Divided by health:

a city profile

key findings

November 2008

HEALTHY CITIES
Belfast

Working together for a healthier Belfast

Preface

Health is a measure of personal quality of life, but it is also a yardstick of a healthy community, city or society. Our health and wellbeing is shaped above all by our social environment, and differences in factors such as income, employment and educational attainment can therefore result in inequitable health outcomes. As such, it is the responsibility of policy makers to create conditions that both enable health improvement for all our citizens, and reduce inequalities in health.

This Profile makes a valuable contribution to the policy process by providing a single resource that collates available information on health and wellbeing in the Belfast Health and Social Care Trust area. It focuses on the social determinants of health and also places figures in a wider geographical context of the United Kingdom, the Republic of Ireland and Europe.

The Profile highlights important positive change over the last decade, including improvements in life expectancy, reduced unemployment, improving quality of housing and increases in the proportion of school leavers achieving at least five GCSEs at grades A*-C. There has also been an increase in the number of people in higher education, especially in areas where participation in higher education traditionally has been low.

However, the Profile also shows that there is still much work to do: smoking levels remain high, economic inactivity in Belfast is among the highest across the UK and has not changed markedly over the last decade, and in too many local areas over half of young people leave school with less than five good GCSEs. Most importantly, the available figures show that inequalities in health within the Trust area have not reduced and indeed in some cases the gap has increased. Most fundamentally, this affects life chances: a boy born today into the least disadvantaged conditions can expect to live for six years longer than a boy born into the most disadvantaged conditions. A high proportion of local areas also tend to have poorer health outcomes than Northern Ireland as a whole or cities elsewhere in the UK and Europe.

So much has been achieved, but to continue to improve health and wellbeing overall, tackling inequalities in health must be a core policy priority. At the same time, increasing priority must be given to health more generally, to enable efficient prevention of ill health. This requires continually improving collaboration across sectors, which can be done particularly effectively at local level.

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This Profile is a welcome, timely and important document that highlights some of the key issues that policy and decision makers must tackle in order to achieve our goal of a fair and prosperous society for all. I am pleased to endorse it and encourage its use in strategic discussion and priority setting.

Michael Mc Gimpsey MLA
Minister for Health, Social Services and Public Safety



Foreword

This Profile presents a comprehensive picture of health and wellbeing in the Belfast Health and Social Care Trust area, and of the key social factors influencing health and wellbeing. It provides an outline of change over the last decade, which has been a period of major social, economic and political change across Northern Ireland. It builds on the first city health profile *Towards a City Health Plan: A Statistical Profile*, which was published by Belfast Healthy Cities in 1998, and also coincides with the 20th anniversary of Belfast as a WHO European Healthy City.

For the first time, this Profile places health and wellbeing in Belfast and Castlereagh in a wider context with cities in the UK, the Republic of Ireland and Europe. It will also contribute to a Europe wide analysis of urban health, as a key product required of all cities in the WHO European Healthy Cities Network. This report refers to Local Government District boundaries current in 2008 and does not consider the proposals for new boundaries published in September 2008. The full Profile is published online only, and is available at **www.belfasthealthycities.com**. A summary Key Findings report is also available.

This report fulfils an important function in that it brings existing statistics relevant to health and wellbeing into one coherent resource. These highlight some very serious messages about persistent inequalities in health within the Belfast Trust area, which can only be tackled by addressing their root causes. What is required is joint leadership across sectors, based on an understanding of how non health policy impacts on health. This is, indeed, a recommendation of the WHO Commission on the Social Determinants of Health, which recently published findings from a three year study of global inequalities in health and effective solutions under the challenging title *Closing the Gap in a Generation*.

Health equity will be a key theme for the WHO European Healthy Cities Network in its next five year Phase. We see the Profile as an essential resource and basis for agreeing future policy priorities for Belfast, and the ongoing reform of the public administration structures offers a timely opportunity for this. In particular, the profile can help target action and resources in a way that is most likely to improve health and reduce inequalities in health. Our aim is that the Profile will be updated regularly in future, and as such it can also provide a baseline and support tool for monitoring progress.

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This significant and extensive project has been a major focus of Belfast Healthy Cities' work over the last year. It has been conducted in partnership with data providers, in a way which we hope will continue in order to support improved intersectoral relationships between information specialists and statistical experts. We would like to thank the members of the working group, who provided invaluable guidance and support throughout the project. Special thanks go to Cathryn McBurney of the NINIS team in the Northern Ireland Statistics and Research Agency, who acted as statistical advisor to the Belfast Healthy Cities project team. Finally, sincere thanks go to Jonna Monaghan for managing the process and compiling the final Profile.

Dr Bernadette Cullen
Chair, Belfast Healthy Cities

Joan Devlin
Programme Director



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Rationale for geographical and comparative basis

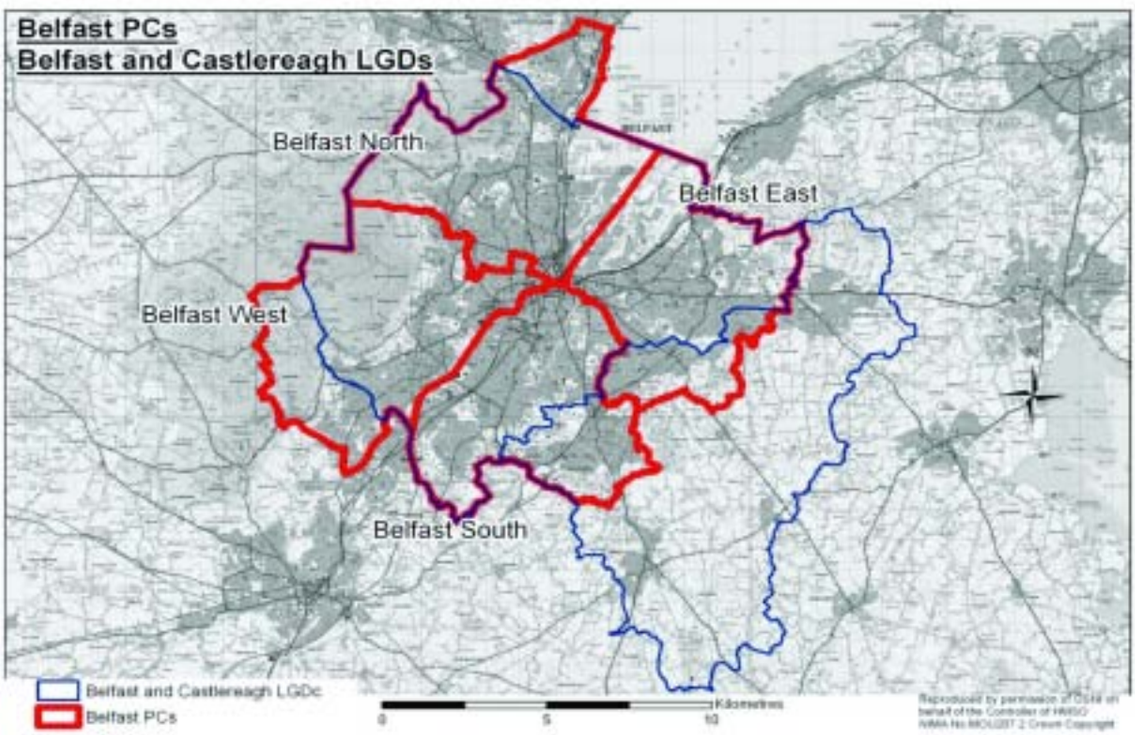
Geographical structure

The key geographies of this Profile are Local Government District (LGD) level for overall analysis and where possible Parliamentary Constituency level for more local level analysis.

Where statistics are given for the Belfast Trust area, this is defined as Belfast and Castlereagh Local Government Districts combined. The boundaries are those current in 2008. This Profile has not considered proposals for new Local Government District boundaries published in September 2008.

As figure i shows, the four Belfast Parliamentary Constituencies do not overlap exactly with Belfast and Castlereagh LGDs. However, analysis at this level helps highlight inequalities. Many statistics are also routinely published at this level, which is likely to facilitate future comparative analysis. Selected ward level data are included to emphasise differences, where data are available and can be analysed meaningfully.

Figure i. Belfast and Castlereagh Local Government District boundaries and Belfast Parliamentary Constituency boundaries



Source: NISRA

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Some survey findings, primarily related to lifestyle, are only available at Health Board level. In this case figures are given for the Eastern Health and Social Services Board (EHSSB) area, which is in existence until April 2009. The EHSSB area covers the Local Government Districts of Ards, Down, Lisburn and North Down as well as Belfast and Castlereagh.

Data sources

The Profile is a compilation of existing primarily public sector statistics. There is no single consistent model for data collection across sectors, and therefore there is some variation in the years and geographical levels at which data is presented. Many organisations have also changed the way data is collected over the last ten years, which has limited the availability of data over the full period 1996-2006. However, public data availability has improved over the decade. Especially the Northern Ireland Neighbourhood Information Service **(www.ninis.nisra.gov.uk)** developed by Northern Ireland Statistics and Research Agency (NISRA) has been a major resource for this Profile.

For some indicators, only survey based data is available. When interpreting statistics resulting from survey data it is worth bearing in mind that they are estimates associated with confidence intervals (ranges in which the true value is likely to lie). Surveys also vary in achieved sample size from about 900 households (Travel Survey for Northern Ireland) to 8,000 (NI House Condition Survey 2006), which has an impact on how large the confidence intervals are. This is particularly important when comparing data between years.

Comparative data for the UK, Republic of Ireland and Europe

The Profile aims to place Belfast and Castlereagh in a wider context, and therefore includes national and international comparison for key indicators. Data should be treated with some caution, as the methodologies for data collection may differ between countries.

Comparisons are made above all with other WHO European Healthy Cities in the UK – Brighton and Hove, Glasgow, Liverpool, Manchester, Newcastle upon Tyne, Stoke-on-Trent, Stirling and Sunderland – and also Edinburgh and Cardiff as capitals of Scotland and Wales. Statistics have been sourced primarily from the Office for National Statistics (ONS)[1], the Scottish Government[2] and the Welsh Assembly Government.[3]



Where possible, data is also presented for Galway, which is the only WHO European Healthy City in the Republic of Ireland in 2008, and Dublin as the capital. This data is sourced primarily from Central Statistics Office Ireland.[4]

City level data across Europe are drawn from the Urban Audit[5], which is an EU funded project that aims to systematically collect statistics on quality of life in cities. Over 300 cities are included in the survey, which covers all of the 27 EU member states as well as Norway, Switzerland and Turkey. Most recent data available in 2008 was for 2004 as a common reference year. Metadata for the project is available from Eurostat, the EU statistics agency which has co-ordinated the project.[6]

International country level comparisons are drawn primarily from the WHO Health for All database[7] and Eurostat.

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The context: How social conditions determine health and wellbeing

The key determinants of health are income, employment and education. Income and employment (or lack of employment) are closely connected, and broadly determine an individual's or household's position on the socioeconomic scale. While this in itself may not be unfair or unjust, inequalities arise as income also is the central determinant of social opportunities and other choices available to an individual or household. These interlinkages can result in multiple disadvantage, and this Profile highlights quantitative evidence of such links in the Belfast Health and Social Care Trust area.

To begin with, education is a crucial determinant of income. People with few educational qualifications are more likely to be unemployed or in low skilled, low paid jobs. Education also supports health and wellbeing by widening available life choices; higher levels of education are associated with better access to information and therefore enable healthier choices. Moreover, low skilled jobs are associated with limited control over the job, which has been shown to increase stress.[8] Higher levels of education, and lower levels of deprivation, are also associated with better access to specialist services. For example, Belfast Trust has found that specialist healthcare services (elective hospital treatment) is not provided to people from more deprived areas at the level that would be anticipated based on differences in need.[9]

Housing is important both for physical and mental wellbeing: a decent dwelling which is affordable to heat supports physical wellbeing, while stable and suitable permanent accommodation is a foundation for mental and social wellbeing. Strong social networks within the local community can also support mental wellbeing; it has been suggested such ties have helped people in Northern Ireland to cope with conflict[10], and the presence or absence of such social capital has a major impact on the general spirit within a community.[11] Similarly, active citizenship for example through volunteering can boost self esteem, build skills and social networks and improve job prospects. All of these support health and wellbeing.

Transport has an impact on how people can participate in society, meet family and friends, access jobs, services and importantly, access affordable healthy food. In societies where the transport system is built around private transport, access to a car may be essential to manage everyday life. Here, income is important as the relative cost of maintaining a car may be much higher for a lower income household compared to a more affluent one; it has been estimated that the cost may be up to 10% of the weekly income of a household with two unemployed adults in Northern Ireland[12]. Meanwhile,



reliance on motorised forms of travel is linked to increasing levels of obesity, as well as pollution, congestion and climate change.

Crime and anti social behaviour has a direct impact on victims' health and wellbeing, but its most important health impact is as a destabilising factor that affects society as a whole by increasing insecurity. It often affects more deprived areas disproportionately, and can both blight the physical environment and reduce people's willingness to participate in society.

Finally, the natural environment can support health and wellbeing by offering opportunities for recreation and physical activity. It has been shown that people who are ill recover quicker if they are in contact with nature, and that green space in cities boosts people's sense of wellbeing. Air and water pollution can be direct health risks, while broader issues such as climate change will change natural and social conditions and thus affect health.

The pathway from disadvantage to ill health: new thinking

There is now a large body of research evidence which highlights a social gradient in health. This means that risk factors for ill health tend to accumulate at the bottom of the socioeconomic scale, which ultimately means shorter life expectancy and higher levels of physical and mental morbidity. The key issues centre around opportunities and choices available, which are strongly influenced by income and socioeconomic status.[13]

For example, research in Northern Ireland has shown that the cost of education, especially higher education, reduces the opportunities and motivation of children from more deprived backgrounds to do well at school.[14] Children from more deprived backgrounds remain much more likely to leave school with few qualifications, which increases the risk of persistent deprivation across generations that has been reported for example from parts of Belfast.

Recent research into the ways in which social conditions affect health has provided growing evidence that social differences and inequalities affect health through psychosocial mechanisms. Essentially, this means that experiences of social inequality matter as much as differential material conditions.[15] For example, people in the lowest socioeconomic groups typically have little control over their social situation, while they manage very tight household budgets. They also tend to have more limited resources to engage with people in positions of power than others in higher groups. Such living conditions are characterised by chronic stress, and for example smoking may become a coping mechanism.[16]

It has also been suggested that people in lower positions on the social scale may be strongly aware of the differences between them and those further up the scale, which can affect self esteem and motivation, and results in stress.[17] An example might be the different status value associated with private and public transport. Low level crime and anti social behaviour may similarly highlight stress associated with a marginal social position.[18] This line of research emphasises tackling inequalities through social and economic policy, and by building more cohesive communities.

A related field of emerging research indicates that living in deprivation can directly affect the physical organism at cell level. This line of research also suggests that stress is a key factor, as it triggers inflammatory reactions in the body that increase the risk of for example cardiovascular diseases[19] and diabetes.[20] It has also been found that chronic stress causes changes at cell level, which essentially speeds up the ageing process.[21] One recommendation arising from this area of research is to focus on the early years, as biological change is easiest to halt early in life.

In summary, there is now solid evidence that health outcomes are profoundly determined by social conditions. These conditions can, however, be influenced through public policy. This Profile provides a picture of the key areas that require action within the Belfast Trust area and can only be tackled through future cross sectoral policy and priority setting. It will act as a resource to inform these decisions.

The global evidence: improving health but worsening inequalities

The impact of social conditions on health is, as has been shown, wide ranging and fundamental. Most dramatically they affect a person's life chances: a boy born into the most disadvantaged conditions in Belfast can expect to live six years less than a boy born in the least deprived area, and a girl over three years less. Crucially, these conditions are determined by social, economic and political forces.

In August 2008, the World Health Organisation (WHO) Commission on the Social Determinants of Health published the findings of a three year investigation into how social factors, or determinants of health, shape health outcomes across the world.[22] The report draws a stark picture of increasing inequality both between countries and global regions, as well as within countries. For example, in 2006 the richest countries with 10% of the world's population had a gross national income 122 times higher than that of the poorest 10%, compared to a difference of 60 in 1991. In the US, almost a million lives could have been saved between 1991 and 2000, if mortality rates of white and African



Americans were equivalised. Importantly, the Commission states that growing wealth in itself will not improve health, and may even worsen inequalities if benefits are not distributed equitably.

In England, health profiles of all local authorities have been published since 2006, as part of the public health strategy *Choosing Health*.[23] These highlight marked inequalities and little change in the relative position of local authorities. In some cases, there is indeed evidence of increasing inequalities. For example, life expectancy at birth for males in Liverpool – the most deprived local authority in England - increased by over two years between 1993-95 and 2004-06, but the highest life expectancy (in 1993-95 in East Dorset and in 2004-06 in Kensington and Chelsea) grew by over five years.

It can be noted that all WHO European Healthy Cities in the UK, except Stirling, are among the most deprived in their respective countries. In the English Index of Multiple Deprivation 2007, Liverpool was the most deprived local authority, while Manchester was ranked 4th, Stoke-on–Trent 16th, Sunderland 35th and Newcastle upon Tyne 37th. Sheffield was in place 63 and Brighton and Hove in place 79 out of a total 354 local authorities. This means that all cities except Brighton and Hove were among the 20% most deprived local authorities in England.[24]

In Scotland, the 2006 Scottish Index of Multiple Deprivation showed that 34% of the most deprived local areas across Scotland are in Glasgow, while the share in Edinburgh was seven per cent and in Stirling less than one per cent.[25] On the Welsh Index of Multiple Deprivation, Cardiff had 18% of the 10% most deprived local areas in Wales.[26]

However, the WHO Commission on the Social Determinants of Health is optimistic and argues that the knowledge exists to close the gap in a generation. Its recommendations are to improve daily living conditions, tackle the inequitable distribution of power, money and resources, and measure and understand the problem as well as assess the impact of actions. In short, the Commission recommends prioritizing health equity on the political and policy agenda, and highlights the Nordic countries as an example of what can and needs to be done elsewhere.

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Executive summary
Health and wellbeing in Belfast: widening inequalities despite improvements

Over the last decade, the Belfast Trust area, including Belfast and Castlereagh Local Government Districts, as well as Northern Ireland as a whole, has experienced significant political, economic and social change. The period has been characterised by economic growth and investment, which has manifested itself as physical renewal that has revitalised Belfast, as well as a new dynamic in the job market as well as cultural sphere. Examples include the regeneration of the Laganside and significant new build of office, cultural and retail space, including the award winning Waterfront Hall and most recently the Victoria Square development.

New jobs have also been created by new business and growing tourism attracted to Northern Ireland, and the positive economic conditions contributed to the unprecedented rise in house values, which saw prices double in about two years between 2005 and 2007. Increasing political stability and the return to devolution in 2007 has contributed more generally to a sense of renewed optimism, although there are likely to be differences in how different population and social groups have experienced this.

In such a decade of positive change, an important question is whether health and wellbeing has improved, and whether inequalities in health have reduced or increased. This Profile provides the information required to answer these questions, and highlights some important good news such as overall improvement in life expectancy. However, it also shows that major inequalities in health remain; for example, the gaps in life expectancy within the Belfast Trust area are growing.

The good news: positive change

- Life expectancy has improved, in Belfast by about two years for both males and females, and in Castlereagh by three years for males and 2.5 years for females.

- Unemployment has fallen substantially across the Belfast Trust area, at a time when the number of employee jobs increased.

- The proportion of school leavers achieving at least five GCSEs at grades A*-C or a higher qualification has increased, and enrolments in further and higher education have increased, most notably in Belfast West Parliamentary Constituency (enrolments in higher education up by 20% between 2001-02 and 2006-07), which generally has had low educational attainment.



- The living environment has also improved. Most notably, the proportion of dwellings that failed the Decent Homes standard across the Belfast Trust area fell from 35% in 2001 to 21% in 2006, which was similar to the improvement observed in England.

- Recorded crime fell by over 25% across the Belfast Trust area between 2001-02 and 2006-07, which was more than across Northern Ireland as a whole (-14%).

- Despite an increase in traffic volumes, air quality in the Belfast area has improved, and the number of people killed or injured in road traffic collisions fell by over 40% in all PSNI District Command Units (DCUs) in the Belfast Trust area. In West Belfast DCU, which in 1998 had the highest number of casualties, the total number of persons killed or injured more than halved (-54%) by 2006.

The challenges: the widening gap

- Smoking prevalence in the Belfast Trust area remains at around 30%, and the gap in smoking rates between people in manual and non manual occupation groups has increased. This is in line with the trend across the UK.

- About 20% of people remain sedentary, and there has been an increase in the proportion drinking above sensible limits (over 21 units of alcohol per week for a man and 14 per week for a woman).

- Obesity is increasing among both adults and children, which reflects trends across the UK.

- Most importantly, the levels of economic inactivity have also remained high at about 30% in Belfast, which is one of the highest rates in the UK.

- There has also been limited change in the proportion of people who leave school with no GCSEs.

- In a UK wide perspective, Belfast continues to rank low on indicators such as life expectancy, long term limiting illness, child health and economic inactivity. Within Belfast, differences in for example child poverty are large.

- Similarly, a European snapshot for 2004 indicates that Belfast has a comparatively high infant mortality rate, low employment rate and high proportion of young people who do not complete compulsory education.

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Key challenge to tackle disadvantage

The available information shows that much like elsewhere in the UK, differences and inequalities between local areas are not reducing markedly. On most indicators, Belfast lags behind Castlereagh as well as the Northern Ireland average, and in many cases improvement in Castlereagh has been greater than in Belfast.

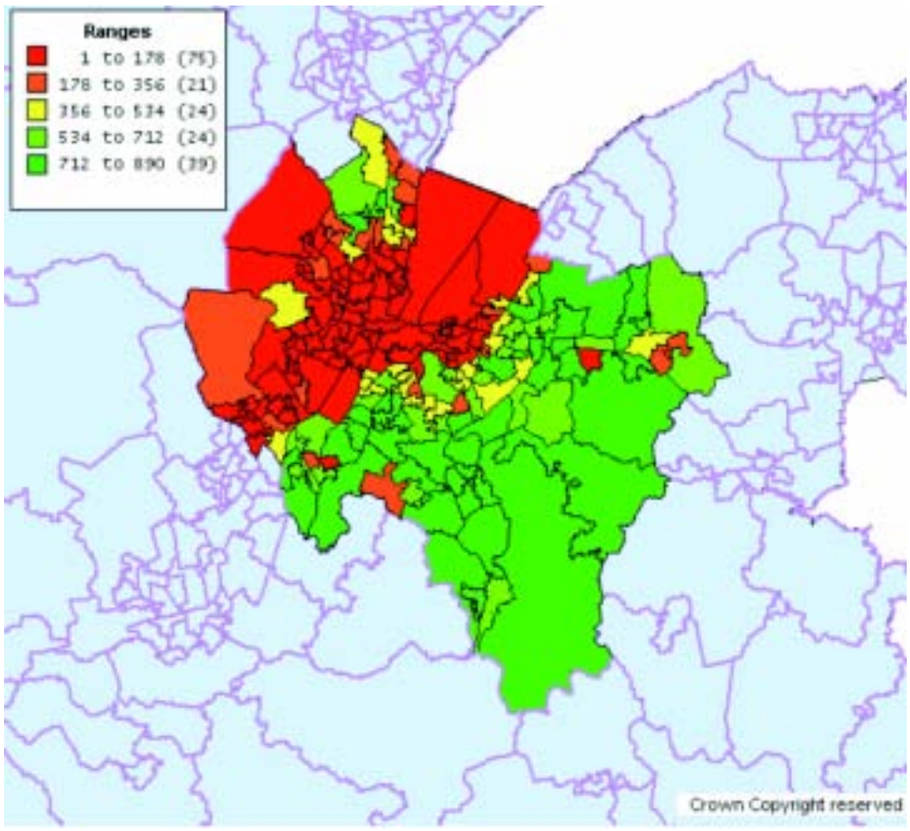
The inequalities become clearer still in an analysis at Parliamentary Constituency or ward level, and an outline summary is given in table i. As a rule, health outcomes are markedly poorer in Belfast West and Belfast North than Belfast East and Belfast South. It should be emphasised that there are wards, and pockets within wards, characterised by poorer health outcomes also in Belfast East and Belfast South.

The key difference between the Parliamentary Constituencies is relative levels of deprivation and socioeconomic disadvantage, linked to employment status, income and educational attainment. Figure ii illustrates multiple deprivation within the Belfast Trust area based on the most recent measure, the Northern Ireland Multiple Deprivation Measure 2005. While the results are not directly comparable to previous indices of deprivation, wards in Belfast North and Belfast West have consistently featured among the most deprived in successive measures since the 1980s. This suggests that there has been limited change in relative disadvantage and deprivation within the Belfast Trust area. Belfast also has the highest levels of deprivation within Northern Ireland, with some 40% of the most deprived local areas located within Belfast Local Government District.

There is now strong evidence that deprivation and social disadvantage is the major determinant of health, creating stress that appears to be a main factor in translating social conditions to physical ill health. The key challenge is the limited change in relative disadvantage and deprivation, which also is key to successfully reducing inequalities in health and the gap in health outcomes. As recommended by the WHO Global Commission on the Social Determinants of Health, to improve health and wellbeing for everyone in the Belfast region, tackling disadvantage and its root causes across sectors must be a priority for political decision makers and policy makers.



Figure ii. Relative deprivation ranking by Super Output Area, NI Multiple Deprivation Measure 2005, Belfast Trust area



Source: NISRA[27]

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Table i. Selected socioeconomic, health and educational indicators by Belfast Parliamentary Constituency

Indicator	Belfast East	Belfast South	Belfast North	Belfast West
Socioeconomic conditions				
% of population living in most deprived areas	23%	19%	60%	79%
Unemployment				
% of working age population, 2007	2%	2%	4%	6%
Hourly earnings, all jobs 2007	£9.61	£11.17	£8.29	£8.36
Number of Income Support claimants aged 16-59, Feb 2007	4,191	4,500	9,278	12,146
% in social rented accommodation, 2006*	16%	19%	26%	44%
Health outcomes				
Life expectancy, 2004-06				
Males	76.1	76.9	73.3	71.0
Change 2001/03-2004-06	+1.0	+1.5	+1.3	-1.3
Females	81.3	81.5	78.7	78.1
Change 2001/03-2004-06	+0.6	+0.5	-0.5	+0.6
Suicide rate per 100,000 population aged 15+, 1998-2004				
Males, all ages	10.0	17.6	35.4	34.2
UK wide rank (from 1 best to 426 worst)	415	233	11	13
Females, all ages	7.7	4.2	7.6	9.2
UK wide rank (from 1 best to 426 worst)	64	301	68	33
% persons reporting long term limiting illness, Census 2001	23%	18%	28%	27%
Child health				
Infant mortality, 2001-05 (deaths before age 1 per 1000 live births)	6.3	5.7	6.1	8.1
Smoking in pregnancy*, 2006	24%	20%	39%	37%
Breastfeeding*, 2006	47%	58%	29%	21%
Change 1996-2006, percentage points	+5	+8	+3	+1
Educational attainment				
% of population aged 16-74 with no formal qualifications, Census 2001	41%	27%	51%	51%
% leaving school with 5+GCSEs A*-C or higher, 2005-06	60%	69%	52%	52%
% leaving school with no GCSEs, 2005-06	4%	5%	6%	8%
% of school leavers continuing in further or higher education, 2005-06	62%	73%	44%	47%
Change in higher education enrolments, 2000/01-2006/07	+7%	+2%	+4%	+20%

*refers to areas within Belfast Local Government District only



Part 1

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1. Demographic trends

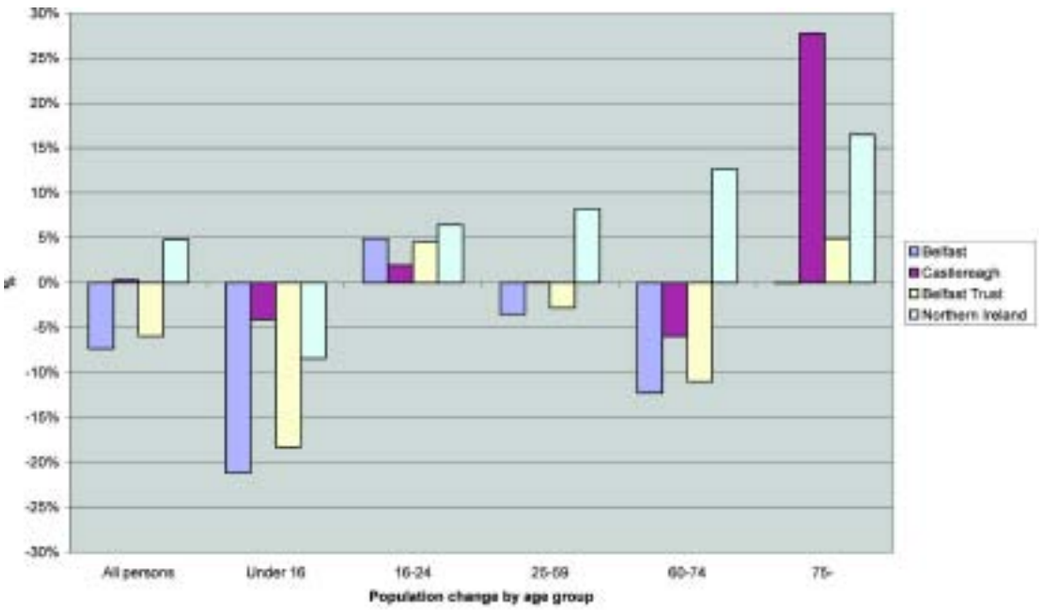
There were three key trends in relation to demography in the Belfast Trust area in the last decade. The population in Belfast continued to decline, while Castlereagh and Northern Ireland saw an increasingly older population. Births fell to 2001 and then began to recover, while an increasing proportion of mothers were aged 30 and over. There was also a notable increase in immigration to Northern Ireland, which became evident around 2004.

1.1 Population: decline in Belfast, ageing in Castlereagh

The population in Belfast continued to decline over the decade 1996-2006. The child population aged under 16 fell most (by over three percentage points in terms of population share, or by 20% in terms of absolute numbers, as per mid year population estimates 1996 and 2006). The absolute population in Castlereagh stayed virtually unchanged, but the age group over 75 increased by 28%. The decline in the number of children in Belfast was greater than the Northern Ireland average (number of children grew by 5%), while the older population in Castlereagh grew substantially more than the Northern Ireland average (16%).

At the same time, families with children became a less common household type across the Belfast Trust area (from 31% of all households in 1996-97 to 23% in 2006-07), while families without children became more common (from 21% of households to 25%).[28]

Figure 1.1 Population change 1996-2006 by age group and area



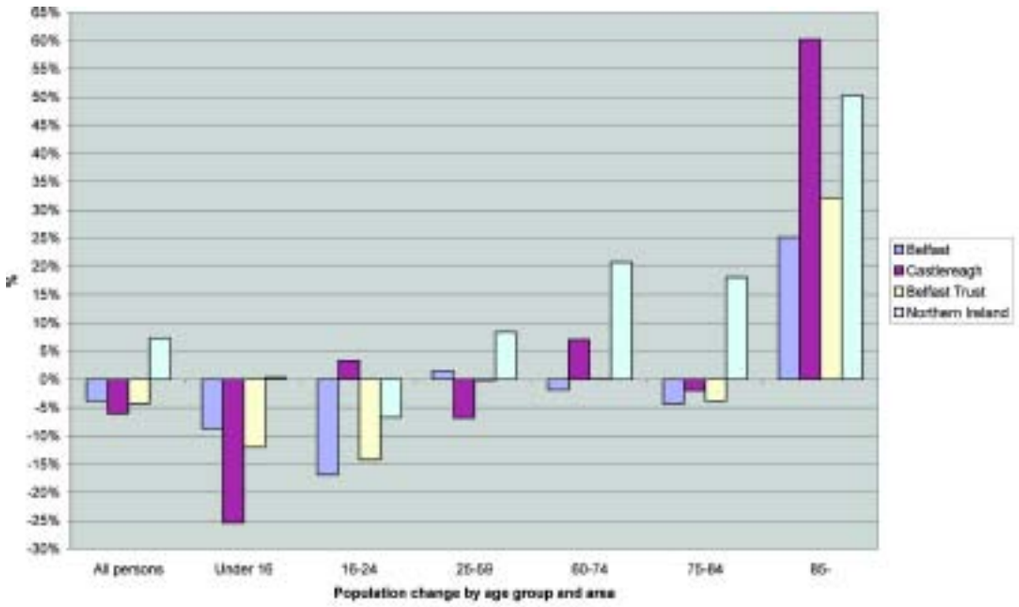
Source: Mid year population estimates 1996, 2006, NISRA[29]



The trend was similar in other WHO European Healthy Cities in the UK, but the total population and child population decline was sharper in Belfast than the other cities[30].

Population projections to 2016 (based on the 2006 mid year estimate) clearly illustrate the ageing of the population across the Belfast Trust area as well as Northern Ireland. The population aged under 25 is projected to decline, while the age group over 85 is projected to rise substantially. By 2016, people aged 60 and over are projected to constitute 26% of the population in Castlereagh, and the population aged 60 and over in Belfast (22%) is also projected to exceed the Northern Ireland average (21%). This will have major implications for the types of services required.

Figure 1.2 Projected population change 2006-2016 by age group and area



Source: Population projections 2006-2017, NISRA (2006 based)[31]

1.2 Births: increasing proportions to mothers aged 30 and over

The total number of births fell until 2001-2002, but began to rise again after this, although the fertility rate did not return to 1996 levels by 2006. The age specific fertility rate per 1,000 women aged 15-44 fell more in Castlereagh (-12.9) than Belfast (-6.9), and in 2006 was similar in both Local Government Districts (54.7 in Belfast, 56.2 in Castlereagh). Figure 1.3 illustrates this, and also indicates that the general fertility rate in both Belfast and Castlereagh was higher than in several other WHO European Healthy

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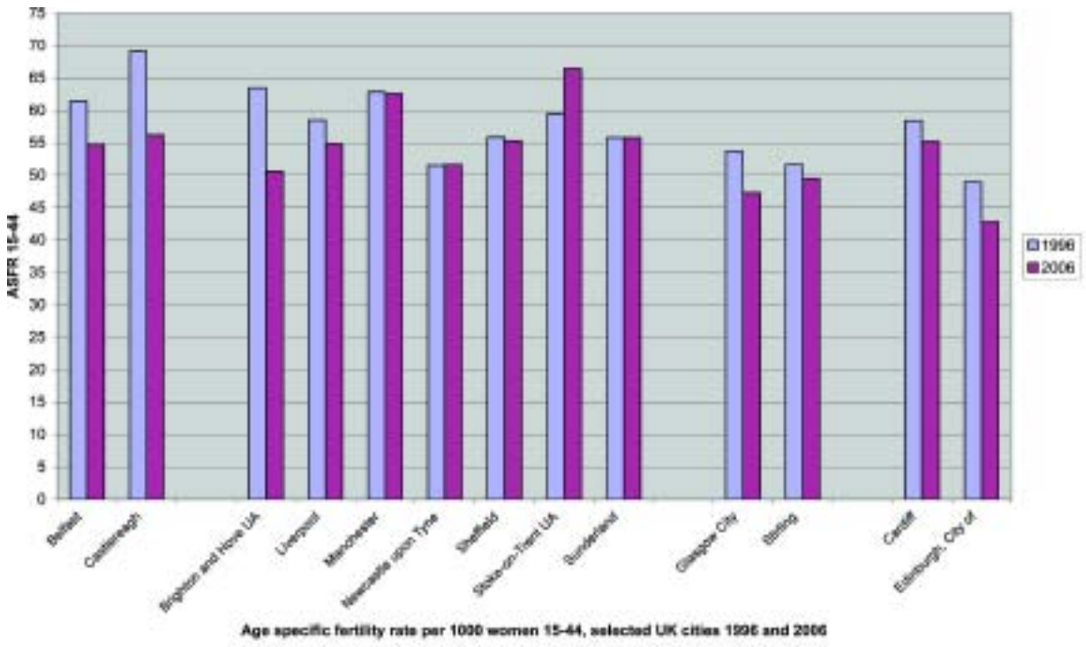
Cities in the UK; Scottish cities had the lowest fertility rates in 1996 and the rate fell further by 2006.

Age specific fertility rate (ASFR) is defined as the number of babies born per 1,000 women of a given age group, while the age specific fertility rate per 1,000 women aged 15-44 is sometimes also known as the general fertility rate. Meanwhile, the overall birth rate is defined as the number of babies born per 1,000 population.

Figure 1.3 Age specific fertility rate per 1000 women aged 15-44, selected UK cities, 1996 and 2006



Source: Office for National Statistics,[32] Registrar General, NISRA[33]

1.2.1 Births by age of mother

It has been suggested that the drop in births, which bottomed around 2001-02, was related to changing trends in family formation, above all a tendency for women to have children later in life than in previous generations, and also have fewer children.[34] This is illustrated in figure 1.4, which shows that the proportion of births to mothers aged 30 and over increased between 1996 and 2006, while the proportion of births to mothers aged 20-29 fell.

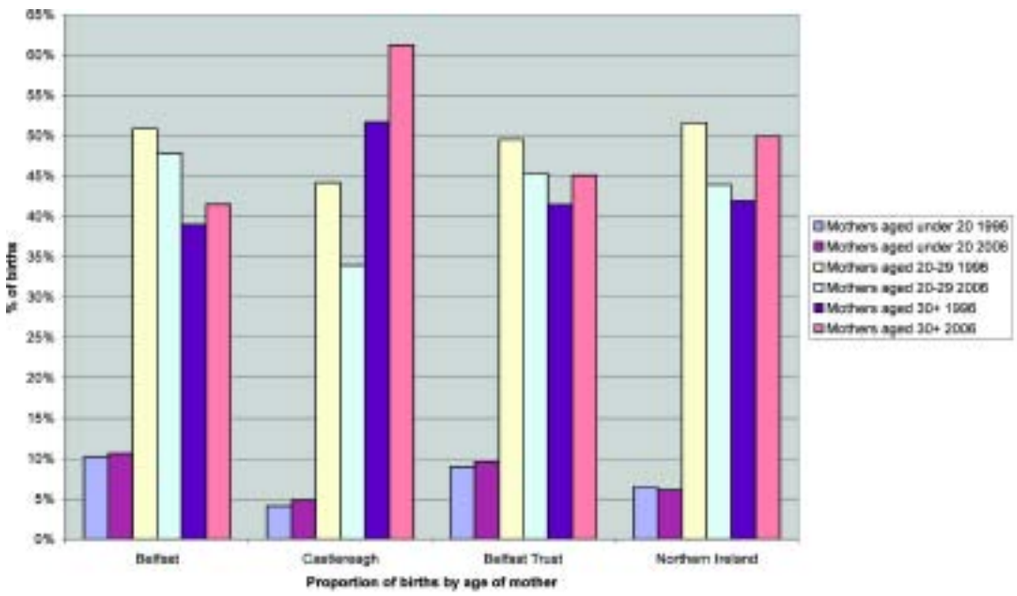
There was, however, a notable difference between Belfast and Castlereagh, in that about half of births in Belfast were to mothers aged 20-29 in both years, while in Castlereagh



over half were to mothers aged 30 and over. There was a similar split at Parliamentary Constituency level; over half of births in Belfast East and Belfast South were to mothers aged 30 and over, while the proportion in Belfast North and Belfast West was about a third.

It can be noted that the proportion of births to mothers aged under 20 remained virtually unchanged, and much higher in Belfast than Castlereagh (also see section on Teenage parenthood under Health and wellbeing of children and young people).

Figure 1.4 Distribution of births by age of mother and area, 1996 and 2006



Source: Registrar General, NISRA[35]

1.3 Migration: increasing international immigration

Births data also show that births to mothers born outside Northern Ireland, Britain or the Republic of Ireland doubled in Belfast (156 to 298) as well as Castlereagh (33 to 67) and more than doubled across Northern Ireland (691 to 1,450) between 2001 and 2006. This highlights the third main demographic trend, which is increasing international immigration. Immigration has increased in very recent years, notably from 2004 when the EU was enlarged with eight new member states from Eastern Europe (Estonia, Czech Republic, Hungary, Latvia, Lithuania, Poland, Slovakia and Slovenia, collectively known as the A8). This immigration has helped stem the net population loss in Belfast in recent years.

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Migration estimates can be based on a number of proxy sources, including health card registrations, the Worker Registration Scheme for A8 nationals (which does not cover Bulgaria and Romania that joined the EU in 2007), work permits (required for persons from outside the EU), National Insurance number registrations and the school census, which shows children for whom English is an additional language. There are, however, limitations with all proxy sources; for example, many only record entrants the first time they register and do not provide information on how long a person stays or whether they return at a later date.[36] The Northern Ireland Statistics and Research Agency uses health card registrations as the key proxy, as these cover all migrants who register and can be broken down by sex and age.

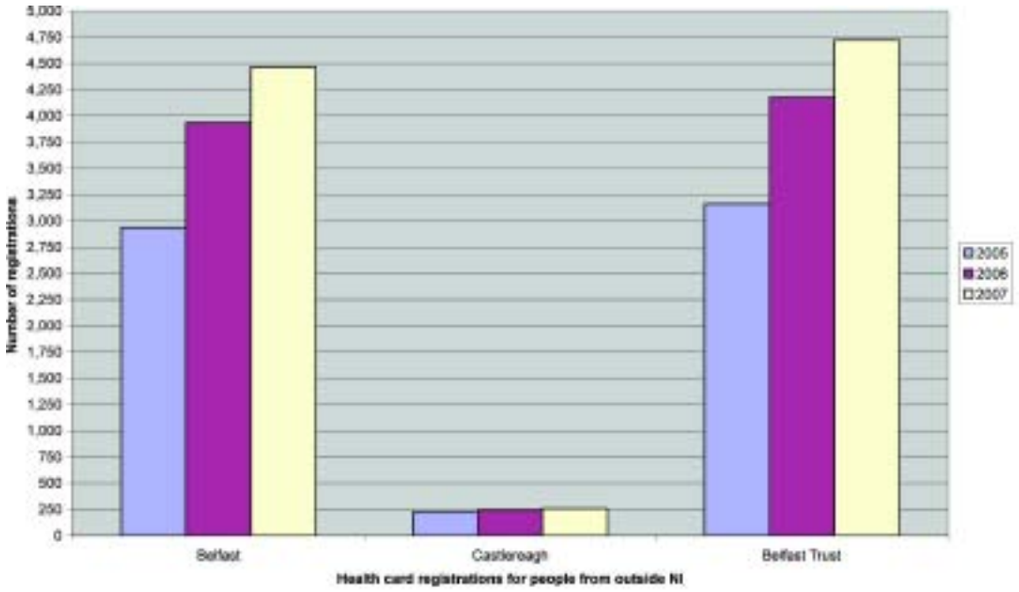
Figure 1.5 shows that in Belfast as well as the Belfast Trust area health card registrations for persons from outside Northern Ireland have risen by about 50% between 2005 and 2007. Across Northern Ireland, registrations increased by 40% (from 13,607 to 19,369). All data sources on migration indicate that Belfast is a hub for migrants alongside Dungannon and Cookstown.

Northern Ireland level figures indicate that the largest number of migrants comes from Poland, followed by Lithuania, although compared to the UK as a whole, Northern Ireland has received a higher proportion of Lithuanians.[37] The largest number of work permits in 2007-08 was issued to Indian, Bulgarian and Filipino nationals.

Figures from the Regional Interpretation Service of the Health and Social Care services in Northern Ireland, which provides interpreters to accompany people to appointments, show that demand has increased dramatically since the service was launched in 2004. Mandarin and Cantonese have steadily accounted for about a fifth of requests, but requests for Polish interpreters have increased most, from two per cent in 2004 to 27% in 2007.[38]



Figure 1.5 Health card registrations by people from outside Northern Ireland, 2005-07



Source: Central Services Agency[39]

More in the full Profile:

The full Profile chapter on demography includes a more detailed analysis on population structure and projected change, as well as information on household projections, religious distribution and ethnic minorities.

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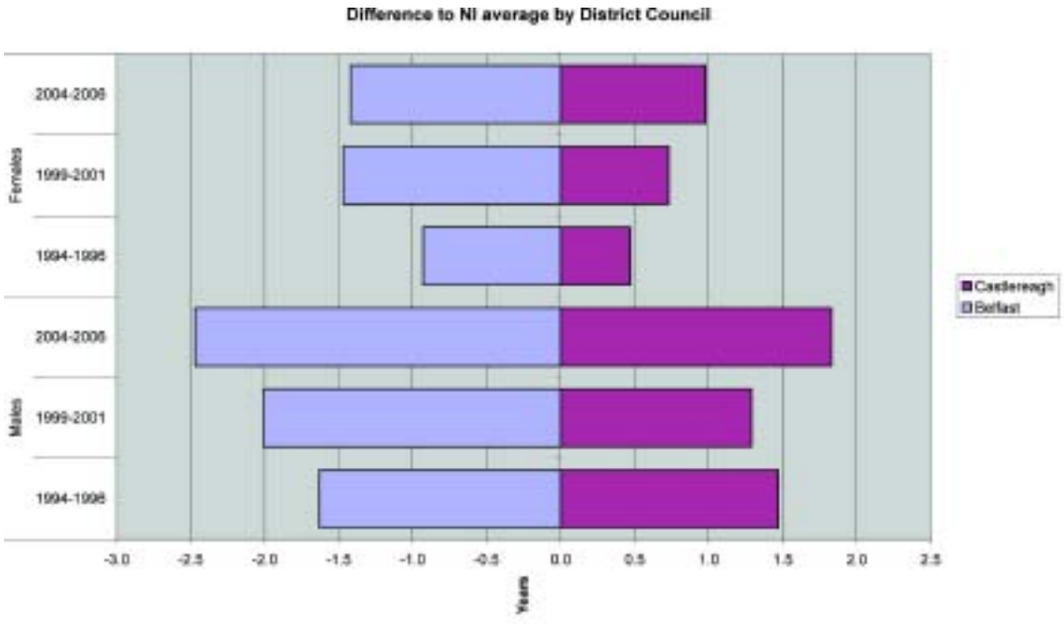
2. Health and mortality

2.1 Life expectancy: improvement for both males and females but less in more deprived areas

Life expectancy is a high level indicator of health, and is in fact based on mortality rates. Life expectancy in the Belfast Trust area has improved over the decade, by about two years for women (to 79.6 in 2004-06) and just under two years for men in Belfast (to 73.7). In Castlereagh, there was more marked improvement with life expectancy for men increasing by three years (to 78.0 in 2004-06) and for women by two and a half years (to 82.0).

Nevertheless, across Northern Ireland, life expectancy for males improved by over 2.5 years, which means that Belfast fell further behind the Northern Ireland average, while Castlereagh surged further ahead. This is illustrated in figure 2.1, and reflects a trend repeated across a number of indicators. Put simply, while there have been improvements in Belfast, improvements elsewhere have been larger, thus increasing the gap further.

Figure 2.1 Life expectancy at birth: difference to Northern Ireland average by District Council, 1994/96-2004/06 (years)



Source: Office for National Statistics[40]



2.1.1 Context of the UK and Republic of Ireland

Tables 2.1 and 2.2 show how the two Local Government Districts are ranked in comparison with the other WHO European Healthy Cities in the UK in 1993-95 and 2004-06 (tables are organised by the rank of each city in 2004-06). They illustrate the growing gap, as Belfast fell in the rankings especially for male life expectancy, and was in place 422 out of a total 432 local authorities in 2004-06. Animated maps of life expectancy at local authority level across the UK, between 1992 and 2005, are available through the Office for National Statistics.[41]

It can be noted that a number of other UK Healthy Cities experienced a similar trend to Belfast in terms of an increasing gap. The gap between the highest life expectancy and life expectancy in Glasgow (which had the lowest life expectancy in the UK in both 1993-95 and 2004-06) in 2004-06 was 13 years for males and ten for females. This meant that the gap grew by three and two years, respectively, compared to 1993-95.

Table 2.1 Life expectancy at birth and UK wide rank, males in selected UK cities, 1993-95 and 2004-06

	Life expectancy at birth, males		UK wide rank (1-432)	
	1993-95	2004-06	1993-95	2004-06
Highest life expectancy UK wide	77.9 East Dorset	83.1 Kensington & Chelsea	1	1
Castlereagh	74.4	78.0	218	172
Sheffield	73.4	77.0	298	256
Stirling	72.9	76.6	350	289
Cardiff	73.6	76.6	287	294
Brighton and Hove	73.5	76.3	290	315
City of Edinburgh	72.5	75.8	374	346
Sunderland	72.3	75.5	383	369
Newcastle upon Tyne	72.4	75.2	377	387
Stoke-on-Trent	72.1	74.5	391	407
Liverpool	71.2	73.8	418	421
Belfast	72.0	73.7	410	422
Manchester	69.7	73.0	430	428
Glasgow City	67.9	70.5	432	432

Source: Office for National Statistics[42]

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Table 2.2 Life expectancy at birth and UK wide rank, females in selected UK cities, 1993-95 and 2004-06

	Life expectancy at birth, females		UK wide rank (1-432)	
	1993-95	2004-06	1993-95	2004-06
Highest life expectancy UK wide	83.4 East Dorset	87.2 Kensington & Chelsea	1	1
Castlereagh	79.2	82.0	265	178
Brighton and Hove	79.7	81.8	191	197
Cardiff	79.3	81.3	247	255
Sheffield	79.2	81.2	256	276
City of Edinburgh	78.4	80.9	349	296
Stirling	78.6	80.6	331	323
Newcastle upon Tyne	77.8	80.3	391	349
Sunderland	77.4	79.8	410	388
Belfast	77.9	79.6	389	393
Stoke-on-Trent	77.8	79.6	392	394
Manchester	76.6	78.6	427	423
Liverpool	77.3	78.3	413	427
Glasgow City	75.2	77.0	432	432

Source: Office for National Statistics[43]

In the Republic of Ireland, life expectancy at birth in Co Dublin was 75.6 years for males and 80.4 for females (2002-2004). In Co Galway, male life expectancy was 75.7 years and female life expectancy 81.2. In a ranking of Local Government Districts in Northern Ireland and counties in the Republic of Ireland, Belfast was third lowest for both male and female life expectancy (Leitrim lowest for males at 72.8, Derry and Limerick for females at 79.3), while Castlereagh was among the top ten for both males and females (Ballymoney highest, 78.1 for males and 82.4 for females).[44]

Male life expectancy for the Republic of Ireland as a whole in 2002-04 was 75.5 and female life expectancy 80.6, which was slightly lower than Northern Ireland as a whole (although higher than Scotland).

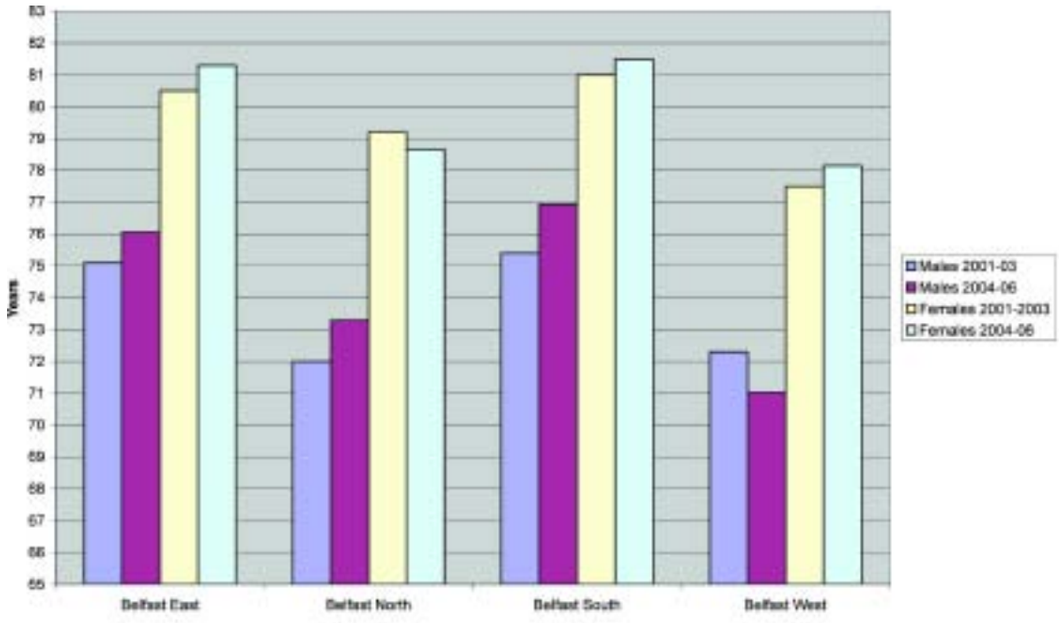
2.1.2 Local differences

There were also large differences in life expectancy within the Belfast Trust area, as illustrated in figure 2.3. In Belfast West Parliamentary Constituency, life expectancy for males in fact fell by over a year between 2001-03 and 2004-06 (to 71), which meant that the gap between Belfast West and Belfast South increased to just under six years. For females, life expectancy fell by half a year in Belfast North (to 78.7). The gap remained



largest between Belfast West and Belfast South also for female life expectancy (about 3.5 years in both 2001-03 and 2004-06).

Figure 2.3 Life expectancy at birth by Parliamentary Constituency, 2001/03-2004/06 (years)



Source: DHSSPS[45]

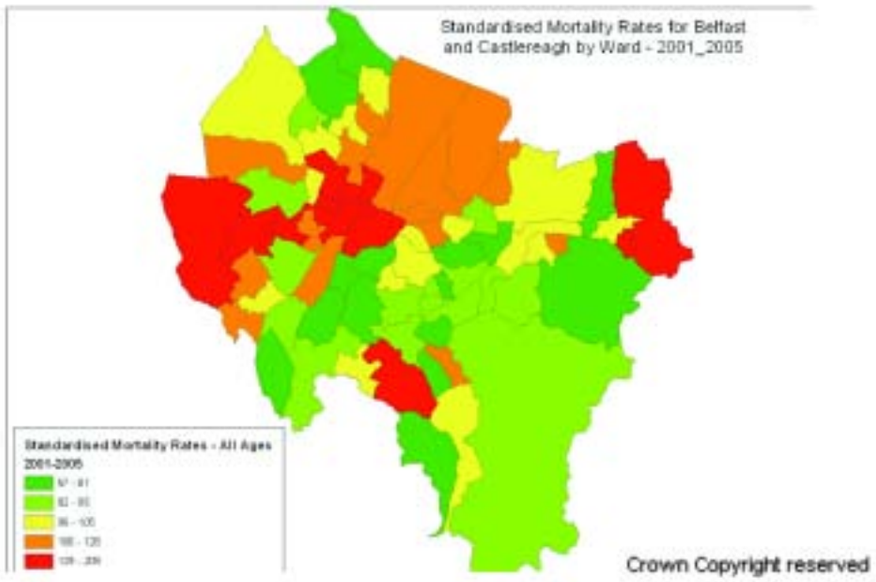
2.2 Mortality

The total number of deaths in Belfast has decreased by one third since 1980. In the ten years from 1996 to 2006 actual deaths in Belfast decreased by thirteen percent. In comparison those in Castlereagh have remained relatively stable.

In common with the rest of the UK, the major area of decrease in deaths was in circulatory diseases and in the younger age groups. This is consistent with the increases in life expectancy outlined above.

Belfast has the highest Standardised Mortality Rate of any Local Government District within Northern Ireland (114 at 2004-2006 NISRA data) and Castlereagh (90) one of the lowest. However within these are substantial variations. Figure 2.4 shows the Standardised Mortality Rate at electoral ward level for Belfast and Castlereagh for the period 2001-2005. The areas of highest deprivation have fifty to one hundred percent higher mortality rates than the Northern Ireland average.

Figure 2.4 Standardised Mortality Rates for Belfast and Castlereagh by ward, 2001-2005



Source: NISRA Demography[46]

2.3 Mental health: limited data, rising suicide rates in Belfast North and West

Very limited data is available on mental health and wellbeing. The Health and Social Wellbeing Survey 2001 and 2005-06 included the General Health Questionnaire (GHQ-12, designed as a screening tool aimed at indicating a potential mental health disorder). Both surveys found that just over 20% of respondents in the Eastern Health and Social Services Board area as well as Northern Ireland had a potential mental health disorder.[47] Meanwhile, analysis of GHQ-12 scores across the UK found that contrary to common assertions that mental health problems are more common in Northern Ireland, the highest scores were found in Wales.[48] The study suggested that people in Northern Ireland may employ a range of coping strategies that moderate the impact of conflict in everyday life, such as denial, habituation to violence and social cohesion.

Figures on prescriptions of drugs to treat anxiety (anxiolytic drugs) or anti depressant drugs show that around ten per cent of patients registered with a GP across the Belfast Trust area were prescribed these drugs in 2006. There were few differences within the area, but a small increase in the proportion since 2004.[49]



In the Republic of Ireland in 2005, eight per cent of residents in both Co Dublin and Co Galway were prescribed antidepressants.[50]

2.3.1 Suicide rates: large increases in Belfast North and Belfast West for men, Belfast West and Belfast East for women

Suicide has become a priority issue in Northern Ireland in recent years, following an increase in the number of suicides, especially among young men. It is a major issue particularly in Belfast North and Belfast West Parliamentary Constituencies, where the suicide rate for males aged 15 and over (calculated per 100,000 population and age standardised to the European population for comparability), doubled between 1991-97 and 1998-2004 and were among the highest across the UK. In a UK wide comparison conducted by the Office for National Statistics, suicide rates for males in Belfast North (rank 11 out of 426) and Belfast West (ranked 13th), and for females in Belfast West (ranked 33rd), were found to be over 50% higher than the UK average rate. It is notable that the suicide rate for females in Belfast East was 25-49% higher than the UK average, but for males 25-49% lower.[51]

Tables 2.3 and 2.4 illustrate the suicide rates and UK wide ranks for the four Belfast Parliamentary Constituencies, the nine other UK Healthy Cities plus Cardiff and Edinburgh. The ranks run from 1 to 426, with 1 representing the area with the highest suicide rate. It highlights the high suicide rate in Glasgow – indeed, 17 out of the 20 areas with the highest suicide rate for men, and 12 out of 20 for women, were in Scotland.

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Table 2.3 Suicide rate for men aged 15 and over and UK wide rank, selected UK areas 1997-97 and 1998-2004

	Rate		Rank	
	1991-97	1998-2004	1991-97	1998-2004
Belfast East	18.0	10.0	248	415
Belfast North	16.2	35.4	319	11
Belfast South	16.8	17.6	291	233
Belfast West	17.7	34.2	259	13
Glasgow City	43.0	41.6	1	4
Brighton and Hove	28.3	28.3	18	28
Manchester	30.9	25.8	14	54
Newcastle upon Tyne	22.1	25.0	102	64
Edinburgh	28.9	24.9	17	65
Stirling	35.7	24.2	9	76
Stoke-on-Trent	19.8	22.1	170	100
Liverpool	19.8	20.8	165	128
Sunderland	18.7	19.4	218	168
Cardiff	21.3	18.6	117	193
Sheffield	16.3	16.8	316	260

Rate calculated per 100,000 population and age standardised to European population
Source: Office for National Statistics (ONS)[52]

Table 2.4 Suicide rate for women aged 15 and over and UK wide rank, selected UK areas 1997-97 and 1998-2004

	Rate		Rank	
	1991-97	1998-2004	1991-97	1998-2004
Belfast East	n/a	7.7	n/a	64
Belfast North	7.2	7.6	98	68
Belfast South	6.1	4.2	173	301
Belfast West	n/a	9.2	n/a	33
Glasgow City	14.0	15.8	1	1
Cardiff	10.5	12.9	17	5
Brighton and Hove	11.2	10.8	11	17
Manchester	11.7	9.1	7	35
Newcastle upon Tyne	7.1	8.3	105	47
Liverpool	6.2	8.0	168	55
Stirling	10.8	7.6	15	66
Sunderland	4.9	5.5	275	192
Edinburgh	4.8	5.1	286	226
Stoke-on-Trent	4.7	5.1	300	227
Sheffield	4.7	3.7	296	337

Rate calculated per 100,000 population and age standardised to European population
*no rate provided for females in Belfast East and Belfast West for 1991-97 as fewer than 10 suicides were registered
Source: Office for National Statistics (ONS)[53]



Suicide rates in the Republic of Ireland appear higher than in Northern Ireland; the All Ireland Health Poverty Index developed by the Institute of Public Health in Ireland indicates that over the period 2001-2004 the rate in Dublin was 12.4 per 100,000 and in Galway 10.7 per 100,000 compared to 10.1 in Belfast. However, the Institute notes that the difference may be due to different methods employed to establish the suicide rate.[54]

2.3.2 Hospital admissions due to self harm

In terms of hospital admissions due to self harm, which typically is a sign of mental distress, Belfast consistently has a higher rate than Northern Ireland as a whole. In particular Belfast West Parliamentary Constituency stands out with a higher number of admissions than the other three Belfast constituencies. However, the number of admissions of people who live in Belfast West fell between 2000-04 and 2003-07, especially for women (-11%). Meanwhile, Belfast North recorded the highest increase for both men (12%) and women (18%)[55]. Women are more likely than men to be admitted to hospital due to self harm.

2.4 Limiting long term illness and disability: two way link to disadvantage

The Northern Ireland Survey of Activity Limitation and Disability 2007 showed that 21% of adults and eight per cent of children under 15 in Belfast had an activity limitation or disability, which was just above Northern Ireland averages.[56] The Census 2001 also found similar proportions, and the map in figure 2.5 highlights the association with higher levels of deprivation.

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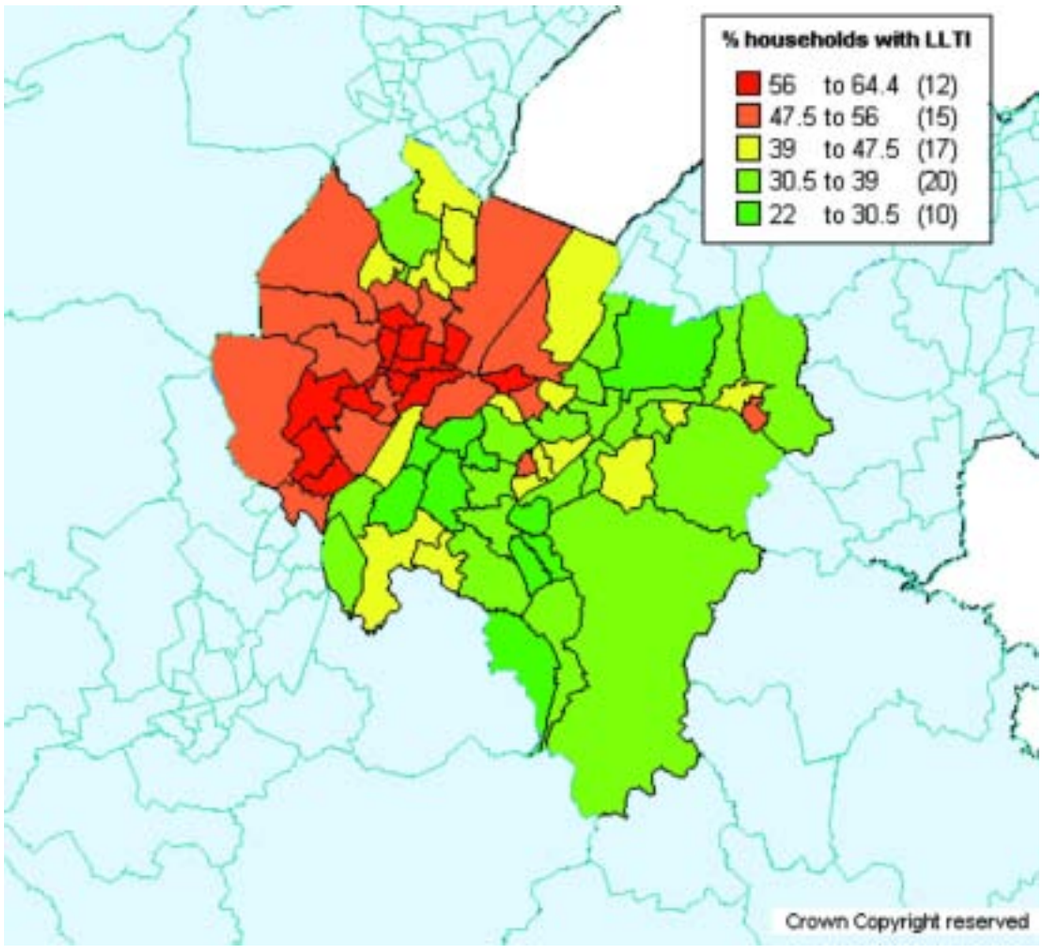
Figure 2.5 Households within wards with at least one person with limiting long term illness, Census 2001 (%)



Source: Census 2001, NISRA[57]

In a UK wide comparison, Belfast (24%) had a relatively high proportion of people with a long term limiting illness, while the proportion in Castlereagh (19%) was below mid range among all UK local authorities. High proportions were typically reported in more deprived local authorities, such as Liverpool (25%, most deprived local authority in England) and Glasgow (26%, most deprived local authority in Scotland).[58]

It can be noted that the Census 2006 in the Republic of Ireland showed that 11% of the population in Dublin City and eight per cent of the population in Galway City reported a disability or long term condition limiting daily activities.[59]



However, the link can work in two ways: people living in deprivation are more likely to have a long term condition, but people with a long term condition are also more likely to be unable to work, and permanent sickness or disability is the most common reason for economic inactivity. In both cases, long term illness is linked with low income; the Family Resources Survey indicates that 56% of households in the Belfast Trust area with at least one person sick or disabled had a weekly income of less than £300, compared to 42% of all households. The survey also estimates that people with a disability in the Belfast Trust derive 22% of income from wages and salaries, compared to 54% of all individuals.[60]

Figures on the main disability related benefits, Disability Living Allowance (DLA) and Incapacity Benefit, show that the number of claimants in Belfast West and Belfast North was almost twice that in Belfast East and Belfast South. The number of DLA claimants increased by just over ten per cent in all local areas across the Trust area between 2001 and 2007, while the number of Incapacity Benefit claimants fell by 40% or more across Parliamentary Constituencies.[61] It can be noted that there appears to be an association between the proportion of disability benefit claimants and rates of economic inactivity.

In Belfast and Castlereagh as well as Northern Ireland as a whole, about 12% of the population reported providing unpaid care in the Census 2001. The key difference was that in Belfast East Parliamentary Constituency about a quarter of carers were aged 60 and over, while 15% of carers in Belfast West were aged under 25.[62]

2.5 Accidental deaths and injuries: falling road deaths and injuries across area

Accidents are responsible for a relatively low number of deaths annually, but are a major cause of disability and ill physical and mental health. The longest record of accidental injury relates to road traffic collisions, and table 2.5 shows that the total number of persons killed and injured (casualties) has fallen substantially between 1998 and 2006. By 2006, there were no marked differences between PSNI District Command Unit areas. However, figure 2.6 shows that in comparison with data from other WHO European Healthy Cities in the UK, Belfast had the highest total casualty rate.

District Command Units correspond to Local Government District boundaries in Northern Ireland except in Belfast, which has been divided into four separate units. It should be noted that Shankill ward is part of North Belfast.

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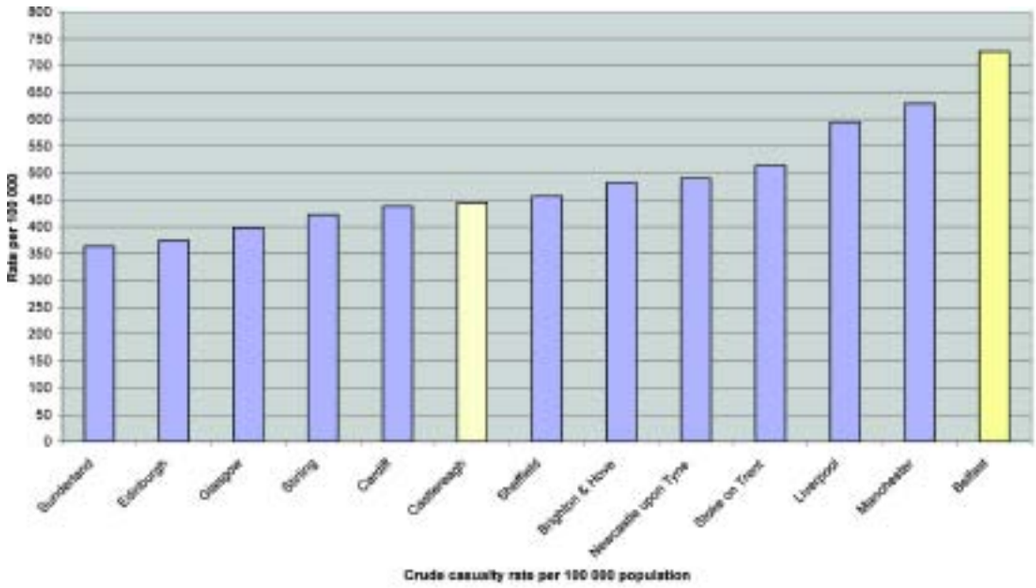
Table 2.5 All persons killed or injured in road traffic collisions and crude casualty rate by District Command Unit and Local Government District, 1998-2006 (no)

	Number of persons killed or injured				Crude casualty rate per 100 000 population		
	1998	2002	2006	Change 1998-2006	1998	2002	2006*
East Belfast	614	504	422	-31.3%		735.1	
North Belfast	899	684	566	-37.0%		830.1	
South Belfast	749	655	495	-33.9%		1003.1	
West Belfast	1000	985	463	-53.7%		1572.5	
Belfast	3262	2828	1946	-40.3%	1137.6	1031.7	726.1
Castlereagh	491	396	292	-40.5%	741.7	597.0	444.7
Belfast Trust	3753	3224	2238	-40.4%	1063.4	947.0	670.7
Northern Ireland	13402	11914	9182	-31.5%	798.8	702.2	532.5

*2006 rate calculated using 2005 mid year estimate
Source: Central Statistics Unit, PSNI[63]

Figure 2.6 Crude casualty rate per 100 000 population, selected UK cities, 2006



Source: Central Statistics Unit, PSNI; Department for Transport, England[64]; Welsh Assembly Government[65]; Scottish Government[66]

Data from the Urban Audit **(www.urbanaudit.org)**, an EU funded project aimed at systematically collecting information on quality of life in cities across the EU as well as Norway, Switzerland and Turkey shows that Belfast had a relatively high number of road traffic collisions leading to death per 10,000 population. In comparison with 173



European cities (2004 figures), Belfast was among the top 40% (0.03, rank 129). The lowest rate (0.01) was shared by a number of cities, including Milan in Italy, Frankfurt am Main and Bremen in Germany. The highest death collision rate was recorded in Trencín in Slovakia (0.23).

In international country level comparison, Northern Ireland had the highest death rate (75 per million) among the UK countries in 2006, but a lower rate than the Republic of Ireland (87 per million). Northern Ireland ranked just below the middle in EU wide comparison.[67] The number of people killed and injured in the Republic of Ireland also show a downward trend in recent years.

More in the full Profile:

The full Profile includes more detailed analysis of the above topics, as well as information on self reported health, health deprivation, Potential Years of Life Lost, carers, persons claiming Disability Living Allowance and Incapacity Benefit and deaths and hospital admissions due to home accidents. A separate chapter on health services provides an overview of GP density, dental registrations and availability of primary care in foreign languages.

3. Child health: large local variation linked to deprivation

Childhood and adolescence are crucial to future health and wellbeing, both because conditions in early childhood are directly linked to health outcomes and because lifestyle patterns are set in adolescence. A large body of research shows that deprivation and inequality experienced in childhood are key to explaining different health outcomes throughout life[69]. For example, children from more deprived backgrounds are less likely to do well at school, more likely to have a long term health condition or disability, and more likely to be disadvantaged as adults themselves.

The available information on child health in the Belfast Trust area appears to highlight precisely such differences explained by socioeconomic disadvantage.

3.1 Infant mortality: limited change, local differences

Infant mortality (deaths before the age of 1 per 1,000 live births) is highest in the Belfast West Parliamentary Constituency, which has a high concentration of deprivation and disadvantage. Belfast also has a higher rate than Castlereagh, or Northern Ireland as a whole, as is evident from table 3.1. The actual number of deaths has changed relatively little, but at a local level the rate may rise due to the overall drop in births. However, figure 3.1 indicates that Northern Ireland has a relatively high infant mortality rate in a European context, and the rates in all Belfast constituencies are above the Northern Ireland average.

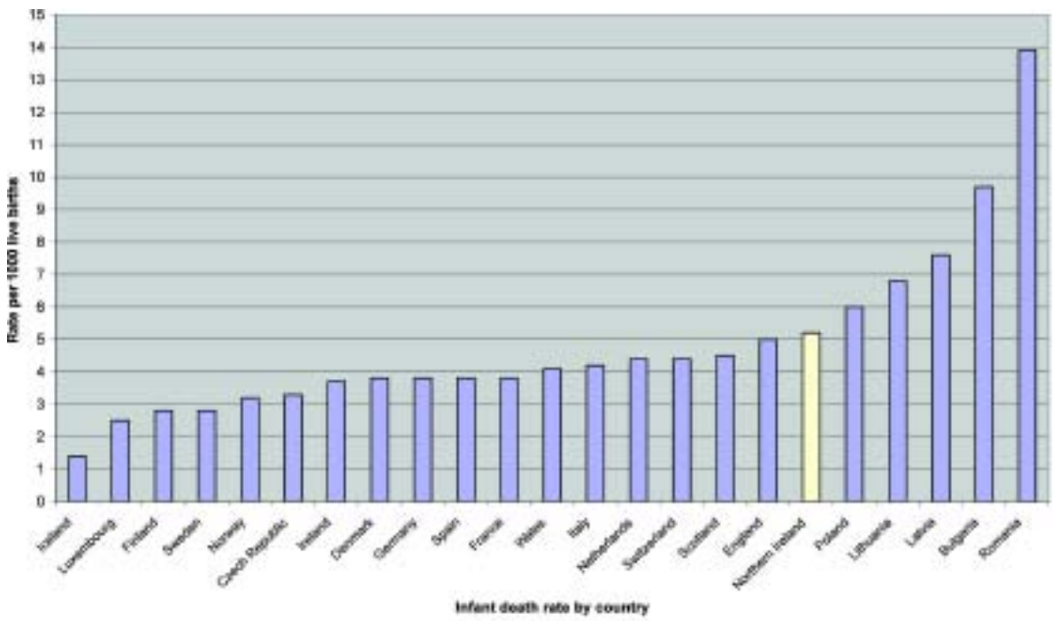
Table 3.1 Infant deaths and infant mortality rate by area, 1996-2006 (no and%)

	Infant deaths		Infant mortality rate	
	1996-2000	2001-2005	1996-2000	2001-2005
Belfast	117	117	6.4	7.1
Castlereagh	17	18	3.7	4.9
Belfast Trust	134	135	5.9	6.7
Northern Ireland	670	611	5.8	5.6
Belfast East	Not available	27	N/A	6.3
Belfast North		33		6.1
Belfast South		28		5.7
Belfast West		50		8.1

Source: Registrar General, NISRA[70]



Figure 3.1 Infant mortality rate per 1000 live births, selected European countries 2006



Source: Eurostat[71]; ONS[72]; General Register Office for Scotland[73]; NISRA

Among 238 European cities in 2004, Belfast (6.13, rank 75) was among the 40% with the highest infant mortality rates, while the lowest rates were under one per 100,000 and recorded in Finnish, Swedish, German and Polish cities. However, Stoke-on-Trent (7.7) and Manchester (8.8) had higher rates than Belfast, and fell in the top 20%.[74] Meanwhile, Co Dublin and Co Galway had lower rates at just over four per 1,000.[75]

3.2 Smoking in pregnancy and breastfeeding: high smoking rate linked to low breastfeeding rate in more deprived areas

Similar differences, illustrated in figure 3.2, can be seen in relation to smoking in pregnancy and breastfeeding. There was little change in the proportion of mothers reporting smoking while pregnant over the decade, while there was a small increase of about five percentage points in breastfeeding. It can be noted that high levels of smoking in pregnancy tended to be associated with low breastfeeding rates, which indicates a 'double disadvantage' for a number of babies. There were, however, smaller differences in relation to uptake of immunisations, which is over 90% for the primary vaccination against diphtheria, tetanus, pertussis (whooping cough) and polio and around 90% for the measles, mumps and rubella immunisation (over 93% in Castlereagh, 88% in Belfast).[76]

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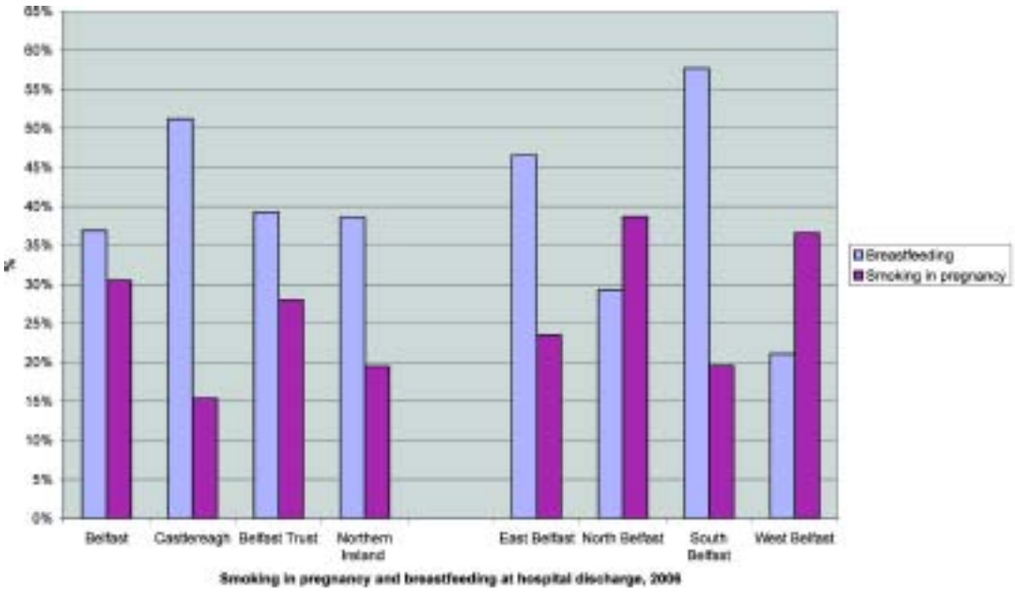
Figure 3.2 Proportion of mothers smoking in pregnancy and breastfeeding rate by area, 2006 (%)



Source: Child Health System[77]

In comparison with English data, smoking rates in pregnancy in Belfast (30%) are higher than anywhere in England and breastfeeding rates (37%) low. Castlereagh (15%) is closer to the English average (16%) in relation to smoking in pregnancy, but falls behind in breastfeeding rates (51%; English average 69% in 2006-07). In 2006-07, the highest rate of breastfeeding initiation (breastfed within the first 48 hours after birth) was found in the London borough of Lambeth (91%) and the lowest in Knowsley on Merseyside (33%).[78]

3.3 Dental health: local differences

Similar differences can be seen in dental health, with the proportion of caries free P1 and P7 children in the former North and West Belfast Trust area (in 2004-05, 39% of P1 pupils and 18% of P7 pupils caries free) much lower than in the former South and East Belfast Trust area (62% of screened P1 and 38% of screened P7 pupils caries free in 2004-05).[79] Children aged under 6 in Belfast North and Belfast West were also less likely to be registered with a dentist.[80] Children in Northern Ireland as a whole tend to have poorer dental health than England and Wales.[81]



3.4 Teenage parenthood

The association with social disadvantage is also clear in relation to teenage pregnancy. This is a key issue, as especially girls who become mothers early are less likely to complete their education, which has negative impacts on their health and wellbeing as well as their job prospects, and can increase the risk of persistent poverty and social disadvantage.

Table 3.2 illustrates the differences between Parliamentary Constituencies within the Belfast Trust area, and highlights the higher incidence of teenage parenthood in Belfast West and Belfast North Parliamentary Constituencies. It also shows that the birth rate to women aged 15-19 increased in all Belfast Parliamentary Constituencies between 2001 and 2006 except Belfast North, although the proportion of births to mothers aged under 20 remained virtually unchanged.

Table 3.2 Summary data on births to teenage mothers by Belfast Parliamentary Constituency, 2001-2006 (no and%)

	% of all births to mothers aged under 20		Birth rate per 1,000 women aged 15-19	
	2001	2006	2001	2006
Belfast East	7.0	7.4	24.5	26.3
Belfast North	13.3	11.6	44.3	42.0
Belfast South	5.5	5.9	15.5	16.4
Belfast West	14.0	13.9	39.8	41.3

Source: Registrar General, NISRA[82]

The birth rate for women aged 15-19 in Northern Ireland as a whole is lower than in England and Wales or Scotland, but higher than in the Republic of Ireland. Unfortunately comparable local level data is more difficult to obtain, one of the reasons being that abortion is available in England, Scotland and Wales but not Northern Ireland (and therefore teenage conceptions are the most commonly used measure in Britain).[83] In recent years, around 1200 women (of all ages) from Northern Ireland have travelled to England for a private abortion, but this is considered an underestimate as not all women will give their real address for fear of detection.[84]

In comparison with counties in the Republic of Ireland and Local Government Districts in Northern Ireland for 2004, Belfast had the highest rate of births to mothers aged 19 or under (25.9 per 1000) across the island of Ireland, while Co Dublin (16 per 1000) was ranked 8th lowest and Castlereagh below mid table (rank 38, 10 per 1000). Co Galway had one of the lowest birth rates to mothers aged 19 or under (7.9 per 1000).[85]

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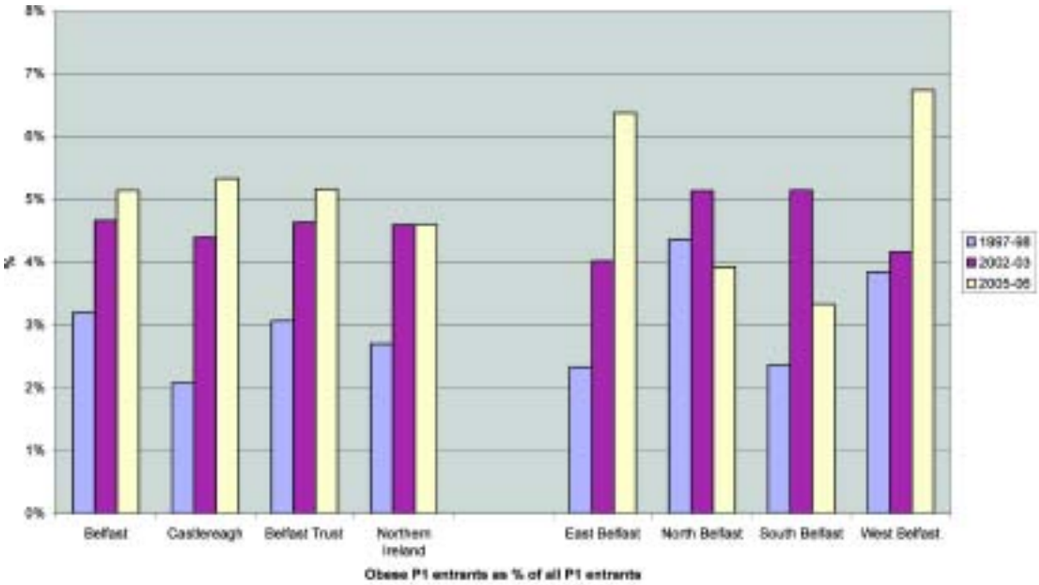
3.5 Childhood obesity

The differences in childhood obesity were less clearly related to deprivation, but showed that the proportion of P1 pupils classified as obese increased between 1996 and 2006, as illustrated in figure x. Figures for older children will become available in the future, which will help establish trends and trajectories.

Figure 3.3. Percentage of P1 pupils measured to be obese by area, 1997/98-2005/06



Source: Child Health System

Obesity in Northern Ireland is measured using the definition of the International Obesity Task Force[86], while elsewhere in the UK a different definition is used that gives higher obesity figures. This means that obesity figures across the UK are not comparable. However, it can be noted that among the WHO European Healthy Cities in England there was large variation in the proportion of Reception year pupils (4-5 year olds) found to be obese using the English definition, from six per cent in Brighton and Hove to over twelve per cent in Sunderland.[87]

3.6 Child poverty

Figures released by the Campaign to End Child Poverty **(http://www.endchildpoverty.org.uk)** in September 2008, based on the number of children living in workless households or households entitled to maximum Working Tax Credit, show that 77% of children in Belfast West fell in this category. This was the sixth



highest proportion across the UK, with the highest proportion 81% (in Birmingham Ladywood). Belfast North (67%) was ranked 27th, while the proportion in Belfast East (43%) and Belfast South (37%) was around mid table. The lowest proportion of children living in households receiving maximum Child Tax Credit or Working Tax Credit was found in Ribble Valley (6%); data based on figures in August 2006).

The Northern Ireland Multiple Deprivation Measure 2005 included a separate measure of Income Deprivation among Children (IDAC), which measured the proportion of children under 16 in each Super Output Area who lived in families in receipt of Income Support and income based Jobseekers' Allowance, or families in receipt of then key tax credits, whose equivalised income was below 60% of the UK median before housing costs. The measure is based on 2003 data, but a similar index has also been developed in England thus giving broadly comparable figures of child poverty. Super Output Areas are geographical units consisting of around 2000 people each, which have been created by dividing electoral wards, or in some rural areas integrating wards. The key advantage of this geographical level is that data are more comparable than at ward level, where population size can vary.

Figure 3.4 illustrates the proportion of children under 16 classified as income deprived, by Super Output Area. The figure has a close association with deprivation in general, and highlights concentration of income deprivation among children under 16 in Belfast North and Belfast West.

In total 72 Super Output Areas in the Belfast Trust area – all of them located within Belfast Local Government District - were among the 20% most deprived in Northern Ireland. In other words, in total 40% of the areas with the highest levels of child income deprivation were in Belfast, and in total 40% of Super Output Areas in the Belfast Trust areas were among the 20% most deprived.

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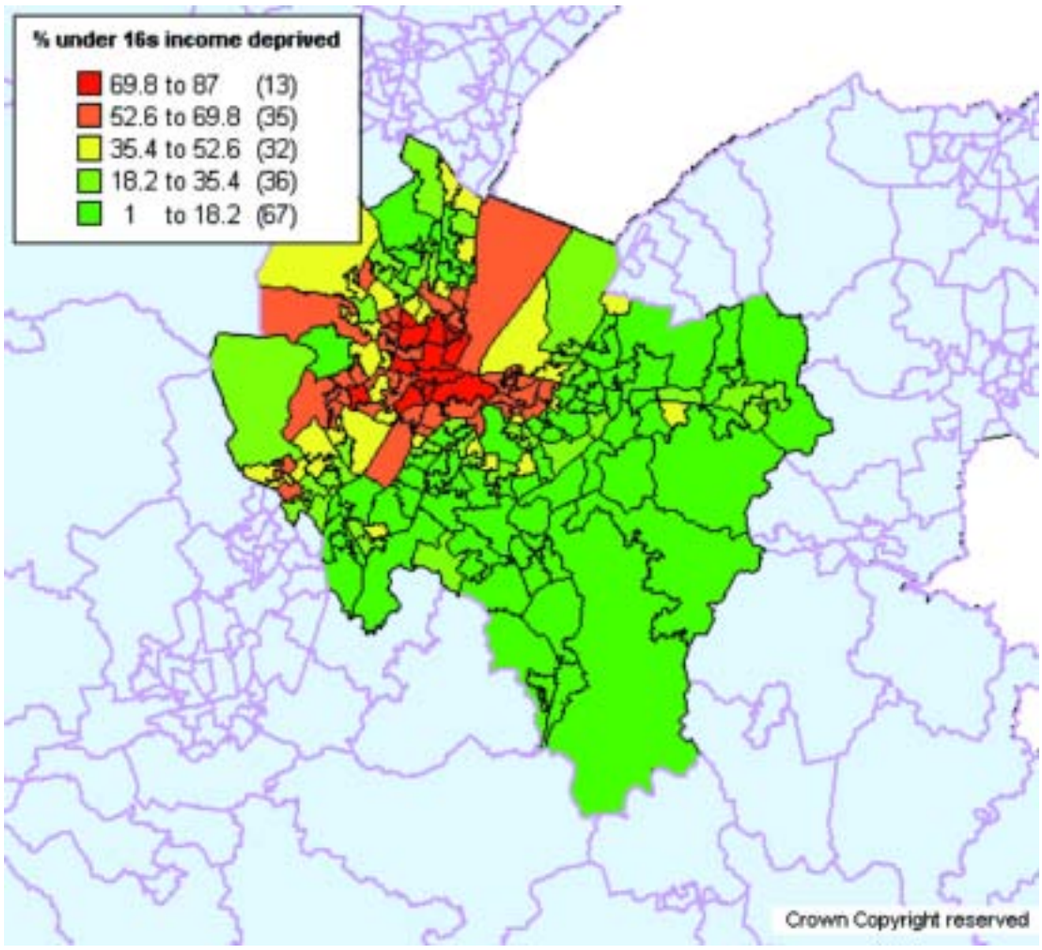
Figure 3.4 Proportion of children under 16 classified as income deprived by Super Output Area, Belfast Trust area 2003



Source: NI Multiple Deprivation Measure 2005, NISRA[88]

Among the seven WHO European Healthy Cities in England, Manchester had the highest level of income deprivation among children in 2005. There was major variation both between local authorities and within local authorities in England, highlighting concentration of deprivation. For example, in some areas in Manchester virtually all children (99%) lived in families in receipt of means tested benefits, while virtually no children did in the least deprived areas.[89]

In the Republic of Ireland in 2006, 20% of children aged under 16 lived in households with an income under the poverty threshold (60% of the national median), while over half of children lived in households with an equivalised gross income under 400 euros per week, or just over £300 per week.[90]



3.6.1 Income of children and families

The Family Resources Survey indicates that over the period 2003/04-2005/06, in total 25% of children in the Belfast Trust area lived in households with an income under 60% of the UK median (mid point of income scale), which is currently considered the relative poverty threshold. Across Northern Ireland, the same figure was 34% in 2005-06.[91]

A detailed study of child poverty in Northern Ireland has also been published by Save the Children in 2006.[92] This study, using Family Resources Survey data from 2002-03, found that a third of all poor children in Northern Ireland lived in the Belfast metropolitan area.

More in the full Profile:

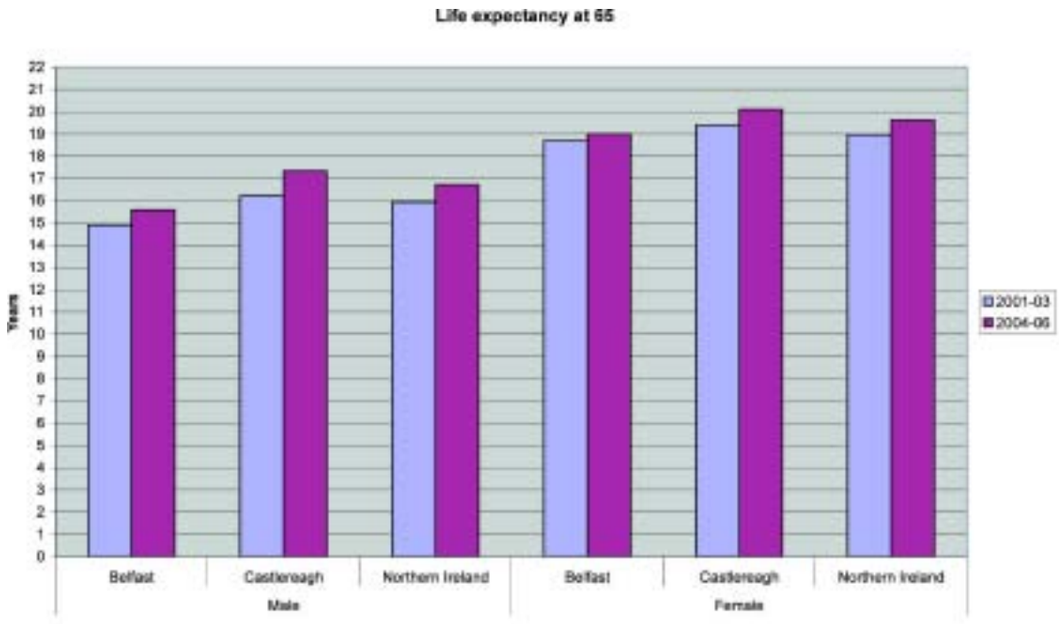
The full Profile chapter on children and young people includes a more detailed analysis of the above topics, as well as information on low birth weight, immunisations, mental health, young people's lifestyle choices, abortion, looked after children and lone parent families.

4. Health and wellbeing of older people

4.1 Life expectancy at age 65: increase larger in Castlereagh

Life expectancy at age 65 has been calculated at Local Government District level since 2001, and shows increases across the Belfast Trust area, as illustrated in figure 4.1. However, the increase was smaller in Belfast than Castlereagh or Northern Ireland as a whole, and as a result life expectancy at age 65 in Belfast fell further behind the Northern Ireland average (although the gap was less than in the case of life expectancy at birth).

Figure 4.1 Life expectancy at age 65 by sex and area, 2001/03-2004/06 (years)



Source: DHSSPS[94]

Table 4.1 illustrates life expectancy at age 65 in Belfast and Castlereagh in UK wide comparison. It shows that Belfast was among the 20 local authorities with the lowest life expectancy at age 65 for males, while Castlereagh was just above the mid point of the table. Belfast was ranked higher in terms of female life expectancy at age 65, and was above several WHO European Healthy Cities in the UK. Compared to life expectancy at birth, both Belfast and Castlereagh were ranked somewhat better. Glasgow had the lowest life expectancy in the UK for both males and females also at age 65.

In 2002, life expectancy at age 65 in the Republic of Ireland was 15.1 years for males and 18.7 years for females.[95]



Table 4.1 Life expectancy at age 65, selected UK cities, 2004-06

Males			Females		
	Life expec-tancy at 65	Rank (1-432)		Life expec-tancy at 65	Rank (1-432)
Kensington & Chelsea	22.0	1	Kensington & Chelsea	24.8	1
Castlereagh	17.3	208	Brighton and Hove	20.6	114
Brighton and Hove	17.2	222	Castlereagh	20.0	201
Sheffield	16.9	278	Cardiff	20.0	216
Cardiff	16.8	293	City of Edinburgh	19.7	265
City of Edinburgh	16.5	329	Sheffield	19.6	281
Stirling	16.3	351	Belfast	19.1	349
Newcastle upon Tyne	16.2	364	Stoke-on-Trent	19.0	353
Sunderland	15.7	404	Newcastle upon Tyne	19.0	355
Stoke-on-Trent	15.6	406	Stirling	19.0	361
Belfast	15.6	412	Manchester	18.4	399
Liverpool	15.3	425	Sunderland	18.4	405
Manchester	15.3	426	Liverpool	17.7	427
Glasgow City	13.8	432	Glasgow City	17.3	432

Source: Office for National Statistics[96]

4.2 Dementia: increases expected in line with ageing population

In 2007, research commissioned by the Alzheimer's Society UK established new estimates of the prevalence of dementia in the UK, including Northern Ireland. The findings of the Dementia UK study indicate that the number of people with dementia in Northern Ireland will increase rapidly, from an estimated 16,000 today to 20,500 by 2017 and 47,000 by 2051, which represents a 30% increase by 2017 and a tripling by 2051.

The estimates indicate that a comparatively low proportion of people aged 65 and over in Belfast will be affected by dementia, while the proportion will be higher in Castlereagh, as illustrated in figure 4.2. Around two thirds of people currently affected are women, which reflects both higher overall mortality among men and higher age specific prevalence in women. Nevertheless, the increase in Northern Ireland is projected to be the lowest across the UK. Magherafelt is estimated to have the lowest proportion (about 4.5%) of the population aged 65 and over UK wide affected by dementia in both years.

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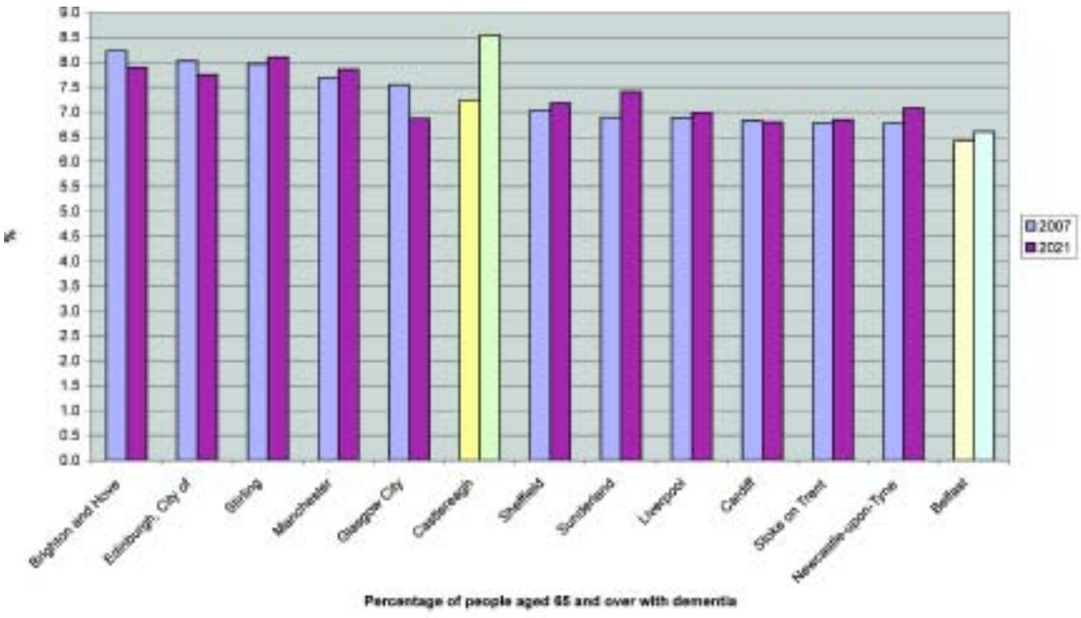
Figure 4.2 Estimated proportion of population aged 65 and over affected by dementia, selected UK cities, 2007 and 2021*



*Northern Ireland estimates to 2017
Source: Dementia UK study, Alzheimer's Society[97]

4.3 Older people's income

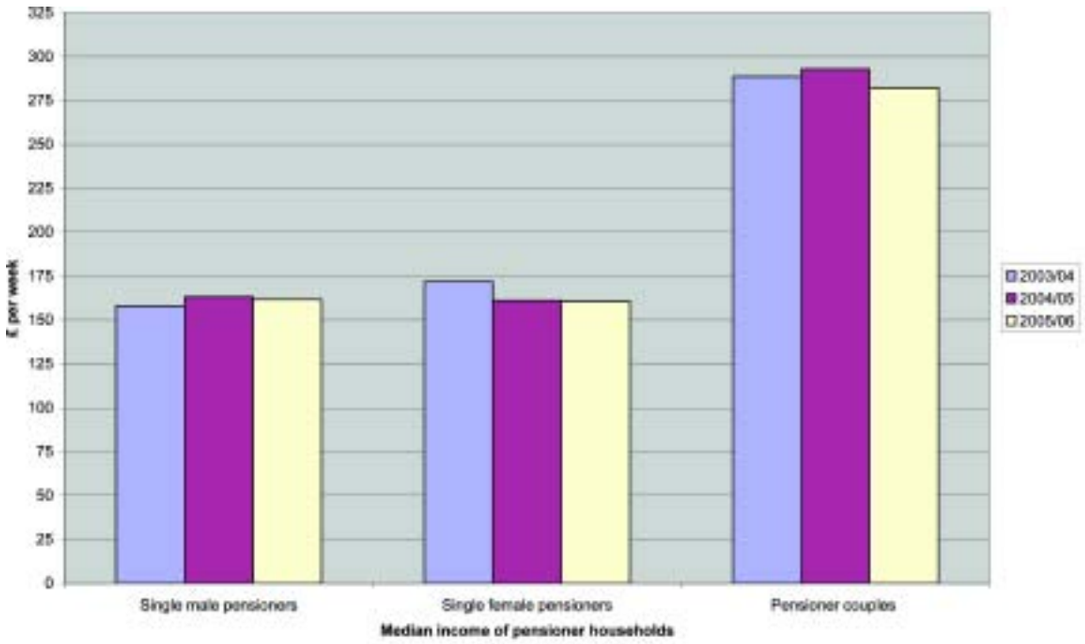
Older people are among the population groups most likely to live on low incomes. According to the Family Resources Survey (2003/04-2005/06), in the Belfast Trust area over 65% of households with one or more adults over pension age had an income of less than £300 per week. This rose to 88% for pensioners living alone, of whom 55% had an income of under £200 per week.[98]

The median income for different types of pensioner households, before housing costs in Northern Ireland over the period 2003/04-2005/06 is illustrated in figure 4.3. It highlights the low income of single pensioners, although it should be noted the sample sizes are small and therefore especially small differences can be due to statistical error.

The figures across Britain were very similar[99], although it can be noted that the average living costs in Northern Ireland are higher than in Britain.



Figure 4.3. Median income (before housing costs) of pensioner households by household type, Northern Ireland 2003/04-2005/06



Source: Family Resources Survey[100]

More in the full Profile:

The full profile chapter on the health and wellbeing of older people includes a more detailed analysis of the above topics, as well as information on self reported health, hospital admissions of people aged 65 and over, long term limiting illness, nursing and care homes as well as people claiming Retirement Pension and Pension Credit.

In 2006, Belfast Healthy Cities also published a detailed profile of the health, social and living conditions of older people in Belfast. The publication *Older People: Health, Social and Living Conditions* is available through Belfast Healthy Cities website at **www.belfasthealthycities.com/?pageid=24**.

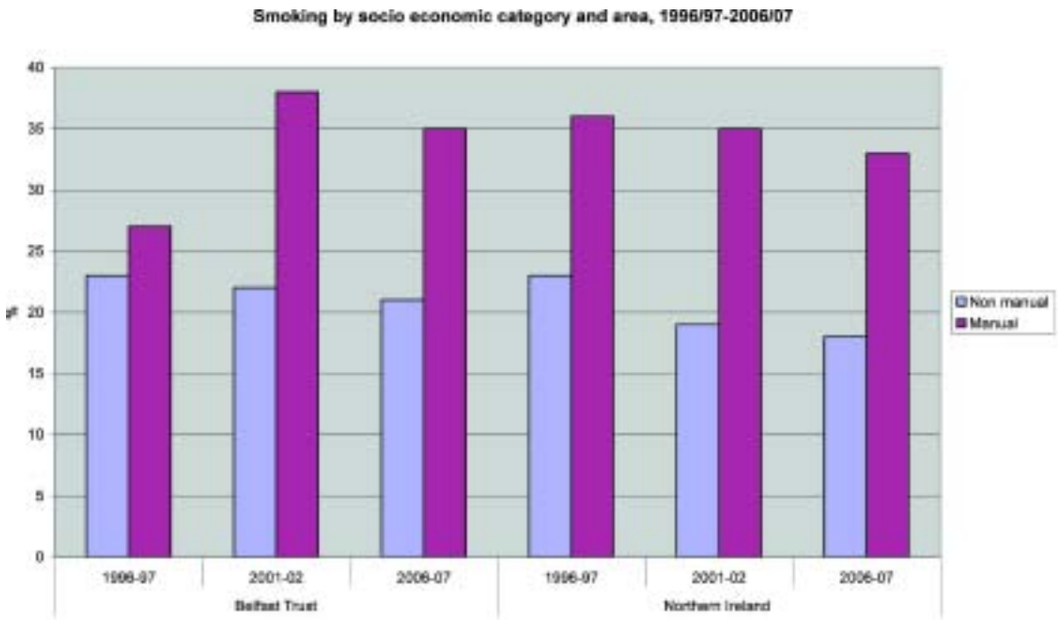
5. Lifestyle: limited change, evidence of increasing inequalities

5.1 Smoking

Figures on smoking prevalence from the Continuous Household Survey show little change between 1996/97 and 2006/07, and a growing gap in smoking between manual and non manual occupation groups. It should be noted that these figures relate to one survey only, and due to small sample sizes below Northern Ireland level are subject to a degree of uncertainty, as well as an element of random variability between years. However, similar trends and gaps have also been observed elsewhere, although smoking prevalence is slightly lower in England and Wales than in Northern Ireland, Scotland or the Republic of Ireland.

Smoking remains the single major cause of preventable ill health and premature death, and is responsible for about 2,300 deaths per year.[101] It has been suggested that smoking is more common among people in lower socioeconomic groups for a number of reasons related to their disadvantaged position in society, for example as a means of coping with stress arising from such living conditions.[102]

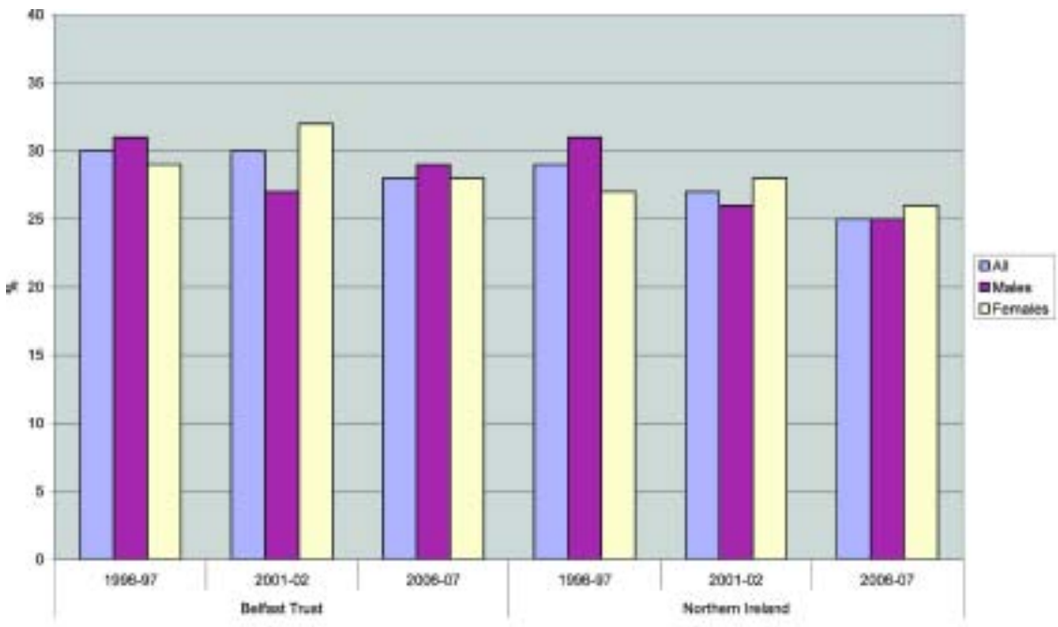
Figure 5.1 Smoking by occupation type and area, 1996/07-2006/07 (%)



Source: Continuous Household Survey, NISRA[103]



Figure 5.2 Smoking by sex and area, 1996/97-2006/07(%)



Source: Continuous Household Survey, NISRA[104]

5.1.1 Smoking among young people

Health Board level figures on smoking among 11-16 year olds indicate that in 2003, over a third of respondents in the EHSSB area reported having tried cigarettes and of those who had, 31% (29% in 2000) smoked daily. The EHSSB area covers the Local Government Districts of Ards, Down, Lisburn and North Down as well as Belfast and Castlereagh. Meanwhile, across Northern Ireland the proportion of 11-16 year olds smoking weekly fell from 12% in 2000 to 7.5% in 2007.[105]

Directly comparable figures are not available from elsewhere in the UK, but it can be noted that the international WHO survey Health Behaviour in School Aged Children found that 18% of 15 year old girls in England smoked at least once a week compared to 13% of 15 year old boys, while the proportions in Scotland were 23% of girls and 14% of boys, and in Wales 23% of girls and 12% of boys. In the Republic of Ireland, 20% of 15 year old girls and 19% of 15 year old boys were smoking weekly.

The study found that in all three UK countries, the gender difference was statistically significant, while smoking among girls in Scotland and Wales was above the average for all participating countries (19%, highest in Greenland at 48%, lowest in Israel at 7%).[106]

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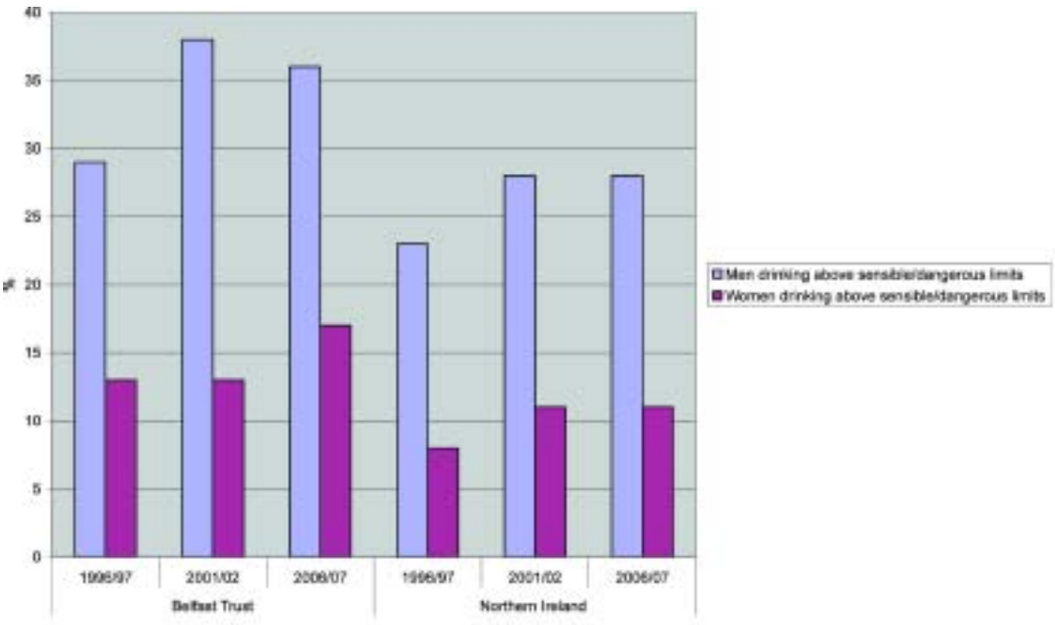
5.2 Alcohol consumption: increase in people drinking above sensible limits, small socio economic differences

In relation to alcohol consumption, there has been a small increase in the proportion of 'drinkers' in the Belfast Trust area, but the proportion of people who drink above sensible (more than 21 units of alcohol per week for men and 14 units for women) or dangerous limits (above 50/35 units per week) has increased more, as illustrated in figure x.

Figure 5.3 Proportion of all respondents drinking over sensible limits by sex and area, 1996/97-2006/07



Source: Continuous Household Survey, NISRA

Men are more likely to drink alcohol than women. In 2006-07, in total 87% of men in the Belfast Trust stated they drink, compared to 80% of women. However, women in non manual occupations are more likely to drink than women in manual occupations (in the Belfast Trust area in 2006-07, 87% compared to 71%), which is the only notable socioeconomic difference.[107]

The Young People's Behaviour and Attitudes survey indicated that 66% of 11-16 year olds in the EHSSB area had tried alcohol. Directly comparable data is not available from elsewhere, but data from the Health Behaviour of School Age Children survey indicates that over a third of 15 year old boys as well as girls in England, Scotland and Wales reported drinking weekly, compared to just under 20% in the Republic of Ireland.[108]



It can be noted that figures for the Republic of Ireland indicate that alcohol consumption, measured in litres of pure alcohol per person and year, has doubled since 1971 from five to 11.4 litres, and increased by nearly 50% between 1991 and 2001 (from eight to 11.4 litres).[109]

5.3 Drug use: rise in cocaine use

The Drug Use in Ireland and Northern Ireland 2006-07 survey indicates that 37% of respondents in the EHSSB area reported ever taking any illegal drug (lifetime use). About six per cent of respondents reported taking any illegal drugs in the last month. At Northern Ireland level, 28% of respondents reported ever taking drugs and four per cent reported last month use.

In the EHSSB area, the most commonly used drug was cannabis (32% lifetime use, 4% last month) followed by ecstasy (10% lifetime use) and LSD and poppers (9% lifetime use). About a quarter also reported ever using sedatives or tranquillisers, and 21% also reported ever using antidepressants (8% reported using in last month). A statistically significant change from the previous survey in 2002-03 was in last year use of cocaine and poppers (up from around one per cent to just under three per cent in 2006-07).

Meanwhile, in the Republic of Ireland, 24% reported ever taking any illegal drugs and three per cent reported use in the last month. In the East Coast Regional Drugs Taskforce area, which covers the Dublin area, last year drug use in 2006-07 was 12% and showed an increase from 2002-03. In this area, in total nine per cent of respondents reported ever taking cocaine.[110]

In 2006-07, just over 40% of people referred to drug treatment services in the EHSSB area lived in the former North and West Belfast HSS Trust area, with Falls ward ranked highest (116 referrals).[111]

5.4 Obesity and physical activity: increasing issue

Limited long term data is available in relation to physical activity and Body Mass Index, which is a weight to height ratio (BMI = weight in kilos divided by height in metres squared) and the most common measure of overweight and obesity among adults.

In the Health and Social Wellbeing Survey 2005-06, over half of respondents in both the EHSSB area and Northern Ireland were found to be overweight (BMI 26-30) or obese (BMI >30), with over 20% obese.[112] This level of obesity is in mid range compared to

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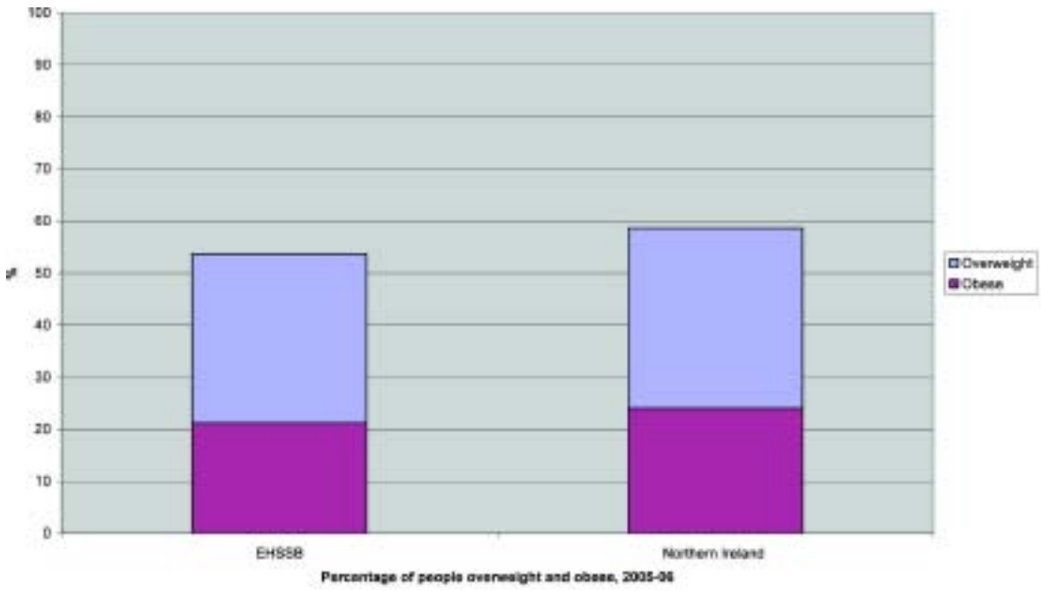
other WHO European Healthy Cities in the UK. It can be noted that Stoke-on-Trent had the highest rate of obesity across England at 31% of adults.[113]

Figure 5.4 Percentage of population aged 16+ overweight or obese by area, 2005-06



Source: Health and Social Wellbeing Survey 2005-06, NISRA

The Health and Social Wellbeing Survey also indicates that around 30% of respondents in both the EHSSB area and Northern Ireland stated they were physically active for at least 30 minutes on most days. However, in both the 2001 and 2005-06 surveys over 20% of respondents stated they were sedentary.[114] Unfortunately very limited information on physical activity at local level is available, but usage data from Belfast City Council leisure centres showed a notable increase between 2006-07 and 2007-08.[115]

There is also limited data on usage of open space in the Belfast Trust area, but maps of public and private open space have been developed for the Belfast Metropolitan Area Plan (BMAP) by the Planning Service within the Department of the Environment.[116]



5.5 Sexual health: increasing incidence of sexually transmitted infections

Figures on sexually transmitted infections (STIs) and HIV are only available at Northern Ireland level due to issues of confidentiality, but show an increase especially in Chlamydia infections and among people aged 20-24. HIV infection remained very rare in Northern Ireland and the diagnosis rate was lower than in England, Scotland, Wales or the Republic of Ireland, although new diagnoses increased from 17 in 1996 to 56 in 2006. A specific issue was a syphilis epidemic (diagnosis rate increase from zero to 1.7 per 100,000 population), which was first noted in 2001 and is associated particularly with sex between men.[117]

More in the full Profile:

The full Profile chapter on lifestyle includes a more detailed analysis of the above topics.

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Part 2

6. Housing: Increasing home ownership and improving housing quality

Over the last decade, the key trends in housing have been increasing home ownership and a growing private rented sector, as well as steadily decreasing levels of unfit and non decent housing. As in the rest of the UK house prices increased substantially over the period with the greatest increase in Belfast occurring between 2005 and 2007, indicating a problem with affordability and a marked deterioration of the position of first time buyers. The social housing waiting list and levels of homelessness also increased while there was a shortfall in the projected levels of new build social housing provision.

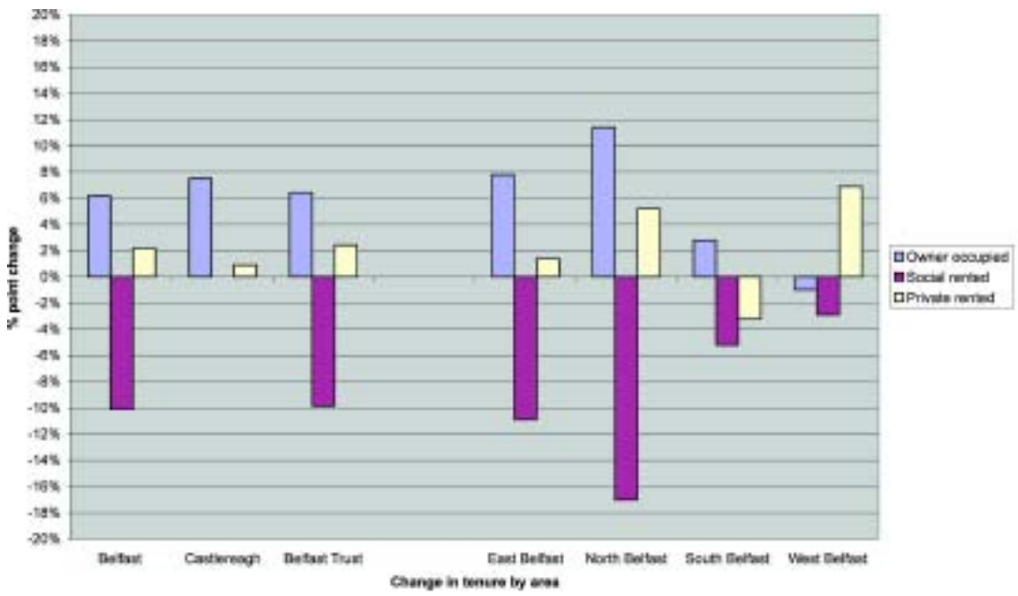
6.1 Increasing home ownership

Home ownership increased over the decade in Belfast as well as Castlereagh, but remained notably higher in Castlereagh (78%) than Belfast (54%) in 2006. Within Belfast, home ownership was higher in the east (65%) compared to the west (43%), where home ownership did not increase. Analysis of social accommodation (Housing Executive owned stock) by Belfast sector shows that the highest proportion was in west Belfast (38%) and the lowest was in east Belfast (10%).

Figure 6.1 illustrates tenure change, and indicates that home ownership increased more in Castlereagh than Belfast. Within Belfast, home ownership increased most in north Belfast (+11 percentage points), where social rented accommodation also decreased most (-17 percentage points). A similar, but less marked change took place in east Belfast. Meanwhile, the major change in west Belfast was a marked rise in private rented accommodation.



Figure 6.1. Change in tenure by area, 1996-2006 (percentage points)



Source: House Condition Survey 1996, 2001, 2006, NIHE[118]

Data from the EU funded Urban Audit project show that in European comparison, Belfast fell in the mid range both in 2004 (ranked 17 among 36 cities) and 2001 (ranked 145 among 270 cities) in relation to home ownership. However, UK cities tended to have a higher proportion of house dwelling than other cities (Belfast 89%, place 11 in 2001). This highlights the culture of low density living also in cities, which is less typical elsewhere in Europe.[119]

Figures from the Census 2006 in the Republic of Ireland show high levels of home ownership. In Co Dublin (Dublin City, Dún Laoghaire-Rathdown, Fingal and South Dublin), 68% of dwellings were owner occupied, compared to 73% in Co Galway and 75% in the Republic of Ireland as a whole. The private rented sector was larger than the social rented sector across the Republic of Ireland.[120]

6.2 Improving housing quality

Housing quality, measured as the proportion of dwellings that meet the Decent Homes standard, has also improved over recent years, as shown in figure x. It can be noted that a similar change has taken place in England.

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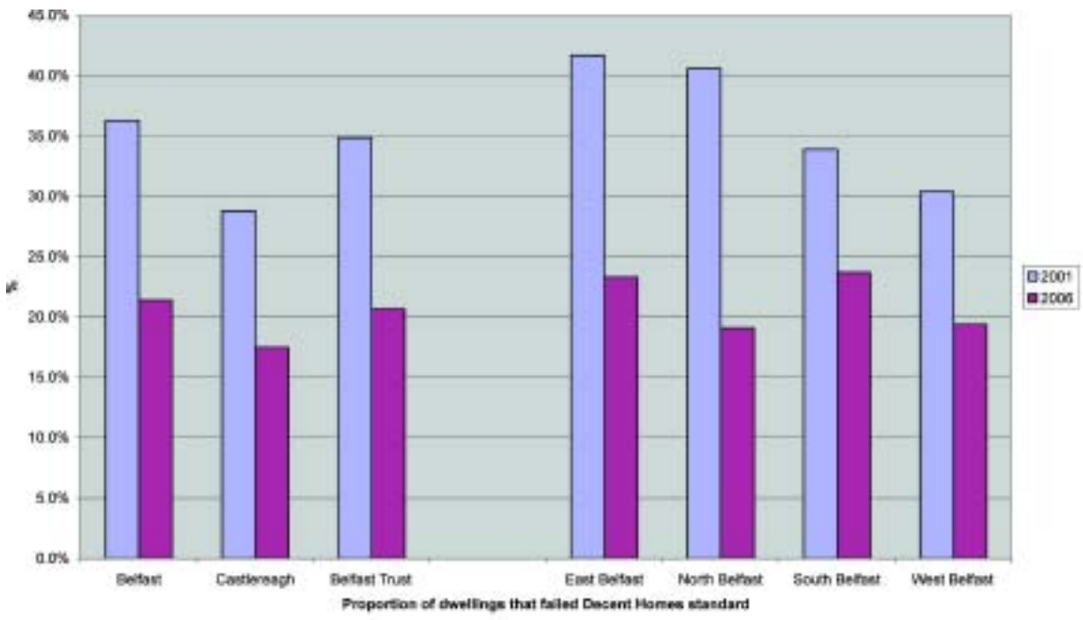
Most of the dwellings that failed to meet the Decent Homes Standard failed on the element of thermal comfort.

Figure 6.2 Dwellings classified not decent as proportion of all dwellings by area, 2001 and 2006



Source: 2001 House Condition Survey, 2006 House Condition Survey; NIHE[121]

Investment in physical regeneration has contributed to improvements in housing quality but also more generally improved housing contributes to a better quality of life. The number of unfit properties in Belfast has dropped from nearly 8,470 in 1996 to 6,660 (around 5%) in 2006. This has been due to a number of factors including physical renewal particularly in areas of inner city Belfast, with demolition of unfit housing and replacement with new build; investment in capital improvements to social housing stock; and also grant funding for private sector housing improvements.

Though there have been significant improvements in the housing conditions in Belfast over the last 10 years, there remain persistent pockets of poor housing and poor environmental conditions.



6.3 Homelessness, the waiting list and the need for social housing

During the period the social housing waiting list, including the number in housing stress and the number of homeless increased substantially. The most common reason for homelessness was breakdown in sharing arrangements or family dispute.

Homelessness increased substantially between 1996 and 2006 and the number presenting as homeless has more than doubled in most housing districts across the Belfast Trust area. By comparison in England over the same period homeless numbers substantially reduced. In England there has been an emphasis on homelessness prevention which has reduced the number of potential homeless applicants from presenting for a homelessness assessment. In Northern Ireland the response to homelessness is through the range of legislative duties, including prevention work but the homelessness application is also accepted and registered, hence the larger numbers presenting here.

In Belfast significant initiatives have been introduced to alleviate some of the negative impacts on both physical and mental health and wellbeing that are associated with homelessness. These include from early 2005 the existence of a Multi-disciplinary Homeless Support Team, supporting clients back into mainstream health and housing services. Also the introduction of Street Out Reach Services and a Crash Facility has reduced the number of people sleeping rough in the city. As part of our Rough Sleeper Strategy a “wet” hostel was opened in late 2005. Belfast Health and Social Care Trust have also appointed two dedicated nurses to work with people living in hostels, providing primary health care and arranging for other health services.[122]

6.4 Fuel poverty: increasing across area

Fuel poverty is defined as spending more than 10% of total household income on all heating, including electricity (in order to maintain a temperature of at least 18 degrees Celsius within the dwelling). It is affected by a number of factors, but most importantly household income and energy prices.

Due to the large rises in energy costs in recent years, fuel poverty has begun to affect a higher proportion of households. While figures are not available, it is also likely that those already affected have become worse off financially. A number of government funded schemes are in place to alleviate fuel poverty, primarily by improving energy efficiency in low income households (eg. Warm Homes).

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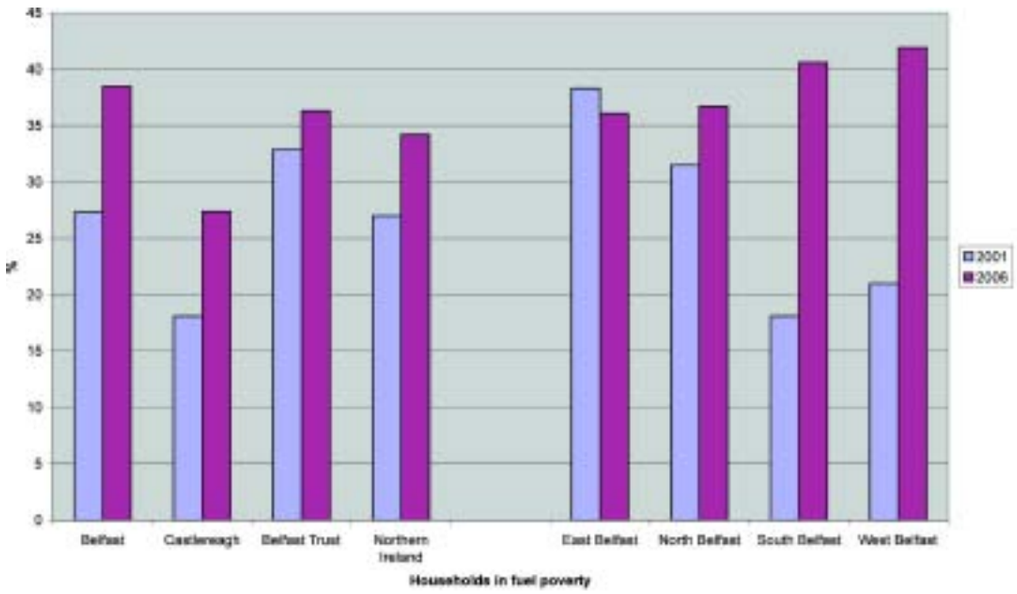
Figure 6.3 shows that fuel poverty increased notably between 2001 and 2006, and slightly more in Belfast than Castlereagh, which continued to have a fuel poverty rate below the Northern Ireland average. The increase within Belfast was particularly large in west Belfast. It should be noted that the low figure for south Belfast in 2001 is due to the survey methodology used for the 2001 House Condition Survey; field work during summer months meant surveyors could not access student accommodation, and this was addressed for the 2006 survey.

Figure 6.3 Households in fuel poverty by area, 2001 and 2006



2001 figures are recalculations based on model used for 2006 calculations
Source: House Condition Survey 2001, 2006; NIHE[123]

Across Northern Ireland, lone pensioner households (62%) were most likely to be fuel poor, followed by households with a head aged 75 or over and households where the head was unemployed (55%). Fuel poverty fell with household income, from 75% of households with total income under £7000 to 25% of households with an income between £15,000 and £19,999 and 8% of households with an income between £20,000 and £29,999.



6.5 Adaptations for people with a disability

The provision of adaptations in social housing and Disabled Facilities Grants for the owner occupied and private sector continues to help people with a disability so they can live independently or manage daily activities more easily.

6.6 Supporting People and partnership working for housing related support

The Supporting People Programme was introduced in Northern Ireland in 2003. It has enabled a better strategic and co-ordinated approach to the planning for and provision of housing related support services for a range of client groups, including older people, homeless people, people with a disability and people with mental health problems, to help them maintain their independence and live more independent lives. In Britain, the programme is administered by Local Authorities. In Northern Ireland it is administered by the Housing Executive with services commissioned in partnership with the four Health and Social Services Boards and the Probation Board Northern Ireland. Expenditure on Supporting People funded schemes in the Belfast area accounts for around 40% of the Supporting People budget with older people being the main client group.[124]

More in the full Profile:

The full Profile chapter on housing includes a more detailed analysis of the above topics, as well as information on the housing market trends and affordability, new build developments and adaptations and support services for people with disabilities and vulnerable groups.

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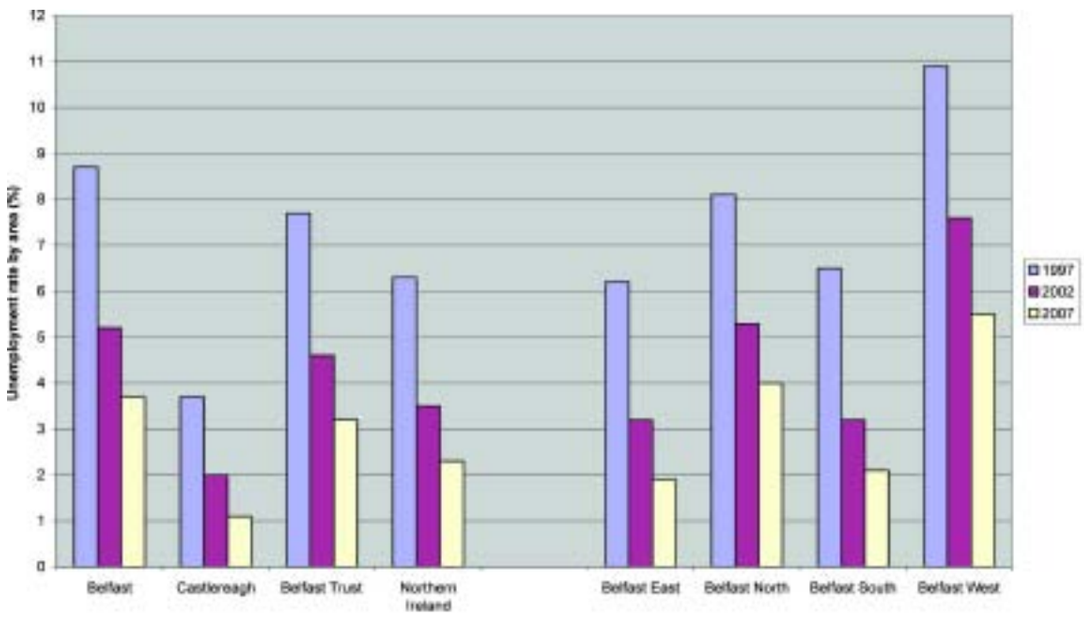
7. Income and employment

7.1 Labour market: reduction in unemployment but continued high economic inactivity in Belfast

One example where Belfast has recorded higher than average improvement is in falling unemployment. Between 1997 and 2007, the unemployment rate (persons claiming unemployment benefit, ie. Jobseekers' Allowance, as a proportion of the working age resident population) in Belfast fell by five percentage points, compared to a decrease of three percentage points in Castlereagh and four percentage points in Northern Ireland as a whole. The number of long term (12 months+) claimants also fell by 80% or more across the Local Government Districts as well as Parliamentary Constituencies. Unemployment remained, however, higher in Belfast than Castlereagh or Northern Ireland on average, as illustrated in figure 7.1.

The figure also shows that while substantial reductions in unemployment were observed in all Parliamentary Constituencies, the unemployment rate was consistently highest in Belfast West, where the number of people claiming Jobseekers' Allowance in 2007 was twice that of Belfast South. The difference increased slightly over time.

Figure 7.1 Unemployment rate by area, 1997-2007 (%)



Proportions for Parliamentary Constituencies in 1997 and 2001 calculated using mid-2001 working age population, for 2007 using mid-2005 working age population.
Source: DETI Claimant count (Nomis)[125]



In comparison with the other WHO European Healthy Cities in the UK, Belfast had the second highest unemployment rate, with only Liverpool recording a higher rate, (5.1% in 2006-07). Castlereagh had a lower rate than any WHO European Healthy City in the UK in 2007.[126]

It can be noted that in Dublin (County and City), the unemployment rate fell by a similar amount as in Belfast, from 10.7% in the last quarter of 1997 to 4.8% in quarter 3 of 2007 (although it should be noted the rate in the Republic of Ireland is calculated as a percentage of the total population aged 15 and over).[127]

The decrease in unemployment coincides with an increase in employee jobs, which took place in Belfast (+13%) as well as Castlereagh (+23%) and Northern Ireland (+17%) between 1997-2005, although the increase in Belfast was less than the Northern Ireland average. Within the four Parliamentary Constituencies, the number of employee jobs grew by nearly nine per cent in Belfast South (which includes Belfast city centre) or twice as much as in Belfast West (+4.5%) and more than four times as much as in Belfast North (+2%). In Belfast East, manufacturing remained the second largest sector of employment, while the other constituencies had overwhelmingly service dominated labour market structures.[128]

It can be noted that although the analysis here does not focus on full time versus part time jobs, part time employment is more common in Belfast (26% in 2004, rank 54 out of 151 cities) than most other European cities.[129]

7.2 Economic inactivity: widening gap within Belfast Trust area

Although the reduction in unemployment is very good news, the unemployment rate does not tell the full story of change in the labour market. Another key factor is the economic inactivity rate, which shows the proportion of the population neither working nor seeking work, due to permanent illness or disability, full time study, family duties or other reasons. This shows notable improvement in Castlereagh, where economic inactivity fell by over ten percentage points between 2000 and 2006, but limited change in Belfast or Northern Ireland as a whole, where economic inactivity is close to 30%.[130] Similarly, there was little change in the number of people claiming Income Support, which is the key benefit for people unable to work long term.[131]

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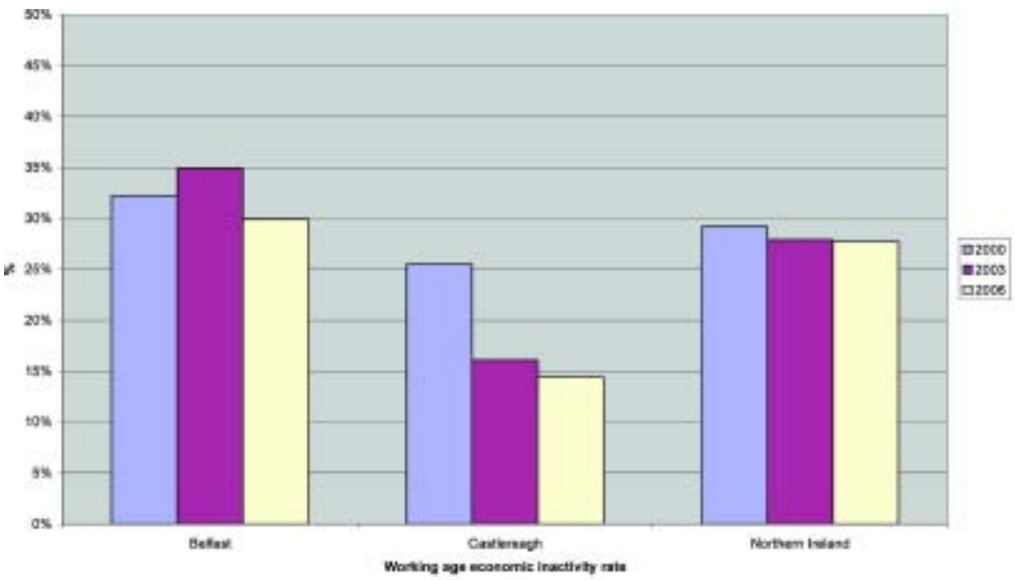
Figure 7.2 Economic inactivity rate by Local Government District, 2000-2006



Source: Labour Force Survey, DETI[132]

The economic inactivity rate in Belfast in 2007 was one of the highest in the UK, with similar rates recorded in Birmingham (30.7%), Manchester (30.2%), Liverpool (29.7%), Burnley (29.4%), Glasgow and Blackpool (28.3%) and higher rates only in a number of London boroughs (highest proportion 35.6% in Tower Hamlets) as well as Ceredigion in Wales (32.8%). Also across the UK as a whole, there were limited changes to the highest economic inactivity rates between 1997 and 2007. Meanwhile, the economic inactivity rate in Castlereagh was among the lowest in the UK.[133]

A comparable economic inactivity figure is not available for the Republic of Ireland as statistics include all persons aged 15 and over including those retired. The labour force participation rate in Dublin (County and City) in both 2000 and 2007 (quarter 3) was around 65%.[134]

The level of economic inactivity is a key factor when assessing health outcomes, as economically inactive people are most likely to be on low incomes, which as has been shown is the most significant determinant of poor health and an important factor in explaining inequalities. It can also be noted that the income gap between the economically active and inactive is likely to have risen markedly over the last decade, as most economically inactive people are reliant on benefits, which have stayed largely stable while earnings have increased.



7.3 Household incomes: limited data over time, pensioners at highest risk of low income

In relation to incomes, long term figures are not available to monitor change. However, table 7.1 illustrates the proportion of households, by composition, that had a total weekly household income of less than £300 in the Belfast Trust area (data combined over period 2003/04-2005/06 and for Belfast and Castlereagh Local Government Districts, which separately have small samples) and Northern Ireland (2005-06). It indicates that for all household types except pensioners, a higher proportion in the Belfast Trust area had a total weekly income of under £300. After pensioner households, lone parents were most likely to have a total household income of less than £300, followed by households with at least one sick or disabled adult. It can be noted that two parent families were least likely to be in the income band under £300 per week.[135]

Table 7.1 Percentage of households with total weekly household income under £300 by type of household, Belfast Trust area 2003/04-2005/06 and Northern Ireland 2005-06

	Proportion of all households with total weekly household income less than £300	
	Belfast Trust	Northern Ireland
Adult over pension age	88	88
Adult under pension age	59	59
Two adults, either over pension age	48	47
Two adults, both under pension age	22	20
Three or more adults	8	6
Households with children		
One adult	62	51
Two adults	12	9
Three or more adults	3	n/a*
All households with children	49	44
All households without children	23	18
Households with one or more adults over pension age	62	61
Households with one or more sick or disabled adults under pension age	56	38
Households with one or more unemployed adults under pension age	38	n/a*
All households	42	35

*sample too small

Source: Family Resources Survey, DSD

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In comparison, in 2005-06 across the UK over 80% of single pensioner females and 75% of single pensioner males had a total income of less than £300 per week, as did 55% of lone parent households with one child and 32% of lone parent households with three or more children. In total, 32% of all households fell into this income category.[136]

More in the full Profile:

The full Profile chapter on income and employment includes a more detailed analysis of the above topics, as well as information on employment and income deprivation and reliance on benefits.



8. Education: small improvements but large local variation

Figures on educational attainment at individual level in Northern Ireland are only available for school leavers, which includes people leaving at the end of compulsory education (Year 5 of post primary education or Year 12 of total education) as well as people leaving sixth form (Year 14). This design makes it more difficult to assess achievement at GCSE, particularly as it adds up achievement at GCSE and A or AS level. For example, someone who achieved six GCSEs at grades A*-C and also three A levels would be counted among those achieving at least five GCSEs grades A*-C as well as those achieving three A levels.

8.1 Degree level qualifications: Belfast and Castlereagh in European mid range

In comparison with a total of 126 cities for which figures are available, Belfast (20%, rank 59) fell in the mid range, along with Derry (21%) and the Healthy City of Györ (20%). Castlereagh would also have fallen in the same range, with 22% of the population reporting a degree level or higher qualification in the Census 2001. The highest proportions were recorded in Swedish cities (Uppsala 37% ranked 1st), but Edinburgh was ranked second (36%). Meanwhile, several UK cities were among those with the lowest proportions of working age people with degree level qualifications (Stoke-on-Trent 9%, Worcester 8%).[138]

In the Republic of Ireland's Census 2006, it was found that 20% of people in Co Dublin (Dublin City and County) had a degree level qualification or higher, compared to 17% in Co Galway (Galway City and County).[139]

It can be noted that in the UK Census 2001, 42% of the population aged 16-74 in Belfast had no qualifications, with a concentration in Belfast North and Belfast West.[140] This proportion was among the highest across the UK.[141]

8.2 School leavers' achievement: improvement over decade, large local variation

School leavers' achievement in 1999-00 and 2005-06 is illustrated in table 8.1. This was one area where Belfast observed larger improvement than Castlereagh, and reduced the gap in achievement, and overall a positive change. The proportion of school leavers achieving at least five GCSEs at grades A*-C or a higher qualification also improved more in Belfast North (+9 percentage points) and Belfast West (+12 percentage points)

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Parliamentary Constituencies than in Belfast South (+6) or Belfast East (+4), although the gap remained large. Belfast North and West also had higher proportions leaving school with no GCSEs. There was a relatively small decrease in the proportion of young people leaving school with no formal qualifications, which is a major disadvantage in the labour market and risk factor for future ill health.

Table 8.1 Achievement among school leavers, 1999/00-2005/06

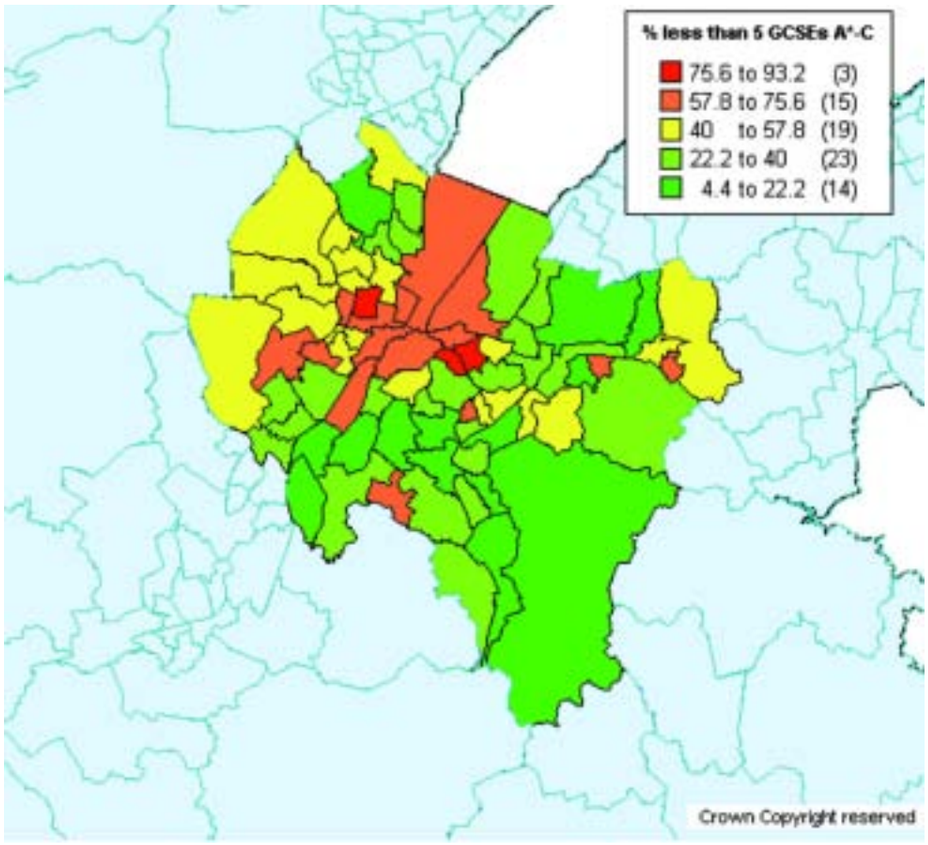
	1999-00			2005-06		
	Total school leavers	% achieved 5+ GCSEs A*-C or higher qualification	% achieved no GCSES	Total school leavers	% achieved 5+ GCSEs A*-C or higher qualification	% achieved no GCSES
Belfast	3718	47.5%	8.50%	3534	56.76%	6.62%
Castlereagh	708	61.44%	4.10%	855	66.67%	2.34%
Belfast Trust	4426	49.73%	7.79%	4389	58.69%	5.79%
Northern Ireland	25079	56.86%	5.22%	25528	64.22%	4.51%
Belfast East	982	56.21%	5.50%	892	59.64%	4.26%
Belfast North	1209	43.34%	9.35%	1218	51.89%	6.40%
Belfast South	835	62.51%	3.23%	914	69.15%	4.60%
Belfast West	1642	40.26%	10.48%	1507	52.42%	8.03%

Source: DE, School Leavers' Survey 1999/00-2005/06[142]

There is also large local level variation in educational achievement. The map in figure 8.1 illustrates the proportion of school leavers in 2005-06 who achieved less than five GCSEs at grades A*-C. It highlights that in almost a quarter of wards within the Belfast Trust area, over half of school leavers had limited qualifications. These wards were concentrated in the inner city and included Blackstaff and Shaftesbury in Belfast South; Crumlin, Duncairn and New Lodge in Belfast North; Falls, Shankill, Upper Springfield and Whiterock in Belfast West and Ballymacarrett, Woodstock and The Mount (where 94% of school leavers in 2005-06 achieved less than five GCSEs A*-C) in Belfast East. More isolated pockets of lower achievement were found in Tullycarnet, Enler and Cregagh wards in Castlereagh. There was a clear association with higher levels of deprivation and socioeconomic disadvantage.



Figure 8.1 Wards in Belfast Trust area by proportion of school leavers achieving less than five GCSEs A*-C, 2005-06



Source: DE, School Leavers' Survey 1999/00-2005/06[143]

8.3 Transfer test and destination of school leavers: large local variation linked to deprivation

Similar differences can be seen in the number of P7 pupils taking the 11+ transfer test. A lower proportion of P7 pupils in Belfast North and Belfast West sat the 11+ transfer test, and this proportion fell between 1996-97 and 2006-07 while the proportion in Belfast East and Belfast South remained stable. Pupils in Belfast North and Belfast West were also less likely to achieve an A or B1 'pass' grade; the gap between Belfast North (31% A-B1 grades) and Belfast South (56%) in 2006-07 was 16 percentage points.[144]

There are also differences that appear linked to socioeconomic conditions in the proportion of school leavers continuing to further and higher education. School leavers in Belfast South were much more likely to continue to further or higher education than school leavers in the other three Belfast Parliamentary Constituencies; the gap between

Belfast North (44%) and Belfast South (73%) was almost thirty percentage points. However, more positively the relative increase in school leavers continuing to higher education was larger in Belfast North and Belfast West.

Across Belfast and Castlereagh as well as Northern Ireland as a whole, the proportion of school leavers continuing to further or higher education increased between 1999-00 and 2005-06. The proportion going into training or employment generally fell, while the proportion who became unemployed or whose destination was unknown remained virtually unchanged.[145] This is broadly evidence of positive change in terms of educational achievement.

8.4 International context

Direct comparisons to other cities in terms of educational achievement are difficult due to differences in educational systems. Also in England and Wales, which have a similar system, achievement is reported for 15 year olds or pupils leaving Key Stage 4 (rather than all school leavers). Figures for England and Wales indicate improvement in the proportion achieving at least five GCSEs at grades A*-C or equivalent qualifications, to about half of pupils leaving Key Stage 4 in 2006-07.[146]

The Urban Audit data for 2004 show that in comparison with 104 other European cities for which data is available, Belfast had a comparatively high rate of students who did not complete compulsory education (6.7%, rank 67). Meanwhile, several English cities recorded a rate of zero in 2004 (Gravesham, Exeter, Cambridge, Wrexham). Less than one per cent of students also in Finnish cities (eg. the Healthy City of Turku 0.23%) did not complete compulsory education, while up to a third did in some Greek cities (eg. Athens 33%).[147]

8.5 Further and higher education: increase in enrolments, large local variation

In terms of enrolments to higher education, Belfast West (20%) recorded a much higher increase than other constituencies or the Belfast Trust average (7%). This can be seen as a positive change, as Belfast West traditionally has had low rates of participation in higher education. However, the number of enrolments in Belfast South (4,743) was double that of other constituencies in both 2001-02 and 2006-07.[148]



The Urban Audit data **(www.urbanaudit.org)** show that among 200 European cities in terms of students in further and higher education, Belfast fell in the mid range (79 students per 1,000 resident population, rank 114). A number of Polish cities had notably high rates (eg Katowice 295 ranked 5th, Poznan 270, ranked 9th), while Italian cities also recorded high rates (Padua, 311 per 1,000 ranked 1st, Bologna 284 per 1,000 ranked 10th). It can be noted that in 2001, Dublin was ranked in the bottom 20% with a rate of 22 students per 1,000 resident population.

More in the full Profile:

The full Profile chapter on education includes a more detailed analysis of the above topics, as well as information on pupils with special needs and the proportion of students studying in Britain.

9. Transport

The transport system in the Belfast Trust area remains centred around private transport, although the greater Belfast area has the most extensive public transport network in Northern Ireland. Unfortunately limited information is available over time, and generally a narrower range of transport statistics is available for Northern Ireland compared to England, Scotland and Wales.

9.1 Car access

The Census 2001 indicated that 43% of households in Belfast had no access to a private car or van, compared to about 20% of households in Castlereagh and just over a quarter across Northern Ireland. Nearly half of households in Belfast North and Belfast West Parliamentary Constituencies had no access to a car or van.[149] The figures were similar in the WHO European Healthy Cities of Manchester and Liverpool (both 48%) and Newcastle upon Tyne (45%), but higher in Glasgow (56%). In Stirling, just under a quarter of households were carless.[150]

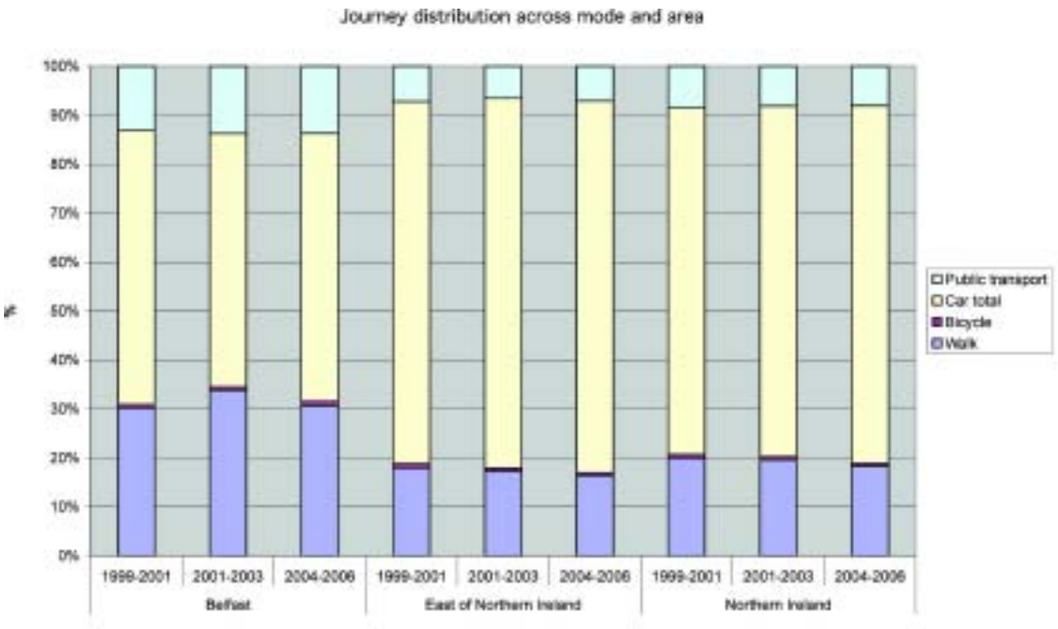
9.2 Journeys by mode: limited change but small drop in journeys

Information on personal journeys is collected in the Travel Survey for Northern Ireland, but due to a relatively small sample size (achieved sample around 900 households per year across Northern Ireland) figures are only available for Belfast, the East of Northern Ireland and the West, where the East includes Castlereagh as well as Antrim, Ards, Ballymena, Banbridge, Carrickfergus, Craigavon, Down, Larne, Lisburn, Newtownabbey and North Down.

The survey indicates that over the last decade, there has been limited change in the transport modes used with the car dominating. As illustrated in figure 9.1, over half of trips in Belfast are made by car, compared to around 70% across Northern Ireland. Overall, however, there were small reductions in the total number of journeys made between 1999-2001 and 2004-06 (-10% in Belfast and -4% across Northern Ireland). The figures broadly reflect similar trends across Britain.



Figure 9.1 Journey distribution by mode and area, 1999/2001-2004/06



Source: Travel Survey for Northern Ireland, DRD[151]

About a third of trips in Belfast are made on foot compared to 20% in Northern Ireland as a whole, which is likely to reflect generally shorter distances to amenities in urban areas. Similarly, higher use of public transport in Belfast is likely related to the comparatively better availability of services compared to smaller towns and rural areas. Figures on usage of the Senior SmartPass (free travel for people aged 65 and over – from October 2008 for people aged 60 and over) provides further support for this, as older people in Belfast and Castlereagh were much more likely to have a SmartPass and use it regularly than in more rural areas.[152]

The evidence from Scotland is similar, with over 80% of people aged 60 and over in Glasgow and Edinburgh holding a concessionary fare pass and half using it at least weekly, compared to for example Stirling, where two thirds had a pass and about 20% used it at least weekly.[153]

Cycle usage accounts for a very low proportion of all journeys across Northern Ireland. However, counts from automatic cycle counters on key arterial routes in and near Belfast city centre indicate increases in the average daily cycle flow between 2003 and 2006.[154]

A survey by the sustainable transport charity Sustrans also indicated that usage of the National Cycle Network, for either cycling or walking, increased between 2004 and 2006-07. Interviews with users suggested that they were increasingly physically active, and use of the Network was associated with personal health, as well as fitness reasons.[155] Sustrans has produced a publicly available a map of cycling routes in the Belfast area.

9.3 Travel to work and school

Figures from 2004-06 on main mode of travel to work indicates that two thirds of people in Belfast used the car, compared to 81% across Northern Ireland.[156] This was higher than for example in Glasgow or Edinburgh, where about half travelled to work by car, and indicates high reliance on private transport. Across Scotland, people were more likely to travel to work using public transport than in Northern Ireland.[157] Travel to work by car was also more common in Belfast than Dublin (County and City), where the Census 2006 indicated that 50% of people at work aged 15 and over travelled to work by car, but roughly the same as Co Galway, where the figure was 63%.[158]

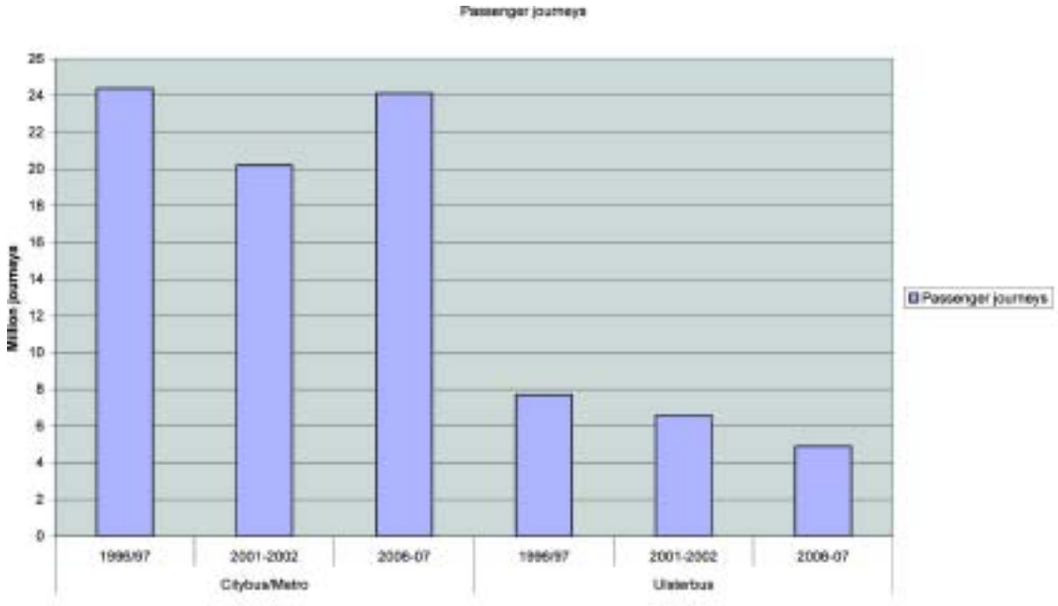
Across Northern Ireland, primary school pupils were most likely to travel to school by car, and the percentage increased slightly between 1999-2001 and 2004-06 to over half. Secondary school pupils were most likely to take the bus.[159]

9.4 Public transport: increase in journeys following service improvements in Belfast

Although public transport accounts for a small proportion of all trips and recorded a decline regionally between 1996-97 and 2006-07, there has been an increase in passenger journeys on local services in Belfast since 2005. In this year, Translink introduced the Metro bus service, which included investment in new accessible buses and improved service frequencies.



Figure 9.2 Passenger journeys on Citybus/Metro and Ulsterbus, Belfast area 1996/97-2006/07



Source: Translink[160]

More in the full Profile:

The full Profile chapter on transport includes a more detailed analysis of the above topics.

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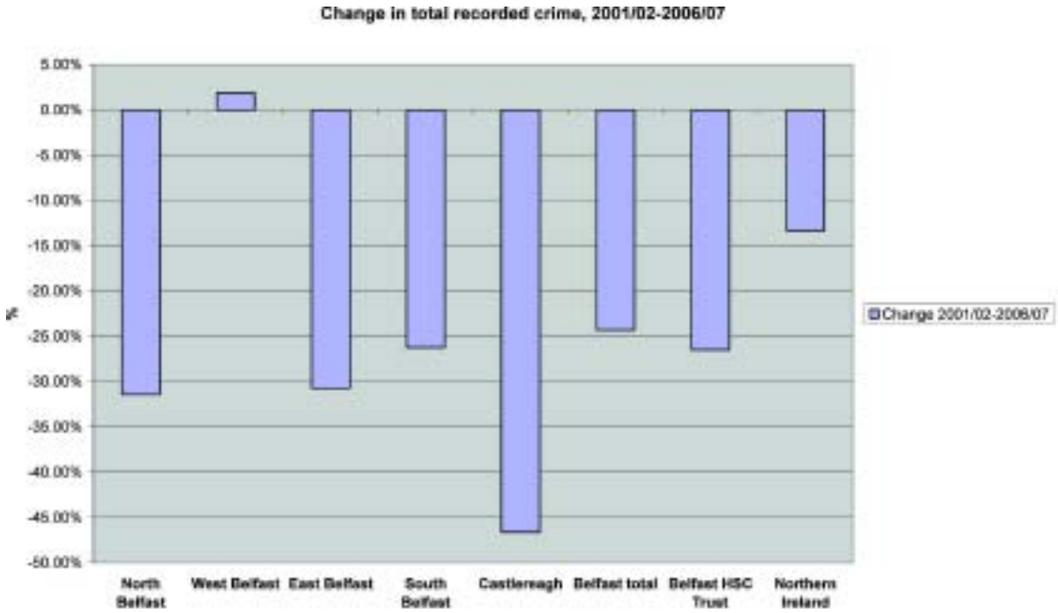
10. Crime: falling rates and changes in crime reporting but differences between areas unchanged

Recorded crime has fallen since 2001-02 in Belfast as well as Castlereagh and Northern Ireland as a whole, with West Belfast PSNI District Command Unit (DCU) the only exception. This is illustrated in figure 10.1.[161]

The decrease may, however, reflect changes in how likely people are to report crime, and change in actual incidence is difficult to discern. Research commissioned by the Policing Board and PSNI in 2007 suggests that people in predominantly Catholic areas, who historically have been least likely to report crime, have in recent years become more likely to report crime to the PSNI, while the situation has reversed in predominantly Protestant areas.[162]

Figure 10.1 Percentage change in total recorded crime rate per 100,000 population by area, 2001/02-2006/07



Source: Central Statistics Unit, PSNI

The overall decrease, however, does not highlight changes by type of crime. Offences against the person have in fact risen in all District Command Unit areas within the Belfast Trust area except Castlereagh, and also across Northern Ireland as a whole. Meanwhile, thefts as well as domestic burglary and criminal damage have fallen much more than the total crime rate. The exception was West Belfast, where reported domestic burglary and



criminal damage increased.[163] This broadly falling trend was the same in England and Wales, where total crime also has been falling for many years.[164]

Data from the Urban Audit project **(www.urbanaudit.org)**, which aims to collate comparable data on quality of life in cities across the EU and Turkey, indicate that Belfast was ranked among the top 20% for both total recorded crime (128 per 1,000, rank 36 out of 215) and domestic burglaries (8.6 per 1,000, rank 18 out of 217). This may reflect higher incidence of crime, but also differences in the likelihood of reporting crime.

However, the total recorded crime rate in Belfast was notably lower than in the highest ranked cities, which recorded rates of over 200 (top ranks Malmö, 232 per 1000 and the Healthy City of Stockholm in Sweden, 206 per 1000). In relation to domestic burglaries per 1,000 population, seven out of the ten cities with the highest rates were in the UK, with Nottingham ranked highest at 23 per 1,000 and Manchester third (17 per 1000). The figures relate to 2004 as a common reference year.

The recorded crime rates in Dublin (348 per 1000), Cork (343 per 1000) and Limerick (317 per 1000) reported in the Urban Audit 2001 data were much higher than any other European city. Figures at county level reported in the All Ireland Health Poverty Index, relating to 2004, were lower, although Dublin had a high rate of recorded violent crime (270 per 100,000) and markedly higher rates also for burglary and theft than any other region in the Republic of Ireland.[165]

10.2 Crime rates: Differences between areas unchanged

There are large differences in recorded crime within the Belfast Trust area, which can best be examined by comparing rates per 100,000 population that level out differences in population size. These rates are illustrated in figure 10.2, and show that the recorded crime rate consistently is highest in South Belfast DCU area; it was up to four times higher than the rate in Castlereagh DCU, which consistently had the lowest rate.

When assessing the rates it should be noted that the day and nighttime total population especially in Belfast city centre, which falls within South Belfast DCU, is much higher than the resident population, as people travel from elsewhere into the city to work, study or visit for entertainment or other purposes. This will serve to reduce the actual crime rate per population in South Belfast, although concrete figures are difficult to calculate. Conversely, the rate may in practice be higher in largely suburban areas such as Castlereagh, which people leave during the day to work or study elsewhere.

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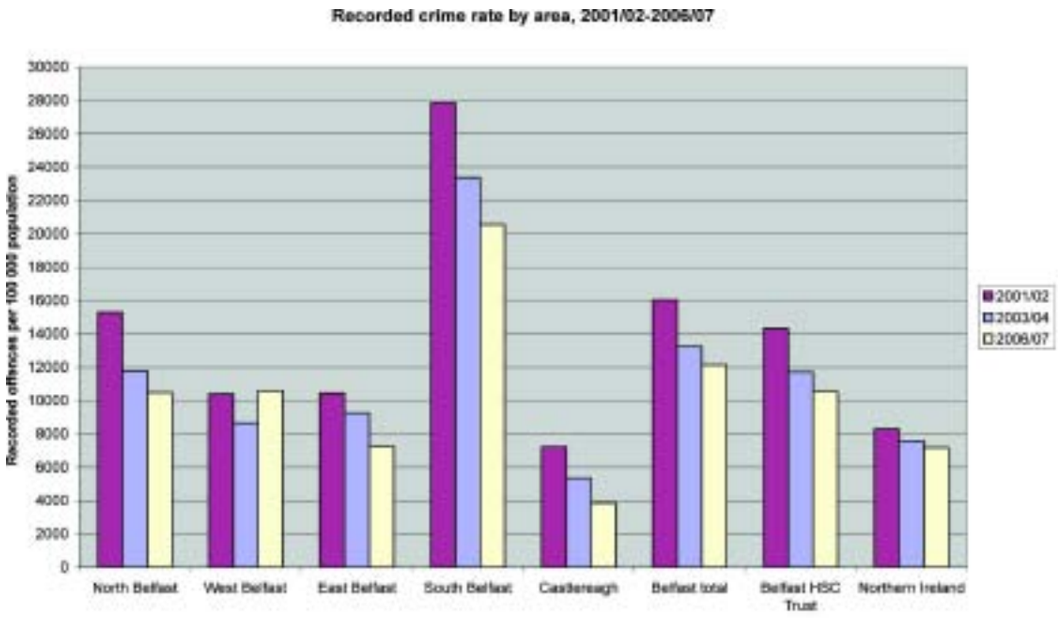
Figure 10.2 Total recorded crime rate per 100,000 population by area, 2001/02-2006/07



Source: Central Statistics Unit, PSNI[166]

More in the full Profile:

The full Profile chapter on crime includes a more detailed analysis of the above topics, as well as information on hate crime, crime involving domestic abuse, anti social behaviour and incidents relating to the security situation.



11. Environment: changes driven by regulation and societal change

Changes in environmental indicators appear to reflect both broader societal changes and changes in environmental management. Generally, the conditions relevant to environmental health have improved. For example, chemical quality of the River Lagan at Stranmillis has improved from poor (class E) to fairly good (class C) between 1995-97 and 2005-07, while biological quality improved from fairly good to good (class B).[167] Near its estuary, the River Lagan has undergone major change over the last 20 years primarily as a result of regeneration, and wild Atlantic salmon now breed again in the Lagan after becoming extinct around 1800 due to industrial use and pollution of the river.[168]

Limited information on changes in biodiversity is available at local level. There is some evidence indications that some species have disappeared from the Belfast region while others have declined in numbers. The key threat to biodiversity is habitat loss through development pressure. However, Belfast has a number of important natural habitats, in particular Belfast Lough which is an internationally recognised wetland of importance.[169]

11.1 Drinking water quality

Drinking water quality has also improved as water treatment plants have been modernised and new plants opened, although drinking water across Northern Ireland has been safe from a public health perspective for several decades. The main issue in relation to drinking water quality across Northern Ireland is the level of trihalomethanes, which are byproducts created when organic matter, naturally present in untreated water, reacts with chlorine used in water treatment.

Over 95% of drinking water in Northern Ireland comes from surface sources, which require more treatment than groundwater. In the Belfast region, compliance with standards set for trihalomethanes has improved to over 90% since 2005, when a new water treatment plant supplying much of the area was opened at Drumaroad.[170]

11.2 Air quality

Air quality has been affected by stricter regulation, which has improved emissions from industry and road traffic (eg. legal requirements for catalytic converters in cars and lower emission standards). Another key factor has been the gradual phasing out of solid fuel heating systems, which has greatly reduced emissions of sulphur dioxide.

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Air pollution tends to disproportionately affect more deprived areas, for example because these are more likely to be located along major roads. In a UK wide study of such inequalities, it was found that up to 65% (for sulphur dioxide concentrations; 46% for particulate matter and 39% for nitrogen dioxide) of the population experiencing the worst air quality in Northern Ireland lived in the most deprived areas. This study also stated that solid fuel domestic heating systems historically have made a particularly large contribution to higher concentrations of pollutants. It is therefore predicted that this inequality will reduce as solid fuel systems are phased out.[171]

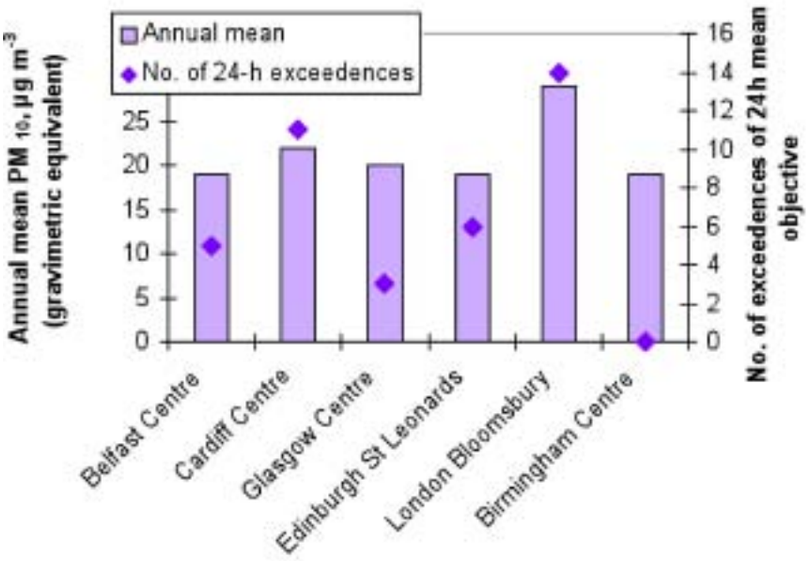
However, the growth in traffic flows means that air quality continues to be an issue. Belfast City Council has identified four areas in Belfast located along or around main arterial routes (the Westlink, Upper Newtownards Road, Ormeau Road and Bridge End) that are unlikely to meet air quality objectives within the target timescale, and these have been declared Air Quality Management Areas for which a specific action plan has been put in place. The plan and progress can be viewed on the Research pages of the NI Air Quality website at **www.airqualityni.co.uk**.

Comparisons of air quality between different locations should be made with caution, as air quality is affected by many factors including composition of emission sources around the location, typical wind conditions and topography. For example, Belfast is in a valley, which makes it more difficult for pollutants to disperse. However, figure 11.1 compares levels of particulate matter (PM10) and exceedences of the national objective in core UK cities in 2007, measured at urban centre or urban background sites. The measurements from Belfast are taken at a monitoring station at Lombard Street in the city centre.

Particulate matter is very fine particles emitted especially from road traffic. They have been shown to be the most harmful to health of the commonly emitted air pollutants. Short term exposure to high levels can trigger attacks in asthmatics and worsen heart conditions, while long term exposure can worsen asthma and allergies, and reduces average life expectancy by about 8 months.



Figure 11.1 Comparison of PM_{10} exceedences in Belfast and other cities, 2007



Source: AEA Energy and Environment[172]

11.3 Noise

Information on noise levels is not available over time, but in 2007 the Department of the Environment published noise maps of Northern Ireland, which highlight the estimated levels in decibel and key sources of noise and are publicly available at **www.noiseni.co.uk**. In the Belfast agglomeration road traffic is the main source of noise, while estimated levels are highest along the key arterial routes and especially M1, the Westlink and M2. It is estimated that in total 10% of the population in the area is affected by noise levels over 60 decibels (L_{den}) over a 24 hour period, and five per cent at night (L_{night}).[173]

11.4 Waste and recycling

EU legislation aimed at reducing the amount of waste going to landfill has been a major factor in increasing facilities for recycling waste. Public debate and awareness campaigns on the environmental impacts of unsustainable activities have also become commonplace over the last decade, and a corresponding increase in the proportion of household waste recycled has been observed over the last five years, as illustrated in table 11.1. However, the total amount of household waste generated has increased in Belfast as well as Northern Ireland as a whole.[174]

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Figure 11.1 Household waste arisings and recycling rate by Local Government District, 2002-2006/07

	Total waste arisings (tonnes)			% recycled/sent to composting			Change 2002-2006/07	
	2002	2004-05	2006-07	2002	2004-05	2006-07	Total (%)	Recycling rate (percentage points)
Belfast	139,967	146,491	146,402	4	9	19	5	15
Castlereagh	34,146	29,521	31,634	5	22	35	-7	30
Northern Ireland	902,454	919,169	938,726	10	17	28	4	18

Source: Belfast City Council; NIEA Municipal Waste report 2006-07

The total household waste arisings in 2006-07 in Belfast were equivalent to 1.2 tonnes per household per year, or 24 kilogrammes per household per week. The household level amounts in Castlereagh were slightly lower at 1.15 tonnes per household per year or 22 kilos per week. Across Northern Ireland, each household produced on average 1.4 tonnes of waste per year, or 26 kilos per week. In UK wide comparison, Northern Ireland produced more waste than other countries in the UK in 2005-06.[175] It can be noted that in a longer time perspective, the amount of waste collected in the Republic of Ireland tripled between 1984 and 2003.[176]

Recycling rates in Belfast were among the lower compared to other WHO European Healthy Cities in the UK, while the rate in Castlereagh was higher than in any WHO European Healthy City in the UK. However, a number of councils in England recorded rates of over 50% in 2006-07.[177]

In comparison with other European cities on the proportion of waste processed through recycling show that Belfast (7.5%, rank 115) was in the bottom third of a total 153 cities for which 2004 figures are available. The highest recycling figures were recorded in Polish and German cities (including the Healthy City of Dresden, 85% and ranked 5th). It is notable that a number of German cities also were found at the bottom, along with Hungarian (including the Healthy City of Györ, 1.25%) and Belgian cities (including the Healthy City of Liége, 4%).[178]

More in the full Profile:

The full Profile chapter on the environment includes a more detailed analysis of the above topics as well as Northern Ireland level information on climate change.



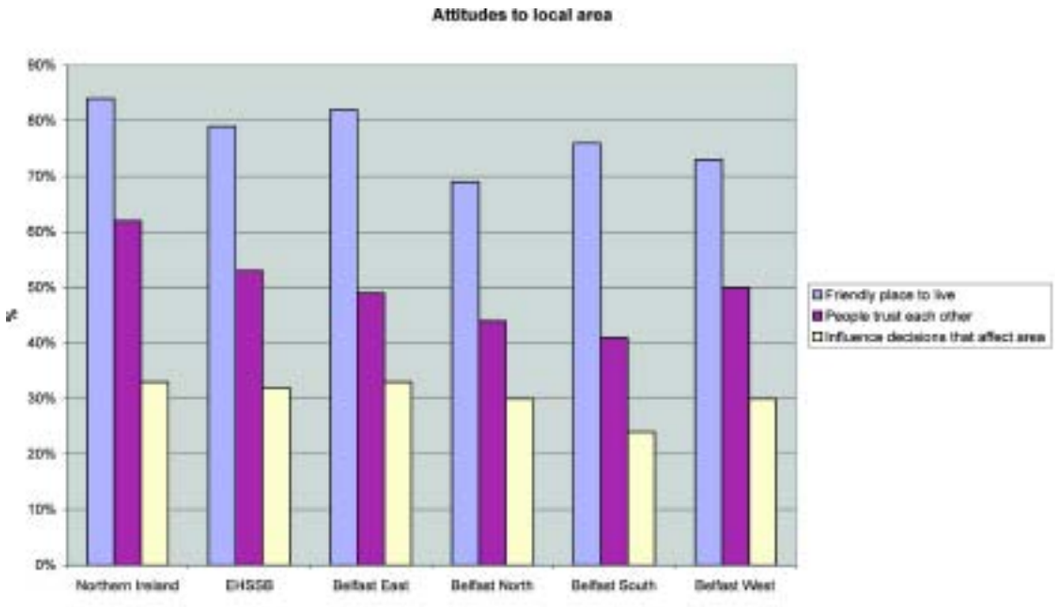
12. Social networks and assets: information beginning to emerge

Information on less tangible, more qualitative aspects of life relevant to health and wellbeing has only begun to be collected in Northern Ireland, and therefore relatively little information is available over more than a single year. However, this type of information is highly important, as health and wellbeing is affected by the general attitudes and relationships in a community, and the community's relationships to other communities and decision makers, collectively often known as its social capital. For example, it has been suggested that people who feel they live in a close knit community have better health than others[179], and people who actively participate in society have been shown to live longer[180]. Good social networks can also support mental wellbeing, and have been found to be key channels of information for example about new jobs.[181]

The Continuous Household Survey included a module of social capital questions in 2005-06, and results at the Eastern Health and Social Services Board level (an area covering Ards, Down, Lisburn and North Down as well as Belfast and Castlereagh), as well as Parliamentary Constituency level, are illustrated in figure 12.1. It was notable that there were limited differences between areas, and a majority of people felt their local area was a friendly place to live, while almost half said people in their area trusted each other, which reflects the concept of bonding social capital. It was notable that only a minority felt they were able to influence decisions concerning their area (linking social capital).

The same survey also indicated that a majority of people (over 80%) in the EHSSB area see and phone family and friends at least weekly.

Figure 12.1. Percentage of respondents agreeing with statement about local area/community by area, 2005-06 (%)



Source: Continuous Household Survey 2005-06, NISRA[182]

12.1 Voluntary sector: denser structure in Belfast North and Belfast West

Voluntary action work is an important resource for society, and can also support health and wellbeing. Through volunteering, people build skills that can help in finding work or developing a career, while it also encourages social interaction and support, which is important particularly for mental wellbeing. The experience can also boost self esteem, which is an important building block of health and wellbeing.

12.1.1 Volunteering

Volunteering can take many forms, from regular work within an organisation (formal volunteering) to assisting neighbours or local groups (informal volunteering). In 2007, the Volunteer Development Agency estimated that about 61,000 people in Belfast and Castlereagh (excluding Moneyreagh ward) were volunteers within organisations, while another 119,000 people volunteered less formally.[183] The formal volunteer estimate corresponds to 18% of the population in the area (mid year population estimate 2006), and the total volunteer estimate to about half the population.



The survey indicated that women account for about two thirds of volunteers, while about half of both formal and informal volunteers are aged 25-49. Although people aged 50 and over were least likely to volunteer, those who did tended to give more time than other age groups. Fundraising or handling money was the most common volunteer activity, engaging about a third of respondents in Belfast as well as Northern Ireland. This was followed by organizing or helping to run an event, sitting on a committee and working with young people. On average, volunteers working within an organisation gave about 14 hours per month.

12.2 The size of the sector

Information on the community and voluntary sector as a whole is collected in the State of the Sector surveys conducted by NICVA (Northern Ireland Council for Voluntary Action), and results from the State of the Sector IV survey in 2004 are illustrated in table x.[184] Just over a quarter of organisations within the Belfast Trust area were located in west Belfast or the Shankill (postcodes BT11-13, which also take in part of the Village in south Belfast), compared to 15% located broadly in east Belfast (postcodes BT3-BT6, BT16), which may indicate important differences in community infrastructure. It should, however, be noted that some areas, notably BT1, BT2, BT7 and BT9, have a relatively large number of head offices for regional organisations, which means that numbers in these areas do not necessarily reflect local community infrastructure.

The number of organisations is also not necessarily related to their effectiveness or influence. CENI (Community Evaluation Northern Ireland) and the Community Foundation Northern Ireland have conducted research mapping this type of information, as part of mapping the social capital and social assets of communities at Super Output Area level across Northern Ireland. The aim of the research is to provide information that complements the NI Multiple Deprivation Index, but at time of going to print (September 2008) findings had not yet been published.

The final research report will include a database of all 890 Super Output Areas across Northern Ireland and their scores on Social Capital (Bonding, Bridging, Linking and Overall), Community Capacity (the number, density and type of community groups within an area) and Community Capability (based on these groups' abilities to draw in funding and resources, manage funding and resources, run programmes and activities based on need, be representative of the wider area and work with other groups and communities). In addition, it will include a qualitative description of each Super Output Area, providing reasons why it scored the way it did, as well as providing a list of groups within the area. The research found that it was critical that community capacity and community capability were discussed/scored separately. This was due to the fact that some areas were

characterised by large numbers of incapable or competing groups (high levels of capacity and low capability), while other areas had only one or a few groups, but they were perceived to be supremely competent and effective (low capacity and high capability).[185]

Table 12.1 Distribution of voluntary and community sector across Belfast and Castlereagh (no and%)

	Count	% of Northern Ireland total
Belfast	1,080	24.0
Castlereagh	90	2.0
Belfast Trust	1180	26
Northern Ireland	4500	100
	Count	% of Belfast Trust total
Postcode areas BT3, BT4, BT5, BT6, BT16	165	15.3
Postcode areas BT14, BT15, BT36, BT37	190	17.5
Postcode areas BT7, BT8, BT9, BT10	230	21.2
Postcode areas BT11, BT12, BT13	290	26.7
Central Belfast – BT1, BT2	205	19

Source: NICVA

More in the full Profile:

The full Profile chapter on community participation includes a more detailed overview of the above topics, as well as information on the frequency of contacts with friends and family, library usage, mobile phone ownership, Internet access and activity in community centres owned by Belfast City Council.



Appendix 1.

Working group

Anne Marie Campbell/Jelena Buick	Belfast City Council
Paula Devine/Dr Katrina Lloyd	ARK, Queen's University of Belfast
Alison Durnien	Belfast Health and Social Care Trust
Stephanie Harcourt	Department for Regional Development
Gillian Hunter	Police Service of Northern Ireland
Gordon Jackson	Belfast Education and Library Board
Stephen Kerr	Department of the Environment
Cathryn McBurney*	Northern Ireland Statistics and Research Agency (NISRA)
Mary McDonnell/Joan Finn/ Jahnet Brown	Northern Ireland Housing Executive
Dr Christine McMaster/Adele Graham	Eastern Health and Social Services Board
Gabi Mornhinweg	Belfast Health and Social Care Trust
Claire Savage	Department for Social Development
Bill Stewart	Department of Health, Social Services and Public Safety

*Cathryn McBurney also acted as statistical advisor to the Belfast Healthy Cities' project team.

Support was also supplied by Dr Leslie Boydell from Belfast Health and Social Care Trust and Dr Bernadette Cullen from Eastern Health and Social Services Board.

Belfast Healthy Cities team

Joan Devlin	Chair of working group
Jonna Monaghan	Project manager

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Appendix 2.

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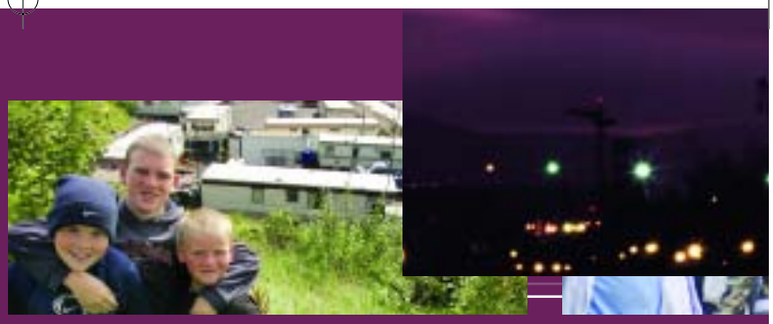

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185 For further information contact Community Foundation Northern Ireland, Kat Healy.



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A full profile version is available for download from the Belfast Healthy Cities website at www.belfasthealthycities.com

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