



The Use of Administrative Data in Population Estimates

October 2014



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, statistics, 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

Northern Ireland Statistics and Research Agency

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1.0 Background

A regular series of population estimates is one of the most critical statistical outputs produced by statistical agencies. Information on the number of usual residents in a country, broken down by age and gender and their spatial distribution underpins the delivery of virtually all public services and informs just about every aspect of society. Throughout the world, this has traditionally been addressed through the conduct of a regular Census (in the UK including Northern Ireland every 10 years, in Ireland every 5 years) to provide a very robust benchmark estimate of the population at the time of the Census. In the UK, this Census-year benchmark is updated annually through a cohort method that “ages on” the current population by one year and adjusts for births, deaths and migration. The resulting statistics are called ‘Mid-Year Estimates’, which are benchmarked by the decennial Census.

In recent years, administrative data sources have played an increasingly role in official statistics. In the area of demography, this has reached the extent whereby in some countries (such as the Netherlands and some Scandinavian countries) Censuses are no longer conducted and administrative data sources provide all the required information. In the UK, administrative sources play a leading role in the annual update of population estimates, though for example civil registration of vital events. However, a Census enumeration remains as the regular benchmark for population statistics. Administrative sources have been used to quality assure the Census, and played an enhanced role in the 2011 Census in Northern Ireland (further detail can be accessed [here](#)).

This paper describes research conducted by NISRA to examine the extent to which administrative data could be used to estimate the size of the usually resident population through the creation of an Administrative Data Population Estimate (ADPE), essentially supporting the Census enumeration with an ADPE. A prototype ADPE is derived and compared to other estimates of the population in terms of age, gender and spatial distribution. It is noted that this paper does not address the issue of other information traditionally collected through a Census such as ethnicity, language, labour market status and so forth.

2.0 Current Estimates of the Northern Ireland Population

2.1 Census estimates

One of the primary aims of the Census is to estimate the number of people who live in Northern Ireland (i.e. the number of usual residents) along with the number of occupied households.

The number of occupied households in Northern Ireland in 2011 was estimated at 703,300 and the usually resident population of Northern Ireland in 2011 was estimated at 1,810,900. More detailed information is available from the [Northern Ireland Neighbourhood Information System \(NINIS\)](#).

While every household and individual in Northern Ireland was legally obligated to participate in the Census, it was anticipated, as in previous Censuses, that some would be missed resulting in under-enumeration. Accordingly, NISRA's under-enumeration project was designed and developed to ensure that the Census estimates would be representative of the entire usually resident population in Northern Ireland. This comprised of two key components, namely:

- using high quality administrative data from the list of people on the Health Card Register. For addresses that were identified as occupied but that did not return a Census form the key demographic characteristics (e.g. age and gender) of those living at that address were gathered from the Health Card Register and added to the Census processing. [Further detail on this use of information from the Health Card Register is provided [here](#)].
- the re-enumeration of a specifically targeted stratified random sample of some 14,000 addresses across Northern Ireland, through a Census Coverage Survey, with the aim of estimating the key demographic characteristics of those who had been missed by the Census.

The number of occupied households in Northern Ireland was estimated at 703,300 with an associated 95 per cent confidence interval of +/- 2,800. Just under 94 per cent of these (659,200) responded to the Census by returning an adequately completed questionnaire. The key demographic characteristics for a further four per cent of occupied households (31,000) were captured through the high quality administrative data from the Health Card Register mentioned above, with the remaining two per cent (13,000) being derived through the Census coverage assessment and adjustment process.

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Similarly, the usually resident population of Northern Ireland was estimated at 1,810,900 with an associated 95 per cent confidence interval of +/- 11,000. Just under 92 per cent of usual residents (1,658,300) were included on an adequately completed questionnaire. The key demographic characteristics for a further four per cent of usual residents (67,700) were captured through the high quality administrative data from the Health Card Register mentioned above, with the remaining five per cent (84,900) being derived through the Census coverage assessment and adjustment process.

2.2 Mid-year population estimates

Mid-year population estimates (MYEs) are produced annually and relate to the population at 30 June each year. MYEs are created by starting at a Census base, ageing-on the current population, adding births, removing deaths and adjusting for migration. More details are available on the [demography section of the NISRA website](#). However migration is very difficult to accurately measure and accordingly MYEs have an increased error margin the further away they move from a Census. Therefore, after every Census the mid-year population estimate are re-based to take account of the more accurate recent Census benchmark.

The 2011 MYE (1,814,300) differs slightly from the 2011 Census Day population estimate (1,810,900) – a difference of 3,400 - primarily reflecting demographic change in the three months between Census Day (27 March) and the MYE reference date (30 June).

Prior to the results of the 2011 Census being available, a 2011 Mid-Year Estimate (rolled forward the 2001 Census benchmark) was published as 1,806,900. Following the publication of the 2011 Census results, the 2011 Mid-Year Estimate (based on the 2011 Census) was re-estimated as 1,814,300. This upward revision of 7,400 primarily reflects the difficulty inherent in tracking net migration over the decade, although it will also involve measurement error in the Census itself. While the revision is reassuringly small (representing about 0.4 per cent of the population), the relative errors for some sub-groups of the population (for example by age group or spatial unit) will necessarily be higher.

Papers on the quality of the Mid-Year Estimates are available on the NISRSA Website:

http://www.nisra.gov.uk/archive/demography/population/midyear/historical/mye_report_2011.pdf

http://www.nisra.gov.uk/archive/demography/population/midyear/Stat_Report_Rebased_NI_2001_2011.pdf

2.3 Geographical breakdown

There is a user requirement for accurate annual population estimates (by age and gender) for a range of spatial areas within Northern Ireland. Accordingly, both the Census and Mid-Year Estimates are published for a range of geographical units including Small Areas, Super Output Areas, wards, Local Government Districts, Assembly Areas and so forth. The population estimates for these spatial units can be accessed through the NINIS website. The ability of a population estimate based solely on administrative data sources to produce regular robust statistics across a range of spatial units will be one aspect on which an ADPE would be assessed.

3.0 Creation of an Administrative Data Population Estimate (ADPE)

There are a large number of administrative data sources in Northern Ireland related to population. The sources used in this research are outlined in Annex A and only aggregated data has been used. Superior estimates could be produced through access to record-level data, but this is beyond the scope of this paper. The purpose of this paper is to demonstrate the potential for use of aggregated data from administrative sources.

From a statistical perspective, a major issue with administrative sources is that they measure what is required for the administrative purpose, and this is unlikely to match exactly with the statistical requirement. For example, registration with a GP for health care through the NHS clearly provides a potentially rich source data source with very high population coverage. However, there is no legal requirement to register with a GP and many people (such as young adults) may go for long periods without any contact with the NHS. Some of the issues around the administrative sources used in this research are outlined in Annex A.

The main sources used to create the prototype Administrative Data Population Estimate (ADPE) reported in this paper are the Active Health Card Registrations, births data and information on students from the Higher Education Statistics Agency (HESA).

3.1 Active patient data

The main source for the ADPE is the Active Health Card registrations data. Details are in the annex A. The number of people registered with a GP and currently actively using the Health Service is 1,788,000. It is known that this will be an undercount because there are some people who currently live in Northern Ireland but have no interaction with the Health Service. However this Active Health Card registrations count is very accurate for those over 40, is consistent with the Census and other sources such as the Department for Work and Pensions (DWP) benefits.

3.2 Young children

The births record provides the most accurate count of very young children in Northern Ireland. Births for 2010 and 2011 are used to estimate the 0 and 1 year olds for 2011.

3.3 Students

International definitions of the “usually resident” population place individuals where they spend most time within the year; accordingly students are enumerated at their term-time address in the Census. Many students are counted on the Health Card registrations at their family home address rather than their term-time address. Therefore it is necessary to make adjustments to ensure the student population is counted as defined on the Census– otherwise areas with known large student populations such as Belfast, Derry and Coleraine local government districts would have under-representation in the Administrative Data Population Estimate (ADPE). The HESA data holds information on the students’ home address and the term-time address and therefore can provide information on the net effect to the age group 17 – 30 of counting people at their term-time address.

Some top-line figures for individual sources are given below, prior to discussion of the creation of an ADPE. It is noted that the count of the number of people on the National Insurance Register is higher than the population count but there is no current activity flag within this dataset which could be used to reduce this over-count. Therefore the National Insurance Register data has not been used in the creation of the ADPE. An initial observation is that both of the two main administrative sources that potentially have near-full population coverage (the Health Card register and the National Insurance register) overstate the population, probably reflecting lags when removing people who have migrated.

Table 1 Population Counts (thousands)

Census Count (enumerated)	1,658.3	-8%
Active Patient (24 months)	1,786.2	-1%
Census Population estimate	1,810.9	
Health Card Register	1,893.0	+5%
People on National Insurance Register (based on data from HMRC/DSD/DWP)	1,952.7	+8%

4.0 Results

As outlined above, there is no one definitive administrative dataset that can accurately count the population so the Administrative Data Population Estimate is best created from a combination of sources. Further, there is no self-evident ‘right’ combination of sources. The ADPE reported below has been created by taking all the people on the active patient dataset, removing babies and replacing with numbers of births and making an adjustment for students at term-time address. The ADPE of the Northern Ireland population in March 2011 is 1,788,578. In the following sections, the ADPE for 2011 is compared with four alternative estimates, namely the published 2011 MYEs (bases respectively on the 2001 Census rolled forward, and the 2011 Census), the 2011 Census Count (that is, the number of people enumerated on Census returns) and the 2011 Census Estimate (that is, the estimated population on Census Day after various statistical adjustments).

Table 2: Population Totals (thousands)

	Persons		Males		Females	
	All Ages	% difference from Census Estimate	All Ages	% difference from Census Estimate	All Ages	% difference from Census Estimate
ADPE	1,788.6	-1.2%	871.0	-1.8%	917.6	-0.6%
Census Count	1,653.0	-8.7%	801.0	-9.7%	851.9	-7.8%
Census Estimate	1,810.9		887.3		923.5	
Mid-year population Estimates (2001 based)	1,806.9	-0.2%	888.5	0.1%	918.3	-0.6%
Mid-year population Estimates (2011 based)	1,814.3	0.2%	889.3	0.2%	925.0	0.2%

The ADPE is within two per cent of all persons and all ages, slightly better for females than for males, and closer to the Census Estimate than the Census Count in all areas.

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Chart 1: Comparison of age distribution of all persons in Northern Ireland

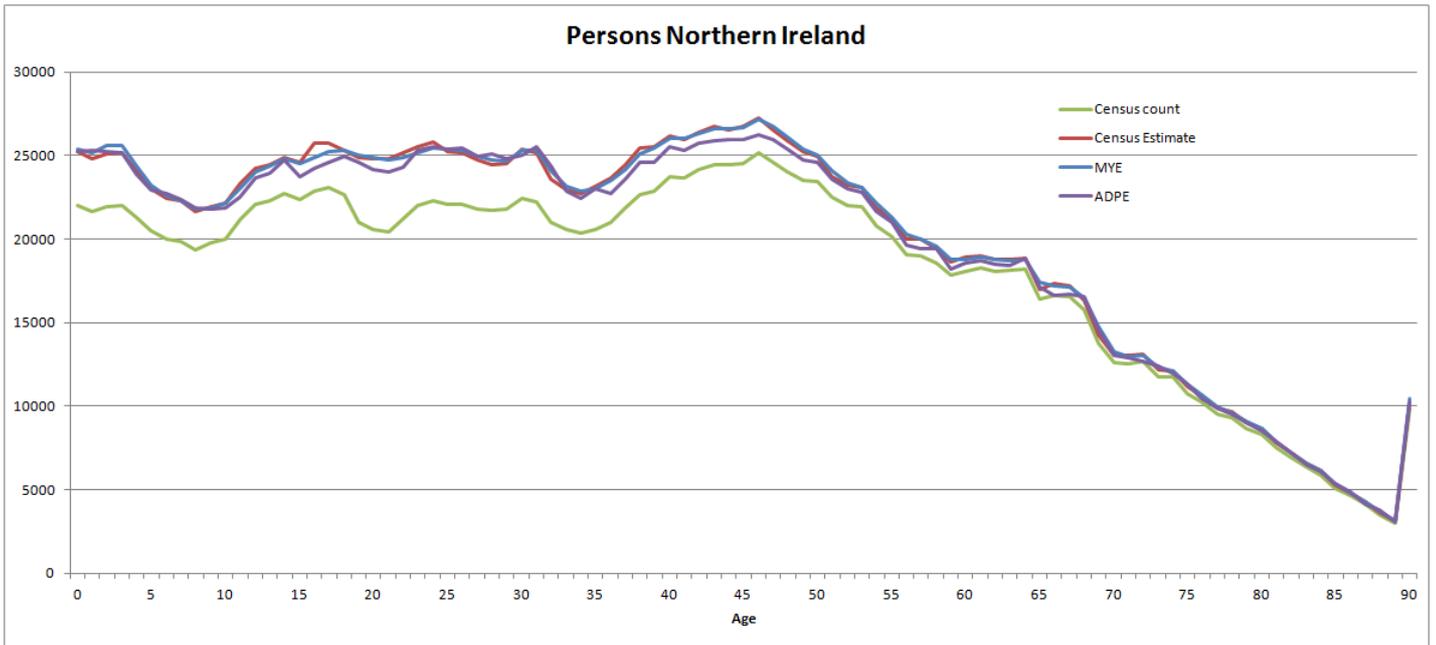
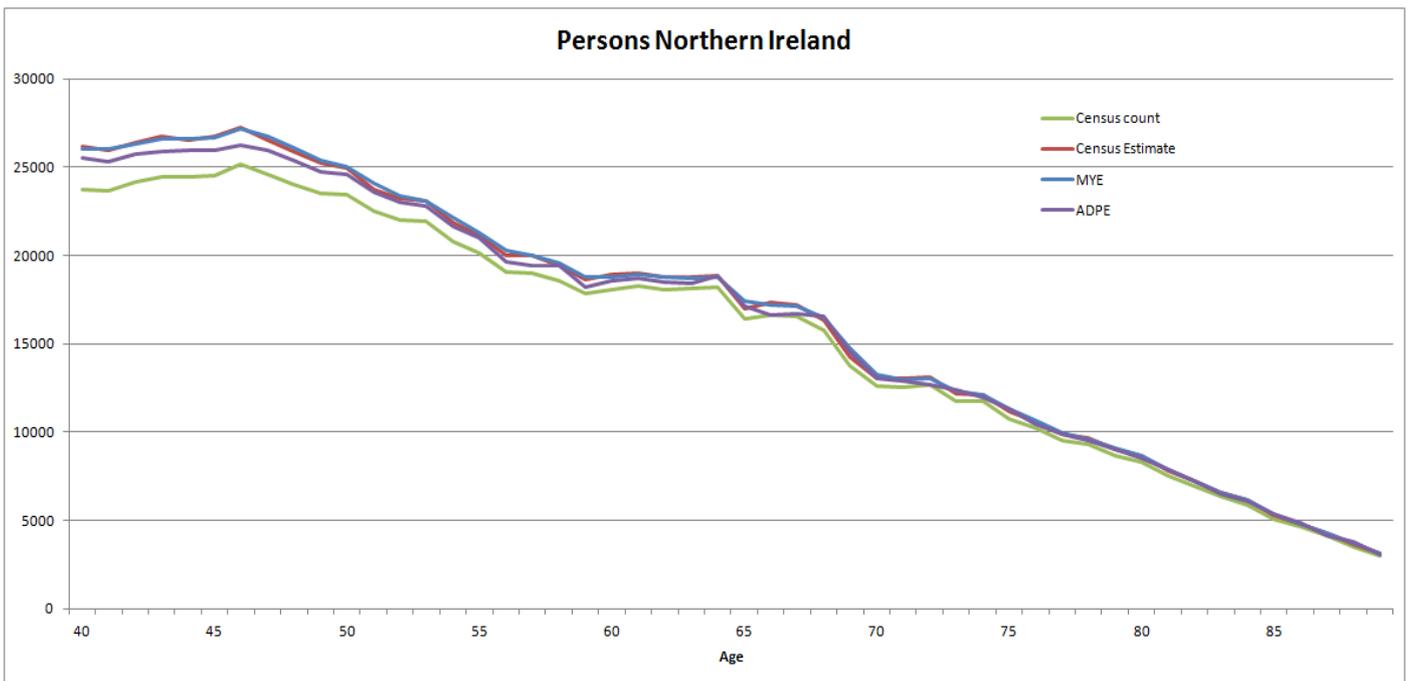


Chart 2: Comparison of age distribution of all persons in Northern Ireland, aged 40-89



The ADPE, the MYE and the Census Estimate are all very close for those persons aged over 40, suggesting that administrative data are potentially very good at counting the population of the older age groups.

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Chart 3: Comparison of five-year age bands of all persons in Northern Ireland

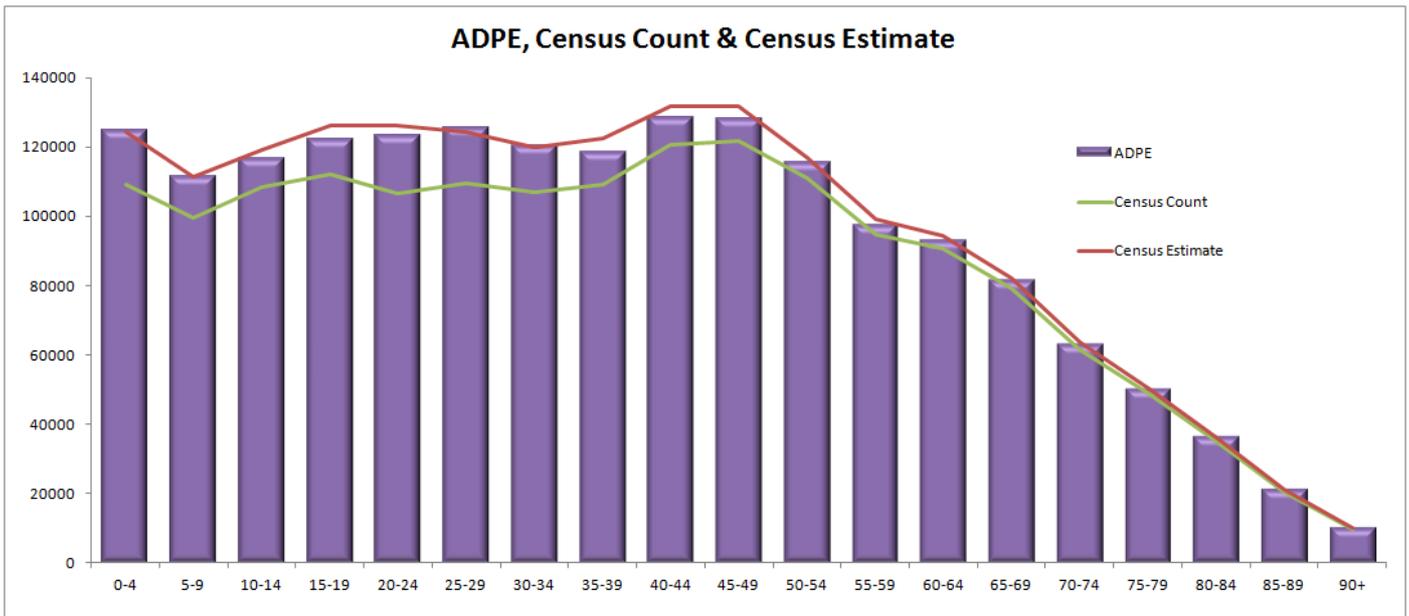
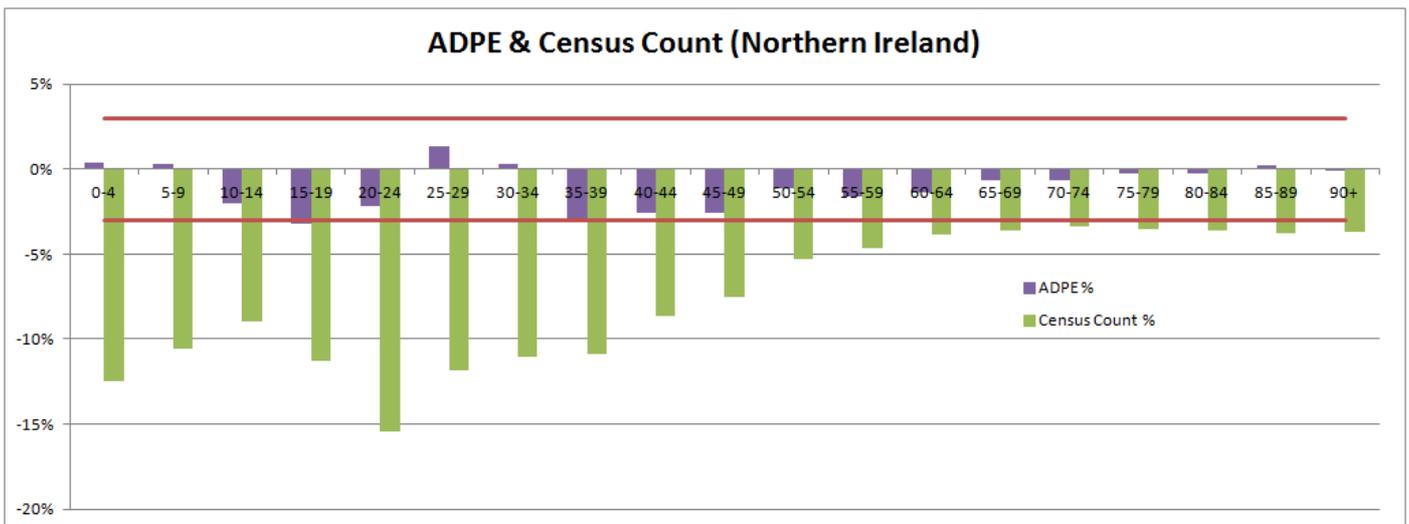


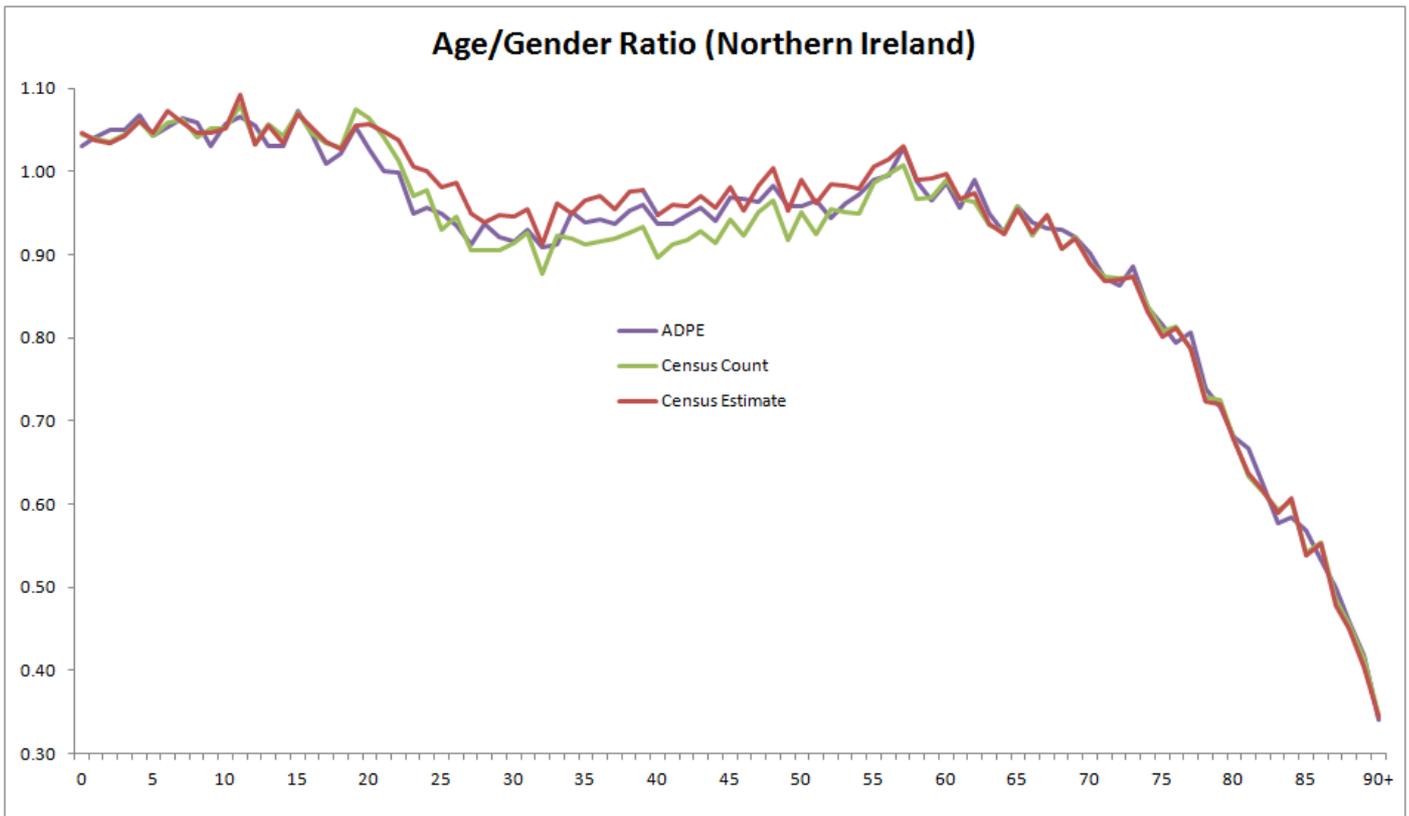
Chart 4 – Comparison of ADPE and Census Count with the Census Estimate by age group



The red lines in Chart 4 indicate +/- three per cent error bars around the Census estimate, a level of tolerance which is widely used as 'adequate' by ONS. The ADPE is within three per cent of the Census Estimate across all five year age bands, and this is prior to any adjustment or enhancement of the ADPE. The ADPE is usually lower than the Census Estimate except for ages 25-34 when the ADPE is higher than the Census Estimate.

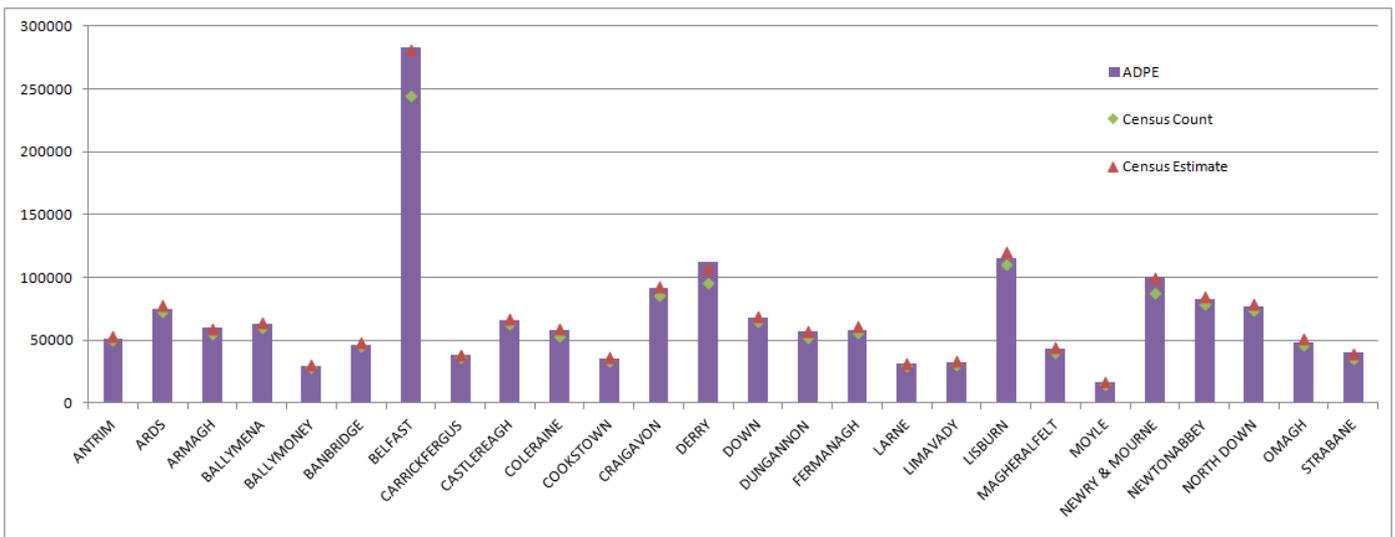
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Chart 5 - Gender ratios by age



The ADPE and the Census Estimate yield similar gender ratios (the number of men to the number of women in a given age group) across all age bands.

Chart 6 – Local Government District totals for all persons



The ADPE is always closer to the Census Estimate than the Census count for LGDs. A table of the population totals are given below:

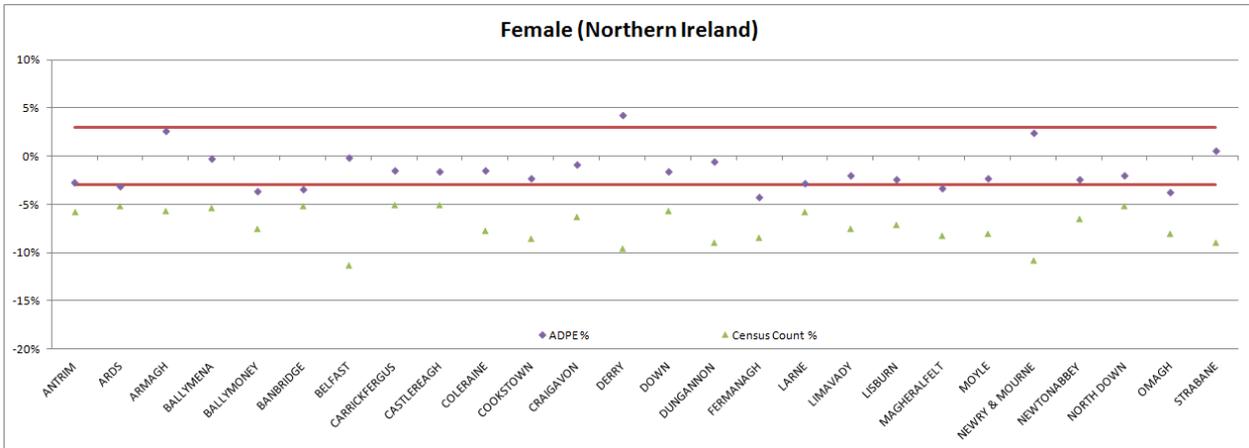
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Table 3 – Local Government totals for the Census Count, Census Estimate, Mid-year Estimate and ADPE

LGD	Census Count	Census Estimate	MYE	ADPE	ADPE % difference from Census Estimate	Census Count % difference from Census Estimate
Antrim	50.2	53.4	53.6	51.4	-4%	-6%
Ards	73.6	78.1	78.0	75.0	-4%	-6%
Armagh	55.5	59.3	59.7	60.3	2%	-6%
Ballymena	60.1	64.0	64.1	63.4	-1%	-6%
Ballymoney	28.6	31.2	31.3	29.6	-5%	-8%
Banbridge	45.6	48.3	48.3	46.0	-5%	-6%
Belfast	244.4	281.0	280.9	282.6	1%	-13%
Carrickfergus	36.9	39.1	39.1	38.4	-2%	-6%
Castlereagh	63.4	67.2	67.4	66.0	-2%	-6%
Coleraine	53.9	59.1	59.0	57.8	-2%	-9%
Cookstown	33.5	37.0	37.1	35.7	-3%	-10%
Craigavon	86.5	93.0	93.3	91.7	-1%	-7%
Derry	95.7	107.9	108.3	112.6	4%	-11%
Down	65.3	69.7	69.9	68.1	-2%	-6%
Dungannon	52.2	57.9	58.1	57.1	-1%	-10%
Fermanagh	56.1	61.8	62.0	58.3	-6%	-9%
Larne	30.2	32.2	32.1	31.3	-3%	-6%
Limavady	30.6	33.5	33.6	32.3	-4%	-9%
Lisburn	110.5	120.2	120.5	115.7	-4%	-8%
Magherafelt	40.8	45.0	45.1	42.9	-5%	-9%
Moyle	15.4	17.1	17.1	16.4	-4%	-9%
Newry & Mourne	87.9	99.5	100.0	100.8	1%	-12%
Newtonabbey	79.1	85.1	85.0	82.8	-3%	-7%
North Down	74.6	78.9	79.2	76.4	-3%	-6%
Omagh	46.7	51.4	51.5	48.6	-5%	-9%
Strabane	35.9	39.8	39.9	40.0	0%	-10%

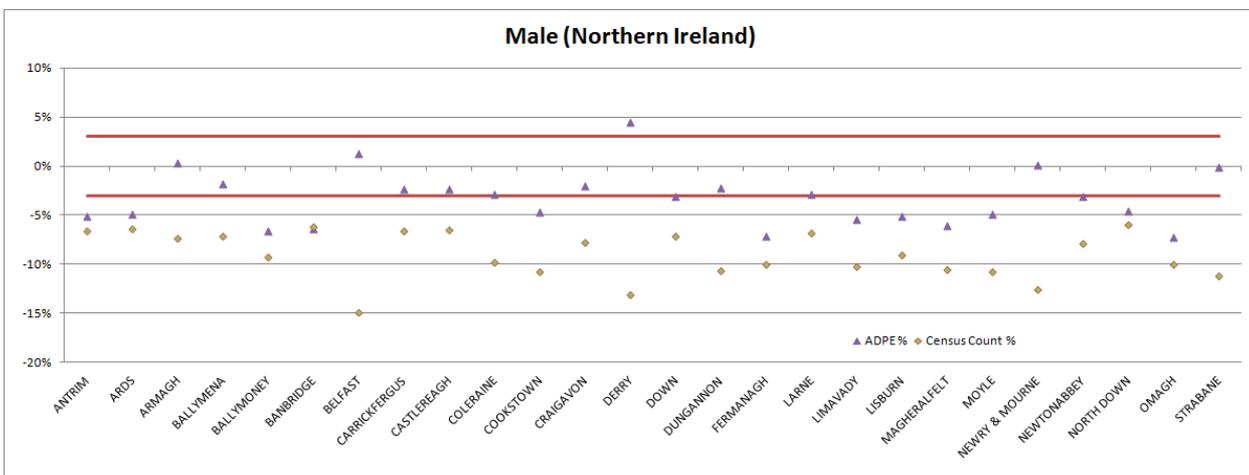
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Chart 7 – Comparison of ADPE and Census Count with the Census Estimate by Local Government District (Females)



For all LGDs the female ADPE total is closer to the Census Estimate than the Census count. Most of the LGDs have ADPE totals within five per cent of the Census Estimate.

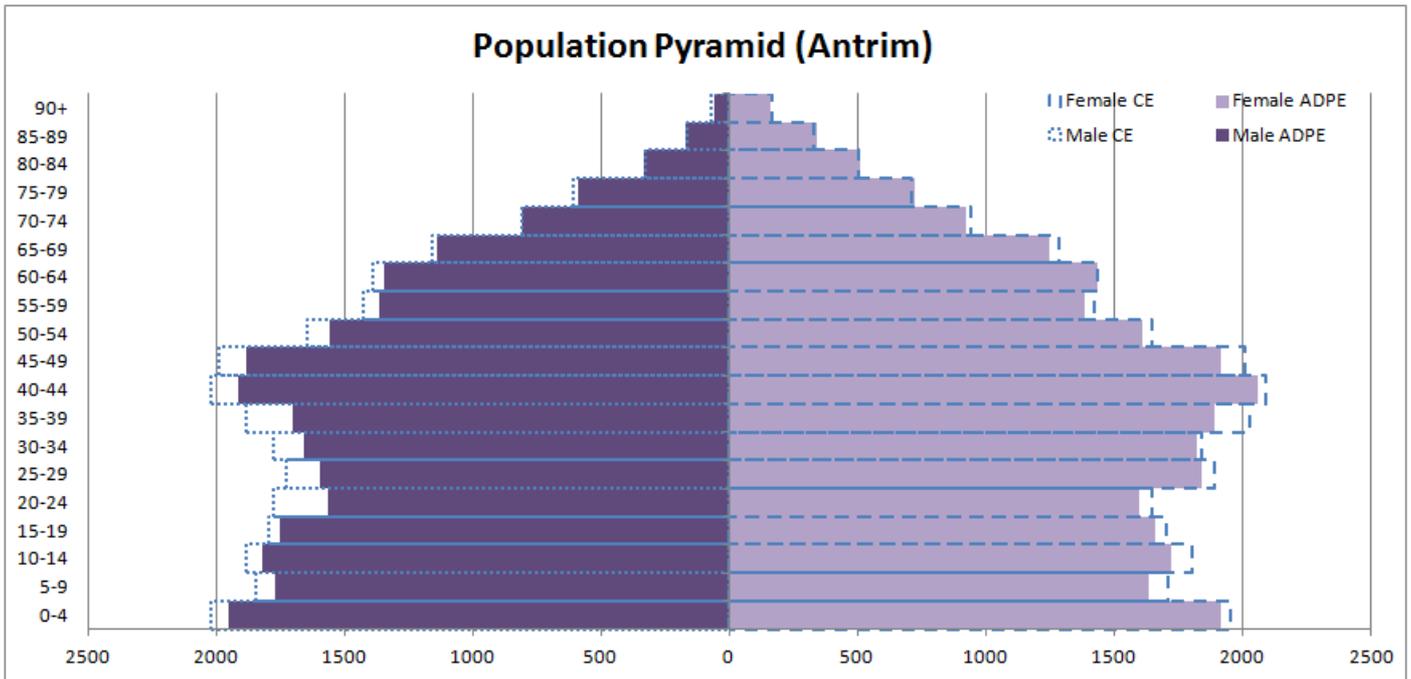
Chart 8 – Comparison of ADPE and Census Count with the Census Estimate by Local Government District (Males)



For all LGDs the male ADPE total is closer to the Census Estimate than the Census count (with the exception of Banbridge where the ADPE and the Census Count are very similar). Most of the LGDs have ADPE totals within five per cent of the Census Estimate.

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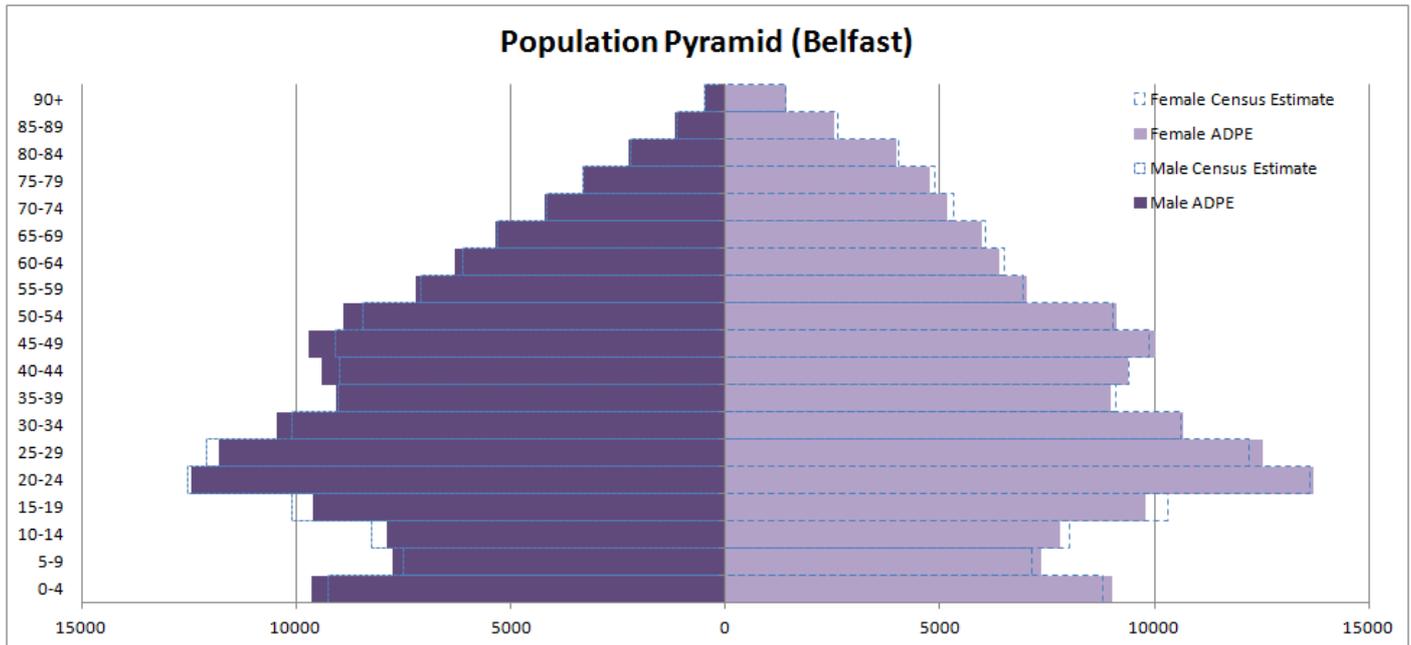
Chart 9 – A comparison of population pyramids between the ADPE and the Census Estimate for Antrim LGD



The total for the ADPE for Antrim LGD is lower than the Census Estimate. This is true across most of the age groups as indicated in the population pyramids above where the bars from the dotted lines (Census Estimate) are wider than the solid bars (ADPE).

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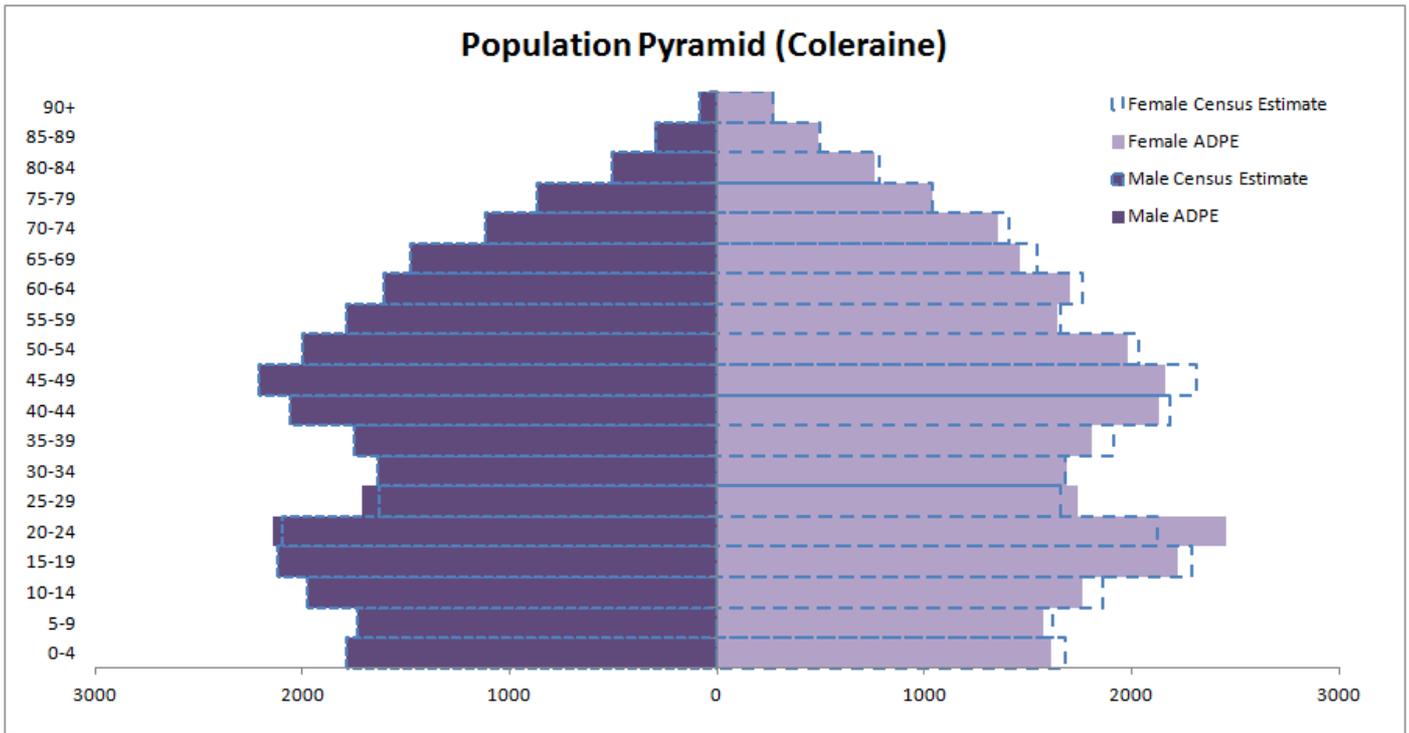
Chart 10 – A comparison of population pyramids between the ADPE and the Census Estimate for Belfast LGD



The total for the ADPE for Belfast LGD is one per cent higher than the Census Estimate. This varies by age group where some are higher in the ADPE (solid bars) than the Census Estimate (dotted bars) - males aged 40-44, 45-49 and some where the ADPE is lower - males and females aged 10-14, 15-19. The estimate of the ADPE in the age group most affected by students is close to the Census Estimate.

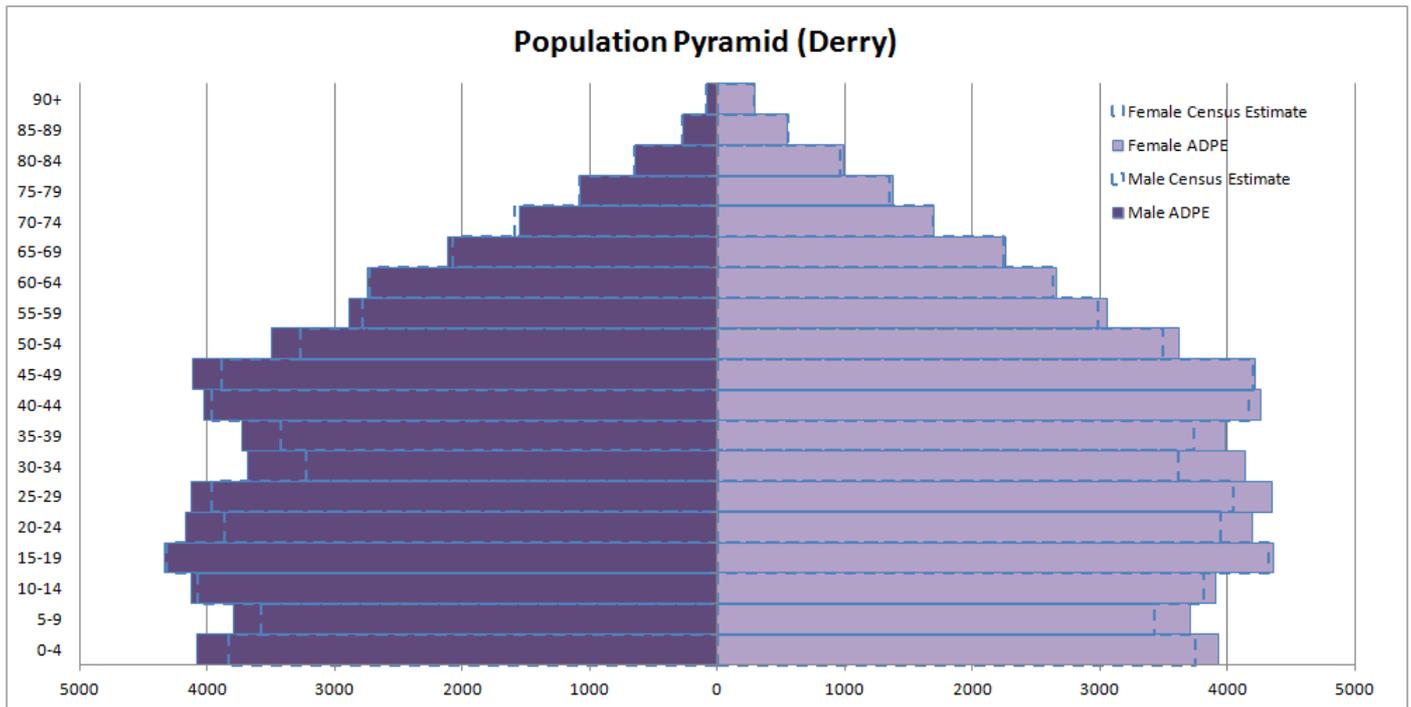
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Chart 11 – A comparison of population pyramids between the ADPE and the Census Estimate for Coleraine LGD



The total for the ADPE for Coleraine LGD is per cent lower than the Census Estimate. These estimates for males in Coleraine are very close, with the biggest differences being in females 20-24 and 45-49.

Chart 12 – A comparison of population pyramids between the ADPE and the Census Estimate for Derry LGD



The total for the ADPE for Derry LGD is four per cent higher than the Census Estimate – the highest difference of all the LGDs. This is seen across all age groups – where the solid bars (ADPE) are wider than the dotted bars (Census Estimate). This may be because people are being counted at the wrong location (i.e. are registered with their GP in a different area than they are recorded in the Census) or there are too many active patients using the Health Service or the Census Estimate is too low. Only further analysis and linkage with other sources will determine the cause of this difference.

5.0 Discussion

The overall count of the population using the ADPE is very close to the Census Estimate. Looking at age groups, the ADPE is within three per cent of the Census Estimate for all five year age bands. It is particularly close for all those age groups where the population are more likely to be attending health services, that is the very young and those aged 40 and above.

The ADPE is closer to the Census Estimate for males than for females.

When looking at local areas, the adjustment for university students ensures that the ADPE totals and the ADPE for age groups are close to the Census Estimates for most areas. There are a

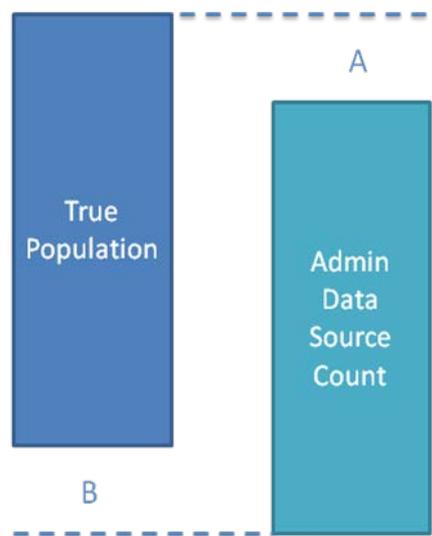
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number of areas where there are differences such as Derry LGD where the ADPE is higher for most age groups. It is not clear whether there is a misreporting of addresses in the Health data or where the Census Estimate is too low. In comparison the ADPE is closer to the Census Estimate than the Census count.

6.0 Conclusion

This paper reports the derivation of an ADPE primarily using a single administrative source with comprehensive population coverage (the active patient dataset), with small enhancements for the young (aged 0 and 1) and the spatial distribution of students. It has clearly been demonstrated that administrative data (even at aggregated level) can be used to produce an Administrative Data Population Estimate (ADPE) that is closer to Census Estimate than Census enumeration, and generally the ADPE is within three per cent of the Census estimate.

One problem with aggregated data from administrative data sources is that apparently accurate estimates can result from counterbalancing errors. Thus, for example, an administrative source count is related to the true population size by the following identity



True population + those in the administrative source, but not actually in the population (B) = Those in the administrative source + those in the population but omitted from the administrative source (A)

Ideally, A and B should be very small, but provided A and B are similar in size, the administrative source will provide an accurate estimate of the true population size, even if A and B are large.

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The ADPE could be improved in a number of ways. Firstly further sources could be brought into the analysis. However, using aggregate data this rapidly becomes very complicated and introduces potential errors “A” and “B” for every source.

Rather than bringing in additional sources, a second way in which an ADPE could be improved is through use of administrative sources at the level of individual records. In this way, the extent of overlap, and hence inherent quality across the sources, can be assessed and utilised – a person found in several sources is more likely to be a real usual resident than a person found in only one source. This introduces a practical constraint – NISRA must have access to individual level records in order to combine the sources efficiently. The sources used in this preliminary research reflect only those that are available in aggregated form with an activity indicator and where there is potential for NISRA to access the individual level data through existing legal gateways. NISRA is working on legal pathways to access further datasets solely for the purpose of demographic statistics.

Finally, in the same way as the Census estimate has been derived through adjustments to the Census count informed by a Census Coverage Survey (CCS), the ADPE could similarly be enhanced through a Coverage Survey. The nature of a Coverage Survey for an ADPE would differ fundamentally from a CCS, not least because it needs to address over-enumeration as much as under-enumeration.

In conclusion, it is suggested that this limited research demonstrates that a basic prototype ADPE, based on aggregate statistics from a small number of administrative sources, is already as good as an enumeration process for obtaining an initial count of the population. The ADPE could readily be improved through the introduction of further sources, ideally at individual record level, and adjusted through a Coverage Survey. The ADPE could be used as an additional source in the quality assurance of the census counts. It could also enable population estimates to be produced annually (without a Census to rebase them) that are as accurate as the current mid-year population estimates.

NISRA

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Annex A Data Sources

Active Patient Data		
Geographic Coverage:	Super Output Area, Local Government District Northern Ireland	Variables: Single Year of Age Gender Super Output Area Local Government District Northern Ireland
Source:	Business Services Organisation, Information and Research Unit	
Classification and Format	Administrative dataset provided in Excel format	
National Statistics Data?	No	
Metadata		
Description of Data	<p>The Active Patient data provides the number of “live records” on the Health Card Register at Local Government District, by Gender and Single Year of Age.</p> <p>Registrations are provided by GPs to the Business Services Organisation who compile and administer the Register. A record is considered as “live” if there has been any activity in the previous 24 months. Activities include the dispensing of prescriptions, treatment by a dentist or an optician, or changes in the registration details such as change of address or change of family doctor; treatment in an Accident & Emergency department or Admission or Discharge from hospital. Such activities can be seen as evidence of residence.</p>	
Topic Coverage	<p>As a list of where individuals are registered, coverage only extends to those people who have registered with a GP. Certain groups, such as Armed Forces personnel (and prisoners), are excluded from Health Card Registers.</p> <p>Individuals intending to stay in the United Kingdom for longer than three months can register with an NHS GP. This will mean that the Register may include some individuals who would be excluded from the 2011 Census definition of usual residence (i.e. individuals who have lived in NI or intended to stay for longer than twelve months). Individuals arriving in Northern Ireland on a Visa are automatically deducted according to the expiry date on the Visa.</p> <p>It is not possible to distinguish between short-term migrants and usual residents on the Register. Furthermore, it is also not possible to identify if people (both short-term migrants and usual residents) who have left NI to live elsewhere have been removed from the register.</p>	
Accuracy	<p>The coverage and accuracy of the Health Card Register depends on all patients registering with an NHS GP when they move into or within Northern Ireland.</p> <p>NHS Health Card Registers are prone to list inflation, caused by delays in people who have died or moved out of a Health Trust being removed from the relevant Register, duplicate entries, and people having more than one NHS number.</p> <p>The degree of list inflation varies geographically - for instance, it tends to be higher in border areas and areas with large numbers of students, who tend to be slow in re-registering with a GP when they leave higher education.</p> <p>An estimate of list inflation has been calculated from the number of records in the Health Card Register data and the population estimates as 5%. However, the activity indicator (indicating “live” status) provides further assurances that individuals are still in Northern Ireland and, therefore, addresses the issue of list inflation. For example, when comparing the Northern Ireland total number of Health Card Register records (1,893k) to those that are active (1,786k), the difference of 6% is comparable with the estimated list inflation.</p> <p>As such, Active Patient data is considered a robust and reliable source of data to count the Northern Ireland population.</p>	
Timeliness	<p>This extract was taken in April 2011 and age was calculated as of 27th March 2011 to reflect Census Day.</p>	
References	<p>http://www.hscbusiness.hscni.net/services/1802.htm http://www.hscbusiness.hscni.net/1814.htm</p>	

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Births		
Geographic Coverage:	Super Output Area (SOA), Local Government District (LGD), Northern Ireland (NI).	Variables: Single Year of Age Gender Super Output Area Local Government District Northern Ireland
Source:	The General Register Office	
Classification and Format:	Administrative dataset provided in Excel format.	
National Statistics Data?	National Statistics	
Theme?	Population	
Metadata		
Description of Data	<p>Births registrations are obtained from the General Register Office (GRO). Counts provided for counting the population are based on the date of occurrence.</p> <p>Births to mothers who are resident outside Northern Ireland are counted separately, as there are a considerable number of mothers from outside Northern Ireland (most resident in the Republic of Ireland) who give birth in Northern Ireland every year.</p> <p>Counts of all births for the past two years are used to get an indication of the numbers in the 0-1 age group.</p>	
Topic Coverage	All births for the two years prior to April 2011 by the geographical area of the mother's usual residence are included.	
Accuracy	<p>Births data are considered to provide robust and reliable estimates of the 0 and 1 year olds.</p> <p>However, it is also worth noting that births may not be registered for up to 42 days after the birth and therefore births occurring, for example, in December of a given year may not be registered until January of the next year.</p>	
Timeliness	The extract was taken in July 2011 reflecting the time period 28 th March 2009-27 th March 2011 thus including all those who were age 0 or age 1 on Census Day.	
References	<p>http://www.nisra.gov.uk/archive/demography/publications/vital_stats_QA.pdf</p> <p>http://www.statisticsauthority.gov.uk/assessment/assessment-reports/assessment-report-124---statistics-on-demography-and-vital-events-in-northern-ireland.pdf</p> <p>http://www.nisra.gov.uk/archive/demography/publications/births_deaths/births_2009.pdf</p>	

The Use of Administrative Data in Population Estimates

Higher Education Statistics Data (HESA)		
Geographic Coverage:	Local Government District (LGD), Northern Ireland (NI).	Variables: Single Year of age (18+) Gender Local Government District Northern Ireland
Source:	Higher Education Statistics Agency (HESA) via NI Department for Employment and Learning (DEL)	
Classification and Format:	Administrative dataset provided in Excel format.	
National Statistics Data?	National Statistics	
Theme?	Children, Education and Skills	
Metadata		
Description of Data	<p>Higher Education Statistics Agency (<i>HESA</i>) data provide data by single year of age and gender for each of the following: -</p> <ul style="list-style-type: none"> • NI domiciles at Higher Education Institutions in Northern Ireland (Home & Term time postcode), • Non-NI domiciles at Higher Education Institutions in Northern Ireland (Term time postcode), • NI domiciles at Higher Education Institutions in Great Britain (Home postcode & Higher Education Institutions). <p>The HESA data are used to adjust the net flow of students in their home and term-time addresses.</p>	
Topic Coverage	HESA data reflect a count of all NI domiciled students enrolled at Higher Education Institutions (HEIs) in NI, England, Scotland and Wales (UK) and non NI domiciles at NI HEIs.	
Accuracy	<p>HESA data provide a reliable and robust count of the number of NI domiciled students enrolled at Higher Education Institutions in the UK and the number of non NI domiciles at NI HEIs.</p> <p>The data are collected and processed by HESA on behalf of DEL, and are subjected to a range of quality assurance and validation procedures before it is provided to DEL.</p> <p>Further information can be found at References below.</p>	
Timeliness	This extract was taken in July 2011 to reflect the number of students attending Higher Education Institutions in the 2010/11 academic year.	
References	http://www.delni.gov.uk/index/statsandresearch/higher-education-stats/he-statistical-methods.htm http://www.hesa.ac.uk/component/option,com_studrec/task,show_file/Itemid,233/mnl,11051/href,validation.html/	

Abbreviations

MYEs	Mid-year Population Estimate
ADPE	Administrative Data Population Estimate
CUE	Census Under-enumeration
NINIS	Northern Ireland Neighbourhood Information System
Beyond2011	Beyond 2011 – a programme of work to look at the future of population statistics in the UK
GRO	General Register Office
NISRA	Northern Ireland Statistics and Research Agency
ONS	Office for National Statistics
CCS	Census Coverage Survey