



Northern Ireland
**Statistics &
Research**
Agency

Registrar General Northern Ireland Annual Report 2011

November 2012



An Agency within the Department of

**Finance and
Personnel**

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The Northern Ireland Statistics and Research Agency

The Northern Ireland Statistics and Research Agency (NISRA) is an Executive Agency within the Department of Finance and Personnel (DFP) and has been in existence since April 1996. The Agency also incorporates the General Register Office (GRO) for Northern Ireland. NISRA's core purpose is to provide a high quality, cost effective, research and registration service that informs policy making and the democratic process and the wider public.

The overall corporate aims of NISRA are to:

- Provide a statistical and research service to support decision making by Northern Ireland Ministers and Departments and to inform elected representatives 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, civil partnerships, adoptions and deaths in Northern Ireland.

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

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of the
Registrar General
2011

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Foreword

I have pleasure in presenting my 2011 Annual Report to the Northern Ireland Assembly. The report outlines the work of the General Register Office and presents detailed information on the demography of Northern Ireland. 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).

In 2011, the Agency ran the biggest statistical exercise in Northern Ireland – the ten yearly Census. The Census provides a unique and comprehensive picture of the population. The first results were published in July 2012 with further results in September and others to come in the next six months. Next year's Annual Report will include a detailed summary of what the 2011 Census tells us about Northern Ireland.

However, to set the scene this year I invited Mr Ian White from the UK Office for National Statistics to write a special article on the History of the Census in Ireland / Northern Ireland from 1813 to 2011. Ian's article paints a fascinating picture of the twenty one censuses taken across this period. The article highlights the different challenges that faced previous census takers but also indicates some of the similarities between Census taking in the 19th, 20th and 21st centuries.

Last year, the General Register Office registered over 49,000 vital events relating to people's lives all across Northern Ireland. Registration is a vital service in establishing identity, providing information to support the delivery of public services and a host of other applications. Over the last decade the Office has taken forward a range of modernisation initiatives relating to Civil Registration, such as the reform of Marriage law and the computerisation of the records. The next step will be the work towards providing online access to historic civil registration records for genealogical and family history research.

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



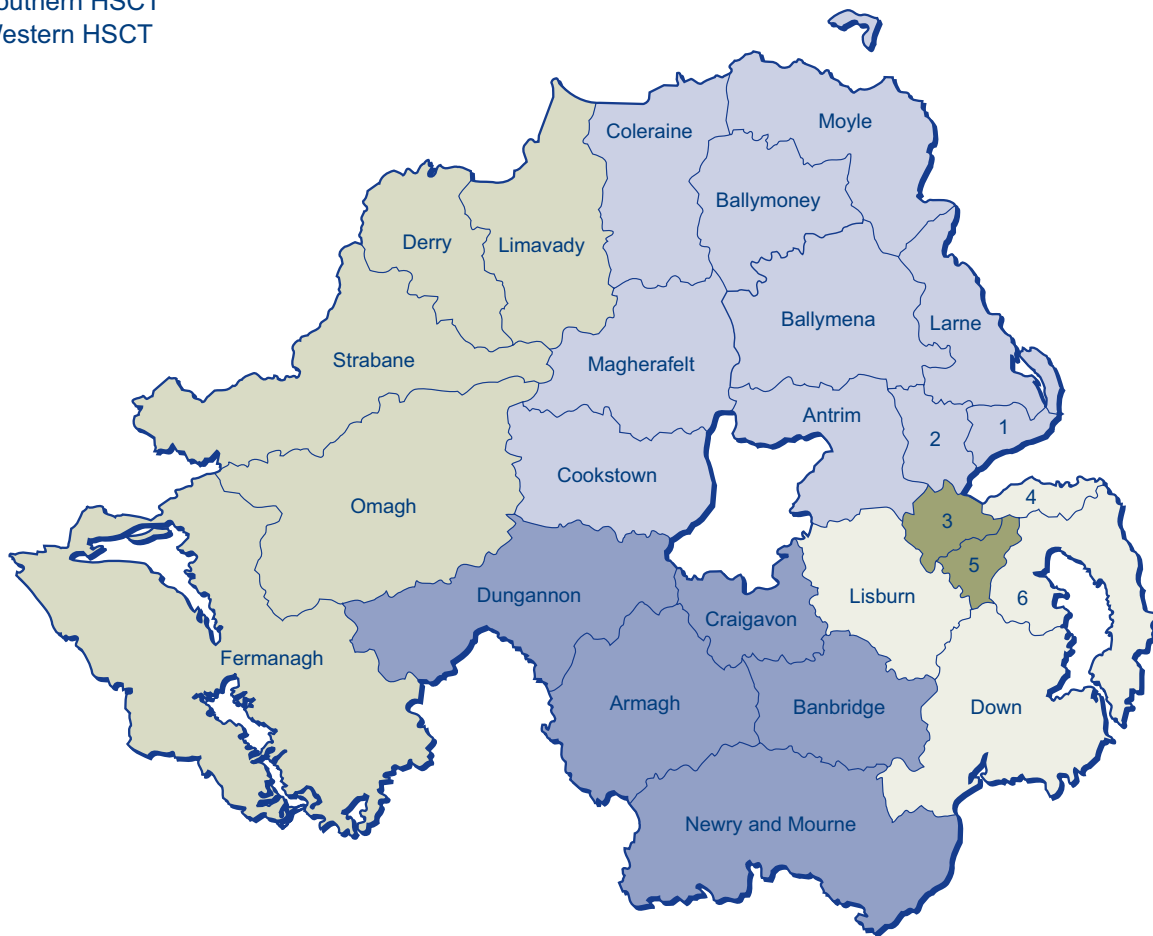
Norman Caven

Registrar General for Northern Ireland

November 2012

Northern Ireland's Health & Social Care Trusts and Local Government Districts

- Belfast HSCT
- Northern HSCT
- South Eastern HSCT
- Southern HSCT
- Western HSCT



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

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Chapter 1

Demographic Overview of Northern Ireland



Population estimates and rates relate to the mid-year population estimates rolled forward from the 2001 Census

1.1 Introduction

1.1.1. The first results of the 2011 Census were released in July 2012¹. The 2011 Census showed that 1.81 million people (1,810,900) were resident in Northern Ireland on 27 March 2011. This was 0.2% higher than the mid-year estimate rolled forward from the 2001 Census - the official population estimate for 30 June 2011 was 1,806,900. More detailed Census results covering areas across Northern Ireland and issues such as migration, country of birth and nationality will be published in the coming months.

1.1.2. It is common practice to revisit mid year population estimates released since the previous Census (2001) in light of the new Census results. The rebased Northern Ireland mid-year population estimates for the period 2001 to 2011 are planned for release in Spring 2013. Rebased population estimates for other geographies, further detail of the population aged 85 and over, as well as population projections will also be updated in light of the 2011 Census results. NISRA has published a guidance document² for using the available population estimates until the rebasing of all population outputs is complete.

1.1.3. In the remainder of this report, population estimates and rates are related to the mid-year population estimates rolled forward from the 2001 Census – thus they do not take account of the latest Census figures.

1.1.4. The number of people living in Northern Ireland continues to rise, although at a lower rate than that seen in the previous six years. The estimate of the population resident in Northern Ireland at 30 June 2011 was 1,806,900.

1.1.5. The mid-2011 figure is an increase in population over the preceding twelve months of 7,500 people or 0.4 per cent of the population. This increase in population was due to significantly more births (25,400) than deaths (14,500)

in the period mid 2009 to mid 2010, giving a natural increase in population of 10,900 people. Population growth was less than in each of the previous five years, primarily due to migration into Northern Ireland being smaller than migration out of Northern Ireland. There was also a net loss of 200 due to other changes in Her Majesty's Forces stationed in Northern Ireland.

1.1.6. In the decade to 2004, the overall annual rate of population increase was around 7,000 people, or 0.4 per cent each year. Between mid-2004 and mid-2008, the average annual rate of population increase more than doubled to 0.9 per cent due to large flows of people into Northern Ireland. With the return to balanced migration and population growth dominated by natural change, the population increase of 0.6 per cent in 2009-10 exceeds that of 0.4 per cent in the early 2000s, when balanced migration was last observed.

1.1.7. In terms of civilian migration it is estimated that in the year to mid-2011, 21,700 people came to live here and 24,900 people left Northern Ireland to live elsewhere; thus giving a net out migration of 3,200 people. Of the 21,700 people who came to live here, 4,700 came from the eight Eastern European countries that joined the European Union in May 2004.

1.1.8. In 2011, there were 25,273 births registered to Northern Ireland mothers, a decrease of 0.2 per cent on the 2010 figure of 25,315 births.

1.1.9. Despite this small decrease in 2011 (and previously in 2009), the general trend in births over the past decade has been one of increasing birth registrations, from a record low in 2002 (21,385 births). The current figure (25,273) is, however, still much lower than the numbers of births registered thirty or forty years ago. As a comparison, the number of births registered in Northern Ireland in 1981 was 27,166 births, which is seven per cent higher than the number registered in 2011. Moreover the peak during the baby boom was 34,345 births registered in 1964; 9,072 (26.4 per cent) higher than the 2011 figure.

1 Census results available at http://www.nisra.gov.uk/Census/2011_results_population.html

2 Guidance document available at <http://www.nisra.gov.uk/archive/demography/population/midyear/guidance.pdf>

1.1.10. In 2011 there were 14,204 deaths registered in Northern Ireland, a decrease of 253 deaths or 1.8 per cent on the 14,457 deaths registered in 2010, and the lowest number ever recorded here. The population is increasing, which resulted in 2011 having the lowest death rate in the history of Northern Ireland (7.9 deaths per 1,000 population).

1.1.11. In 2011 there were 8,366 marriages celebrated, an increase of 210 marriages or 2.6 per cent on the 2010 figure of 8,156 marriages. The highest number of marriages ever recorded in Northern Ireland was in 1970 (12,297 marriages).

1.1.12. There were 2,343 divorces granted in 2011, this is a decrease of 257 divorces or 9.9 per cent from the 2010 figure of 2,600 divorces. The number of divorces recorded in 2007 (2,913) was the largest on record for Northern Ireland.

1.1.13. 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. Between December 2005 and the end of 2011, 626 civil partnerships have been registered in Northern Ireland.

1.1.14. During 2011 there were 89 civil partnerships registered in Northern Ireland, 46 male civil partnerships and 43 female civil partnerships. This is a decrease from the 2010 figure of 116 civil partnerships. In 2011 there were more male than female civil partnerships registered, compared to 2010 when there were more female civil partnerships formed.

1.1.15. Whilst legislation has been in place in Northern Ireland since late 2005 to dissolve a civil partnership through The Civil Partnership Act, there were no dissolutions registered in Northern Ireland until 2010. During 2011 there were four civil partnership dissolutions registered in Northern Ireland, only one more than in 2010. All civil partnership dissolutions were to female partners in 2011.

Key Points

Population and Migration

- The size of the Northern Ireland resident population rose in the year to 30 June 2011 by 7,500 people or 0.4 per cent to 1,806,900.
- Prior to 2004, population increase in Northern Ireland was mostly due to natural change, i.e. the number of births minus the number of deaths. In the year to 30 June 2011, births exceeded deaths by 10,900. This is the highest level of natural change seen since the year to mid-1992.
- In 2005/6 and 2006/7 the contribution to population change from migration was larger than the contribution from natural change. Since then, net migration has gradually reduced and arrived at a position of net out migration between mid-2010 and mid-2011. Other changes resulted in a further reduction of 200 people to the population, including Her Majesty's Forces stationed in Northern Ireland.
- In terms of civilian migration it is estimated that in the year to mid-2011, the number of people coming to Northern Ireland (21,700 people) was smaller than the number of people leaving Northern Ireland (24,900 people). Of the 21,700 people who came to live here; 4,700 came from the eight Eastern European countries that joined the European Union in May 2004.

Births

- There were 25,273 births registered in 2011, a decrease of 42 (or 0.2 per cent) on the 2010 figure and 1,893 (7.0 per cent) fewer than the number of births registered in 1981.
- In 2011, the average age of women at childbirth was 30.0 years compared with 29.4 years in 2001, 28.0 years in 1991 and 27.5 years in 1981.
- In 2008 fertility increased to replacement level (2.10 children per "average woman") for the first time since 1991. In 2011 fertility levels fell slightly below replacement level (2.06); however

this is an 18 per cent recovery from the record low of 1.75 in 2000.

- 2011 saw the highest percentage of maternities on record resulting in a multiple birth (1.7 per cent). There were 410 sets of twins and four sets of triplets registered in 2011.

Deaths/Stillbirths

- In 2011 there were 14,204 deaths registered in Northern Ireland, the lowest number on record, and a decrease of 253 deaths or 1.8 per cent on the 14,457 deaths registered in 2010.
- The expectation of life at birth for males and females based on mortality rates of recent years was 77.0 and 81.4 years respectively, with corresponding figures for men and women based on the mortality rates of 1922 of 53.8 and 54.4 years respectively.
- Cancer accounted for 4,059 deaths in 2011, 29 per cent of deaths and the largest number of cancer deaths ever registered in Northern Ireland.
- There were 3.6 stillbirths per 1,000 births (live and still) in 2011, a substantial reduction from 20.5 stillbirths per 1,000 births in the early 1960s, and the lowest on record.
- There was a similar fall in infant deaths from 26.5 infant deaths per 1,000 live births in the early 1960s to 4.3 infant deaths per 1,000 live births in 2011, the lowest on record.

Marriages/Divorces

- There were 8,366 marriages celebrated in 2011, an increase of 210 marriages on the 2010 figure of 8,156 marriages. This is in contrast to the early 1970s when around 12,000 marriages were celebrated each year.
- In January 2004, marriage legislation was reformed in Northern Ireland. The new law allowed civil marriage ceremonies to be conducted outside Registrar's Offices in a number of approved venues. In 2011, 1,291 civil marriage ceremonies (47.3 per cent of all civil marriage ceremonies) were held in

approved venues; this compares with 1,151 (45.8 per cent of all civil marriage ceremonies) such ceremonies in 2010.

- There were 2,343 divorces granted in 2011, this is a decrease of 257 divorces or 9.9 per cent from the 2010 figure of 2,600 divorces. The number of divorces recorded in 2007 (2,913) was the largest on record for Northern Ireland.

Civil Partnerships/Dissolutions

- The Civil Partnership Act came into force in late 2005, enabling same-sex couples to obtain legal recognition of their relationship. Between December 2005 and the end of 2011, 626 civil partnerships have been registered in Northern Ireland.
- During 2011 there were 89 civil partnerships registered in Northern Ireland, 46 male civil partnerships and 43 female civil partnerships. This is a decrease from the 2010 figure of 116 civil partnerships.

1.2 Population

1.2.1. The latest estimate of the size of the Northern Ireland population³ (30 June 2011) is 1,806,900 people. Twenty-one per cent of the population were aged under 16 years, 17 per cent were of current pensionable age (see Box 1 for definition), with the remaining 61 per cent of the population of current working age.

Box 1: Pensionable Age Definitions

Current Pensionable Age (2011 definition)

Under current legislation, the pension age for females will be increased incrementally from 60 to 65 between April 2010 and April 2020. The 2011 definition of pensionable age is therefore males aged 65 and over, and females aged 61 and over and 35 per cent of females aged 60 on 30th June 2011

Current Working Age (2011 definition)

Males aged 16 to 64 and females aged 16 to 59 and 65 per cent of females aged 60 on 30th June 2011

Older Population

Persons aged 65 and over

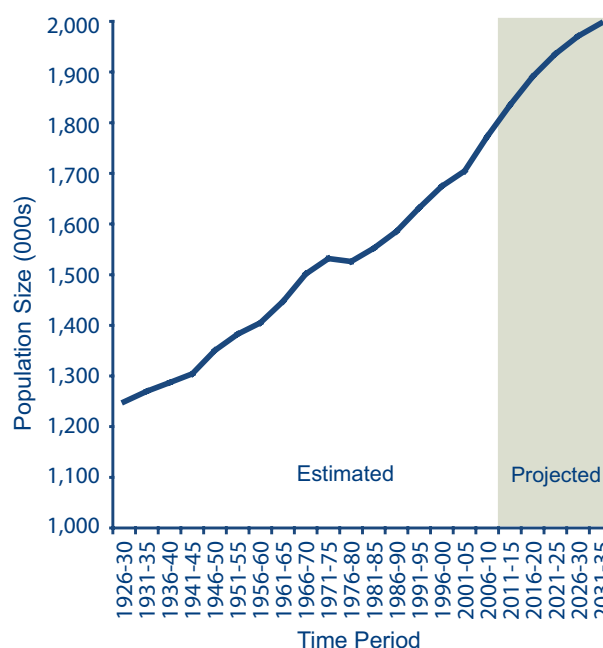
Due to gradual changes in pensionable age, and to ensure consistency, the older population definition will be more prominently used in reporting population statistics

1.2.2. In the 12 months to 30 June 2011, Northern Ireland's population is estimated to have risen by 7,500 persons. Whilst natural growth (i.e. births minus deaths) added 10,900 people to the population, there were more people leaving Northern Ireland than arriving (24,900 versus 21,700), leading to a net loss of population of 3,200 through migration. Other changes, including

Her Majesty's Forces stationed in Northern Ireland, accounted for a population decrease of 200 persons.

1.2.3. Figure 1.1 shows the long term trend of increasing population, despite a slight decrease in population in the early 1970s as a result of high levels of net outward migration at that time. Latest 2010-based population projections for Northern Ireland show that the population is projected to continue to increase.

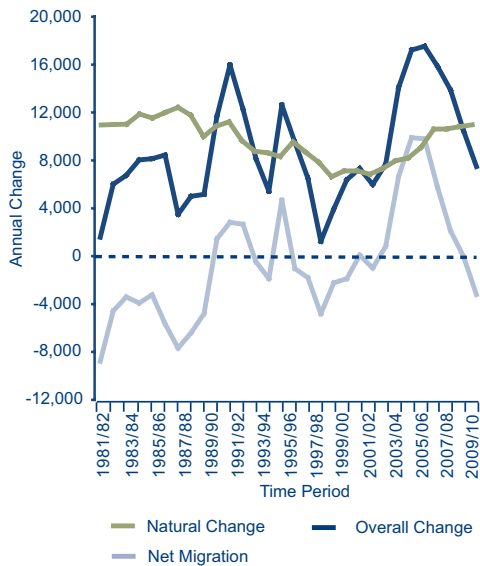
Figure 1.1: Population of Northern Ireland (1926 to 2011 estimated – 2012 to 2035 projected) – non-zero y-axis



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. From 2005-6 to 2007-8, the contributions from migration were larger than the contributions from natural change. Since then, net migration has gradually reduced and fallen below zero between mid 2010 and mid 2011.

³ Reports and statistics are available at <http://www.nisra.gov.uk/demography/default.asp17.htm>

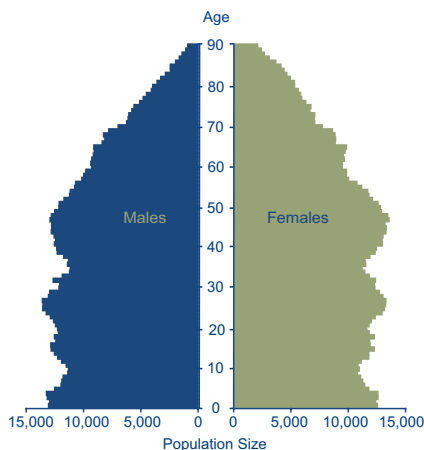
Figure 1.2: Components of population change (1981-2 to 2010-11)



Age and Sex Structure

1.2.5. The age structure of Northern Ireland’s population continues to get older due to a long period of below replacement level fertility⁴ and increasing life expectancy. In mid-2011, there were more females (51 per cent) than males in Northern Ireland. Twenty-two per cent of males were aged under 16 years old compared with 20 per cent of females, while 65 per cent of males and 63 per cent of females were aged 16 to 64. Figure 1.3 shows the age structure of the population in 2011.

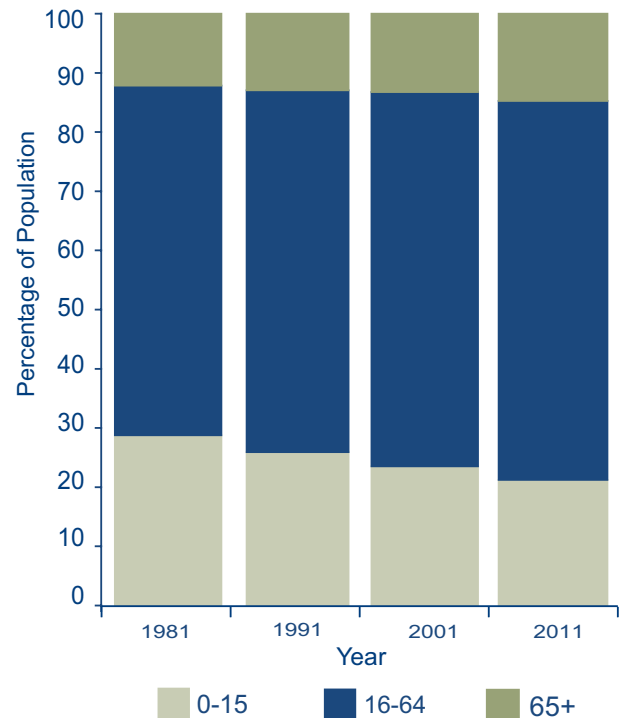
Figure 1.3: Northern Ireland population pyramid by sex and age (2011)



1.2.6. During the twelve months to June 2011, the number of children aged 0-15 years increased by 0.4 per cent, the number of people aged 16 to 64 remained stable while the older population (65 and over) increased by 2.2 per cent. In overall terms the Northern Ireland population increased by 0.4 per cent or 7,500 people. In the decade to 2004, the overall annual rate of population increase was around 6,700 persons (equivalent to 0.4 per cent each year). Between mid-2004 and mid-2009, increases were significantly larger at between 0.8 and 1.0 per cent each year.

1.2.7. Over the past thirty years, lower fertility levels have resulted in a decrease in the number of children aged 0-15 years (14 per cent decrease). In contrast, the number of people aged 16 to 64 has increased by 27 per cent; and the older population (aged 65 and over) has increased by 42 per cent. The changing age structure of the population since 1981 is illustrated in Figure 1.4

Figure 1.4: Changing age structure of Northern Ireland population (1981 to 2011)



4 In western countries a total period fertility rate of about 2.1 is required to maintain long-term population levels.

Estimates of the Population aged 85 and over

1.2.8. In June 2011, 30,800 people or around 1.7 per cent of the population were aged 85 years and over. This number has increased by 1,100 people (+3.7 per cent) in the period between July 2010 and June 2011. Within the population aged 85 and over, women significantly outnumber men at 69 per cent of this population group.

1.2.9. More detailed statistics of the population aged 85 and over in Northern Ireland⁵ are available for the period 2002 to 2010, providing estimates by sex and single year of age. It is estimated that in June 2010 there were just over 200 centenarians (those aged 100 and over) living in Northern Ireland, with the number of centenarians living in Northern Ireland having increased by around 70 per cent since June 2002.

Area Comparisons within Northern Ireland

1.2.10. At the Northern Ireland level, there is little difference in the total population estimate between the 2011 Census and those for mid-2011. This is also true for the broad age groups, but there are some differences when looking at single years of age and sub-national areas (Local Government Districts). Care should be taken when using and interpreting the currently available mid-year population estimates and the components of change in the period 2001 to 2011, prior to the rebased figures due for release in Spring 2013. Further information is provided in the user guidance⁶.

1.2.11. 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-2010 and mid-2011. The largest natural increase of population was in Belfast Local Government District, adding 1,400 people.

1.2.12. Dungannon Local Government District had the greatest increase in population (+22 per cent respectively). The populations of Lisburn, Magherafelt and Newry & Mourne Local Government Districts increased by 1.2 per cent. These rates of increase are more than twice the Northern Ireland percentage increase (+0.6 per cent).

1.2.13. Newry & Mourne was the Local Government District with the largest proportion of children aged 0–15 among its population (24 per cent), while North Down had the smallest proportion (18 per cent). In 2010, North Down Local Government District had the highest proportion of older people aged 65 and over (19 per cent) and Derry Local Government District had the smallest proportion (12 per cent).

5 Further detail available at <http://www.nisra.gov.uk/demography/default.asp134.htm>

6 <http://www.nisra.gov.uk/archive/demography/population/midyear/guidance.pdf>.

1.3 Migration

1.3.1. Measures of population movement or migration are based on the United Nations definition of a long-term international migrant⁷. 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.

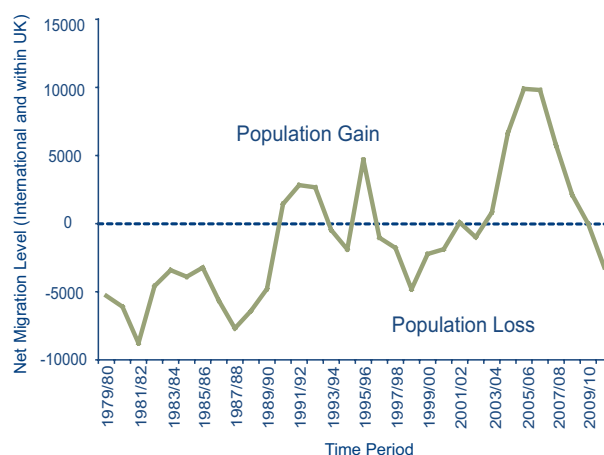
1.3.2. Between July 2010 and June 2011, there were fewer people coming to Northern Ireland than leaving (21,700 in and 24,900 out). Since the Second World War it is estimated that around 300 thousand more people have left Northern Ireland to live elsewhere than came here to live.

1.3.3. Estimates of net migration for Northern Ireland since the mid-1970s are shown in Figure 1.5. 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

third phase since 2004, the number of people estimated to have come here to live rose to, on average, 30,000 persons each year between mid-2004 and mid-2008. This indicates a marked increase in international inflows 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. The population increase of 0.4 per cent in 2010-11 is dominated by natural change and a return to a position of modest net out migration, similar to that seen in the late 1990s and early 2000s, mainly due to increased migration out of Northern Ireland. This compares to balanced migration levels in the period from mid-2009 to mid 2010.

Figure 1.5: Estimated level of net migration (1979-80 to 2010-11)



Place of Origin/Destination of People Coming to/ Leaving Northern Ireland (2010-11)

1.3.5. Table 1.1 shows where people coming to Northern Ireland last lived. Of the 21,700 people who came to live here during 2010-11, around 53 per cent (13,300) came from outside the United Kingdom. Of this 4,700 came from the eight Eastern European Accession countries (A8)⁸ that joined the European Union in May 2004.

7 “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>

8 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-2008 to Mid-2011)

Country of Last Residence	Number of people coming to live in Northern Ireland (Mid-2008 to Mid-2009)		Number of people coming to live in Northern Ireland (Mid-2009 to Mid-2010)		Number of people coming to live in Northern Ireland (Mid-2010 to Mid-2011)	
	Number	Percentage	Number	Percentage	Number	Percentage
England and Wales	8,600	36%	8,400	38%	8,200	37%
Scotland	2,200	9%	2,200	10%	2,100	10%
Poland	3,300	14%	2,300	10%	2,000	9%
Republic of Ireland	1,500	6%	1,700	8%	1,600	8%
Lithuania	1,100	5%	1,400	6%	1,500	7%
India	500	2%	500	2%	500	3%
Latvia	400	2%	700	3%	500	2%
China	400	2%	500	2%	400	2%
Slovakia	600	3%	400	2%	400	2%
USA	500	2%	400	2%	400	2%
All other EU Accession Countries	400	2%	400	2%	300	1%
All other countries	3,700	16%	3,600	16%	3,700	17%
Total Inflow	23,500	100%	22,500	100%	21,700	100%

Source: HSC Business Services Organisation, May 2011, Health Card Registrations

1.3.6. Table 1.1 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 24,900 people who left Northern Ireland to live elsewhere in 2010-11, 45 per cent went to Great Britain and the remainder (55 per cent) to countries outside the UK. Therefore, in total, it is estimated that 800 more people moved from Northern Ireland to live in Great Britain, than moved in the opposite direction.

In total, 2,400 more people went to live here from outside the UK than moved in the opposite direction.

Age-Distribution of Migrants

1.3.8. Figure 1.6 shows the age distribution of net migration in Northern Ireland for 2010-11. Whilst there is still a net in migration gain for both males and females in the 0-17 age group and a balanced migration for those aged 45 and over, there is a large net outflow of those aged 18 to 44. This is generally speaking the most mobile population group.

Figure 1.6: Net total migration by age group and gender (2010-11)



Other Data Sources on Migration

1.3.9. As noted earlier, 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 from mid-2004 and then slowing down since mid-2007. The sources also give a consistent picture on which parts of Northern Ireland new migrants are working and living in.

1.3.10. Up to May 2011, most people coming to Northern Ireland to work from one of the eight Eastern European countries that joined the EU in 2004 had to register through the Worker Registration Scheme (WRS). According to EU law, there is no longer a need to register under this Scheme, hence it has become obsolete as a source for migration estimates.

1.3.11. In 2011, 2,477 births here (10 per cent of all births) were to mothers born outside the UK and Ireland, compared to 700 such births in 2001. Of these, 1,210 births in 2011 were to mothers from the eight Eastern European countries that joined the EU in 2004, compared to 10 such births in 2001.

1.3.12. The School Census (October 2011) shows that about 5,100 primary school children have a language other than English as their 'first' language. This is about three per cent of the primary school population, and an increase on the corresponding figure (5,000) for the previous year. For secondary school children, the number of pupils that have a language other than English as their 'first' language remained constant between 2010 and 2011 (2,500 pupils or two per cent of the secondary school population).

1.3.13. There is also spatial variation in migration related statistics for children. In October 2011 about three per cent of primary school children did not have English as their 'first' language; however this figure was highest for schools in Dungannon Local Government District at 13 per cent. Similarly, while births to mothers born outside the United Kingdom and Ireland accounted for 10 per cent of all 2011 births, in Dungannon Local Government District the figure was 21 per cent.

1.4 Projected Population – Northern Ireland

1.4.1. Population projections are produced every other year and the latest projections use 2010 as the base year. The next full set of population projections will start from the mid-2012 population estimates, based on the 2011 Census results, and will include a review of the assumptions on fertility, mortality and migration.

1.4.2. From the 2010 projections the Northern Ireland population, 1.799 million in 2010, is projected to increase to 1.859 million by 2015. This is equivalent to an average annual rate of growth of 0.7 per cent. Over the longer term the population is projected to reach 1.951 million by 2025, an increase of 152,000 people (8 per cent).

1.4.3. The projected increase in population is primarily due to natural growth. In the period 2010 to 2015, it is projected that there will be 56,000 more births than deaths, accounting for 93 per cent of the projected population growth in this period. The remainder of the population growth was attributable to a projected net in migration of 4,000 people.

1.4.4. Projections indicate a marked increase in the size of the population at older ages. The population aged 65 or more is projected to increase from 266 thousand in 2011 to 379 thousand by 2026, an increase of over 40 per cent. The largest projected population change will occur in the number of people aged 85 and over, doubling within the next 17 years.

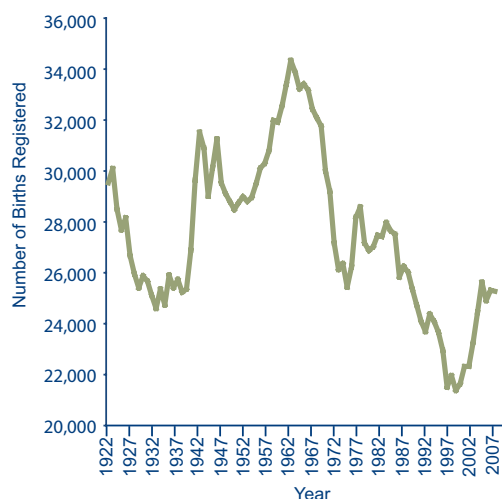
1.5 Births

Numbers

1.5.1. In 2011, there were 25,273 births registered to Northern Ireland mothers, a similar number to the 2010 figure of 25,315 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 2011 is still below corresponding levels of the early-1980s, when almost 27,200 births were registered in 1981.

1.5.2. The number of births registered each year since 1922 is shown in Figure 1.7. 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 passing through their childbearing years. The decline in births resumed in the 1990s as these women started to complete their families. The mainly increasing number of births since 2002 arrests the recent decline.

Figure 1.7: Number of births registered (1922 to 2011) – non-zero y-axis

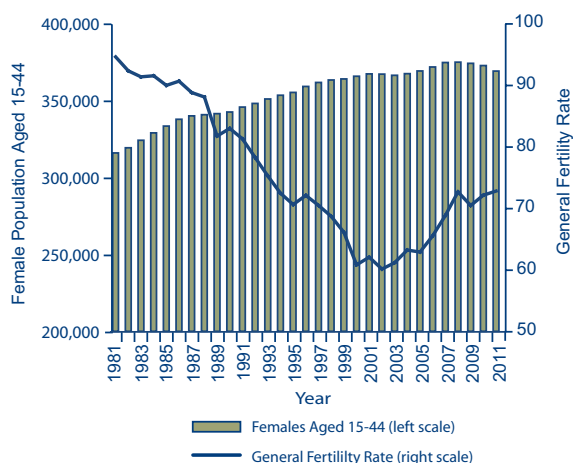


Fertility Rates

1.5.3. The crude birth rate in 2011 was 14.0 births per 1,000 population, which is a decrease on the 2010 figure of 14.1 births per 1,000 population. 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 1.8 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 1981, however, the general fertility rate has fallen. In 2011, the general fertility rate was 68.3 births per 1,000 females aged 15-44. Whilst this is an increase from the record low in 2002 of 58.1 births per 1,000 females aged 15-44, it is still well below the general fertility rate in 1981 of 85.8 births per 1,000 females aged 15-44.

Figure 1.8: Estimated female population aged 15-44 and general fertility rate (1981-2011) - non-zero y-axes



1.5.5. There has been a recent trend towards later childbearing by mothers. In 2011, for all live births, the average age of the mother was 30 years, compared with 29 in 2001, 28 in 1991 and 28 in 1981. Just over half (12,827) of all births registered in 2011 were to mothers aged 30 and over; this is a significant increase from 1981 when

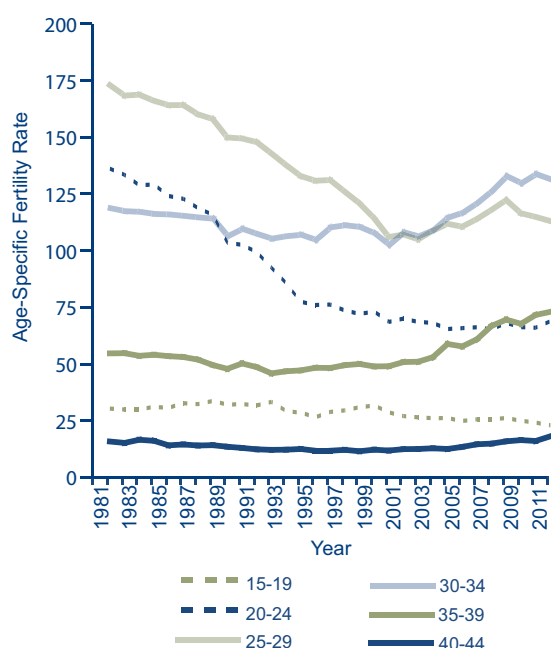
around 32 per cent of births were to mothers aged 30 and over. This indicates that women are delaying child-bearing; indeed, the average age of first time married mothers was 28 in 2011 compared with 25 in 1981.

1.5.6. In 2011, for all live births, the average age of the father was 33 years compared with 32 in 2001. However, seven per cent of births in 2011 compared to 10 per cent in 2001 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 rates among 20-24 year old females. Over the past three decades fertility for this age group has fallen substantially from 134 babies per 1,000 women in 1981 to 66 babies per 1,000 women in 2011.

1.5.8. In 2011, women aged 30-34 years experienced the highest age-specific fertility rate, with 130 babies per 1,000 women, while women aged 25-29 years experienced the second highest rate (111 babies per 1,000 women). Figure 1.9 shows the change in age-specific fertility rates by age group over the last 30 years.

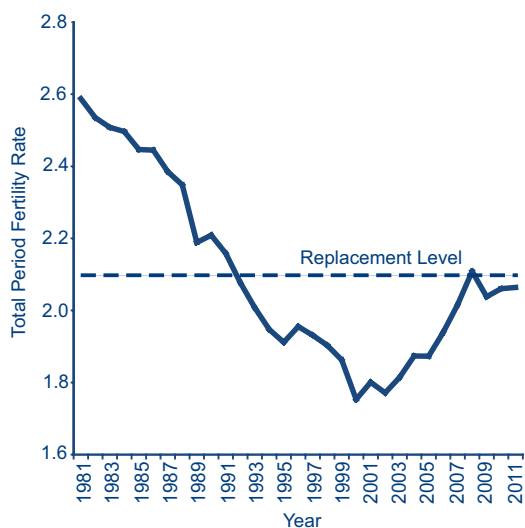
Figure 1.9: Live births per 1,000 women by age group of mother (1981 to 2011)



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 the population would replace itself in the long run, ignoring migration.

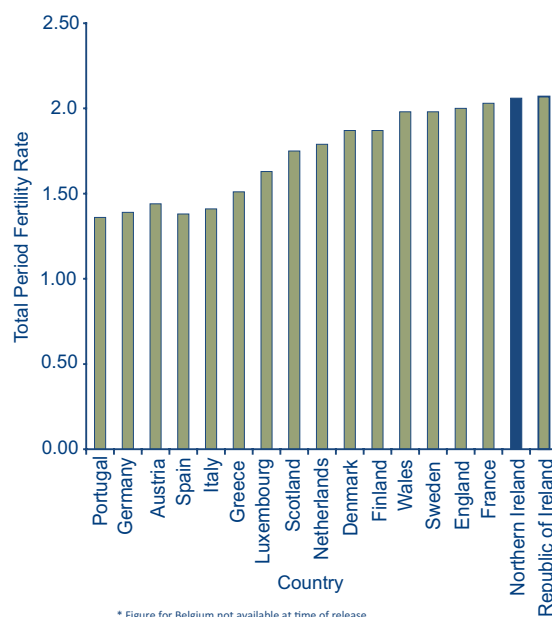
1.5.10. The total period fertility rate dropped below replacement level (2.1) in Northern Ireland for the first time in 1992. The total period fertility rate for 2011 was 2.06, which is a recovery from a record low of 1.75 in 2000, but still below the fertility rates in the 1980s. The total period fertility rate for Northern Ireland since 1981 is shown in Figure 1.10.

Figure 1.10: Total period fertility rate (1981 to 2011) – non-zero y-axis



1.5.11. Figure 1.11 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 the Republic of Ireland is the only EU15 country with a higher total period fertility rate than Northern Ireland. The most recent data available for all countries is for 2010; with the exception of Italy which is 2009 data.

Figure 1.11: Total period fertility rate, EU15 and Constituent Countries of the UK, 2010

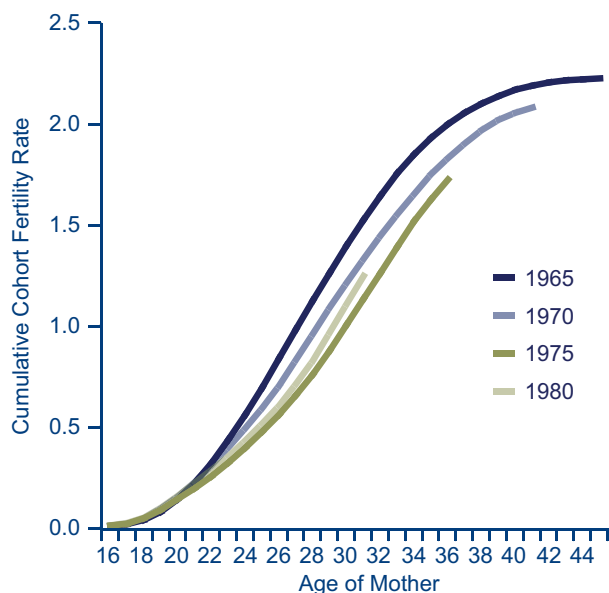


* Figure for Belgium not available at time of release

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 1.12 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. In Northern Ireland those women born in 1965 had attained an average completed family size of 2.2 children by the time they reached 45. Figure 1.12 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 1980 cohort is 0.3 children lower than that of the 1965 cohort. A key point in Figure 1.12 is that the 1980 female cohort is ahead in fertility terms of the 1975 cohort at age 30.

Figure 1.12: Cumulative cohort fertility rate for selected birth cohorts



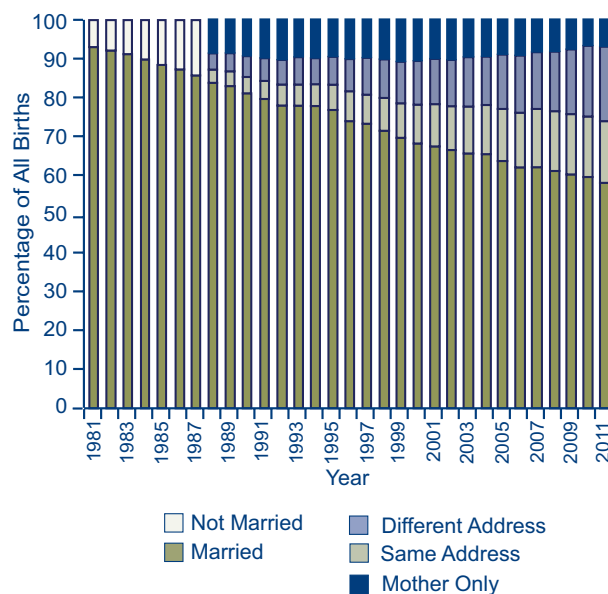
Birth Order

1.5.14. A total of 10,381 births (41 per cent) were to first-time mothers in 2011. Second-time mothers had 8,607 babies (34 per cent) and third-time mothers had 4,094 babies (16 per cent). Only nine per cent of mothers, in 2011, already had three or more live born children reflecting the trend towards smaller family sizes.

Births Outside Marriage

1.5.15. In 2011, 41.9 per cent of all live births occurred outside marriage, the highest figure ever recorded for Northern Ireland. This proportion has been increasing steadily since the early 1960s when the proportion of children born outside marriage was about two 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 2011, 83.6 per cent of births outside marriage were jointly registered by both parents. Figure 1.13 shows the change in births by registration status since 1981.

Figure 1.13: Live births by registration status (1981 to 2011)



1.5.16. In 2011, 97.6 per cent of births to mothers under the age of 20 were outside marriage, 84.9 per cent of births to mothers aged between 20 and 24 were outside marriage, while for those aged 25 and over 29.8 per cent of births were outside marriage.

Multiple Births

1.5.17. In 2011, the percentage of maternities resulting in a multiple birth was 1.7 per cent, the highest level ever recorded in Northern Ireland. There were 410 sets of twins and four sets of triplets registered in 2011.

1.5.18. The percentage of maternities resulting in multiple births has increased from 1.1 per cent in the 1970s to 1.7 per cent in 2011. The percentage of maternities that result in a multiple birth increases with the age of the mother. In 2011, less than one per cent of maternities to mothers aged under 25 resulted in multiple births, while 2.6 per cent of maternities to mothers aged between 35 and 39 resulted in multiple births.

Place of Birth

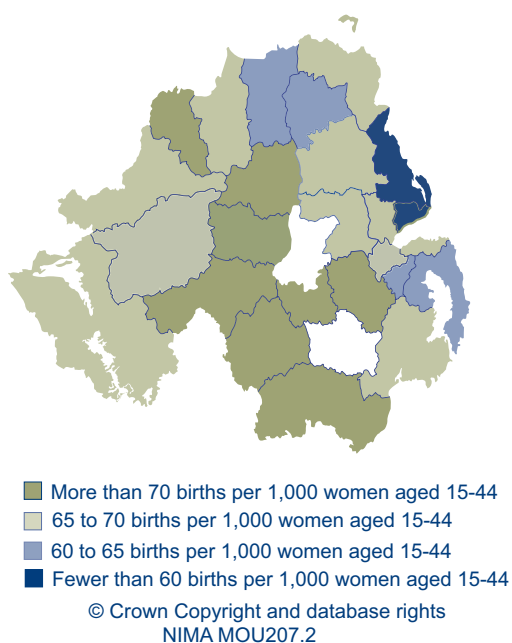
1.5.19. In 2011, 89 babies were born in places other than a hospital; this is a decrease on the 2010 figure of 112 babies.

Births by Area

1.5.20. Health and Social Care Trust level crude birth rates ranged from 13.1 births per 1,000 population in the Northern Health and Social Care Trust to 15.2 births per 1,000 population in the Southern Health and Social Care Trust. The birth rate in the Belfast, South Eastern and Western Health and Social Care Trusts were 14.5, 13.2 and 14.2 births per 1,000 population respectively.

1.5.21. Armagh had the highest birth rate (15.6 per 1,000 population) of all the Local Government Districts in 2011 closely followed by Craigavon (15.4), and Newry and Mourne (15.4), while the lowest birth rates were in Carrickfergus (10.9) and Larne (11.0). Figure 1.14 shows the 2011 birth rates per 1,000 women of child-bearing age by Local Government District, which differs from the birth rates above which are per 1,000 of total population.

Figure 1.14: Live births per 1,000 women aged 15-44, by Local Government District (2011)



Country of Birth of Parents

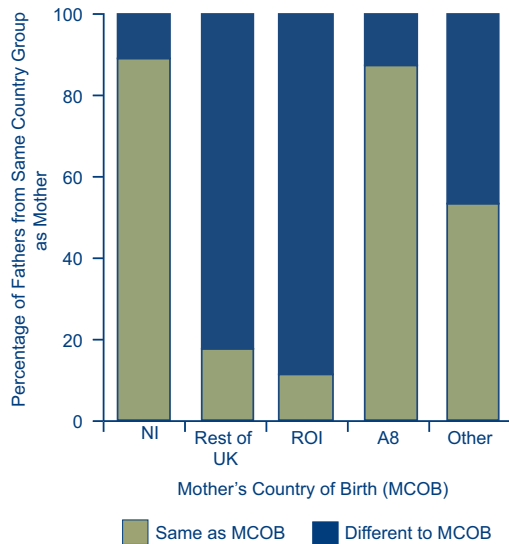
1.5.22. There were 4,465 births registered in Northern Ireland during 2011 where the mother was not born in Northern Ireland (18 per cent of all births). Just under half (45 per cent) of mothers who were not born in Northern Ireland were born either elsewhere in the United Kingdom or in the Republic of Ireland (1,988 births). Ten per cent of all births (2,477 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 just fewer than 700 such births in 2001 or three per cent of all births.

1.5.23. Over recent years, the number of births to mothers born in the A8⁹ countries has increased. The number of births in 2001 to mothers born in one of the A8 countries was 12. In 2011 the number of such births increased to 1,210.

1.5.24. Figure 1.15 shows father's country of birth in relation to the mother's country of birth, where both parents were registered on the birth certificate. (Over two-thirds of all children born in Northern Ireland have both parents born in Northern Ireland in 2011). For births where the mother was born in the rest of the UK or the Republic of Ireland, the majority of fathers were, as might be expected, born in Northern Ireland (72 per cent). The trend is different for children whose mother was born in an A8 country, where 83 per cent of these children have an A8 father as well.

9 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 1.15: Live births in Northern Ireland by mother's and father's country of birth (2011)



1.6 Stillbirths and Infant Deaths

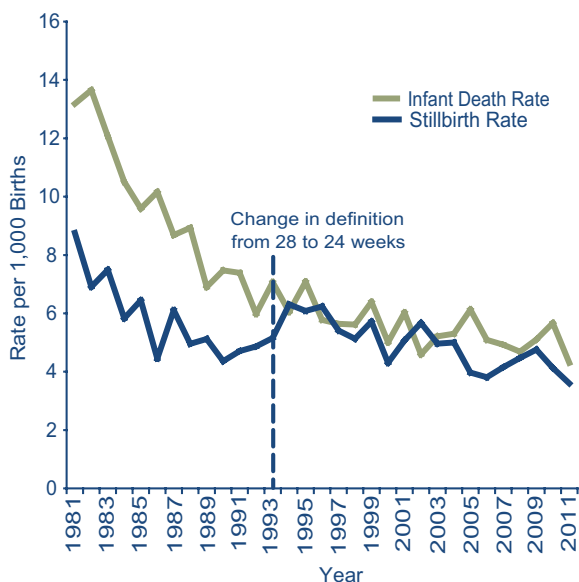
Numbers

1.6.1. The number of stillbirths in 2011 was 91, a decrease of 14 from the 2010 figure of 105. The number of infant deaths in 2011 was 110, a decrease of 36 from the 2010 figure of 146. Deaths in the first week of life accounted for 66 per cent of all infant deaths. The number of infants dying on the first day of life accounted for 46 deaths in 2011, 16 fewer than the number registered in 2010.

1.6.2. 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.

1.6.3. As can be seen in Figure 1.16, there have been significant reductions in stillbirth and infant death rates in the period since 1981. 2011 saw the lowest infant and stillbirth death rates on record. The stillbirth rate has reduced from 8.8 stillbirths per 1,000 births (live and still) in 1981 to 3.6 in 2011. This fall has 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 67 per cent from 13.2 infant deaths per 1,000 live births in 1981 to 4.3 in 2011.

Figure 1.16: Stillbirth and infant death rates (1981 to 2011)



1.6.4. As with stillbirths and infant deaths, the numbers of perinatal, neonatal and postneonatal deaths (see Appendix 3 for definitions) have reduced greatly to around one tenth of their values several decades ago. In 2011, there was a decrease in the number of perinatal deaths (203 to 164), a decrease in the number of neonatal deaths (116 to 88) and a decrease in postneonatal deaths (30 to 22) from the numbers seen in 2010. Males accounted for more perinatal, neonatal, postneonatal and infant deaths than females in 2011.

Causes of Infant Deaths and Stillbirths

1.6.5. Congenital malformations, deformations and chromosomal abnormalities (ICD10 codes Q00 Q99) were the cause of 32 per cent of all infant deaths. A further 15 per cent were caused by disorders relating to length of gestation and fetal growth (ICD10 codes P05 P08) and 12 per cent of infant deaths were caused by disorders related to respiratory and cardiovascular disorders specific to the perinatal period (ICD10 codes P20 P29). Three infants died of external causes of injury (ICD10 codes V01 Y98) in 2011.

1.6.6. Nine infants died as a result of ill-defined and unknown causes of mortality (ICD10 code R95-R99). This is an increase from the seven deaths registered in 2010. Between 2007 and 2011, 40 infants died of these causes, compared to 39 in the previous five years (2002-2006).

1.6.7. Forty-six per cent of all stillbirths in 2011 were caused by ‘other conditions and disorders originating in the perinatal period’ (ICD10 codes P75 P96) while congenital malformations, deformations and chromosomal abnormalities (ICD10 codes Q00 Q99) accounted for a further 20 per cent. Placental and cord conditions (ICD10 code P02) were the cause of 18 per cent of all stillbirths.

Pregnancy, Childbirth and Puerperium

1.6.8. There were four maternal deaths (ICD10 codes O00-O99) in 2011, compared to two in 2010, five in 2009 and none in either 2008 or 2007. There were nine maternal deaths in the period 2002-2006.

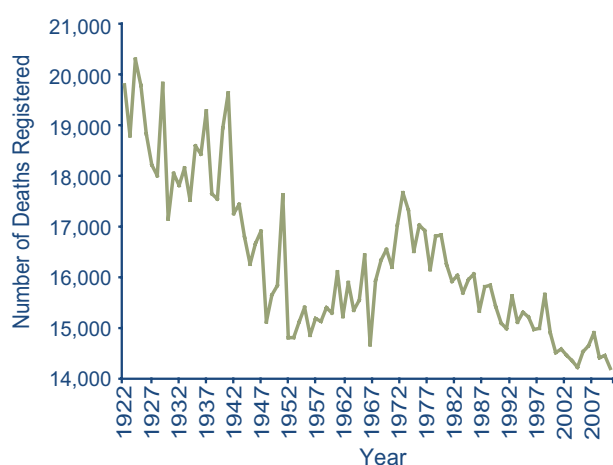
1.7 Deaths

Numbers

1.7.1. In 2011, there were 14,204 deaths registered in Northern Ireland, a decrease of 253 deaths or 1.8 per cent on the 14,457 deaths registered in 2010. The number of deaths registered in Northern Ireland in 2011 was the lowest number on record. Figure 1.17 shows the number of deaths registered from 1922 to 2011.

1.7.2. The long-term trend in the number of deaths 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 17 per cent larger than it was in 1981 and those aged 75 and over represent seven per cent of the population now compared to only five per cent in 1981. Indeed, if the age-specific death rates of 1981 still applied today, the number of deaths registered in 2011 would have been just over 25,200; almost 11,000 higher than the actual number registered. This reduction is reflected in the continuing reduction in mortality rates across all age groups and the corresponding increase in life expectancy.

Figure 1.17: Number of deaths registered (1922 to 2011) – non-zero y-axis



Mortality by Age

1.7.3. In 2011, 63 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 2011 was 72 years for males and 79 years for females, an increase of five years on the average age at death for males (67 years) and six years for females (73 years) in 1981. 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 and 10–14 years, with ASDRs of 0.0–0.1 per 1,000 population for 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 1.18a and 1.18b show age-specific death rates for males and females by age group for 1981 and 2011.

Figure 1.18a: Age-specific death rates by age group and sex (1981 and 2011)

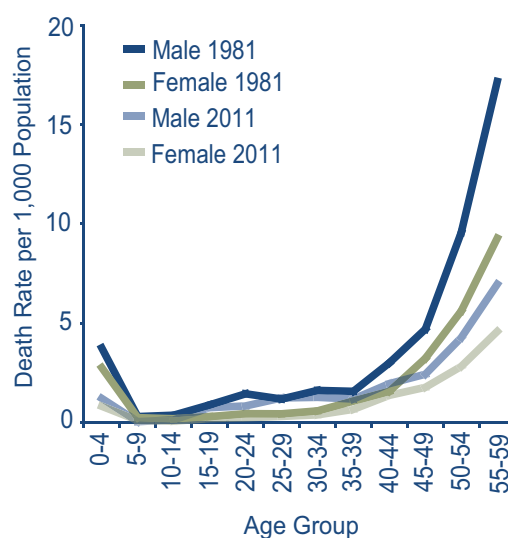
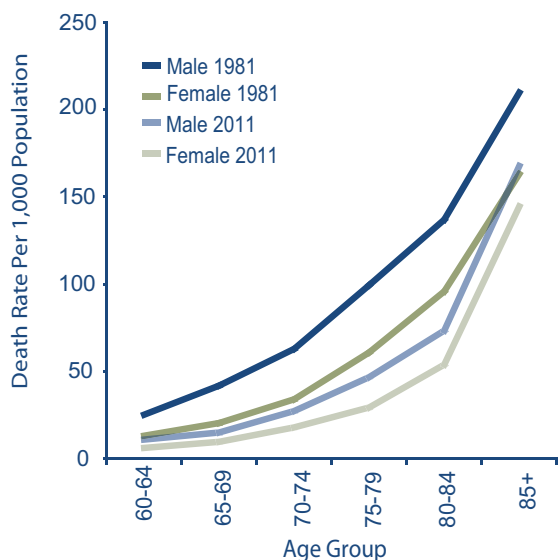


Figure 1.18b: Age-specific death rates by age group and sex (1981 and 2011)



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 88 per cent), followed by those aged 0-4 years (down 68 per cent), and 10-14 years (down 68 per cent). Female age-specific death rates declined most substantially for 0-4 years (down 71 per cent), 10-14 years (down 71 per cent), followed by those aged 5-9 years (down 61 per cent).

Mortality by Sex

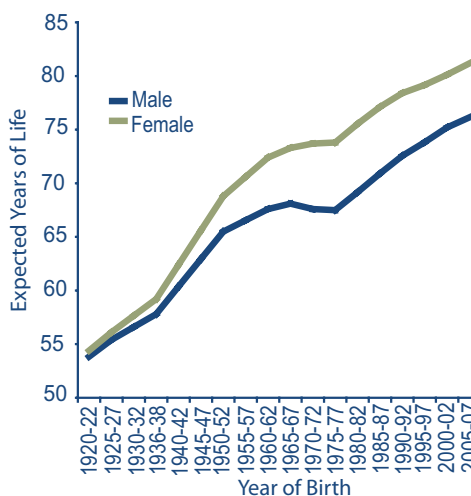
1.7.7. Female deaths (7,286) outnumbered male deaths (6,918) registered in 2011, giving a sex ratio of 105 female deaths for every 100 male deaths. The number of female deaths has outnumbered male deaths for each of the last 23 years.

1.7.8. In 1981, males had a death rate of 11.1 deaths per 1,000 population compared to females with a death rate of 10.0 deaths per 1,000 population. By 2011, the male death rate was 7.8 deaths per 1,000 population and the female rate was higher at 7.9 deaths per 1,000 population.

Life Expectancy

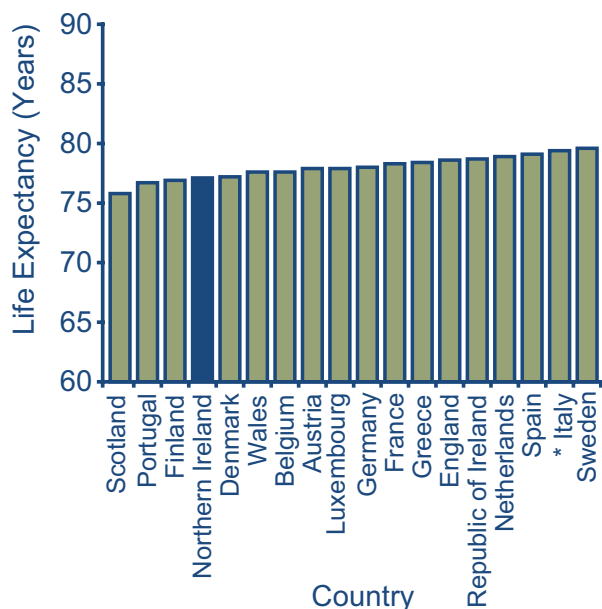
1.7.9. Children born today can expect to have longer lives than children born in the past. Based on current death rates, males born in recent years could expect to live until they are 77.0 years and females could expect to live until they are 81.4 years, with corresponding figures for men and women born around 1920-22 of 53.8 and 54.4 years respectively. While women aged 65 alive today could expect to live another 20.1 years, their male counterparts could expect to live another 17.3 years. Figure 1.19 shows the change in the expectation of life at birth for males and females since 1920.

Figure 1.19: Period expectation of life at birth, by sex (1920-22 to 2005-07) - non-zero y-axis



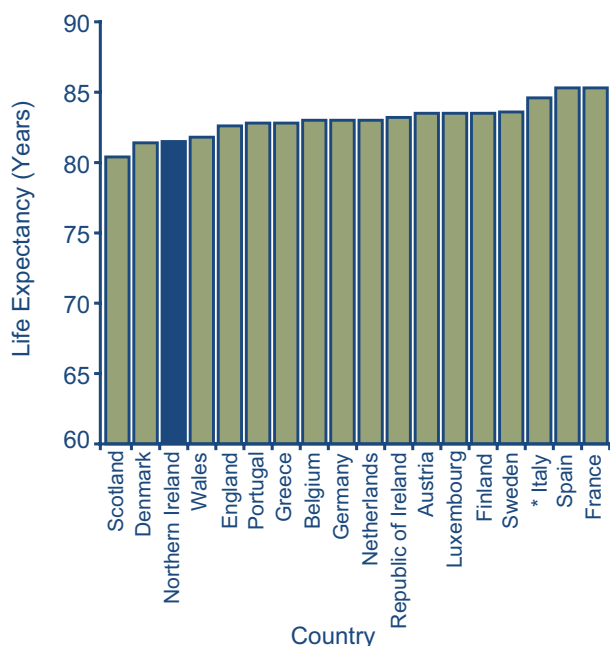
1.7.10. Figures 1.20 and Figure 1.21 show that Northern Ireland has generally lower expectation of life at birth for both males and females compared to other European (EU15) countries. The figures also show that only Scotland, amongst the other United Kingdom countries, have lower life expectancy than Northern Ireland for both males and females. The most recent data available for all countries is for 2010, with the exception of Italy which is 2009 data.

Figure 1.20: Life expectancy at birth, EU15 and Constituent Countries of the UK, 2010, male - non-zero y-axis



* Data for Italy refers to 2009, as this is the latest available

Figure 1.21: Life expectancy at birth, EU15 and Constituent Countries of the UK, 2010, female - non-zero y-axis



* Data for Italy refers to 2009, as this is the latest available

Cohort Life Expectancy

1.7.11. 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 1.19, 1.20 and 1.21 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.

1.7.12. 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 1.2 shows period (2008-10) and projected cohort (2010) expectations of life.

Table 1.2: Period (2008-10) and projected cohort (2010) expectations of life - males and females

Expectation of Life (years)	Males	Females
At birth - Period	77.0	81.4
At birth - Projected Cohort	88.9	93.1
Percentage difference	15%	14%
Age 65 - Period	17.3	20.1
Age 65 - Projected Cohort	20.4	23.4
Percentage difference	18%	16%

Mortality by Marital Status

1.7.13. Of all men whose deaths were registered during 2011, 52 per cent were married at the time of death, while 21 per cent were widowed and 20 per cent were single. In contrast, of all women whose deaths were registered during 2011, 55 per cent were widows at the time of death, with a further 25 per cent married and 15 per cent single. This difference is a consequence of the greater longevity of women.

Centenarians

1.7.14. There were 103 deaths of centenarians in 2011. Only 21 of these deaths were males, comprising nine aged 100, seven aged 101, one aged 102, two aged 103, one aged 104 and one aged 107. There were 82 female deaths of centenarians, 30 aged 100, 17 aged 101, 12 aged 102, 14 aged 103, four aged 104, four aged 105 and one aged 107. In contrast, there were 27 deaths of centenarians in 1981 of which four were male and 23 were female.

Place of Death and Type of Death Certificate Issued

1.7.15. Of the 14,204 deaths registered in 2011, 49 per cent of these occurred in NHS hospitals. A further 21 per cent of deaths occurred in other hospitals or nursing homes. The remaining 30 per cent occurred in all other places.

1.7.16. For 78 per cent of deaths registered in 2011, a medical certificate was issued, while coroner's certificates were issued for the remaining 22 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 anesthetic, 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

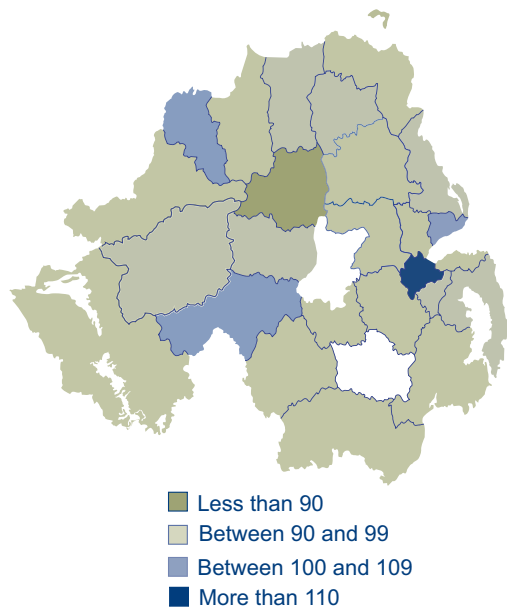
1.7.17. All figures recorded in this report are based on the year that the death was registered and not the year in which the death occurred. While the vast majority of deaths are registered shortly after death, some can take time to be registered. In 2011, 93.1 per cent of deaths were registered in the year they occurred. Events such as infant death or suicide must be referred to a coroner and this legal process can take some time.

Deaths by Area

1.7.18. The standardised death rate, which allows for the age and sex structure of the population, was highest in the Belfast Health and Social Care Trust at 8.8 deaths per 1,000 population and lowest for the South Eastern Health and Social Care Trust at 7.5 deaths per 1,000 population. The standardised death rate in both the Northern and Western Health and Social Care Trusts was 7.6 deaths per 1,000 population, while in the Southern Health and Social Care Trust the standardised death rate was 7.7 deaths per 1,000 population.

1.7.19. Standardised mortality ratios (SMRs), based on three years data (2009-2011), 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 1.22. Two Local Government Districts, Belfast and Derry have a standardised mortality ratio significantly above the Northern Ireland average of 100.

Figure 1.22: Standardised mortality ratios by Local Government District (2009 to 2011)



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Deaths by Country of Birth

1.7.20. In 2011, 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.

1.8 Cause of Death

Numbers

1.8.1. All deaths registered in 2011 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 70 per cent of all deaths in 2011.

1.8.3. In 2011, 4,059 people died from cancer, an increase on recent years. Cancer deaths (ICD10 codes C00-C97) represent 29 per cent of all deaths registered in 2011 compared to 18 per cent of all deaths in 1981. By contrast, in 2011, 1,966 people died from ischaemic heart disease (ICD10 codes I20-I25), a decrease of 60 per cent from the 1981 figure of 4,909 deaths.

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

Malignant Neoplasms (ICD10 Codes C00-C97)

1.8.5. Cancer accounted for 4,059 deaths in 2011, 29 per cent of all deaths, and the largest number of cancer deaths ever registered in Northern Ireland. Prior to 2007 the number of deaths due to cancer had remained broadly stable at about 3,700 per year. Cancer now accounts for the largest number of deaths attributable to a single group of causes.

1.8.6. The most common cancer site for males and females was the trachea, bronchus or lung (ICD10 Codes C33-C34), which accounted for 26 per cent of male cancer deaths and 19 per cent of female cancer deaths in 2011. Deaths of females due to breast cancer (ICD10 Code C50) accounted for 18 per cent of female cancer deaths in 2011. Deaths of males due to prostate cancer (ICD10 Code C61) accounted for 11 per cent of male cancer deaths in 2011.

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

1.8.7. In 2011, these diseases accounted for 3,951 deaths; 28 per cent of all deaths in Northern Ireland. Between 2001 and 2011 the number of deaths due to diseases of the circulatory system, fell from 5,829 to 3,951 (32 per cent).

1.8.8. Deaths due to the diseases of the circulatory system are mostly accounted for by ischaemic heart disease (ICD10 Codes I20-I25) and cerebrovascular disease or stroke (ICD10 Codes I60-I69), which accounted for, respectively, 14 per cent and eight per cent of all deaths in 2011. 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.

Respiratory Diseases (ICD10 Codes J00-J99)

1.8.9. Deaths from respiratory diseases numbered 1,923 in 2011; 14 per cent of all deaths in Northern Ireland. These included 737 deaths from pneumonia (ICD10 Codes J12-J18), 774 from chronic lower respiratory diseases (ICD10 Codes J40-J47) and 412 due to all other respiratory diseases. Between 2001 and 2011, the number of deaths due to diseases of the respiratory system fell from 1,975 to 1,923 (three per cent).

1.8.10. In April 2009 a worldwide outbreak of the H1N1 virus (swine flu) reached Europe. As a result more strict influenza monitoring procedures were put into place to assess the impact of the virus. During the 2011 registration year 22 people in Northern Ireland died from the H1N1 virus. This compares to nine such deaths during the 2010 registration year and 14 in 2009.

External Causes of Death (ICD10 Codes V01-Y98)

1.8.11. The number of deaths from external causes registered in 2011 was 785, of which 547 were males and 238 were females with the corresponding figures for 2010 being 840 deaths - 565 male and 275 female. In the period 1999-2009, there were on average 694 deaths per year from external causes of death.

1.8.12. The number of deaths from transport accidents (ICD10 Codes V01-V99) in 2011 (90) has fallen by 27 per cent compared to 123 deaths in 2010. Within this figure, 83 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)

1.8.13. In the United Kingdom, deaths classified as 'events of undetermined intent' along with 'intentional self-harm' are classified as suicide. In 2011, there were 289 such deaths registered in Northern Ireland, of which 216 were of males and 73 were of females. This is a decrease from the 313 registrations in 2010 (240 males and 73 females).

1.8.14. 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 2011 occurred in earlier years. Of the 289 such deaths registered in 2011, 120 actually occurred in 2011, 131 occurred in 2010, 12 occurred in 2009, 15 occurred in 2008, with the remaining 11 occurring in 2007 or earlier.

1.8.15. 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.

1.8.16. Table 1.3 compares the number of suicide and undetermined deaths being registered each year with the number occurring in those years. Occurrence figures for 2009 to 2011 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 1.3: Number of suicide and undetermined deaths registered and actual number occurring (2001-2011)

Year	Suicide and Undetermined Deaths (Year Registered)	Suicide and Undetermined Deaths (Year Occurred)
2001	158	183
2002	183	201
2003	144	163
2004	146	236
2005	213	229
2006	291	218
2007	242	249
2008	282	234
2009	260	...
2010	313	...
2011	289	...

Smoking Related Deaths

1.8.17. 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.

1.8.18. 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.

1.8.19. The attributable proportions derived were then applied to Northern Ireland counts of cause-, sex- and age- specific mortality. Table 1.4 shows the estimated number of smoking related deaths between 2001 and 2011 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.

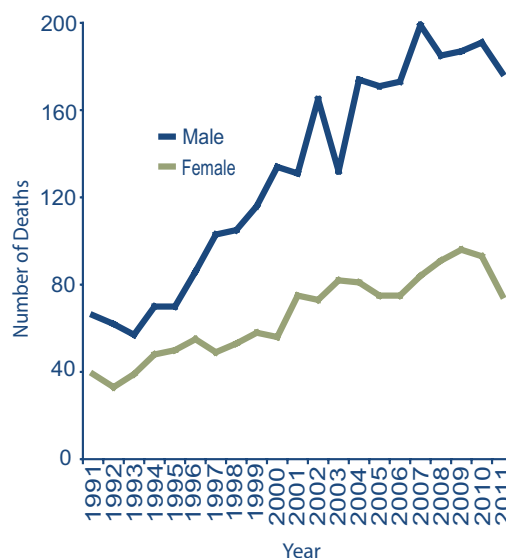
Table 1.4 Estimated number of smoking related deaths registered (2001-2011)

Year	Smoking Related Deaths
2001	2,350
2002	2,340
2003	2,390
2004	2,350
2005	2,290
2006	2,320
2007	2,310
2008	2,400
2009	2,360
2010	2,310
2011	2,270

Alcohol Related Deaths

1.8.20. 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 2011, a total of 252 people died from alcohol related deaths using the new definition; 177 males and 75 females. The equivalent 2010 figure is 284 deaths (191 males and 93 females) and the number of alcohol related deaths in 2011 is 38 per cent higher than the 206 deaths registered in 2001. Figure 1.23 shows the trend in the number of alcohol related deaths since 1991 using the new definition.

Figure 1.23: Deaths from alcohol related diseases by sex (1991-2011)

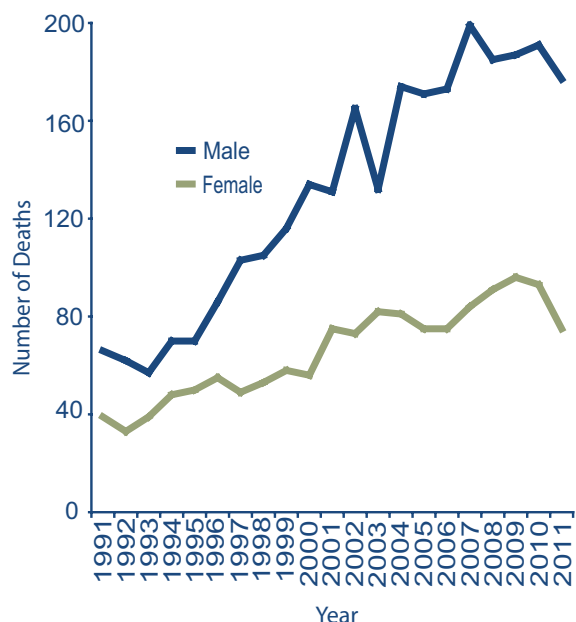


Drug Related Deaths

1.8.21. Drug related deaths relate to cases where the underlying cause of death recorded on the death certificate is drug poisoning, drug abuse or drug dependence. Deaths from substances of abuse which are not traditionally regarded as drugs, such as alcohol and tobacco, are excluded from the definition. Further information on the definition can be found in Appendix 3.

1.8.22. In 2011, there were 102 drug related deaths; 65 males and 37 females. This is an 11 per cent increase from the equivalent 2010 figure of 92 deaths (66 males and 26 females). The number of drug related deaths in 2011 is almost three times higher than the number of drug related deaths registered in 2001 when there were 35 deaths. Figure 1.24 shows the trend in the number of drug related deaths since 1997.

Figure 1.24: Drug related deaths by sex (1997-2011)



Asbestos Related Deaths

1.8.23. In 2011, 72 asbestos related deaths were registered in Northern Ireland while there were 50 such deaths in 2010. The 2004 figure of 92 deaths was the highest number recorded in the period from 2001 to 2011. See Appendix 3 for further information on asbestos related deaths.

Healthcare Associated Infections

1.8.24. In 2011, 30 deaths were registered where Methicillin resistant Staphylococcus aureus (MRSA) was mentioned on the death certificate. Of these, 12 deaths had MRSA recorded as the underlying cause of death. Corresponding figures for 2010 were 29 deaths where MRSA was mentioned on the death certificate of which eight deaths had MRSA recorded as the underlying cause of death.

1.8.25. The number of deaths where Clostridium difficile was mentioned on the death certificate in 2011 was 81. Of these, 31 deaths had Clostridium difficile as the underlying cause of death. This compares to equivalent figures for 2010 of 91 deaths with Clostridium difficile mentioned on the death certificate of which 30 deaths had Clostridium difficile recorded as the underlying cause of death.

1.8.26. In 2008 there was an outbreak of Clostridium difficile infection in Northern Ireland, this resulted in a public inquiry being conducted. The purposes of the inquiry were to (i) establish how many deaths occurred for which Clostridium difficile was the underlying cause of death, or was a condition contributing to death and (ii) to examine and report on the experiences of patients and others who were affected directly by the outbreak. The impact of this outbreak is reflected in the increase in Clostridium difficile deaths registered in 2008 (191 deaths with Clostridium difficile mentioned on the death certificate and 64 where Clostridium difficile was the underlying cause of death). The Inquiry Report was published on 21st March 2011¹⁰.

Main Causes of Death by Age and Sex

1.8.27. Mortality rates by cause of death vary with age and sex. A total of 110 deaths of children aged less than one year were registered in 2011, 80 per cent of whom died within the first four weeks of life. The majority of infant deaths were

10 Further details can be found on the Inquiry website at: <http://www.cdifinquiry.org/index.htm>

attributed to certain conditions originating in the perinatal period (ICD10 Codes P00-P96, 57 deaths) and congenital anomalies (ICD10 Codes Q00-Q99, 35 deaths).

1.8.28. A total of 35 children aged 1-14 died in 2011. Cancer (ICD10 Codes C00-C97) accounted for 11 of these deaths, while external causes of death (ICD10 Codes V01-Y98) accounted for nine deaths, diseases of the nervous system (ICD10 Codes G00-H95) accounted for five deaths and diseases of the respiratory system (ICD10 Codes J00-J99) accounted for four deaths.

1.8.29. A total of 319 people aged 15-34 died in 2011. External causes of death accounted for more deaths than any other cause (212 deaths, 66 per cent of deaths of persons aged 15 to 34). Forty-five per cent of all suicide and self inflicted injury and events of undetermined intent (129 out of 289 suicides) and 41 per cent of deaths due to transport accidents (37 out of 90 transport accident deaths) involved people aged 15-34.

1.8.30. Of the 2,392 people who died between the ages of 35-64 (of which 60 per cent were male), cancer accounted for 40 per cent of deaths in 2011, while diseases of the circulatory system accounted for a further 20 per cent of deaths in this age group.

1.8.31. Deaths of people aged 65 and over accounted for 80 per cent of all deaths in 2011. Although the death rate from cancer continues to increase with age and accounted for 27 per cent of deaths in this age group, the death rates from diseases of the circulatory system increase more quickly with age and these accounted for 30 per cent of deaths to those aged 65 and over. For those aged 85 or more, diseases of the circulatory system accounted for 33 per cent of deaths, diseases of the respiratory system 18 per cent and cancer 15 per cent. Figures 1.25 and 1.26 show the main causes of death by age group for male and female deaths respectively.

Figure 1.25: Percentage of male deaths by cause and age group (2011)

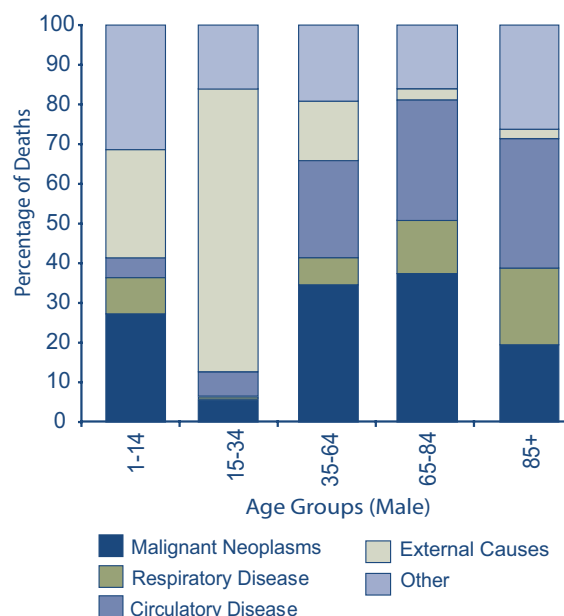
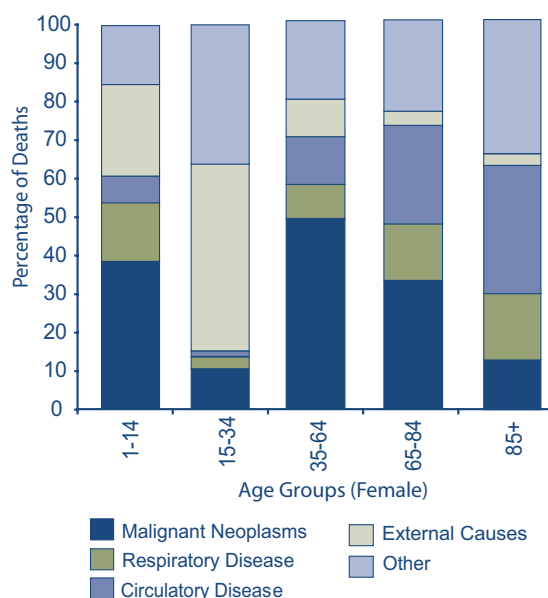


Figure 1.26: Percentage of female deaths by cause and age group (2011)

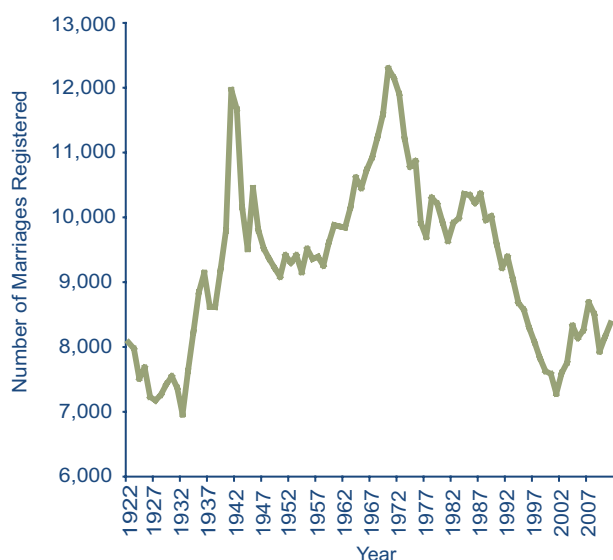


1.9 Marriages

Numbers

1.9.1. There were 8,366 marriages registered in 2011, an increase of 210 marriages or 2.6 per cent on the 2010 figure of 8,156 marriages. Figure 1.27 shows the number of marriages from 1922. The number of marriages registered in 2011 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 1.27: Number of marriages registered (1922 to 2011) – 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 2011 was 31.6 years of age. This compares to 29.5 years in 2001, 26.1 years in 1991 and 23.9 years in 1981. The average age for the groom was 33.9 years of age, an increase of two years from 2001 (31.8 years), five years from 1991 (28.2 years) and seven years from 1981 (26.0 years).

1.9.3. The average age for first marriages has also increased and is now 29.7 for single females and 31.5 for single males, both around six years older than their counterparts 30 years ago.

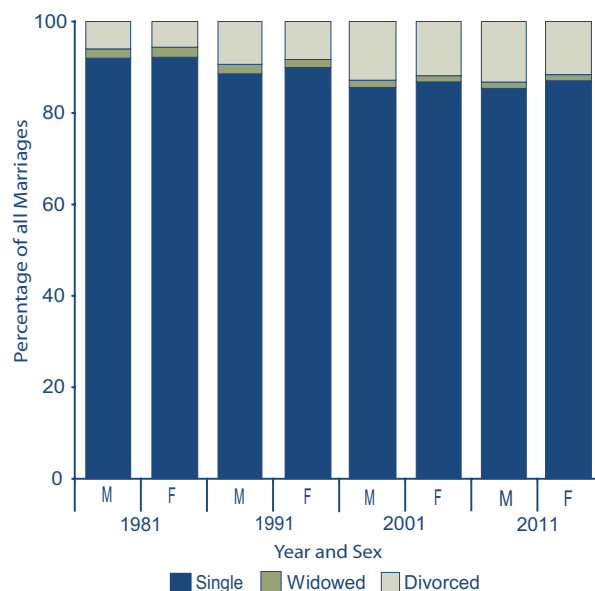
1.9.4. The age difference at first marriage is around two years. This has remained fairly constant over the last 30 years.

Marital Status at Marriage

1.9.5. Figure 1.28 gives the percentage of marriages by marital status at the time of marriage between 1981 and 2011. The percentage of people marrying who are divorcees rose from six per cent in 1981 to around 12 per cent in 2001 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 decreased slightly over the past 30 years from around two to one per cent for both brides and grooms.

1.9.6. Just over half (51 per cent) of couples who married in 2011 lived at the same address before marriage.

Figure 1.28: Percentage of marriages by sex and marital status (1981 to 2011)



Bride and Groom Usual Residence

1.9.7. Of the 8,366 marriages in 2011, 7,431 (89 per cent) were to couples where one or both partners lived in Northern Ireland. In the remaining

935 marriages (11 per cent) neither partner lived in Northern Ireland. Of these 935 marriages just over two-thirds (67 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

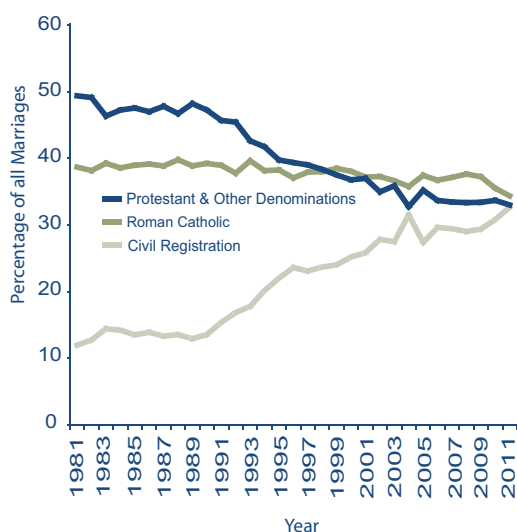
1.9.8. Overall, in 69 per cent (5,777 marriages) of marriages registered in 2011 both partners were born in Northern Ireland, in 23 per cent (1,935 marriages) one partner was born in Northern Ireland and in the remaining eight per cent (654 marriages) neither partner was born in Northern Ireland.

Religious and Civil Marriages

1.9.9. Last year saw a new high when 33 per cent of all marriages (2,732) were celebrated by a civil ceremony, compared to only 12 per cent of marriages in 1981.

1.9.10. Of the 5,634 religious marriages in 2011, 51 per cent were Roman Catholic ceremonies, 19 per cent Presbyterian, 14 per cent Church of Ireland, four per cent Methodist and 13 per cent other denominations. Figure 1.29 shows the change in type of ceremony from 1981 to 2011.

Figure 1.29: Number of marriages per week (2011)



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 2011, 1,291 civil marriage ceremonies (47 per cent of all civil marriage ceremonies) were held in approved venues other than a Registrar’s Office compared to 1,151 such ceremonies in 2010. The most popular locations were Galgorm Manor Hotel, Ballymena (64 civil weddings) followed by Clarion Hotel, Carrickfergus (63 civil marriages), Guildhall, Derry (53 civil marriages) and Belfast Castle (50 civil marriages).

1.9.12. The ability to conduct religious marriage ceremonies other than in religious buildings varies by religion and denomination. In 2011, 605 religious marriage ceremonies (11 per cent of all religious marriage ceremonies) were held outside of religious buildings.

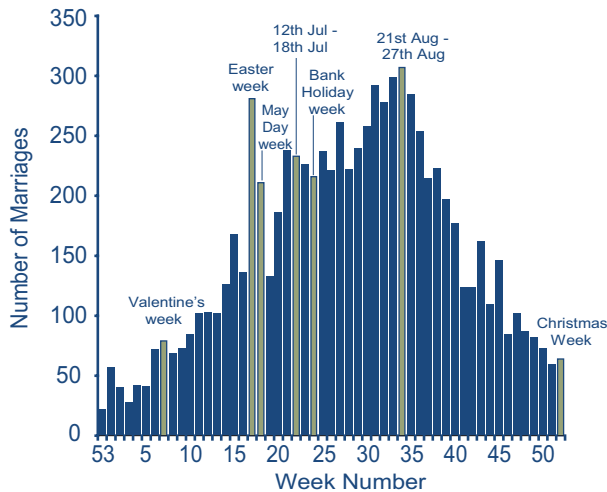
1.9.13. Belfast Registrar’s Office had the most weddings of all Registrar’s Offices in 2011 and St. Eugene’s Cathedral and St. Columba’s Church, Long Tower, both in Derry Local Government District, had the most weddings of all religious buildings.

Marriage Day

1.9.14. The most common day of the week for all marriages was a Saturday (36 per cent) while Friday was the most common day for civil marriages (33 per cent). The most common month to get married was August (1,230 couples) followed by July (1,137 couples). Saturday 27th August 2011 was the most popular day in 2011 to get married, with 109 couples marrying on that date. Only 133 marriages took place on a Sunday in 2011, 41 of which were civil marriages – the latter only becoming possible under the 2003 legislation.

1.9.15. Figure 1.30 shows the number of marriages by week, with dates of selected weeks highlighted. The most popular week to get married was from Sunday 21st August to Saturday 27th August (307 couples got married).

Figure 1.30: Number of marriages per week (2011)



Marriages by Area

1.9.16. Sixteen per cent of all marriages in 2011 occurred in Belfast, followed by seven per cent in Newry and Mourne and six per cent in both Derry 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. North Down had the highest average ages at 33.5 for females and 35.8 for males, compared to Magherafelt with the lowest average ages at 29.5 for females and 31.6 for males.

1.9.18. More than 80 per cent of religious ceremonies in Newry and Mourne and Derry Local Government Districts were Roman Catholic compared to less than five per cent of religious ceremonies in Carrickfergus and North Down Local Government Districts, reflecting the community background of the populations in these Local Government Districts.

1.10 Divorces

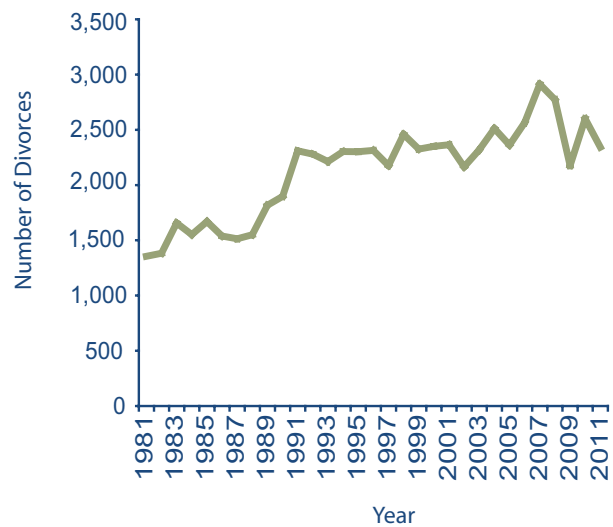
Numbers

1.10.1. The divorce figures reported here are based on Decree Absolutes. Decree Nisi information can be obtained from the Northern Ireland Courts and Tribunals 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 2011 was 2,343. This is a decrease of 10 per cent from last year's figure of 2,600. The number of divorces recorded in 2007 (2,913) was the largest 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. Since the 1990s there has been another increase in the number of divorces to around 2,300 per year. Figure 1.31 shows the number of divorces from 1981 to 2011.

Figure 1.31: Number of divorces registered (1981 to 2011)



Grounds for Divorce

1.10.4. Non-cohabitation remains the most frequently recorded reason for divorce (73 per cent), followed by behaviour (14 per cent) and combined grounds (11 per cent).

1.10.5. As in previous years, more women (62 per cent) than men (37 per cent) lodged applications for divorce in 2011. Just eight divorces granted in 2011 were the result of joint applications.

Duration of Marriage

1.10.6. The average duration of marriage ending in divorce is increasing over time. The average duration of marriage ending in divorce was 18 years in 2011; the comparable duration for 1991 was 15 years.

1.10.7. Of the divorcing couples in 2011 six 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 24 per cent of divorces occurred to couples that had been married for 25 years or more.

Marital Status at Time of Marriage

1.10.8. While the majority of people getting divorced in 2011 had been single at the time of marriage (90 per cent for males and 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 2011. Just under one per cent of all divorcees were widows or widowers when they married.

Age at Marriage of Divorcees

1.10.9. The average ages at marriage of men and women who got divorced in 2011 were 28 years and 26 years respectively. In 2011, 41 per cent of men and 57 per cent of women who divorced were under 25 years when they married.

Age at Divorce

1.10.10. The average ages at divorce for men and women who got divorced in 2011 were 46 and 44

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

1.10.11. In 2011, 30 per cent of divorces were of marriages that had been celebrated in a Roman Catholic Church. Corresponding figures for Presbyterian (including Free Presbyterian), Church of Ireland, Methodist and marriages in a Registrar's Office were 15 per cent, 14 per cent, four per cent and 27 per cent respectively. The remaining 11 per cent were either unknown or other denominations.

1.10.12. In 2011, 17 per cent of divorces here were following a marriage which took place outside Northern Ireland. Of these divorces, a significant proportion (28 per cent) involved one partner living outside Northern Ireland at the time of their divorce, as opposed to eight per cent for those who were married here.

Divorcees by Area of Residence

1.10.13. Fourteen per cent of all divorcees in 2011 were residing in Belfast followed by seven per cent in Lisburn and six per cent in North Down and Derry 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 eight per cent of male divorcees.

Children Affected by Divorce

1.10.14. In 2011, just over 4,000 children/stepchildren were affected by divorce; 2,400 children aged under 18 at the time of divorce and 1,600 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. Between December 2005 and the end of 2011, 626 civil partnerships have been registered in Northern Ireland.

1.11.2. During 2011, 89 civil partnerships were registered in Northern Ireland. Of these 46 partnerships were male partnerships and 43 were female partnerships. This compares to 116 civil partnerships registered in 2010 (54 male partnerships and 62 female partnerships).

Marital Status and Age of Civil Partners

1.11.3. For 70 civil partnerships (79 per cent) both partners were single, while in the remaining 19 civil partnerships at least one partner had previously been married. For 36 of the 46 male civil partnerships both partners were single, while for 10 civil partnerships at least one partner had previously been married. For 34 of the 43 female civil partnerships both partners were single; in the remaining nine female civil partnerships at least one partner had previously been married.

1.11.4. For male civil partnerships the average age of partners was 38.9 years and was 37.0 years for female civil partnerships.

Place of Ceremony

1.11.5. In 2011, 61 civil partnership ceremonies were held in Registrar's Offices. The remaining 28 ceremonies were held in an approved venue.

Civil Partnerships by District

1.11.6. Civil partnerships celebrated in a particular district are not necessarily between residents of that district. In 2011, Belfast Local Government District was the most popular district for civil partnerships (42 civil partnerships), with Lisburn and Newry and Mourne Local Government Districts the next most popular (eight civil partnerships each).

1.12 Civil Partnership Dissolutions

1.12.1. Whilst legislation has been in place in Northern Ireland since late 2005 to dissolve a civil partnership through the Civil Partnership Act, there were no dissolutions registered in Northern Ireland until 2010.

1.12.2. During 2011 there were four civil partnership dissolutions registered in Northern Ireland, all to female couples.

1.12.3. The average age of all partners dissolving a civil partnership in 2011 was 36.5 years.

1.13 Adoptions

1.13.1. 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.

1.13.2. 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.

1.13.3. The number of children recorded in the Adopted Children Register during 2011 was 104, a decrease of 12 from the 2010 figure of 116. The number of adoptions had been falling steadily since 1970 when over 500 children were adopted; the 2008 figure (97 adoptions) was the lowest recorded figure since the early 1930s.

1.14 Re-Registrations of Births

1.14.1. In 2011, 927 births were re-registered, 33 more than in 2010. The most common reasons for a re-registration are because the parents have got subsequently married or to add the father's name to the birth entry.

1.15 Gender Recognition Registration

1.15.1. 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.

1.15.2. 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. In 2011 there were four births re-registered in this way.

Chapter 2

A Brief History of the Census in Ireland/Northern Ireland

Ian White

Office for National Statistics



Ian White works for the Office for National Statistics (ONS). He has worked at ONS (and its predecessors, the Office for Population censuses and Surveys, and the General Register Office) since 1970, and has been involved in every UK census (in one way or another) since then (five censuses in all). He is the last remaining active member of the ONS staff who worked at Somerset House, the home of the very first General Register Office (GRO) Census in England and Wales in 1841. Ian has a wealth of experience on census matters. He headed the work on UK legislation for the 2001 and 2011 censuses and has been involved in working within Eurostat and the United Nations Economic Commission for Europe on international census matters.

Ian has written a book on the history of the census in the United Kingdom (census and Sensitivity) to be published by Palgrave Macmillan next year. This chapter contains material extracted from the book and presents a look at the history of the census throughout Ireland before 1921 and in Northern Ireland since 1926.

Ian was supported in his writing of this chapter by Mr Uel McMath from NISRA's Census Office. Uel has worked on the last four censuses in Northern Ireland since 1981 with an occasional inter-census sabbatical. Uel managed the Field Operations elements of both the 2001 and 2011 censuses and holds a wealth of experience of the recent censuses and also of the legislative basis of the census in Northern Ireland.

“Many inquiries of a similar nature, might no doubt, have been pursued with an advantage to a correct knowledge of the condition of the people. We felt, in fact, that a census ought to be a social survey, not a bare enumeration, but we were restrained by the apprehension that jealousy and prejudice might be excited if we made our inquiries too searching and too minute... People are slow to see that questions relating to themselves and their households can have any bearing on the general good, and forget that, in accounts of large numbers, the individual is wholly lost sight of in the average, but that averages can only be obtained by an accurate knowledge of all that pertains to the individual.”

Report of the Commissioners appointed to take the Census of Ireland for the year 1841¹

2.1 The all-Irish censuses: 1813-1911

1813

2.1.1 The 1800 Population Act that provided for the first census in Great Britain obtained Royal Assent on 31 December, just one day before passing of the Act of Union. This, together with a very much different local administration in Ireland meant that the 1801 Census did not extend across all parts of the new United Kingdom. However, to make amends for this, a Bill to take a census in Ireland was presented to Parliament on 31 January 1806 by James Fitzgerald, the MP for Ennis, County Clare.

2.1.2 He noted, thanking the Speaker for allowing time to introduce such a measure, that a census in Ireland would help to

“... assimilate the laws of and regulations of Ireland to those of this country, as far as it is just and expedient”,

2.1.3 Fitzgerald echoed arguments that Charles Abbott MP had made in the House of Commons in support of the 1800 Bill:

“It must indeed be obvious to every man conversant with the subject that to ascertain the population of a country is a grand desideratum in political economy, whether considered with regard to its physical force, its agricultural produce, or its financial capacities”.

2.1.4 He observed, however, that in Ireland there was no mechanism equivalent to English poor law administration, for enumerating the population. Instead he proposed that the Bill should give the responsibility to

“... the magistrates of the City of Dublin with the advice of their recorder, and the magistrates of the other Irish counties aided by the advice of the assistant barristers, at a general quarter session, to appoint one or more householder, according to necessity, for each barony, parish or such other district as may be deemed expedient, for the purposes of collecting a list of the inhabitants of such districts, the expense arising from such appointments to be defrayed by the assessment of the grand juries of the several counties in the same manner as presentment for roads etc, are now provided.”

2.1.5 Fitzgerald was concerned to give the House the fullest opportunity of examining the Bill, and to that end he proposed that he should not move the second reading until after the Easter recess. However, having been given the opportunity to do so, the House clearly thought that the desideratum was not strong enough, since the Bill failed to get through its next Parliamentary stage and was dropped. And it was only during the debate on the next Population Bill for Great Britain in 1810 that the proposal for a census in Ireland was again raised.

2.1.6 This led to a second Bill introduced on 29 January 1812 by Sir John Newport MP, who expressed his surprise that

“...a measure should have been so long deferred which would enable Parliament to ascertain the number of persons for whom it is to legislate. Twice since the Union has the population of Great Britain been calculated, but in this respect, as well as in others, the natives of Ireland have been totally neglected.”

2.1.7 He considered it an absurdity that all Bills did not automatically cover the whole of the United Kingdom and that it was left to the individual introducing them to determine what parts of the kingdom should be included. He noted that Ireland was more often than not excluded.

2.1.8 Conducted under the supervision of William Shaw Mason, the 1813 Census attempted to follow the mode of the 1811 Census in Great Britain, but with an administrative system rather similar to that set out in the aborted 1806 Bill. The Enumerators were drawn from the barony constables and parish officers, which led to some hostility from the local population. The resulting conflict, combined with poor administration, led to the submission of very incomplete returns. Mason valiantly extended the Census until 1815 at which point he finally gave up the attempt to collect any further returns. No results were published at the time, but in the Report of the subsequent census of 1821, Mason wrote of the 1813 enumeration

“At the expiration of two years employed in trying to accomplish the object of the Legislature, it was found on examining the returns, that out of the forty Counties and Counties of Cities into which Ireland is divided, ten only furnished complete returns; in four, no steps whatsoever were taken in pursuance with the Act; and those of the remaining twenty six were inaccurate or defective. The Act therefore may be considered to have been wholly inoperative as to its main objective, that of ascertaining the number of souls by actual enumeration. By the aid of comparative calculations founded on previous inquiries and on the partial results of the Act, the amount of population in 1813 has been conjectured to be 5,937,856”.²

Whitelaw’s 1798 Census of Dublin

2.1.9 It was of particular disappointment to Mason that the City of Dublin was one of the districts for which no returns were collected, not least because this was clearly the most populous, but also because of the earlier prodigious, and

far more successful, effort to enumerate the city by the Reverend James Whitelaw in 1798. In a footnote to the 1813 Census figure quoted in the 1821 Report (and which was estimated on the basis of some rather spurious statistical calculations, and is generally regarded as unreliable), Mason added:

“Although in a recapitulation of this general nature, the attempts of ascertaining the population of particular districts are not properly admissible, yet it would be scarcely justice to the memory of a most intelligent and persevering character, the late Rev. James Whitelaw, to suffer his account of the population of the city of Dublin to pass wholly unnoticed. The peculiar circumstances of that city, during the rebellion of 1798, led him to undertake an account of the population by actual enumeration. At that period every householder was obliged to affix on the outside of his door, a list of the names of every person then residing in the house. The numbers were then collected by Mr Whitelaw, and published by him, together with a comparative statement of the numbers, taken in 1803, by the conservators of the peace, after the insurrection in that year. The totals, in both cases, were

<i>In 1798</i>	<i>Houses</i>	<i>Inhabitants</i>
	<i>16,401</i>	<i>172,091</i>
<i>In 1804</i>	<i>Houses</i>	<i>Inhabitants</i>
	<i>15,958</i>	<i>169,528</i>
<i>Decrease in six years</i>	<i>Houses</i>	<i>Inhabitants</i>
	<i>443</i>	<i>2,563”</i>

2.1.10 Indeed, Whitelaw (though he little realised it at first) had set himself a daunting task, but one only made possible, ironically, by the disturbed state of the country resulting from the United Irishmen Rebellion of 1798. As a security measure at that time the Lord Mayor of Dublin, Thomas Fleming, ordered that a list of inhabitants be fixed to the door of every house in the city. Thus the task of census-taking seemed to Whitelaw at first to be a fairly straight-forward matter of merely collecting the number of names.

2.1.11 Fuelled by the lack of any reliable data on the population of the country, Whitelaw had been motivated to contemplate such an innovative exercise in the first place for much the same reasons that had driven John Rickman to propose a census in England, in his 1796 pamphlet on Thoughts on the utility and facility of a general enumeration of the people of the British Empire. (Rickman would, of course, go on to oversee the first four censuses in Great Britain.

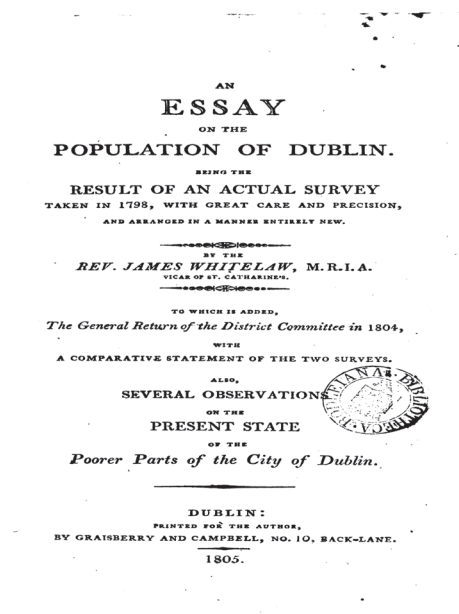
2.1.12 Referring to the population controversy that had been raging in England throughout the latter half of the 18th century, Whitelaw wrote in his report to Philip, Earl of Hardwicke, the Lord Lieutenant General and Governor General of Ireland

“Struck with this strange diversity of opinion, anxious to ascertain the truth, and influenced, perhaps, by a laudable ambition of being the first to offer to the public what is often wished for in vain, an accurate well-arranged census of a considerable capital, I availed myself of the favourable opportunity offered by the unhappy situation of this city at the commencement of the late rebellion; and with the sanction of the Government, but at my own private expense and toil, began a census of the inhabitants of the city of Dublin, early in the month of May, 1798.”³

2.1.13 He initially anticipated no real difficulty, believing that he would have little more to do than transcribe carefully the list of the inhabitants posted on the doors. Indeed, in more prosperous areas there was generally some individual member of the family competent enough to do the task, and, there, Whitelaw found the lists to be correct (though he did not explain how he verified this). But it was clear that among poorer families that formed by far the majority of the population, the case was very different. There, he reported

“The lists on the doors were frequently illegible, and generally short of the actual number by a third or even a half.”

Figure 1 The title page of Whitelaw’s report



2.1.14 Thus he resorted to a more intrusive enquiry

“In order effectually to obviate the difficulty, my assistants and I,, explored, in the burning month of the summer, every room of those habitations, from the cellar to the garret, and on the spot ascertained their population.”

2.1.15 He expected opposition but experienced none, and found that

“... everyone was ready to cooperate.”

2.1.16 Whitelaw put this down to a combination of a fear and dread that the authorities would take punitive action against anyone showing any form of disaffection, and a belief by the inhabitants that he was employed by the Government to help prepare some sort of system for the relief of their conditions. He noted that, in the course of the whole survey, only one Enumerator had been assaulted, when

“... in attempting to remonstrate with a butcher of Ormond Market on the incorrectness of his list, the butcher flung at him a quantity of blood and offal.”

2.1.17 The method for carrying out the enumeration that Whitelaw described proved to be a model that subsequent census takers could only aspire to, in particular, the lengths he took in the training and supervision of his field staff. He was initially very much concerned about the ability of his Enumerators to carry out the task:

“I was, at first, much embarrassed by the inexperience of my assistants. I employed them therefore in taking surveys of the streets that I had already surveyed myself, until I discovered that they had attained a sufficient degree of accuracy. I never relied on their returns with implicit confidence, but made them frequently act as checks on each other. Two or more of them frequently surveyed the same street in succession, without any communication with each other, and if any material variation occurred, I investigated it myself on the spot.”

2.1.18 In addition, Whitelaw himself re-enumerated the hardest-to-count populations living in the poorest streets, as he expected these to produce the most error. Thus he was able to report

“... in the poorer parts of the city, there are few streets that have not been twice, and some, even three times surveyed.”

2.1.19 Whitelaw was particularly concerned with determining the density of population, not only to highlight the extent of deprivation in the poorer districts, but also to produce an algorithm which could be applied to calculate the populations of other European capital cities.

2.1.20 His figures revealed, for example, that the parishes within the old walled part of the city were much more densely populated than the newer suburbs, ranging from an horrendously overcrowded 439 persons per acre in St Michael's (opposite Christchurch) to a more comfortable 87 per acre in St Thomas's (around the Sackville Street/Gardiner Street area – now known as O'Connell Street).

1821 and 1831: improving the count?

2.1.21 Following the failure of Mason's first enumeration, another Act had followed immediately

in 1815 leading to a rather more successful attempt in 1821 to carry out the census throughout the whole of the island at the same time. The Act provided a more stable administration for the census than its predecessor, and overall responsibility was transferred from the Grand Juries to the Bench of Magistrates.

2.1.22 The Enumerators were mostly appointed from the pool of tax collectors, who, like the Poor Law officials in England, would be familiar with the area and with its inhabitants, and for the first time in the United Kingdom the Enumerator was instructed to write down the details about each individual in a record book. The information collected included the *name, relationship to head of household, age, occupation, number of acres for landholders*, and any observations. The census was taken on 28 May 1821, as it was elsewhere in the United Kingdom.

2.1.23 Much of the improvement in this census was due to the fact that the tabulations were carried out centrally, leading to uniformity of the returns of families. However, the resulting total population figure of 6.8 million may still have been somewhat of an undercount, since not only were the Enumerators inexperienced (though they may well have been familiar with their area), but a general lack of public confidence in the Government made householders reluctant to disclose to the authorities information that they believed might then be used as the basis of further oppression, and rendering them liable to tax duty and/or service in the militia.

2.1.24 However, by the time the 1821 Census was taken, relations between the Government and the public seemed easier than they had been for some years before, or were to be for some years after, and the Catholic clergy ameliorated some of the public's concerns, encouraging their church members to give accurate information. Not without some success it would seem since, in the Report of the 1841 Census¹, the Census Commissioners, while they thought that the 1821 was indeed likely to have produced an undercount, did not regard it as defective enough to make the difference

between it and the 1831 Census figure (14.2 per cent) an inaccurate representation of population growth over the decade. Nevertheless, much of the information collected in the 1821 Census remained unpublished.

2.1.25 The 1831 Census itself was an enigmatic enquiry. Very little commentary from it exists, and we can only make conjectures from the limited results that were published and the few comments made in the reports of subsequent Irish censuses.

2.1.26 The census was undertaken by George Hatchell, designated, according to the only report published as ‘The Officer appointed by the Chief Secretary of the Lord Lieutenant for digesting and arranging the Population Returns of Ireland’. The Report, however, gives neither an introduction nor any details of enumeration procedures adopted - not even the date of which the census was nominally supposed to have been carried out⁴. It is likely, however, that a procedure similar to that employed in 1821 was followed, where Enumerators, recruited from the pool of local tax collectors, recorded information by means of door-to-door visits. Certainly there would have been little time to develop a significantly different approach since the relevant legislation for it was only passed on 30 March that year.

2.1.27 The questions asked were along the lines of those included in the 1831 British Census, and omitted the question on age. Interestingly, however, one surviving return, for the parish of Dunboe in County Londonderry records information on religion, separately identifying ‘Church of Ireland’, ‘Roman Catholic’, ‘Presbyterian’ and ‘Other’, though there is no reference to any such information in Hatchell’s Report. It is possible therefore, that such information was recorded by the Enumerator as part of his ‘observations’ and was, thus, not universally collected – and would not therefore have been officially reported.

2.1.28 It is generally thought that, whereas the 1821 Census under-estimated the population, the 1831 figure of 7.8 million was an over-count arising from the fact that, in the event, the enumeration,

according to the *Report* of the 1841 Census, was taken

“... at different dates, at different times extending over a considerable period. It is understood, too, that the enumerators considered that they would be paid - and in many cases were paid - in proportion to the numbers they enumerated, the obvious tendency of which would be to augment the total numbers.”¹

2.1.29 Certainly the figures were, at the time, considered unsatisfactory since they were subject to a further examination and correction in 1834 by the Commissioners of Public Instruction for their 1835 Report.

1841: a pioneering effort

2.1.30 In 1841, while use was being made of the recently created Registration Service in England and Wales, in Ireland a new network of the officers and men of the Dublin Metropolitan and Constabulary police force were employed as the field force for this and subsequent censuses.

2.1.31 The 1841 Census in Ireland was, in comparison both with the two preceding censuses and with the corresponding enumeration in Great Britain, a remarkable achievement, not only in the method of the collection of data but in the range of questions covered. In addition to the topics included in England and Wales, the Irish census form enquired into members of the family who were absent and who had died since the previous census, and a separate form collected information to assess the quality of the housing stock and some agricultural statistics.

2.1.32 The authority for the census was the Census (Ireland) Act, 1840 passed the day after the corresponding legislation for Great Britain on 10 August 1840. At first Parliament had agreed that the census should be taken

“...on one or more consecutive days in the month of July 1841”,

with the actual date(s) to be determined by the Lord Lieutenant; a date of 1 July eventually being

fixed. But following some adverse reaction to such a comparatively late date, the decision was subsequently taken, at the suggestion of the Statistical Society of London, to bring the enumeration forward to 6 June so that it should be simultaneous with the census in Great Britain. A further Act was passed, accordingly, to amend the earlier legislation.

2.1.33 The Act was considerably less specific in detail than the corresponding Act for Great Britain; but this led, ironically, to the more detailed question content. It required Enumerators to

“... take an account, in writing, ... of the number of persons dwelling therein, and of the sex, age, and occupation of all such persons, distinguishing the persons born in the place or parish, and county in which they shall be then dwelling; and shall also take an account of the number of inhabited houses and of uninhabited houses, and of houses then building, within such districts respectively; ... and shall also take an account of all such further particulars as by such instructions they may be directed to inquire into; such particulars and instructions having no reference to the religion of any person or persons.”

2.1.34 This gave a relatively free hand to the Irish authorities to include any additional questions as they wished. Though the collection of information on religion was specifically prohibited, other information considered to be of value could be collected on the authorisation of the Lord Lieutenant, who delegated this responsibility to the Chief Secretary, who in turn passed the task of carrying out the census to a group of Commissioners, namely William Tighe Hamilton, Henry J Brownrigg, William Robert Wills Wilde and Thomas Aiskew Larcom. Each was chosen because of the responsibilities they held in other areas of Irish public administration.

2.1.35 Hamilton, the Chief Commissioner, was a civil servant in the Chief Secretary's office, holding the purse strings and providing authority for the collection of the unspecified information. Brownrigg

was Inspector General of the Constabulary, and, as such, controlled the personnel necessary for the enumeration. Wilde (father of Oscar) played a key role as a medical and cultural commentator in the 1841 and subsequent Irish censuses (for 1841 he was employed particularly to analyse the data on deaths which would be collected at the census for the first time). And Larcom, a career soldier, was working at the Ordnance Survey of Ireland and responsible for providing statistical, social, geological and topographical guides for Ireland.

2.1.36 In addition to paving the way for a much larger census, with more questions in order to enquire into the 'condition of the people', Larcom, and his fellow Commissioners also introduced a number of other important innovations to the Census, none of which had been carried out, either in Ireland or in Great Britain, before.

2.1.37 The Enumerators (mainly constables) were instructed first to complete a survey of the houses in their district, recoding information for each on;

- whether it was built or being built;
- whether the walls were constructed from mud, stone or brick, and whether the roof was slated or thatched;
- whether it was a private dwelling, public building, manufactory, hotel, public house, lodging house, shop, school etc;
- whether inhabited or uninhabited; and
- the number of stories (including basement) rooms (exclusive of closets) and front windows.

2.1.38 This enabled a four-fold classification of dwellings derived from the number of rooms and windows, and durability (as assessed by the material used in the constructions of their walls and roofs), to be produced which would, the Commissioners hoped

“... throw some useful light upon the general condition of the community, as there can be no more obvious indication of the advances and condition of a people than improvement in the comfort of their residence.”¹

2.1.39 For farms, information was also collected on:

- the number of acres (distinguishing between arable, pasture and waste); and
- numbers of livestock (horses, cattle, sheep, goats, pigs and poultry)

and for all properties, the Enumerators were required to record:

- the number of families in the house; and
- the name of the head of each family.

2.1.40 A definition of families was given for the first time, being

“...either one individual living independently in a house, or part of a house, on his or her own means of support, or several individuals related to each other, as parents and children, brothers or sisters etc, with the addition of servants or visitors, living together in the same house, or part of a house, upon one common means of support. A lodger, or family of lodgers, who do not board with the family of the house, should be treated as a distinct family. Where such do board with the family of the house, they should be treated as one with it”.

- a description which we easily recognise as the basis for the definition of a household today.

2.1.41 The information recorded on the housing schedule relating to families and heads of families was then used by the Enumerator as a check on the information collected from the household form, which (as in Great Britain) was to be completed by the head of family for the first time. Blank copies of these were supposed to be distributed to each family in each house in the week before the census by the Enumerator, who was instructed to ensure that the house number used in the housing form was written on the household form.

2.1.42 The latter contained three ‘tables’ for each head of family to complete. The first asked for information relating to each member of the family on:

- age, sex, and marital status;
- relationship to head of family;
- year of marriage(s);
- occupation;
- school attendance and literacy (recording either ‘Read’, ‘Read and write’ or ‘Cannot read’); and
- birthplace.

2.1.43 For those living on farms further information was collected on the number of day’s employment and the level of wages.

2.1.44 The occupation data collected allowed Larcom to derive an occupational classification somewhat more developed than those adopted by John Rickman and William Farr in Great Britain. Firstly, families were classified according to their ‘pursuits’ in a way that distinguished between those dependent on ‘agriculture’ and those on ‘manufacture and trade’, and which provided a reasonable comparison with the figures presented for Great Britain (and for Ireland from the previous census). Secondly, they were classified according to their ‘means’ thus creating three groups which could be said to represent upper, middle and lower social classes. Thirdly, people were classified according to how they ministered to the wants of others.

2.1.45 The second ‘table’ sought to record name, age, sex, relationship, occupation, and place of residence for those family members absent on census night, which, thereby, anticipated the collection of information on all residents in Great Britain by some 90 years. The Commissioners’ Report, using such information, together with that on occupation, devoted much space to commenting on migration, both long-term and short-term, and both internal and external. In commenting on the phenomenon of economic migration, for example, they wrote

“It is gratifying to see that a considerable amount of productive labour is afforded by the counties in which the manufacture of linen and cotton prevails. Antrim, Down, Armagh and

Londonderry by the prevalence of bleachers, indicate their peculiar proportions. In almost every county a considerable number of male strangers appear to be weavers, and of females, spinners. Shoemakers appear to migrate more than tailors, but both are numerous. Artificers in building would seem to be everywhere in demand, and form a moveable class."

2.1.46 And in commenting on the reasons for including a question on absent residents specifically, the Commissioners noted (describing a sort of 19th century e-Borders)

"... We had taken measures to obviate certain inconveniences which we had reason to apprehend would arise from the lateness of the season at which the census was taken. Of these the principle arose from the fact, familiar to everyone acquainted with Ireland, that in the month of June the agricultural population is in a state of considerable movement; the labourers resorting, in search of work, to neighbouring counties, which require more labour than the resident population can supply, and many proceeding to England or Scotland for the purpose of reaping the harvest. The numbers thus migrating to Great Britain having been variously stated, we required from the police at every port, an enumeration of all deck passengers who embarked on board the various packets during the summer of 1841. For this purpose a competent officer was stationed at each packet office, and each person as he received his ticket for embarking was asked from what country he came."

2.1.47 The third 'table' was to record information on all people who had married, and those who had died in the family residence, during the previous decade. Name, age, sex, relationship to the current head of family, occupation, and cause and date of death, were required, and the responses provided a mass of statistical data to enable William Wilde to report in some depth, in a second volume of the Census Report, analyses of mortality in Ireland in a manner that Farr was only able to emulate in England and Wales with the

benefit of civil registration after the establishment of the General Register Office. Wilde's report certainly overshadowed much of the remainder of the published census output.

2.1.48 The amount of information collected and analysed in the 1841 Irish Census was thus by far the greatest ever attempted anywhere by a census in the British Isles – but it might have been even larger but for the Commissioners' concerns about not making the Census too intrusive. They noted in their *Report*

"Many inquiries of a similar nature, might no doubt, have been pursued with an advantage to a correct knowledge of the condition of the people. We felt, in fact, that a census ought to be a social survey, not a bare enumeration, but we were restrained by the apprehension that jealousy and prejudice might be excited if we made our inquiries too searching and too minute".

2.1.49 And in observing the public's lack of understanding of the nature and purpose of the census, which is no less prevalent today, the Commissioners added:

"People are slow to see that questions relating to themselves and their households can have any bearing on the general good, and forget that, in accounts of large numbers, the individual is wholly lost sight of in the average, but that averages can only be obtained by an accurate knowledge of all that pertains to the individual."

2.1.50 The Census produced by far the most accurate count of population in Ireland to that date.

1851-1871: a period of population decline

2.1.51 Three years after the 1841 Census, the Irish Marriages Act 1844, created the General Register Office in Ireland and the post of Registrar General. William Donnelly was the first appointee and held office until 1876, and was responsible for conducting the next three censuses. However, the Registrars thereby appointed to register non-Catholic marriages and to solemnise civil

marriages, were not given the same enumeration responsibilities as their counterparts in England and Wales. In Ireland, therefore, the machinery of the field operation was again left principally to the police.

2.1.52 The Census (Ireland) Act 1850 took effect in late July that year, and prescribed a census in 1851 to be taken on 30 March (the same day as in Great Britain) that would be much the same as the previous enumeration. And, again, it left the decision whether or not to include additional questions, in effect, to the discretion of Donnelly, as Chief Commissioner, and William Wilde, who had been retained as Assistant Commissioner.

2.1.53 It is very probable that ill health, at that time, prevented Larcom from taking up the post of Registrar General and Chief Commissioner, but he later went on to become Under Secretary for Ireland and, in that role, was influential in ensuring that the civil registration was extended to births and deaths in an act passed in 1863.

2.1.54 More new questions were, indeed, added to the schedule by Donnelly and Wilde. The household form added both a column to identify persons who were deaf and dumb or blind, and an instruction to the education question that

“The word ‘Irish’ is to be added in this column to the name of each person who speaks Irish, but who cannot speak English; and the words ‘Irish and English’ to the names of those who can speak both the Irish and English languages.”

2.1.55 The latter thus had anticipated, by twenty years, the question on Gaelic speakers in the Scottish census, and by thirty years the equivalent enquiry in Wales. The 1850 Act continued, however, to prohibit, specifically, any enquiry into religion.

2.1.56 A new separate form was introduced to collect information on persons who were

“...afflicted with insanity or idiocy”,

and, reflecting the difficulties experienced in 1841 in enumerating institutions, a variety of other

forms were produced to facilitate better coverage, specifically, in workhouses, hospitals, schools and colleges, barracks, prisons, and at ports. The process for completing the schedules was still left, however, to the Enumerator, suggesting that either at least this element of the enumeration process was not unsuccessful in 1841, or that there was no viable alternative.

2.1.57 The Commissioners were pleased to be able to report to the Lord Lieutenant in June 1856 that

“... owing to the zeal and diligence of the Superintendents, and the good feeling of all classes, we received within a reasonable time from the 30th March, the returns from every Constabulary district in Ireland complete, with only very few exceptions, in which the parties at first refused to fill in the forms. In these cases a remonstrance from us had the desired effect of procuring the returns, so that in no instance had we to resort to the compulsory powers... in order to obtain the necessary information.”⁵

2.1.58 Nevertheless, despite a seemingly universal coverage, Donnelly and Wilde had to report a much decreased population of some 6,552,385. This was almost 20 per cent fewer than in 1841 – a decline attributed to migration and famine during the decade, following on from the continued widespread failure of the potato crop, particularly in 1841 and 1844, and, far more catastrophically, in the years after 1845. Only in the major urban areas of Dublin, Belfast, Galway, Limerick, Waterford, Cork, Kilkenny and Drogheda were increases in population recorded.

2.1.59 The 1861 Census, carried out on 7 April that year (again, as elsewhere in the UK) counted even fewer souls, just 5,798,967, but Donnelly and Wilde were able to report, more encouragingly that

“The causes which led to the diminution of the population between 1851 and 1861 were, happily, not of the twofold character to which the decrease was to be attributed between 1841 and 1851. In the latter decade it may be said to have been owing to the great mortality

and emigration which originated with the famine consequent upon the failure of the potato crop for several years, commencing with 1845. The diminution between 1851 and 1861 may be said to have directly due to emigration, no fatal epidemic, we are happy to state, having prevailed during that period.”⁶

2.1.60 Indeed, the total number of emigrants from Irish ports in the decade leading up to the 1861 Census according to the Registrar General’s returns was 1,208,350, being some 97 per cent of all persons departing from UK shores in this period. However, it should be remembered that the Census was, at that time, still the only source of mortality data in Ireland, and the Commissioners acknowledged the estimates of the annual numbers of deaths reported were likely to have been less than the actual occurrences.

2.1.61 Despite this loss of population, particularly among the agricultural classes, what surprised the Commissioners was that the amount of arable land had increased significantly from 13.5 million acres in 1841 to 15.5 million in 1861, and made up some 74 per cent of the total land area of Ireland at the time of the Census – though they noted that the amount of arable land that was recorded as being ‘under crops’ was more or less unchanged in the decade 1851-1861.

Figure 2 *The leaving of Ireland*



Emigrants leave Ireland, Henry Doyle

2.1.62 In form and content, 1861 differed significantly from the previous census only in that, for the first time, the Act prescribing it allowed a question on religion to be included. After making specific provisions prohibiting the inclusion of such a question in the legislation for the previous four censuses, Parliament had to be convinced that to allow it this time was both justified and safe. As had been shown to be the case in Great Britain in 1851, it was clear that there was no lack of interest in the topic (though the reasons for the enquiry in Ireland were very much different), and the analysis of the responses to the question, together with the enquiry into education, required a whole volume to itself. Moreover, in Ireland the question was included on a mandatory basis, and became an integral component of the Irish census throughout the rest of the century.

2.1.63 Both in the 1861 and 1871 Censuses, Donnelly and Wilde gave much attention to the analysis of religious profession and education in combination. The General Report to the 1871 Census alone devoted some 90 pages to the subject. In introducing the commentary, they noted (rather smugly perhaps)

“We now come to deal with the two elements – religion and education – whose presence serves more than anything else to distinguish the Irish Census returns from those of Great Britain, and to bring them, into harmony with the census returns of all the world beside. It is no duty of ours to speculate upon the reasons which have determined the Legislature to maintain for Great Britain an isolation, which, in this respect at all event, entitles the statisticians of the world to qualify the inhabitants of the sister Island as ‘Penitus toto divisos orbe Britannos’.

There were sufficient reasons we doubt not; but whatever those reasons may have been, it is the fact, meanwhile, that every principality in the world with a claim to civilisation – England and Scotland alone excepted – takes careful note and register of the confessional differences of its subjects. The self-governing Colonies, great and small, of our Empire are at

one in this respect with all the Governments of Christendom; and while forbearing to discuss the policy that excepts Great Britain from the general rule – a policy which we have no commission to examine – we cannot forbear congratulating ourselves that Ireland has been exempted from the application of that policy.”⁷

2.1.64 They went on to note the importance of having accurate counts of the numbers within each religious denomination on which to reach

“...safe conclusions based on authentic figures”

rather than having to rely, as Great Britain did, on “*valueless conjecture*”.

2.1.65 Such was the considered importance of obtaining accurate returns for the question on religion in Ireland, that in both the 1861 and 1871 Censuses, where responses were unclear (for example, when the simple response ‘Protestant’ was given) follow-up enquiries were instigated in order to find out the particular denomination in each case. However, this was not always successful, and the Commissioners had to admit that

“In a very few cases the entries were facetious, and although we afforded, through our queries, an opportunity to the persons so returning themselves, of making a more becoming return, we did not think it necessary or judicious to reproduce their silliness here.”

But, in reassurance, Donnelly and Wilde noted:

“The number of entries characterised by levity or eccentricity was, exceedingly small, nor can there be any doubt that, upon the whole, the returns were made under a proper sense of responsibility, and are therefore entirely trustworthy”.

2.1.66 The 1871 Irish Census very much followed the 1861 model in almost all other aspects also. However, in reporting the results the Commissioners expanded Larcom’s 1841 classification of dwelling type by subdividing the fourth class and distinguishing those whose walls were constructed from mud, from those where brick

or stone were used. They also decided to code and tabulate occupations according to the classification adopted in England and Wales.

1881-1901: few further developments

2.1.67 In their concluding remarks on the *General Report* of the 1871 Census, Donnelly and Wilde recommended that, in the absence of any likelihood that the responsibility for the census in Ireland would be taken up by a statistical office, as was becoming the case in continental Europe, the appointment of the Commissioners before the next census should be made at least eight months before Census day to allow sufficient time to enable all the preliminary work to be completed. As Commissioners, the 1871 Census had been their third, and they recognised that

“The difficulties attendant upon the execution of so great a work as ours by a temporary Commission were, no doubt, materially lessened in our own regard by the circumstances that the Commissioners brought a large experience to the performance of their duties...”⁷

2.1.68 The same Commissioners clearly did not expect to direct a fourth census, and indeed the new Registrar General, Dr Thomas Wrigley Grimshaw, appointed as such in 1879 in succession to William Malachy Burke, took up the post of Chief Commissioner on 8 December 1880. While this was not as early as the eight months that Donnelly had suggested (Census Day would be 3 April 1881), Grimshaw had in fact discussed arrangements for the Census with the Treasury as early as October 1879 even before the Bill for Census had been presented to Parliament.

2.1.69 The 1881 Census (and the 1891 Census also conducted by Grimshaw), again followed the 1861 model. There were no new topics, but Grimshaw had to report a continued decline in population to the level of just 5.1 million - barely above that of the figure estimated from the incomplete 1813 Census – though he noted that the percentage decrease had declined in each successive decade since 1841-51, being just 4.4 per cent since 1871⁸.

2.1.70 Grimshaw did, however, introduce a special enquiry into agricultural holdings, including the value of the land, at the suggestion of the Statistical and Social Inquiry Society of Ireland as a means of collecting information on the number of people on farms of different acreages. He regarded the benefit of this survey as

“...providing a standard of comparison for those who desire to compare the results annually published by the Registrar General in his report on the Agricultural Statistics of Ireland, with the actual condition of the agricultural holdings and their occupiers.”

2.1.71 Occupational coding was again carried out along the lines of the Census in England and Wales. However, the classification had been significantly revised since the previous census, and the delay in receiving the details of the new classification from the English Registrar General, George Graham, (just days before Census itself) meant that considerable effort was involved in quickly revising the Irish indexes and instructions for the clerks in time for the coding to start on 1 June that year. However, Grimshaw experimented with the introduction of a social classification of occupations for the city of Dublin that preceded that developed by T H C Stevenson in England and Wales by some 30 years.

2.1.72 The publication of all the main tabulations by the end of the following year was a considerable achievement for the new Commissioners. But Grimshaw was even more industrious at the next Census of which the General Report⁹ was submitted to the Lord Lieutenant General, the Earl of Zetland, as early as 23 June 1892, less than 16 months after Census day. Again, no new questions were included this time, but the special study into agricultural holdings was repeated. Indeed, this enquiry was becoming a distinctive and valuable element of the Census in Ireland, not comparable with any other part of the UK.

2.1.73 The 1891 Census was otherwise uneventful - save for one thing. During the enumeration there was an outbreak of smallpox

in the northern counties which necessitated special disinfection measures to be taken for any persons who were expected to handle the census forms. Grimshaw held emergency discussions with Medical Commissioner of the Local Government Board, the Secretary of the General Post Office and officials at the Stationery Office and Department of Public Works in order to install disinfecting equipment at the Census Office and to prepare impervious covers in which to wrap each census form in order to prevent the spread of the infection. These were, happily, successful, and Grimshaw was able to report that no case of smallpox occurred among his staff during the course of the Census.

2.1.74 As was the case in Great Britain, the first census of the new century in Ireland in 1901 offered few changes, but in reporting on it in June 1902, the Commissioners, who were now Robert E Matheson, the new Registrar General, his deputy Robert J Brew, and T J Bellingham Brady, commented on the difficulty in planning the enumeration resulting from the complete re-arrangement of the territorial divisions following the Local Government (Ireland) Act in 1898. This required the necessary preparatory work to start significantly earlier than usual, and, indeed, a complete plan for the census was submitted to the Government, together with an estimate of costs, as early as 3 November 1898, some five months before the Census Office was officially re-established in April the following year.

2.1.75 But little else seemed to have troubled the new Commissioners. Though they had to report a continued decline in Ireland's population from 4,704,750 to 4,458,775 in the ten years since the 1891 Census, this percentage reduction at 5.2 per cent was only a little more than half the decline over the previous decade¹⁰. The rate of population decrease was slowing – and would continue to do so thereafter.

1911: the last all-Ireland Census

2.1.76 The last census (so it turned out) to be carried out in what was an unpartitioned

Ireland, was, much like the 1901 Census had been, little different in conduct and content to its predecessors, other than the addition of the same fertility enquiry that was being carried out for the first time in Great Britain. The 50 pages of the Commissioners' commentary in the *General Report*⁴¹, published in February 1913, was, consequently, rather perfunctory; even the new fertility data did not demand much attention and, as in Scotland, there was no separate Report.

2.1.77 The number of forms and schedules to be completed either by an Enumerator or the householder had, however, now grown to almost unmanageable proportions. There were some 27 different types of document that required completion for each of the 208 enumeration districts:

Form A. Family return

Form B1. House and building return

Form B2. Return of out-offices and farm-steadings

Form B3. Shipping return

Form C. Return of the sick

Form D. Return of lunatics and idiots, not in institutions

Form E. Return of paupers in workhouses

Form F. Hospital return

Form G. College and boarding school return

Form H. Return of military, R. I. constabulary, or metropolitan police, in barracks

Form I. Return of lunatics and idiots in public institutions and private lunatic asylums

Form K. Prison, Bridewell, and police station return

Form L1. College and boarding school return

Form L2. Return of scholars attending schools

Form L3. Return of children on school roll

Form L4. University and college return

Form M1. Return of agricultural holdings

Form M2. Enumerator's abstract of returns relating to agricultural holdings

Form M3. Amalgamation of holdings in occupation of same person

Form N. Enumerator's abstract for a townland or street

Form O1. Enumerator's summary

Form O2. Enumerator's summary of houses, by classes

Form P1. Names of Enumerators

Form P2. Townlands, etc., in enumeration district

Form P3. Enumerator's return showing material discrepancies in the houses, and the population of the townlands, etc

Form Q. Schedule of forms

Form R. Statutory declaration return

with copious notes and instructions accompanying them. The processing of all the data contained therein remained essentially a clerical operation. Mechanical data processing would not be introduced in any part of Ireland until the 1920s.

2.1.78 The Parliamentary debate caused little fuss, certainly in comparison with the hours of argument that were simultaneously ensuing over the legislation for the census in Great Britain. Most of the few points that were raised were resolved amicably and with relatively little discussion. John Boland, Irish Parliamentary Party MP for South Kerry, for example, had, at the Bill's second reading, questioned the collection of information on literacy relating to children as young as five; he felt that such returns would swell the figures to an extent that would mask the true level of illiteracy in Ireland. He observed that in America the minimum age for measuring illiteracy was ten. At first, Augustine Birrel, the Chief Secretary for Ireland, accepted the point and agreed to consider the matter, but in Committee, two days later, he explained that the tabular results would be able to show levels of literacy by any age, thereby making ready comparison with other countries possible.

2.1.79 Thomas Scanlan, Irish Parliamentary Party MP for North Sligo, was concerned about the continued use of members of the Irish constabulary as Enumerators, citing instances in England when the enquiries of the Distress Committee had largely broken down because the investigations had been

entrusted to the police, and noting that in Ireland the constabulary was far more unpopular since it represented, what he considered to be, a “foreign garrison”. He tabled an amendment to have the Bill require that the

“...officials to be appointed by the county councils for the several districts under their respective jurisdictions, and by the local authority of each borough and urban district which is without the jurisdiction of a county council”

should act as the Enumerators instead. Birrel responded by reminding the House that the Royal Irish Constabulary and the Dublin Metropolitan Police had carried out the enumerations in Ireland since 1841 without any particular obstruction from the public, and that a Treasury Committee, appointed in 1890 to consider the way in which the Census could be improved, while hearing testimony of some inefficiency in the manner in which the enumeration was carried out in England, had, thanks to Grimshaw’s evidence, singled out Ireland for special commendation, and had reported that it had been “*uncommonly well done*”.

2.1.80 The Registrar General had traditionally commented on marriage and fertility rates in the Irish Census reports (using his own vital registration data), so the inclusion of the new fertility enquiry was generally welcomed by Members, particularly by Birrel himself, who saw the benefit of collecting consistent information across the UK. However, in reporting the re-introduction of the question on duration of marriage, that had been asked in earlier Irish censuses but had since been abandoned, he sardonically observed

“... it was found, as anybody could have foreseen, that it is rather difficult to rely upon the value of statistics which you get from a somewhat hazy memory. I could not myself tell anybody how long I have been married without considerable research, though my memory is still strong enough to say with some confidence the age and the number of my children”.

2.2 The pre-war Northern Ireland censuses

The delayed census in 1926

2.2.1 At the time when the preparations for the Great Britain 1921 Census started – towards the end of 1919 – particular emphasis was laid on the need to harmonise the census questions across all parts of the United Kingdom. To this end a Census Joint Committee was entrusted with the task of achieving the maximum degree of comparability in census statistics in each constituent country. Their efforts to do so were however balked by the political conditions in Ireland that rendered it impracticable to proceed with the census there as planned.

2.2.2 Even at the time when the Census Bill for Ireland was introduced in the Commons, there were serious concerns about its viability. Joseph Montague Kenworthy, Liberal MP for Central Hull believed that most people in the south and west of Ireland would certainly refuse to take part. He asked the Attorney General for Ireland to tell the House

“ ... how many tanks he will require for the collection of the census forms”,

2.2.3 Captain William Wedgewood Benn, Liberal MP for Leith outside Edinburgh agreed that it would be totally impracticable to do so. Nevertheless, the Bill proceeded along its due course. In Committee there was very little discussion on the content of the census, but more on the risk of expending government funds on such a risky venture. The Rt Hon Sir Donald Charles Hugh Maclean, then leader of the Liberal Opposition, in particular, did not believe that any sane person would think for a moment that there was any chance whatsoever of a census taking place in Ireland. He said

“If conditions arise in Ireland under which a census can be taken, then there will be an Irish authority for taking it, and not this House. Ireland is now in a state of chaos, if not of de facto civil war, and the Government are asking this House to support them by giving authority for the expenditure of £94,000.”

2.2.4 And though the Bill was approved, Maclean's foresight proved astute. Following threats from Dáil Éirean - the parliament set up in Southern Ireland in 1919 - to boycott the census, the British government decided, on 4 April 1921 that it would take the advice of the Census Commissioners in Ireland to postpone the census there indefinitely. Just a month later the Government of Ireland Act 1920 came into force and separate jurisdictions were established in the north and the south of the island. It was not until 10 November 1925 that separate legislation for the census in Northern Ireland took effect.

2.2.5 In the course of the debate on the 1925 Bill for the first census in Northern Ireland, the Minister for Finance, Hugh MacDowell Pollock, noted that it had been nearly 15 years since the last census in Ireland, and that intervening events such as the Great War and the 1918-19 influenza epidemic had affected the demographic picture of the country, and thus required a census to be taken. It was eventually held on 18 April 1926 on the same day as the similarly delayed census in the Republic of Ireland.

2.2.6 Northern Ireland continued to have specific legislation for each new Census until the 1969 Act provided a legal framework similar to the permanent 1920 Census Act in Great Britain.

2.2.7 The schedule for the 1926 Census in Northern Ireland, conducted by its first Registrar General, L A Bullwinkle, had basically the same content as the 1911 Census except that the fertility enquiry was dropped (as it had been in the 1921 Census throughout Great Britain). Moreover, neither the question on Irish language nor the long-standing enquiry into agricultural holdings, so long a feature of Irish censuses and which had been the focus of a special study in 1911, were included north of the border. Instead the Northern Ireland form contained an additional question relating to health insurance and an enquiry on dependency in childhood and orphanhood, arising from the particular concerns resulting from the loss of fathers in the Great War.

2.2.8 Following the previous practice, the services of the local police force, the now Royal Ulster Constabulary, were again utilised in the delivery and collection of the Census returns.

2.2.9 Data processing was, for the first time in Ireland, carried out along the lines adopted in Great Britain and utilised the punched card and mechanical sorting machines first used in the 1911 Census there.

2.2.10 The Registrar General used the *General Report* to explain the need for, and the intricacies of, the Hollerith tabulating machinery that it had been necessary to introduce in order to remove the limitations (and reduce the costs) of the manual 'ticking' method of coding and tabulating the information from the census returns.

2.2.11 Bullwinkle accepted that the only satisfactory way of compiling the bulk of the Northern Ireland census statistics was by 'machine tabulation'. Even though the amount of processing that was required was only a fraction of that in England and Wales or Scotland, Bullwinkle acknowledged in his Report that, from the experience of the 1921 Census in Great Britain, it was

*"... abundantly clear that all the tabulation, excepting that of the housing and accommodation particulars and the populations of small areas, could be carried out more quickly, accurately and cheaply by using modern machine methods."*¹²

2.2.12 Coding the responses into a series of numeric codes was done in groups of topics, with, for example, 'usual residence', 'birthplace' and 'nationality' coded together, but where the more complex topics of 'occupation' and 'industry' were coded separately by different coders. After this process the returns were passed to the card punchers who transferred the coded responses on to a unique card for each person, where the position of the each punched hole represented a specific question and code (Figure 3).

2.2.13 Two types of punching machines were used; the gang punch was able to punch mechanically batches of cards where there was a common code for each data item (such as area codes for the Enumeration Districts and place of usual residence; and hand operated key punches were used for the remaining data items. It was through such holes that electrical contacts were made when the cards went subsequently through the counting machines, which identified and recorded each item response at a rate of 24,000 cards per hour.

Figure 3 The 1926 Census punched card

publication programme was put on hold. Carson

2.2.14 Bullwinkle recorded that all the card punching was carried out by just seven young women and a supervisor in the seven months between October 1926 and April 1927. The relatively small amount of data processing which was not carried in this way was done by the more traditional and laborious clerical ticking process.

1937

2.2.15 The next census in Northern Ireland was again out of phase with the rest of the United Kingdom. In an attempt to bridge the gap between the 1926 Census and the UK-wide census scheduled for 1941, W A Carson the second Registrar General for Northern Ireland at first planned to carry out a census in 1936 to coincide with the then proposed mid-term enumeration in Great Britain. But when the plans for the latter were abandoned because of the general economic crisis, Carson postponed the census in Northern Ireland until 28 February 1937, when he carried out a more limited enumeration by omitting not only the questions on key topics such as occupation and industry, but the long-running question on infirmities.

2.2.16 No detailed national report was published; the outbreak of the war in 1939 and the resulting paper shortages meant that, after the County Reports had been produced, the remaining

reported, in a much shortened *Summary Report*

“After the close of hostilities the question of issuing a final volume – unless a new census is then in preparation – will be considered.”¹³

But neither a final report nor any such new census ever came to fruition.

The 1939 National Registration and identity cards

2.2.17 On 3 September 1939 World War II broke out, and less than a month later the civilian population was enumerated under the direction of the three UK Registrars General, but under separate legislation (the National Registration Act 1939), so that a National Register might be compiled as a war-time general security measure.

2.2.18 Preparations for such a National Register had already begun at the end of 1938 and were virtually complete by April 1939, and had the country still been at peace these preparations would have been used for a 1941 Census.

2.2.19 Originally the Registration Regulations prescribed that all persons present within the UK and the Isle of Man on National Registration Day, 29 September 1939, were to be enumerated, with the exception of those persons serving in the armed forces or who were registered merchant seaman, for whom a separate register was to be

kept. However, at the time of the Registration, no requirement for such a mercantile marine register had been identified, and merchant seamen were, in the event, included in the National Register. The information collected on each individual was kept to the bare minimum (as the exercise was not intended to serve any statistical function) and referred only to sex, age, marital status and occupation, together with some additional details, where appropriate, regarding membership of Naval, Military or Air Force Reserves, Auxiliary Forces, or Civil Defence Services.

2.2.20 Some of the statistics for Northern Ireland from the 1939 enumeration were published in 1944 in a volume covering the UK and the Isle of Man, but they were not comparable with previous censuses, since the enumeration itself was primarily an administrative exercise used for issuing National Identity Cards, and as the basis for a variety of other war-time measures such as rationing and the deployment of labour in the essential industries and services.

2.3 The post-war censuses: 1951-1971

1951

2.3.1 The first post-war census - the first in which the census in Northern Ireland took place at the same time as the rest of the United Kingdom - was no exception to the general rule that more suggestions for questions to be included are received by the Census Office than can possibly be contained on the questionnaire. Nevertheless, the new Registrar General for Northern Ireland, L C Mulligan, tried to accommodate as many demands for new information as possible, and consequently the topic content for the 1951 Census was far wider in scope than any of its predecessors. The fact that there had been an interval of 14 years since the previous Northern Ireland census (no mid-term census was even contemplated for 1946), during which time there had been significant legislative and social changes, no doubt justified a larger enquiry.

2.3.2 Mulligan agreed with his counterparts in England and Wales and Scotland (George North and Edmund Hogan respectively) that the content of the census in Northern Ireland should be broadly the same as in Great Britain. Thus, questions on *age, marital status, relation to head of household, usual residence, birthplace, nationality, number of rooms, occupation and industry* were similar throughout the UK. The main omissions in Northern Ireland were the fertility-related questions on date of marriage and number of children born in marriage for women aged under 50, and the questions on age at which full-time education ceased and employers' address, and the enquiry into the exclusive or shared use household amenities such as piped water. On the other hand the Northern Ireland census form still kept the traditional voluntary question about religion and included also a new question on length of residence for persons born outside Northern Ireland.

2.3.3 Though representations were made to retain the 1926 question on infirmities, Mulligan decided to accept the view widely held by research bodies that it was no longer possible to use the census to collect accurate and consistent information about physical and mental conditions. The same conclusion had been reached in England and Wales some thirty years earlier, when the question was dropped after the 1911 Census. Indeed as early as the 1881 Census doubts were being expressed by William Ogle, the Superintendent of Statistics at the General Register Office in London about the reliability of the information recorded in the returns.

2.3.4 Today, however, there is an increasing demand for the sort of information that only questions on disability can provide, and the problem of dementia for example is certainly an issue of particular current national interest. But it remains as challenging as it was in Ogle's day to include, on a self-completion form, questions on disability which yield relevant and accurate statistics.

2.3.5 In his *General Report*, Mulligan recorded no significant change in the field operation from the approach adopted in the previous census, and members of the Royal Ulster Constabulary acted once again as Enumerators. However, the publicity campaign for raising public awareness of the census was more extensive than any yet. It had, of course, been long realised that a successful enumeration is entirely dependent on the ready cooperation of the public. As Mulligan acknowledged

*"The standard attained in the tabulations cannot rise above the standard set out in the returns, and this in turn depends on the extent to which people have been informed about the benefits accruing from a census."*¹⁴

2.3.6 Consequently, not only was the census given wide publicity on the national and local press, but there was also a flow of articles in weekly and other periodicals. The BBC also made a substantial contribution in ensuring that the

public was informed and receptive, and as many as twenty radio features, totalling over three and a half hours of air time, were broadcast covering all three stations - the Home Service, and the Light and Third Programmes - including the popular *Woman's Hour*. A four and a half minute slot on *Radio Newsreel* was broadcast on Census night.

2.3.7 Neither were cinema audiences neglected. When not watching the latest blockbuster – *Abbott and Costello meet the Invisible Man* – they were shown special newsreel features interspaced with a cartoon produced by the Central Office for Information.

1961

2.3.8 For the 1961 Census there was much closer collaboration between the Northern Ireland, England and Wales, and Scotland Census Offices. Mulligan decided that, subject to the modifications necessary to meet local requirements and the needs of the Northern Ireland government departments and other users, the topic content should be harmonised with Great Britain so as to ensure a high degree of comparability across the UK as far as possible.

2.3.9 Consequently the list of questions included in the 1961 Census was considerably wider in scope than any of its predecessors. All those asked in 1951 were repeated, although in some cases there were slight changes in the wording and application. Thus the questions on *sex, age, marital status, relationship to the head of the household, usual address, birthplace, nationality, occupation, industry and religion* were similar to those in 1951, except that the age qualification for the marital status and occupation and industry enquiries reverted to 16 or over to be consistent with Great Britain and with the censuses in Northern Ireland prior to 1951 (when the questions were asked of those aged 14 or over and 15 or over respectively).

2.3.10 There were also new questions, in line with those being included in Great Britain, on

- *scientific and technological qualifications,*

included at the request of the Ministry for Science on the advice of the Advisory Council on Scientific Policy, in order to establish, amidst concerns about Britain's brain drain, the extent and location of the country's scientific manpower, and for whom special analyses were produced;

- *length of stay at a person's usual address* if they had lived there more than one year, or *previous address* if less than one year, responses to which, when combined with other data, provided information about the extent of internal migration and the characteristics of such migrants;
- the *fertility of married women*, included at the recommendation of the Conference of European Statisticians and at the request of the Department of Health and Local Government as a key input into the study of genetics;
- *age at which full-time education ceased* in order to provide a general measure of level of educational attainment; and
- *tenure of accommodation* and the extent to which *piped water, cooking and toilet facilities* were available, in order to investigate the extent and characteristics of private renting and council housing for the purposes of informing housing and town planning policy particularly in Belfast.

2.3.11 Additional information, recorded on the form by the Enumerator, indicated the number of rooms occupied by the household and the type of accommodation, the total number of households occupying the premises, and whether the building was wholly or only partially residential.

2.3.12 In fact, the only information collected in England and Wales which was not asked in Northern Ireland was the person's workplace address and a selection of key questions which were asked in respect of those persons usually resident at the address but who were temporarily absent on Census night.

2.3.13 The field operation was carried out, as was now customary, by members of the RUC,

despite the concerns of a number of Northern Ireland MPs - expressed during the debates on the Census Bill - that it was no longer appropriate or practicable for them to do so. The Northern Ireland Minister of Finance, Terence O'Neill, emphasised the experience that the RUC had acquired in performing the Enumerator duties and the benefits that this would have to the overall quality of the census. However, in his *General Report* of the census in 1964, the new Registrar General Dr A T Park noted that insufficient numbers of the RUC could be released at the time of the Census in the border areas (in April) and that enumeration duties had to be undertaken by other appointed persons¹⁵.

2.3.14 Nevertheless, with a common date fixed throughout the UK, the census in Northern Ireland benefited from the wider more general publicity in the UK national press and other media outlets. The importance of engaging the public and encouraging them to participate in the census was increasingly being recognised, and a variety of media channels (the daily press, journals and magazines, broadcasting, booklets and posters) was used to demonstrate the national importance of the event. Advantage was taken, in particular, of the increased access to television by referring to the census in both news items and in popular programmes on both the BBC and commercial TV channels, and by featuring short light-hearted fillers between programmes during the run up to the Census.

2.3.15 The local activities in Northern Ireland included the issue of some 4,000 census posters for display at schools, libraries, post offices, police stations, transport depots and other public buildings as well as at large industrial and commercial business establishments. Almost 8,000 copies of an explanatory leaflet, *The Census of 1961*, were distributed to a wide audience including clergymen and such organisations as chambers of commerce and young farmers' clubs.

2.3.16 Data processing, in the main, developed the punched card technology used in 1951 but with a much larger 80-column card. But for the

preparation of the final reports, the Registrar General was able to use the services of an ICT 1500 electronic computer, operated under secure conditions, by International Computers and Tabulators Ltd at its London-based offices.

2.3.17 The use of a computer made it practicable for the first time to have machine-readable output consisting of the precise figures required for publication, tabulated in the way that was required by users. For example, the computer was programmed to derive automatically social class and socio-economic group (SEG), on the basis of a standard cross-classification of occupation and employment status; and for the purposes of the Fertility Report, where a husband and wife were enumerated on the same return, the computer automatically associated their records and recorded the husband's SEG code on the wife's record. In addition to this, the total volume of results could be both increased and reproduced for different output geographies, particularly for small areas if required.

2.3.18 Equally important was the fact that the quality of the results could now be better assured. The census input records inevitably contained errors originating both from respondents and as the result of the coding and keying of data. Previously, of course, some respondent errors could be removed by clerical processing, but often the tables produced by the punched card tabulation system contained inconsistencies which could not be detected by inspection alone. In 1951 and earlier censuses, the subsequent tabulations had then to be adjusted, in a somewhat time-consuming process, so that the marginal totals were consistent throughout.

Figure 4 The ICT 1500 computer



2.3.19 But despite this technology the speed of producing the published reports was not greatly improved; the final county report (for Tyrone) appeared in July 1964, compared with the final county report from the 1951 Census (for Fermanagh) in September 1954.

Cost of the census

2.3.20 At a time, now, when the ever-increasing cost of the census is a matter of serious public and political concern, it is perhaps interesting to note that such increases seem almost always to have been the case. The total cost that Park estimated for the 1961 Census was £105,732, being 1s.6d per head of population, and therefore equivalent, in new money, to about 3p per head per year over the entire period of the census operation. But this was more than double the total cost for 1951 Census.

2.3.21 The longer than usual gap of 14 years since the previous census and the much reduced size of the whole operation in 1937 means that costs then (amounting to just £9,953) are not comparable. A more realistic comparison should, perhaps made with the cost of the 1926 Census, at £18,126.

2.3.22 Generally though, the costs of the field operation in these early Northern Ireland censuses were artificially low compared with the situation in Great Britain since, other than providing for travelling expenses for the Enumerators, the Registrar General was able to acquire the use of the RUC as part of their constabulary duties.

1966: the only mid-term census

2.3.23 The legislation providing for the census in Great Britain had, since its introduction in 1920, always allowed for a mid-term census, should the need arise. However, despite repeated calls from the Royal Statistical Society and others to do so, until 1966 no Registrar General had chosen to exercise the option to conduct a mid-term census relying instead on the decennial results to meet the needs of users for population data throughout each decade. But a rapidly changing socio-demographic profile in the 1960s - with increasing birth and

migration rates, greater mobility and changing employment patterns - together with the need for information that would be more up-to-date than that being provided by the delayed results from the 1961 Census in Great Britain (the General Report for example, was not published until 1968), prompted the decision around the end of 1963, to undertake, for the first time, a mid-decade census.

2.3.24 Thus censuses were taken throughout Great Britain on 17 April 1966. To reduce costs, however, it was proposed that, for the first time, the census should be carried out on a 10 per cent sample basis.

2.3.25 The case for a census in Northern Ireland was equally as strong. However, the Northern Ireland Census was to be a full enumeration. The Bill for the Census was debated in Stormont and concerns were expressed that a 10 per cent sample would seriously limit the use of data since such samples, with their inherent errors, would prevent figures for areas of less than 50,000 population being published. The other big difference in Northern Ireland was that the date of the Census was deferred until 9 October.

2.3.26 The proximity of the 1966 General Election (called by Harold Wilson on the 31 March) was a matter of some concern to all three Registrars General. But because the additional cost of postponement in Great Britain (estimated to be as much as £350,000) was significant compared with the total estimated cost of the Census itself (£2 million), the decision was made to stick with the original date. In Northern Ireland, however, there were also concerns to avoid the risk of any disruption due to the parades and activities to commemorate the fiftieth anniversary of the Easter Rising on 24 April 1916. Both these factors together led to the postponement of the Census in Northern Ireland from 17 April to 9 October.

2.3.27 The 1966 Census questionnaire was much shorter than the 1961 form and omitted the individual person questions on birthplace, religion, fertility, education and occupation (though the question on industry was retained to reflect

the changing pattern of employment in a number of new industries being established in Northern Ireland). Nor were the questions on housing tenure and amenities included as it was argued that these would have changed very little in the five years since the previous census. However, new questions on address one year and five years before the census and on workplace and transport to work were introduced to gain a better understanding of migration and travel to work flows.

2.3.28 The proposals were generally welcomed by the Northern Ireland parliament when the Census Bill was being debated, but concerns were expressed, particularly by David Bleakey, the Northern Ireland Labour Party MP for Belfast Victoria, that the Census would not address the issue of emigration, particularly of people qualified in the teaching and medical professions and in other skilled trades. In response, the Minister of Finance, Ivan Neill, noted regretfully that, though the government was looking for ways and means of getting a fuller and more up-to-date picture of the trend in migration:

“... the airport authorities will not cooperate with us in the matter of taking the census of persons leaving the country to remain overseas, and until we find some way of doing the job with the voluntary co-operation of those who are leaving ... the picture will remain incomplete”

2.3.29 In most other aspects the 1966 Census operation followed very much the pattern of its predecessors, and the new Registrar General, W G Nichol noted this in his *General Report*.

1971: new legislation – more questions

2.3.30 And nor did the 1971 Census throw up anything new or controversial for Northern Ireland's first female Registrar General Miss S D J Henderson to report in depth. In fact for the first time since 1937 no general report was produced. And this was perhaps surprising, since a significant change in the legislative framework for the census had taken place in 1969 with the introduction of a permanent statute (the Census Act (Northern Ireland) 1969), along broadly similar

lines to the 1920 Census Act of Great Britain. This allowed, particularly in an age of rapid change and development, for a census to be carried out by the Registrar General every five years. Now all that would be required for a particular census to take place in Northern Ireland, as elsewhere in the UK, would be secondary legislation in the form of an Order and Regulations, prescribing the information to be collected and the arrangements for carrying out the enumeration respectively.

2.3.31 In taking the second reading of the Northern Ireland Census Bill on 14 May 1969, the Minister of Finance, Herbert Kirk, simply moved the proposal for the provisions of the legislation in much the same way that the Rt Hon Dr Christopher Addison, the Minister for Health had done at Westminster in 1920, seemingly wishing to play down the significant changes that the Bill was introducing. Only F V Simpson, Northern Ireland Labour Party MP for Belfast Oldpark, voiced a concern over the time it took for the reports to be published, and asked

“In this age of computerisation would it not be possible to produce a census report in a very short time so that it would not be out of date by the time it is made available to the public, which has been the case in the past? With a new Registrar General we expect great things.”

2.3.32 However, the complexity of the task was to mean that the Summary Tables for the 1971 Census were only published in 1975.

2.3.33 When the subsequent Northern Ireland Census Order was approved, a number of new questions found their way on the census form. With the aim of maintaining as much harmony as possible with rest of the UK, the new Registrar General, J Y Malley, included, as part of the fertility survey, a question on the *dates of birth of all children born alive* to women aged under 60 – a move aimed at providing data to examine trends in family size and spacing.

2.3.34 A new question was also included on *occupation a year before the census*, to provide data on occupational mobility. But no question was

included on part-time or full-time work; instead a question on hours worked was asked of all persons in employment.

2.3.35 To extend the scope of the information collected on educational qualifications in order to inform planning in the field of higher education and the deployment of highly qualified manpower, a new question was asked on the *possession of certain specified qualifications*, broadly equivalent to A level or Higher grade of the Scottish Certificate of Education. But the 1961 question on age at which full-time education ceased was dropped.

2.3.36 Following difficulties experienced in 1966 in enumerating households in converted/shared accommodation, an attempt was made to identify structurally separate dwellings by asking *if the household shared any room, hall, passage or staircase with another*. And questions on *car availability, garaging and means of transport to work* (for the largest part, by distance, of the normal journey to the place of primary employment) were included because of the concerns about the need to monitor and control traffic in towns following the *Buchanan Report* - a major report on UK Transport Policy published in 1963¹⁶.

2.3.37 A further change brought about by the regulations emanating from the 1969 Census Act was the role of the Census Enumerator. The tradition of utilising members of the local constabulary forces, stretching back to 1841, was broken, and a new temporary census field management structure was created, with Census Supervisors appointed and trained to recruit Census Officers and to take control of the field operations locally and to recruit, in turn, their own Enumerators. As a consequence the direct field costs of the census in Northern Ireland increased considerably.

2.4 The modern census: 1981-2001

2.4.1 As we progress to more recent censuses their historical interest naturally diminishes but not so the significance of the innovations they present. With the authority and basic format of the census now well-established, under the provisions of the 1969 Act, key developments in census taking in Northern Ireland focused on improving and assuring the coverage and quality of the statistical results. There was also a need, despite the growth in users' requirements for information, to keep the demands made upon the public within bounds by making the form as easy as possible to complete. These increased demands, and the increasingly rapid changes in the social and technical environments meant that a number of new features have been introduced.

1981

2.4.2 After the 1979 General Election the UK Government under Margaret Thatcher sought to reduce the content of the 1981 Census by omitting the proposed questions on *ethnic group*, *school qualifications*, *availability of car*, and *hours worked*. In contrast the Registrar General for Northern Ireland E Boston made proposals for the Northern Ireland census which escaped relatively unscathed. However, the content of Northern Ireland's second census conducted under the 1969 Act differed from the 1971 Census.

2.4.3 The question on *tenure of accommodation* was expanded to include response categories to distinguish between renting from a public authority and a housing association or charitable trust; the enquiry into household amenities now covered *domestic sewage disposal*, *central heating*, *type of fuel used for heating*, and *type of heating insulation* (none of which were included elsewhere in the UK) at the expense of the previous questions on kitchen cookers and sinks, and the supply of hot water; the 1971 question on the garaging of cars was also dropped.

2.4.4 As throughout the rest of the UK, a question on *whereabouts on Census night* was now included in Northern Ireland (in order to collect information on absent usual residents), and the question on *journey to work* again adopted the mode of transport categories asked in Great Britain, but added a space for the respondent to record the *start time of the journey*. But the enquiries into 5-year migration, school qualifications, apprenticeships, occupation one year before the census, and hours worked were omitted.

2.4.5 As in 1971, a large number of part-time field staff were recruited to undertake the enumeration activities which included the delivery and the collection of forms to households. At that time the census was conducted in particularly difficult circumstances amidst acute political tension during the second Maze Prison hunger strike. A campaign of non-cooperation, which included the public burning of census forms was conducted in some areas. Tragically, a female Enumerator, Mrs Joanne Mathers, was shot dead on the doorstep of a house while she was collecting returns. Arising from this, special arrangements were put in place, most notably the public were asked to co-operate by sending in their completed forms by post. The response from the public was excellent but the enumerated count still understated the actual population.

2.4.6 The *Summary Report*, published in 1983 under the pen of the new Registrar General R McMurray, reported an enumerated population of 1.49 million and an adjusted Census day population of 1.51 million, implying that 1.3 per cent of the population were not among those enumerated¹⁷. However, a number of academics and official statisticians then examined the extent of estimated non-response, and compared the Census returns with other sources such as child benefit data, the Census of Employment, and derived variables such as implied fertility rates. This resulted in a range of estimates of the extent of the under-enumeration. The accepted mid-year estimate for 1981 (as currently adopted by NISRA)

is 1.54 million suggesting a level of non-response in the Census in Northern Ireland of the order of 3.6 per cent.

1991

2.4.7 The list of questions asked in the 1991 census was no shorter. Indeed all the topics included on the 1981 Census form were repeated - and some more.

2.4.8 A question on *limiting long-term illness* was included at the request of the Department of Health and local authorities to provide both a means of helping to measure, generally, the need for health and personal social services, and, more specifically, to help improve the formulae for allocating central government funds to the health service. After a gap of 80 years since the last health-related question had been included in the 1911 Census, it was important that, notwithstanding the strong demand for information, a viable and acceptable question should be devised. Consequently, thorough tests of two questions - one on long-term illness and the other on short-term illness were carried out by the Registrar General for England and Wales. The results from the long-term question correlated well with the use of health services, and data users were confident that the results could be put to practical use.

2.4.9 The *term-time address* of students was collected so that students could be allocated to area of usual residence as defined in the annual mid-year population estimates. The question on *hours worked*, dropped from the census in 1981, was reinstated. And for the first time, an attempt was made to collect information from wholly absent households, albeit on a voluntary basis, by asking householders who were away from home on Census night to complete a form on their return.

2.4.10 A question on *Irish language* was re-introduced for the first time since partition, so that similar questions on Celtic languages were now included in Wales, Scotland and Northern Ireland. Furthermore, the format of three of the GB Census questions were modified in Northern

Ireland in order to meet specific user requirements for local information: an extra category of '*unpaid work in a family business including a shop or farm*' was added to the *economic activity* question; and the *education* question ascertained levels of educational achievement in specific fields of study.

Samples of anonymised records and the need for confidentiality

2.4.11 A further innovation in the 1991 Census was the production of microdata that was made available to users in the form of two Samples of Anonymised Records (SARs) covering the whole of the UK. These were commissioned by the Economic and Social Research Council.

2.4.12 The decision to issue these samples was only taken (a) after the three Registrars General had been assured that the measures taken to protect the data and to prevent identification of individual persons and households were sufficient, and (b) after legal advice had been given about the authority of the Registrars General to publish such samples as abstracts under the provisions of the Census Acts. The advent of computerised processing and tabulation production had demanded a whole new interpretation of the wording of the 1920 and 1969 Acts, and it was important to have this legally defined.

2.4.13 The SARs thus represented a major milestone in census processing on a par with the advances in outputs made possible by the introduction of Hollerith technology in 1926 and the computer in 1961.

2.4.14 Maintaining the confidentiality aspects of the SARs was always a key factor in their design and dissemination. Indeed, all three UK Census Offices have always regarded the confidentiality and security of the Census to be a matter of the gravest importance, and went to even greater lengths this time to assure Parliament and the public alike about the confidentiality of the information recorded and the security of the data processing systems. This assurance included, as was now the usual practice, commissioning an independent review of the computing arrangements. The Data

Protection Registrar had expressed support for such a review, and following a competitive tender, the British Computer Society (BCS) was awarded the contract to review the security arrangements to protect against unauthorised access to personal data for all activities from the receipt of the forms in the processing sites, through all the processing stages, to the subsequent removal and transfer of the forms to permanent storage.

2.4.15 In its main findings the BCS reported that the Census Offices' arrangements were

*"... fully in keeping with the very high standards of confidentiality required, and that the plans and intentions current at the time were consistent with that standard."*¹⁸

2.4.16 But even before the 1991 Census was taken, the issue of confidentiality was brought to a head requiring new legislation to be hurriedly drafted. Two years before, parts of the 1911 Official Secrets Act were repealed, including, in particular, section 2 on which the Census Offices had relied until then to safeguard personal information after the census had been taken.

2.4.17 A new Act was therefore required to strengthen the confidentiality provision of the Northern Ireland and GB Census Acts. There was, fortunately, unanimous support for the measure – and the resulting Census (Confidentiality) Act 1991, together with an equivalent Order in Northern Ireland, was passed only days before the Census. It provided for an offence of unlawful disclosure of personal census information, and extended the previous confidentiality provisions to include post-enumeration census-related surveys and to encompass any person employed for the purpose of taking the census.



2001 Census Logo

2001: new challenges, new solutions

2.4.18 Under the supervision of the new and current Registrar General, Dr T N Caven, the broad strategy for the first census of the new century was to base it on those successful methods used for the 1991 Census, but to strengthen the operation by the introduction of some innovatory measures aimed at meeting the ever changing needs of users, the societal environment and the opportunities of utilising the rapidly developing technologies offered by outside service providers.

2.4.19 A question on *relationship to each member of the household* (rather than just to the head of household) was included to provide more detailed information on household structure to assist in planning housing needs for multiple families within households.

2.4.20 Recognising the increasing amount of informal (and often unrecognised) help given to people with ill health, the Census also included a new question on the *provision of unpaid personal care* aimed at improving the understanding of local variations in the need for care and the pressure on social services in an attempt to target resources more effectively. This was linked to another new question on *general health*, which, in addition to the question on long-term illness, aimed to allow people to assess their own health over the preceding 12 months as either 'Good', 'Fairly good', or 'Not good'.

2.4.21 Questions on the *lowest floor level of accommodation* and on the *number of floor levels in the accommodation* were included to provide a measure of the numbers of people and households living in potentially unsuitable accommodation, such as households with young children, or elderly

residents, or people with long-term illness living several floors above the ground.

2.4.22 While a specific question on religion was being included throughout the rest of the UK for the first time (following a necessary change to the 1920 Census Act), Northern Ireland’s long-standing enquiry was expanded to include a question on *religion in which the person was brought up* for those who indicated in the main question that they had no religion; this information would assist in the monitoring of policies on equality issues.

Figure 5 The 2001 Census question on ethnic group in Northern Ireland

10 To which of these ethnic groups do you consider you belong?

✓ one box only.

White

Chinese

Irish Traveller

Indian

Pakistani

Bangladeshi

Black Caribbean

Black African

Black Other

Mixed ethnic group, write in

Any other ethnic group, write in

2.4.23 But the most significant change to the Northern Ireland census form was the inclusion of a question on *ethnicity*. Such a question had, after many years of research and testing been included in the census in Great Britain for the first time in 1991. The GB question provided baseline figures against which the Government was able to monitor possible racial disadvantage and deprivation within minority groups.

2.4.24 The question was not at that time included in the census in Northern Ireland, where user consultation had not indicated a sufficiently strong enough case for such information. But its undoubted success meant that its extension to Northern Ireland in 2001 was broadly welcomed. The classification of ethnic groups used in the Census is now widely regarded as a standard for inter-censal surveys and ethnic monitoring.

2.4.25 A key development in the field operation was the use of postal services for the first time as the primary means of collecting the completed forms from households. This was a significant change in data collection methodology, and its implementation allowed a significant reduction to be made in the field force necessary to carry out the 2001 Census. The aim was to free up resources in order to focus on those areas known to be difficult to enumerate, with the aim of minimising the differential undercount experienced across the country ten years earlier. But it was also to play a key role in enabling the enumeration to be completed despite the catastrophic outbreak of foot and mouth disease affecting farms and the rural community not only in Northern Ireland but across the whole of the UK generally, and which threatened to disrupt the entire census operation.

2.4.26 The foot and mouth outbreak was sufficiently serious for the government to warn against travelling in rural areas, and for an early General Election, originally intended for 3 May (just five days after the scheduled date for the Census), to be postponed. Nevertheless, the Census went ahead as planned, though modified enumeration procedures had to be quickly developed to conduct the field work during the emergency. Close liaison was maintained with the Department for Agriculture and Rural Development and the several farming agencies to ensure that the census field work would not compromise the work being done to contain the outbreak.

Figure 6 Foot and Mouth 2001



2.4.27 Special methods of delivery and collection were quickly arranged to ensure as complete a coverage as possible in the areas most affected. Additional instructions were issued to field staff on the revised arrangements for delivery and collection of census forms where access to premises was not possible or advisable.

2.4.28 These special arrangements worked well, and there was no evidence that response was seriously affected by the outbreak. Very few incidents of alleged breaches of the restrictions were reported, and even these turned out to be largely unfounded. Furthermore, since the Royal Mail had already established procedures for handling mail in such emergencies, the decision to adopt a post back methodology can be seen, in hindsight, to be serendipitous.

The 'one number' census

2.4.29 Every effort is made to ensure everyone is counted in a Census. However, no Census is perfect and inevitably some people are missed. As in previous censuses, the numbers from the 1991 Census were not adjusted for under-enumeration, but the mid-year population estimates series were. Differences in the published population statistics for 1991, some 1.578 million enumerated in the Census and 1.607 million in the mid-year estimate, were mainly due to the final estimate of the census under-enumeration.

2.4.30 But during the extensive consultation carried out prior to the 2001 Census, users of census data were adamant that they wanted

one definitive set of estimates from the Census which were adjusted for the estimated under-enumeration, such that Census statistics were consistent with the mid-year estimate (MYE) series. The so called 'One Number Census' (ONC) was the innovative response to these problems, though in many ways it was a natural progression from the advances made in previous censuses: the introduction of automatic editing and imputation of missing variables in 1981; then the imputation of absent households in the 1991 Census

2.4.31 The key to the ONC was comparing the Census with a second large independent survey, the Census Coverage Survey (CCS), that was carried out three and half weeks after Census Day, and then matching the records with those from the Census itself using a combination of automated and clerical processes to identify people and households missed by the Census but found by the CCS, and vice versa.

2.4.32 A new and ground-breaking methodology was successfully implemented and for the first time all the census results were successfully adjusted for measured under-enumeration. It was estimated that 95 per cent of the population were covered in the Northern Ireland 2001 completed census returns. A crude adjustment to the figures based on the information, collected separately by Enumerators, on occupied households that did not make a return might have increased coverage to around 98 per cent. It is clear that the ONC enabled a more accurate population count giving a more representative picture of the characteristics of the population.

Electronic outputs

2.4.33 The 2001 Census was also the first which based the planning of outputs on a strategy that was agreed at the outset and set out as government policy. It was based on the simple premise that

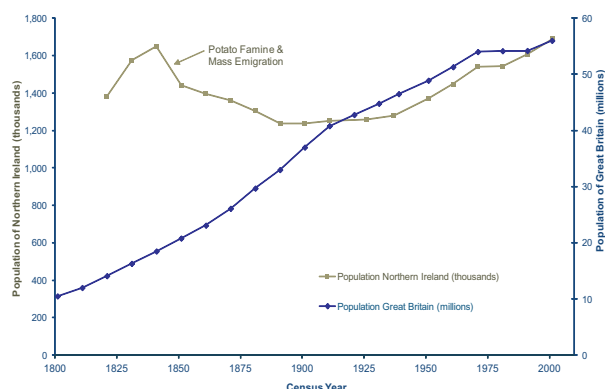
"the investment in the Census was only justified if the results are made available speedily and in a clear and useable form".¹⁹

2.4.34 The key UK criterion to meet user' needs, was that outputs should be comprehensive and comparable between areas. At the same time NISRA's own key criteria were that they should: be produced speedily and efficiently, be user-friendly, accessible and intuitive, and should minimise the risk of disclosing information about identifiable individuals.

2.4.35 As a result, and in accordance with government's policy on e-government, the bulk of the outputs were disseminated by NISRA through on-line data systems such as the NISRA website and the Northern Ireland Neighbourhood Information Service or NINIS www.ninis2.nisra.gov.uk/ninis. Hardcopy reports were still produced for laying before the Assembly and ease of reference, however the dissemination of output at lower geographical levels was exclusively carried out through electronic media (CD products and via the Internet).

2.4.36 By 2001, and after almost two hundred years of census taking, the population of Northern Ireland had increased from 1.380 million to a record level of 1.685 million, though not before falling to a low of 1.236 million in 1891. This profile of change is in stark contrast with the pattern of continuous, though not always steady, growth in Great Britain, where population totals increased over 5½ times in the same period (Figure 7).

Figure 7 Populations of Northern Ireland (1821-2001) and Great Britain (1801-2001)



2.5 The 2011 Census



2.5.1 At the time of the publication of this article, the 2011 Census was little more than a year and half ago and the bulk of the outputs are yet to come, and so this account – as

a history - effectively ends here. But perhaps we may conclude by commenting on how the lessons learned by the Census Offices from the several reviews and evaluations of the 2001 Census, together with changing social and legislative environments, helped drive the innovations and developments that were introduced into the 2011 Census carried out on 27 March last year.

2.5.2 The key issues raised in the reviews and evaluations of the 2001 Census covered the need to:

- develop a high quality and up-to-date address list to increase the efficiency of the delivery of census forms;
- develop field management and form-tracking systems to enable better central control of field processes and activities;
- undertake more detailed and earlier engagement with stakeholders to ensure, for example, that the needs of the disabled community are taken into account;
- review whether or not the coverage survey design is sufficient to identify under-enumeration in the hardest-to-count areas;
- review the cost-benefit trade-offs in aiming to produce more timely outputs that are consistent and harmonised across the UK; and
- review the mechanisms to protect statistical confidentiality without eroding the utility of the data.

2.5.3 The subsequent design of Northern Ireland's 2011 Census introduced measures, methodologies and processes to respond to each of these as well as the need to reflect an ever more ageing, migrant and mobile population, and an increasingly less compliant society.

More questions

2.5.4 Not surprisingly, the 2011 Census introduced yet more new questions to reflect not only societal change generally and shifts in Government policy, but also the requirement to comply with new European legislation to provide the European Union with a set of census outputs that are harmonised not only within the UK but across all 27 Member States. But such questions were included only after extensive consultation, testing, assessment and a full justification for national purposes.

2.5.5 The previous long-standing census question on whether or not households have exclusive use of either a bath/shower and/or toilet amenities was no longer regarded as providing a sufficiently discriminative indicator in the allocation of resources for housing development and regeneration, and was now replaced with a question on the *type of central heating* available to provide a more useful indicator of basic housing standards. The information will be used to facilitate future research on fuel poverty and deprivation, and on renewable energy and energy efficiency.

2.5.6 In a similar manner, a question on *adaptations to accommodation for health conditions* was also asked to evaluate the issue of accessibility for many people, for example people with disabilities.

2.5.7 In addition to the enquiry into the knowledge of the Irish language, a similar question on *Ulster Scots* was introduced. And questions on *main language* and *knowledge/use of English* were included in order: to provide an indication of areas and communities where foreign language service provision is necessary; to better understand the diversity of the population; and, in particular, to assess the impact of English language ability on employment and other social inclusion indicators. The ability to include '*British/Irish Sign Language*' as a main language was introduced to respond to the particular needs of the deaf.

2.5.8 In total, four specific individual questions on health and care were included in the 2011

Census; most notably a new individual question on specific long-term health conditions (e.g. deafness, blindness etc.) was included.

2.5.9 Following the Civil Partnership Act 2004, the traditional question on *marital status* was expanded to include response categories for those with a civil partnership status or former status.

2.5.10 A number of new questions were introduced to help measure and analyse the pattern of international migration flows – a subject that, with European Union expansion in the intervening decade since the 2001 Census, has aroused considerable interest. These included:

- *country of previous usual residence and month and year of most recent entry into Northern Ireland* for those people who had lived outside Northern Ireland for a period of one year or more;
- *intended length of stay* for those who had arrived in the UK within a year of the census; and
- *citizenship* (as determined by asking a question on the country of passport held)

2.5.11 But in order to reduce the burden on the public, people who were visiting at an address on Census night (including overseas visitors) were required only to provide information on the basic demographic questions; in previous censuses, and particularly those before 1991 that were carried out on a person present (de facto) basis, such visitors had been required to complete a full questionnaire at the address where they were present. Full information on such visitors was, however, still collected at their place of usual residence on their return.

Post-out and the Census Address Register

2.5.12 A logical extension of the post-back methodology adopted to collect the completed census returns in 2001 was the employment of a postal service provider for the delivery of questionnaires. And so, following the successful trialling of post-out as a delivery mechanism for census forms in the 2007 Test, a decision was

made by Dr T N Caven, the Registrar General for Northern Ireland, to use the postal service as the prime means of form delivery.

2.5.13 The rationale for this strategy was that even with hand delivery in the 2001 Census, Enumerators failed to make doorstep contact with households at more than a third of addresses and resorted to delivering the form through the letter box. The use of the Royal Mail to perform this activity was seen as an opportunity to direct further field resources to those areas where a more focused approach to follow-up activities was necessary in order to improve response rates.

2.5.14 Clearly the prerequisite for this was the availability of a comprehensive, high quality address register. In the absence of a single authoritative domestic address register, NISRA worked with the Land and Property Services Agency to develop an address register that met Census requirements. Drawn from the Land and Property Services Agency POINTER address database that had been developed for Northern Ireland jointly with the Royal Mail and local district councils, the resulting register contained a list of addresses linked to higher level geographic areas for management, reporting and output purposes. This associated every address with an accurate positional reference, which was used during the planning of field operations, the printing of questionnaires and the production of outputs.

More outsourcing – more confidentiality

2.5.15 The use of the Royal Mail, now for the delivery as well as the collection of the census forms, was not the only example of the benefits gained by using specialist agencies in the Census. NISRA, working with the Office for National Statistics, started a major data processing procurement in September 2005, and, following an extensive evaluation a single supplier - Lockheed Martin UK - was selected in August 2008, in time for them to work on the 2009 Rehearsal.

2.5.16 The confidentiality and security arrangements in place to manage not only the outsourced contracts, but the traditional field

enumeration and all in-house activities at each site, were subject, as was now usual, to an Independent Information Assurance Review, which was reported to Parliament in February 2011 and which concluded that

“... the public can be reassured that the information they provide to the 2011 Census will be well protected and securely managed.”²⁰

The online census

2.5.17 But not all forms were posted back. One final, but very significant development in 2011 was the facility for people to complete their census form online. It had been estimated from international experience that up to 25 per cent of households might be prepared to provide their census information online. Accordingly, the Northern Ireland Census Office offered the option of making a census return via the internet for the first time.

2.5.18 But in planning for this, the actual take up of this channel was uncertain. Such a facility afforded the possibility of both encouraging response among particular sub-groups of the population who may otherwise be hard to reach, and of achieving some data processing cost savings. Furthermore, such an option provided an opportunity to assess the efficacy of collecting information in such a way for any future censuses and surveys.

2.5.19 The online questionnaire had the same questions as the paper form. A unique reference number was placed on each paper questionnaire which formed the basic security code for accessing and completing an online return. The address was also checked at the start of the completion process to confirm identification. A little disappointingly, perhaps, less than one in five returns were submitted in this way, but the reaction from those respondents who did so was generally very favourable.

2.5.20 If only this technology had been available to the Reverend James Whitelaw!

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Annex A - Dates of Census

1813
1821
1831
1841, June 6-7
1851, March 30-31
1961, April 7-8
1871, April 2-3
1881, April 3-4
1891, April 5-6
1901, March 31-April 1
1911, April 2-3
1926, April 18-19
1937, February 28 – March 1
1939, September 29 ¹
1951, April 8-9
1966, October 9-10
1971, April 25-26
1981, April 5-6
1991, April 21-22
2001, April 29
2011, March 27

NOTES

¹ War-Time Population Enumeration and not full Census

Annex B – Registrar Generals

B1 - Registrar Generals of Ireland

W Donnelly	1844-1876
WM Burke	1876-1879
TW Grimshaw	1879-1900
Sir R.E. Matheson	1900-1909
Sir W. Thompson	1909-1926

B2 - Registrar Generals of Northern Ireland

LA Bullwinkle	1922-1938
WA Carson	1938-1952
LC Mulligan	1952-1962
CF Darling	1962-1963
Dr AT Park	1963-1965
WG Nicholl	1965-1969
JY Malley	1969-1971
J Burns	1971-1974
Miss SDJ Henderson	1974-1976
JY Malley	1976-1978
EJA Boston	1978-1981
R McMurray	1981-1994
Dr TN Caven	1994-Date



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Appendices



Appendix 2: Population and vital events by Administrative Area, 2011

AREA	Estimated population at 30 June 2010	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	1,806,873	25,273	14.0	91	3.6	110	4.4	14,204	7.9	8,366	4.6
Belfast HSC Trust	334,820	4,840	14.5	14	2.9	17	3.5	3,230	9.6	1,535	4.6
Belfast	267,551	4,029	15.1	13	3.2	13	3.2	2,593	9.7	1,352	5.1
Castlereagh	67,269	811	12.1	1	1.2	4	4.9	637	9.5	183	2.7
Northern HSC Trust	460,364	6,048	13.1	14	2.3	26	4.3	3,622	7.9	2,139	4.6
Antrim	54,465	775	14.2	1	1.3	3	3.9	369	6.8	224	4.1
Ballymena	63,772	840	13.2	1	1.2	4	4.8	532	8.3	392	6.1
Ballymoney	30,787	393	12.8	-	-	3	7.6	230	7.5	121	3.9
Carrickfergus	40,065	438	10.9	-	-	2	4.6	357	8.9	275	6.9
Coleraine	56,672	673	11.9	3	4.5	4	5.9	505	8.9	279	4.9
Cookstown	37,118	558	15.0	2	3.6	4	7.2	234	6.3	192	5.2
Larne	31,617	349	11.0	1	2.9	1	2.9	264	8.3	140	4.4
Magherafelt	45,139	676	15.0	3	4.4	1	1.5	298	6.6	218	4.8
Moyle	16,992	212	12.5	-	-	1	4.7	159	9.4	95	5.6
Newtownabbey	83,737	1,134	13.5	3	2.6	3	2.6	674	8.0	203	2.4
South Eastern HSC Trust	348,301	4,595	13.2	20	4.4	21	4.6	2,836	8.1	1,498	4.3
Ards	78,300	898	11.5	6	6.7	6	6.7	661	8.4	219	2.8
Down	71,113	926	13.0	3	3.2	5	5.4	525	7.4	355	5.0
Lisburn	118,676	1,789	15.1	5	2.8	6	3.4	880	7.4	409	3.4
North Down	80,212	982	12.2	6	6.1	4	4.1	770	9.6	515	6.4
Southern HSC Trust	362,711	5,522	15.2	16	2.9	26	4.7	2,478	6.8	1,658	4.6
Armagh	60,071	935	15.6	1	1.1	4	4.3	439	7.3	294	4.9
Banbridge	48,438	677	14.0	3	3.0	5	7.4	327	6.8	175	3.6
Craigavon	94,767	1,463	15.4	5	3.4	7	4.8	663	7.0	338	3.6
Dungannon	58,550	894	15.3	-	-	3	3.4	406	6.9	299	5.1
Newry & Mourne	100,885	1,553	15.4	8	5.2	7	4.5	643	6.4	552	5.5
Western HSC Trust	300,677	4,268	14.2	27	6.3	20	4.7	2,038	6.8	1,536	5.1
Fermanagh	63,339	809	12.8	4	4.9	6	7.4	481	7.6	460	7.3
Limavady	33,924	489	14.4	3	6.1	1	2.0	211	6.2	153	4.5
Derry	109,886	1,666	15.2	11	6.6	5	3.0	744	6.8	527	4.8
Omagh	53,320	745	14.0	3	4.0	3	4.0	324	6.1	258	4.8
Strabane	40,208	559	13.9	6	10.7	5	8.9	278	6.9	138	3.4

Note: 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 Courts and Tribunals Service and include nullities of marriage.

Information on the number of 'Decree Nisis' is published by the Northern Ireland Courts and Tribunals 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.ons.gov.uk/ons/publications/all-releases.html?definition=tcm%3A77-29395>

Drug Related Deaths

A death is considered to be a drug related death if the underlying cause of death recorded on the death certificate is drug poisoning, drug abuse or drug dependence. These deaths can be identified solely through the International Classification of Diseases (ICD). The ICD9 and ICD10 codes used to define these deaths are listed in the table below.

ICD10 Underlying Cause Code	ICD9 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
X85	E962.0	Assault by drugs, medicaments and biological substances
Y10–Y14	E980.0–E980.5	Poisoning by drugs, medicaments and biological substances, undetermined intent

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 three years rates provided (**Figure 1.22**).

Significance of SMRs

The estimation of SMRs by LGD and Health and Social Care Trust 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.ons.gov.uk/ons/guide-method/classifications/archived-standard-classifications/soc-and-sec-archive/the-national-statistics-socio-economic-classification-origins-development-and-use.pdf>

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 are 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 1.2.

Northern Ireland Population Projections

Northern Ireland population projections based on the 2010 mid-year estimates were published in October 2011.

Base population: The projection was based on the Northern Ireland mid-2010 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, 2010-11, are based on the best estimates that could be made in September 2011 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 2010. In the long term rates of improvement in mortality rates are projected to be 1.2 per cent per annum.

Migration: It has been assumed that over the next six years around 4,000 more people will come to Northern Ireland to live than leave. Beyond this migration will be in balance with the same number of people coming here to live as leaving each year. These assumptions are based on recent trends in migration and do not attempt to predict the impact of government policies on, for example, migration and student fees.

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.gov.uk
lifetables@ons.gov.uk

Website: <http://www.ons.gov.uk/ons/index.html>

Geography Used for Data

Since the 2007 Registrar General Annual Report vital statistics by geography are defined using the Pointer address database. In Annual Reports prior to 2007 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.

Since the 2009 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.

Change to Health Geographies

As a result of changes to the Health Service in Northern Ireland which were introduced from the 1 April 2009, the four Health and Social Service Boards have been replaced by five new Health and Social Care Trusts. The Northern, Southern and Western Trusts mirror the equivalent Boards in the old system while the former Eastern Board has been split into the Belfast Trust (Belfast and Castlereagh Local Government Districts) and the South Eastern Trust (Ards, Down, Lisburn and North Down 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.gov.uk

Website: <http://www.ons.gov.uk/ons/index.html>

The National Records of Scotland (NRS) 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.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 Care Trusts, 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

Since 2006 NISRA has published an annual paper outlining analysis undertaken to develop measures of long-term international migration. The paper looks 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.

These 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

2011 Census

The 2011 Census was held on Sunday 27 March 2011. Census Office is currently processing and analysing the Census returns. The first results from the 2011 Census were published in summer 2012 and included a new estimate of the total number of people living in Northern Ireland, broken down by age and gender, along with estimates for local administrative areas. The Census Day population estimates will be followed by the publication of Key Statistics and Quick Statistics which will provide basic analyses of the Census questions, to be followed in turn by a series of reports (Local Characteristics tables, Detailed Characteristics tables and Detailed Theme tables) that will provide more detailed cross-tabular output.

Further information about all the planned outputs is set out in the Northern Ireland Census 2011 Output Prospectus –

<http://www.nisra.gov.uk/Census/2011CensusProposedOutputs.html>

The prospectus will be regularly updated as the release programme unfolds.

More information on the Census, and the 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.nisra.gov.uk/Census.html>**

Northern Ireland Neighbourhood Information Service (NINIS)

The Northern Ireland Neighbourhood Information Service (NINIS) is a dedicated website providing statistics for small areas across Northern Ireland and is available at **www.nisra.gov.uk/ninis**. The NINIS website contains datasets on a range of socio-economic themes at small-area statistical geographies. This includes data from the 2001 and 2011 Censuses and detailed aggregate statistical information from various administrative data systems held within Central Government and Non-Departmental Public Bodies.

The Northern Ireland Multiple Deprivation Measure 2010 results, showing the distribution of deprivation in NI at the small area level are also available on NINIS. Further information can be obtained from:

Neighbourhood Statistics
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.nisra.gov.uk/ninis>**

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 Health Card Registrations, Census and vital events. Data sources include health registrations data, birth and death registrations and additional demographic data derived from 2001.

Northern Ireland Mortality Study (NIMS)

The Northern Ireland Mortality Study (NIMS) is a large-scale data linkage study developed in 2006 that links mortality data from the General Register Office (GRO) to 2001 Census returns. Thus a companion dataset to the full NILS has been developed in which 100 per cent of the population as recorded in the 2001 Census is included. As with the NILS dataset, these anonymised data are held in a safe setting by the Northern Ireland Statistics and Research Agency (NISRA). Like the NILS dataset, the NIMS is designed and maintained for statistical and research uses only and is managed under various legislation including Census legislation.

Further information can be obtained from:

NILS Research Support Unit
Northern Ireland Statistics and Research Agency
McAuley House
2-14 Castle Street
BELFAST
BT1 1SA
Tel: 028 9082 8210
Fax: 028 9034 8134
Email: **nils-rsu@qub.ac.uk**
Website: **<http://www.nils-rsu.census.ac.uk>**

Divorces and Civil Partnership Dissolutions – Decree Nisi Information

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

Northern Ireland Courts and Tribunals Service
Laganside House
23-27 Oxford Street
Belfast
BT1 3LA

Tel: 028 9032 8594

Fax: 028 9072 8942

Website : <http://www.courtsni.gov.uk>

Appendix 5: Report on the work of the General Register Office for Northern Ireland (2011)

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 statutory duties relating to the production and publication of vital statistics. Demography and Methodology Branch 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 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 2011

Just over 49,300 vital events (births, re-registered births, deaths, marriages and civil partnerships) were registered in District Registration Offices and a corresponding number of certificates were issued. In addition, during 2011, GRONI:

- produced 63,000 certificates and of those, 6,650 priority certificates;
- had 2,500 visitors to the Public Search Room facility in Oxford House;
- verified 60 births, deaths and marriages for government departments;
- provided all death notifications to the Business Services Organisation, Electoral Office for Northern Ireland and Department for Work and Pensions; and
- dealt with 4,600 registration related cases.

Each year the Registrar General sets a number of key targets for GRONI. During 2011 these included:

- (i) Process 98 per cent of postal, online and telephone certificate applications within seven working days. The target was revised to five working days in October 2011.

Achieved: over 98 per cent were processed within target.

- (ii) Process 98 per cent of personal certificate applications within three working days.

Achieved: over 98 per cent were processed within target.

- (iii) Process 97 per cent of birth, death, marriage, civil partnership and adoption registration casework within 15 working days.

Achieved: Over 97 per cent were processed within 15 days.

Reform Developments in 2011

Each year a number of further measures are taken to improve customer services and value for money. In 2011 the main developments included:

- the introduction of the Civil Registration Act (Northern Ireland) 2011 to modernise the civil registration service;
- the digitisation of eight million paper-based records;
- the review of Death Certification processes in Northern Ireland; and
- the review of fees charged by GRONI

Each of these is described in turn below.

(i) Civil Registration Act (Northern Ireland) 2011

The Civil Registration Act (NI) 2011 received Royal Assent on 3 May 2011 and the following powers which did not require subordinate legislation came into operation from 3 October 2011:

- Registration of a birth, death or still-birth in any registration office in Northern Ireland;

- The period for registering a still-birth extended from 3 to 12 months; and
- An unmarried father is able to register as the father of a still-born child without the mother being present.

Subordinate legislation is currently being drafted that will enable the remainder of the powers in the Act to be introduced in late 2012.

(ii) Digitisation of Civil Registration Records

As part of the on-going Modernisation Programme, the General Register Office for Northern Ireland undertook a project aimed digitising approximately eight million historic paper based registrations. The project was successfully completed several months ahead of schedule and within budget and all civil registration records from 1845 have now been digitised and migrated to the existing Registration & Certificate Modernisation (RCM) system, facilitating electronic certificate production.

(iii) Review of Death Certification

GRONI continued its involvement in the Inter-Departmental Steering Group which was established in Northern Ireland to examine and review the existing death certification process in Northern Ireland in light of the Shipman Inquiry and the Luce Review.

Following a consultation exercise it was decided that the existing arrangements for death certification in Northern Ireland will be enhanced to strengthen and improve the current processes. These enhancements include:

- Adding the General Medical Council Number and the Health and Care Number to the existing Medical Certificate of Cause of Death (MCCD);
- Improving death certification training for registered medical practitioners and including this as part of the doctor appraisal;
- Establishing a set of system standards and improved guidance for death certification;
- Establishing an appropriate mechanism to facilitate review of implementation and

compliance with standards and guidance on certifying deaths across organisations;

- Building on learning from other established death reporting systems; and
- Health & Social Care Trusts undertaking an analysis of MCCD completion by hospital based doctors under current governance arrangements.

(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 not necessary.

(v) GRONI Genealogical (GeNI) Project

GRONI is currently engaged in the next stage of the modernisation programme by seeking to provide an online service to allow members of the public, genealogists etc. to search and retrieve images and indexes of civil registration records and order certified copies of entries upon payment of an appropriate fee. The project is currently scheduled to be completed in 2014.

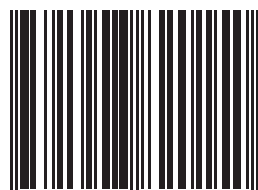


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