

Health Intelligence Team NHS Highland

Lochaber demography 2016 - 2037

**Health Intelligence Team** 

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The Health Intelligence Team are part of the Directorate of Public Health of NHS Highland and provide an expert resource of demographic and population health evidence.

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## Introduction

The Lochaber area of NHS Highland is a large and predominately remote rural part of the Scottish West Highlands. The resident population of less than 20,000 people live in an area of 4,643 square kilometres with very low population density. Fort William with a population of 10,000 people is the major service centre for the area and the largest settlement. The area extends from the vastness of Rannoch Moor in the south, to a sea coastline of small settlements including those on the Ardnamurchan peninsula and the town of Mallaig in the west. The sparsely populated Glen Spean lies in the north-east and the Great Glen in the north. Lochaber also includes the Small Isles of Eigg, Muck, Rum and Canna that lie to the south of the Skye and to the north of Ardnamurchan.

The area referred to as Lochaber in this report is that defined by the Highland Community Partnership geography in 2017<sup>1</sup> and therefore excludes the population of Fort Augustus.

## Summary

The population of Lochaber in 2016 was  $19,806^2$ . In the previous 15 years the total population of Lochaber has increased by 5%, while the 65 years and over age group has risen by over a third.

Assuming that recent fertility, mortality and migration trends continue in the Lochaber area the total population will decrease by 3 percent between 2017 and 2037, although the over 85 age group is projected to increase by 141 percent.

In 2016 Lochaber had a slightly higher proportion of both aged 5-14 year olds and 45-54 year olds and lower percentage of 30-39 year olds than in Highland Council area as a whole (Table 2). Otherwise the estimated current and projected population structure of Lochaber is similar to Highland (Figure 1, Figure 8 and Figure 9).

## **Population distribution and settlements**

The larger settlements within Lochaber and their populations are summarised in Table 1 and population distribution by postcode plotted in Map 1.

## • Table 1: Lochaber settlement and locality populations 2017

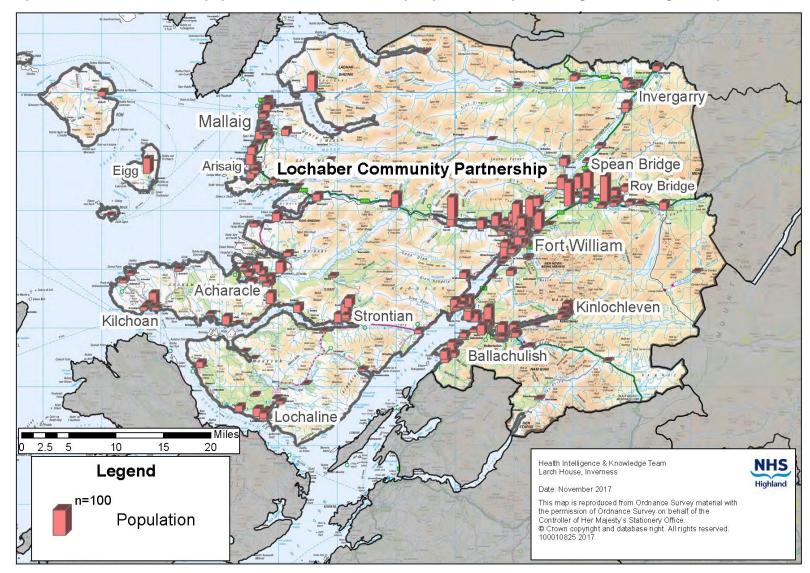
Settlement	Population		
Ballachulish		638	
Fort William		10,943	
Banavie and Corpach	1,407		
Caol	3,444		
Fort William	6,092		
Kinlochleven		888	
Mallaig		736	
Spean Bridge		542	

Data sources: Community Health Index (CHI) GP Practice Registration File October 2017 – NHS Highland data held locally and National Records of Scotland settlements and localities geographies

<sup>&</sup>lt;sup>1</sup> http://www.highlandcpp.org.uk/lochaber-community-partnership.html

<sup>&</sup>lt;sup>2</sup> Based on best fit of 2011 data zones to Lochaber Community Partnership geography

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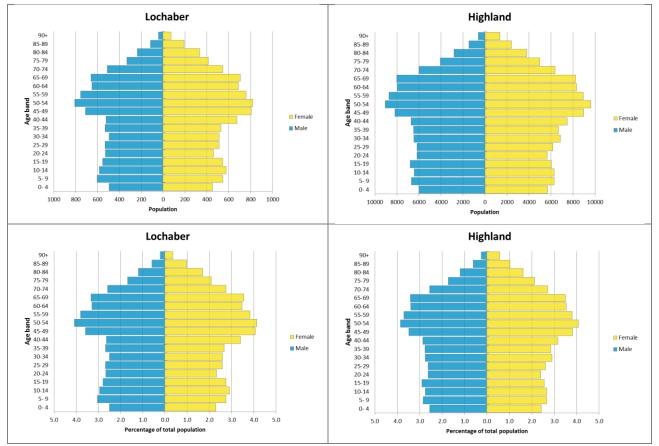


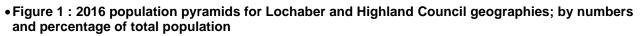
• Map 1: Lochaber October 2017 population distribution based upon postcode of patients registered with general practice

Data source: Community Health Index (CHI) GP Practice Registration File October 2017 - NHS Highland data held locally

## **Current population structure**

Figure 1 shows the mid-year 2016 estimated population structures of Lochaber and the Highland Council areas. The proportion of older people in the population is increasing over time (Figure 7). This primarily results from past trends in fertility, although falling mortality at older ages is also important. Larger groups are moving into older age and themselves being followed by smaller numbers at younger ages. The top heavy structure of the population profile will increase over the next 20 years.





Data source: <u>National Records of Scotland mid-2016 Small Area Population Estimates (SAPE)</u>; based on best fit of 2011 data zones to NHS Highland Community Partnership geographies.

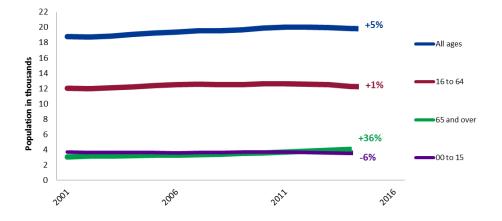
### • Table 2 : 2016 population structures in 5-year age bands

	Lochaber			Highland				
Age Group	Male	Female	Persons	% of total	Male	Female	Persons	% of total
0-4	494	454	948	4.8%	6,012	5,690	11,702	5.0%
5-9	603	544	1,147	5.8%	6,690	6,268	12,958	5.5%
10-14	584	576	1,160	5.9%	6,446	6,266	12,712	5.4%
15-19	554	544	1,098	5.5%	6,805	6,009	12,814	5.5%
20-24	529	461	990	5.0%	6,178	5,641	11,819	5.0%
25-29	530	513	1,043	5.3%	6,176	6,150	12,326	5.3%
30-34	496	512	1,008	5.1%	6,464	6,835	13,299	5.7%
35-39	530	529	1,059	5.3%	6,481	6,676	13,157	5.6%
40-44	522	674	1,196	6.0%	6,714	7,452	14,166	6.0%
45-49	710	805	1,515	7.6%	8,184	8,963	17,147	7.3%
50-54	808	821	1,629	8.2%	9,055	9,594	18,649	7.9%
55-59	754	758	1,512	7.6%	8,716	8,930	17,646	7.5%
60-64	653	688	1,341	6.8%	7,980	8,319	16,299	6.9%
65-69	660	704	1,364	6.9%	8,009	8,225	16,234	6.9%
70-74	511	545	1,056	5.3%	5,994	6,354	12,348	5.3%
75-79	333	413	746	3.8%	4,056	4,988	9,044	3.9%
80-84	236	336	572	2.9%	2,818	3,794	6,612	2.8%
85-89	116	193	309	1.6%	1,460	2,415	3,875	1.7%
90+	42	71	113	0.6%	608	1,355	1,963	0.8%
Total	9,665	10,141	19,806	100%	114,846	119,924	234,770	100%

Data source: <u>National Records of Scotland mid-2016 Small Area Population Estimates (SAPE)</u>; based on best fit of 2011 data zones to NHS Highland Community Partnership geographies.

In the previous 15 years the total population of Lochaber has increased by 5%, while the 65 years and over age group has risen by 36%.

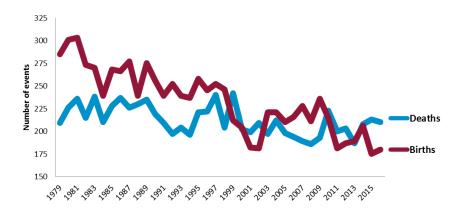
#### • Figure 2 : Lochaber population over time by age group with % change 2001-2016



Data source: <u>National Records of Scotland Small Area Population Estimates (SAPE)</u>. Best fit of data zones 2001 and 2011 to Lochaber Community Partnership area

Over the preceding 40 years deaths per year have fluctuated around 200 annually, while births have reduced from around 300 to less than 200 per year. Between 2001 and 2011 births in the Lochaber areas generally exceeded deaths contributing to the population growth shown in Figure 2. The current pattern of negative natural population change with deaths out numbering births highlights the importance of attracting inward migration while retaining existing population to ensure future population growth (Figure 3).

#### • Figure 3 : Lochaber vital events

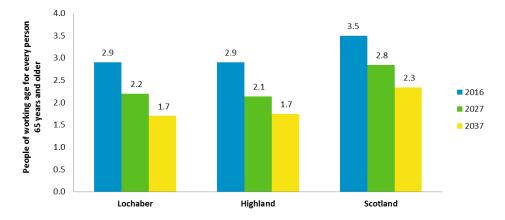


Data source: National Records of Scotland, Vital events reporting for NHS Highland held locally

## **Old Age Ratio**

An old age dependency ratio is an age-population ratio that shows the ratio of older people compared to people aged 16-64 years of age, who are assumed to be economically active.

Lochaber reflects Highland's old age ratio of proportionally less working age population to support those aged 65 and over than that nationally (Figure 4). This is projected to reduce further given the population profiles in Figure 5 and Table 3 to 2.2 by 2027 and to only 1.7 working age people to every person aged over 65 in Lochaber by 2037.



#### • Figure 4 : People of working age (16-64 years) for every person 65 years and older in 2016 to 2037

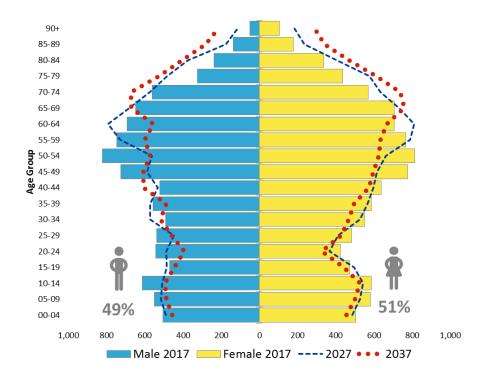
Data source: <u>National Records of Scotland mid-2016 Small Area Population Estimates (SAPE)</u>; based on best fit of 2011 data zones to NHS Highland Community Partnership geographies and <u>National Records of Scotland (NRS) 2012-based population projections for sub-council areas and NRS Projected Population of Scotland (2016-based)</u>

## Projected population structure 2017 to 2037

In 2014 the National Records of Scotland (NRS) published a set of small area population projections for sub-Local Authority areas, including Lochaber. The area definition used is very similar to the Community Partnership geography of Lochaber and all the data in this section is derived from this source. While the NRS projection suggests that between 2017 and 2037 the total size of the population of Lochaber will reduce by 3 percent, this figure is based on past trends and makes assumptions about the future from past patterns of fertility, mortality and migration. Annual net migration gain, the difference between the number of people moving into the area and those leaving, is estimated to be less than 10 people per year. The interplay of these factors is complex and the reliability of population projections decreases over the course of the projection, particularly for smaller populations which can be very influenced by the size of migration flows.

What is more certain is the picture of population ageing apparent in the current population structure and the impact that this will have across all years of the projection. Large cohorts of older adults are ageing and being replaced at younger ages by a smaller number of people.

Changes resulting from significant new developments in an area are not taken into account in NRS estimates, which are based on projection of past experience. GFC Alliance companies Liberty British Steel and Simec Lochaber Power took over the aluminium smelter plant in Fort William in 2016. The new owners plan, in phase one, to create an estimated 600 new direct and indirect jobs and in the longer term increase the workforce overall as the projects expand. Planning permission was approved for construction of a feeding plant for Marine Harvest which is expected to be completed by 2018. The feed plant will employ 55 people in a range of jobs within the company<sup>3</sup>. Therefore the expected additional workforce requirement is 655; this represents around 5% of the estimated working age population of Lochaber in 2016. Based on existing population profiles this would project an additional 185 children in the 0-15 year age group.

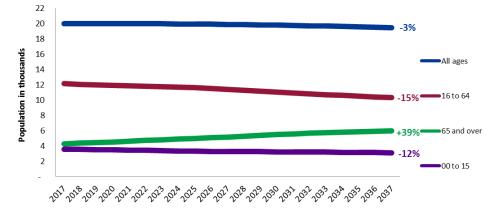


### • Figure 5 : Lochaber projected population profiles - 2017 to 2037

Data source: National Records of Scotland (NRS) 2012-based population projections for sub-council areas

<sup>&</sup>lt;sup>3</sup> Belford Hospital Review, section 3.1 Population change; NHS Highland Planning & Performance, November 2017

Lochaber's population is projected to age in a similar pattern to Highland with the over 85 years age group increasing by 141% and the over 65 years age group by 39% by year 2037. All age groups up to 64 years are projected to decrease over time (Figure 6, Figure 8 and Figure 9). The old age dependency ratio will increase, with fewer people of working age potentially available to look after an increasingly elderly population.



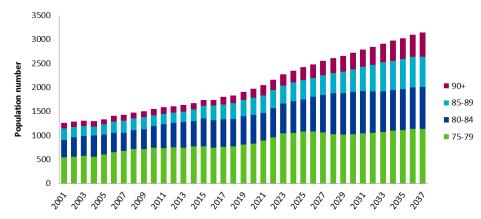


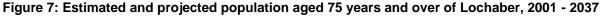
Data source: National Records of Scotland (NRS) 2012-based population projections for sub-council areas

Table 3 : Lochaber	<sup>,</sup> projected	population	by age	group
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Age group	2017	2022	2027	2032	2037
00-15	3,552	3,429	3,277	3,212	3,122
16-24	1,700	1,566	1,629	1,495	1,405
25-44	4,366	4,391	4,224	4,171	4,042
45-64	6,054	5,837	5,551	5,132	4,862
65-74	2,487	2,553	2,619	2,824	2,841
75-84	1,337	1,571	1,843	1,922	2,013
85+	468	594	710	924	1,128
All ages	19,964	19,941	19,854	19,679	19,413

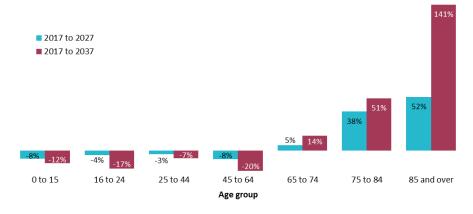
Data source: National Records of Scotland (NRS) 2012-based population projections for sub-council areas



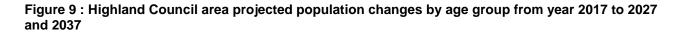


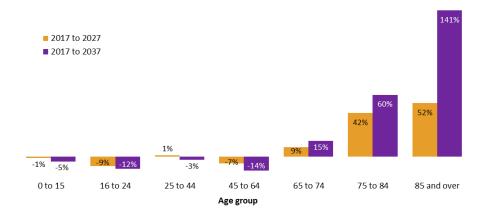
Data sources: <u>National Records of Scotland mid-2016 Small Area Population Estimates (SAPE)</u>; based on best fit of 2011 data zones to NHS Highland Community Partnership geographies and <u>National Records of Scotland (NRS) 2012-based population projections for sub-council areas</u>





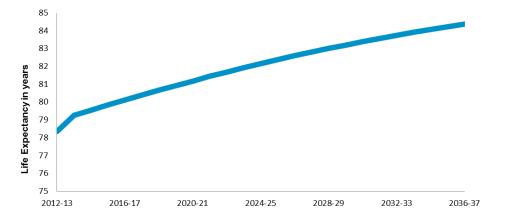
Data source: National Records of Scotland (NRS) 2012-based population projections for sub-council areas





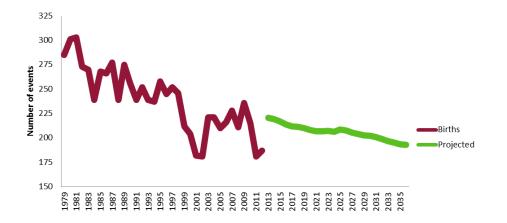
Data source: National Records of Scotland (NRS) 2012-based population projections for sub-council areas

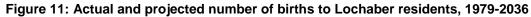
In the projection for Lochaber, life expectancy is expected to continue to rise in line with the rest of the Highland Council area (Figure 10).





Note: The POPGROUP method of calculating life expectancy differs to that used by National Records of Scotland for council area life expectancy calculations. Data source: <u>National Records of Scotland (NRS)</u>, 2012-based population projections for sub-council areas, 2012-2037. Births, based on the data available in 2014, are projected to decline to under 200 per year by the end of the projection. Figure 11 suggests that the birth component of the projection may over estimate the number of young people in the longer term.





Data source: NHS Highland - locally held National Records of Scotland (NRS) vital events recording (1979-2012), <u>NRS 2012-based</u> population projections for sub-council areas - combining projected numbers of age 15-44 women and total fertility rate (TFR).