Northern Ireland Statistics & Research agency

Registrar General Northern Ireland Annual Report 2007

December 2008

An Agency within the Department of Finance and Personnel
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NATIONAL STATISTICS

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The Northern Ireland Statistics and Research Agency

The Northern Ireland Statistics and Research Agency (NISRA) was established as an Executive Agency within the Northern Ireland Department of Finance and Personnel on 1 April 1996. NISRA is the principal source of official information of socio-economic conditions in Northern Ireland. The Agency provides statistics and social research services, undertakes the Northern Ireland census of population and administers the civil registration of births, deaths, marriages and adoptions.

The overall corporate aims of NISRA are to:

- Provide a statistical and research service to support the decision making by Government in Northern Ireland and to inform Parliament and the wider community through the dissemination of reliable official statistics; and
- Administer the marriage laws and to provide a system for the civil registration of births, marriages, adoptions and deaths in Northern Ireland.

NISRA can be found on the internet at www.nisra.gov.uk

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10 December 2008

This report has been prepared by the Demography and Methodology Branch of the Northern Ireland Statistics and Research Agency. All queries relating to its statistical or data content and requests for further information should be addressed to Customer Services. All of the data included in this report is available on the NISRA web site (www.nisra.gov.uk) or can be obtained in electronic format from Customer Services, NISRA.

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Content

Foreword

I am pleased to present my 2007 Annual Report to the Northern Ireland Assembly. Chapter one of the report documents the main demographic trends in Northern Ireland; charting changes in fertility, mortality and migration as well as providing detailed information on registered births, deaths and marriages. Two points of particular note are that last year the population here rose above the 1.75 million threshold and that there was a significant increase in the number of babies born. Detailed statistical tables are presented as a supplement to the report on the attached compact disc and on the Northern Ireland Statistics and Research Agency website (www.nisra.gov.uk).

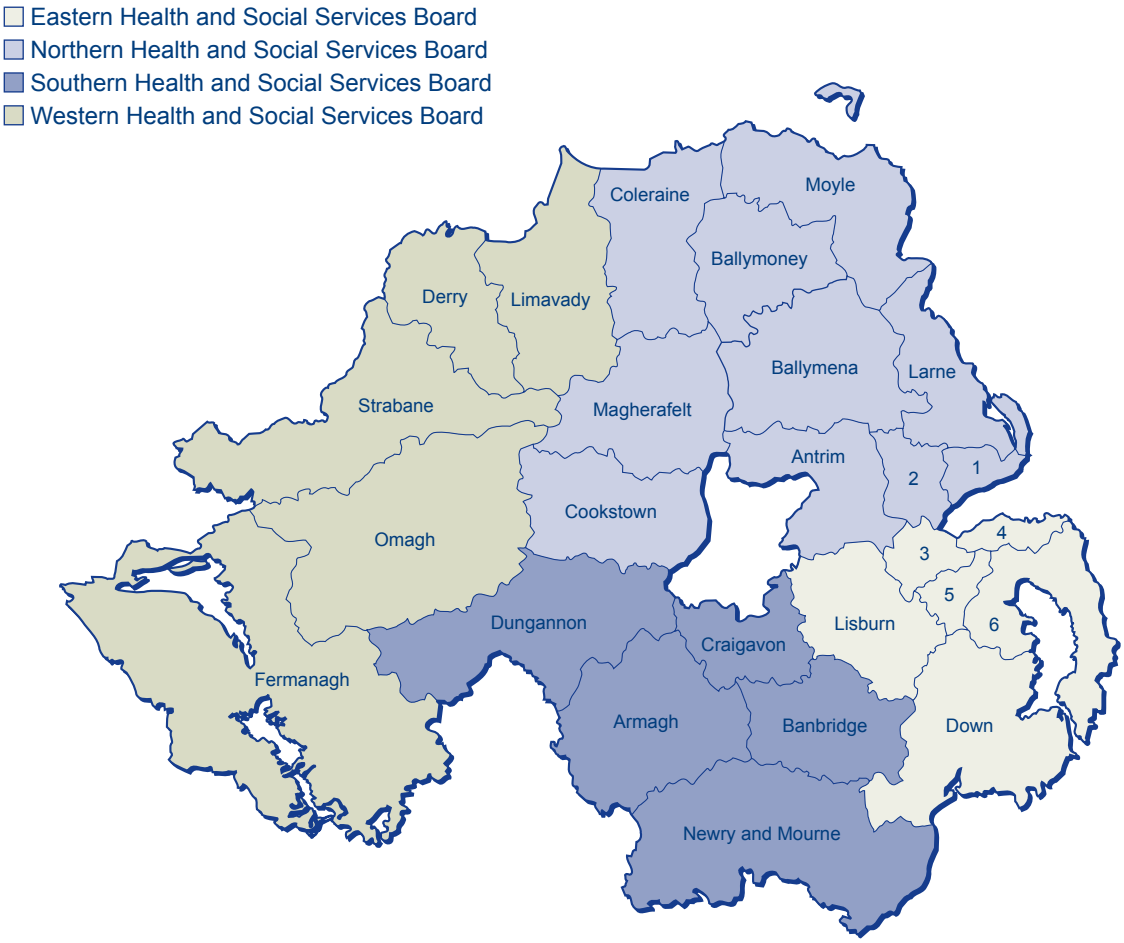
Understanding the future size and structure of the population is of major importance in planning a wide range of services. To inform the planning process I produce, every second year, official demographic projections for Northern Ireland. This year, I invited Tony Dignan, an independent economic and social researcher, to provide a detailed commentary on the Northern Ireland population and household projections. This is presented in chapter two of the report and I trust will add to the interest in these important issues.

The General Register Office in Northern Ireland continues to modernise. Currently, the Office is working on the computer digitisation of eight million individual paper records dating back to the mid-19th century. In addition Annual Reports of the Registrars General of Ireland and Northern Ireland dating back to 1887 are now available on-line on the NISRA website (www.nisra.gov.uk). These projects protect important historic records and improve access to registration information for us all.

I would welcome all comments on the format and content of the Annual Report. I hope you will find it informative and useful.

Norman Caven
Registrar General for Northern Ireland
December 2008

Northern Ireland's Health & Social Services Boards and Local Government Districts



1. Carrickfergus
2. Newtownabbey
3. Belfast
4. North Down
5. Castlereagh
6. Ards

Chapter 1
Demographic Overview of Northern Ireland

1.1 Introduction

1.1.1. The number of people living in Northern Ireland continues to rise. The estimate of the population resident in Northern Ireland at 30 June 2007 was 1,759,100. Last year for the first time the population in Northern Ireland rose above the 1.75 million threshold.

1.1.2. The mid-2007 figure is an increase in population over the preceding twelve months of 17,500 people or 1.0 per cent of the population. This increase in population, which is one of the largest ever observed, is due to two factors. Firstly, there were more births than deaths giving a natural increase in population of 9,100 people. Secondly, it is estimated that the Northern Ireland population grew by 9,800 people as a result of net migration, this was partially counterbalanced by a reduction of 1,400 in Her Majesty's Forces stationed in Northern Ireland.

1.1.3. The rate of population growth in 2007 exceeds that seen, on average, over the last 30 years. The increase over the period mid-1977 to mid-2007 is estimated to be 235,800 people, or 13.5 per cent of the mid-1977 population of 1,523,300. This increase is equivalent to an average annual rate of growth of 0.5 per cent, half the rate of increase seen between 2006 and 2007.

1.1.4. In terms of civilian migration it is estimated that in the year to mid-2007, 32,300 people came to live here and 22,500 people left Northern Ireland to live elsewhere; thus giving a net migration gain of 9,800 people. Of the 32,300 people who came to live here; 10,500 came from the eight Eastern European countries that joined the European Union in May 2004.

1.1.5. In 2007, there were 24,451 births registered to Northern Ireland mothers, an increase of 5.1 per cent on the 2006 figure of 23,272 births. The increase in the number of births last year is the largest seen since 1979 and is the fifth consecutive year of increases in the number of births registered.

1.1.6. However the increase in the number of births over the last five years should be set against the decline in the number of births observed since the mid-1980s. As a comparison the number of births registered in Northern Ireland in 1977 was 25,437 births, which is still greater than the number registered last year. Moreover the peak during the baby boom was 34,345 births registered in 1964; 9,894 higher than the 2007 figure.

1.1.7. In 2007 there were 14,649 deaths registered in Northern Ireland, an increase of just over 100 deaths or 0.8 per cent on the 14,532 deaths registered in 2006. Over the last thirty years the death rate has fallen by around a quarter; from 11.1 deaths per 1,000 population in 1977, to 8.3 deaths per 1,000 population in 2007.

1.1.8. In 2007 there were 8,687 marriages celebrated, an increase of 428 marriages or 5.2 per cent on the 2006 figure of 8,259 marriages. Marriage law was reformed in 2004 introducing, among other things, less strict residency requirements for marriage. This allowed couples to marry in the area of their choice and making it easier for people from outside Northern Ireland to get married here. Another result of the new law is that 41 per cent of civil marriages in 2007 took place in an approved venue, rather than the Registrar's Office.

1.1.9. There were 2,913 divorces granted in 2007, this is an increase of 248 divorces or 13.6 per cent from the 2006 figure of 2,565 divorces and is the largest number ever recorded in Northern Ireland.

1.1.10. On 5 December 2005 the Civil Partnership Act came into force across the United Kingdom. The new legislation enabled same-sex couples to obtain legal recognition of their relationship. During 2007 there were 111 civil partnerships registered here, this compares to 116 registered in 2006.

Key Points

Population and Migration

- The size of the Northern Ireland population rose in the year to 30 June 2007 by 17,500 people or 1.0 per cent to 1,759,100.
- There are more births than deaths in Northern Ireland leading to the population growing through natural change. In the year to 30 June 2007, births exceeded deaths by 9,100; this was the highest level of natural change seen since the year to mid-1998.
- In the year to mid-2007 there was population gain for Northern Ireland of 9,800 people due to civilian migration. This was partially counterbalanced with a net outward movement of 1,400 people from Her Majesty's Forces stationed in Northern Ireland.
- In terms of civilian migration it is estimated that in the year to mid-2007, 32,300 people came to live here and 22,500 people left Northern Ireland to live elsewhere; thus giving a net migration gain of 9,800 people. Of the 32,300 people who came to live here; 10,500 came from the eight Eastern European countries that joined the European Union in May 2004.

- Since 1997 the number of children in the population has fallen from 413,400 to 380,100 a fall of 8.1 per cent. In contrast, the number of pensioners has increased from 254,900 to 289,700 a rise of 13.6 per cent between 1997 and 2007. The working age population has increased by 8.6 per cent, from 1,002,900 in 1997 to 1,089,400 in 2007.
- Over the longer term since 1977, the number of children has fallen by 18.5 per cent, while the working age and pensioner populations have increased by 29.0 and 36.3 per cent respectively.

Projected Population (2006-Based)

- The Northern Ireland population is projected to exceed 1.8 million by 2011 and 1.9 million by 2019. Longer-term projections indicate the population will reach 2 million by the early 2030s.
- The number of children aged under 16 is projected to remain broadly constant at around 385,000. In 2006, there are 380,000 children with a projected 393,000 children in 2021.
- The number of adults aged 16-64 is projected to increase from 1,122,000 in 2006 to 1,190,000 by 2021, an increase of 68,000 or 6.1 per cent.
- The number of people aged 65 and over is projected to increase from 239,000 in 2006 to 339,000 by 2021, an increase of 99,000 or 41.5 per cent.
- The number of older people is projected to increase markedly relative to the number of younger people; as a consequence the average (mean) age of the population is expected to rise from 37.3 years in 2006 to 40.0 years by 2021.

Births

- There were 24,451 births registered in 2007, an increase of almost 1,200 (or 5.1 per cent) on the 2006 figure but nearly 1,000 fewer than the number of births registered in 1977.
- In 2007, the average age of women at childbirth was 30 years compared with 29 years in 1997, 28 years in 1987 and 27 years in 1977.
- In Northern Ireland, the total period fertility rate dropped below replacement level (2.1) for the first time in 1992. The total period fertility rate for 2007 was 2.02 children; a rise from the record low of 1.75 children in 2000.

Deaths/Stillbirths

- In 2007 there were 14,649 deaths registered in Northern Ireland, an increase of just over 100 deaths or 0.8 per cent on the 14,532 deaths registered in 2006.
- The expectation of life at birth for males and females based on mortality rates of recent years was 76.2 and 81.2 years respectively, with corresponding figures for men and women based on the mortality rates of 1922 of 53.8 and 54.4 years respectively.
- In 2007, the two most common causes of death were cancer (3,870 deaths – 26.4 per cent of deaths) and ischaemic heart disease (2,494 deaths – 17.0 per cent of deaths).
- There were 4.2 stillbirths per 1,000 births (live and still) in 2007, a substantial reduction from 20.5 stillbirths per 1,000 births in the early 1960s.
- There was a similar fall in infant deaths from 26.5 infant deaths per 1,000 live births in the early 1960s to 4.9 infant deaths per 1,000 live births in 2007.

Marriages/Divorces

- There were 8,687 marriages celebrated in 2007, an increase of 428 marriages on the 2006 figure of 8,259 marriages. This is in contrast to the early 1970s when around 12,000 marriages were celebrated each year.
- On 1 January 2004, new marriage legislation came into effect in Northern Ireland. The new law allows civil marriage ceremonies to be conducted outside Registrar's Offices in a number of approved venues. In 2007, 1,042 civil marriage ceremonies (40.8 per cent of all civil marriage ceremonies) were held in approved venues; this compares with 878 (35.9 per cent of all civil marriage ceremonies) such ceremonies in 2006.
- There were 2,913 divorces in 2007, this is an increase of 348 divorces (13.6 per cent) from the 2,565 in 2006 and is the largest number of divorces on record for Northern Ireland.

Civil Partnerships

- On 5 December 2005, the Civil Partnership Act and Civil Partnership Regulations (Northern Ireland) came into force, enabling same-sex partners to obtain legal recognition of their relationship. During 2007, there were 111 civil partnerships registered here, this compares to 116 during 2006.

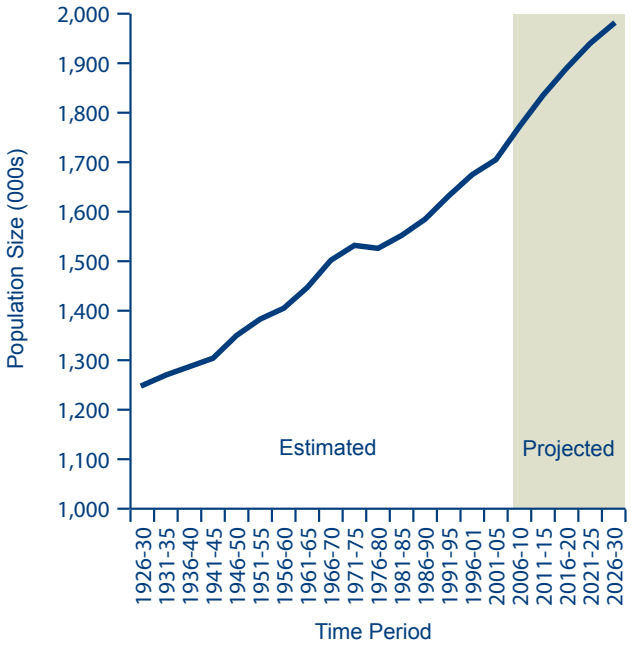
1.2 Population

1.2.1. The latest estimate of the size of the Northern Ireland population (30 June 2007) is 1,759,100 people. Twenty-two per cent of the population were aged under 16 years, 16 per cent were of pensionable age (60 years and over for women and 65 years and over for men), with the remaining 62 per cent of the population of working age.

1.2.2. In the 12 months to 30 June 2007, Northern Ireland's population is estimated to have risen by 17,500 persons. This is made up of an increase of 9,100 people attributable to natural growth (i.e. more births than deaths), and a net inward migration to Northern Ireland of 9,800 people. This level of migration is the highest ever observed, but is partially counterbalanced by a loss of 1,400 people in changes to Her Majesty's Forces stationed in Northern Ireland.

1.2.3. Figure 1.1 shows the trend of increasing population, although there was a slight decrease in population in the early 1970s as a result of high levels of net outward migration at that time. Latest 2006-based population projections for Northern Ireland show that the population is projected to continue to increase.

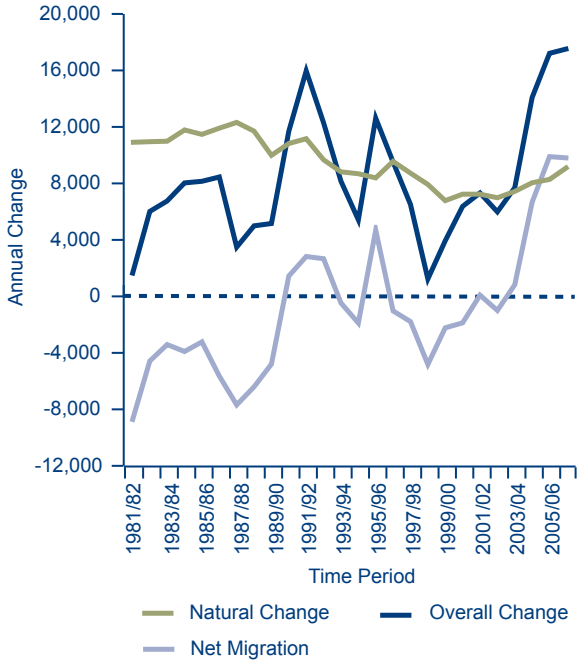
Figure 1.1: Population of Northern Ireland (1926 to 2007 estimated – 2008 to 2030 projected) – non-zero y-axis



1.2.4. It can be seen from the trends in natural change and net migration presented in Figure 1.2 that, prior to 2004, population increase was mostly due to natural change. However, in contrast, in 2004-5 the contributions to population increase from natural change and migration were of a similar magnitude and in 2005-6 and 2006-7 the contribution from migration was larger than the contribution from natural change.

1.2.5. There has been a gradual reduction in natural change since the late 1980s, albeit with a slight increase in recent years. The trend in net migration has been more volatile with troughs of emigration in 1987-8 and 1998-9, and peaks of immigration in 1995-6 and 2004-7.

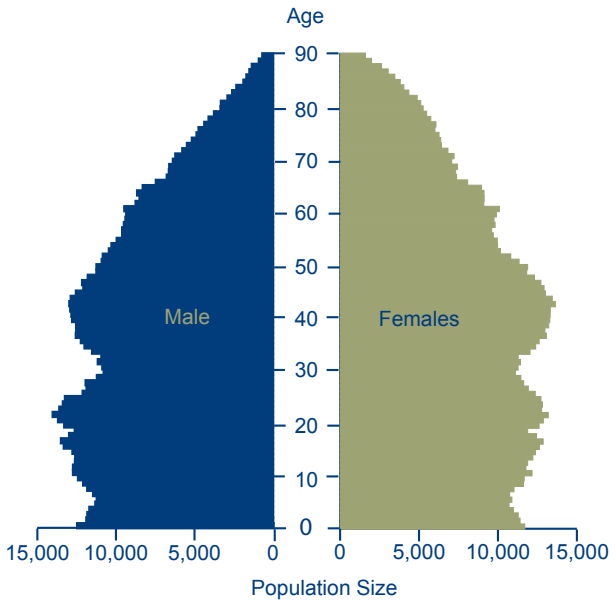
Figure 1.2: Components of population change (1981-2 to 2006-7)



Age and Sex Structure

1.2.6. The age structure of Northern Ireland's population continues to get older due to sustained below replacement levels of fertility (in western countries a total period fertility rate of about 2.1 is required to maintain long-term population levels) and increasing life expectancy. In mid-2007, there were more females (51 per cent) than males in Northern Ireland. Twenty-three per cent of males were aged under 16 years old compared with 21 per cent of females, while 65 per cent of males and 59 per cent of females were of working age. Figure 1.3 shows the age structure of the population in 2007.

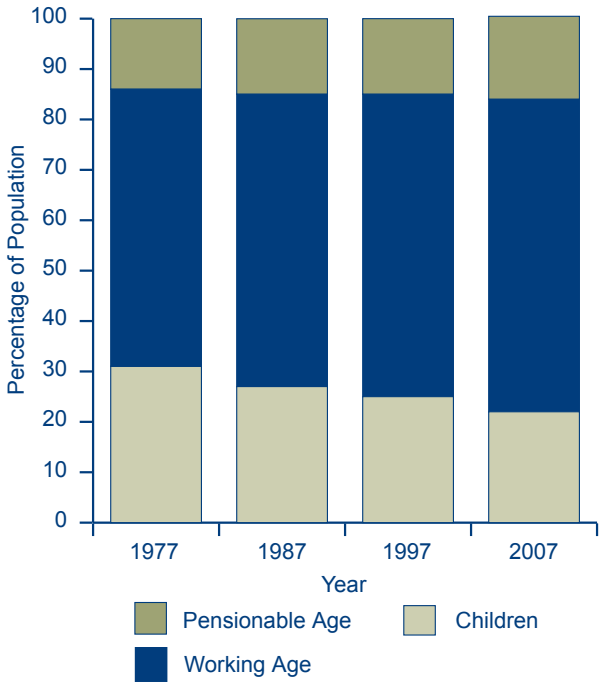
Figure 1.3: Northern Ireland population pyramid by sex and age (2007)



1.2.7. During the twelve months to June 2007, the number of children aged 0-15 years remained essentially unchanged, the number of people of working age increased by 1.1 per cent while those of pensionable age increased by 2.0 per cent. In overall terms the Northern Ireland population increased by 1.0 per cent or 17,500 people. Over the last decade the average annual rate of population increase has been around 8,800 persons (equivalent to 0.5 per cent each year). The increase in population (1.0 per cent) in 2007 and 2006 is larger than the average annual increase experienced over recent years.

1.2.8. Over the past thirty years, low fertility levels have resulted in a decrease in the number of children aged 0-15 years (18.5 per cent decrease). In contrast, the number of people of working age has increased by 29.0 per cent; and those of pensionable age have increased by 36.3 per cent. The changing age structure of the population since 1977 is illustrated in Figure 1.4.

Figure 1.4: Changing age structure of Northern Ireland population (1977 to 2007)



Area Comparisons Within Northern Ireland

1.2.9. The pattern of continuing population growth is evident within the majority of Northern Ireland's 26 Local Government Districts. Indeed, all Local Government Districts experienced a natural increase of population (more births than deaths) between mid-2006 and mid-2007. The largest natural increase of population was in Lisburn and Newry and Mourne Local Government Districts, each with natural increases of almost 800 people.

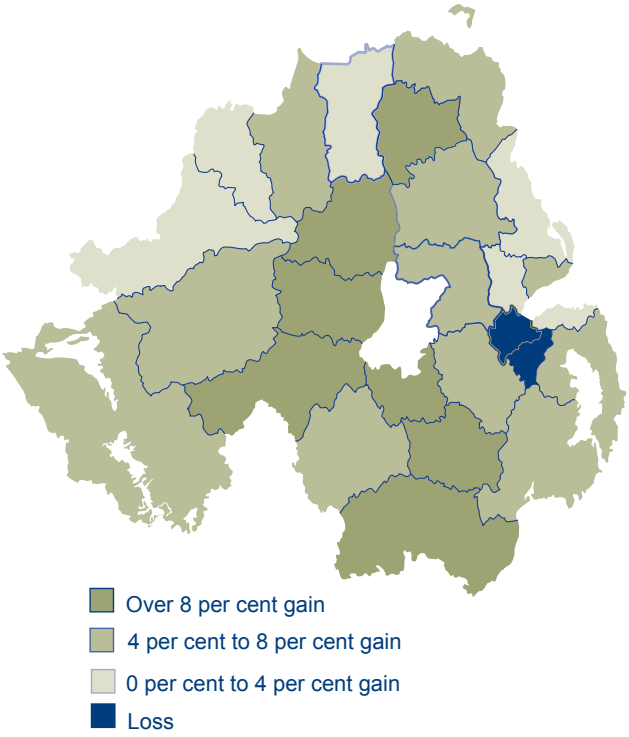
1.2.10. However, when one accounts for migration, including Armed Forces movement, the populations of Belfast (0.1 per cent), Castlereagh (-0.1 per cent) and North Down (0.0 per cent) Local Government Districts experienced either virtually no growth or a very small loss in population between 2006 and 2007.

1.2.11. In contrast Dungannon and Craigavon Local Government Districts had the greatest increases in population (+3.8 per cent and +2.4 per cent respectively). These rates of increase are more than twice the Northern Ireland percentage increase (+1.0 per cent). In addition, other districts that experienced population increases of over 2 per cent between mid-2006 and mid-2007 included, Antrim (+2.2 per cent), Banbridge (+2.1 per cent) and Newry and Mourne (+2.2 per cent) Local Government Districts.

1.2.12. Newry and Mourne was the Local Government District with the highest proportion of children among its population (24.4 per cent), while North Down had the lowest proportion (18.5 per cent). In 2007, North Down Local Government District had the highest proportion of the population of pensionable age (20.5 per cent) and Derry Local Government District had the lowest proportion (13.1 per cent).

1.2.13. Figure 1.5 shows the percentage change in population between mid-2001 and mid-2007 for each Local Government District area. It is better to compare population change over a longer time frame, as population change tends to fluctuate from year to year, particularly for smaller areas. The areas with the fastest growing population (e.g. Ballymoney, Banbridge and Dungannon Local Government Districts) tend to experience both net population in-migration and natural growth.

Figure 1.5: Percentage population change by Local Government District Area (2001 to 2007)



1.3 Migration

1.3.1. Measures of population movement or migration are based on the United Nations definition of a long-term international migrant[1]. This definition is in use in population statistics for countries across the European Union. Unlike some other European countries, there is no comprehensive system which registers population movement in the United Kingdom. Therefore, estimates of population movement into, and out of, Northern Ireland are derived from proxy indicators. In Northern Ireland the primary source for estimating this is family doctor registrations. At the Northern Ireland level, the overall effect of population movement is derived from the difference in two "population flows": the number of people coming to live in Northern Ireland and the number of people leaving Northern Ireland to live elsewhere.

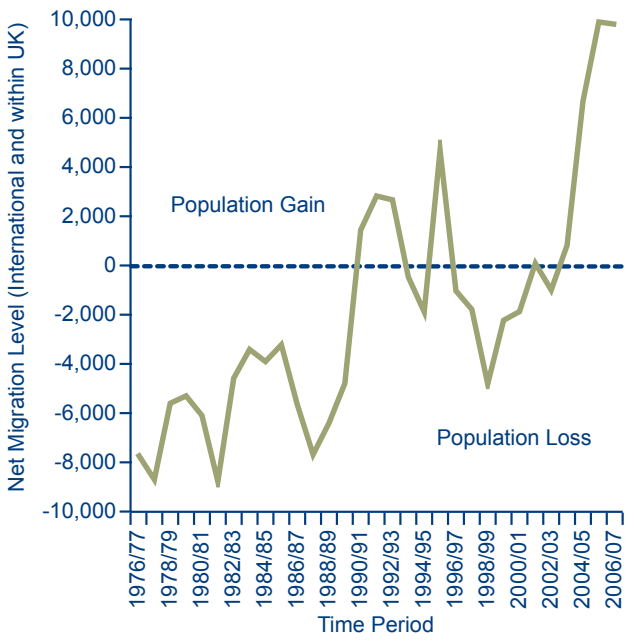
1.3.2. Between July 2006 and June 2007, almost 32,300 people came to live here and just under 22,500 people left Northern Ireland. This resulted in an overall gain in population (or net-migration) of 9,800 people. This is a similar figure to the highest figure ever recorded for net-migration to Northern Ireland in a single year in mid-2006 (9,900). In contrast, since the Second World War it is estimated that around 300,000 more people have left Northern Ireland to live elsewhere than came here to live.

1.3.3. Estimates of net migration for Northern Ireland since the mid-1970s are shown in Figure 1.6. The graph can be viewed in terms of three distinct phases of migration. The first phase during the 1970s and 1980s was when Northern Ireland experienced consistently large net population loss due to population movement (or out-migration) approaching 10,000 people in some years. Clearly, the impact of "The Troubles" is significant here.

1.3.4. The second phase from the early 1990s until 2004 shows population movement has been in balance, with broadly the same number of people coming to live in Northern Ireland as leaving. Over this period it is estimated that each year around 20,000 people have come to live in Northern Ireland and 20,000 left. However in the last phase since 2004 the number of people estimated to have come here to live rose to 27,000 by mid-2005, to over 30,000 by mid-2006 and to over 32,000 by mid-2007. This is a marked increase and is related to the enlargement of the European Union in May 2004, when people from countries in Eastern Europe were allowed to come to work in the United Kingdom and Ireland.

1 "A person who moves to a country other than that of his or her usual residence for a period of at least a year, so that the country of destination effectively becomes his or her new country of usual residence." - Taken from "Recommendations on Statistics of International Migration. UN 1998" available at http://unstats.un.org/unsd/pubs/gesgrid.asp?ID=116

Figure 1.6: Estimated level of net migration (1976-7 to 2006-7)



Place of Origin/Destination of People Coming to Northern Ireland (2006-7)

1.3.5. Table 1.1 shows where people coming to Northern Ireland last lived. Of the 32,300 people who came to live here during 2006-7; around 60 per cent (19,400) came from outside the United Kingdom. Of this just over half (10,500) came from the eight Eastern European Accession countries (A8)[2] that joined the European Union in May 2004.

2 The A8 countries are the Czech Republic, Estonia, Hungary, Latvia, Lithuania, Poland, Slovakia and Slovenia. Malta and Cyprus also joined the EU on 1 May 2004 but are considered separately from the A8 countries as they have full free movement rights to work throughout the EU.

Table 1.1: Number of people coming to live in Northern Ireland by country of last residence (Mid 2004 to Mid 2007)

Country of Last Residence	Number of people coming to live in Northern Ireland (Mid-2004 to Mid-2005)		Number of people coming to live in Northern Ireland (Mid-2005 to Mid-2006)		Number of people coming to live in Northern Ireland (Mid-2006 to Mid-2007)	
	Number	Percentage	Number	Percentage	Number	Percentage
England and Wales	10,800	*40%*	9,900	*33%*	10,200	*31%*
Poland	2,400	*9%*	5,400	*18%*	6,700	*21%*
Scotland	2,400	*9%*	2,300	*8%*	2,600	*8%*
Lithuania	1,500	*6%*	2,000	*7%*	1,600	*5%*
Republic of Ireland	2,100	*8%*	1,400	*5%*	1,700	*5%*
Slovakia	600	*2%*	1,000	*3%*	1,100	*4%*
India	700	*3%*	700	*2%*	800	*2%*
China	500	*2%*	500	*2%*	600	*2%*
Philippines	500	*2%*	500	*2%*	500	*1%*
Portugal	700	*3%*	300	*1%*	300	*1%*
USA	500	*2%*	400	*1%*	300	*1%*
All other EU Accession Countries	700	*2%*	1,000	*3%*	900	*3%*
All other countries	3,400	*13%*	5,000	*16%*	4,800	*15%*
Total Inflow	**26,900**	***100%***	**30,500**	***100%***	**32,300**	***100%***

Source: Central Services Agency, May 2008, Health Card Registrations

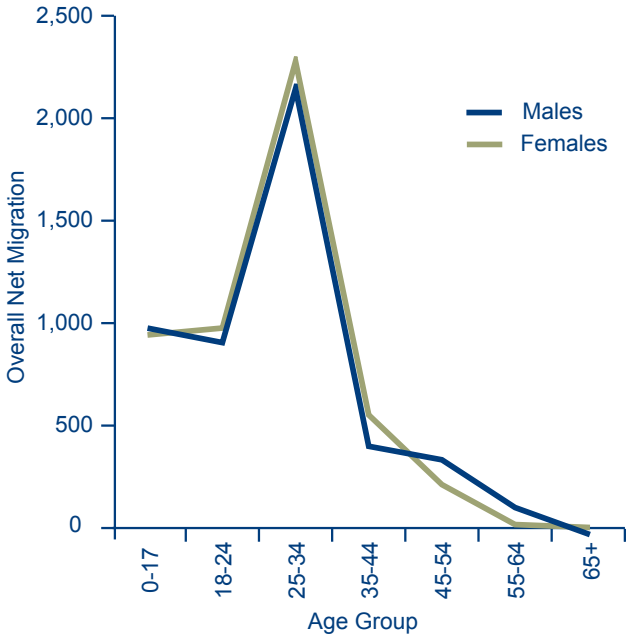
1.3.6. This table reflects where people coming to live here last lived *not* their nationality. Thus some people coming from Great Britain or Ireland will be non-British/ Irish nationals, and some people coming from outside the British Isles will be returning British/Irish nationals.

1.3.7. In contrast looking at the 22,500 people who left Northern Ireland to live elsewhere in 2006-7; just under half, 11,100 left for Great Britain and just over half, 11,300 left for outside the UK. Therefore, in total, it is estimated that just under 1,800 more people came to live here from Great Britain, than moved in the opposite direction, and 8,000 more people came to live here from outside the UK than moved in the opposite direction.

Age-Distribution of Migrants

1.3.8. Figure 1.7 shows the age distribution of net migration in Northern Ireland for 2006-7. The 25-34 age groups experienced the largest net-migration gain for both males and females.

Figure 1.7: Net total migration by age group and gender (2006-7)



Other Data Sources on Migration

1.3.9. As noted above measuring migration is challenging. There are a number of sources available to count people coming to or leaving Northern Ireland. However the sources use different definitions of how, when and where migrants are recorded. That said recent data from all administrative and statistical sources show increased migration. The sources also give a consistent picture on which parts of Northern Ireland new migrants are working and living in.

1.3.10. Most people coming to Northern Ireland to work from one of the eight Eastern European countries that joined the EU in 2004 must register through the Worker Registration Scheme (WRS). In the year to June 2007, some 9,100 people registered with the WRS to work in Northern Ireland, a slightly higher level to the previous year.

1.3.11. Non-EEA nationals coming to work in Northern Ireland require work permits, and there is an average flow of about 2,000 persons per year, although numbers in the year to June 2007 are slightly down on previous years. Numerically Indian and Filipino are the largest nationalities applying for work permits for jobs in Northern Ireland.

1.3.12. In 2007, 1,900 births here (8 per cent of all births) were to mothers born outside the UK and Ireland, compared to 700 such births in 2001. Of these, 800 births in 2007 were to mothers from the eight Eastern European countries that joined the EU in 2004, compared to 10 such births in 2001.

1.3.13. The School Census (October 2007) shows that about 3,500 primary school children have a language other than English as their 'first' language. This is about two per cent of the primary school population, and a large increase on the corresponding figure (2,400) for the previous year. For secondary school children, the increase has been from 1,100 to 1,700 (one per cent of the secondary school population) between 2006 and 2007.

1.3.14. New registrations with GPs from migrants coming from outside the UK continue to increase, with almost 19,400 registrations in 2007. Over half those registering with GPs gave their reason for coming to the UK as work related, while 20 per cent came for family reasons, 7 per cent for education reasons and 20 per cent gave another or no specific reason.

1.3.15. The overall migration trends described above vary across Northern Ireland. Flows around areas such as Botanic (Belfast), Jordanstown (Newtownabbey) and Strand (Derry) are driven by students, but work is the main reason given by people for coming to Northern

Ireland. Information from registrations with GPs shows that in parts of Dungannon, Craigavon, Belfast and Newry and Mourne Local Government Districts, annual immigration flows in 2007 exceed 1 in 30 of the resident population.

1.3.16. There is also spatial variation in migration related statistics for children. In 2007 about two per cent of primary school children did not have English as their 'first' language; however this figure for schools in Dungannon Local Government District was eight per cent. Similarly, while births to mothers born outside the United Kingdom and Ireland accounted for eight per cent of all 2007 births, in Dungannon Local Government District the figure was 18 per cent.

1.4 Projected Population – Northern Ireland

1.4.1. Population projections are produced every other year and the latest projections use as the base year 2006. Based on this the Northern Ireland population, 1.742 million in 2006, is projected to increase to 1.812 million in 2011. This is equivalent to an average annual rate of growth of 0.8 per cent. Over the longer term the population is projected to reach 1.922 million by 2021 an increase of 180,000 people.

1.4.2. The projected increase in population is due to both natural growth and inward migration. In the five years (2006 to 2011) it is projected that there will be 51,000 more births than deaths and 19,000 more people coming to Northern Ireland to live than leaving.

1.4.3. Projections indicate a marked increase in the size of the population at older ages. The number of people of current pensionable age is projected to increase by around 11 per cent in the next five years and by around 39 per cent over the fifteen year period 2006-2021, while the number of children aged under 16 is projected to remain broadly constant over this period.

1.4.4. In totality, the population will also gradually become older with the average age expected to rise from 37.3 years in 2006 to 40.0 years by 2021. In 2006 there were 141,000 more children aged under 16 than people aged 65 and over. The number of people aged 65 and over is projected to exceed the number of children from 2027 onwards. The number of children aged under 16 is projected to remain broadly constant at around 385,000. In 2006, there are 380,000 children with a projected 393,000 children in 2021.

1.4.5. The number of males aged 16-64 and females aged 16-59 (the current definition of working age) is projected to increase from 1,077,000 in 2006 to 1,133,000 by 2021, an increase of about 56,000 (5 per cent).

1.4.6. Between 2010 and 2020, the pension age for females will be increased incrementally from 60 to 65. Taking this into account, the number of people of working age in Northern Ireland is projected to rise by 10 per cent from 1,077,000 in 2006 to 1,190,000 in 2021. Table 1.2 shows the estimated and projected dependency ratios.

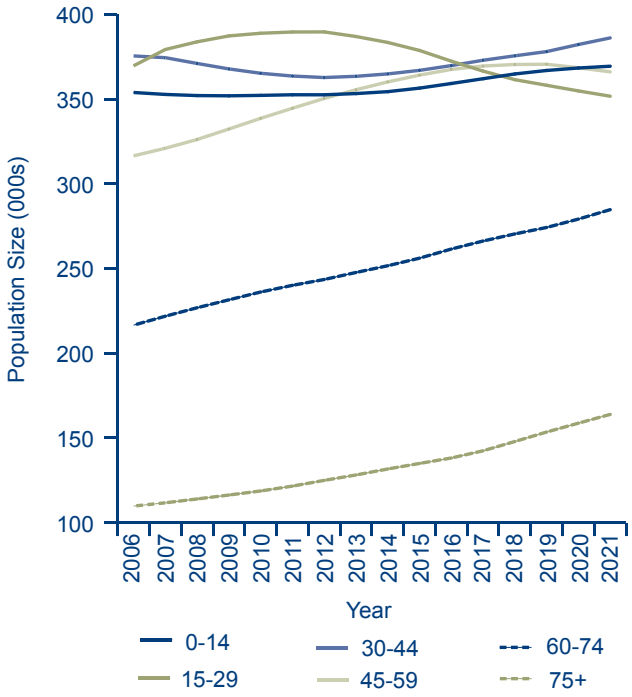
Table 1.2: Estimated and projected dependency ratios, 1976, 1986, 1996, 2006 and 2021

	Number of dependents per 100 persons of working age		
Mid-Year Population Estimates/Projections	**Children (Under 16 years)**	**Persons of State Pension Age**	**All Dependants**
Mid-1976	56	25	81
Mid-1986	46	26	72
Mid-1996	42	26	67
Mid-2006	35	26	62
Mid-2021 (State pension age as at 2021)	33	28	61
Mid-2021 (State pension age as at 2006)	35	35	70

1.4.7. The number of people of pensionable age (as currently defined, aged 60 and over for females and aged 65 and over for males) is projected to increase from 284,000 in 2006 to 396,000 by 2021, an increase of 39 per cent. In 2021, after allowing for the change in age at which females can claim retirement pension, the number of people of pensionable age is projected to be 339,000 (19 per cent higher than 2006).

1.4.8. The number of people aged 85 and over will also rise; it will almost double within the next 17 years. Figure 1.8 shows the changes different age groups are projected to experience over the next 15 years.

Figure 1.8: Projected population by age group (2006 to 2021) – non-zero y-axis

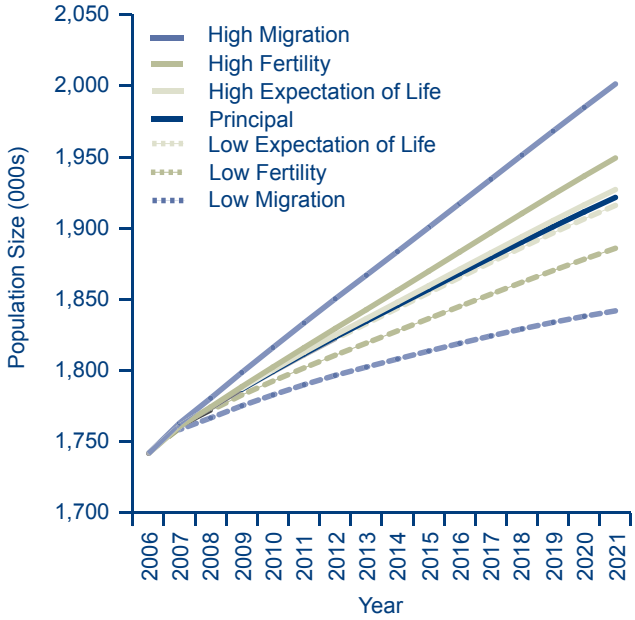


Assumptions and Variant Projections

1.4.9. Population projections provide a consistent starting point for all Government planning. Projections are however based on assumptions and due to the inherent uncertainty of demographic behaviour, any set of projections will inevitably, to a greater or lesser extent, be proved wrong (see Chapter 2 for further commentary). Therefore, alternative variant assumptions of future fertility, mortality and migration are available for the population projections.

1.4.10. In these projection variants, different fertility, mortality and migration assumptions have been treated as separate and independent departures from the assumptions in the principal projection. Figure 1.9 shows that, for example, holding the fertility and mortality assumptions unchanged, an assumption of high migration (net in-migration of 5,000 per year) would lead to a population in 2021 of 2.00 million while an assumption of low migration (net out-migration of 4,000 per year) would lead to a population in 2021 of 1.84 million.

Figure 1.9: Population projections - principal and variant 2006-based projections (2006 to 2021) – non-zero y-axis

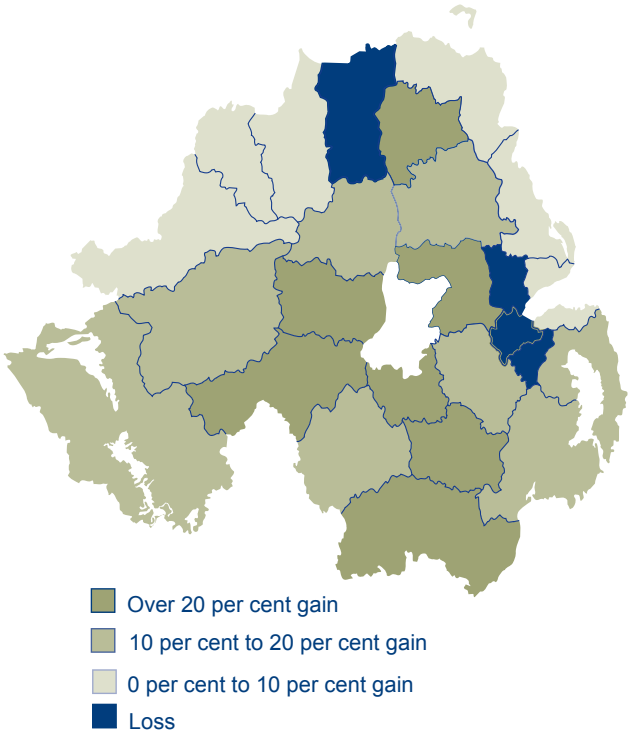


Area Comparisons Within Northern Ireland

1.4.11. Population projections are also calculated for areas within Northern Ireland, with the latest local area projections, like the Northern Ireland projections, also using 2006 as the base year. Based on this over the period 2006 to 2021, 22 of Northern Ireland's 26 Local Government Districts are projected to experience population growth. Those projected to experience a loss over the 15 year period are Belfast (-7 per cent), Castlereagh (-10 per cent), Coleraine (-7 per cent) and Newtownabbey (-1 per cent) Local Government Districts.

1.4.12. Of those Local Government Districts projected to grow Dungannon is projected to have the highest percentage growth of 44 per cent with an increase from 52,300 to 75,500 between 2006 and 2021, this is over four times higher than the projected growth for Northern Ireland (10 per cent). Figure 1.10 shows the percentage change in all Local Government Districts.

Figure 1.10: Overall projected percentage change in population size of Local Areas between 2006 and 2021



1.4.13. Castlereagh Local Government District is projected to experience the greatest percentage decrease in the percentage share of the Northern Ireland population from 3.8 per cent in 2006 to 3.1 per cent in 2021. In contrast Dungannon Local Government District is projected to experience the greatest percentage increase from 3.0 per cent to 3.9 per cent of the Northern Ireland population.

1.4.14. The number of children aged 0-15 is projected to increase in 16 of the 26 Local Government Districts by 2021, with the largest percentage increases in Dungannon (+40 per cent) and Newry and Mourne (+29 per cent). The biggest decreases are projected in Castlereagh (-31 per cent) and Limavady (-25 per cent).

1.4.15. The population aged 16-64 years is projected to increase in 19 of the 26 Local Government Districts by 2021, with the largest percentage increases in Dungannon (+45 per cent), Newry and Mourne (+25 per cent) and Craigavon (+25 per cent). The biggest decreases are projected in Coleraine (-14 per cent) and Castlereagh (-10 per cent).

1.4.16. The population aged 65 years and over is projected to increase in all Local Government Districts by 2021, with the largest percentage increases in Limavady (+71 per cent) and Ards (+66 per cent) and the smallest increase is projected in Belfast (3 per cent).

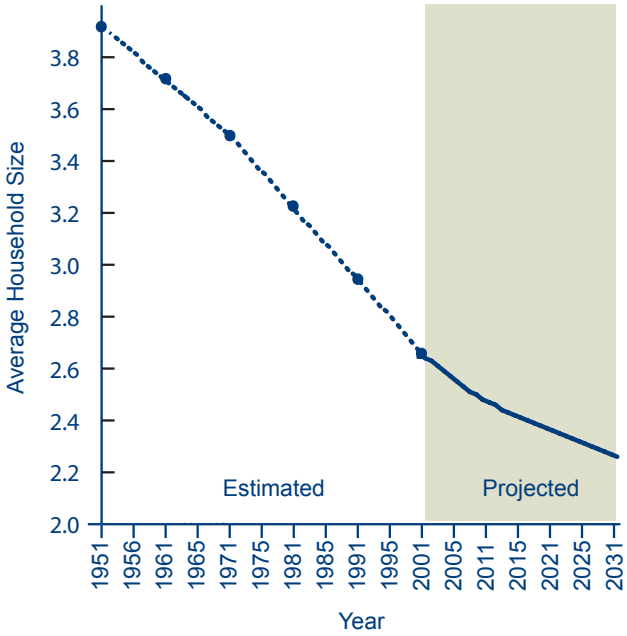
Household Projections

1.4.17. Clearly one impact of the projected increase in population is housing. Over the last five years NISRA have worked with Government Departments in Northern Ireland with responsibility for housing to create official household projections for Northern Ireland. These figures are based on both population projections and trends in household formation (for example, increasing trends in the number of people living in one person households).

1.4.18. The latest household projections for Northern Ireland are based on the 2006 population projections. The number of households in Northern Ireland is projected to grow by 48,500 or seven per cent over the five year period 2006 to 2011, from 672,600 households in 2006 to 721,100 households in 2011. Over this period, the average household size will fall from 2.55 to 2.47 persons per household.

1.4.19. In the longer term, over the period 2006 to 2021, it is projected there will be around 125,700 (19 per cent) additional households in Northern Ireland. This increase is a combined result of population growth (65,300 households), changing age structure (34,400) and continuing trends towards smaller households (26,000). The average household size is projected to drop to 2.36 persons per household in 2021. The projected average household sizes demonstrate a slowdown in the downward trend observed since 1951 (see Figure 1.11).

Figure 1.11: Average household size, Northern Ireland, 1951-2031 (non-zero y-axis, Census estimates between 1951 and 2001, projections 2002 onwards)



1.4.20. The fall in the average household size is primarily caused by a rise in the number of single and two adult households. The number of one-person households is projected to rise from 199,000 in 2006 to 225,100 in 2011 (13 per cent). At the same time, the number of two-adult households is projected to increase from 175,300 in 2006 to 196,400 in 2011 (12 per cent). The number of households with four or more persons is projected to fall slightly from 171,200 in 2006 to 169,200 in 2011 (one per cent).

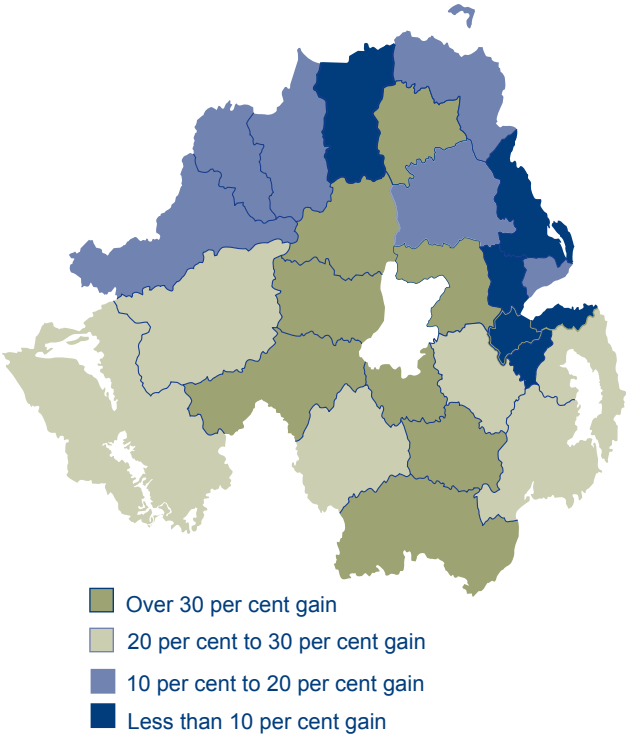
1.4.21. The number of lone adult with dependent children households is projected to remain relatively stable at around 43,000 households. The number of other households with children is projected to remain stable as well at around 177,000 households. The number of households with three or more persons without dependent children is projected to rise in the short term, from 76,900 in 2006 to 80,400 in 2011 (five per cent).

1.4.22. In 2006, it is estimated that 98.4 per cent of the population resides in households. This percentage is set to fall slightly to 98.1 per cent in 2021. This is primarily due to the increase in the proportion of the population who are elderly and thus are more likely to reside in residential care.

1.4.23. Over the period 2006 to 2021, all of Northern Ireland's Local Government Districts are projected to experience a growth in the number of households. The

largest percentage increases are projected in Dungannon (+54 per cent) and the smallest increases are projected in Belfast, Castlereagh and Coleraine (all +2 per cent). Figure 1.12 below shows the projected change in each Local Government District.

Figure 1.12: Overall percentage change in number of households by Local Areas between 2006 and 2021



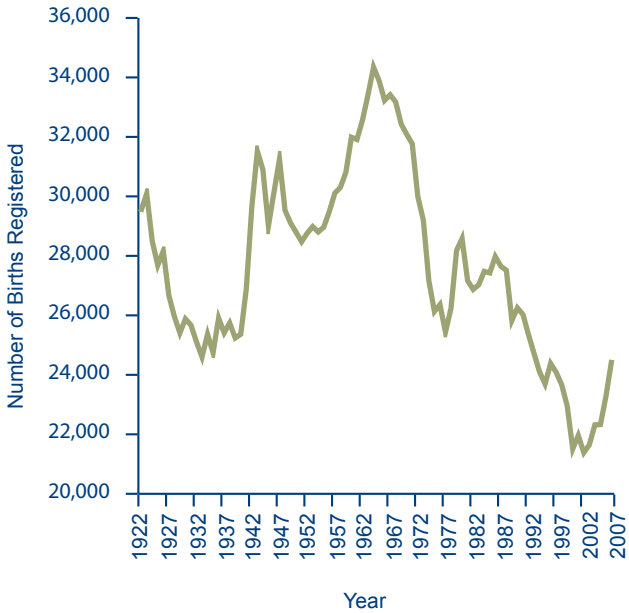
1.5 Births

Numbers

1.5.1. In 2007, there were 24,451 births registered to Northern Ireland mothers, a 5.1 per cent increase on the 2006 figure of 23,272 births. Indeed, the number of births has recovered from an all-time low of 21,385 births registered in 2002. However, the number of births in 2007 is still well below corresponding levels of the mid-1970s, when just over 25,400 births were registered in 1977.

1.5.2. The number of births registered each year since 1922 is shown in Figure 1.13. This graph shows a noticeable peak after the second world war. Like many western countries, Northern Ireland experienced a “baby boom” during the second half of the 1950s and early 1960s. Specifically in Northern Ireland, births peaked in 1964 at just over 34,000 live births and then fell dramatically in the early 1970s. The drop in the number of births levelled off in the 1980s at 27,000 births per annum. However, this was mainly a result of the larger number of women, who were born in the baby boom of the 1950s and 1960s, passing through their childbearing years. The decline in births resumed in the 1990s as these women started to complete their families. The increase in the number of births since 2002 arrests the recent decline.

Figure 1.13: Number of births registered (1922 to 2007) – non-zero y-axis

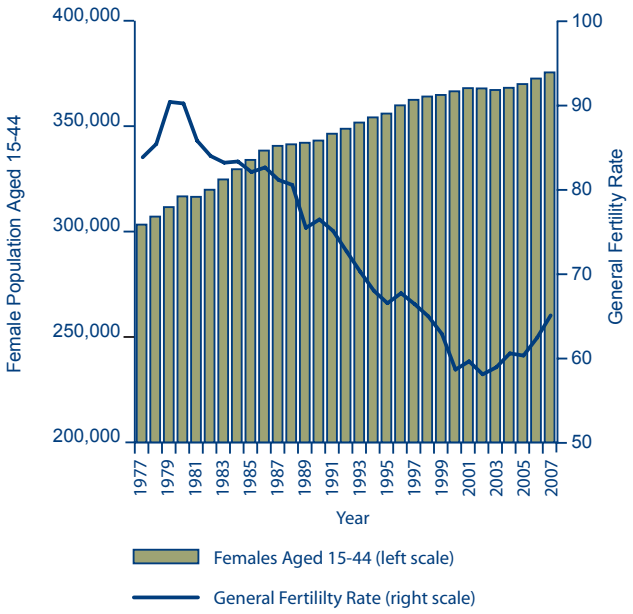


Fertility Rates

1.5.3. The crude birth rate in 2007 was 13.9 births per 1,000 population, which is an increase on the 2006 figure of 13.4 births per 1,000 population. However, over the longer term the birth rate has fallen from its peak in the early 1960s when it was 23.0 births per 1,000 population.

1.5.4. Figure 1.14 shows the general fertility rate (births per 1,000 females aged 15-44), along with the number of women aged 15-44. The population of females aged 15-44 has increased since 1977, however, the general fertility rate has decreased. In 2007, the general fertility rate was 65.1 births per 1,000 females aged 15-44; this is an increase from the record low in 2002 of 58.1 births per 1,000 females aged 15-44, but still well below the general fertility rate in 1977 of 86.0 births per 1,000 females aged 15-44.

Figure 1.14: Estimated female population aged 15-44 and general fertility rate (1977-2007) - non-zero y-axes



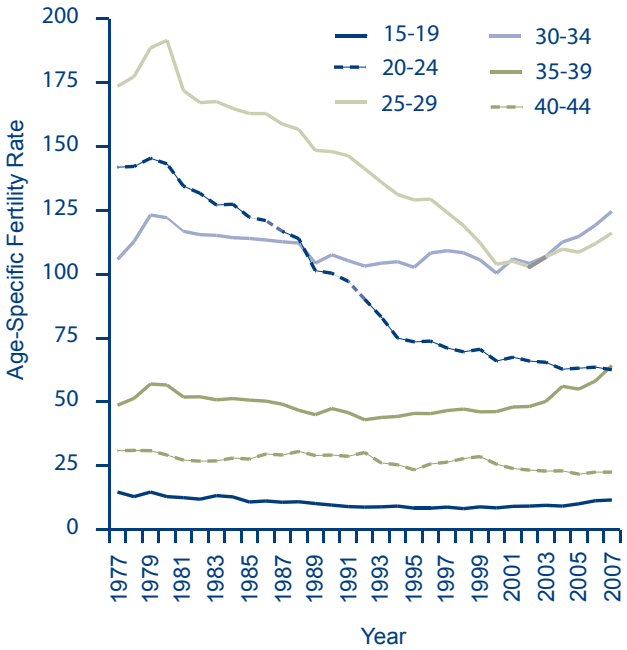
1.5.5. There has been a recent trend towards later childbearing by mothers. In 2007, for all live births, the average age of the mother was 30 years, compared with 29 in 1997, 28 in 1987 and 27 in 1977. Just over half of all births registered in 2007 were to mothers aged 30 and over; this is a significant increase from 30 years ago when around 30 per cent of births were to mothers aged 30 and over. This indicates that women are delaying child-bearing; indeed, the average age of first time mothers was 27 in 2007 compared with 24 in 1977.

1.5.6. In 2007, for all live births, the average age of the father was 33 years, compared with 32 in 1997 and 30 in 1987. However, around eight per cent of births in 2007, 10 per cent in 1997 and around 14 per cent in 1987 were registered by the mother with no father's details recorded.

1.5.7. This trend to later childbearing is most apparent in the decline in fertility among 20-24 year old females. Over the past three decades fertility for this age group has more than halved, from 142 babies per 1,000 women in 1977 to 63 babies per 1,000 women in 2007.

1.5.8. In 2007, women aged 30-34 years experienced the highest age-specific fertility rate, with 125 babies per 1,000 women, while women aged 25-29 years experienced the second highest rate (116 babies per 1,000 women). Figure 1.15 shows the change in age-specific fertility rates by age group over the last thirty years.

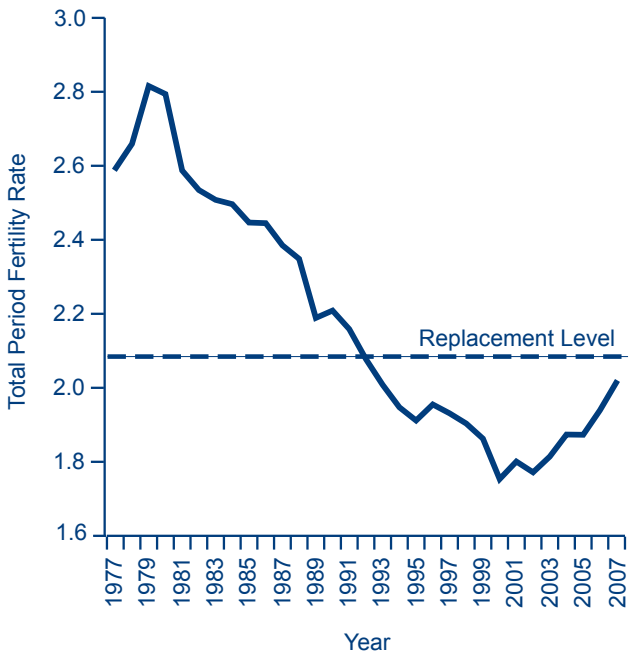
Figure 1.15: Live births per 1,000 women by age group of mother (1977 to 2007)



1.5.9. The total period fertility rate is derived from the sum of age-specific fertility rates. It gives the theoretical average number of children who would be born alive to a woman during her lifetime if she were to pass through her childbearing years conforming to the age-specific fertility rates of a given year. A value of 2.1 is generally taken to be the level at which a generation would replace itself in the long run, ignoring migration.

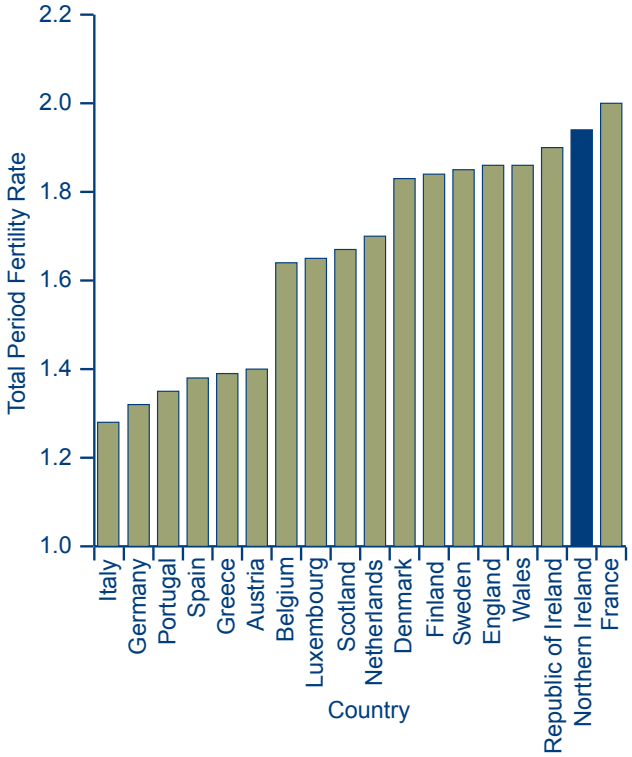
1.5.10. The total period fertility rate dropped below replacement level (2.1) in Northern Ireland for the first time in 1992. The total period fertility rate for 2007 was 2.02, which is a recovery from a record low of 1.75 in 2000, but still below the fertility rates in the 1980s and 1990s. The total period fertility rate for Northern Ireland since 1977 is shown in Figure 1.16.

Figure 1.16: Total period fertility rate (1977 to 2007) – non-zero y-axis



1.5.11. Figure 1.17 shows the total period fertility rate for Northern Ireland compared to the European Union 15 (EU15) and the other constituent countries of the United Kingdom (UK). Northern Ireland has the highest total period fertility rate of the constituent countries of the UK and one of the highest total period fertility rates of the EU15 – only France has a higher total period fertility rate (2.00). The most recent data available for all countries is for 2006.

Figure 1.17: Total period fertility rate, EU15 and Constituent Countries of the UK, 2006 - non-zero y-axis



1.5.12. A further measure of fertility is completed family size which is a more accurate picture of fertility for a cohort of women born in a specific year. Figure 1.18 shows the achieved family size, sometimes called cumulative cohort fertility, at specific ages for women born in particular years (or cohorts). Family size at age 45 is taken to represent completed family size. This enables easy comparison between selected cohorts as women pass through the child-bearing ages.

1.5.13. Those women born in 1962 had attained an average completed family size of 2.4 children by the time they reached 45. Figure 1.18 also permits the comparison of family size at selected ages for the various cohorts as they pass through the childbearing ages. For example, by age 30 the cumulative childbearing of the 1977 cohort is 0.6 children lower than that of the 1962 cohort.

Figure 1.18: Cumulative cohort fertility rate for selected birth cohorts

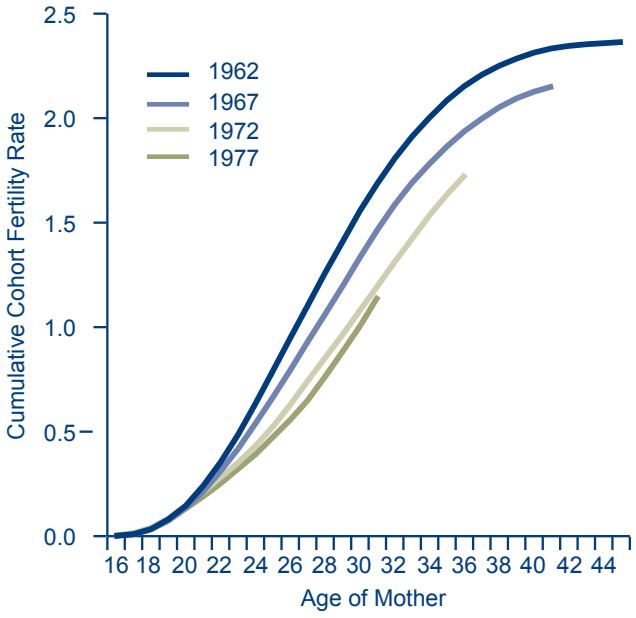
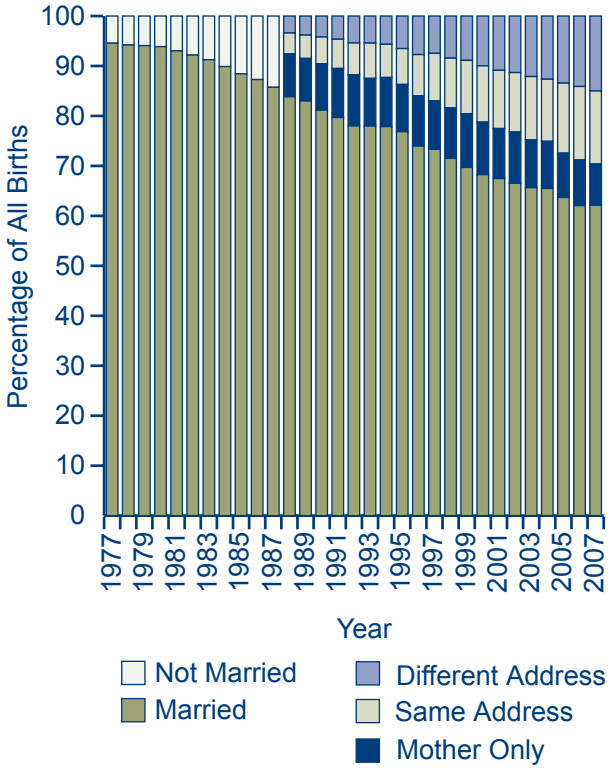


Figure 1.19: Live births by registration status (1977 to 2007)



Birth Order

1.5.14. A total of 10,383 births (42 per cent) were to first-time mothers in 2007. Second-time mothers had 8,022 babies (33 per cent) and third-time mothers had 3,917 babies (16 per cent). Only nine per cent of mothers, in 2007, already had three or more live born children reflecting the trend towards smaller family sizes.

Births Outside Marriage

1.5.15. In 2007, 37.9 per cent of all live births occurred outside marriage. This proportion has been increasing steadily since the early 1960s when the proportion of children born outside marriage was about 2.5 per cent. Since 1988, information has been gathered that identifies births registered by married parents, unmarried parents (living at the same address or at different addresses) or by the mother only. In 2007, 78.2 per cent of births outside marriage were jointly registered by both parents. Figure 1.19 shows the change in births by registration status since 1977.

1.5.16. In 2007, 97.4 per cent of births to mothers under the age of 20 were outside marriage, 78.6 per cent of births to mothers aged between 20 and 24 were outside marriage, while for those aged 25 and over only 24.8 per cent of births were outside marriage.

Multiple Births

1.5.17. In 2007, the percentage of maternities resulting in a multiple birth was 1.5 per cent. There were 357 sets of twins and five sets of triplets registered in 2007.

1.5.18. The percentage of maternities, resulting in multiple births has increased from 1.1 per cent in the 1970s to 1.5 per cent in 2007. The percentage of maternities that result in a multiple birth increases with the age of the mother. In 2007, less than one per cent of maternities to mothers aged under 25 resulted in multiple births, while 2.5 per cent of maternities to mothers aged between 40 and 44 resulted in multiple births.

Place of Birth

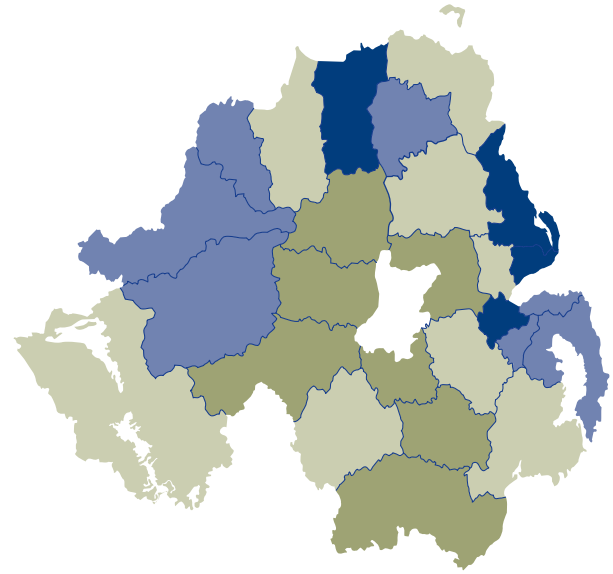
1.5.19. In 2007, around 100 babies were born in places other than a hospital, this is a similar figure to 2006.

Births by Area

1.5.20. Health Board level crude birth rates ranged from 13.4 births per 1,000 population in the Eastern Board and Northern Board areas to 15.6 births per 1,000 population in the Southern Board area. The birth rate in the Western Board area was 13.8 births per 1,000 population.

1.5.21. Dungannon had the highest birth rate (16.1) of all the Local Government Districts in 2007 while the lowest birth rate (11.3) was in Coleraine. Figure 1.20 shows the 2007 birth rates per 1,000 women of child-bearing age by Local Government District.

Figure 1.20: Live births per 1,000 women aged 15-44, by Local Government District (2007)



More than 70 births per 1,000 women aged 15-44
65 to 70 births per 1,000 women aged 15-44
60 to 65 births per 1,000 women aged 15-44
Fewer than 60 births per 1,000 women aged 15-44

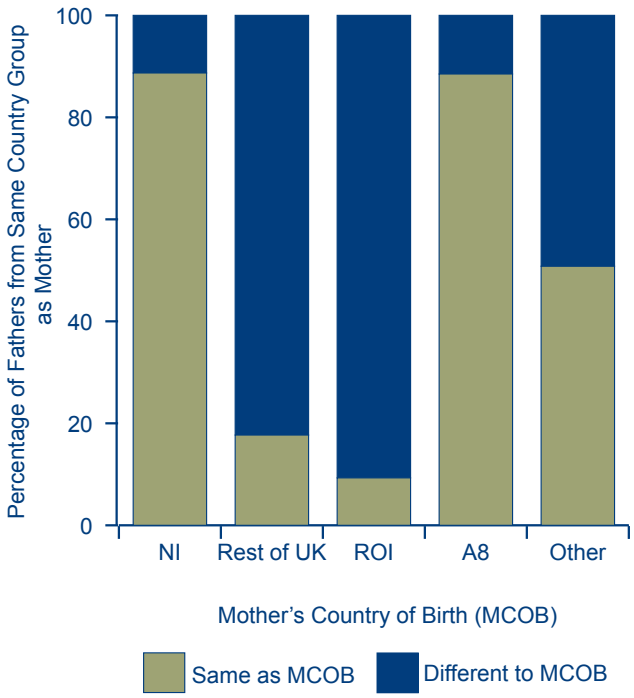
Country of Birth of Parents

1.5.22. In 2007, the majority of women having babies were themselves born in Northern Ireland (83 per cent). Of the remaining new mothers (17 per cent), most were born elsewhere in the UK or the Republic of Ireland (nine per cent). However, nearly eight per cent of all births (1,947 births) were to mothers who themselves were born outside the UK and Ireland. This is a marked rise on previous years, for example, there were fewer than 600 such births in 1997 or two per cent of all births.

1.5.23. Over recent years, the number of births to mothers born in the A8 countries has increased. The number of births in 2001 to mothers born in one of the A8 countries was 12. Between 2006 and 2007 the number of such births increased from 390 to 775.

1.5.24. Figure 1.21 shows father's country of birth in relation to the mother's country of birth, where both parents were registered on the birth certificate. Two-thirds of children born in Northern Ireland have both parents born in Northern Ireland. For births where the mother was born in the rest of the UK and the Republic of Ireland, the majority of fathers have been born in a different country to the mother, with 77 per cent from Northern Ireland. The trend is different for children whose mother was born in an A8 country, where 84 per cent of these children have an A8 father as well.

Figure 1.21: Live births in Northern Ireland by mother and father's country of birth (2007)

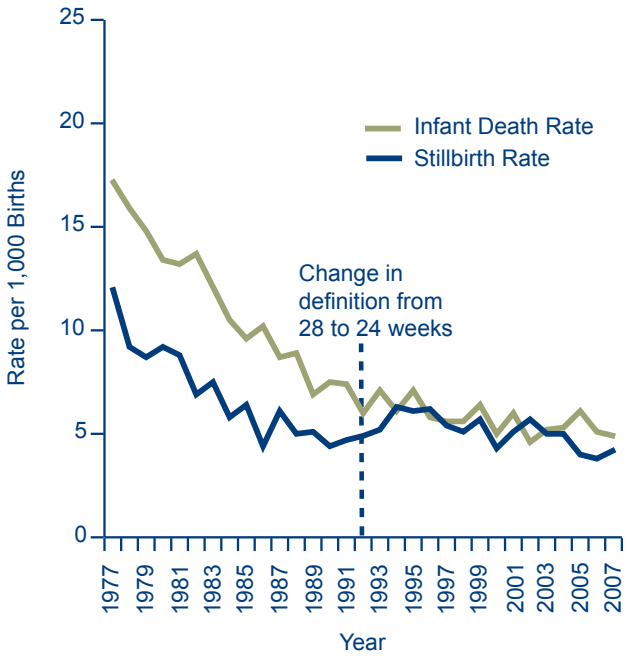


1.6 Stillbirths and Infant deaths

Numbers

1.6.1. As can be seen in Figure 1.22, there have been significant reductions in stillbirth and infant death rates in the period since 1977. The stillbirth rate has reduced from 12.0 stillbirths per 1,000 births (live and still) in 1977 to 4.2 in 2007. This fall happened despite a change in the definition of stillbirths in 1992, which reduced the minimum period of gestation from 28 weeks to 24 weeks (thus increasing the number classified as stillbirths). The infant death rate (deaths of children aged under 1) has decreased by over 70 per cent from 17.2 infant deaths per 1,000 live births in 1977 to 4.9 in 2007.

Figure 1.22: Stillbirth and infant death rates (1977 to 2007)



1.6.2. The numbers of stillbirths in 2007 was 102, an increase of 13 from the 2006 figure of 89. The number of infant deaths also increased slightly from 121 in 2006 to 123 in 2007. Deaths in the first week of life accounted for 57 per cent of all infant deaths. The number of infants dying on the first day of life accounted for 47 deaths in 2007 compared with 42 in 2006.

1.6.3. Looking further back the recent infant death figures show a large decrease from the 1920s when over 2,000 infant deaths were registered each year. The number of infant deaths was highest in 1943, with 2,464 infant deaths and lowest in 2002 with 100 infant deaths registered.

1.6.4. As with stillbirths and infant deaths, the numbers of perinatal, neonatal and postneonatal deaths have reduced greatly to around one tenth of their values several decades ago. In 2007, there was a slight increase in the number of perinatal deaths (165 to 172) and a slight decrease in the number of neonatal deaths (90 to 81). There was also a slight increase in postneonatal deaths (31 to 42) from the numbers seen in 2006. Males accounted for more stillbirths, perinatal, neonatal and infant deaths than females in 2007.

Causes of Infant Deaths and Stillbirths

1.6.5. Congenital malformations, deformations and chromosomal abnormalities (ICD10 codes Q00-Q99) were the cause of 28 per cent of all infant deaths. A further 10 per cent of infant deaths were caused by disorders related to respiratory and cardiovascular disorders specific to the perinatal period (ICD10 codes P20-P29), and another 11 per cent were caused by disorders related to length of gestation and fetal growth (ICD10 codes P05-P08). Five infants died of external causes of injury (ICD10 code V01-Y98).

1.6.6. Ten children died as a result of ill-defined and unknown causes of mortality (ICD10 code R95-R99). This is a similar figure to the nine deaths registered in 2005 and 2006. Between 2003 and 2007, 45 infants died of these causes, compared to 25 in the previous five years (1998-2002).

1.6.7. Forty-nine per cent of all stillbirths in 2007 were caused by 'other conditions and disorders originating in the perinatal period' (ICD10 codes P75-P96) while placental and cord conditions (ICD10 code P02) accounted for a further 17 per cent.

Pregnancy, Childbirth and Puerperium

1.6.8. There were no maternal deaths (ICD10 codes O00-O99) in 2007, compared to three in 2006 and one death in 2005, and there were nine maternal deaths in the period 1994-2004.

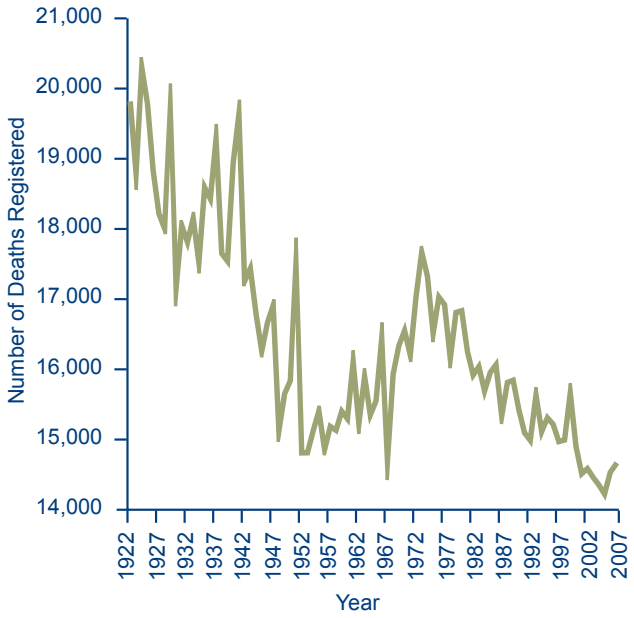
1.7 Deaths

Numbers

1.7.1. In 2007, there were 14,649 deaths registered in Northern Ireland, an increase of just over 100 deaths or 0.8 per cent on the 14,532 deaths registered in 2006. Figure 1.23 shows the number of deaths registered from 1922 to 2007.

1.7.2. Although the number of deaths increased last year, the long-term trend is one of falling death rates. The reduction in the number of deaths in recent years has occurred despite the population increasing in size and containing a higher proportion of elderly people. The current population is 15 per cent larger than it was in 1977 and those aged 75 and over represent six per cent of the population now compared to only four per cent in 1977. Indeed, if the age-specific death rates of 1977 still applied today, the number of deaths registered in 2007 would have been over 26,500; almost 12,000 higher than the actual number registered. This reduction in the number of deaths reflects the continuing reduction in mortality rates across all age groups and the corresponding increase in life expectancy.

Figure 1.23: Number of deaths registered (1922 to 2007) – non-zero y-axis



Mortality by Age

1.7.3. In 2007, 62 per cent of deaths were of people aged 75 and over, and a further 23 per cent were of people aged 60 to 74. Children aged under five accounted for one per cent of all deaths.

1.7.4. The average age at death in 2007 was 71 years for males and 79 years for females, an increase of six years on the average age at death for males in 1977 and seven years for females. This reflects the increased survival of males and females over the period and the consequential ageing of the population.

1.7.5. From the relatively high rates of death in infancy, death rates sharply decline through childhood. The lowest age-specific death rates (ASDRs) were experienced by males and females aged 5–9 years, with an ASDR of 0.1 per 1,000 population for both males and females. ASDRs begin to increase after age 15 years, for both males and females. Throughout the life span, ASDRs are higher for males. However, the difference between males and females becomes more prominent after the age of 60 years. Figures 1.24a and 1.24b show age-specific deaths rates for males and females by age group for 1977 and 2007.

Figure 1.24a: Age-specific death rates by age group and sex (1977 and 2007)

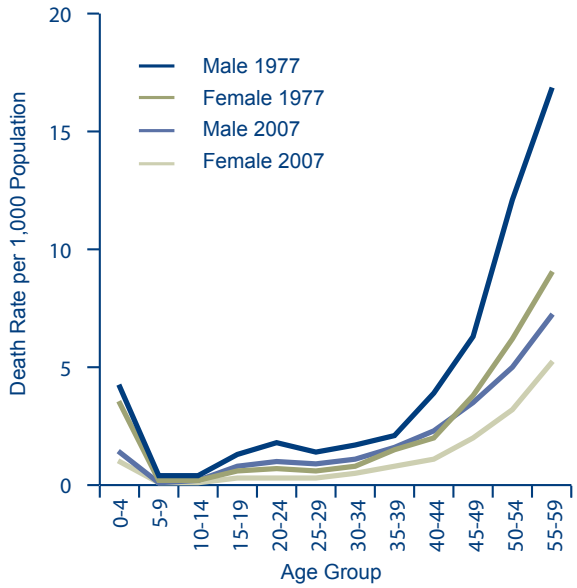
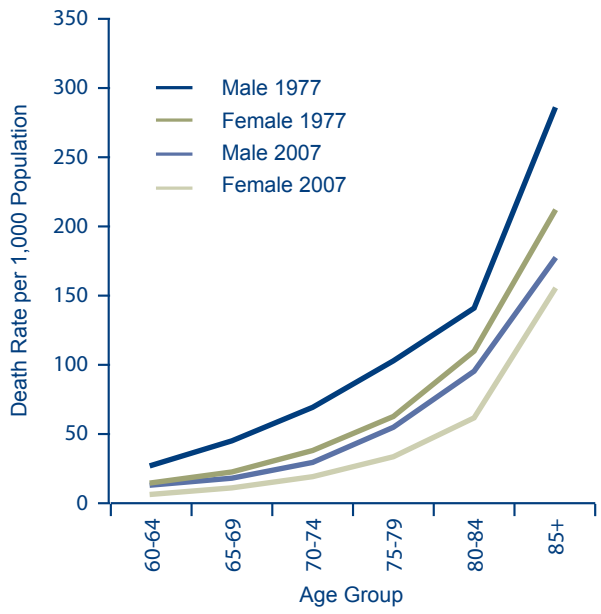


Figure 1.24b: Age-specific death rates by age group and sex (1977 and 2007)



1.7.6. In the past 30 years the annual risk of dying has declined for people of all ages. The largest declines in male age-specific death rates occurred in the 5-9 years age group (down 77 per cent), followed by those aged 0-4 years (down 66 per cent), and 65-69 years (down 60 per cent). Female age-specific death rates declined most substantially for 0-4 years (down 71 per cent), 20-24 years (down 63 per cent), followed by those aged 60-64 years (down 56 per cent).

Mortality by Sex

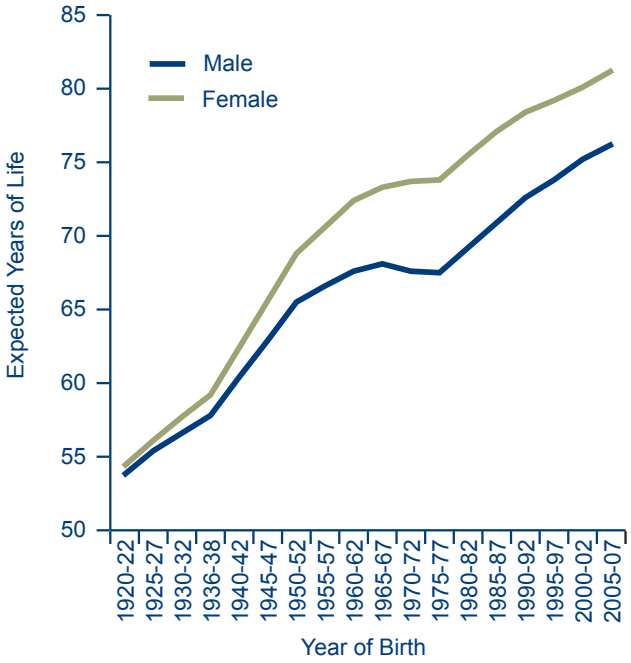
1.7.7. Female deaths (7,441) outnumbered male deaths (7,208) registered in 2007, giving a sex ratio of 103 female deaths for every 100 male deaths. The number of female deaths has outnumbered male deaths for each of the last 19 years.

1.7.8. In 1977, males had a death rate of 11.8 deaths per 1,000 population compared to females with a death rate of 10.5 deaths per 1,000 population. By 2007, the male death rate was 8.4 deaths per 1,000 population and the female rate was lower at 8.3 deaths per 1,000 population.

Life Expectancy

1.7.9. Children born today can expect to have longer lives than children born in the past. Based on current death rates, males born in recent years could expect to live until they are 76.2 years and females could expect to live until they are 81.2 years, with corresponding figures for men and women born around 1920-22 of 53.8 and 54.4 years respectively. While women aged 65 today could expect to live another 19.7 years, their male counterparts could expect to live another 16.8 years. Figure 1.25 shows the change in the expectation of life at birth for males and females since 1920.

Figure 1.25: Period expectation of life at birth, by sex (1920-22 to 2005-07) - non-zero y-axis



1.7.10. Expectation of life varies across the Local Government Districts within Northern Ireland, however the variation is not as large for females as males. Males born in recent years in Banbridge, Castlereagh, Coleraine or North Down Local Government Districts can all expect to live until they are at least 78 years, while males born in Belfast have the lowest life expectancy of all Local Government Districts at 73.6 years. Females born in recent years in Banbridge have the highest life expectancy at 83.2 years, while females born in Belfast and Derry have the lowest life expectancy of just under 80 years.

1.7.11. Figures 1.26 and Figure 1.27 show that Northern Ireland has generally lower expectation of life at birth for

both males and females compared to other European (EU15) countries. The figures also show that only Scotland amongst the other United Kingdom countries has lower life expectancy. The most recent data available for all countries is for 2006, with the exception of Italy which is 2004 data.

Figure 1.26: Life expectancy at birth, EU15 and constituent countries of the UK, 2006, male - non-zero y-axis

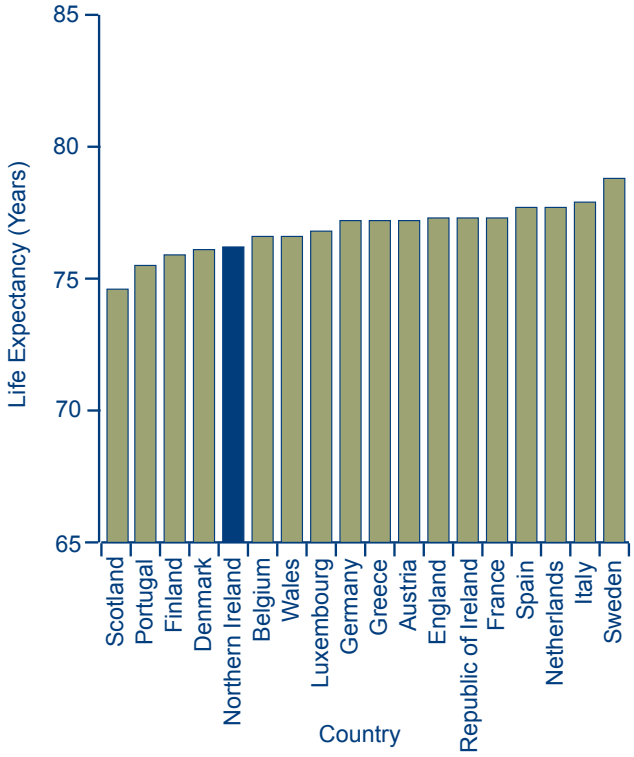
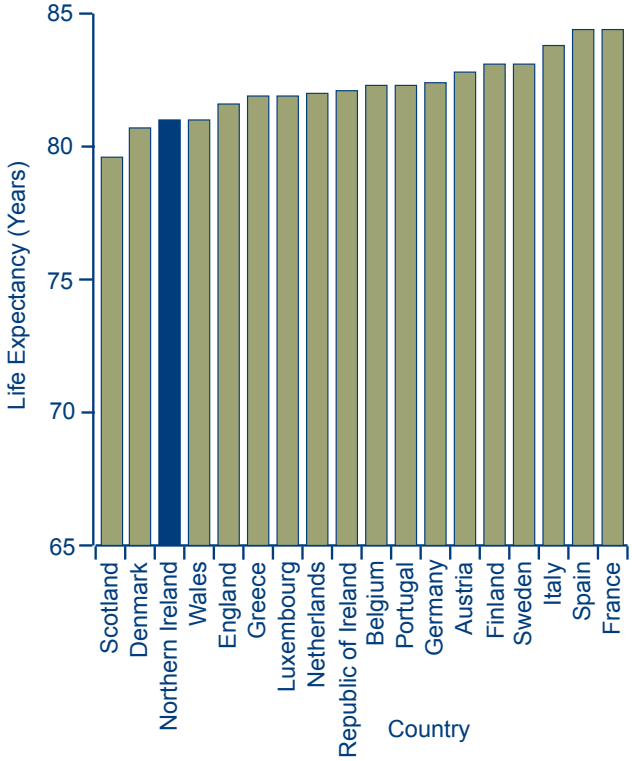


Figure 1.27: Life expectancy at birth, EU15 and constituent countries of the UK, 2006, female - non-zero y-axis



1.7.12. Expectation of life statistics are a standard way of comparing mortality rates over time. Typically, these statistics are calculated using today's age-specific mortality rates - this is known as the 'period life expectancy' calculation. This enables the comparison of mortality rates over time, or for different areas, and allows the expectancy of life statistics of today to be compared with those of the past. Expectation of life statistics given in Figures 1.25, 1.26 and 1.27 are an example of this. However, in practice period life expectancy is unlikely to be a true reflection of what is likely to happen. Throughout the twentieth century, mortality has improved significantly, with around a one per cent year on year improvement in mortality rates.

1.7.13. Expectation of life statistics can however be calculated another way. This alternative is known as a 'cohort life expectancy' calculation. Cohort expectation of life statistics are calculated using age-specific mortality rates over the lifetime of a group of people born in the same year (a cohort). The cohort method allows for projected improvements in mortality rates over time. As the cohort estimates incorporate population projections they inherently have more uncertainty than period estimates. Table 1.3 shows period and projected cohort expectations of life for 2007.

Table 1.3: Period and projected cohort expectations of life - males and females, 2007

Expectation of Life (years)	Males	Females
At birth - Period	76.2	81.2
At birth - Projected Cohort	87.7	91.4
Percentage difference	*15%*	*13%*
Age 65 - Period	16.8	19.7
Age 65 - Projected Cohort	20.4	23.0
Percentage difference	*21%*	*17%*

Mortality by Marital Status

1.7.14. Of all men whose deaths were registered during 2007, 52 per cent were married at the time of death, while 22 per cent were widowed and 21 per cent were single. In contrast, of all women whose deaths were registered during 2007, 55 per cent were widows at the time of death, with a further 25 per cent married and 16 per cent single. This difference is a consequence of the greater longevity of women.

Centenarians

1.7.15. There were 67 deaths of centenarians in 2007. Only 12 of these deaths were males, comprising eight aged 100, three aged 101 and one aged 102. There were 55 female deaths of centenarians, 19 aged 100, 14 aged 101, six aged 102, five aged 103, five aged 104 and six aged 105 or over. In contrast, there were 11 deaths of centenarians in 1977 of which two were male and nine were female.

Place of Death and Type of Death Certificate Issued

1.7.16. Of the 14,649 deaths registered in 2007, 51 per cent of these occurred in hospitals. A further 15 per cent of deaths occurred in nursing homes. The remaining 33 per cent occurred in all other places.

1.7.17. For 76 per cent of deaths registered in 2007, a medical certificate was issued, while coroner's certificates were issued for the remaining 24 per cent of deaths. A death must be reported to a coroner if the person has not seen a doctor in the 28 days before they died or immediately afterwards, a doctor had not looked after, seen or treated the person during their last illness (in other words, death was sudden), the cause of death is unknown or uncertain, the death was violent or unnatural (for example, suicide, accident or drug or alcohol overdose), the death was in any way suspicious, the death took place during surgery or recovery from an anaesthetic, the death took place in prison or police custody, or the death was caused by an industrial disease or accident.

Deaths by Date of Registration and Date of Occurrence

1.7.18. All figures recorded in this report are based on the year that the death was registered and not the year in which the death occurred. While the vast majority of deaths are registered shortly after death, some can take time to be registered. Over the registration period 1996 to 2005, 92.2 per cent of all deaths were registered in the year the death occurred. However in more recent years a larger percentage of deaths are being registered a significant period after death. In 2006, 91.0 per cent of deaths were registered in the year they occurred and this decreased slightly to 90.9 per cent for deaths occurring in the registration year 2007. Events such as infant death or suicide must be referred to a coroner and this legal process can take some time.

Deaths by Area

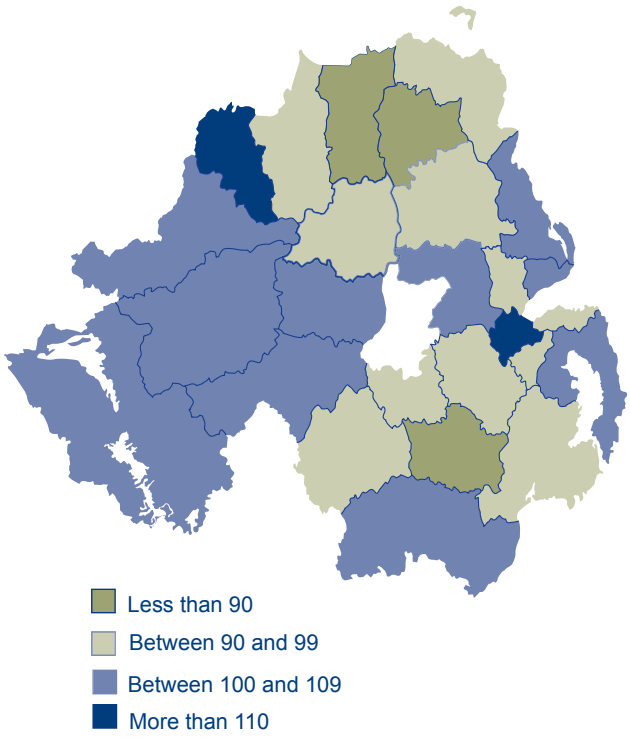
1.7.19. The standardised death rate, which allows for the age and sex structure of the population, was highest in the Western Health Board at 9.0 deaths per 1,000 population and lowest for the Southern Health Board at 7.8 deaths per 1,000 population. The standardised death rates in the Eastern and Northern Boards were 8.6 and 8.0 deaths per 1,000 population respectively.

1.7.20. Standardised mortality ratios (SMRs), based on three years data (2005-2007), compare local death rates with death rates in Northern Ireland as a whole, taking account of the different population structure of each area. SMRs by Local Government District are presented in Figure 1.28. Three Local Government Districts, Belfast,

Carrickfergus and Derry have a standardised mortality ratio significantly above the Northern Ireland average of 100. The highest, Belfast, is 15 per cent higher than the Northern Ireland average.

1.7.21. At the other end of the scale, nine Local Government Districts, Ballymena, Ballymoney, Banbridge, Castlereagh, Coleraine, Craigavon, Lisburn, Newtownabbey and North Down have SMRs significantly below the Northern Ireland average of 100. The lowest Banbridge, is 14 per cent below the Northern Ireland average.

Figure 1.28: Standardised mortality ratios by Local Government District (2005 to 2007)



Deaths by Country of Birth

1.7.22. In 2007, 89 per cent of all deaths registered in Northern Ireland were to persons who had been born in Northern Ireland. A further 10 per cent of deaths were to persons who had been born in the rest of the United Kingdom or the Republic of Ireland. The remaining one per cent were to persons born in other countries of the world.

Seasonality of Deaths

1.7.23. Generally more deaths occur in the winter months of the year, with most deaths occurring in January and December in 2007. On average there are around 13 per cent more deaths in the winter months of December and January than the annual monthly average.

1.8 Cause of Death

Numbers

1.8.1. All deaths registered in 2007 have been coded using the tenth revision of the International Statistical Classification of Diseases, Injuries and Causes of Death (ICD10).

1.8.2. In total, circulatory diseases, malignant neoplasms (cancer) and respiratory diseases accounted for almost three-quarters of all deaths in 2007.

1.8.3. In 2007, 3,870 people died from cancer, a broadly similar number to recent years. However, cancer deaths (ICD10 codes C00-C97) represent 26 per cent of all deaths registered in 2007 compared to 18 per cent of all deaths in 1977. By contrast, in 2007, 2,494 people died from ischaemic heart disease (ICD10 codes I20-I25), a decrease of 50 per cent from the 1977 figure of 5,017 deaths.

1.8.4. Some of the principal causes of deaths are considered in the following sections.

Diseases of the Circulatory System (ICD10 Codes I00-I99)

1.8.5. In 2007, these diseases accounted for 4,838 deaths; 33 per cent of all deaths in Northern Ireland. Between 1997 and 2007 the number of deaths due to diseases of the circulatory system, fell from 6,505 to 4,838 (26 per cent). Circulatory diseases account for the largest number of deaths attributable to a single group of causes.

1.8.6. Deaths due to the diseases of the circulatory system are mostly accounted for by ischaemic heart disease (ICD10 Codes I20-I25) and cerebrovascular disease (ICD10 Codes I60-I69), which accounted for, respectively, 17 per cent and nine per cent of all deaths in 2007. The number of male deaths from ischaemic heart disease exceeds the number of female deaths, whereas female deaths from cerebrovascular disease are more numerous than male deaths.

Malignant Neoplasms (ICD10 Codes C00-C97)

1.8.7. Cancer accounted for 3,870 deaths in 2007, 26 per cent of all deaths. Prior to 2007 the number of deaths due to cancer had remained broadly stable over recent years at about 3,700 per year. The most common site for males and females was the trachea, bronchus or lung (ICD10 Codes C33-C34), which accounted for 25 per cent of male cancer deaths and 19 per cent of female cancer deaths in 2007. Deaths of females due to breast cancer (ICD10 Code C50) accounted for 17 per cent of female cancer deaths in 2007.

Respiratory Diseases (ICD10 Codes J00-J99)

1.8.8. Deaths from respiratory diseases numbered 1,992 in 2007; 14 per cent of all deaths in Northern Ireland. These included 859 deaths from pneumonia (ICD10 Codes J12-J18), 693 from chronic lower respiratory diseases (ICD10 Codes J40-J47) and 440 due to all other respiratory diseases. Between 1997 and 2007, the number of deaths due to diseases of the respiratory diseases fell from 2,664 to 1,992 (25 per cent). Part of this drop in the numbers is associated with a change in the coding rules for pneumonia that were implemented when ICD10 was introduced in 2001.

External Causes of Death (ICD10 Codes V01-Y98)

1.8.9. The number of deaths from external causes registered in 2007 was 773, of which 534 were males and 239 were females with the corresponding figures for 2006 being 853 deaths - 574 male and 279 female. Most of this decrease is due to a fall in suicides and events of undetermined intent, but see section below on interpretation of trends in numbers of suicides. In the period 1996-2005, there were 600 deaths per year on average from external causes of death.

1.8.10. The number of deaths from transport accidents (ICD10 Codes V01-V99) in 2007 (172) has fallen by eight per cent compared to 187 deaths in 2006. Within this figure, 76 per cent of transport accident deaths were of males.

Deaths from Suicide and Events of Undetermined Intent (X60-X84, Y87.0, Y10-Y34, Y87.2)

1.8.11. In the United Kingdom, deaths classified as ‘events of undetermined intent’ along with ‘intentional self-harm’ are classified as suicide. In 2007, there were 242 such deaths registered in Northern Ireland, of which 175 were of males and 67 were of females. This is a fall in the number of registrations of 291 in 2006 (227 males and 64 females).

1.8.12. All suicides are referred to the coroner. These deaths can take time to be fully investigated and there is often a period of time between when the suicide occurs and when it is registered. A significant number of suicides registered in 2007 occurred in earlier years. Of the 242 such deaths registered in 2007, 80 actually occurred in

2007, 102 occurred in 2006, 35 occurred in 2005, with the remaining 25 occurring in 2004 or earlier.

1.8.13. Prior to 2004, there were seven coroner's districts in Northern Ireland. Following a review of the coroner's service, the separate districts were amalgamated into one centralised coroner's service. This change may have affected the timing of the registration of deaths, with statistics from 2004 onwards being more timely and consistent.

1.8.14. Table 1.4 compares the number of suicide and undetermined deaths being registered each year with the number occurring in those years. Occurrence figures for 2005 to 2007 have been excluded as a significant number of deaths occurring in these years will, as yet, not have been registered. The occurrence figures show more accurately the upward trend in the number of suicide and undetermined deaths.

Table 1.4: Number of suicide and undetermined deaths registered and actual number occurring (1997-2007)

Year	Suicide and Undetermined Deaths (Year Registered)	Suicide and Undetermined Deaths (Year Occurred)
1997	138	153
1998	150	180
1999	154	163
2000	185	186
2001	158	181
2002	183	196
2003	144	157
2004	146	220
2005	213	…
2006	291	…
2007	242	…

Smoking-Related Deaths

1.8.15. Information is not recorded on the death certificate on whether the deceased was a smoker. Estimates can however be made of the number of deaths attributable to smoking, by using information on the contribution of smoking to specific conditions which are recorded at death, for example lung cancer.

1.8.16. Research has been undertaken by the Health Development Agency to derive attributable proportions of smoking related deaths based on published relative risk factors for mortality of current and ex-smokers from various diseases, counts of death by cause, and estimates of current and ex-smoking behaviour.

1.8.17. The attributable proportions derived were then applied to Northern Ireland counts of cause-, sex- and age- specific mortality. Table 1.5 shows the estimated number of smoking related deaths between 2001 and 2007 using this method. On average there are around 2,300 deaths per annum attributable to smoking. Further information on the method used is given in Appendix 3.

Table 1.5: Number of smoking-related deaths registered (2001-2007)

Year	Smoking-Related Deaths
2001	2,351
2002	2,336
2003	2,393
2004	2,350
2005	2,287
2006	2,320
2007	2,306

Alcohol-Related Deaths

1.8.18. In 2005, the definition of alcohol-related deaths was widened to include additional causes of death with a clear causal relationship to alcohol consumption. The main addition is 'mental and behavioural disorders due to use of alcohol' (see Appendix 3 for further details). In 2007, a total of 283 people died from alcohol-related deaths using the new definition; 199 males and 84 females. The equivalent 2006 figure is 248 deaths (173 males and 75 females) and the number of alcohol-related deaths in 2007 is over 86 per cent higher than the 152 deaths registered in 1997. Figure 1.29 shows the trend in the number of alcohol-related deaths since 1991 using the new definition.

Figure 1.29: Deaths from alcohol-related diseases by sex (1991-2007)

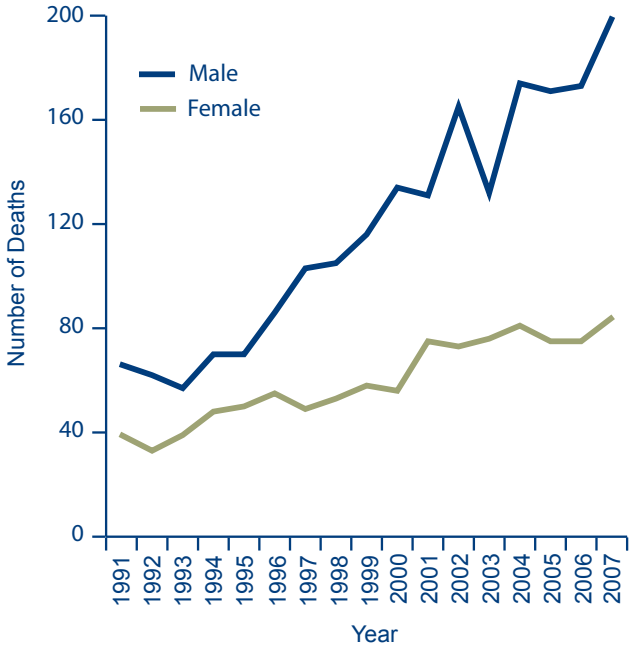
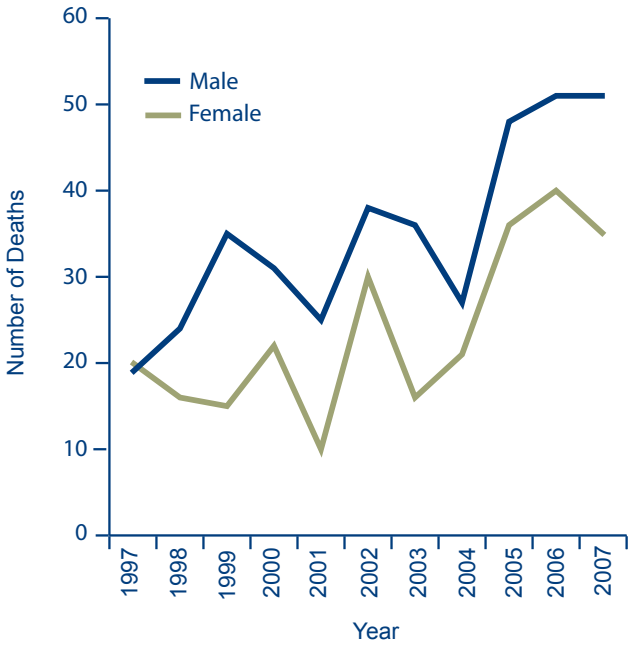


Figure 1.30: Deaths from drug-related poisoning by sex (1997-2007)



Drug-Related Deaths

1.8.19. Deaths due to drug-related poisoning include accidents and suicides involving drug poisoning, as well as poisonings due to drug abuse and drug dependence. Deaths from substances of abuse which are not traditionally regarded as drugs, such as alcohol and tobacco, are also excluded from the definition. Further information on the definition can be found in Appendix 3.

1.8.20. In 2007, a total of 86 people died from drug related poisonings; 51 males and 35 females. This is a slight decrease from the equivalent 2006 figure of 91 deaths (51 males and 40 females), the number of deaths related to drug poisoning in 2007 is more than double the number of deaths related to drug poisoning registered in 1997 when there were 39 deaths. Figure 1.30 shows the trend in the number of deaths related to drug poisoning since 1997.

Asbestos-Related Deaths

1.8.21. In 2007, 65 asbestos-related deaths were registered in Northern Ireland. In 2006 there were 76 such deaths, the 2004 figure of 92 deaths was the highest number recording in the period from 2001 to 2007. See Appendix 3 for further information on asbestos-related deaths.

Healthcare Associated Infections

1.8.22. In 2007, 59 deaths were registered where Methicillin resistant *Staphylococcus aureus* (MRSA) was mentioned on the death certificate. Of these, 20 deaths had MRSA recorded as the underlying cause of death. Similar figures for 2006 were 56 deaths where MRSA was mentioned on the death certificate and 19 cases where MRSA was the underlying cause of death.

1.8.23. The number of deaths where *Clostridium difficile* was mentioned on the death certificate in 2007 was 77. Of these, 34 deaths had *Clostridium difficile* as the underlying cause of death. This compares to equivalent figures for 2006 of 63 deaths with *Clostridium difficile* mentioned on the death certificate and 41 where *Clostridium difficile* was the underlying cause of death.

Main Causes of Death by Age and Sex

1.8.24. Mortality rates by cause of death vary with age and sex. A total of 123 deaths of children aged less than one year occurred in 2007, 66 per cent of whom died within the first four weeks of life. The majority of infant deaths were attributed to certain conditions originating in the perinatal period (ICD10 Codes P00-P96, 50 deaths) and congenital anomalies (ICD10 Codes Q00-Q99, 35 deaths).

1.8.25. A total of 49 children aged 1-14 died in 2007. External causes of death accounted for 20 of these deaths, while cancer (ICD10 Codes C00-C97) accounted for 9 deaths and diseases of the nervous system (ICD10 Codes G00-G99) accounted for a further 7 deaths.

1.8.26. A total of 315 people aged 15-34 died in 2007. As with children, external causes of death accounted for more deaths than any other cause (199 deaths, 63 per cent of deaths of persons aged 15 to 34). Thirty-three per cent of all suicide and self-inflicted injury and events of undetermined intent (80 out of 242 suicides) and 45 per cent of deaths due to transport accidents (77 out of 172 transport accident deaths) involved people aged 15-34.

1.8.27. Of the 2,593 people who died between the ages of 35-64 (of which 63 per cent were male), cancer accounted for 38 per cent of deaths in 2007, while diseases of the circulatory system accounted for a further 24 per cent of deaths in this age group.

1.8.28. Deaths of people aged 65 and over accounted for 79 per cent of all deaths in 2007. Although the death rate from cancer continues to increase with age and accounted for 25 per cent of deaths in this age group, the death rates from diseases of the circulatory system increase more quickly with age and this accounted for 36 per cent of deaths to those aged 65 and over. For the most elderly (aged 85 or more), diseases of the circulatory system accounted for 40 per cent of deaths, cancer 13 per cent and diseases of the respiratory system 20 per cent. Figures 1.31 and 1.32 show the main causes of death by age group for male and female deaths respectively.

Figure 1.31: Percentage of male deaths by cause and age group (2007)

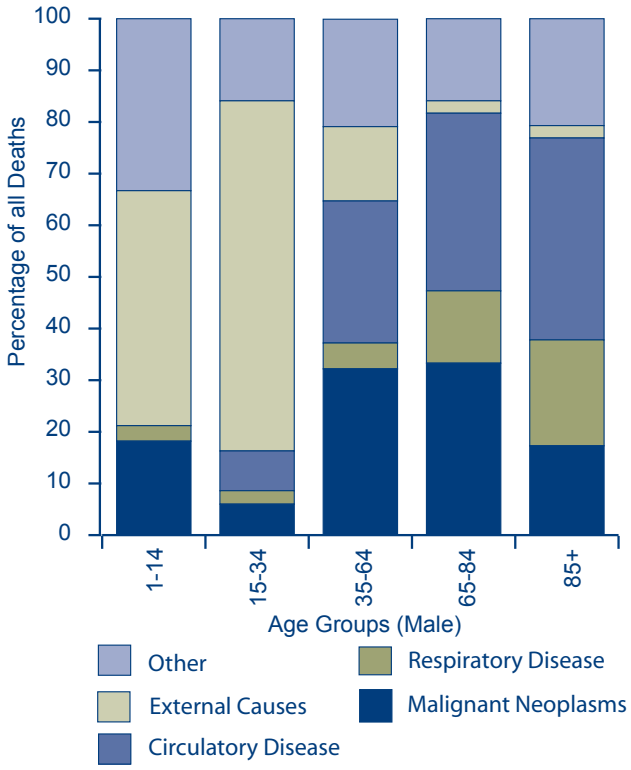
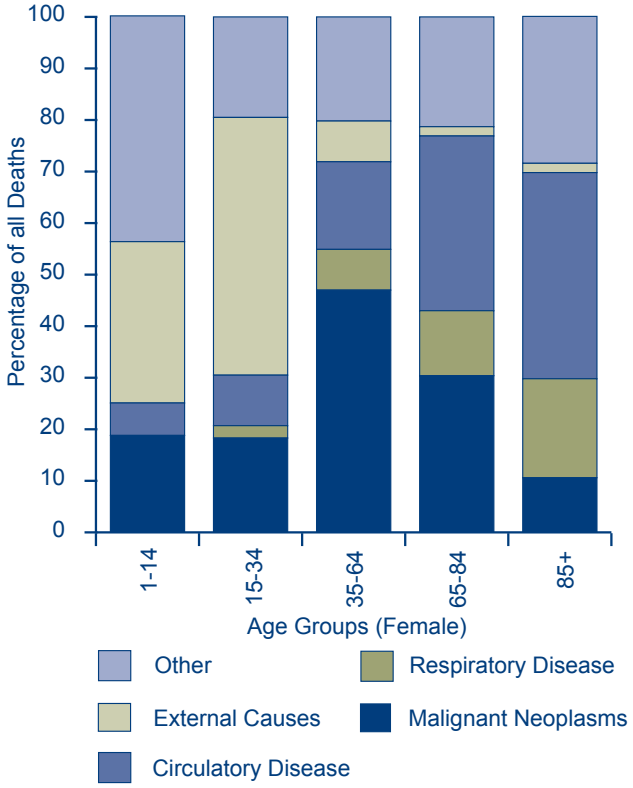


Figure 1.32: Percentage of female deaths by cause and age group (2007)

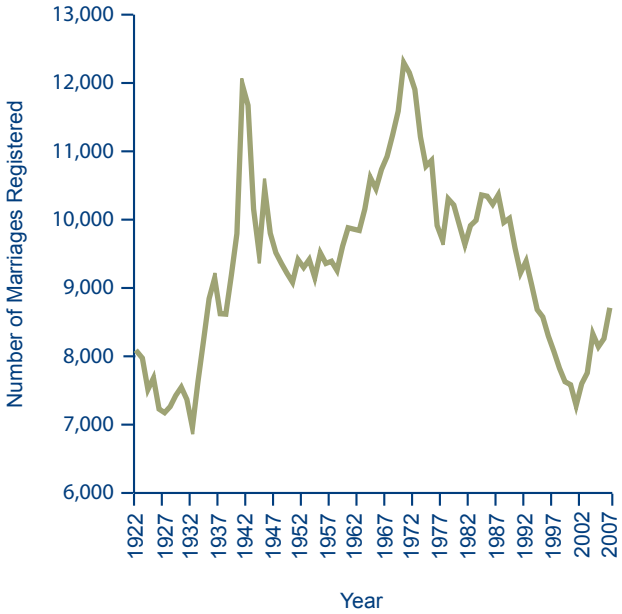


1.9 Marriages

Numbers

1.9.1. There were 8,687 marriages registered in 2007, an increase of 428 marriages or 5.2 per cent on the 2006 figure of 8,259 marriages. Figure 1.33 shows the number of marriages from 1922. The number of marriages registered in 2007 is significantly higher than the low of 7,281 marriages in 2001, but still below the levels seen 30 years ago of around 10,000 marriages a year.

Figure 1.33: Number of marriages registered (1922 to 2007) – non-zero y-axis



Age at Marriage

1.9.2. The average age at marriage has increased markedly in the last two decades. The average age at marriage for all brides in 2007 was 31 years of age. This compares to 29 years in 1997, 25 years in 1987 and 24 years in 1977. The average age for the groom was 33 years of age, an increase of two years from 1997 (31 years), five years from 1987 (28 years) and seven years from 1977 (26 years).

1.9.3. The average age for first marriages has also increased and is now 29 for single females and 31 for single males, both around six years older than their counterparts 30 years ago.

1.9.4. The age difference at first marriage is around two years. This has remained fairly constant over the last 30 years, while the age difference for those who have

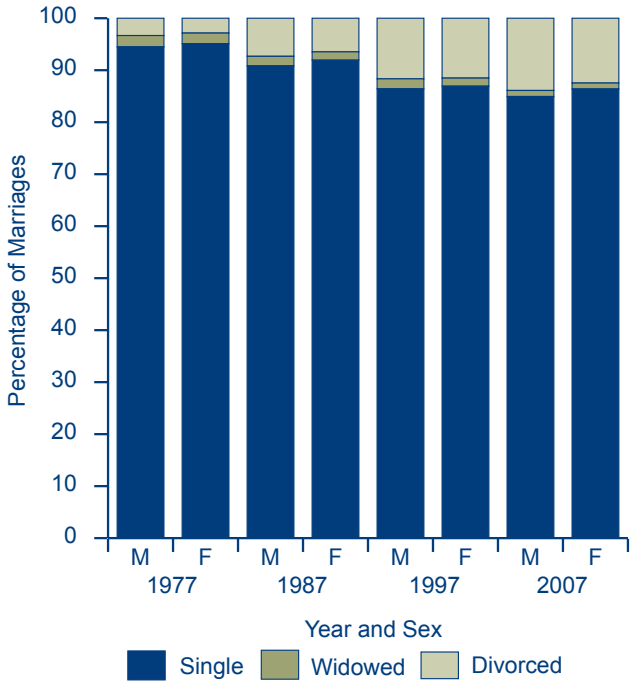
been married previously is greater at around six years; again this has been a constant value since 1977.

Marital Status at Marriage

1.9.5. Figure 1.34 gives the percentage of marriages by marital status at the time of marriage between 1977 and 2007. The percentage of people marrying who are divorcees rose from three per cent in 1977 to around 12 per cent during 1997 and has remained at about this level since. The majority of this shift reflects a reduction in the proportion of marriages where one of the partners was single before marriage. The proportion of those marrying who were widowed has remained stable over the past 30 years at around two per cent for both brides and grooms.

1.9.6. Just over half (53 per cent) of couples who married in 2007 lived at the same address before marriage.

Figure 1.34: Percentage of marriages by sex and marital status (1977 to 2007)



Bride and Groom Usual Residence

1.9.7. Of the 8,687 marriages in 2007, 7,766 (89 per cent) were to couples where one or both partners lived in Northern Ireland. In the remaining 921 marriages (11 per cent) neither partner lived in Northern Ireland. Of these 921 marriages almost three-quarters (74 per cent) were marriages where one or both partners were born in Northern Ireland; clearly relating to people returning home to get married.

Bride and Groom Country of Birth

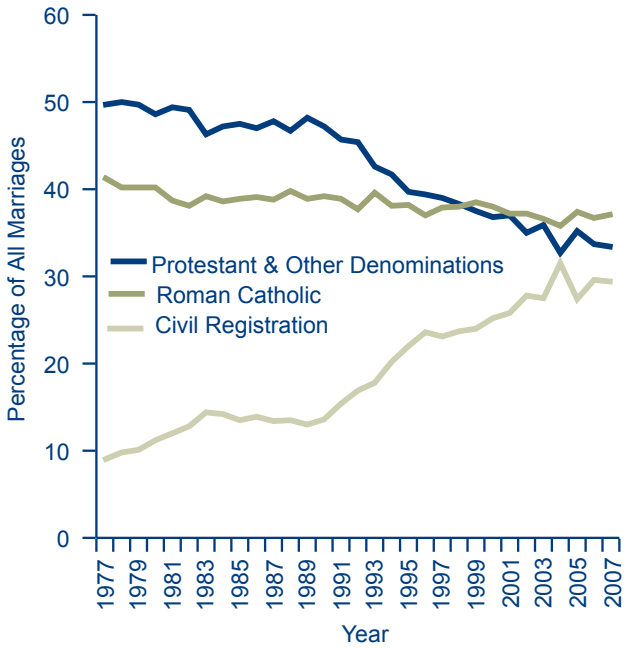
1.9.8. Overall in 70 per cent (6,107 marriages) of marriages registered in 2007 both partners were born in Northern Ireland, in 24 per cent (2,118 marriages) one partner was born in Northern Ireland and in 5 per cent (462 marriages) neither partner was born in Northern Ireland.

Religious and Civil Marriages

1.9.9. Almost 30 per cent of all marriages (2,555) in 2007 were civil ceremonies compared to nine per cent in 1977.

1.9.10. Of the 6,132 religious marriages in 2007, 53 per cent were Roman Catholic ceremonies, 19 per cent Presbyterian, 16 per cent Church of Ireland, three per cent Methodist and nine per cent other denominations. Figure 1.35 shows the change in type of ceremony from 1977 to 2007.

Figure 1.35: Percentage of marriages by method of celebration (1977 to 2007)



Place of Ceremony

1.9.11. The Marriage (Northern Ireland) Order 2003 now allows civil marriage ceremonies to be conducted in a number of approved venues outside of Registrar's Offices. In 2007, 1,042 civil marriage ceremonies (41 per cent of all civil marriage ceremonies) were held in approved venues other than a Registrar's Office compared to 878 in 2006. The most popular location was Belfast Castle (73

civil weddings) followed by Galgorm Manor Hotel, Ballymena (51 civil marriages).

1.9.12. The ability to conduct religious marriage ceremonies other than in religious buildings varies by religion and denomination. In 2007, 378 religious marriage ceremonies (six per cent of all religious marriage ceremonies) were held outside of religious buildings.

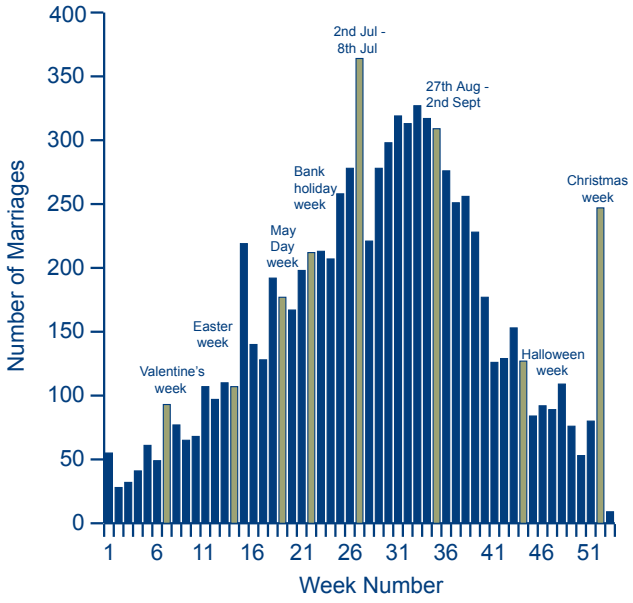
1.9.13. Belfast Registrar Office had the most weddings of all Registrar Offices in 2007 and St. Eugene's Cathedral in Derry Local Government District had the most weddings of all religious buildings.

Marriage Day

1.9.14. The most common day of the week for all marriages was a Saturday (39 per cent). Friday was the most common day for civil marriages (34 per cent); and the most common month to get married was August (1,430 couples) followed by July (1,196 couples). Saturday 7th July 2007 was the most popular day in 2007 to get married, with 162 couples got marrying on that date. Only 46 marriages took place on a Sunday in 2007, 10 of which were civil marriages – the latter only becoming possible under the 2003 legislation.

1.9.15. Figure 1.36 shows the number of marriages by week, with dates of selected weeks highlighted. The most popular week to get married was from Monday 2nd July to Sunday 8th July (364 couples).

Figure 1.36: Number of marriages per week (2007)



Marriages by Area

1.9.16. Almost 16 per cent of all marriages in 2007 occurred in Belfast, followed by just over six per cent in Derry, Newry and Mourne and North Down Local Government Districts.

1.9.17. The average age of males and females at the time of marriage varies across Local Government Districts. Carrickfergus had the highest average ages at 34 for females and 37 for males respectively, compared to Magherafelt with the lowest age for females at 29 and Dungannon with the lowest average age for males at 31.

1.9.18. Almost 87 per cent of religious ceremonies in Newry and Mourne Local Government Districts were Roman Catholic compared to five per cent of religious ceremonies in Carrickfergus Local Government District, reflecting the community background of the populations in these Local Government Districts.

1.10 Divorces

Numbers

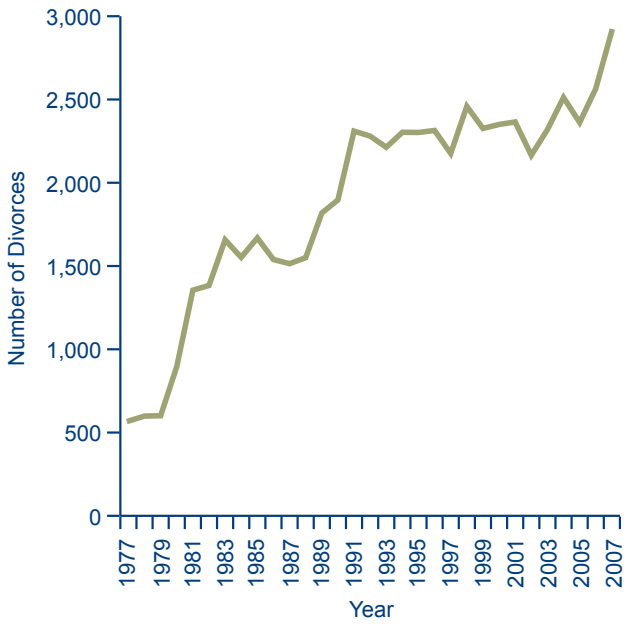
1.10.1. The divorce figures reported here are based on Decree Absolutes. Decree Nisi information can be obtained from the Northern Ireland Court Service. A Decree Nisi does not terminate the marriage; a couple remain married until the Decree Absolute has been granted.

1.10.2. The number of marriages dissolved in Northern Ireland in 2007 was 2,913. This is an increase of 14 per cent from last year's figure of 2,565 and is the largest number of divorces on record for Northern Ireland.

1.10.3. During the 1970s the number of divorces was around 500 per year, by the 1980s the figure had tripled to around 1,500 per year, and in the 1990s and early part of this decade there has been another increase in the number of divorces to around 2,300 per year. Figure 1.37 shows the number of divorces from 1977 to 2007.

1.10.4. Of couples married in Northern Ireland in the mid-1980s it is estimated that just over 1 in 6 were divorced within twenty years of their marriage.

Figure 1.37: Number of divorces registered (1977 to 2007)



Grounds for Divorce

1.10.5. Non-cohabitation remains the most frequently recorded reason for divorce (74 per cent), followed by behaviour (12 per cent) and combined grounds (10 per cent).

1.10.6. As in previous years, more women (64 per cent) than men (35 per cent) lodged applications for divorce in 2007. Just 16 divorces granted in 2007 were the result of joint applications.

Duration of Marriage

1.10.7. The average duration of marriage ending in divorce is increasing over time. The average duration of marriage ending in divorce was 17 years in 2007; the comparable duration for 1987 was 14 years.

1.10.8. Of the divorcing couples in 2007, five per cent were married less than five years, 20 per cent between five and nine years and 75 per cent were married for 10 years or more. Around 21 per cent of divorces occurred to couples that had been married for 25 years or more.

Marital Status at Time of Marriage

1.10.9. While the majority of people getting divorced in 2007 had been single at the time of marriage (91 per cent for males and 90 per cent for females), the proportion of people getting divorced who had been divorced previously has been rising since the early 1980s and this group now accounts for nine per cent of all divorcees in 2007. Less than one per cent of all divorcees were widows or widowers when they married.

Age at Marriage of Divorcees

1.10.10. The average ages at marriage of men and women who got divorced in 2007 were 27 years and 25 years respectively. In 2007, 48 per cent of men and 63 per cent of women who divorced were under 25 years when they married.

Age at Divorce

1.10.11. The average ages at divorce for men and women who got divorced in 2007 were 44 and 42 years respectively. More women get divorced at younger ages than men reflecting the difference in their ages at marriage with husbands generally being older than their wives.

Method of Celebration of Marriage

1.10.12. In 2007, 29 per cent of divorces were of marriages that had been celebrated in a Roman Catholic Church. Corresponding figures for Presbyterian, Church of Ireland, Methodist and civil marriages were 17 per cent, 16 per cent, four per cent and 25 per cent respectively. The ceremony type for the remaining 10 per cent was unknown. The average duration of marriage before divorce for marriages celebrated in a religious ceremony was 18 years compared to 13 years for those who celebrated marriage in a civil ceremony.

1.10.13. Over the last three years 14 per cent of divorces here were following a marriage which took place outside Northern Ireland. Of these divorces, a significant proportion leads to one partner living outside Northern Ireland at the time of their divorce.

Divorcees by Area of Residence

1.10.14. Just under 15 per cent of all divorcees in 2007 were residing in Belfast followed by around six per cent in Lisburn and North Down Local Government Districts. Six per cent of divorcees were residing outside Northern Ireland at the time of divorce, but this figure differed by gender – four per cent of female divorcees were living outside Northern Ireland compared to nine per cent of male divorcees.

Children Affected by Divorce

1.10.15. In 2007, just under 5,000 children/stepchildren were affected by divorce; 2,911 children aged under 18 at the time of divorce and 2,085 children aged 18 and over at the time of divorce.

1.11 Civil Partnerships

1.11.1. The Civil Partnership Act 2004 came into force in late 2005, enabling same-sex couples to obtain legal recognition of their relationship. During 2007, 111 civil partnerships were registered in Northern Ireland. Of these 60 partnerships were male partnerships and 51 were female partnerships. This compares to 116 civil partnerships registered in 2006 (65 male partnerships and 51 females partnerships).

Marital Status and Age of Civil Partners

1.11.2. For 85 civil partnerships both partners were single, while in 26 civil partnerships at least one partner had previously been married. For 52 of the 60 male civil partnerships both partners were single, while for 8 civil partnerships at least one partner had previously been married. For 33 of the 51 female civil partnerships both partners were single; in the remaining 18 female civil partnerships at least one partner had previously been married.

1.11.3. For male civil partnerships the average age of partners was just over 41 years and was 38 years for female civil partnerships.

Place of Ceremony

1.11.4. In 2007, 99 civil partnership ceremonies were held in Registrar's Offices. The remaining 12 ceremonies were held in an approved venue.

Civil Partnerships by District

1.11.5. Civil partnerships celebrated in a particular district are not necessarily between residents of that district. In 2007, Belfast Local Government District was the most popular district for civil partnerships (72 civil partnerships), with Derry Local Government District the second most popular (11 civil partnerships).

1.12 Adoptions

1.12.1. Registers of children adopted under the provisions of the Adoption (NI) Order 1987 and Adoption (Hague Convention) Act (NI) 1969 and of previous adoption Acts of 1929, 1950 and 1967 are kept in the General Register Office, to which adoption orders made to the courts are transmitted.

1.12.2. A certified copy of an entry in the Adopted Children Register is evidence of adoption, and is also evidence of the date of birth of the adopted child.

1.12.3. The number of children recorded in the Adopted Children Register during 2007 was 147, an increase of six from the 2006 figure of 141. The number of adoptions had been falling steadily since 1970 when over 500 children were adopted; the 1998 figure of just 120 adoptions was the lowest recorded figure since the early 1930s.

1.13 Re-Registrations of Births

1.13.1. In 2007, 778 births were re-registrations, 16 less than in 2006. The most common reason for a re-registration is to add the father's name to the birth entry.

1.14 Gender Recognition Registration

1.14.1. The Gender Recognition Act 2004 was passed on 1 July 2004 and established a Gender Recognition Panel that will issue Gender Recognition Certificates to those who have satisfactorily proved that they have been living in their new gender.

1.14.2. The Gender Recognition Regulations (Northern Ireland) 2005 that came into operation from 1 April 2005 will allow the Registrar General, on receipt of a Gender Recognition Certificate, to re-register a birth, showing the new gender, in the Gender Recognition Register.

1.14.3. During the period 1 April 2005 to 31 December 2005 there were 11 births re-registered in this way. In 2006 there were 21 births re-registered in this way. In 2007 there were no births re-registered in this way.

Chapter 2
Northern Ireland Demographic Projections: Review and Commentary

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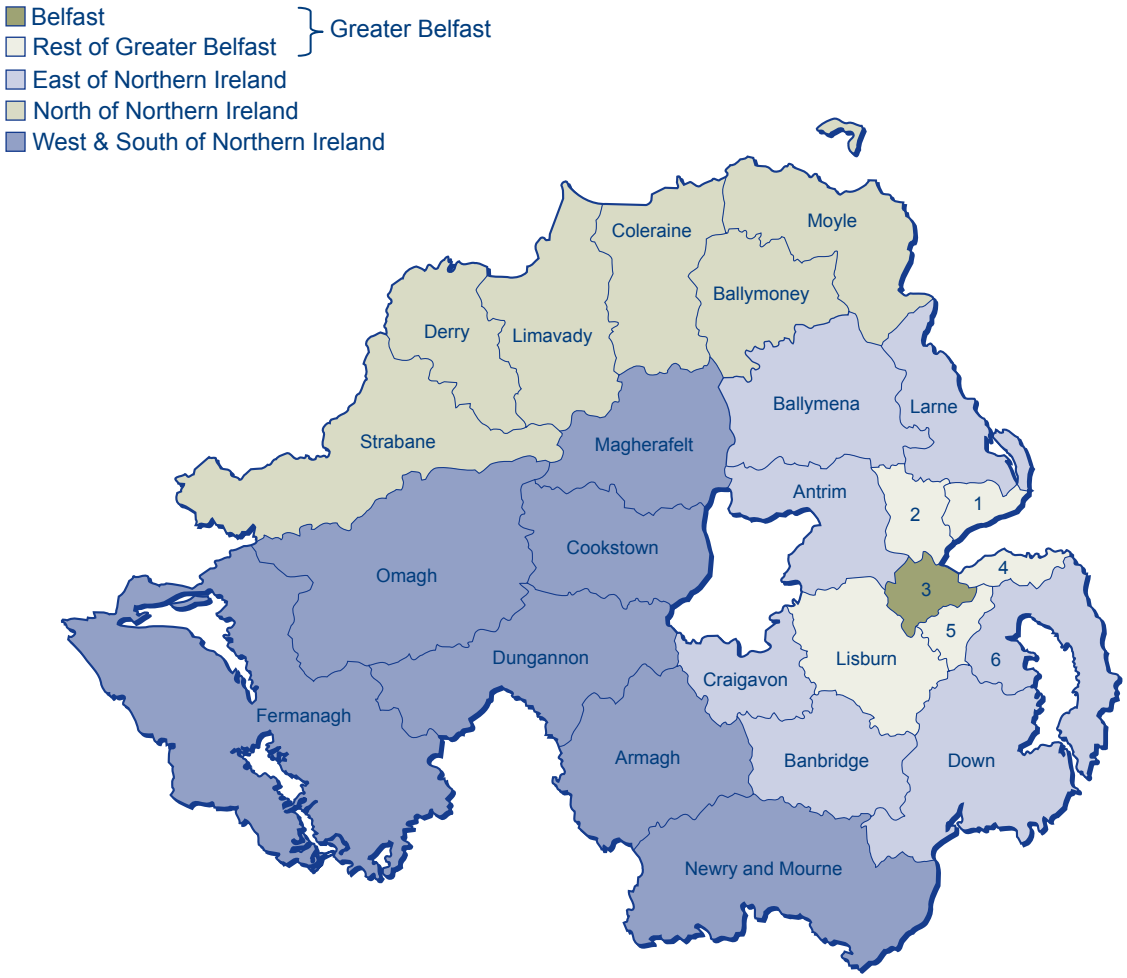
Northern Ireland Regional Areas and Local Government Districts



1. Carrickfergus
2. Newtownabbey
3. Belfast
4. North Down
5. Castlereagh
6. Ards

2.1 Introduction

2.1.1. Demographic projections are an essential input to planning and policy-making across a range of government functions. In framing policies and making decisions on the future allocation of resources, population and household projections help to answer questions such as:

- **Education** – what is the number of school places likely to be needed over the next 5, 10 or more years?
- **Infrastructure** – what level of provision will be required for roads, water, sewage and other services? Will current provision be so strained by future population growth that additional facilities are required?
- **Health and social care** – how are the needs of the population likely to evolve in coming years? Are we adequately prepared for an ageing population?
- **Housing** – how many additional dwellings will be required in future years?
- **Economic development and manpower planning** – will the growth in the working-age population be sufficient to meet future employment demand?
- **Environment** – how to balance the pressure of demand from future population growth with the need for sustainable land-use patterns?

2.1.2. Each of these questions can also be seen to have a geographic dimension i.e. planners and policy-makers need to have an indication of where population growth (or decline) is expected to occur. More broadly, the Northern Ireland Government is committed to a policy of balanced regional development, as set out in the strategy document Shaping Our Future[1]. Furthermore, policy issues are often inter-linked e.g. decisions about infrastructure provision need to be consistent with economic development policies. For both of these reasons, it is important that population projections should be prepared on a consistent basis, to provide a common framework for decision-making.

2.1.3. In order to meet these requirements, Northern Ireland population and household projections are prepared on a periodic basis. The most recent age and sex population projections for Northern Ireland as a whole, from 2006 onwards, were released by the Northern Ireland Statistics and Research Agency (NISRA) in October 2007[2]. In February 2008, NISRA made available population projections for areas within Northern Ireland[3]. These were followed by the release of 2006-based projections for numbers of households, by type and location, in March 2008[4].

2.1.4. The purpose of this chapter is to provide an overview and commentary on the most recent projections for Northern Ireland. The objectives are as follows:

- What are the main features, and drivers, of the projections?
- What are the main uncertainties associated with the projections?
- What factors should be considered in the use and interpretation of the projections?

2.1.5. The chapter commences with a brief description of the process by which the projections are prepared. It then presents the main projections for the growth of the population before turning to a discussion of the components of change i.e. births, deaths and net migration. The chapter then examines some of the more detailed projections that will be of most interest to potential users: changes in age composition; geographical patterns; and the projections for numbers of households. Prior to the concluding remarks, the chapter discusses issues around the use and interpretation of the projections.

1 See http://www.drdni.gov.uk/shapingourfuture/

2 See NISRA, 2007a.
3 See NISRA, 2008a.
4 See NISRA, 2008b.

2.2 Process

2.2.1. The Office for National Statistics (ONS)[5] produces national population projections for the United Kingdom and its constituent countries. The projections are undertaken at the request of the National Statistician and the Registrars General of Scotland and Northern Ireland and they are produced by ONS to ensure UK consistency. The Northern Ireland projections are jointly published by both ONS and NISRA.

2.2.2. Presently, projections are made every second year, following a review of trends affecting fertility, mortality and migration. The assumptions on which projections are based are agreed in liaison with the devolved administrations. Consultations are also undertaken with key users of the projections in each country and with advice from an expert panel.

2.2.3. The standard approach to making population projections, which is employed in the UK, is based on the cohort component method. The method is best understood as an accounting framework based around the following formula (see also Figure 2.1):

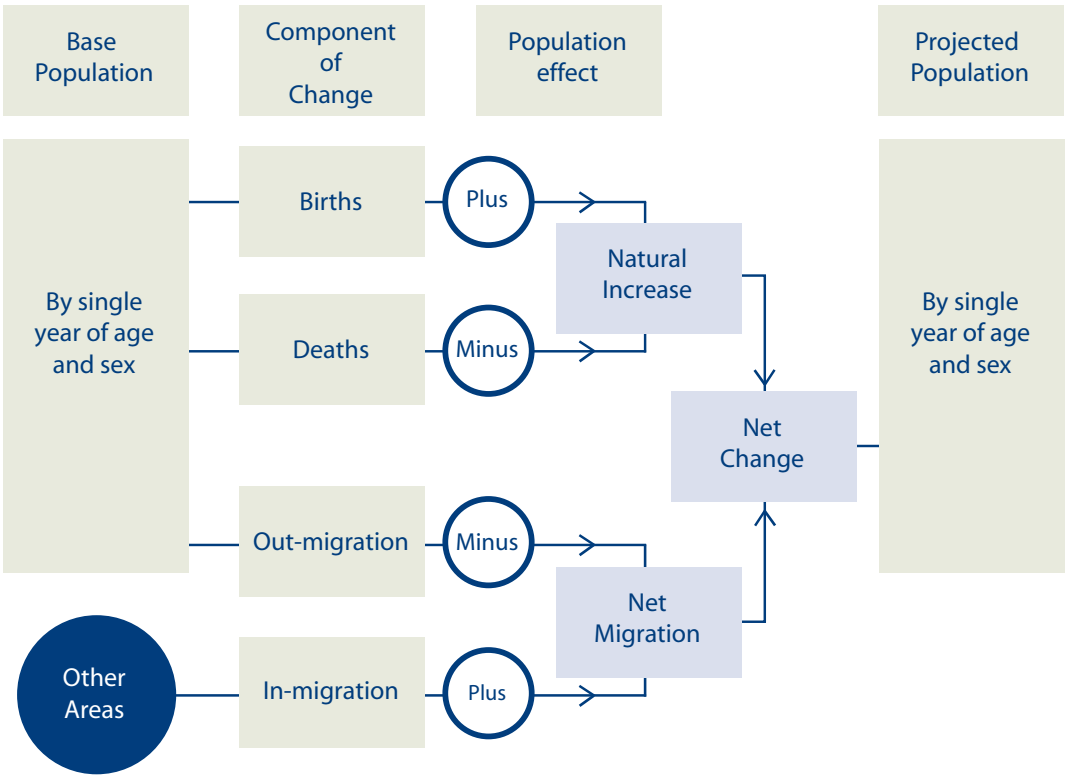
Projected population

equals

Base population *plus* births *minus* deaths *plus* net migration

2.2.4. The difference between births and deaths is referred to as the natural increase in the population. Net migration is the difference between population gains due to in-migration from other areas compared with losses due to out-migration to other areas.

Figure 2.1 Components of Population Change



5 Previously, the projections had been prepared by the Government's Actuary Department (GAD), going back to 1954. Responsibility was transferred to ONS in 2006.

2.2.5. As shown in Figure 2.1, the net change in the population from one period of time to another is determined by adding together natural increase and net migration. The net change can be positive or negative, depending on the balance between those components that result in additions to the base population (births and in-migration) and the components that bring reductions in the base population (deaths and out-migration).

2.2.6. In practice, population projections for Northern Ireland and the other countries of the UK are prepared by single year of age and sex i.e. age-sex cohorts. Starting from the base population, each age-sex cohort is successively aged through each of the years for which projections are to be made. For each cohort in each year for which projections are to be made, the projected number of deaths occurring in that year is calculated, based on an extrapolation of mortality trends, and then subtracted to give the surviving population in that cohort, which is aged on one year to the next period. Similarly, the assumed level of net migration is added (or subtracted if there are more out-migrants than in-migrants) to each age-sex cohort in each time period. Births are calculated in each projection period by applying assumed age-specific fertility rates to the female population of child-bearing age (generally 15-44)[6].

2.2.7. The components of change framework depicted in Figure 2.1 highlights the main challenges involved in preparing a population projection. Thus, the accuracy or otherwise of the projected population will depend on:

- the base population estimate; and
- the assumptions adopted for calculating the net change components.

2.2.8. As the base population estimate provides the starting point for the projections, any errors in the base population figures will be transmitted to all years in the projections. For the most recent Northern Ireland projections, the base population corresponds to the 2006 mid-year population estimates[7].

2.2.9. Assumptions are adopted for the future direction of trends in mortality (which determines deaths), fertility (for calculating births) and net migration. Any set of assumptions adopted will clearly be subject to uncertainty. For that reason, ONS produces what is called the principal projection and an accompanying set of variant projections. The principal projection is the main focus of the published projections for Northern Ireland and formed the basis of the October 2007 release.

2.2.10. The variant projections, both for Northern Ireland and the other constituent countries of the UK, represent alternative 'what-if' scenarios for population growth resulting from variations in the assumptions adopted. For example, what would happen to population growth if net migration was assumed to be higher (or lower) compared to the assumption used in the principal projection? Prior to discussing the assumptions and their variants, it is useful to first consider the principal projection for overall population growth.

6 See ONS, 2008, for a detailed explanation of the methodology
7 See NISRA, 2007b for an explanation of the 2006 mid-year estimates.

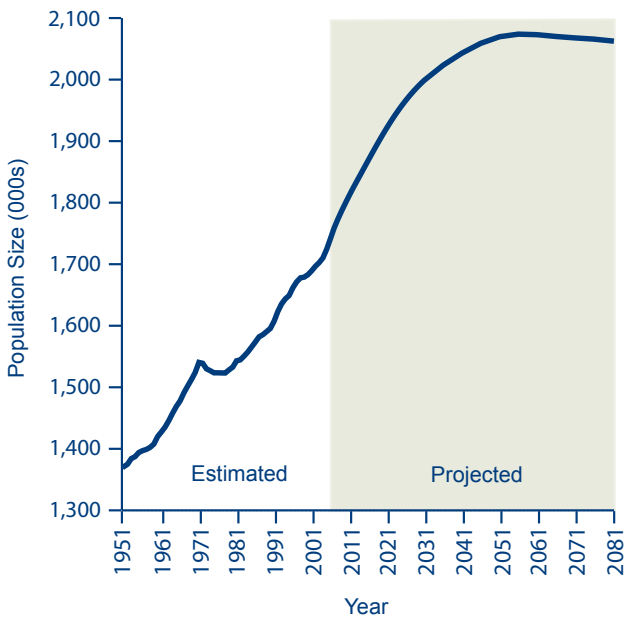
2.3 The Principal Projection

2.3.1. The main focus of the 2006-based projections is on the first 25 years, that is, the period up to 2031. Longer-term projections to the year 2081 are also prepared. The longer-term projections are useful in showing the anticipated evolution of the population for a given set of assumptions. Though, it should be appreciated that population projections become increasingly uncertain the further they are carried forward[8].

2.3.2. Bearing that caveat in mind, the main features of the principal Northern Ireland population projection are as follows (Figure 2.2. See also Table A2.1 in Annex A):

- A net change of +0.26 million over the period 2006 to 2031.
- By 2031, it is projected that almost 2 million persons will be living in Northern Ireland, representing a 15 per cent increase on the 2006 base of 1.742 million.
- Beyond 2031, the population is projected to continue growing, albeit at a slower pace, until 2056, peaking at about 2.07 million before declining gently to 2.06 million.

Figure 2.2: Northern Ireland Estimated and Projected Population (1951 to 2081) – non-zero y-axis



2.3.3. With an annual average growth rate of 0.8 per cent per annum, the first five years of the projection period, from 2006 to 2011, are anticipated to see a slight acceleration from the relatively fast pace of population growth (+0.6 per cent per annum) witnessed in the preceding five years 2001 to 2006 (see Table A2.2 and Figure A2.1). The most recent mid-year population estimates, for 2007[9], are consistent with the near-term projection; however this is to be expected as NISRA provide the latest estimates of births, deaths and migration to ONS at the time the projections are produced.

2.3.4. From 2011 to 2021, the growth rate is expected to moderate, to +0.6 per cent. The decade from 2021 to 2031 sees a further drop in the growth rate, to an annual average of +0.4 per cent.

2.3.5. Thus, over the 25-year period from 2006 to 2031, the Northern Ireland population is projected to expand at an annual average pace of +0.6 per cent. This is slightly higher than the historical average for the previous 25-year period from 1981 to 2006 (+0.5 per cent).

2.3.6. Comparing projected with historical annual growth rates is always a useful exercise in assessing a set of population projections. In particular, major discrepancies between historical and projected trends would need to be well-founded with a coherent explanation about why the future may differ greatly from the past.

2.3.7. Regarding the principal projection for the overall growth in the Northern Ireland population, it can be concluded that the projected annual growth rates for the period to 2031 are not out of kilter with the historical experience, either the near-term 5-year ahead projection or the medium-term 25-year ahead projection. This does not necessarily mean that the projections are 'correct'. It simply means that, for the overall population projection, no major disruptions to the historical experience are anticipated.

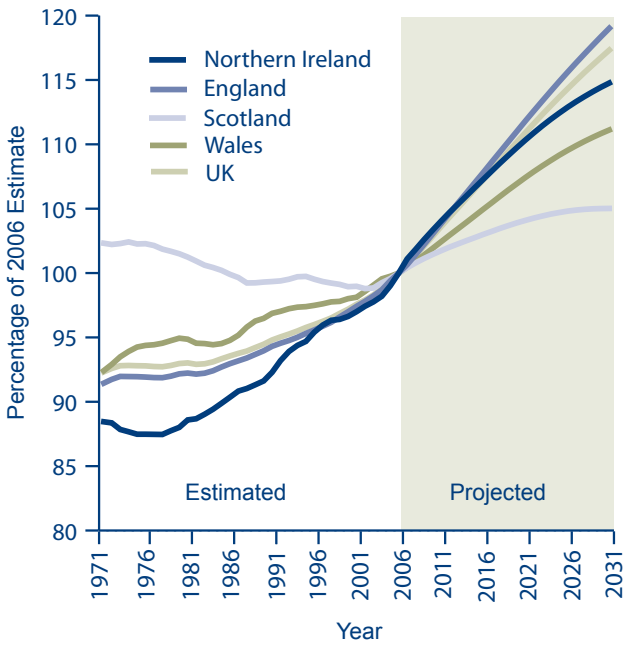
2.3.8. Interestingly, whereas Northern Ireland has historically been the fastest-growing of the UK countries, this is not expected to be the case over the next 25 years. Under the ONS principal projections, the fastest-growing UK country is anticipated to be England, projected to expand by 19 per cent by 2031 (Figure 2.3. See also Tables A2.1 and A2.2 in Annex A). The reason for the reversal in relative growth rates is due mainly to the more buoyant net migration assumptions adopted for England[10]. The effects of the net migration assumptions are discussed in greater detail later in Section 2.5.

8 See Bray, 2008.

9 See NISRA, 2008c.

10 See ONS, 2008.

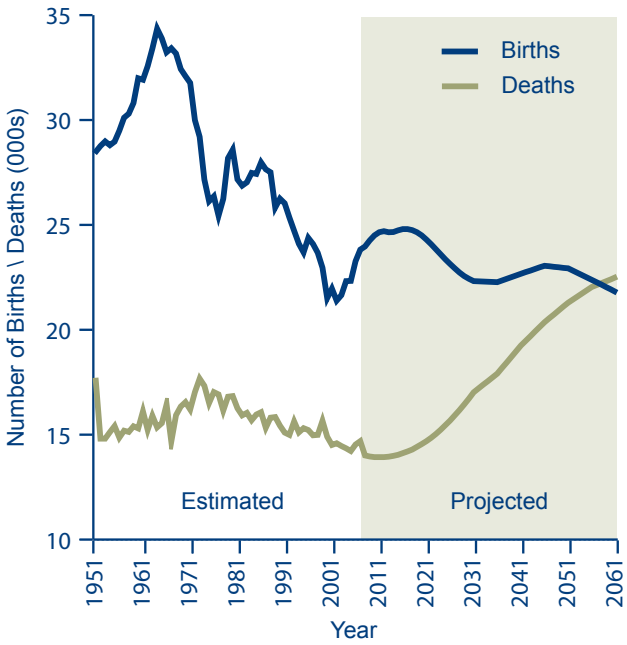
Figure 2.3: UK and Constituent Countries Estimated and Projected Population as a Percentage of the 2006 Estimate (1971 to 2031) – non-zero y-axis



2.4 Natural Increase

2.4.1. The projected numbers of births and deaths for Northern Ireland are shown in Figure 2.4 (see also Table A2.3 in Annex A). Over the period to 2021, the projections indicate an annual average of around 25,000 births, tapering off to about 22,000 by 2031. Deaths are expected to average out at 14,000 annually through to 2021, before rising steadily to 17,000 by 2031. Thus, for the first 15 years of the projection period, to 2021, natural change will add about 10,000 per annum to the population, falling to 5,000 by 2031. Over the longer term, deaths are projected to continue rising while the number of births remains roughly constant. By 2058, the principal projection suggests that deaths will overtake births in Northern Ireland.

Figure 2.4: Northern Ireland Estimated and Projected Births and Deaths (1951 to 2061) – non-zero y-axis



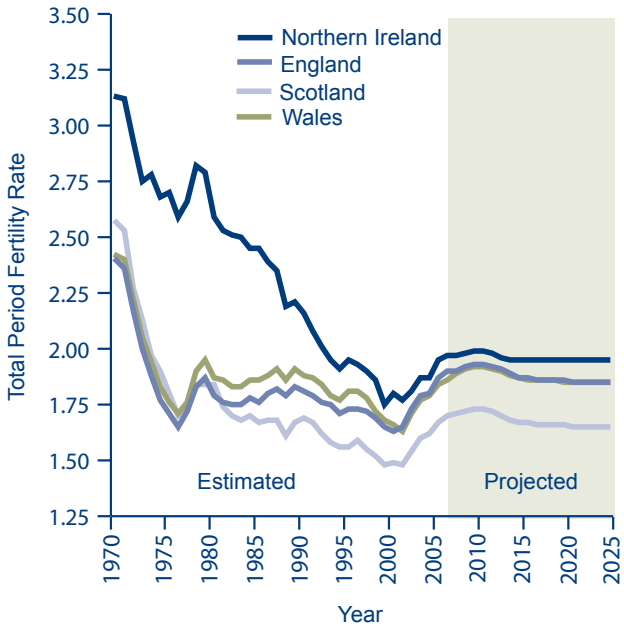
2.4.2. The projected number of births in each period is obtained by applying age-specific fertility rates (the number of births per 1,000 women) to the number of women within each child-bearing age cohort. Due to the system of birth registration in Northern Ireland, robust historical data are available in respect of fertility rates. The difficulty in making a population projection resides in the assumptions to be adopted for the trend in fertility rates, from the 2006 base position[11].

11 See Jeffries, 2008, for a detailed analysis of the fertility assumptions in the 2006-based national population projections.

2.4.3. A useful summary measure for illustrating the fertility assumptions is the Total Period Fertility Rate (TPFR). The TPFR gives the average number of children that a woman would be expected to have over the course of her child-bearing years, given the age-specific fertility rates prevailing in a particular period of time. For example, the TPFR for Northern Ireland in 2006 was 1.94; based on the 2006 age-specific fertility rates, 1.94 is the number of children that a woman would be expected to have during her lifetime.

2.4.4. From 1971 to 2000, Northern Ireland experienced sharply declining fertility rates[12], with the TPFR tumbling from almost 3.12 in 1971 to 1.75 in 2000 (Figure 2.5). That is, on average women were having fewer children. This downward fertility trend was reflected in the falling number of births that occurred in Northern Ireland over the same time period (Figure 2.5). However, since 2000, the decline has reversed and fertility rates have been steadily increasing, albeit at a modest pace. Interestingly, a similar phenomenon has been observed in each of the UK countries for this period.

Figure 2.5: UK Constituent Countries Estimated and Projected Total Period Fertility Rates (1970 to 2025) - non-zero y-axis



2.4.5. The reasons for the turnaround in fertility rates are partially explained by delayed fertility, with older women having more babies than previously. However given that all the reasons for the increase are not fully understood makes for a degree of uncertainty in framing assumptions for the projection period. As can be seen from Figure 2.5, the assumptions for the constituent countries of the UK steer towards the middle ground. Thus, the recent rise is extended through to 2010-11, with a peak TPFR for Northern Ireland of 1.99. From 2010-11 to 2020-21, fertility falls back slightly, to 1.95, remaining constant thereafter. A summary of factors that could affect the fertility assumptions, both upwards and downwards, can be found in the ONS 2006-Based National Population Projections report[13].

2.4.6. Part of the uncertainty around the number of births in future years is that people make choices about the number of children that they might wish to have. Some of those who will be making those choices in future years of the projection period have not yet been born themselves. Such choices are clearly subject to social and economic influences, which can be difficult to predict. Indeed, the earliest UK population projections, made in the mid-1950s, completely missed the 1960s 'baby boom' and hence under-predicted population growth. Similarly, the sharp fall in fertility rates that marked the end of the 'baby boom' was not anticipated and hence the population projections made in the mid-1960s greatly over-estimated the actual out-turn in the following decades[14].

2.4.7. Nonetheless, it would be difficult to dispute the principal fertility assumptions made for Northern Ireland. The assumptions for England, Scotland and Wales are all within the bounds of actual historical experience over the past 25 years. Viewing the downward trend in the Northern Ireland TPFR from 1971 to 2000 as a steady convergence on the UK average, the Northern Ireland assumptions can be viewed in that same vein i.e. within the realm of fluctuations that can reasonably be expected from what has transpired in the past.

2.4.8. There is less uncertainty around the projected number of deaths, not least because the population for whom assumptions need to be made have (mostly) already been born. The key requirement in projecting deaths is to make assumptions regarding the mortality of the population. This is done by single year of age and sex, albeit deaths are strongly concentrated in the older age groups.

2.4.9. Again, a summary indicator is useful for illustrating the relevant historical trends and the assumptions used for extrapolating into the future. The expectation of life at birth (EOLB) gives the number of years that a person would be expected to live, if that person experienced the age-specific mortality rates

12 See O'Neill et al (2006) for a review of NI fertility trends.

13 See ONS 2008 Appendix III.

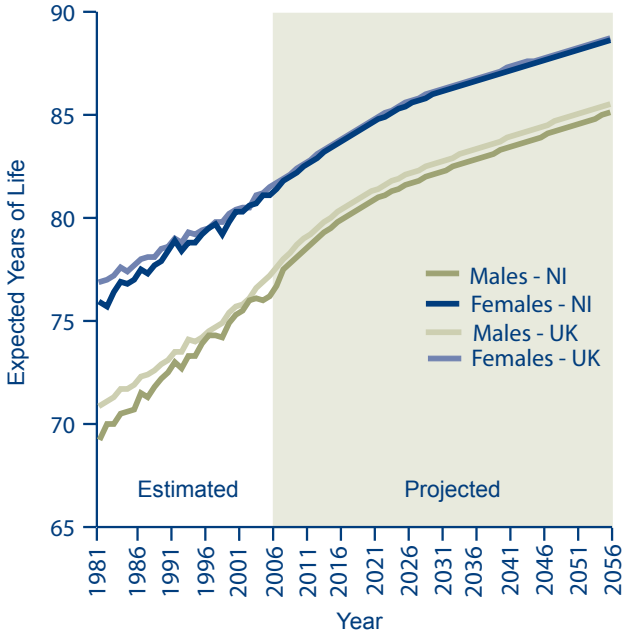
14 See Shaw, 2007.

pertaining in the year of their birth[15]. A rising EOLB signifies falling mortality rates, that is, people living longer.

2.4.10. As in the rest of the UK, falling mortality leading to longer life expectancies has been the historical experience in Northern Ireland[16] (Figure 2.6). The projections assume mortality will continue to improve, as follows[17]:

- Males – EOLB to rise from 76 years in 2006 to 82 years by 2031.
- Females – EOLB to rise from 81 years in 2006 to 86 years by 2031.

Figure 2.6: UK and Northern Ireland Estimated and Projected Expectation of Life at Birth (1981 to 2056) - non-zero y-axis



2.4.11. As for fertility, the factors that could affect the mortality rate assumptions, both upwards and downwards, are listed in ONS (2008).

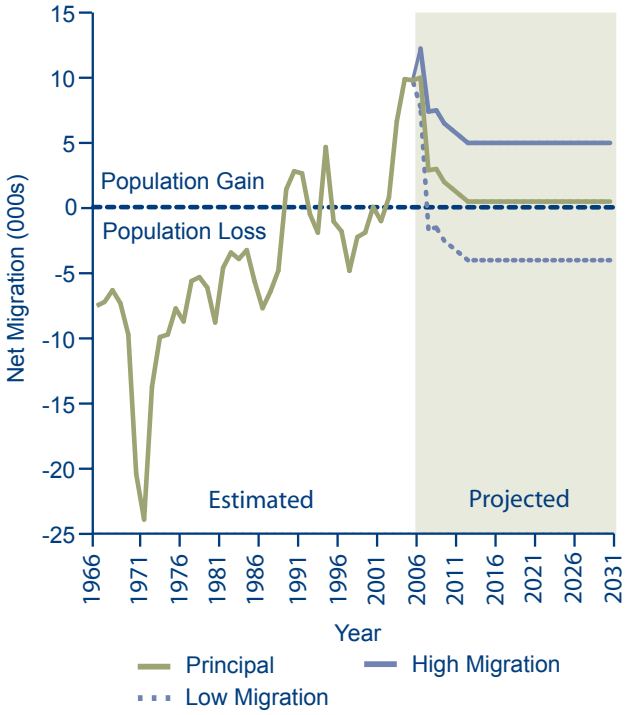
15 That is, the period expectation of life at birth (see Bray, 2008). This is the indicator used by ONS in summarising the underlying long-term projections (ONS, 2007).
16 See O'Reilly et al, 2005, for a review of NI trends.
17 In the 2006-based projections, ONS assumes convergence in age-specific mortality rates to a common rate of improvement of one per cent per annum by 2031. The one per cent per annum decline in mortality rates is then held constant from 2031 onwards. This has been the practice since the 2004-based projections. Previously, the rate of mortality improvement had been assumed to diminish gradually over the long-term, but the fall in mortality rates shown by historical data has been persistently greater than expected (see Shaw, 2007).

2.5 Net Migration

2.5.1. In the principal Northern Ireland projection, net migration is assumed to remain high in 2006-07 (+10,000), falling to +1,500 by 2010-11 and remaining constant thereafter at +500 (Figure 2.7). These assumptions are subject to considerable uncertainty. Indeed, net migration presents, perhaps, the greatest difficulty in making population projections. Partly, this reflects the fact that, unlike births and deaths, net migration is a derived figure, resulting from the balance between inflows and outflows.

2.5.2. Mainly, however, the uncertainty stems from the array of influences, many of them external, to which migration flows are subject. In particular, migration flows are sensitive both to economic conditions and prospects in the host or receiving nation and to the relative attractiveness of the host nation to countries from which in-migrants originate. Consequently, net migration can fluctuate in tandem with the economic cycle, making it more difficult to discern trends likely to be sustained over any period of time. This is evident from the highly variable pattern of net migration flows to and from Northern Ireland over the historical period from 1966 to 2006, for which annual data are available (Figure 2.7).

Figure 2.7: Northern Ireland Estimated and Projected Net Migration (1966 to 2031)



2.5.3. Reflecting its status as one of the UK's peripheral regions, and the influence of the political situation during the 1970s and 1980s, the historical pattern of net migration through to the early 1990s was one of relatively large net outflows. The 1990s saw improvements both in the political situation and Northern Ireland's economic growth prospects relative to the rest of the UK. These developments were mirrored by a turnaround in the net migration position, with outflows broadly matching inflows over the course of the decade. More recently, and particularly since 2004, there has been a strong net inflow to Northern Ireland, notably from the EU Accession countries[18].

2.5.4. The migration assumptions underlying the principal Northern Ireland projection would appear to be based on the premise that inflows, mainly from Eastern Europe, will continue to boost net migration for the first five years of the projection period. Beyond 2011, the assumption essentially is based on a return to the situation prior to the EU Accession, with inflows more or less aligned with outflows.

2.5.5. The 2006-2011 assumption has proven to be broadly correct at least for the first year of the projection period, with the latest mid-year population estimates for 2006-07 reporting a net migration gain of +9,800[19]. Of course, whether this is sustained beyond 2008 is perhaps a moot issue in light of the coming economic downturn.

2.5.6. Nonetheless, and bearing in mind the uncertainty that necessarily attaches to the net migration assumptions, one implication is that the net change in the principal Northern Ireland population projection is largely driven by natural increase.

18 See Beatty et al, 2006; NISRA, 2007.
19 NISRA, 2008c.

2.5.7. This can be illustrated by comparing the principal projection with a special case variant[20] based on zero net migration flows. In the special case where net migration is 'switched off' population growth is entirely due to natural increase. By comparing the principal projection with the zero migration scenario, it is possible to calculate the contribution that the migration assumption makes to projected population growth[21].

2.5.8. The results are shown in Table 2.1. For the period from 2006-2031, the net migration assumptions account for just 17 per cent of the total net change in the principal projection for Northern Ireland, ranging from 32 per cent in the first five years (2006-2011) to eight per cent from 2021 to 2031.

Table 2.1 Migration as per cent of Population Change

	2006-2011	2011-2021	2021-2031	2006-2031
Northern Ireland	*32*	*13*	*8*	*17*
England	*55*	*64*	*82*	*69*
Wales	*75*	*66*	*92*	*77*
Scotland	*87*	*93*	*264*	*122*
UK	***56***	***64***	***83***	***69***

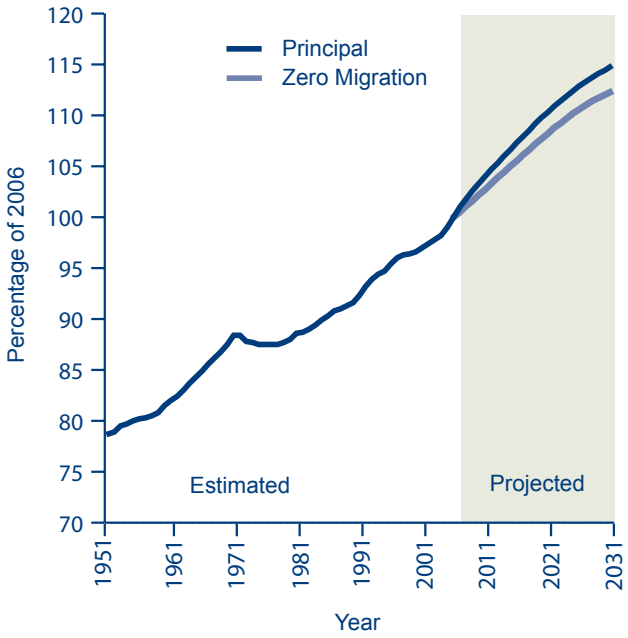
Source: ONS.

2.5.9. Consequently, in the zero migration scenario, population growth is only slightly below the level in the principal projection (Figure 2.8). In the principal projection, population grows by 14.8 per cent between 2006 and 2031, compared to 12.3 per cent in the zero net migration scenario. Another way of thinking about this is that natural increase alone can be expected to continue generating population growth in the order of 0.5 per cent per annum

20 A 'special case variant' is a scenario in which one of the underlying assumptions or parameters is varied so as "to illustrate the consequences of a particular, but not necessarily realistic, set of assumptions" (ONS).
21 In the principal projection, net migration and natural increase are not independent, mainly due to the effect of migration on births. Migrants tend to be relatively concentrated in the age groups from 18-44. Hence, net migration inflows in one period will result in additional births in later periods. The zero migration scenario illustrates the total net migration effect i.e. the direct effect from setting net migration levels to zero plus any effect on births in later periods.

from 2006-2031. This reflects both the momentum for growth in the existing or base population age structure, which will generate 23-24,000 births per annum, and the improving mortality rate.

Figure 2.8: Northern Ireland Estimated and Projected Population - Principal Projection and Zero Net Migration Scenario (1951 to 2031) - non-zero y-axis



2.5.10. In that regard, the principal Northern Ireland projection differs markedly from the other countries of the UK. As shown in Table 2.1, England and Wales will rely on net migration for the majority of their population growth according to their principal projections for the next 25 years. In the absence of net in-migration, Scotland would suffer a decline in its population[22]. Indeed, if natural increase was all that mattered, Northern Ireland would be much the fastest-growing country in the UK from 2006 to 2031. In that scenario, England would grow by just six per cent, half the Northern Ireland rate of 12 per cent[23].

2.6 Scenarios

2.6.1. The zero net migration scenario shows that the net growth in the principal projection for Northern Ireland relies primarily on natural increase rather than net migration. This would seem to be a reasonable and prudent projection in light of past trends. While net migration has been an important source of growth in more recent years, it has relied heavily on the large inflows in the wake of the accession of the A8[24] countries. The EU accession impact can be expected to diminish over time, for a variety of reasons. Other EU member states will open their labour markets to the accession countries, thereby presenting intervening opportunities for potential migrants. Further, the relative attractiveness of Northern Ireland as a destination may well diminish, particularly if there is a protracted recession in the wake of the 'credit crunch'. Albeit the timescale is uncertain, the accession countries can also be expected to exhibit a degree of catch-up or convergence in economic terms on the rest of the EU, over the medium to long-term.

2.6.2. Nonetheless, this is not to say that the principal population projection is insensitive to the net migration assumption. That much is obvious from the high and low migration scenarios prepared by the ONS to accompany the principal projection (see Figure 2.7 for the net migration assumptions in these scenarios).

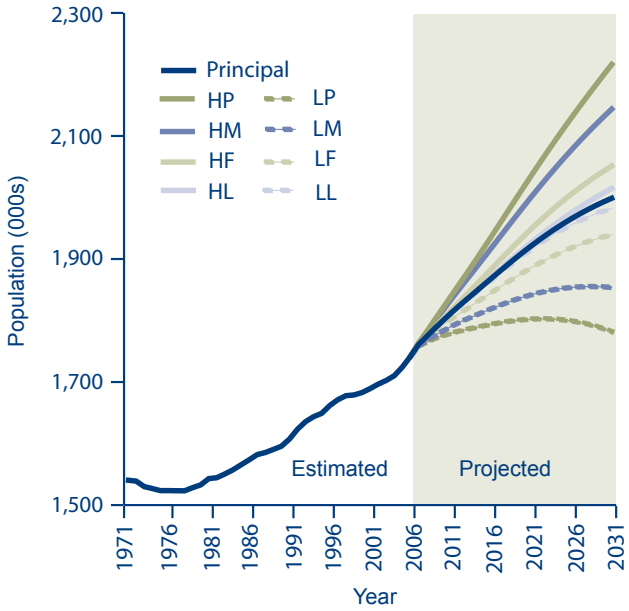
2.6.3. If Northern Ireland was to experience an annual net inflow of +5,000, the population would rise to 2.14 million by 2031 (Figure 2.9), or seven per cent above the principal projection (See Table A2.4 in Annex A). Conversely, a persistent net outflow of -4,000 per annum would see the population rising to 1.854 million by 2031, seven per cent below the principal projection.

22 In Scotland, the migration contribution exceeds the projected net change, implying an excess of deaths over births in the zero migration scenario.

23 Northern Ireland has a higher fertility rate than the other UK countries (see Figure 2.5) and a younger age population – in 2006, 35 per cent of the NI population was aged under 25, compared to 31 per cent for the UK as a whole.

24 The A8 countries are the Czech Republic, Estonia, Hungary, Latvia, Lithuania, Poland, Slovakia and Slovenia. Malta and Cyprus also joined the EU on 1 May 2004 but are considered separately from the A8 countries as they have full free movement rights to work throughout the EU.

Figure 2.9: Northern Ireland Estimated and Projected Population - Principal Projection and Variant Projections (1971 to 2031) - non-zero y-axis



HP	High fertility, high migration and high life expectancy	LL	Low life expectancy
HF	High fertility	LM	Low migration
HM	High migration	LF	Low fertility
HL	High life expectancy	LP	Low fertility, low migration and low life expectancy

2.6.4. In addition to the high and low migration scenarios, Figure 2.9 also shows some of the other population growth scenarios or variants produced by ONS to illustrate the effect of varying assumptions regarding the components of population change[25]. These illustrative variants are of two main types:

- Single component variants, in which only one set of assumptions are varied e.g. the migration scenarios discussed previously[26].
- Combination variants, in which the assumptions for two or more of the components of change are varied. In Figure 2.9, the HP (high population) and LP (low population) are both combination variants.

2.6.5. The variants serve to reflect the uncertainty that necessarily attaches to any population projection. They "are intended as plausible alternatives to the principal assumptions and not to represent upper or lower limits for future demographic behaviour"[27]. In that context, the ONS variants provide a means by which the user can test the sensitivity of their findings to variations in the population assumptions.

2.6.6. For example, in assessing future needs for education facilities, the ONS scenarios could be used to examine the effects of faster or lower population growth on the needs assessment, compared to the principal projection. Nonetheless, care is required in selecting out the most appropriate variants for constructing alternative scenarios. In the education sphere, scenarios which illustrate uncertainties around the growth in the child population are likely to be of most relevance i.e. alternative fertility and migration assumptions[28]. Alternatively, if the planner or policy-maker is concerned with the needs of older people, variants that highlight uncertainties around the ageing of the population will be of most interest.

25 For an explanation of the variants, see http://www.gad.gov.uk/Demography_Data/Population/Index.asp?v=Variant&y=2006&subYear=Continue.

26 In Figure 2.9, the single component variants are HF, HM, HL, LL, LM and LF.

27 The methodology currently used by ONS does not permit the specification of upper and lower limits. See Shaw, 2007, and Keilman, 2007.

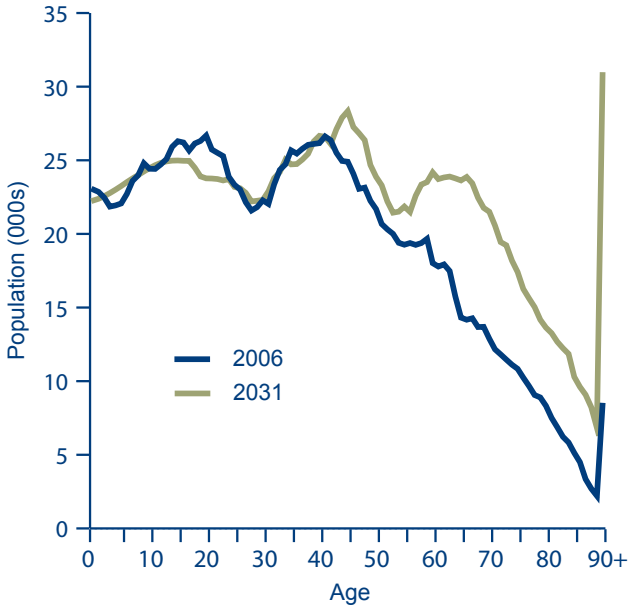
28 Migration is highly age-selective and tends to be disproportionately concentrated in the age range 18-34. Migration inflows in one year will therefore boost the number of births in later years.

2.7 Age Composition

2.7.1. The principal population projections by single year of age for 2006 and 2031 are shown in Figure 2.10. The projections clearly presage faster growth in the older age groups. Whereas in 2006, the median age of the population was 36 years (i.e. half the population was aged 36 and under), it is expected that the median will rise to 42 years of age by 2031.

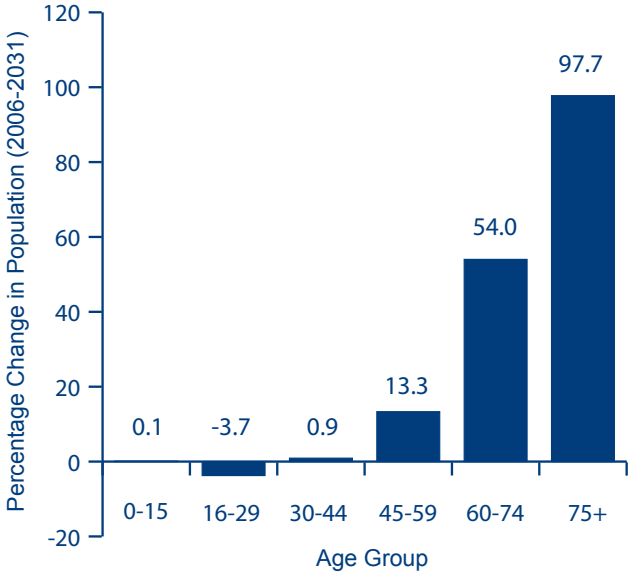
2.7.2. A particularly striking feature of the population projections is the growth in the number of persons in the oldest age groups. Indeed, the projections point to a nearly fourfold increase in the number of persons in the 90+ age range, from 8,400 in 2006 to 31,000 in 2031 (Figure 2.10). Overall, the number of persons aged 75+ will almost double, according to the ONS projections (Figure 2.11). There will also be a sharp rise in the number of persons aged 60-74 (+54 per cent). Expanding by 13 per cent, the age range 45-59 will rise in line with the Northern Ireland average. The remaining younger age groups show slight growth or decline.

Figure 2.10: Northern Ireland Estimated and Projected Population by age (2006 and 2031)



Note: The large peak in the graph at 90+ is due to the inclusion of all persons aged 90 and over in this group.

Figure 2.11: Percentage Change in Northern Ireland Estimated and Projected Population by age-group (2006 and 2031)



2.7.3. The ageing of the population in the 2006-based projections is not a new phenomenon and has been signalled in previous population projections. Partly, this reflects the fact that, with fertility rates having fallen considerably since the 1970s (Figure 2.5) and life expectancy continuing to improve (Figure 2.6), the trend towards an older population is already embedded in the present age composition of the population. To illustrate the point, the 1960s saw very high levels of births in Northern Ireland (Figure 2.4); as these individuals age, against a backdrop of improving mortality, this will act to spur the growth in the population aged 60+ by 2031[29].

2.7.4. While the projected ageing of the population is well-established in the current population demographics, a degree of uncertainty exists regarding the precise magnitude of the shift to an older population. The main uncertainties are around the fertility rate and the level of net migration.

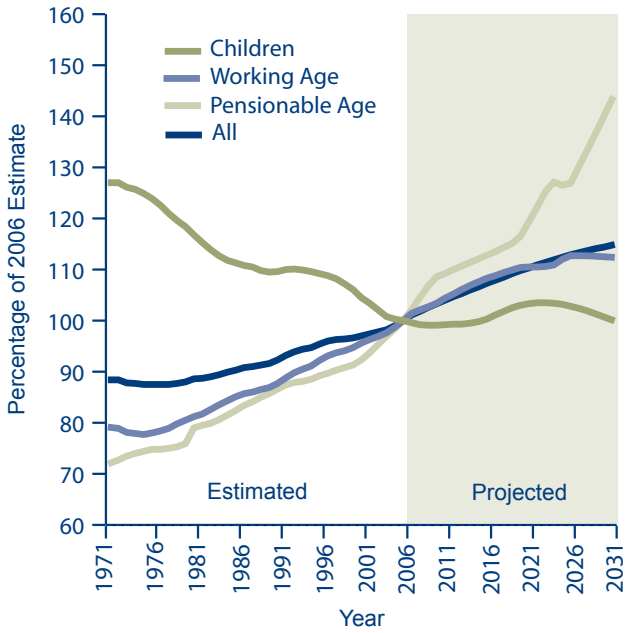
2.7.5. The ONS young population variant, which combines an increase in the fertility rate with the high net in-migration scenario, projects a 0.6 percentage point fall in the proportion of the population aged 0-14. This compares with a fall of 2.5 percentage points in the principal projection. But even in the ONS young population scenario, the share of the population accounted for by those aged 60+ would still rise by 6.2 percentage points, compared to 8.8 percentage points in the principal projection.

29 For example, a 'baby-boomer' born in 1964 will be aged 67 in 2031.

2.7.6. That is, there are plausible scenarios that would slow the shift in the population age composition towards the older age groups, but the shift looks very unlikely to be reversed. In addition, while the young population scenario slows the shift towards a higher share of older people in the population, the actual number of older people is not much affected. Thus, in the young population variant projection, the growth in the number of people aged 60+ is 67 per cent, which is little different from the 69 per cent in the principal projection. The uncertainties are therefore more around the growth in the number aged 14 and under rather than the size of the older population.

2.7.7. The projected ageing of the population clearly has considerable implications for planners and policy-makers at all levels of government. At national UK level, the ageing of the population has obvious consequences for the state pensions bill. As part of its response, government has introduced legislation to increase the pension age for women from 60 to 65, which will be phased in from 2010 to 2020. The pension age for both men and women will be raised from 65 to 68 between 2024 and 2046. While these increases will slow the rise in the pension age population, there will still be 40 per cent more individuals of pension age in 2031 than in 2006 (Figure 2.12).

Figure 2.12: Northern Ireland estimated and projected population by board age group as a percentage of the 2006 estimate (1971 to 2031) – non-zero y-axis



2.7.8. At the Northern Ireland level, the population trends will pose issues around the allocation of resources and policy development to meet new challenges. The increase in the elderly population will generate additional demands for health and social services. This can be contrasted with the relatively flat trajectory for the child population (Figure 2.12).

2.7.9. In the economic development sphere, labour supply growth will be important in underpinning a growing economy. While the working-age population is projected to grow in tandem with the overall Northern Ireland trend (Figure 2.12), there will also be a shift towards the older working age groups (Figure 2.10). Research into the ageing of the labour force suggests that this will in turn pose issues such as ensuring that older workers' skills remain relevant to changing employer requirements[30].

2.7.10. Housing and community development needs will also be shaped by the ageing of the population. As discussed later in this chapter, an older population will mean an increase in the number of one-person households. This will pose issues around the types of dwellings that are best suited to meet a changing pattern of needs, including dwellings that are adapted to the needs of older persons[31].

2.7.11. While bringing challenges for policy development and resource allocation at the Northern Ireland level, the issues outlined will ultimately affect local communities. The supply of facilities to meet population needs, such as the provision of health and social care, as well as new dwelling units, will all have a spatial dimension. For that reason, it is useful to consider the geographic patterns in the population projections.

30 See Dixon, 2003.
31 See Edwards and Harding, 2008.

2.8 Geographic Patterns

2.8.1. Following the completion of the national projections, population projections for the period 2006 to 2021 were prepared by NISRA for each of the 26 Local Government Districts (LGDs) in Northern Ireland. These replaced the 2002-based LGD projections.

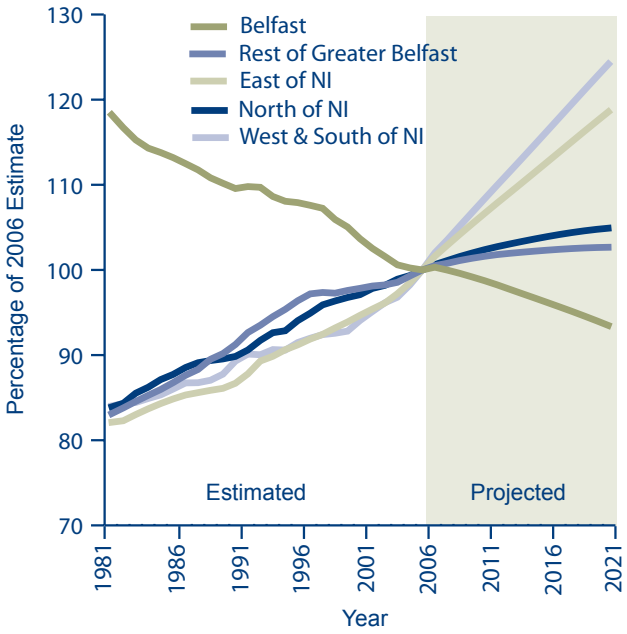
2.8.2. Ideally the LGD projections should be on a 2 year cycle following the publication of the national level projections. However, following the publication of the 2004-based Northern Ireland level projections, NISRA took the decision not to produce 2004-based local area population projections given the level of local migration from the new Eastern European accession countries seen in the 2005 MYEs. With the Northern Ireland projections differing so much after just the first year it was felt by NISRA that producing LGD projections would be of little value.

2.8.3. The LGD projections are designed to be consistent with the Northern Ireland projections[32]. For example, in each year for which projections are made, the sum across the 26 LGDs of, say, the projected number of males aged 0-4 years will be the same as the overall Northern Ireland projections prepared by the ONS. Similarly, the components of change at LGD level will each sum to the respective Northern Ireland figures for births, deaths and net migration.

2.8.4. For presentational purposes, this chapter groups the 26 LGDs into five main regional areas[33], with accompanying detail on LGDs where appropriate. The main findings for population growth by region are shown in Figure 2.13. The fastest rates of growth are projected for the West and South (+24 per cent) and East (+19 per cent) regions. With a projected fall of seven per cent, the Belfast LGD is expected to continue a well-established downward trend in its population level. The Rest of Greater Belfast and the North of Northern Ireland are each projected to grow in population, but at a modest pace (three and four per cent respectively).

2.8.5. The regional projections would therefore suggest a degree of divergence in population growth rates that has not been apparent in previous years. As can be seen from Figure 2.13, over the historical period from 1981 to 2006 the regions outside Belfast have tended to grow at broadly comparable rates.

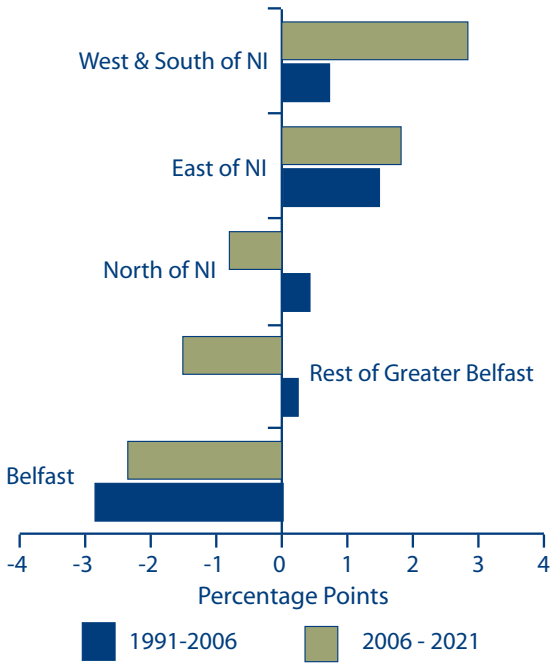
Figure 2.13: Estimated and projected population by area within Northern Ireland as a Percentage of the 2006 Estimate (1981 to 2021) – non-zero y-axis



2.8.6. The divergent growth rates imply that the period 2006-2021 will see a shift in the geographic distribution of the population within Northern Ireland. As illustrated in Figure 2.14, the West & South's share of the Northern Ireland population is projected to expand by three percentage points, from 22 per cent in 2006 to 25 per cent in 2021, or one in four of the Northern Ireland population. This contrasts with the historical experience, as the region's share increased by less than one percentage point in the period 1991 to 2006.

32 See NISRA, 2008a.
33 That is, the five LGD-based areas, as shown in the map at the beginning of this chapter.

Figure 2.14: Estimated and Projected Change in Population Share by area within Northern Ireland (1991-2006 and 2006-2021)



2.8.7. Conversely, the North and Rest of Greater Belfast regions are projected to experience a fall in their population share. In the historical period, both of these areas registered gains in population share. Finally, the projections for Belfast and the East region are broadly in line with the historical trend i.e. a gain in share by the East and a falling share of the population living in Belfast.

2.8.8. The shifts in regional shares shown in Figure 2.14 reflect the geographical patterns in the assumptions made for the components of population change. Similar to the national level, the components of change at the regional level comprise of natural increase and net migration. There is, however, one crucial difference. At the regional level, there are two sources of migration:

- External migration i.e. flows into and out of the region from locations outside Northern Ireland; for example, the recent migration of persons from the EU accession countries.
- Internal migration i.e. flows into and out of the region from locations inside Northern Ireland. For example, the historical pattern of population movement from Belfast to surrounding areas, hence the decline in Belfast's population, both in absolute and relative terms.

2.8.9. At the Northern Ireland level, only external migration needs to be taken into account. By definition, internal migration flows balance out at the Northern Ireland level. In order to distinguish the effects of these two sources of migration at LGD level, NISRA produced a special set of LGD scenarios for the purpose of this article, as follows:

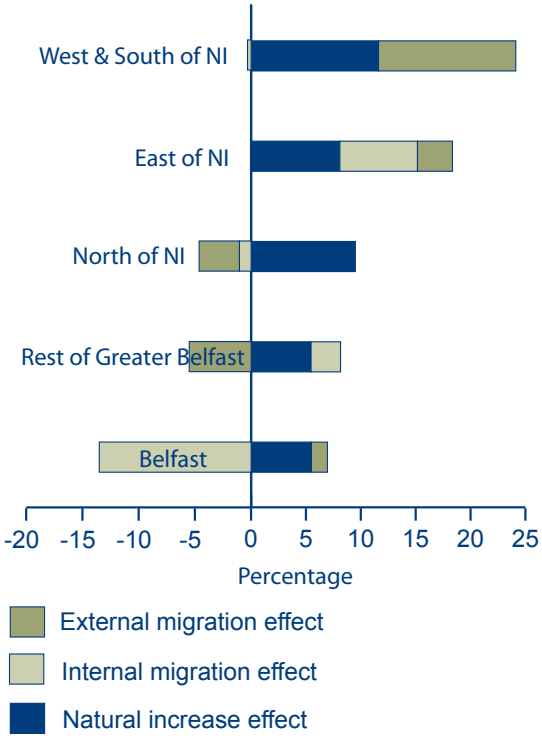
- Zero migration or natural change only. That is, internal and external migration are both set to zero for each LGD. When compared to the 2006 base year population, a projection in this scenario gives the consequences of fertility and mortality in the absence of migration i.e. the natural increase effect.
- Zero external migration. In this scenario, external migration is set to zero for each LGD. That is, population growth in each LGD relies on natural change and internal migration only. Thus, comparing this scenario to the zero migration scenario reveals the internal migration effect in the LGD projections[34].

2.8.10. Finally, the external migration effect can be determined by comparing the principal projection with the zero external migration scenario; this gives the difference made by external migration, whether positive or negative, including both migration inflows and their effect on births in later years.

2.8.11. Each of the five regions is set to gain from the natural increase effect (Figure 2.15), as will the 26 constituent LGDs (see Figure A2.2 in Annex A). The West and South will gain the most (12 per cent), due to a younger population age profile and higher fertility rates. However, variations in rates of natural increase are not the major contributor to the divergent regional growth rates in Figure 2.13.

34 Note that the internal migration effect includes both net migrant flows and the effects of those flows on births in later years (see also footnote 13).

Figure 2.15: Projected Components of Change by Area within Northern Ireland (2006-2021)



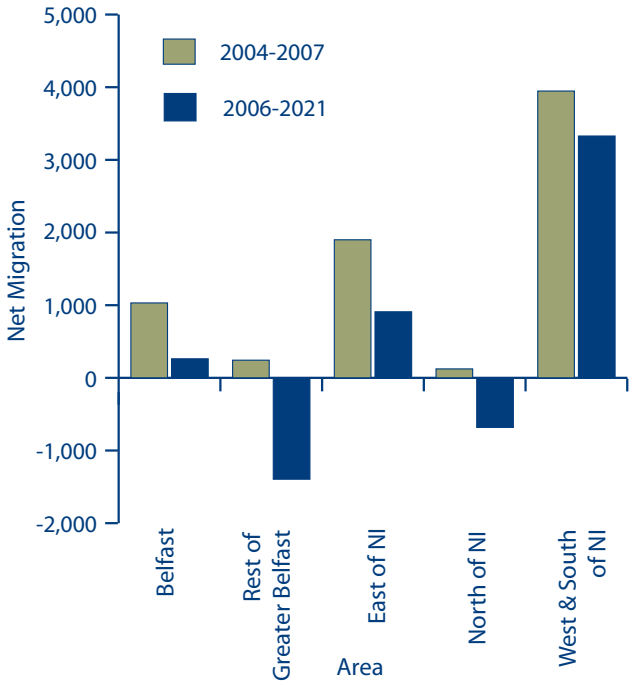
2.8.12. The projected pattern of the internal migration effect is consistent with the historical pattern, of a movement out of Belfast (-14 per cent) and into the LGDs immediately adjacent to Belfast as well as those in the East of Northern Ireland.

2.8.13. The main contrast between the regions in the components of change lies in the assumptions for the effect of external migration. Thus, the external migration effect for the West and South adds 13 per cent to the region's 2006 base population by 2021. More modest effects are projected for the East of Northern Ireland (three per cent) and Belfast (one per cent). The North of Northern Ireland and the Rest of Greater Belfast are both projected to lose population as a consequence of external migration, by four and six per cent respectively.

2.8.14. As discussed in relation to Figure 2.7, the external migration assumption for Northern Ireland as a whole anticipates a reduction from the historically high levels that prevailed from 2003-04 to 2005-06 to a figure on net migration of 500 in the long-term. At the regional level, this has taken the form of a scaling back, in absolute terms, of the most recent net inflows within their constituent LGDs (Figure 2.16).

2.8.15. This does mean, however, that those areas with the highest net external migration inflows in more recent years are also assumed to experience continued net inflows from 2006-2021. Effectively, the recent geographical patterns in net external migration flows have been extrapolated into the future[35]. In the case of the West and South region, the implied net inflows remain substantial by comparison with other areas. This is the reason for the large external migration effect in the West and South region and the resulting more rapid pace of growth in that region, when compared with the rest of Northern Ireland.

Figure 2.16: Average Annual Estimated and Projected Net External Migration by area within Northern Ireland (2004-2007 and 2006-2021)



2.8.16. Before discussing the uncertainties associated with the projections by area, it is important to bear in mind that, the smaller the area, the more onerous the task of making population projections. Principally, this is because, the smaller the area, the more important is migration as a component of change. Furthermore, at the regional level, it is necessary to take into account both internal and external migration. These two migration streams are often

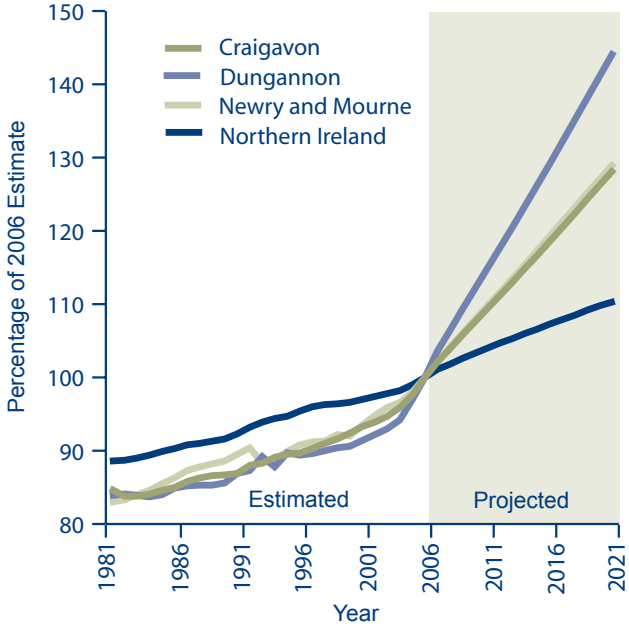
35 As shown in Figure A2.3, the external migration assumptions by LGD for the projection period 2006-21 are highly correlated with the 2004-06 patterns.

subject to different influences. The movement of population from the cities is a well-established trend across the UK[36] and the experience of Belfast shows Northern Ireland does not differ in that regard. As discussed, external migration is subject to an array of influences, some of which can give rise to cyclical or short-term variations in flows to or from an area.

2.8.17. Within that context, the main sources of uncertainty in the sub-Northern Ireland projections for Northern Ireland lie in the migration assumptions. In relation to external migration, the risk is that the assumptions provide too strong a boost to the projected population growth in the West and South of Northern Ireland.

2.8.18. The assumptions extrapolate recent trends in geographical patterns of external migration within Northern Ireland. This is certainly plausible within the first five years of the projection, so long as net migration flows from outside the UK hold up[37]. Beyond 2010-11, however, there must be some uncertainty about the capacity of the main receiving LGDs to absorb the predicted net inflows. In particular, the projections for Dungannon and Newry and Mourne in West and South and Craigavon in the East of Northern Ireland represent a marked acceleration by comparison with the longer-term historical growth rates (Figure 2.17).

Figure 2.17: Estimated and Projected Population by Selected Area within Northern Ireland as a Percentage of the 2006 Estimate (1981 to 2021) – non-zero y-axis

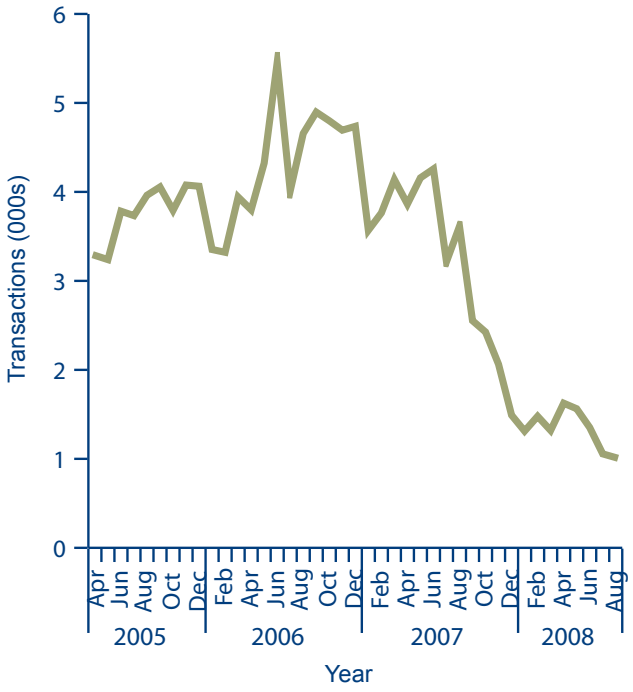


2.8.19. The internal migration effects would appear to be eminently reasonable when considered in relation to historic trends. In particular, Belfast's predicted net loss due to internal migration is entirely consistent with the historical experience. It is, however, necessary to enter a caveat in light of recent events in the Northern Ireland housing market. One consequence of the bursting of the house price bubble in Northern Ireland in autumn 2007 has been a collapse in residential property transactions (Figure 2.18). If people cannot sell their houses, they cannot re-locate. This will in turn act to damp down internal migration, for so long as the housing market remains in recession.

36 See Champion, 2000.

37 A recent analysis shows that, notwithstanding its more peripheral location, Northern Ireland has been relatively attractive as a destination for migrants from central and eastern Europe to the UK (Bauere et al, 2007). For example, Dungannon (an LGD in the West and South of NI) was ranked among the top 10 local authorities in A8 citizens registered per 1,000 population from May 2004 to December 2006.

Figure 2.18: Northern Ireland Residential Property Transactions (April 2005 to August 2008)[38]



2.8.20. In that circumstance, the movement of population out of Belfast may be curtailed. Should such a situation persist, Belfast's projected population loss may transpire to be less than projected, while the traditional receiving areas for internal migration may experience less rapid growth.

2.8.21. But it is also quite possible that the housing market effect may prove to be entirely cyclical i.e. there is a short-term hiatus in levels of internal migration followed by a period of 'catch-up' once the housing market recovers. The likely out-turn is, however, difficult to assess, since the current housing market downturn is unusually severe in the Northern Ireland context[39].

2.8.22. While there are uncertainties, the area population projections serve to provide a consistent framework for policy-makers and planners in analysing where additional population needs will arise, due to both the changing level and age composition of the population. In addition, the projections serve as an indicator of trends in the regional population balance within Northern Ireland. This is of particular relevance to the regional development strategy (Shaping Our Future[40]), for which two broad regions are defined, as follows:

- Belfast Metropolitan Area (BMA) and its hinterland, comprising Greater Belfast and parts of the East of Northern Ireland region.
- The rest of Northern Ireland, comprising all of the North, the West and South and part of the East region.

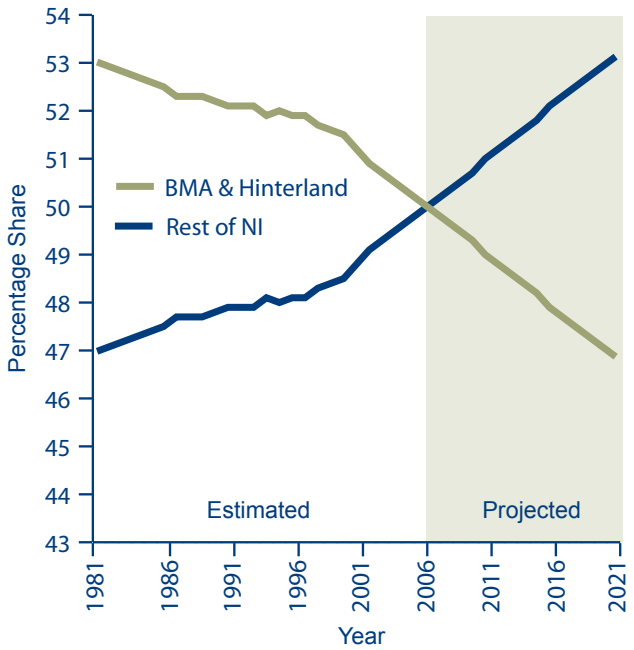
2.8.23. As can be seen from Figure 2.19, there was a steady convergence in the population shares of the two broad regional development strategy regions from 1981 through to 2000. Since then, the shares have converged more rapidly so that, by 2006, the population of Northern Ireland was equally divided between the two regions. The projections from 2006 onwards anticipate continued gain in share by the rest of Northern Ireland, at the more rapid pace that was exhibited from 2000 to 2006. Thus, by 2021, the projections show the majority of the Northern Ireland population (53 per cent) living outside the BMA and its hinterland, a complete reversal of the situation that pertained in 1981. The projection is, however, subject to the uncertainties discussed in relation to the geographical distribution of the external migration assumptions.

38 Source: HMRC, Number of property transactions completed in the United Kingdom with value £40,000 or above - monthly. Available at: http://www.hmrc.gov.uk/stats/survey_of_prop/menu.htm.

39 Prior to the most recent house price cycle, the traditional pattern in Northern Ireland was one of relatively muted participation in UK house price upswings, but with concomitantly modest downturns. This pattern has been completely reversed in the latest cycle.

40 http://www.drdni.gov.uk/shapingourfuture/

Figure 2.19: Estimated and Projected Population Share for Areas within Northern Ireland as a Percentage of the 2006 Estimate (1981 to 2021) – non-zero y-axis



2.9 Households

2.9.1. Household projections, both for Northern Ireland as a whole and by LGD, are also prepared by NISRA. The population projections are a key driver in the household projections: the projected population is distributed over different household sizes and types (including communal establishments) according to their age and sex[41]. The number of households is then derived by dividing the number of persons in a certain household type/size by that household size. The size of the population projections will therefore have a direct impact on the number of households.

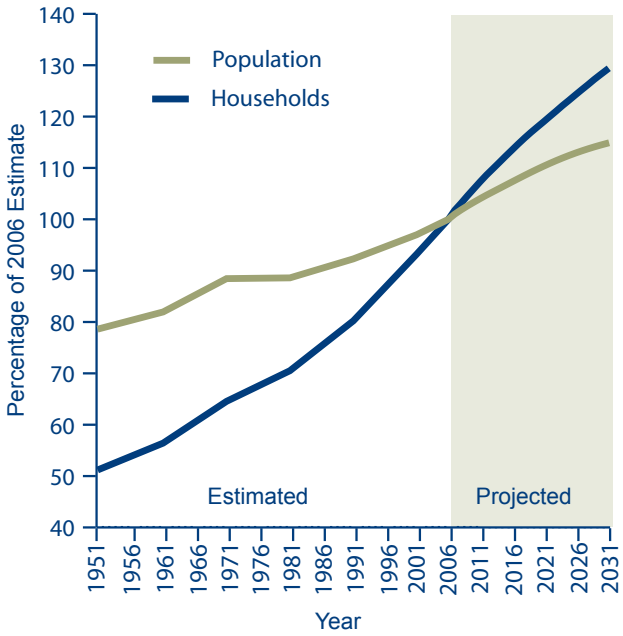
2.9.2. The projected age composition of the population will also have an effect on the number of households. In particular, the growth in the older population will lead to an increase in single-person households, thereby leading to an increase in the total number of households.

2.9.3. However, the number of households is not solely determined by the size and age composition of the population. There is also a general trend towards smaller household sizes, for example, due to the smaller family sizes that accompany falling fertility rates.

2.9.4. With an ageing population and a well-established trend towards smaller households, the growth in the number of households is expected to out-pace the growth in the population. By 2031, Northern Ireland is projected to contain 863,200 households, a 28 per cent increase on the 2006 level and double the projected 15 per cent increase in the population (Figure 2.20).

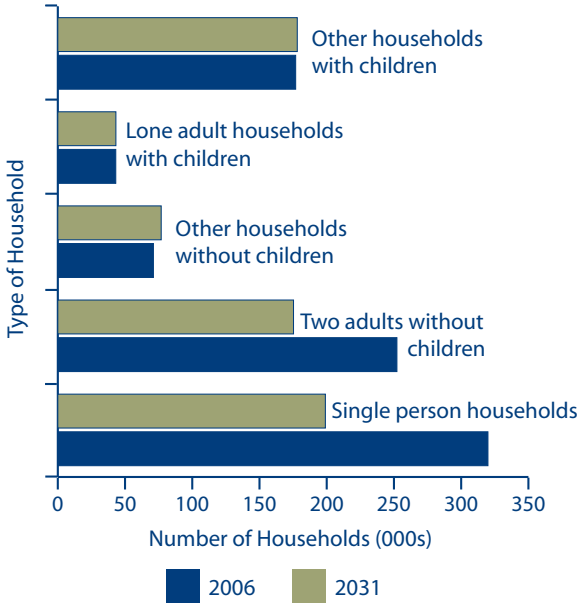
41 The methodology for projecting the number of households is more sophisticated than presented here. Full details can be found in the NISRA occasional paper 21 (2002-based projections) and the technical annex of the 2006-based projections (http://www.nisra.gov.uk/archive/demography/population/household/HProjs_methodology.pdf). See Barry et al, 2005.

Figure 2.20: Northern Ireland Estimated and Projected Households and Population as a Percentage of the 2006 Estimate (1951 to 2031) – non-zero y-axis



2.9.5. The growth in the number of households will be concentrated amongst single person households and two adult households without children (Figure 2.21). Both of these drivers strongly reflect the influence of population ageing.

Figure 2.21: Northern Ireland Projected Number of Households by Household Type (2006 and 2031)



2.9.6. According to an analysis undertaken by NISRA, a little over half (52 per cent) of the growth in the number of households from 2006-2021 (+125,700 households, a rise of +19 per cent) will be due to population growth[42]. The ageing of the population will account for a further 27 per cent of the increase. Thus, 79 per cent of the projected growth in the number of households will reflect demographic factors. The remaining 21 per cent is due to the trend towards smaller households.

2.9.7. To a considerable degree, therefore, the uncertainties in the household projections will mirror those discussed in relation to the population projections.

2.9.8. The main uncertainty that is specific to the household projections is therefore the extrapolation of the trend in average household size. As shown in Figure 2.22, average household size is expected to continue falling. There is some tapering off in the rate at which average household size falls. This is to be expected as, in the longer term, the number of persons per household will stabilise[43]. Overall, the average household size trend appears reasonable.

42 See NISRA, 2008b.
43 The hypothetical minimum is one, but this is clearly not credible.

Figure 2.22: Northern Ireland Estimated and Projected Average Household Size (1951 to 2031)

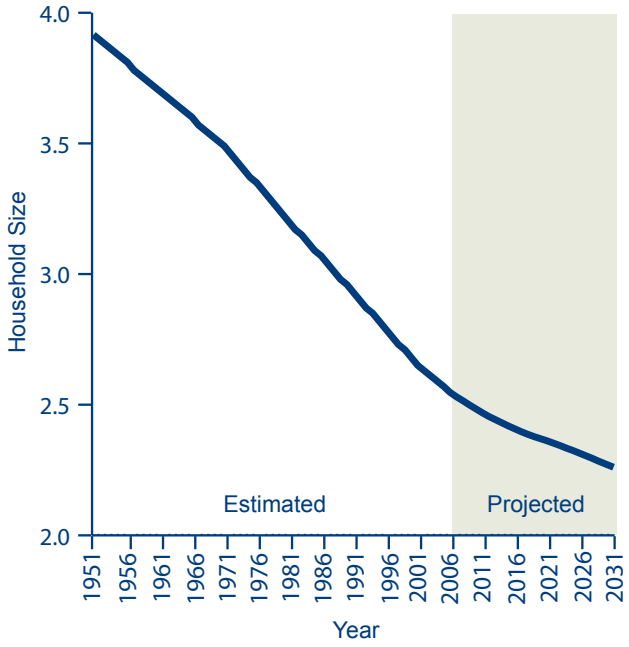
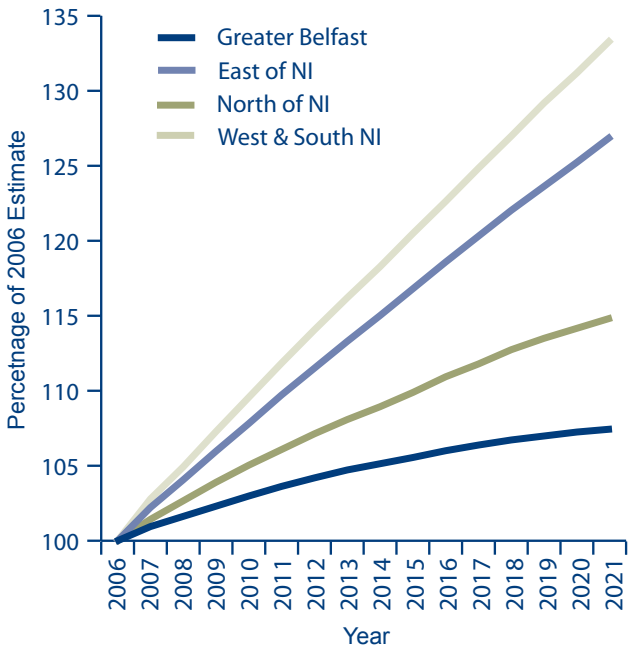


Figure 2.23: Projected Number of Households by Area within Northern Ireland as a Percentage of the 2006 Households (2006 to 2021) – non-zero y-axis



2.9.9. A final point to note is that the household projections envisage some regional variations in average household size. In particular, persons per household will be lowest in the Greater Belfast Area (2.19 by 2021 compared with a Northern Ireland average of 2.36). The projected fall in average household size in the Greater Belfast Area will produce a modest growth in household numbers, despite experiencing a decline in population (Figure 2.23). The West and South region is expected to record the fastest growth in household numbers (+33 per cent). Though, this does depend on the population growth rate for the region, which is subject to a degree of uncertainty as outlined previously.

2.10 Use and Interpretation

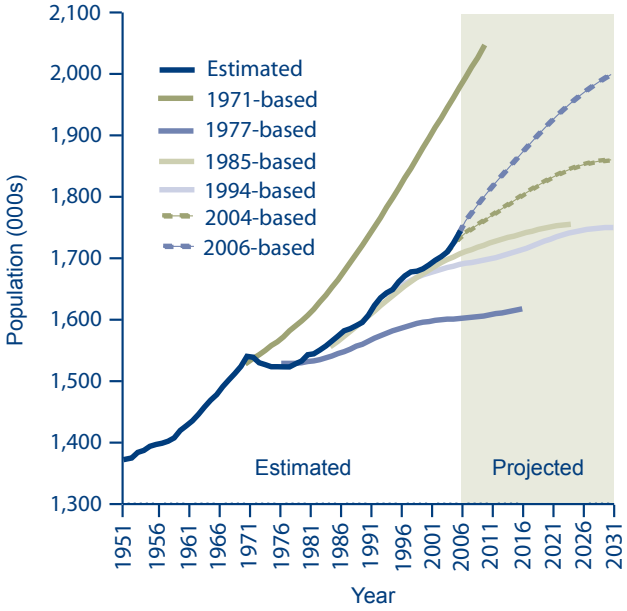
2.10.1. As noted by Shaw (2007), "due to the inherent uncertainty of demographic behaviour, any set of projections will inevitably be proved wrong, to a greater or lesser extent, as a projection of future demographic events or population structure".

2.10.2. This is a fundamental point to be appreciated in the use and interpretation of population projections. If the assumptions for fertility, mortality and migration proved to be exactly 'correct', the resulting population projections would provide perfectly accurate predictions of the future course of population growth.

2.10.3. Of course, the future can never be predicted with certainty. The actual out-turn for fertility, mortality and net migration will inevitably diverge from the assumptions. Hence, the projected population will differ from what actually transpires in future years. This is well illustrated by past experience with population projections.

2.10.4. Figure 2.24 compares the estimated population with various projections made since 1971. The 1971 prediction did not anticipate the sharp fall in fertility rates that brought an end to the 1960s baby-boom[44]. In the specific case of Northern Ireland, the surge in out-migration in the early-1970s sparked by the deepening troubles was a further factor contributing to a sharp divergence between the 1971 projection and the population out-turn during the 1970s. The 1977 projection over-estimated net out-migration and under-estimated both births and deaths, resulting in a projection that under-stated the future growth in population.

Figure 2.24: Northern Ireland Estimated and Population using different Population Projection bases (1951 to 2031) – non-zero y-axis



2.10.5. Regarding the more recent projections, the current 2006-based projections are higher than the 2004-based projections because they assume a positive level of net in-migration and higher fertility[45]. The net migration assumptions in the 2004-based projections did not anticipate the inflow from Eastern Europe following the A8 accession.

2.10.6. Two points can be made from the comparison of estimated and projected population. First, turning-points in key variables can be difficult to identify. In the past, this has been particularly the case with the fertility rate. Migration is a perennial problem, due to the variability in the historical data. In producing projections under such uncertainty, there will be a tendency to weight the most recent information more heavily than earlier data points. This in turn poses a risk of turning what may be more transient phenomena into long term trends. Essentially, that is the risk highlighted in the earlier discussion of the projected regional pattern of shifts in population (see Figure 2.19).

44 The UK population projections were not alone in that regard. See Shaw, 2007.

45 A long-term net migration figure of +500 in the 2006-based projections compared to -500 in the 2004-based projections and a long-term TPFR of 1.95 in the 2006-based projections compared to 1.80 in the 2004-based projections.

2.10.7. Second, the inevitable uncertainty in the principal projection can be managed, to a degree, by constructing scenarios based around the ONS variants, as discussed previously. Though, it should be emphasised that the ONS variant projections are designed as plausible alternatives to the principal projections. They should not be interpreted as giving margins of error or setting upper and lower limits to the projections.

2.10.8. Such a warning also serves to emphasise that the principal projection is itself based upon one set of plausible assumptions. That is, the principal assumptions represent the 'most' plausible set of assumptions based on the information available at the time that the projections were prepared. To that extent, the principal projection represents an informed guide to the future path of population change.

2.10.9. The assumptions in the Northern Ireland population projections are derived from analysis of historical trends, input from expert advisors and user consultations. Considered as such, it is possible for the user to also manage uncertainty by interpreting the projections in the light of past trends. This is the strategy that has been employed throughout this review and commentary. For example, the long-term growth rate in the principal Northern Ireland projection was found to be consistent with the historical rate of growth. That is, there was no sharp break between the past and future for which an explanation would have to be found.

2.10.10. Similarly, in commenting on the geographical patterns, attention was paid to the projected regional pattern in shifts in population shares compared to the historical pattern. Some patterns were clearly consistent with the longer term trends e.g. the falling Belfast population share. But in other areas a clear break with past behaviour could be identified e.g. the West and South region. Where a clear break in past trends is identified in the projections, it is useful for users to satisfy themselves that the explanation behind the break is credible and plausible.

2.11 Concluding Remarks

2.11.1. The Northern Ireland population and household projections are consistent in relation to: the geographical distribution of the population (down to LGD level); age and sex composition; and, key household formation indicators such as average household size and type. This is a major strength, providing a detailed framework to aid decision-making by policy-makers and planners in assessing and anticipating the needs of the population.

2.11.2. Nonetheless, while they are underpinned by a substantial and growing volume of demographic data, and take into account expert views and consultations, the user does need to bear in mind that the projections are primarily trend-based i.e. the past serves as a guide to what the future may hold. From the user's perspective, this has two main consequences.

2.11.3. First, there is the uncertainty associated with the population projections. The methodology currently employed by ONS does not quantify the uncertainty associated with the principal or any variant projection e.g. some measure of expected upper and lower limits, though it is considering the use of such methods[46]. As outlined earlier in this article, one approach to dealing with uncertainty within the current ONS methodology is to make use of the variant projections, whereby different scenarios for population growth result from plausible alternative assumptions about the components of change.

2.11.4. Making some selected sub-set of variants available for area projections as well as national projections would also be a useful step in helping the user to manage uncertainty around the principal projection[47].

2.11.5. However, the relative accuracy of a projection depends not just on the assumptions made about the components of change. As pointed out earlier in this article, the base population estimate is also important. Presently, the Northern Ireland population projections are produced on a two-year cycle, whereas mid-year population estimates are produced annually. For example, as of December 2008, there is a mid-year estimate for 2007 which differs from the 2007 projection, albeit only slightly (0.1 per cent). In addition, the economic landscape has altered considerably and with it the prognosis for components such as migration.

46 See Box One in Shaw, 2007. See also Keilman's discussion of probabilistic methods.

47 Making all variants available for area projections would probably be unmanageable and would run the risk of confusing users, thereby heightening uncertainty rather than helping to manage it.

2.11.6. This poses the issue of whether the population projections should perhaps be updated on an annual rather than a biannual cycle. Regarding the national projections, it is important to bear in mind that the population projections serve as guides to the medium- to long-term evolution of the population. They are *not* short-term forecasts. In that context, the considered analysis of the available information within a two-year cycle remains appropriate.

2.11.7. It would also seem appropriate to update the area projections on the same two-year cycle as the national projections. The smaller the geographical area, the more important will be the migration component. Consequently, there is a higher risk for sub-national areas that population projections will become out-dated and hence less useful as guides to future population levels[48]. More frequent updating would at least ensure that the base population level was kept up-to-date.

2.11.8. The second major consequence of the trend-based approach is that the projections present a picture of what will happen *in the event that the assumptions prove to be correct*. They do not reflect the prospective implications of policy initiatives that might, for example, seek to change the geographical distribution of the population. But policy outcomes are themselves inherently uncertain. Viewed in that context, the projections already serve a valuable purpose in helping to frame the policy context. In particular, where policies seek to change outcomes or to alter existing patterns, trend-based projections serve to illustrate what needs to be done to achieve the outcomes.

48 For example, at LGD level, when the 2002-based population forecasts for 2006 are compared with the 2006 mid-year estimates, the differences range from +1.2 per cent (Castlereagh) to -5.5 per cent (Dungannon). One reason for the out-turn was that that the actual levels of external in-migration by LGD differed from what had been assumed when 2002-based projections were prepared.

Bibliography

Barry, R., Beatty, R., Donnelly, D., and Marshall, D., 2005. Household Projections for Northern Ireland: 2002-2025. NISRA Occasional Paper 21. Available at: http://www.nisra.gov.uk/archive/demography/publications/household/household_project.pdf

Bauere, V., Densham, P., Millar, J., and Salt, J., 2007. "Migrants from central and eastern Europe: Local geographies", Population Trends, 129: 7-19. Available at: http://www.statistics.gov.uk/downloads/theme_population/PT129.pdf

Beatty, R., Fegan, G., and Marshall, D., 2006. Long-term International Migration Estimates for Northern Ireland (2004-5) – Sources and Methodology. NISRA Occasional Paper 22. Available at http://www.nisra.gov.uk/archive/demography/population/migration/NI_Migration_Report(2005).pdf.

Bray, H., 2008. "2006-based population projections for the UK and constituent countries", Population Trends, 131: 8-18. Available at: http://www.statistics.gov.uk/downloads/theme_population/Population_Trends_131_web.pdf

Champion, T., 2000. "Flight from the cities?", Chapter 2, pp 10-19 in Bate, R., Best, R., and Holmans, A. (eds), On the Move: The Housing Consequences of Migration. York: York Publishing Services for the Joseph Rowntree Foundation. Available at: http://www.jrf.org.uk/bookshop/ebooks/1859354092.pdf

Department for Regional Development, 2001. Shaping Our Future: Northern Ireland Regional Development Strategy. Belfast: DRD. http://www.drdni.gov.uk/shapingourfuture.

Dixon, S., 2003. "Implications of population ageing for the labour market". Labour Market Trends, February, pp 67-76. Available at: http://www.statistics.gov.uk/articles/labour_market_trends/Implications_of_population_ageing_feb03.pdf

Edwards, M., and Harding, E., 2008. Building Our Futures: Meeting the Housing Needs of an Ageing Population. Revised edition. London: International Longevity Centre – UK. Available at www.ilcuk.org.uk.

Jeffries, J., 2008. "Fertility assumptions for the 2006-based national population projections", Population Trends, 131: 19-27. Available at: http://www.statistics.gov.uk/downloads/theme_population/Population_Trends_131_web.pdf

Keilman, N. 2007. "UK national population projections in perspective: How successful compared to those in other European countries?", Population Trends, 129: 20-30. Available at: http://www.statistics.gov.uk/downloads/theme_population/PT129.pdf

NISRA, 2007a. 2006-Based Population Projections. Statistics Press Notice dated 23 October 2007. Available at http://www.nisra.gov.uk/demography/default.asp20.htm.

NISRA, 2007b. Mid-Year Population Estimates Northern Ireland (2006). Statistics Press Notice dated 31 July 2007. Available at http://www.nisra.gov.uk/archive/demography/publications/pr_mye_2006.pdf.

NISRA, 2007c. Long-term International Migration Estimates for Northern Ireland (2005-06). Belfast: NISRA. Available at http://www.nisra.gov.uk/archive/demography/population/migration/NI_Migration_Report(2006).pdf.

NISRA, 2008a. Population Projections for Areas within Northern Ireland (2006-Based Projections). Statistics Press Notice dated 28 February 2008. Available at http://www.nisra.gov.uk/demography/default.asp20.htm.

NISRA, 2008b. 2006-Based Household Projections for Northern Ireland. Statistics Press Notice dated 31 March 2008. Available at http://www.nisra.gov.uk/demography/default.asp20.htm.

NISRA, 2008c. Population and Migration Estimates Northern Ireland (2007). Statistical Report Dated 31 July 2008. Available at http://www.nisra.gov.uk/archive/demography/population/midyear/mye_report_2007.pdf.

Office for National Statistics (ONS), 2007. "2006-based national population projections: Underlying long-term assumptions", Population Trends, 129: 83-84. Available at: http://www.statistics.gov.uk/downloads/theme_population/PT129.pdf

Office for National Statistics (ONS), 2008. National Population Projections: 2006-based: Populations by Age and Sex for the United Kingdom, Great Britain and Constituent Countries. Basingstoke, Hampshire: Palgrave Macmillan. Available at: http://www.gad.gov.uk/Publications/documents/National_Population_Projections_2006_Based_Report.pdf

O'Neill, C., McKee, P., and McGregor, P., 2006. "Fertility in Northern Ireland: A review of the demographic evidence", Chapter 2, pp 27-48, Registrar General Northern Ireland, Annual Report 2005. Norwich: The Stationery Office. Available at: http://www.nisra.gov.uk/archive/demography/publications/annual_reports/2005/Chapter2.pdf

O'Reilly, D., Rosato, M., and Connolly, R., 2005. "Trends in Mortality in Northern Ireland", Chapter 2, pp 23-52, Registrar General Northern Ireland, Annual Report 2004. Norwich: The Stationery Office. Available at: http://www.nisra.gov.uk/archive/demography/publications/annual_reports/2004/Chapter2.pdf

Shaw, C. 2007. "Fifty years of United Kingdom national population projections: How accurate have they been?", Population Trends, 128: 8-23. Available at: http://www.statistics.gov.uk/downloads/theme_population/PopulationTrends128.pdf

Annex A
Accompanying Tables and Charts

Table A2.1 Estimated and projected population

	N. Ireland		England	Wales	Scotland	UK
	'000s	% of 2006	% of 2006	% of 2006	% of 2006	% of 2006
1991	1,607	*92.3*	*94.3*	*96.9*	*99.3*	***94.8***
2001	1,689	*97.0*	*97.4*	*98.1*	*99.0*	***97.6***
2006	1,742	*100.0*	*100.0*	*100.0*	*100.0*	***100.0***
2011	1,812	*104.0*	*103.8*	*102.4*	*101.7*	***103.6***
2021	1,922	*110.3*	*111.8*	*107.4*	*104.1*	***110.9***
2031	1,999	*114.8*	*119.0*	*111.1*	*105.0*	***117.4***

Source: ONS.

Table A2.2 Estimated and projected population: Annual per cent change

	N. Ireland (%)	England (%)	Wales (%)	Scotland (%)	UK (%)
1991-2001	*0.5*	*0.3*	*0.1*	*0.0*	***0.3***
2001-2006	*0.6*	*0.5*	*0.4*	*0.2*	***0.5***
2006-2011	*0.8*	*0.8*	*0.5*	*0.3*	***0.7***
2011-2021	*0.6*	*0.7*	*0.5*	*0.2*	***0.7***
2021-2031	*0.4*	*0.6*	*0.3*	*0.1*	***0.6***
2006-2031	*0.6*	*0.7*	*0.4*	*0.2*	***0.6***

Source: ONS.

Figure A2.1: Northern Ireland Estimated and Projected Annual Percentage Change (1992 to 2031)

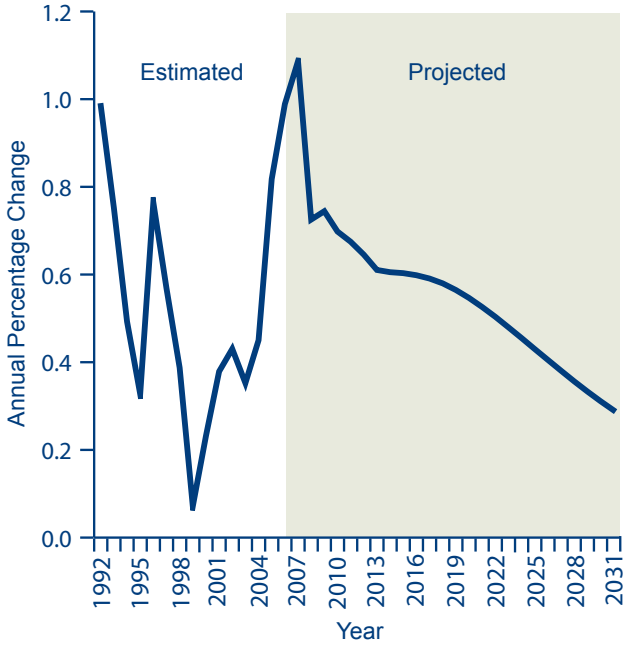


Table A2.3 Components of change: Five-year summary – Annual average

	2006-2011 ('000s)	2011-2016 ('000s)	2016-2021 ('000s)	2021-2026 ('000s)	2026-2031 ('000s)
Population at start	1,742	1,812	1,868	1,922	1,966
Births	24	25	25	24	23
Deaths	14	14	14	15	16
Natural change	**10**	**11**	**10**	**8**	**6**
Net migration	4	1	1	1	1
Total change	**14**	**11**	**11**	**9**	**7**
Population at end	1,812	1,868	1,922	1,966	1,999

Source: ONS.

Table A2.4 Variant population projections: Per cent of principal

	2031 (%)	2056 (%)
Principal	*100*	*100*
HP High fertility, high migration and high life expectancy	*111*	*128*
HF High fertility	*103*	*107*
HM High migration	*107*	*116*
HL High life expectancy	*101*	*104*
LL Low life expectancy	*99*	*96*
LM Low migration	*93*	*84*
LF Low fertility	*97*	*92*
LP Low fertility, low migration and low life expectancy	*89*	*74*

Source: ONS.

Table A2.5 Estimated and Projected Population Age Composition, Selected Years

	1961 (000s)	1991 (000s)	2006 (000s)	2021 (000s)	2031 (000s)
0-15	438	417	380	393	381
16-29	275	356	343	328	330
30-44	262	315	375	386	379
45-59	242	241	316	366	359
60-74	158	190	217	285	333
75+	52	89	110	164	217
All	**1,427**	**1,607**	**1,742**	**1,922**	**1,999**
	%	**%**	**%**	**%**	**%**
0-15	*31*	*26*	*22*	*20*	*19*
16-29	*19*	*22*	*20*	*17*	*17*
30-44	*18*	*20*	*22*	*20*	*19*
45-59	*17*	*15*	*18*	*19*	*18*
60-74	*11*	*12*	*12*	*15*	*17*
75+	*4*	*6*	*6*	*9*	*11*
All	***100***	***100***	***100***	***100***	***100***

Source: ONS.

Figure A2.2: Projected Components of Change for Northern Ireland Local Government Districts as a Percentage of the 2006 Estimate (2006 to 2031)

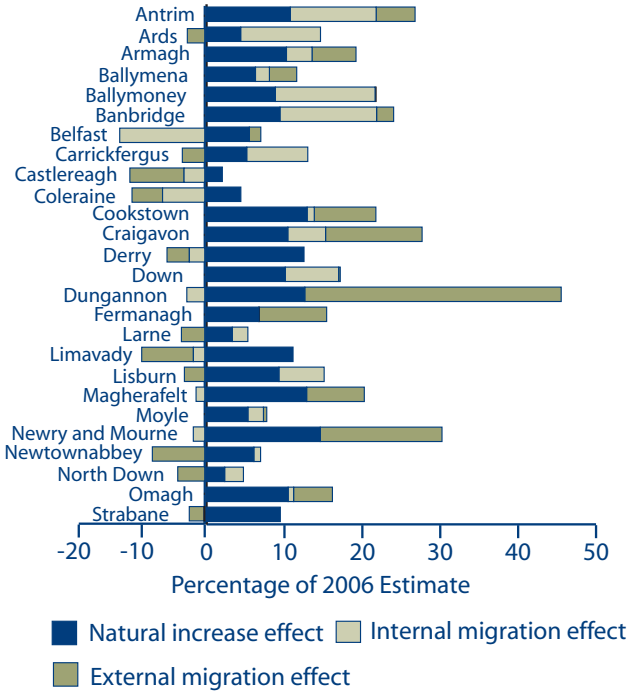
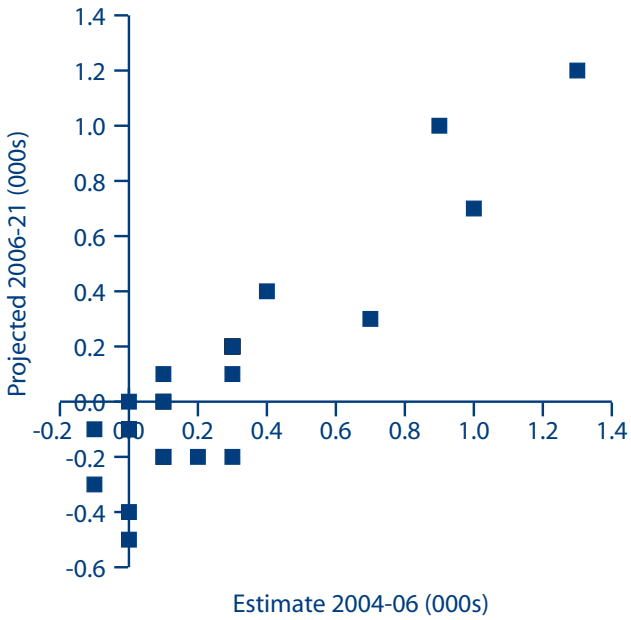


Figure A2.3: Estimated and Projected Average Annual Net External Migration by Local Government Districts (2004-6 and 2006-21)



Appendices

Appendix 1: Population and vital events, 1926-2007

	Estimated population			Resident live births							Multiple births		
									Outside marriage				
Year	Persons	Males	Females	All resident births[1]	Rate[2]	Males	Females	Males per 1,000 females	Number	%[3]	Twins	Triplets etc	% of maternities
1926-30	**1,249,000**	604,000	645,000	**26,418**	***21.2***	13,587	12,831	*1,059*	1,249	*4.7*	308	4	*1.2*
1931-35	**1,270,000**	617,000	653,000	**25,098**	***19.8***	12,926	12,172	*1,062*	1,259	*5.0*	286	2	*1.2*
1936-40	**1,286,800**	626,100	660,700	**25,533**	***19.8***	13,110	12,423	*1,055*	1,178	*4.6*	300	4	*1.2*
1941-45	**1,304,400**	674,000	630,400	**29,592**	***22.7***	15,287	14,305	*1,069*	1,560	*5.3*	332	4	*1.2*
1946-50	**1,350,400**	695,800	654,600	**29,764**	***22.0***	15,336	14,428	*1,063*	1,124	*3.8*	367	5	*1.3*
1951-55	**1,382,500**	673,700	708,800	**28,798**	***20.8***	14,885	13,913	*1,070*	838	*2.9*	391	4	*1.4*
1956-60	**1,405,000**	684,700	720,300	**30,539**	***21.7***	15,755	14,784	*1,066*	758	*2.5*	414	3	*1.4*
1961-65	**1,447,200**	705,500	741,700	**33,226**	***23.0***	17,171	16,055	*1,069*	890	*2.7*	407	3	*1.3*
1966-70	**1,501,500**	732,500	769,000	**32,866**	***21.9***	16,958	15,908	*1,066*	1,180	*3.6*	355	3	*1.1*
1971-75	**1,532,000**	755,200	776,700	**28,850**	***18.8***	14,935	13,914	*1,073*	1,260	*4.4*	308	2	*1.1*
1976-80	**1,526,200**	754,300	771,900	**26,959**	***17.7***	13,807	13,152	*1,050*	1,531	*5.7*	271	4	*1.0*
1981-85	**1,552,100**	759,700	792,400	**27,194**	***17.5***	13,965	13,229	*1,056*	2,469	*9.1*	289	3	*1.1*
1986-90	**1,585,400**	773,800	811,600	**27,045**	***17.1***	13,914	13,130	*1,060*	4,266	*15.8*	286	4	*1.1*
1991-95	**1,631,800**	795,900	835,900	**24,779**	***15.2***	12,704	12,075	*1,052*	5,427	*21.9*	292	8	*1.2*
1996-2000	**1,674,500**	816,700	857,800	**23,321**	***13.9***	11,966	11,356	*1,054*	6,661	*28.6*	319	8	*1.4*
2001-2005	**1,704,700**	833,400	871,300	**21,928**	***12.9***	11,245	10,683	*1,053*	7,511	*34.3*	314	8	*1.5*
1971	**1,540,400**	754,600	785,800	**31,765**	***20.6***	16,504	15,261	*1,081*	1,207	*3.8*	342	4	*1.1*
1972	**1,539,000**	757,500	781,500	**29,994**	***19.5***	15,559	14,435	*1,078*	1,263	*4.2*	325	3	*1.1*
1973	**1,530,000**	755,700	774,200	**29,200**	***19.1***	15,152	14,048	*1,079*	1,195	*4.1*	290	1	*1.0*
1974	**1,526,900**	755,000	771,900	**27,160**	***17.8***	13,987	13,173	*1,062*	1,296	*4.8*	291	3	*1.1*
1975	**1,523,500**	753,300	770,200	**26,130**	***17.2***	13,475	12,655	*1,065*	1,338	*5.1*	294	-	-
1976	**1,523,500**	754,000	769,500	**26,361**	***17.3***	13,542	12,819	*1,056*	1,330	*5.0*	264	5	*1.0*
1977	**1,523,300**	753,900	769,400	**25,437**	***16.7***	13,154	12,283	*1,071*	1,383	*5.4*	266	3	*1.1*
1978	**1,523,200**	753,600	769,700	**26,239**	***17.2***	13,168	13,071	*1,007*	1,523	*5.8*	249	2	*1.0*
1979	**1,528,300**	755,200	773,100	**28,178**	***18.4***	14,485	13,693	*1,058*	1,668	*5.9*	276	5	*1.0*
1980	**1,532,800**	754,800	778,000	**28,582**	***18.6***	14,686	13,896	*1,057*	1,751	*6.1*	298	4	*1.1*
1981	**1,543,000**	756,600	786,300	**27,166**	***17.6***	13,847	13,319	*1,040*	1,894	*7.0*	304	4	*1.1*
1982	**1,544,500**	756,700	787,800	**26,872**	***17.4***	13,732	13,140	*1,045*	2,106	*7.8*	305	2	*1.2*
1983	**1,550,600**	759,000	791,500	**27,026**	***17.4***	13,972	13,054	*1,070*	2,370	*8.8*	263	4	*1.0*
1984	**1,557,300**	761,300	796,000	**27,477**	***17.6***	14,196	13,281	*1,069*	2,790	*10.2*	303	3	*1.1*
1985	**1,565,400**	764,900	800,400	**27,427**	***17.5***	14,076	13,351	*1,054*	3,185	*11.6*	269	3	*1.0*
1986	**1,573,500**	768,400	805,100	**27,975**	***17.8***	14,501	13,474	*1,076*	3,575	*12.8*	280	3	*1.0*
1987	**1,582,000**	772,900	809,100	**27,653**	***17.5***	14,196	13,457	*1,055*	3,967	*14.3*	320	7	*1.2*
1988	**1,585,400**	773,800	811,700	**27,514**	***17.4***	14,131	13,383	*1,056*	4,446	*16.2*	283	2	*1.0*
1989	**1,590,400**	775,900	814,500	**25,831**	***16.2***	13,307	12,524	*1,063*	4,394	*17.0*	281	2	*1.1*
1990	**1,595,600**	777,900	817,700	**26,251**	***16.5***	13,437	12,814	*1,049*	4,946	*18.8*	267	5	*1.0*
1991	**1,607,300**	783,200	824,100	**26,028**	***16.2***	13,427	12,601	*1,066*	5,288	*20.3*	311	7	*1.2*
1992	**1,623,300**	792,100	831,100	**25,354**	***15.6***	12,924	12,430	*1,040*	5,579	*22.0*	256	8	*1.1*
1993	**1,635,600**	798,200	837,300	**24,722**	***15.1***	12,515	12,207	*1,025*	5,445	*22.0*	283	9	*1.2*
1994	**1,643,700**	801,900	841,800	**24,098**	***14.7***	12,361	11,737	*1,053*	5,337	*22.1*	288	6	*1.2*
1995	**1,649,100**	804,000	845,100	**23,693**	***14.4***	12,293	11,400	*1,078*	5,487	*23.2*	324	9	*1.4*
1996	**1,661,800**	810,300	851,400	**24,382**	***14.7***	12,382	12,000	*1,032*	6,346	*26.0*	310	13	*1.3*
1997	**1,671,300**	815,500	855,700	**24,087**	***14.4***	12,325	11,762	*1,048*	6,427	*26.7*	330	7	*1.4*
1998	**1,677,800**	818,700	859,100	**23,668**	***14.1***	12,058	11,610	*1,039*	6,743	*28.5*	305	7	*1.3*
1999	**1,679,000**	818,500	860,500	**22,957**	***13.7***	11,943	11,014	*1,084*	6,957	*30.3*	334	6	*1.5*
2000	**1,682,900**	820,500	862,500	**21,512**	***12.8***	11,120	10,392	*1,070*	6,833	*31.8*	314	5	*1.5*
2001	**1,689,300**	824,400	864,900	**21,962**	***13.0***	11,288	10,674	*1,058*	7,144	*32.5*	330	10	*1.6*
2002	**1,696,600**	828,900	867,800	**21,385**	***12.6***	10,874	10,511	*1,035*	7,161	*33.5*	313	13	*1.5*
2003	**1,702,600**	832,800	869,800	**21,648**	***12.7***	11,244	10,404	*1,081*	7,439	*34.4*	304	5	*1.4*
2004	**1,710,300**	836,500	873,800	**22,318**	***13.0***	11,477	10,841	*1,059*	7,703	*34.5*	330	7	*1.5*
2005	**1,724,400**	844,300	880,100	**22,328**	***12.9***	11,341	10,987	*1,032*	8,108	*36.3*	294	6	*1.4*
2006	**1,741,600**	853,400	888,200	**23,272**	***13.4***	12,010	11,262	*1,066*	8,832	*38.0*	315	1	*1.4*
2007	**1,759,100**	862,000	897,100	**24,451**	***13.9***	12,516	11,935	*1,049*	9,261	*37.9*	357	5	*1.5*

Note: See Appendix 3 - for notes on change in definition of stillbirths that took place in 1992

[1] All births prior to 1981

[2] Rate per 1,000 population

[3] Percentage of all live births

[4] Rate per 1,000 resident live and still births

[5] Rate per 1,000 live births (resident and non-resident)

Stillbirths		Infant deaths		Deaths						Marriages		Divorces	Civil Partnerships	
				Persons		Males		Females						
Number	Rate[4]	Number	Rate[5]	Number	Rate[2]	Number	Rate[2]	Number	Rate[2]	Number	Rate[2]	Number	Number	Year
..	..	2,083	78.8	**18,403**	**14.7**	8,888	14.7	9,515	14.8	7,328	5.9	..	..	1926-30
..	..	1,966	78.4	**18,026**	**14.2**	8,869	14.4	9,157	14.0	7,806	6.1	..	..	1931-35
..	..	1,970	77.2	**18,369**	**14.3**	9,097	14.5	9,271	14.0	9,073	7.1	..	..	1936-40
..	..	2,169	73.3	**17,478**	**13.4**	8,778	13.0	8,700	13.8	10,751	8.2	..	..	1941-45
..	..	1,423	47.8	**16,039**	**11.9**	8,134	11.7	7,905	12.1	9,396	7.0	..	..	1946-50
..	..	1,054	36.6	**15,557**	**11.3**	7,966	11.8	7,590	10.7	9,359	6.8	..	..	1951-55
..	..	863	28.3	**15,175**	**10.8**	7,872	11.5	7,303	10.1	9,500	6.8	..	..	1956-60
695	20.5	879	26.5	**15,628**	**10.8**	8,185	11.6	7,443	10.0	10,185	7.0	124	..	1961-65
530	15.9	791	24.1	**15,987**	**10.6**	8,399	11.5	7,588	9.9	11,357	7.6	225	..	1966-70
407	13.9	610	21.1	**16,948**	**11.1**	8,954	11.9	7,994	10.3	11,384	7.4	381	..	1971-75
269	9.9	427	15.9	**16,750**	**11.0**	8,770	11.6	7,980	10.3	10,010	6.6	648	..	1976-80
194	7.1	323	11.8	**15,972**	**10.3**	8,146	10.7	7,826	9.9	10,049	6.5	1,523	..	1981-85
136	5.0	231	8.5	**15,696**	**9.9**	7,879	10.2	7,818	9.6	10,031	6.3	1,664	..	1986-90
135	5.4	168	6.7	**15,228**	**9.3**	7,515	9.4	7,713	9.2	8,983	5.5	2,282	..	1991-95
126	5.4	134	5.7	**15,150**	**9.0**	7,315	9.0	7,835	9.1	7,881	4.7	2,325	..	1996-2000
109	4.9	122	5.5	**14,428**	**8.5**	6,953	8.3	7,474	8.6	7,821	4.6	2,345	..	2001-2005
462	14.3	722	22.7	**16,202**	**10.5**	8,593	11.4	7,609	9.7	12,152	7.9	339	..	1971
434	14.3	616	20.5	**17,032**	**11.1**	9,001	11.9	8,031	10.3	11,905	7.7	355	..	1972
389	13.1	610	20.9	**17,669**	**11.5**	9,288	12.3	8,381	10.8	11,212	7.3	393	..	1973
374	13.6	567	20.9	**17,327**	**11.3**	9,226	12.2	8,101	10.5	10,783	7.1	382	..	1974
375	14.1	534	20.4	**16,511**	**10.8**	8,664	11.5	7,847	10.2	10,867	7.1	437	..	1975
278	10.4	483	18.3	**17,030**	**11.2**	8,869	11.8	8,161	10.6	9,914	6.5	574	..	1976
310	12.0	438	17.2	**16,921**	**11.1**	8,871	11.8	8,050	10.5	9,696	6.4	569	..	1977
243	9.2	417	15.9	**16,153**	**10.6**	8,458	11.2	7,695	10.0	10,304	6.8	599	..	1978
246	8.7	417	14.8	**16,811**	**11.0**	8,822	11.7	7,989	10.3	10,214	6.7	601	..	1979
266	9.2	382	13.4	**16,835**	**11.0**	8,832	11.7	8,003	10.3	9,923	6.5	896	..	1980
240	8.8	360	13.2	**16,256**	**10.5**	8,423	11.1	7,833	10.0	9,636	6.2	1,355	..	1981
187	6.9	369	13.7	**15,918**	**10.3**	8,004	10.6	7,914	10.0	9,913	6.4	1,383	..	1982
204	7.5	329	12.1	**16,039**	**10.3**	8,209	10.8	7,830	9.9	9,990	6.4	1,657	..	1983
161	5.8	291	10.5	**15,692**	**10.1**	8,007	10.5	7,685	9.7	10,361	6.7	1,552	..	1984
178	6.4	265	9.6	**15,955**	**10.2**	8,088	10.6	7,867	9.8	10,343	6.6	1,669	..	1985
125	4.4	286	10.2	**16,065**	**10.2**	8,154	10.6	7,911	9.8	10,225	6.5	1,539	..	1986
170	6.1	242	8.7	**15,334**	**9.7**	7,721	10.0	7,613	9.4	10,363	6.6	1,514	..	1987
137	5.0	248	8.9	**15,813**	**10.0**	7,993	10.3	7,820	9.6	9,960	6.3	1,550	..	1988
133	5.1	180	6.9	**15,844**	**10.0**	7,878	10.2	7,966	9.8	10,019	6.3	1,818	..	1989
115	4.4	198	7.5	**15,426**	**9.7**	7,648	9.8	7,778	9.5	9,588	6.0	1,897	..	1990
123	4.7	194	7.4	**15,096**	**9.4**	7,533	9.6	7,563	9.2	9,221	5.7	2,310	..	1991
124	4.9	153	6.0	**14,988**	**9.2**	7,469	9.4	7,519	9.0	9,392	5.8	2,280	..	1992
128	5.2	176	7.1	**15,633**	**9.6**	7,731	9.7	7,902	9.4	9,045	5.5	2,213	..	1993
153	6.3	147	6.1	**15,114**	**9.2**	7,362	9.2	7,752	9.2	8,683	5.3	2,303	..	1994
145	6.1	169	7.1	**15,310**	**9.3**	7,482	9.3	7,828	9.3	8,576	5.2	2,302	..	1995
153	6.2	142	5.8	**15,218**	**9.2**	7,418	9.2	7,800	9.2	8,297	5.0	2,314	..	1996
131	5.4	137	5.6	**14,971**	**9.0**	7,244	8.9	7,727	9.0	8,071	4.8	2,176	..	1997
122	5.1	134	5.6	**14,993**	**8.9**	7,321	8.9	7,672	8.9	7,826	4.7	2,459	..	1998
132	5.7	148	6.4	**15,663**	**9.3**	7,464	9.1	8,199	9.5	7,628	4.5	2,326	..	1999
93	4.3	109	5.0	**14,903**	**8.9**	7,128	8.7	7,775	9.0	7,584	4.5	2,350	..	2000
112	5.1	134	6.0	**14,513**	**8.6**	7,007	8.5	7,506	8.7	7,281	4.3	2,365	..	2001
122	5.7	100	4.6	**14,586**	**8.6**	6,948	8.4	7,638	8.8	7,599	4.5	2,165	..	2002
108	5.0	115	5.2	**14,462**	**8.5**	6,920	8.3	7,542	8.7	7,757	4.6	2,319	..	2003
113	5.0	122	5.3	**14,354**	**8.4**	6,935	8.3	7,419	8.5	8,328	4.9	2,512	..	2004
89	4.0	140	6.1	**14,224**	**8.2**	6,957	8.2	7,267	8.3	8,140	4.7	2,362	12	2005
89	3.8	121	5.1	**14,532**	**8.3**	7,062	8.3	7,470	8.4	8,259	4.7	2,565	116	2006
102	4.2	123	4.9	**14,649**	**8.3**	7,208	8.4	7,441	8.3	8,687	4.9	2,913	111	2007

Appendix 2: Population and Vital Events by Administrative Area, 2007

Area	Estimated population at 30 June 2007	Resident live births		Stillbirths		Infant deaths		Deaths		Marriages	
		Number	Rate[1]	Number	Rate[2]	Number	Rate[3]	Number	Rate[1]	Number	Rate[1]
Northern Ireland	**1,759,100**	**24,451**	***13.9***	**102**	***4.2***	**123**	**4.9**	**14,649**	***8.3***	**8,687**	***4.9***
Eastern Board	**671,600**	**8,995**	***13.4***	**28**	***3.1***	**45**	***5.0***	**6,315**	***9.4***	**3,268**	**4.9**
Ards	**77,100**	941	*12.2*	4	*4.2*	4	*4.3*	731	*9.5*	268	*3.5*
Belfast	**267,500**	3,664	*13.7*	17	*4.6*	24	*6.5*	2,796	*10.5*	1,356	*5.1*
Castlereagh	**65,600**	803	*12.2*	-	-	1	*1.2*	647	*9.9*	209	*3.2*
Down	**69,200**	960	*13.9*	3	*3.1*	3	*3.1*	537	*7.8*	409	*5.9*
Lisburn	**113,500**	1,705	*15.0*	2	*1.2*	9	*5.3*	819	*7.2*	475	*4.2*
North Down	**78,700**	922	*11.7*	2	*2.2*	4	*4.3*	785	*10.0*	551	*7.0*
Northern Board	**449,600**	**6,021**	***13.4***	**37**	***6.1***	**26**	***4.3***	**3,651**	***8.1***	**2,135**	***4.7***
Antrim	**52,600**	809	*15.4*	-	-	5	*6.2*	396	*7.5*	312	*5.9*
Ballymena	**62,100**	815	*13.1*	9	*10.9*	2	*2.5*	527	*8.5*	359	*5.8*
Ballymoney	**29,700**	385	*12.9*	6	*15.3*	4	*10.4*	228	*7.7*	109	*3.7*
Carrickfergus	**40,000**	472	*11.8*	3	*6.3*	1	*2.1*	408	*10.2*	164	*4.1*
Coleraine	**56,800**	644	*11.3*	3	*4.6*	3	*4.6*	455	*8.0*	280	*4.9*
Cookstown	**35,400**	540	*15.2*	4	*7.4*	2	*3.7*	264	*7.5*	224	*6.3*
Larne	**31,300**	364	*11.6*	2	*5.5*	3	*8.2*	269	*8.6*	156	*5.0*
Magherafelt	**43,100**	652	*15.1*	2	*3.1*	1	*1.5*	292	*6.8*	220	*5.1*
Moyle	**16,700**	225	*13.4*	-	-	-	-	123	*7.3*	101	*6.0*
Newtownabbey	**81,700**	1,115	*13.6*	8	*7.1*	5	*4.5*	689	*8.4*	210	*2.6*
Southern Board	**342,800**	**5,362**	***15.6***	**17**	***3.2***	**28**	***4.9***	**2,392**	***7.0***	**1,689**	***4.9***
Armagh	**57,700**	862	*14.9*	-	-	4	*4.6*	445	*7.7*	336	*5.8*
Banbridge	**46,400**	688	*14.8*	4	*5.8*	6	*8.7*	296	*6.4*	165	*3.6*
Craigavon	**88,800**	1,416	*15.9*	4	*2.8*	9	*6.2*	601	*6.8*	362	*4.1*
Dungannon	**54,300**	876	*16.1*	4	*4.5*	1	*0.8*	399	*7.3*	292	*5.4*
Newry & Mourne	**95,500**	1,520	*15.9*	5	*3.3*	8	*5.3*	651	*6.8*	534	*5.6*
Western Board	**295,200**	**4,073**	***13.8***	**20**	***4.9***	**24**	***5.7***	**2,291**	***7.8***	**1,595**	***5.4***
Fermanagh	**61,300**	802	*13.1*	4	*5.0*	4	*4.9*	544	*8.9*	417	*6.8*
Limavady	**34,400**	491	*14.3*	3	*6.1*	1	*2.0*	218	*6.3*	173	*5.0*
Derry	**108,500**	1,583	*14.6*	9	*5.7*	8	*4.7*	800	*7.4*	533	*4.9*
Omagh	**51,500**	687	*13.3*	1	*1.5*	8	*11.6*	394	*7.6*	281	*5.5*
Strabane	39,400	510	*12.9*	3	*5.8*	3	*5.9*	335	*8.5*	191	*4.8*

See Appendix 3 - for notes on change in definition of stillbirths that took place in 1992

[1] Rate per 1,000 population
[2] Rate per 1,000 resident live and still births
[3] Rate per 1,000 live births (resident and non-resident)

Appendix 3: Notes and Definitions

Population Data

All population figures refer to estimates or projections as at the 30 of June of the year in question. Ages relate to age last birthday at the date shown.

Natural Increase

Natural increase is equal to total births minus total deaths.

Marriages

Marriage rates relate to the number of marriages solemnised and not to the number of persons married. The number of marriages relates to those registered in Northern Ireland, thus it does not include Northern Ireland residents who get married outside Northern Ireland, but does include non Northern Ireland residents getting married in Northern Ireland.

Divorces

Divorce statistics have been compiled from returns of 'Decrees made Absolute' supplied by the Northern Ireland Court Service and include nullities of marriage.

Information on the number of 'Decree Nisis' is published by the Northern Ireland Court Service. A Decree Nisi does not terminate the marriage; a couple are still married until the Decree Absolute has been granted.

Date of Registration and Date of Occurrence

All the data presented on births, stillbirths, marriages, civil partnerships and deaths relate to the date of registration of the event and not to the date of occurrence. For events such as infant death or suicide, which are likely to be referred to the coroner, it can take some time for the event to be registered.

Place of Occurrence

Births, stillbirths and deaths have been allocated to the area of usual residence if it is in Northern Ireland, otherwise they have been allocated to the area of occurrence. Marriage and civil partnership figures relate to the area of occurrence.

Marital Status of Parents

The following terms are used throughout the report:

Married parents: refers to parents who are married to each other at time of registration of birth.

Unmarried parents: refers to parents who are unmarried or married but not to each other at time of registration of birth.

Births

The births presented in this report (since 1981) do not include births to non Northern Ireland resident mothers unless otherwise stated.

Stillbirths

The **Stillbirth (Definition) Act 1992** redefined a stillbirth, from 1 October 1992, as a child which had issued forth from its mother after the 24th week of pregnancy and which did not breath or show any other sign of life. Prior to 1 October 1992 the statistics related to events occurring after the 28th week of pregnancy.

A stillbirth rate refers to the number of stillbirths per 1,000 live and still births.

The stillbirths presented in this report (since 1981) do not include stillbirths to non Northern Ireland resident mothers.

Perinatal Deaths

Perinatal deaths refer to stillbirths and deaths in the first week of life.

A **perinatal death rate** refers to the number of perinatal deaths per 1,000 live and still births (including non Northern Ireland residents).

Perinatal deaths presented in this report include stillbirths and infant deaths to non Northern Ireland residents.

Neonatal Deaths

Neonatal deaths refer to deaths in the first four weeks of life.

A **neonatal death rate** refers to the number of neonatal deaths per 1,000 live births (including non Northern Ireland residents).

Postneonatal Deaths

Postneonatal deaths refer to deaths after the first four weeks but before the end of the first year.

A **postneonatal death rate** refers to the number of postneonatal deaths per 1,000 live births (including non Northern Ireland residents).

Infant Deaths

Infant deaths refer to all deaths in the first year of life.

An **infant death rate** refers to the number of infant deaths per 1,000 live births (including non Northern Ireland residents).

Deaths

The deaths represented in this report refer to all deaths which occurred in Northern Ireland. They include those which occurred in Northern Ireland to non Northern Ireland residents, but exclude those occurring to Northern Ireland residents outside Northern Ireland.

Suicide, Self-Inflicted Injury and Events of Undetermined Intent

In the UK, in considering suicide events it is conventional to include cases where the cause of death is classified as either 'Suicide and self-inflicted injury' or 'Undetermined injury'. The ICD10 codes used for 'Suicide and self-inflicted injury' are X60-X84 and Y87.0, and the ICD10 codes used for 'Undetermined injury' are Y10-Y34 and Y87.2. (Also see note on registration and occurrence).

Prior to 2004 there were seven coroner's districts in Northern Ireland, following a review of the coroner's service the separate districts were amalgamated into one centralised coroner's service. This change may affect the timing of registration of deaths with statistics from 2004 onwards being more timely and consistent.

Smoking-Related Deaths

Information is not recorded on the death certificate on whether the deceased was a smoker. Estimates can however be made of the number of deaths attributable to smoking, by using information on the contribution of smoking to specific conditions for example lung cancer which are recorded at death.

Research has been undertaken by the Health Development Agency to derive attributable proportions of smoking related deaths based on published relative risk factors for mortality of current and ex-smokers from various diseases, counts of death by cause, and estimates of current and ex-smoking behaviour.

For further information on the causes of death and attributable proportions used to define smoking-related deaths see:

http://www.nice.org.uk/niceMedia/documents/smoking_epidemic.pdf

Alcohol-Related Deaths

The figures in this report are based on the UK-wide harmonised definition of alcohol-related deaths. The definition of alcohol-related deaths includes those causes of death regarded as most directly due to alcohol consumption. It does not include other diseases where alcohol has been shown to have some causal relationship, such as cancers of the mouth, oesophagus and liver. The definition includes all deaths from chronic liver disease and cirrhosis (excluding biliary cirrhosis), even when alcohol is not specifically mentioned on the death certificate.

Apart from deaths due to poisoning with alcohol (accidental, intentional or undetermined), this definition excludes any other external causes of death, such as road traffic deaths and other accidents.

Further details on the UK definition and a list of the ICD9 and ICD10 codes used to code alcohol-related deaths can be found at:

http://www.statistics.gov.uk/statbase/Product.asp?vlnk=14496

Drug-Related Deaths

A death is considered to be a drug-related death if the underlying cause of death is regarded as resulting from drug-related poisoning, according to the current National Statistics definition. The ICD ninth and ICD tenth revision codes used to define these deaths are listed in the table below.

ICD-10 Underlying Cause Code	ICD-09 Underlying Cause Code	Description
F11–F16, F18–F19	292, 304, 305.2–305.9	Mental and behavioural disorders due to drug use (excluding alcohol and tobacco)
X40–X44	E850–E858	Accidental poisoning by drugs, medicaments and biological substances
X60–X64	E950.0–E950.5	Intentional self-poisoning by drugs, medicaments and biological substances
Y10–Y14	E980.0–E980.5	Poisoning by drugs, medicaments and biological substances, undetermined intent
X85	E962.0	Assault by drugs, medicaments and biological substances

Asbestos-Related Deaths

Asbestos exposure can result in a number of life threatening illnesses including asbestosis, a lung disease which restricts breathing, and also mesothelioma which is a cancer of the lung.

In this report, asbestos-related deaths have been defined as those deaths where asbestosis and/or mesothelioma have been mentioned on the death certificate either as a primary or secondary cause.

Further details on the definition used for asbestos-related deaths can be found on the Health and Safety Executive website at:

http://www.hseni.gov.uk/index/information_and_guidance/general_hseniinfo/statistics.htm

Healthcare Associated Infections

In this report deaths related to healthcare associated infection solely relate to Methicillin resistant *Staphylococcus aureus* (MRSA) and *Clostridium difficile.* It is not possible to identify directly from the ICD codes all deaths where MRSA or *Clostridium difficile* contributed to a death. Data within this report has been collated by looking for all mentions of either MRSA or *Clostridium difficile* on the death certificate.

Crude Birth and Death Rates

A **crude rate** refers to the number of occurrences of the event per 1,000 population.

Age Standardisation

A straight comparison of crude death rates between areas may present a misleading picture because of differences in the sex and age structure of the respective populations. The technique of standardisation is used to remedy this. In general, standardisation involves a comparison of the actual number of events occurring in an area with the aggregate number expected if the age/sex specific rates in the standard population were applied to the age/sex groups of the observed population. The results are expressed either as standardised rates or as standardised mortality ratios (SMRs) where the standard ratio (for Northern Ireland) equals 100.

In some areas the presentation of standardised rates for only one year's deaths may not provide a full picture of the underlying standardised death rates. It is therefore advisable to use the 3 years rates provided (**Figure 1.28**).

Significance of SMRs

The estimation of SMRs by LGD and Health Board invites the question of whether such SMRs are different from the Northern Ireland average (100). The statistical significance of the SMRs has been examined by estimating the probability that the difference between an observed SMR and 100 might have resulted from chance variation; where this probability is less than 0.05 (one in 20) the particular SMR has been classified as statistically significantly ($p<0.05$) different from 100. More details on the method can be obtained from Demography and Methodology Branch.

Total Period Fertility Rate (TPFR)

The TPFR is the average number of children that would be born to a cohort of women who experienced,

throughout their childbearing years, the fertility rates of the calendar year in question.

TPFR Replacement Level

In western countries a TPFR of about 2.1 is required to maintain long-term population levels, assuming no migration.

General Fertility Rate

The general fertility rate is the number of live births per 1,000 women aged 15-44.

The Gross Reproduction Rate

The gross reproduction rate is the average number of live daughters that would be born to a cohort of women who experienced, throughout their childbearing years, the fertility rates of the calendar year in question.

The Net Reproduction Rate

With reference to the gross reproduction rate, the net reproduction rate is the average number of these live daughters that, subject to the mortality rates of the calendar year in question, would survive to their mother's age at the time of birth.

Completed Family Size

Average completed family size is calculated by summing over time the succeeding age specific fertility rates of women born in a particular year. (Such an approximation assumes that the effects of mortality and migration are negligible). However this measure can only calculate a value for women who have reached the end of the main childbearing ages conventional 45 years of age, but there is some value in considering the historical data for cohorts that have reached this age and the partial series for those not yet 45.

Maternities

Maternities refer to the number of pregnancies ending in stillbirths or live births with multiple births counting only once. The number of maternities presented in this report (since 1981) does not include births or stillbirths to non Northern Ireland residents.

National Statistics Socio-economic Classification (NS-SeC)

This new social classification has replaced the previously published Registrar General's Social Class. It is principally based on the individual's occupation and employment status and has been introduced in order to reflect a modern view of social classification. It was introduced from 2001 onwards. Further information can be obtained from the Office for National Statistics at:

http://www.statistics.gov.uk/methods_quality/ns_sec/default.asp.

NS-SeC is determined according to a person's occupation; for children of parents who are married to each other, according to the occupation of the father as stated at birth registration; for children of parents who are not married to each other but who jointly registered the birth, according to the occupation of the father; and for sole registrations, according to the occupation of the mother. The occupations are grouped into the following classes:

NS-SeC I	Higher managerial & professional occupations
NS-SeC II	Lower managerial & professional occupations
NS-SeC III	Intermediate occupations
NS-SeC IV	Small employers & own account workers
NS-SeC V	Lower supervisory & technical occupations
NS-SeC VI	Semi-routine occupations
NS-SeC VII	Routine occupations
NS-SeC VIII	Never worked & long-term unemployed

Cause of Death Coding – ICD10

All deaths and stillbirths registered from the 1 January 2001 have been coded in accordance with the International Statistical Classification of Diseases, Injuries and Causes of Death, (ICD) (Tenth Revision), which has been in operation by international agreement from 1 January 1999.

Classification of the underlying cause of death is done by reference to the death certificate and additional information from the certifying doctor.

Expectation of Life

Expectation of life statistics, previously produced by the Government Actuary's Department (GAD), are now produced by the Office for National Statistics (ONS). Expectations of life can be calculated in two ways: period life expectancy or cohort life expectancy.

Period life expectancies are worked out using the age-specific mortality rates for a given period (either a single year, or a run of years), with no allowance for any later actual or projected changes in mortality.

Cohort life expectancies are worked out using age-specific mortality rates which allow for known or projected changes in mortality in later years.

All statistics for expectation of life in Chapter 1 are based on the period methodology and are produced for single year of age based on three year's deaths and population data with the exception of the cohort figures given in Table 1.3.

Northern Ireland Population Projections

Northern Ireland population projections based on the 2006 mid-year estimates were published in October 2007.

Figure 1.1, 1.8 and **1.9** summarise the results of the latest population projections for Northern Ireland. The assumptions used in this projection are summarised below.

Base population: The projection was based on the Northern Ireland mid-2006 population estimate.

Fertility: The numbers of births for the projections are obtained by applying the appropriate fertility rate to the average number of women at each age during each year of the projection period. For Northern Ireland, long-term average completed family size is assumed to be 1.95 children per woman.

Mortality: The mortality rates for the first year of the projection, 2006-07, are based on the best estimates that could be made in September 2007 of the numbers of deaths at each age. Future improvements in mortality rates are based on the trend in mortality rates in the years up to 2006. In the long term rates of improvement in mortality rates are projected to be one per cent per annum.

Migration: It has been assumed that for each year of the projection period in the long-term there was a net inward migration of 500 from Northern Ireland.

The Northern Ireland population projections are produced by the Office for National Statistics (ONS) at the request of the Registrar General for Northern Ireland. Further information on population projections can be obtained from:

National Population Projections and Life Tables Branch
ONS Centre for Demography
Office for National Statistics
Room D3/05
1 Drummond Gate
LONDON
SW1V 2QQ

Tel: 020 7533 5222
Email: natpopproj@ons.gsi.gov.uk
lifetables@ons.gsi.gov.uk
Website: www.statistics.gov.uk

Population Projections for Areas within Northern Ireland

NISRA has produced 2006-based population projections for areas within Northern Ireland – Local Government Districts, Health and Social Services Boards, Education and Library Boards and NUTS III areas. These figures are constrained to the ONS Northern Ireland totals. The population projections for local areas within Northern Ireland were published in February 2008.

Further information on the population projections for areas within Northern Ireland can be obtained from:

Customer Services
Northern Ireland Statistics and Research Agency
McAuley House
2-14 Castle Street
BELFAST
BT1 1SA

Tel: 028 9034 8160
Fax: 028 9034 8161
Email: census.nisra@dfpni.gov.uk
Website: http://www.nisra.gov.uk/demography/default.asp3.htm

Northern Ireland Household Projections

Northern Ireland 2006-based household projections were published in March 2008.

The latest household projections, covering the period 2006 to 2031, incorporate the results of the 2006-based population projections. They also incorporate information from the last two Censuses, to project trends in household formation by type of household and the age of the head of household.

The projections provide an indication of what would happen if past trends continue. They do not take account of policy initiatives, or other factors that may affect future populations.

Further information about the methodology used can be found at the following link:

http://www.nisra.gov.uk/archive/demography/population/household/HProjs_methodology.pdf

Geography used for Data

In the 2007 Registrar General Annual Report vital statistics by geography are defined using the Pointer address database. In previous Annual Reports the geography for vital statistics was defined using the postcode from the address in conjunction with the Central Postcode Directory (CPD).

Pointer is an address database that has been developed by the Land and Property Services, Royal Mail and Local Councils. Pointer gives each address a unique property reference number and geo-spatial coordinates.

In the 2007 report, the address for each registration is linked using the grid-reference of the Pointer unique property reference number to higher geographies. Under the previous CPD method only the postcode of the address was used to define the higher geography. Thus the new method is a more accurate method for allocating births and deaths by geography.

Where it has not been possible to assign a unique property reference number to an address using the Pointer database, the previous CPD method has been used to assign the geography.

As a result of this change 113 births and 69 deaths in 2007 were assigned to different Local Government Districts.

UK Data

The Office for National Statistics (ONS) is responsible for producing a wide range of economic and social statistics. It also, for England and Wales, registers life events and holds the Census of Population. Contact details are as follows:

Customer Contact Centre
Room 1.015
Office for National Statistics
Cardiff Road
NEWPORT
NP10 8XG

Tel:	0845 601 3034
Fax:	0163 365 2747
Email:	info@statistics.gsi.gov.uk
Website:	www.statistics.gov.uk

The General Register Office for Scotland (GROS) is responsible for the registration of births, marriages, deaths, divorces and adoptions in Scotland. They are also responsible for the Census of Population in Scotland which, with other sources of information, is used to produce population statistics. Contact details are as follows:

Customer Services
Dissemination and Census Analysis Branch
General Register Office for Scotland
Ladywell House
Ladywell Road
EDINBURGH
EH12 7TF

Tel:	0131 314 4243
Fax:	0131 314 4696
Email:	customer@gro-scotland.gsi.gov.uk
Website:	www.gro-scotland.gov.uk

Appendix 4: Further Information

Vital Statistics

A wide range of additional information at differing levels of geography (including postcode sector) and for years not included in this edition of the Registrar General's Annual Report is available on request from Customer Services.

Population Statistics

Estimates of the resident population are available by sex and single year of age for each of the Local Government Districts, Health and Social Services Boards, Education and Library Boards, Parliamentary Constituencies and NUTS III areas of Northern Ireland. Population projections are available for the Local Government Districts, Health and Social Services Boards, Education and Library Boards and NUTS III areas by age and sex for a 15 year period after the base year. This information can be obtained from:

Customer Services
Northern Ireland Statistics and Research Agency
McAuley House
2-14 Castle Street
BELFAST
BT1 1SA

Tel:	028 9034 8160
Fax:	028 9034 8161
Email:	census.nisra@dfpni.gov.uk
Website:	http://www.nisra.gov.uk/demography/default.asp3.htm

Migration Statistics

In July 2006 and 2007 NISRA published two papers outlining analysis undertaken to develop measures of long-term international migration. The papers look at a number of administrative/statistical sources including the Worker Registration Scheme, the Work Permit Scheme and National Insurance Number registrations, to help estimate long-term international migration.

A third paper was published in July 2008 which updates these papers providing more up to date statistics. All publications can be found on the NISRA website at the following link:

http://www.nisra.gov.uk/demography/default.asp18.htm

Historical Registrar General Annual Reports

Electronic copies of all Registrar General Annual Reports from 1887 to the present day are now available from the NISRA website. They can be accessed at the following link:

http://www.nisra.gov.uk/demography/default.asp57.htm

Census Office for Northern Ireland

2001 Census Data

Detailed results from the 2001 Census include a wide range of demographic information available for different levels of geography. The headline outputs include:

- Northern Ireland Census 2001 Population Report and Mid-Year Estimates
- Northern Ireland Census 2001 Key Statistics
- Northern Ireland Census 2001 Standard Tables
- Northern Ireland Census 2001 Census Area Statistics
- Northern Ireland Census 2001 Theme Tables
- Northern Ireland Census 2001 Migration, Travel to Work and Workplace Population
- Northern Ireland Census 2001 Univariate Tables

More information on the 2001 Census and statistics available from it can be obtained from:

Census Customer Services
Northern Ireland Statistics and Research Agency
McAuley House
2-14 Castle Street
BELFAST
BT1 1SA

Tel:	028 9034 8160
Fax:	028 9034 8161
Email:	census.nisra@dfpni.gov.uk
Website:	http://www.nisranew.nisra.gov.uk/census/start.html

2011 Census

Preparations are underway for the next Census which is planned for 2011.

Three major phases of testing are planned as part of the 2011 Census development cycle, namely a Census test which took place on 13 May 2007, systems integration test in autumn 2008 and a dress rehearsal in 2009. Similar arrangements are in place across the rest of the UK.

More information on the 2011 Census, including details of the 2007 Census Test, can be obtained from:

http://www.nisranew.nisra.gov.uk/census/2011_census.html

Northern Ireland Neighbourhood Information Service (NINIS)

NISRA has developed a statistical resource for Northern Ireland which includes detailed small area aggregate statistical information. The resource is titled Neighbourhood Statistics and includes a web-based dissemination system available at www.ninis.nisra.gov.uk. The web system includes 2001 Census data along with detailed aggregate statistical information from various administrative data systems. Further information can be obtained from:

Northern Ireland Neighbourhood Information Service
Northern Ireland Statistics and Research Agency
McAuley House
2-14 Castle Street
BELFAST
BT1 1SA

Tel:	028 9034 8111
Fax:	028 9034 8134
Email:	ninis.nisra@dfpni.gov.uk
Website:	http://www.ninis.nisra.gov.uk

Northern Ireland Longitudinal Study (NILS)

The Northern Ireland Longitudinal Study (NILS) is a large-scale data linkage study which has been created by linking administrative and statistical data. The Study is designed for statistical and research uses only and is managed under Census legislation. Information is linked over time on people from Census, vital events and health registration datasets. Data sources include 2001 Census data, birth and death registrations and demographic data derived from health registrations. Further information can be obtained from:

Northern Ireland Longitudinal Study
Northern Ireland Statistics and Research Agency
McAuley House
2-14 Castle Street
BELFAST
BT1 1SA

Tel:	028 90348131
Fax:	028 90348134
Email:	nils.nisra@dfpni.gov.uk
Website:	http://www.nisra.gov.uk/nils/default.asp.htm

Divorces – Decree Nisi Information

The information on divorces in this report refers to Decree Absolutes. Information on Decree Nisi's can be obtained from:

The Northern Ireland Court Service
Resource Management Branch
18th Floor
Windsor House
Bedford Street
BELFAST
BT2 7LT

Tel:	028 9032 8594
Fax:	028 9023 8506

Appendix 5: Report on the work of the General Register Office for Northern Ireland (2007)

Introduction

The General Register Office for Northern Ireland (GRONI) is the part of the Northern Ireland Statistics and Research Agency (NISRA) that administers civil registration. The Registrar General for Northern Ireland, who is also Chief Executive of NISRA, heads GRONI. The registration functions of GRONI stem mainly from the statutory responsibilities placed on the Registrar General and include:

- administration of the registration of births, deaths, marriages and civil partnerships through District Registration Offices;
- formalities relating to marriage and conduct of civil marriages;
- formalities relating to civil partnership registration;
- maintenance of historic records of births, deaths, marriages, civil partnerships and adoptions and production of certified copies to applicants on request; and
- registration of adoptions.

The Registrar General has additional related statutory duties relating to the production and publication of vital statistics. Demography and Census Division within NISRA manage these duties in partnership with GRONI.

Aims

The work of GRONI is wide ranging including policy development, oversight and regulation of registration work undertaken by the District Registration Offices, advice on marriage procedures, casework relating to change of name, procedures relating to legal adoptions, production of certified copies of vital events and maintenance and storage of archive records. This is reflected in the fundamental aims of GRONI, which are:

- to register all births, deaths, marriages, civil partnerships and adoptions;
- to ensure that all information collected is relevant, accurate, complete and updated in such a way as to maintain public confidence in the records;
- to support NISRA in the production of accurate vital statistics to assist policy development and research;
- to preserve birth, death, marriage, civil partnership and adoption records permanently and to store them securely; and
- to produce certified copies of records efficiently and promptly on demand.

The aims of GRONI staff are to carry out these statutory obligations, to give accurate and unbiased advice to the public, to act with integrity at all times and to respect the confidentiality of all information contained in registration records or given by the public in confidence. In carrying out these functions, GRONI seeks to act in a manner consistent with the National Statistics Code of Practice and the Citizen's Charter.

Main Activities / Performance Against Key Targets during 2007

Almost 49,500 vital events (births, reregistered births, deaths, marriages, civil partnerships and adoptions) were registered in District Registration Offices and a corresponding number of certificates were issued. In addition, during 2007, GRONI:

- produced 89,560 certificates and 13,416 priority certificates;
- verified 9,384 births, deaths and marriages for government departments;
- provided all death notifications to the Central Services Agency, Electoral Office for Northern Ireland and Department for Work and Pensions; and
- dealt with 4,457 registration related cases.

Each year the Registrar General sets a number of key targets for GRONI. During 2007 these included:

(i) Process 98 per cent of postal and personal certificate applications within 7 and 3 working days respectively.

Achieved. 98 per cent of postal applications processed within 7 working days and 99 per cent of personal applications processed within 3 working days

(ii) Process birth, death, marriage, civil partnership and adoption registration casework within 15 working days.

Achieved. 97 percent within 15 days

Reform Developments in 2007

Each year a number of further measures are taken to improve customer services, value for money and develop policy. In 2007 the main developments included:

- further work on the review of the civil registration service;
- preparation for the digitisation of 8 million paper-based records;
- the introduction of new legislation relating to the Disclosure of Death Registration Information for the prevention of fraud; and
- the review of fees charged by GRONI.

Each of these is described in turn below.

(i) Review of Registration Service

Work was carried out in conjunction with the Civil Law Reform Division to provide Instructions to Counsel which would enable legislation to be drafted to take the GRONI modernisation programme forward. The Bill has now been drafted by Counsel as the Civil Registration Bill (Northern Ireland) 2008 and is progressing through the Northern Ireland Assembly legislative programme.

(ii) Digitisation of Registration Records

Following the successful implementation of the new Registration and Certificate System in 2005, which linked all 26 district registration offices with GRONI and updated GRONI internal systems for indexes and recent records, GRONI is continuing the programme for the modernisation of all civil registration records dating back to the 19th century. Work is progressing on plans for the digitisation of 8 million paper-based records. In addition to using information technology to make improvements in meeting the needs of the public and contributing to government targets for electronic delivery, this project will protect important historic records and goes hand in hand with the proposed legislative changes.

(iii) Disclosure of Death Registration Information

As part of the ongoing exercise to combat fraud, GRONI was included with GRO England & Wales, in the introduction of a clause to the UK wide Police & Justice Act 2006. This enables GRONI to share death registration information with police and crime investigation agencies for the prevention, detection, investigation and prosecution of offences. The scheme, which will be operated through a joint working arrangement between the General Register Offices in Northern Ireland, Scotland and England & Wales, is aimed at stopping fraudsters from using the identities of the deceased. Work was completed to introduce further legislation that would enable this information to be shared with public and private sector organisations, such as other government departments, financial intuitions, pension companies and credit reference agencies for the same purposes. Work is currently ongoing on vetting procedures and legally binding agreements before any data is released. The scheme was launched in January 2008.

(iv) Annual Review of Civil Registration Fees

Each year GRONI review the statutory fees charged for registration services against costs. The review indicated that an increase in fees in relation to birth, death, marriage and civil partnership certificates was necessary and work was completed in order for the necessary legislation to be introduced to the Assembly.

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