

Briefing: 2012 - Based Subnational Population Projections:

Carlisle

Aim: To present the latest population projections from the Office for National Statistics (ONS) for Carlisle; the 2012-Based Subnational Population Projections (SNPPs). These projections will be placed into context by making comparisons with the 2012-Based Population Projections for Cumbria and England.

Background: Every two years the Office for National Statistics (ONS) produces long-term population projections for local authorities in England; known as the 'Subnational Population Projections (SNPPs)'. The SNPPs project what the population of each local authority will look like over the next 25 years.

In May 2014 the ONS released the 2012-Based SNPPs. The 2012-Based SNPPs took the population of each local authority at mid-2012 as their starting point. These populations were then projected forward a year at a time, to 2037; by ageing the population on from the previous year, adding the projected number of births, subtracting the projected number of deaths and adjusting for projected in and out migration. The projected numbers of births, deaths and migrants were based on trends observed in each local authority over the five years to 2012. Finally, the SNPPs were constrained to be consistent with the national population projections for England. A full description of the methodology used to produce the 2012-Based SNPPs is available via the following link:

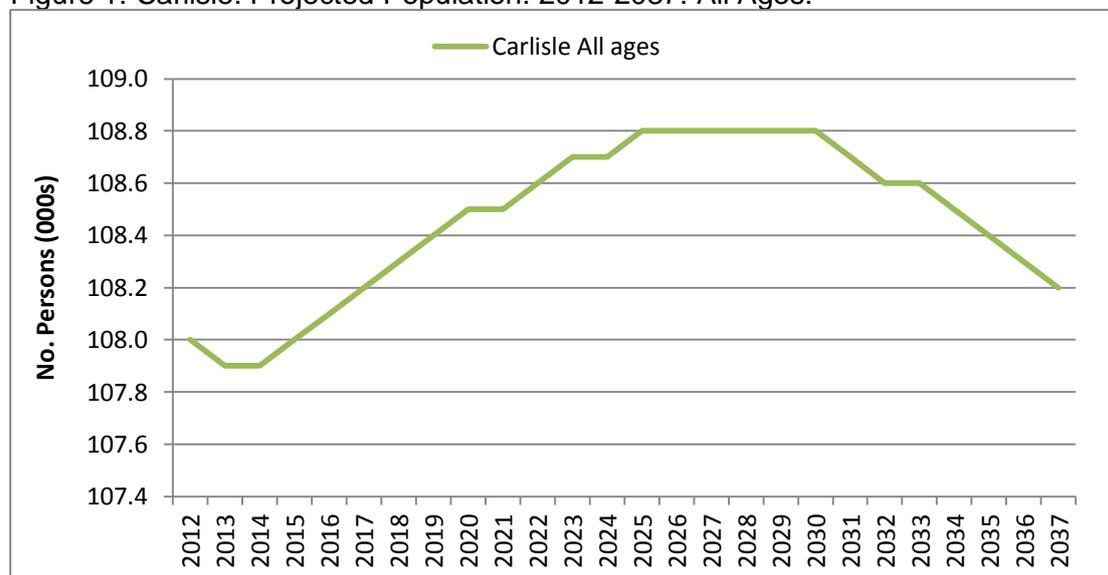
<http://www.ons.gov.uk/ons/rel/snpp/sub-national-population-projections/2012-based-projections/stb-2012-based-snpp.html#tab-Methodology>

Caveats: The SNPPs are trend-based, making assumptions about future fertility, mortality and migration levels based on trends in recent estimates, usually over a five-year reference period. They give an indication of what the future population structure might be if recent trends continued. They are not forecasts and take no account of policy nor development aims that have not yet had an impact on observed trends. The SNPPs provide projections at a local authority level and do not reflect how projections may vary across communities within the local authority. All demographic projections become increasingly uncertain the further into the future they project. This is due to the inherent uncertainty of demographic behaviour. It is important to note that the demographic trends in the five year reference period that the 2012-Based SNPPs are built upon (2007/08 to 2011/12) include the height of the economic downturn. It is possible that these trends may not continue as the economy recovers.

2012-Based Subnational Population Projections (SNPPs)

Figure 1 displays the mid-2012 population estimates for Carlisle and the district's projected population each year from 2013 to 2037; based on the 2012-Based SNPPs.

Figure 1: Carlisle: Projected Population: 2012-2037: All Ages:



Source: 2012-Based SNPPs, Office for National Statistics

The 2012-Based SNPPs project that Carlisle's population will increase from 2015 to 2025 before decreasing from 2031 onwards to 2037. In contrast, it is projected that Cumbria's population will decrease to 2016, increase slightly between 2019 and 2022, and then decrease again from 2024 onwards to 2037, while England's population is projected to increase each year to 2037. For more information about Cumbria and England's projected population changes, please see the Cumbria and districts briefing regarding the 2012-based SNPPs provided via:

<http://www.cumbriaobservatory.org.uk/Population/populationforecasts.asp>

Figure 2 displays the mid-2012 population estimates for England, Cumbria and Carlisle alongside respective projected population figures five years into the projection period (2017) and at the end of the 25 year projection period (2037); based on the 2012-Based SNPPs.

Figure 2: Projected Population: 2012-2017 & 2012-2037: All Ages:

	Population			Numerical Change		Proportional Change	
	2012	2017	2037	2012-2017	2012-2037	2012-2017	2012-2037
England	53,493,700	55,414,500	62,166,000	1,920,800	8,672,300	3.6	16.2
Cumbria	499,100	497,700	493,200	-1,400	-5,900	-0.3	-1.2
Carlisle	108,000	108,200	108,200	200	200	0.2	0.2

Source: 2012-Based SNPPs, Office for National Statistics

By 2017 it is projected that Cumbria’s population will decrease by 1,400 persons (-0.3%); this is the only projected decrease amongst the 33 counties in England and contrary to national projections (England +3.6%). Carlisle’s population is projected to increase by 200 persons by 2017 (+0.2%).

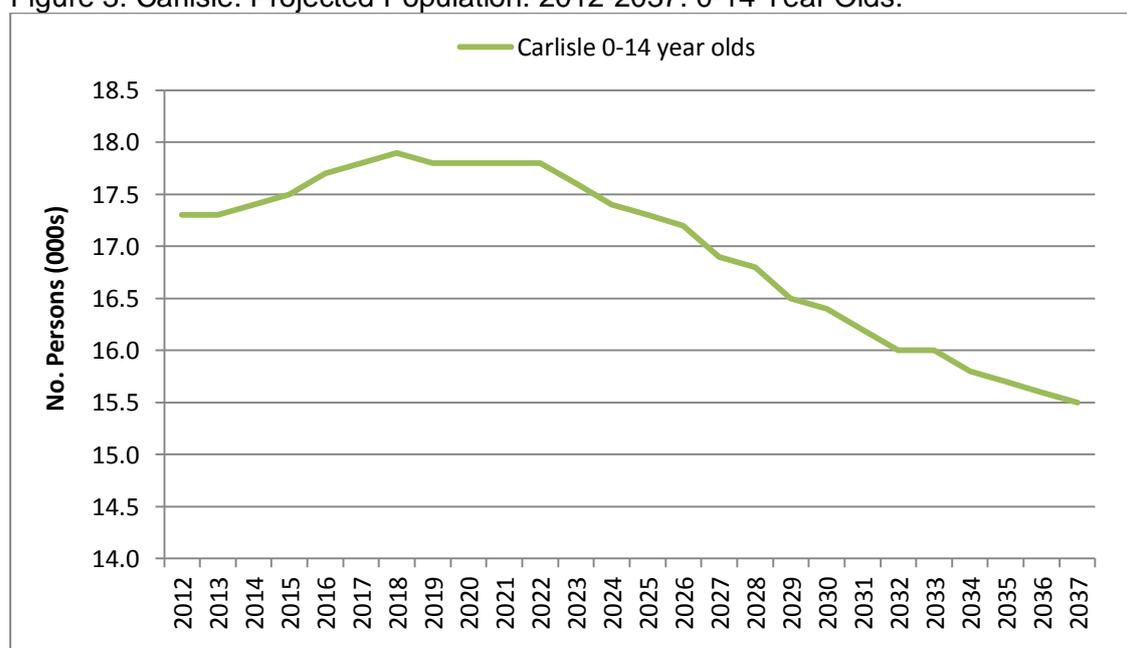
By 2037 it is projected that Cumbria’s population will decrease by 5,900 persons (-1.2%); again, this is the only projected decrease amongst counties in England and contrary to national projections (England +16.2%). Again, Carlisle’s population is projected to increase by 200 persons to 2037 (+0.2%).

Projected Population Change: Broad Age Band

0-14 Year Olds

Figure 3 displays the mid-2012 population estimates for Carlisle and the district’s projected population from 2013 to 2037 in relation to residents aged 0-14 years; based on the 2012-Based SNPPs.

Figure 3: Carlisle: Projected Population: 2012-2037: 0-14 Year Olds:



Source: 2012-Based SNPPs, Office for National Statistics

It is projected that numbers of 0-14 year olds in Carlisle will increase to 2018 and then decrease steadily from 2023 onwards to 2037. Similarly, it is projected that numbers of 0-14 year olds in Cumbria will increase slightly between 2016 and 2018, and then decrease from 2020 onwards to 2037. In contrast, it is projected that numbers of 0-14 year olds across England will increase each year to 2026 and then decrease slightly each year from 2027, with the exception of slight increases in 2028 and 2037. For more information about Cumbria and England's projected population changes, please see the Cumbria and districts briefing regarding the 2012-based SNPPs provided via:

<http://www.cumbriaobservatory.org.uk/Population/populationforecasts.asp>

Figure 4 displays the mid-2012 population estimates for England, Cumbria and Carlisle alongside respective projected population figures for 2017 and 2037 in relation to 0-14 year olds; based on the 2012-Based SNPPs.

Figure 4: Projected Population: 2012-2017 & 2012-2037: 0-14 Year Olds:

	Population			Numerical Change		Proportional Change	
	2012	2017	2037	2012-2017	2012-2037	2012-2017	2012-2037
England	9,484,900	9,984,800	10,379,600	499,900	894,700	5.3	9.4
Cumbria	76,700	76,400	68,300	-300	-8,400	-0.4	-11.0
Carlisle	17,300	17,800	15,500	500	-1,800	2.9	-10.4

Source: 2012-Based SNPPs, Office for National Statistics

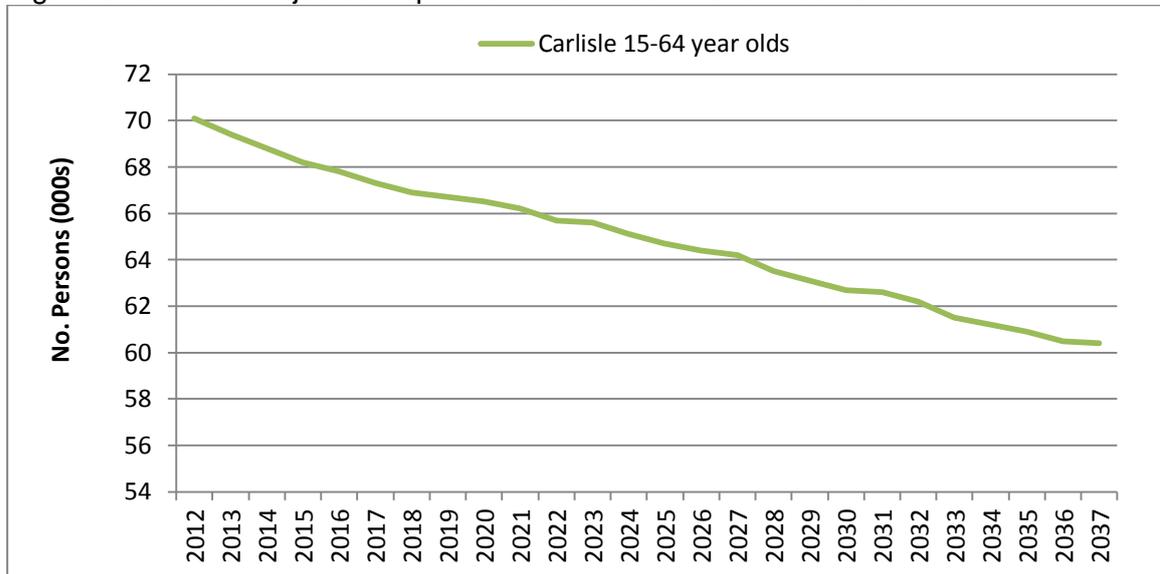
By 2017 numbers of 0-14 year olds in Cumbria are projected to decrease by 300 persons (-0.4%); this is the only projected decrease of all counties in England and contrary to the projected national trend (England +5.3%). During the same timeframe, numbers of 0-14 year olds in Carlisle are projected to increase by 500 persons (+2.9%).

By 2037 numbers of 0-14 year olds in Cumbria are projected to decrease by 8,400 persons (-11%); this is the greatest projected decrease of all counties in England and contrary to the projected national trend (England +9.4%). Carlisle's numbers of 0-14 year olds are projected to decrease by 1,800 persons to 2037 (-10.4%); the fourth greatest proportional decrease for this age group to 2037 out of all England's local authorities.

15-64 Year Olds

Figure 5 displays the mid-2012 population estimates for Carlisle and the district's projected population from 2013 to 2037 in relation to residents aged 15-64 years; based on the 2012-Based SNPPs.

Figure 5: Carlisle: Projected Population: 2012-2037: 15-64 Year Olds:



Source: 2012-Based SNPPs, Office for National Statistics

It is projected that Carlisle's 15-64 year old population will decrease each year to 2037, as will Cumbria's 15-64 year old population. In contrast, the 15-64 year old population of England is projected to increase each year to 2037. For more information about Cumbria and England's projected population changes, please see the Cumbria and districts briefing regarding the 2012-based SNPPs provided via:

<http://www.cumbriaobservatory.org.uk/Population/populationforecasts.asp>

Figure 6 displays the mid-2012 population estimates for England, Cumbria and Carlisle alongside respective projected population figures for 2017 and 2037 in relation to 15-64 year olds; based on the 2012-Based SNPPs.

Figure 6: Projected Population: 2012-2017 & 2012-2037: 15-64 Year Olds:

	Population			Numerical Change		Proportional Change	
	2012	2017	2037	2012-2017	2012-2037	2012-2017	2012-2037
England	34,952,500	35,322,800	36,835,800	370,300	1,883,300	1.1	5.4
Cumbria	314,800	301,300	262,400	-13,500	-52,400	-4.3	-16.6
Carlisle	70,100	67,300	60,400	-2,800	-9,700	-4.0	-13.8

Source: 2012-Based SNPPs, Office for National Statistics

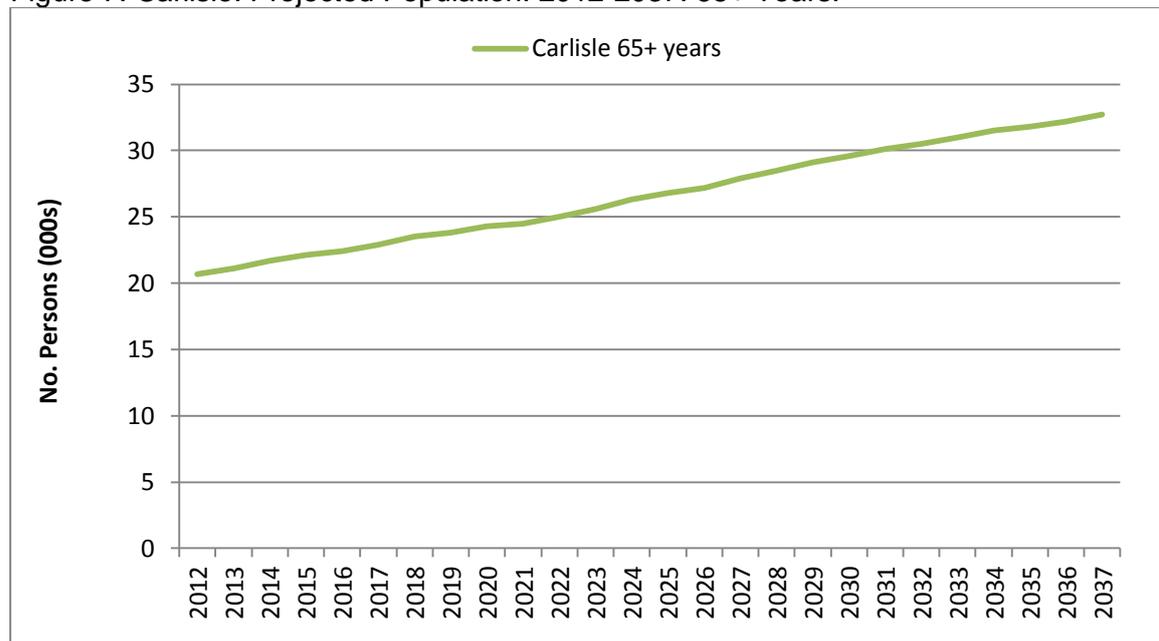
By 2017 numbers of 15-64 year olds are projected to decrease by 13,500 persons (-4.3%) across Cumbria. This is the greatest projected decrease of all counties in England and contrary to the projected national trend (England +1.1%). In Carlisle, numbers of 15-64 year olds are projected to decrease by 2,800 persons to 2017 (-4%); the 16th greatest projected decrease for numbers of 15-64 year olds out of all authorities in England by 2017.

By 2037 numbers of 15-64 year olds are projected to decrease by 52,400 persons (-16.6%) across Cumbria. Again, this is the greatest projected decrease of all counties in England and contrary to the projected national trend (England +5.4%). In Carlisle, numbers of 15-64 year olds are projected to decrease by 9,700 persons to 2037 (-13.8%); the eleventh greatest projected decrease of all authorities in England.

Residents Aged 65+ Years

Figure 7 displays the mid-2012 population estimates for Carlisle and the district's projected population from 2013 to 2037 in relation to residents aged 65+ years; based on the 2012-Based SNPPs.

Figure 7: Carlisle: Projected Population: 2012-2037: 65+ Years:



Source: 2012-Based SNPPs, Office for National Statistics

It is projected that Carlisle, Cumbria and England's populations aged 65+ will increase each year to 2037. For more information about Cumbria and England's projected population changes, please see the Cumbria and districts briefing regarding the 2012-based SNPPs provided via:

<http://www.cumbriaobservatory.org.uk/Population/populationforecasts.asp>

Figure 8: Projected Population: 2012-2017 & 2012-2037: Residents Aged 65+ Years:

	Population			Numerical Change		Proportional Change	
	2012	2017	2037	2012-2017	2012-2037	2012-2017	2012-2037
England	9,056,500	10,107,000	14,950,500	1,050,500	5,894,000	11.6	65.1
Cumbria	107,600	119,900	162,400	12,300	54,800	11.4	50.9
Carlisle	20,700	22,900	32,700	2,200	12,000	10.6	58.0

Source: 2012-Based SNPPs, Office for National Statistics

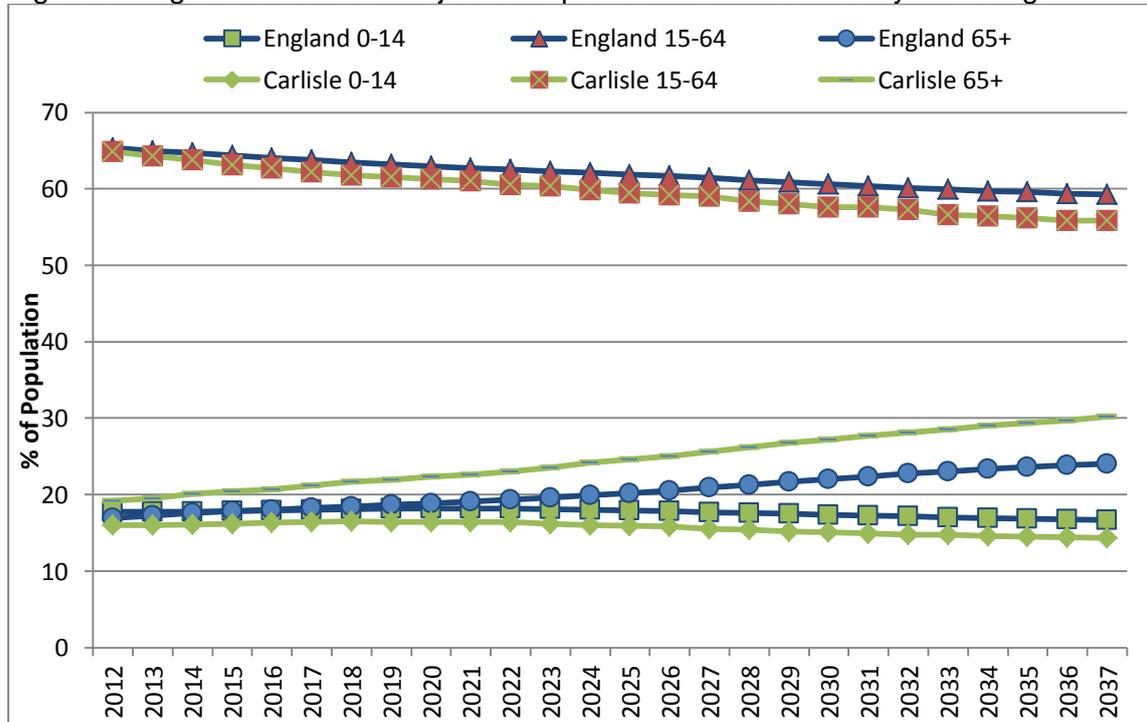
By 2017 the number of residents aged 65+ is projected to increase by 12,300 persons across Cumbria (+11.4%). This projected trend is in line with national projections (England +11.6%). In Carlisle the number of residents aged 65+ is projected to increase by 2,200 persons to 2017 (+10.6%).

By 2037 the number of residents aged 65+ is projected to increase by 54,800 persons across Cumbria (+50.9%). Again, this projected trend is in line with national projections, although the projected national increase is more substantial (England +65.1%). In Carlisle the number of residents aged 65+ is projected to increase by 12,000 persons to 2037 (+58%).

Projected Population Profile: Broad Age Band

Figure 9 provides the estimated proportion of residents by broad age band in 2012 and the projected proportion of residents by broad age band from 2013 to 2037 for England and Carlisle.

Figure 9: England & Carlisle: Projected Population: 2012-2037: % By Broad Age:



Source: 2012-Based SNPPs, Office for National Statistics

Because Carlisle's current age profile is older than the national average and the district is projected to experience a decrease in numbers of residents aged under 65 in addition to significant increases in residents aged over 65, the district's projected age profile is much older than the projected national age profile. To view the projected age profile of Cumbria please see the Cumbria and Districts briefing regarding the 2012-based SNPPs provided via:

<http://www.cumbriaobservatory.org.uk/Population/populationforecasts.asp>

Figure 10 provides the estimated proportion of residents by broad age band in 2012 and the projected proportion of residents by broad age band in 2017 and 2037 for England, Cumbria and Carlisle.

Figure 10: Projected Population: 2012, 2017 & 2037: % Persons By Broad Age:

	0-14 Years			15-64 Years			65+ Years		
	2012	2017	2037	2012	2017	2037	2012	2017	2037
England	17.7	18.0	16.7	65.3	63.7	59.3	16.9	18.2	24.0
Cumbria	15.4	15.4	13.8	63.1	60.5	53.2	21.6	24.1	32.9
Carlisle	16.0	16.5	14.3	64.9	62.2	55.8	19.2	21.2	30.2

Source: 2012-Based SNPPs, Office for National Statistics

By 2017 the proportion of residents aged 65+ is projected to increase to 24.1% across Cumbria; this is the sixth greatest projected proportion of all counties in England and much higher than the projected national proportion (18.2%). In Carlisle it is projected that 21.2% of residents will be aged 65+ by 2017.

By 2037 the proportion of residents aged 65+ is projected to increase to 32.9% across Cumbria; this is the third greatest projected proportion of all counties in England and much higher than the projected national proportion (24%). In Carlisle it is projected that 30.2% of residents will be aged 65+ by 2037.

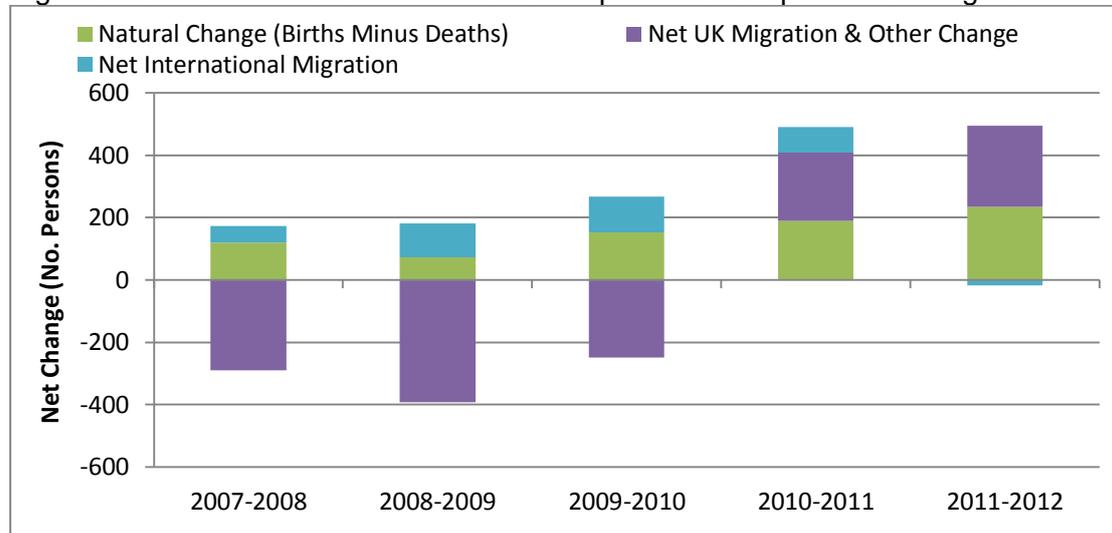
Components of Change

As stated earlier in this briefing, the 2012-Based SNPPs took the population of each local authority at mid-2012 as their starting point and projected these populations forward a year at a time, to 2037; by ageing the population on from the previous year, adding the projected number of births, subtracting the projected number of deaths and adjusting for projected in and out migration. It is the combined effect of changes in the numbers of births, deaths and migrants that determine overall population change. These factors are known as the 'components of change'.

The projected components of change were based on trends observed in each local authority over the five years to 2012. Figure 11 examines the net impact of each

component of change between mid-2007/08 and mid-2011/12 for Carlisle, as it is these demographic trends that have been projected forward within the 2012-based SNPPs.

Figure 11: Mid-2007/08 to Mid-2011/12: Components of Population Change: Carlisle:



Source: Office for National Statistics

The green sections of the bars in figure 11 show the net impact of natural change (births minus deaths). Each year in Carlisle, natural change has been positive (the green bars are above zero). This shows that there have been more births than deaths.

The purple bars show the net impact of internal migration (to and from other parts of the UK) and other changes (i.e. changes in prisoners, armed forces personnel etc.). Internal migration had a large positive impact on Carlisle's population up to 2006-07 (i.e. more people moved into Carlisle than out). However, this trend reversed between 2007/08 and 2009/10 (more people moved out of Carlisle than into Carlisle), before returning to being positive in the two most recent years.

The blue bars show the net impact of international migration (to and from overseas). International migration also had a positive impact on Carlisle's population up to 2006-07. However, in the last five years this trend slowed, and even reversed in 2011/12, so that in the most recent year marginally more people moved out of Carlisle than into Carlisle.

Overall, between mid-2007/08 and mid-2011/12 there were 6,300 births in Carlisle and 5,500 deaths; resulting in a net natural increase of 800 persons. During this timeframe it was also estimated that UK migration and other changes accounted for a net decrease of 500 persons in Carlisle, while international migration accounted for a net increase of 300 persons.

Implications:

For information about the local implications of the 2012-Based SNPPs, please see the Cumbria and Districts briefing regarding the 2012-based SNPPs provided via:

<http://www.cumbriaobservatory.org.uk/Population/populationforecasts.asp>

Further Information: For further briefings and summaries regarding the recent population trends and future population projections for Cumbria and districts please visit the Cumbria Intelligence Observatory website:

<http://www.cumbriaobservatory.org.uk/Population/peopleandpopulation.asp>

Alternatively, please contact the Information & Intelligence Team at Cumbria County Council:

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