

COUNCIL AREA POPULATION PROJECTIONS 2004-2024

May 2006

Summary

- There are significant differences between Council Areas in projected growth rates and age profiles.
- The highest growth is expected to be in Nairn and Inverness, with falls in Sutherland and Caithness.
- Sutherland is expected to have the oldest population and Inverness the most balanced.
- The highest proportions of children are expected to be in Inverness and Lochaber and the lowest in Sutherland and Badenoch & Strathspey.
- The highest proportions of the elderly are expected to be in Sutherland and Badenoch & Strathspey and the lowest in Inverness and Caithness.

Introduction

Population projections and demographic updates are an important input to any planning strategy. Analysing population trends enables organisations to proactively plan for the services and infrastructure that are likely to be required to support the future population. Some of the main uses of population projections include:

- policy and decision making;
- local planning;
- community planning;
- economic development;
- service provision planning (education, health, housing, community care, policing etc); and
- formation of household projections

It is important to remember from the outset that population projections are based solely on past trends and do not take account of any policy initiatives which may influence the demographic profile of Highland in the future. They must therefore be viewed as an essential baseline that allows for monitoring change. In particular, Highland's population is heavily dependent on the level of future migration. The assumed migration rate for 2008 onwards, and the split between areas, is representative of the typical rate from the late 1980s to 2004

and is heavily influenced by policies and the general economic climate during that period. It represents a continuation of the status quo. The Wellbeing Alliance is committed to encouraging growth through inward migration and will be able to exert a positive influence, but many factors will be outside its control.

This Note presents the background and discusses the projections for children, the working age population and the elderly. It compares the current population profile with that in 1984 and shows the extent to which change has already taken place, pointing to the inevitability of future trends. Pen pictures for each Area are presented in at the end of the Note.

National population projections

The General Registers Office for Scotland (GROS) produces population projections for all Scottish local authorities every two years. These are constrained to a national projection which is produced by the Government Actuary Department (GAD). The most up to date GROS population projection for Highland (2004 based) shows that Highland's population is projected to reach 218,894 by 2024, an increase of 3.6% (7,554 people) from 2004. The main features are a general pattern of low birth and death rates along with a larger net migration gain than has been seen previously. It also shows a likely continuation of the population ageing trend which has been experienced by Highland over the past 20 years.

GROS no longer produce population figures for sub-Highland Areas, therefore the Planning & Development Service, in conjunction with NHS Highland, have produced a series of population projections at Council Area level for the Highland Wellbeing Alliance. While every effort has been made to replicate the assumptions and methodology used by GROS in their Highland projection, comparable data has not always been available, meaning that although the trends are consistent the actual Area figures do not sum to exactly the same numbers as the GROS Highland projection.

At the time of preparing this note, GROS have just issued their Mid Year Estimates for 2005 (see Briefing Note 9) which show Highland's population to be some 300 higher than projected using the assumptions described here. This is well within the expected range of error and provides a useful validation of the assumptions made in the first year of the projection.

FACTORS CONTRIBUTING TO POPULATION CHANGE

The three contributing factors to population change are mortality, fertility and migration.

Mortality - Highland and Scotland have seen continual improvements in mortality and life expectancy throughout recent years, and this is assumed to continue throughout the course of the projections. All Council Areas in Highland have lower mortality rates than the national average, and are therefore generally 'healthier' than the Scottish average.

Fertility - Scotland's birth rate in completed families has fallen from 2.08 children per woman for women born in 1950 to a projected 1.71 for women born in 1970 and 1.60 for women born in 2000. This is accounted for by lower fertility rates with women choosing to have their families later and to have fewer children. All Council Areas in Highland other than Badenoch & Strathspey have higher than average fertility rates.

Deaths exceeded Births in all Areas apart from Lochaber and Inverness in 2005, with deaths projected to exceed births in Lochaber in 2007, and in Inverness in 2011.

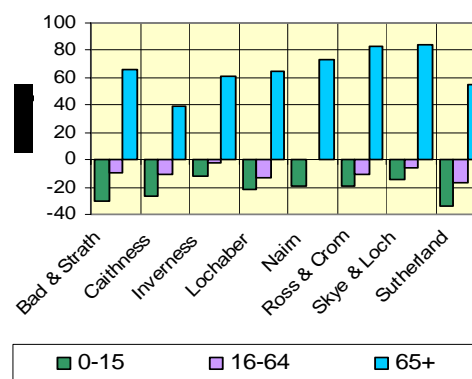
Migration – The migration age profile used in the Area population projections is a three year average of migrant movements between 2001 and 2004, based on GP registrations. This age profile was applied to the annual migrant numbers used by GROS in their 2004 Highland projection – net migration of 2,100 in 2004/05, 1,600 in 2005/06, 1,050 in 2006/07 and 700 for the remaining years of the projection until 2024. All Council Areas are assumed to experience positive net-migration throughout the projection. This is highest in Inverness and Ross & Cromarty and lowest in Caithness and Lochaber. There are some interesting differences in the age profile of the migrants by Council Area, with some key points are as follows:

- Inverness Area has particularly high levels of inward migration in the young adult age brackets, but low levels in the 45+ age groups.
- Conversely Sutherland has very low levels of inward migration in the younger age groups but attracts higher numbers in the 50+ age groups.
- There are higher levels of male inward migration in the 30-40 age group than female which may be accounted for by migrant workers. This is especially noticeable in Lochaber, Nairn and Ross & Cromarty.
- All Areas have high levels of outward migration in the 15-24 age groups, especially Caithness and Ross & Cromarty. Inverness and Nairn lose the smallest numbers in this age range.
- In the older age groups outward migration rates are similar in all Areas until the 75+ age group where Sutherland loses more than the other Areas. This could be influenced by the location of care homes.

AREA POPULATION PROJECTIONS

Figure 1 shows the projected percentage change in the population of Council Areas between 2004 and 2024 by age group.

Figure 1: Projected percentage change in population by Council Area and age group



Overall population

As can be seen from Figure 2 there have been considerable differences in the demographic trends of the Council Areas over the past 20 years, with large growths in some areas, notably Badenoch & Strathspey (16.7%), Inverness (16.1%) and Nairn (15.7%) and overall declines in Caithness (-8.2%), and Lochaber (-3.1%). These variations clearly demonstrate why sub-Highland population projections are so important to service planning throughout Highland.

Highland's overall population is projected to increase by 2024, with the greatest growth

expected in Nairn (10.4%), Skye & Lochalsh (8.4%) and Inverness (6.1%). On the other hand, declines are projected for Caithness (-5.2%), Lochaber (-1.7%) and Sutherland (-4.1%).

Figure 2: Past and projected population, all ages

	1984	2004	2024	Past change (%) 1984-2004	Projected change (%) 2004-2024
Bad & Strath	10,199	11,900	12,049	16.7	1.3
Caith	27,417	25,164	23,846	-8.2	-5.2
Inv	58,341	67,733	71,863	16.1	6.1
Loch	19,395	18,789	18,473	-3.1	-1.7
Nairn	10,117	11,707	12,928	15.7	10.4
Ross & Crom	47,478	49,967	51,924	5.2	3.9
Skye & Loch	11,077	12,374	13,413	11.7	8.4
Suth	13,184	13,706	13,141	4.0	-4.1
High	197,208	211,340	217,637	7.2	3.0
Scot	-	-	-	-1.2	0.8

Population change (0-15 year olds)

Numbers of children aged 0-15 are on the decline throughout Scotland as a whole, and Highland is no exception. Figure 3 shows that all Council Areas have already seen a decrease in this age group over the past 20 years, and this is expected to continue, to 2024. This is due to falling fertility and birth rates (for example, there were 2,572 births in Highland in 1984 compared with 2,153 in 2004).

Figure 3: Past and projected population 0-15 age group

	1984	2004	2024	Past change (%) 1984-2004	Projected change (%) 2004-24
Bad & Strath	2,170	2,123	1,474	-2.2	-30.6
Caith	6,330	4,768	3,482	-24.7	-27.0
Inv	12,986	12,770	11,245	-1.7	-11.9
Loch	4,726	3,585	2,824	-24.1	-21.2
Nairn	2,367	2,181	1,769	-7.9	-18.9
Ross & Crom	12,208	9,629	7,778	-21.1	-19.2
Skye & Loch	2,490	2,325	1,980	-6.6	-14.8
Suth	2,675	2,302	1,519	-13.9	-34.0
High	45,952	39,683	32,071	-13.6	-19.2
Scot	-	-	-	-15.3	-12.4

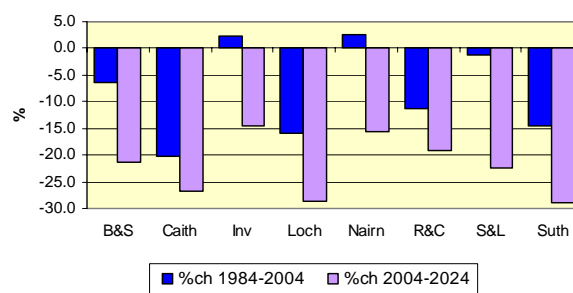
The decline in this age group is well established in some Council Areas, with large declines already experienced by Caithness (-24.7%), Lochaber (-24.1%) and Ross & Cromarty since 1984. Child populations in other Areas such as Inverness (-

1.7%) and Badenoch & Strathspey (-2.2%) have remained reasonably stable over the past 2 decades. By 2024 however, all Areas are projected to see significant declines in this age group, notably in Sutherland (-34.0%), Badenoch & Strathspey (-30.6%) and Caithness (-27.0%).

Differences in the rate of change between the Areas can be accounted for by the different age profiles of their populations, specifically the decline in the number of women in their childbearing years within the total population at any one time. Figure 4 shows the percentage change of women of childbearing age (15-44) between 1984 and 2004 (past change) and between 2004 and 2024 (projected change). Highland wide there has been a 7.4% drop in childbearing age females since 1984 and a further 19.9% drop is projected by 2024. Caithness (-20.1%) and Lochaber (-15.8%) saw the greatest falls in this section of the population since 1984 which helps explain the large falls in the number of 0-15 year olds in these Areas.

The other factor which affects the future demographic of this age group is the extent to which in-migration of young families can offset the effect of the falling birth rates. Therefore Areas such as Inverness and Nairn which benefit from higher than average inward migration of this age group see a smaller decline by 2024.

Figure 4: Percentage change of number of women of childbearing age, past and projected



Population aged 16-64

The 16-64 age group represents the bulk of the economically active population and is therefore very important to the Highland economy. Over the past 20 years only Caithness (-8.9%) and Lochaber (-1.4) have seen declines in this age group, however this is expected to change as the effect of declining numbers of children feeds through the population profile. By 2024 all Areas are projected to see some level of decline in this age group, with the smallest in Nairn (-0.3%) and Inverness (-2.0) and the greatest in Sutherland (-17.4%) and Lochaber (-13.5%).

Figure 5: Past and projected population 16-64 age group

	1984	2004	2024	Past change (%) 1984-2004	Projected change (%) 2004-24
Bad & Strath	6,454	7,532	6,848	16.7	-9.1
Caith	17,515	15,964	14,197	-8.9	-11.1
Inv	37,742	44,180	43,283	17.1	-2.0
Loch	12,165	11,999	10,385	-1.4	-13.5
Nairn	6,106	7,251	7,229	18.8	-0.3
Ross & Crom	29,332	31,876	28,618	8.7	-10.2
Skye & Loch	6,527	7,888	7,461	20.9	-5.4
Suth	8,060	8,356	6,904	3.7	-17.4
High	123,901	135,046	124,925	9.0	-7.5
Scot	-	-	-	0.2	-5.2

These Area differences are largely determined by both the age profile of the current population (i.e. the number of young people in the current population available to feed through) and the migration profile. For example, out migration of young people (notably to large university cities in the rest of Scotland) is a particular issue in all Highland Areas, but is particularly prevalent in Caithness and Sutherland, and less so in Inverness and Nairn.

Population aged 65 and over

In common with the rest of Scotland (and indeed the rest of Western Europe) Highland’s population has been ageing for a number of years and is projected to continue to do so to 2024 and beyond. This is due to increased life expectancies and the age-profile of our migrants. All Council Areas have seen significant increases in numbers of older people since 1984, notably Badenoch & Strathspey and Ross & Cromarty (both 42.5%). The exception to this is Skye and Lochalsh which saw only a 4.9% increase since 1984. This is because

the 1984 Skye & Lochalsh population was already relatively old, therefore despite there being a high percentage of older people in the population in both 1984 and 2004, the actual difference in percentage change terms is not so great as in other Areas where the ageing phenomenon is newer.

Looking ahead to 2024, all Areas are expected to experience increases in this age group, particularly Ross & Cromarty, Skye & Lochalsh and Nairn. This is accounted for by bulges in the current population feeding through (Skye & Lochalsh) and higher than average inward migration of retirees (Ross & Cromarty and Nairn)

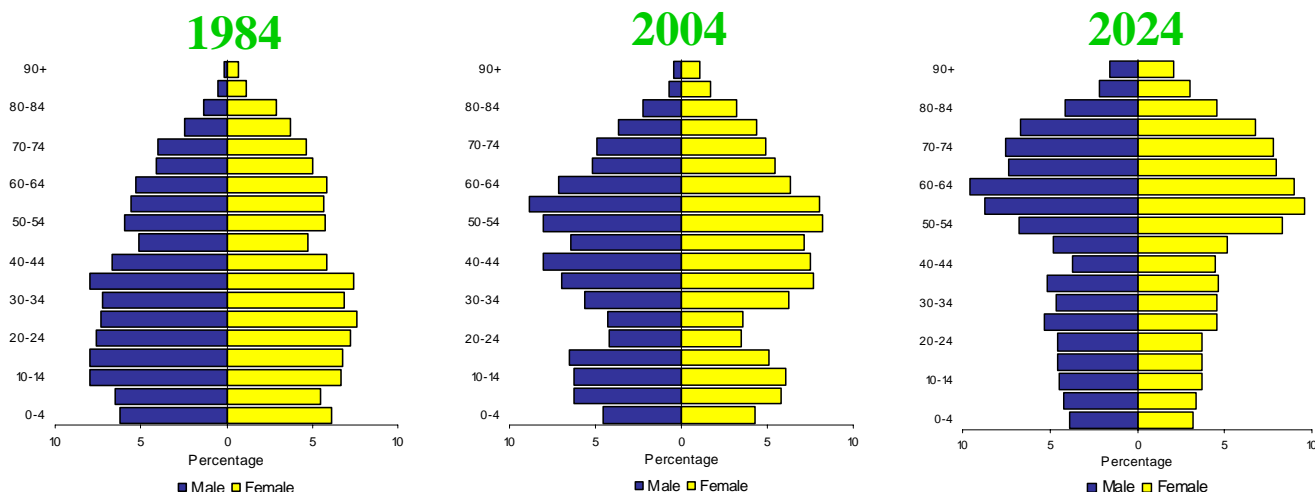
On the other hand, smaller increases in this age group are projected to occur in Caithness and Sutherland, mainly because of smaller numbers of younger population in the current population available to feed through to the older age group, and partly as they do not attract such high levels of retirement migrant population.

Figure 6: Past and projected population 65+ age group

	1984	2004	2024	Past change (%) 1984-2004	Projected change (%) 2004-2024
Bad & Strath	1,575	2,245	3,727	42.5	66.0
Caith	3,572	4,432	6,167	24.1	39.1
Inv	7,613	10,783	17,335	41.6	60.8
Loch	2,504	3,205	5,264	28.0	64.2
Nairn	1,644	2,275	3,930	38.4	72.7
Ross & Crom	5,938	8,462	15,528	42.5	83.5
Skye & Loch	2,060	2,161	3,972	4.9	83.8
Suth	2,449	3,048	4,718	24.5	54.8
High	27,355	36,611	60,641	33.8	65.6
Scot	-	-	-	14.0	39.7

The following 8 pen pictures show the changing age-sex distribution of each Area’s population. Visual presentation in the form of “population pyramids” makes it clear that all Areas are moving from the ‘classic’ population pyramid shape seen in 1984 to a more ‘top-heavy’ version, dominated by older people, by 2024.

BADENOCH & STRATHSPEY

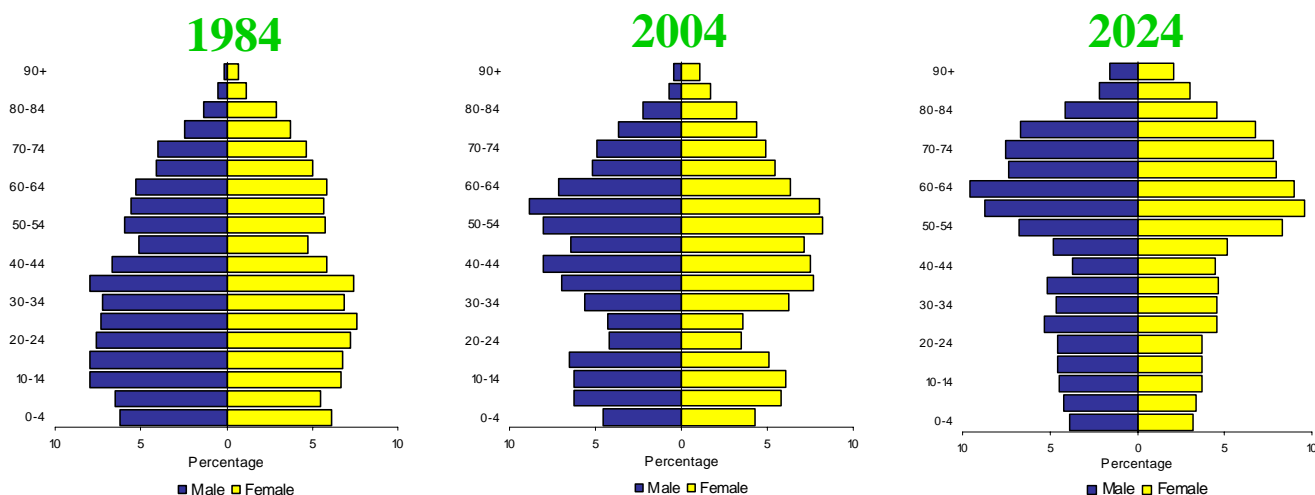


Age Group	2004		2024		Change %
	Number	%	Number	%	
0 to 4	524	4.4	427	3.5	-18.5
5 to 15	1,599	13.4	1,047	8.7	-34.5
16 to 24	988	8.3	887	7.4	-10.2
25 to 44	2,964	24.9	2,227	18.5	-24.9
45 to 64	3,580	30.1	3,734	31.0	4.3
65 to 74	1,215	10.2	1,852	15.4	52.4
75+	1,030	8.7	1,875	15.6	82.0
Total	11,900	100.0	12,049	100.0	1.3

Net Migration (2008 onwards) +65 people per year

There were high numbers of children in 2004 (due to higher than average levels of women of childbearing age in 1984). However, lower levels of young children in 1984 have resulted in relatively small numbers of childbearing aged population in 2004. This is projected to lead to a decline in the numbers of children by 2024. The bulge in 50-60 age group in 1984 resulted in large population increase in 65+ age group by 2004, and the current bulge in 50-60 age group will lead to similar increase by 2024 in 65+ age group. The Area is projected to have the second lowest proportion of children in 2024, and the second highest proportion of over 65s.

CAITHNESS

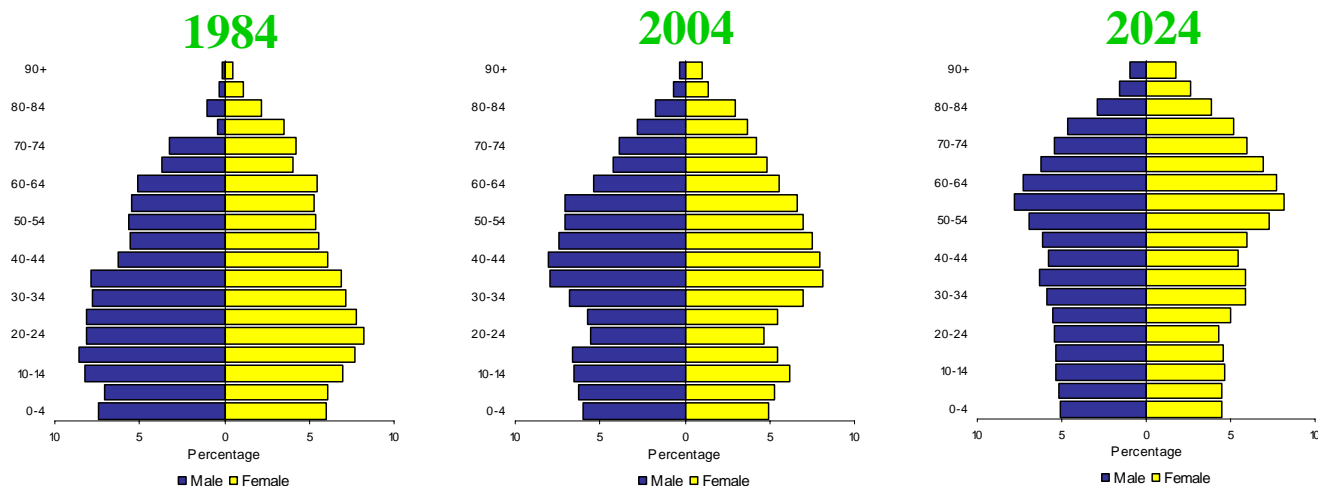


Age Group	2004		2024		Change %
	Number	%	Number	%	
0 to 4	1,297	5.2	1,021	4.3	-21.3
5 to 15	3,471	13.8	2,461	10.3	-29.1
16 to 24	2,414	9.6	1,848	7.7	-23.4
25 to 44	6,637	26.4	5,241	22.0	-21.0
45 to 64	6,913	27.5	7,108	29.8	2.8
65 to 74	2,574	10.2	3,080	12.9	19.7
75+	1,858	7.4	3,087	12.9	66.1
Total	25,164	100.0	23,846	100.0	-5.2

Net Migration (2008 onwards) +5 people per year

Caithness has the lowest rate of inward migration, leading to the largest overall population fall. Relatively low numbers of 25-35 year olds in 1984 resulted in a decline in the number of children by 2004. The currently 'waisted' appearance in the key childbearing years is expected to lead to a further decline of children by 2024. This is also likely to result in a decline in economically active population by 2024. The bulge evident in other Areas in the 50-60 age group is not so apparent in Caithness therefore the increase in 65+ population by 2024 is not expected to be so great.

INVERNESS

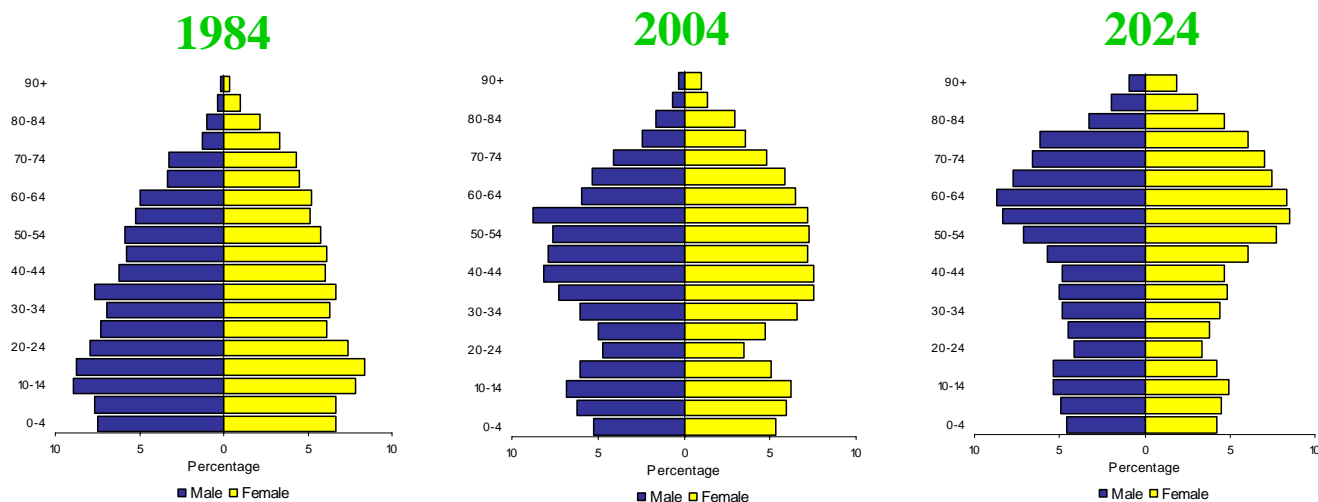


Age Group	2004		2024		Change
	Number	%	Number	%	%
0 to 4	3,700	5.5	3,450	4.8	-6.8
5 to 15	9,070	13.4	7,795	10.8	-14.1
16 to 24	6,688	9.9	6,309	8.8	-5.7
25 to 44	19,338	28.6	16,434	22.9	-15.0
45 to 64	18,154	26.8	20,540	28.6	13.1
65 to 74	5,816	8.6	8,841	12.3	52.0
75+	4,967	7.3	8,494	11.8	71.0
Total	67,733	100.0	71,863	100.0	6.1

Net Migration (2008 onwards) +195 people per year

Inverness is projected to have the largest number of net inward migrants. The 1984 bulges in the young adult population resulted in relatively high levels of both children and economically active population in 2004. A slight dip in the current numbers of childbearing age population will be partly compensated by the inward migration resulting in a modest decline of children by 2024, with the highest proportion of children of all Areas and the second largest rate of growth overall. Relatively high proportions of children in the current population will result in a relatively stable profile in 2024.

LOCHABER



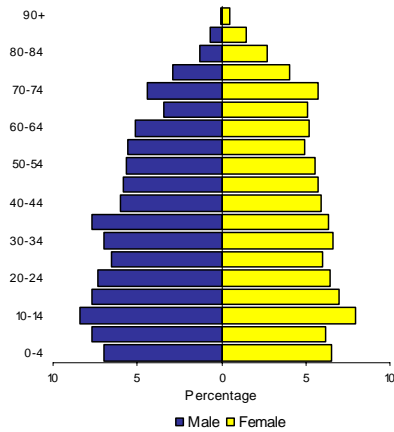
Age Group	2004		2024		Change
	Number	%	Number	%	%
0 to 4	999	5.3	810	4.4	-18.9
5 to 15	2,586	13.8	2,014	10.9	-22.1
16 to 24	1,580	8.4	1,380	7.5	-12.7
25 to 44	4,961	26.4	3,411	18.5	-31.2
45 to 64	5,458	29.0	5,594	30.3	2.5
65 to 74	1,888	10.0	2,660	14.4	40.9
75+	1,317	7.0	2,604	14.1	97.7
Total	18,789	100.0	18,473	100.0	-1.7

Net Migration (2008 onwards) +10 people per year

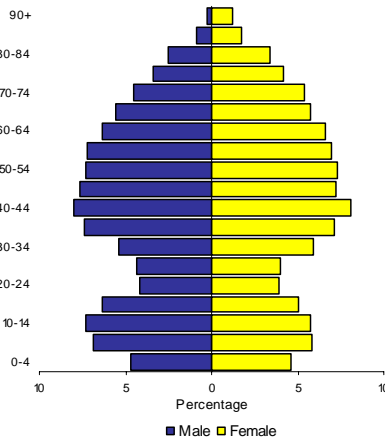
A high proportion of children in 1984 resulted in relatively high numbers of childbearing age in 2004 and the highest proportion of children. This, in turn, is expected to result in a smaller decline in the number of children by 2024 than some other Areas. The current bulge in the 40-60 year olds will result in fairly high increases in 65+ population by 2024.

NAIRN

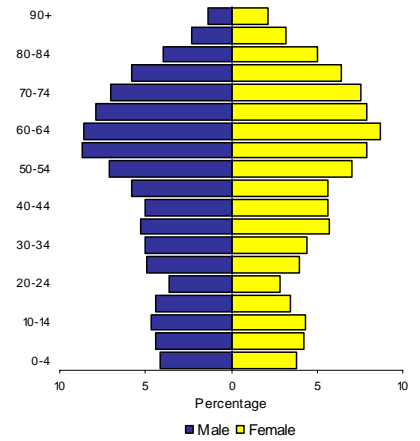
1984



2004



2024



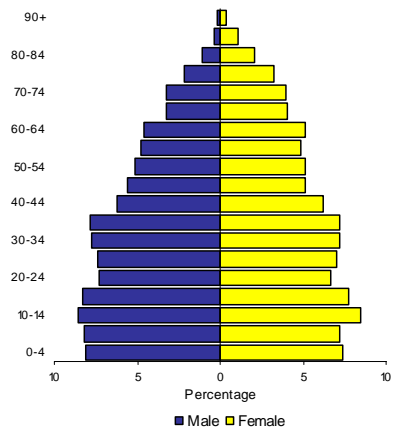
Age Group	2004		2024		Change %
	Number	%	Number	%	
0 to 4	543	4.6	512	4.0	-5.7
5 to 15	1,638	14.0	1,257	9.7	-23.3
16 to 24	998	8.5	800	6.2	-19.8
25 to 44	2,944	25.1	2,584	20.0	-12.2
45 to 64	3,309	28.3	3,845	29.7	16.2
65 to 74	1,246	10.6	1,970	15.2	58.1
75+	1,029	8.8	1,960	15.2	90.5
Total	11,707	100.0	12,928	100.0	10.4

Net Migration (2008 onwards) +105 people per year

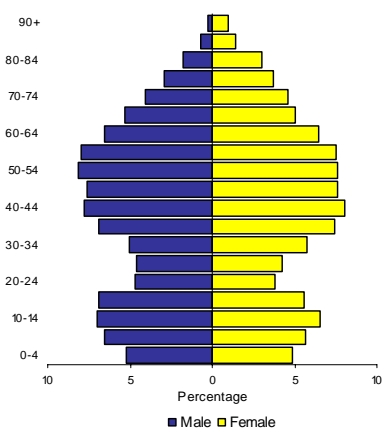
Nairn is projected to have, proportionally, the highest rate of inward migration which will result in the highest rate of growth of all Areas. The population was already relatively old in 1984 and the number / age profile of inward migrants has not and only two other areas are expected to have a lower proportion of children in 2024. Little change is projected in the 16-64 age group by 2024, but numbers will be concentrated in the older ages of this age group. Nairn had the highest proportion of over 75s in 2004 (perhaps due to the location of care homes) and is expected to have the third highest in 2024.

ROSS & CROMARTY

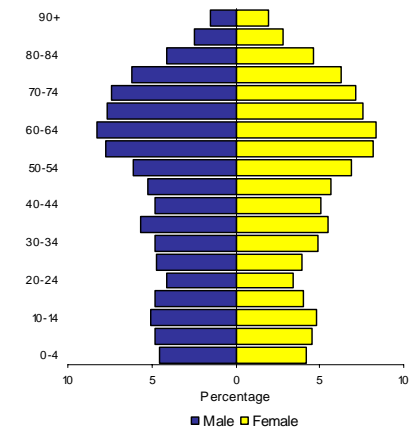
1984



2004



2024



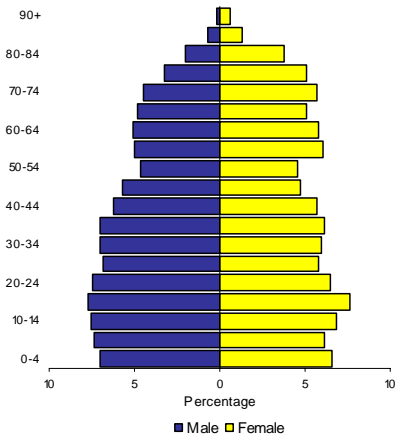
Age Group	2004		2024		Change %
	Number	%	Number	%	
0 to 4	2,516	5.0	2,274	4.4	-9.6
5 to 15	7,113	14.2	5,504	10.6	-22.6
16 to 24	4,546	9.1	3,706	7.1	-18.5
25 to 44	12,470	25.0	10,242	19.7	-17.9
45 to 64	14,860	29.7	14,670	28.3	-1.3
65 to 74	4,767	9.5	7,722	14.9	62.0
75+	3,695	7.4	7,806	15.0	111.3
Total	49,967	100.0	51,924	100.0	3.9

Net Migration (2008 onwards) +170 people per year

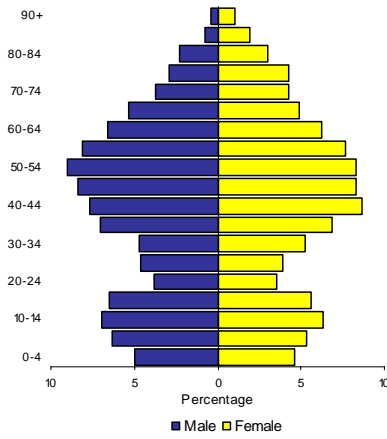
Ross & Cromarty had a relatively classical pyramid shape in 1984 but a combination of the natural ageing process, the loss of young people and the age profile of inward migrants has led to the ageing population seen throughout Highland. The Area will be "average" in 2024 by comparison with the other Areas but the percentage increase in the elderly - particularly over 75s - will be well above average.

SKYE & LOCHALSH

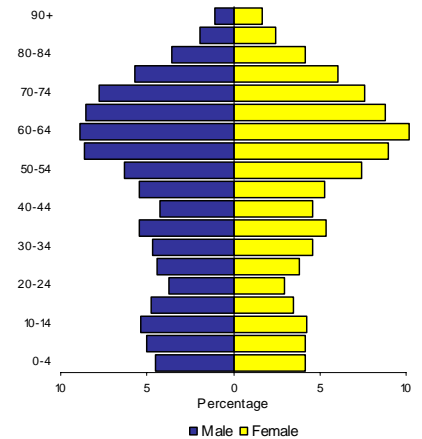
1984



2004



2024



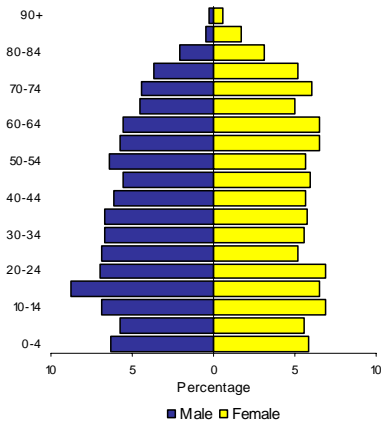
Age Group	2004		2024		Change
	Number	%	Number	%	%
0 to 4	596	4.8	581	4.3	-2.5
5 to 15	1,729	14.0	1,399	10.4	-19.1
16 to 24	1,012	8.2	875	6.5	-13.5
25 to 44	3,014	24.4	2,494	18.6	-17.3
45 to 64	3,862	31.2	4,092	30.5	6.0
65 to 74	1,124	9.1	2,192	16.3	95.0
75+	1,037	8.4	1,780	13.3	71.6
Total	12,374	100.0	13,413	100.0	8.4

Net Migration (2008 onwards) +85 people per year

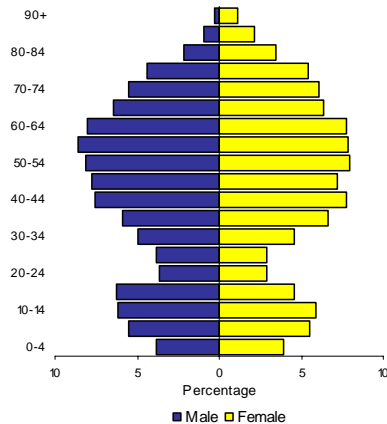
The relatively old population in 1984 has been compensated to some extent by a fairly high rate of inward migration and the proportion of children in 2024 will be around the Highland average. The current high proportion of the 40-60 age group population which will lead to a large increase in the 65+ population by 2024 (particularly the 65-70 age group) although the overall percentage of over 65s will be about the Highland average..

SUTHERLAND

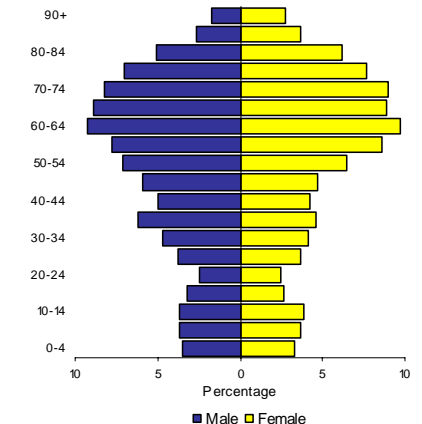
1984



2004



2024



Age Group	2004		2024		Change
	Number	%	Number	%	%
0 to 4	533	3.9	445	3.4	-16.5
5 to 15	1,769	12.9	1,074	8.2	-39.3
16 to 24	1,004	7.3	615	4.7	-38.7
25 to 44	3,023	22.1	2,381	18.1	-21.2
45 to 64	4,329	31.6	3,908	29.7	-9.7
65 to 74	1,674	12.2	2,296	17.5	37.2
75+	1,374	10.0	2,422	18.4	76.3
Total	13,706	100.0	13,141	100.0	-4.1

Net Migration (2008 onwards) +65 people per year

Sutherland is the most extreme example of Highland's demographic imbalance. The population was ageing in 1984 and the resulting low number of births, in combination with the ongoing loss of young people and age profile of inward migrants, gives a top heavy age profile in 2024. Sutherland will have the highest proportion of old people, together with the lowest proportion of children, and the working age population will be biased towards the older age groups. The ageing process has been gradual since 1984 and percentage changes from 2004 to 2024 are generally unexceptional.