in one and two person households between 2006 and 2020,

associated with population ageing and other lifestyle changes such as family formation at later ages.

In 2009, there were just over 6350 new dwelling starts, of which 14% were social housing. In 2008, just over 9,200 applicants were accepted as homeless, while just over 20,840 households were deemed to be in housing stress.⁸²

What policy can do

Support sustainable regeneration.

Evidence from England indicates that in some cases, regeneration has focused on fast food outlets and bars. Especially the latter has direct consequences and costs for policing and healthcare, while increasing access to fast food contributes to poor diet and increases the risk of obesity and ill health. Meanwhile, linking social and economic regeneration, for example through can bring particular benefits to health and wellbeing by providing a range of job opportunities and improving long term prospects of an area and its residents.

Strengthen community engagement.

Community engagement can support the creation of spaces that meet people's needs, as local stakeholders have key knowledge on these. Engagement can also contribute to successful regeneration, as it enables local stakeholders to take ownership of the process and supports a stronger sense of place and pride in the neighbourhood.

Case study:

Dove Gardens, Derry City, Health Impact Assessment and regeneration strategy.

Dove Gardens, Brandywell Ward, Derry City was an unpopular complex of 76 maisonettes and flats located in one of the most deprived areas of Northern Ireland. Built in the 1960's it had a number of intrinsic design and construction deficiencies resulting in the properties becoming problematic. They experienced an increase in long term vacancies, a mismatch between house type and occupant, a significant rise in anti-social behavior and a dramatic rise in turnover of stock which was difficult to let.

The Housing Executive carried out an economic appraisal and determined that redevelopment was the appropriate course of action to alleviate the local problems. Prior to embarking on the progression of the scheme a decision was reached to carry out a Health Impact Assessment (HIA). An HIA has been defined as "a systematic method of ensuring that policies and programmes from a range of areas give one

regard to their Impact on Health" This process involved a wide range of statutory and voluntary organizations working with the local community in the decision making process. The HIA assessed a wide range of health determinants which included environmental, fuel poverty, community safety and cohesion, mental and physical health and educational attainment. This process concluded demolition and replacement with ground floor accommodation appropriate for all household groups was the best way forward.

The outcome, which implemented the recommendations of the HIA, has been a very popular modern housing scheme of 63 traditional houses and bungalows constructed by North and West Housing Association. All the new homes have front and back gardens and the area has been enhanced by a public park, a playing pitch and a proposal for a children play area. The construction included high levels of insulation and the provision of solar panels both aimed at reducing heating costs.

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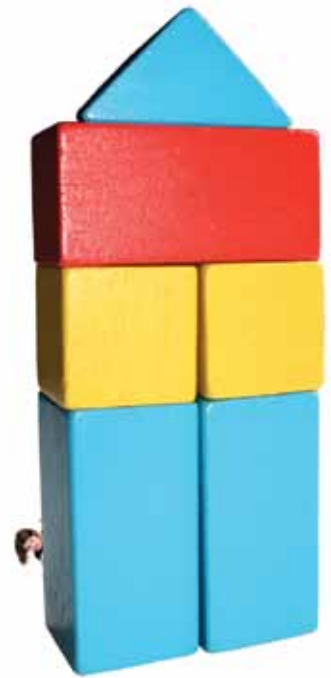
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This publication can be quoted but we would appreciate it if the source is referenced.

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