Cairngorms
NATIONAL PARK
Pàirc Nàiseanta a' Mhonaidh Ruaidh

STRATEGY

Cairngorms National Park
Partnership Plan 2017-2022

Strategic Environmental Assessment Scoping Report

Appendix 2: Environmental Baseline

Topic 8: Population and Human Health

November 2015

Topic 8: Population and Human Health

Population

Population statistics within the Cairngorms National Park are calculated using an aggregate of data zones that roughly correspond with its boundary. For full details on how these data zones are collected, see **Appendix 3** (p. 201).

Population and Households

In 2013[1] the estimated population of the National Park was 18,420, with 9,113 males and 9,307 females.

The National Park has a distinctly different population profile to the national (**Figure 86** and **Figure 87**), with a higher proportion of people falling within the 55 to 74 age cohorts. When compared to other rural parts of Scotland, the Cairngorms National Park also has a relatively high proportion of residents

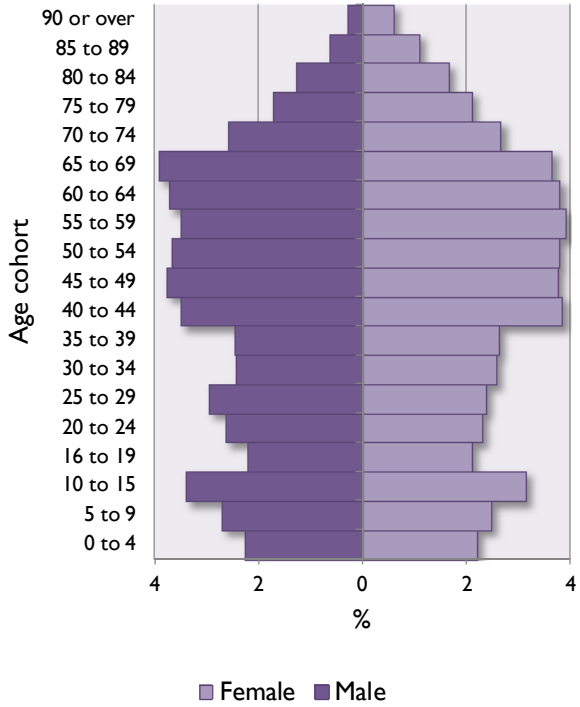

Figure 1 Estimated population profile by age and sex in the Cairngorms National Park in 2013.

Source: www.sns.gov.uk

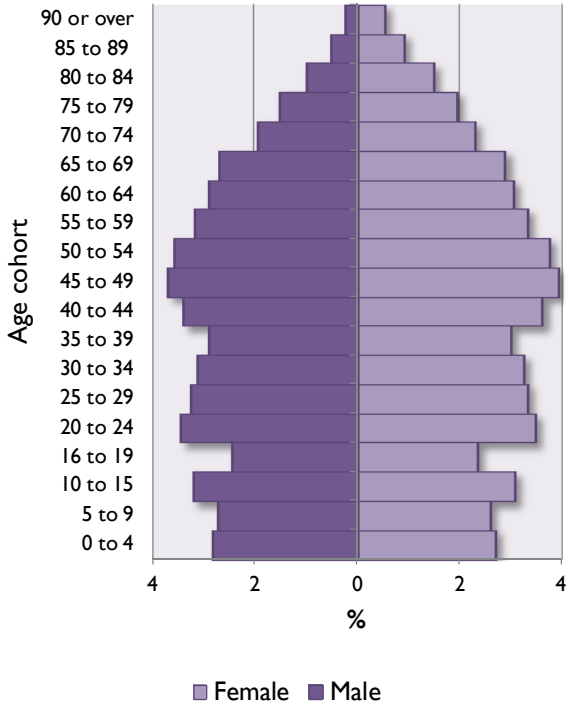

Figure 2 Estimated population profile by age and sex in Scotland in 2013.

[1] 2013 Mid-year estimates represent the most recent set of population statistics at a data zone level at time of writing.

within the 10 to 29 age cohorts (see NRS (2014). This is thought to be due to the relatively high number of opportunities for employment in the outdoor and tourism sectors. There is also a spike in the 10 to 15 year cohort, which is replicated across Scotland as a whole.

Although mid-year estimates for 2013 suggest a small decrease from the previous year (about -0.2%), during the 21st century[2], the National Park has experienced a significant net increase in its resident population, rising by approximately 2,087 persons (a growth of 12.8%) (**Figure 88**). This growth is well above the overall Scottish rate, which saw a net increase of around 5.2% over the same period.

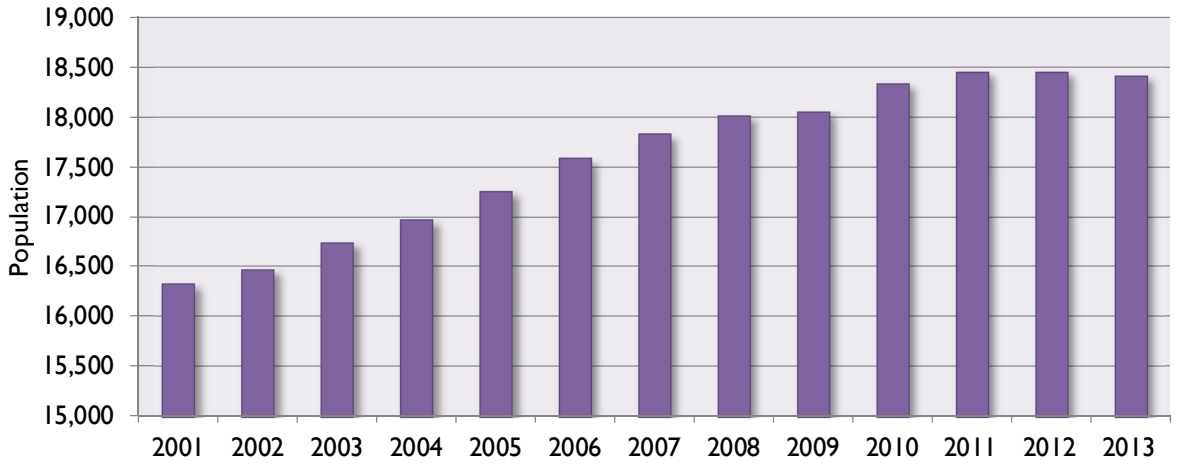

Figure 3 Mid-year estimates of total population for the Cairngorms National Park. Source: www.sns.gov.uk

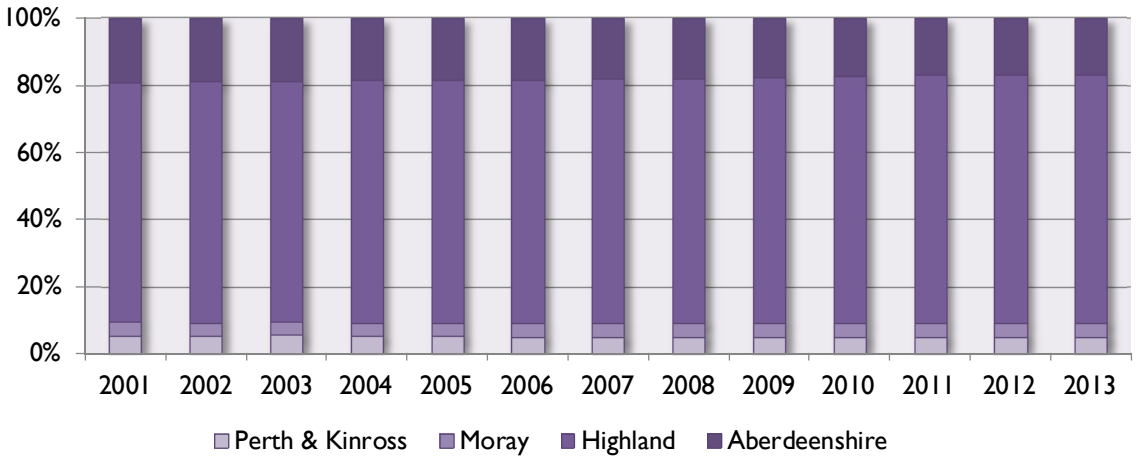

Figure 4 Mid-year estimates of total population for the Cairngorms National Park distributed by Local Authority Area. Source: www.sns.gov.uk

[2] Figures between 2001 and 2009 include people living in the area of Perth and Kinross which did not become part of the National Park until 2010.

This growth has not been evenly distributed throughout the National Park (**Figure 89** and **Figure 90**). Indeed, the overall population in data zones within Aberdeenshire and Perth and Kinross has remained relatively stable.

The greatest increase occurred within Aviemore, which is estimated to have grown by around 972 people. Proportionally this represents a growth of around 136%. Most of Badenoch and Strathspey also experienced growth, gaining an estimated 940 people. Taken together, this addition of 1,912 persons resulted in the Highland area of the National Park growing by 16.4%.

Although net population change within the National Park has been positive, certain areas experienced a reduction in the population. For example, the population of datazone S01000312, which represents part of Ballter, lost around 113 persons (-17.6%). It is unclear if this represents a genuine trend or is a result of methodical or sampling changes to the mid-year estimate methodology.

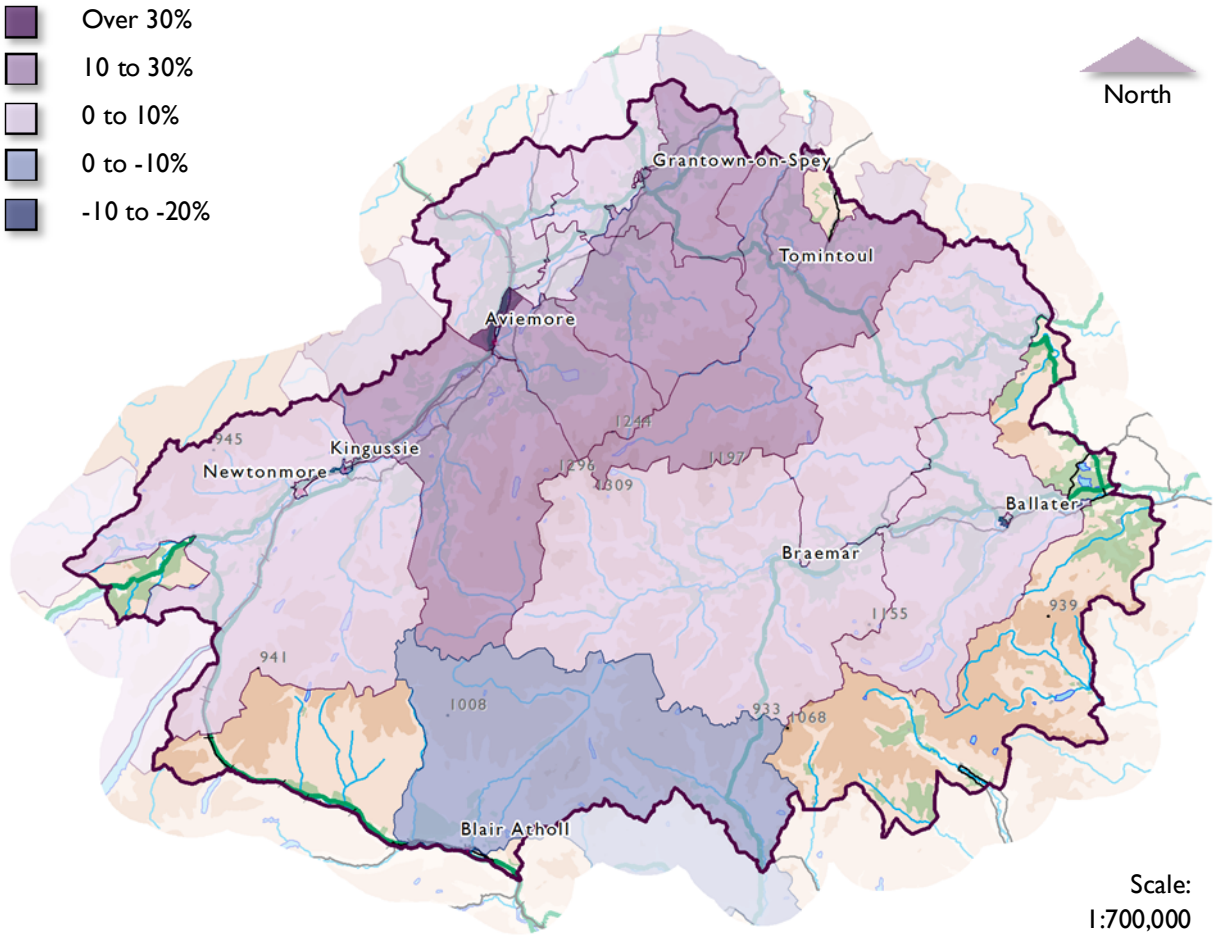

Figure 5 Population change within the Cairngorms National Park between 2001 and 2013 (based on mid-year estimates).

Population projections for the National Park are produced by National Records of Scotland (NRS), with the most recent being 2012 based projections being published in August 2014 (**Figure 91**).

It should be noted that in estimating the population of the National Park and calculating its projected growth, NRS does not include data zone S01005147 / S01011981, which is in Perth and Kinross. Population estimates presented in NRS documents therefore differ from those of the CNPA, since the CNPA does include the data zone within its analyses of the National Park's demographic and socio-economic character.

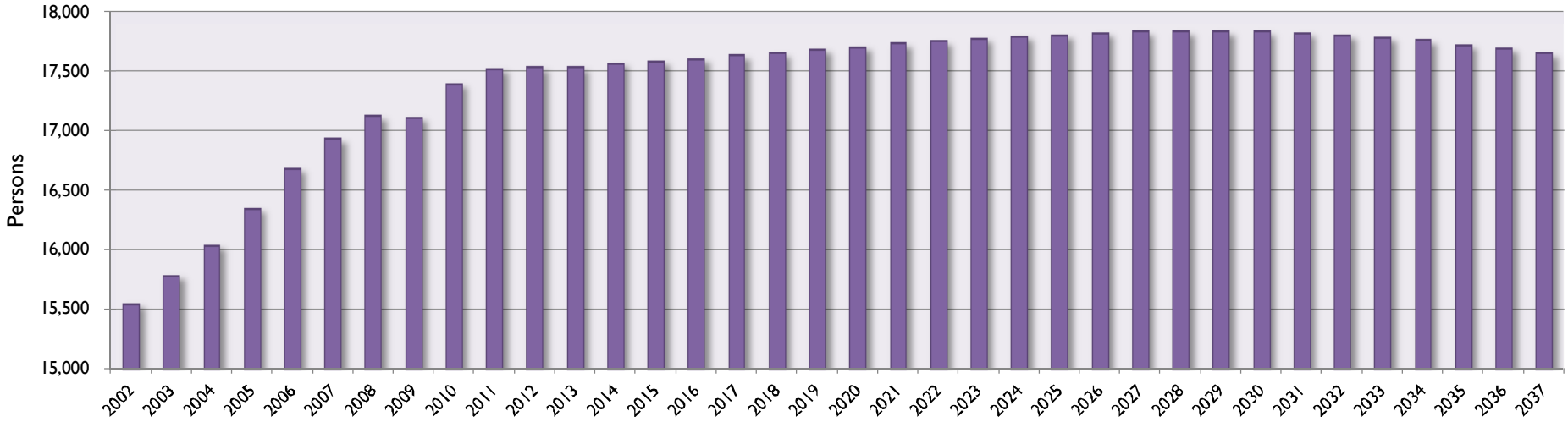

Figure 6 Estimated and projected total population of the National Park, 2002-2037 (NRS, 2014).

This difference does not however result in a significant problem since it is not the headline population that generates a policy response, but the rate and scale at which change occurs. Since data zone S01005147 / S01011981's population was only estimated to be 923 in 2013 and the fact that it saw no statistically significant change over the period of 2001-2013 (an estimated net decrease of 2 persons), there is little to suggest that its absence within NRS' calculations would have had a significant impact on the robustness of their projections.

NRS (2014) estimate that between 2012 and 2037, the population of Cairngorms National Park is projected to rise from 17,540 to 17,660 (an increase of around 1%). This is a lower level of growth than experienced previously, however since 2010 a reduction in the rate of growth has

occurred and should this represent a future trend then the projection is not unreasonable. There is projected to be more deaths than births across the 25 year projection period. Therefore the population increase is due to net immigration to the area, which is assumed to be 50 migrants per year.

NRS (2014) also give an indication of how the age structure of the population might change (**Figure 92** and **Figure 93**). The number of children aged under 16 is projected to decrease by 15% over the projection period from 2,890 in 2012 to 2,460 in 2037. The number of people of working age is projected to decrease from 10,350 in 2012 to 9,910 in 2037, a decrease of 4%.The population of pensionable age is projected to rise by 23% from 4,300 in 2012 to 5,290 in 2037.

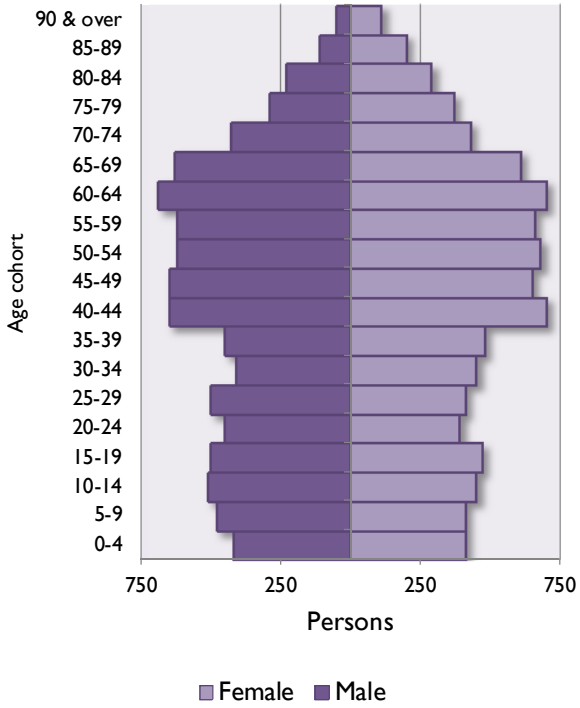

Figure 7 Estimated population profile by age and sex in the Cairngorms National Park in 2012 (NRS, 2014).

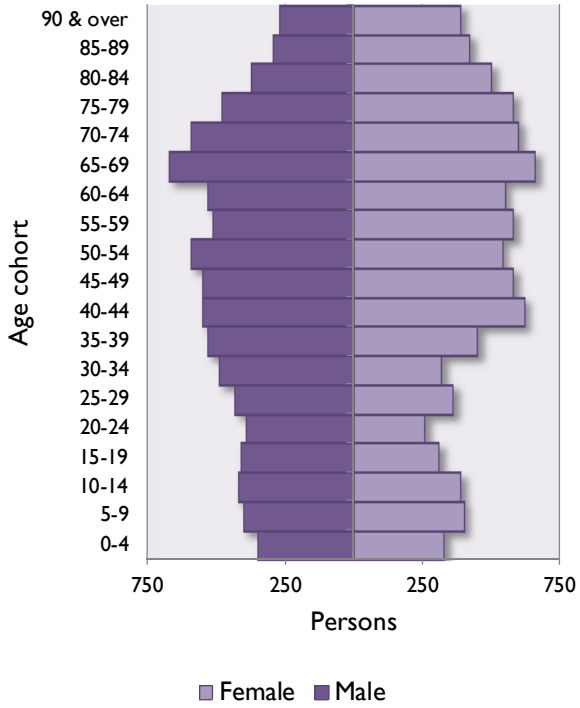

Figure 8 Projected population profile by age and sex in the Cairngorms National Park in 2037 (NRS, 2014).

It's clear that this projected change in population and demographic character will result in an increase in the number of households within the National Park. NRS (2014) projections suggest that households are set to increase from 7,870 in 2012 to 8,780 in 2037, an increase of 12% (**Figure 94**).

Given the limited nature of the projected population growth, it is clear that it does not entirely explain the projected change in the number of households. Indeed, the difference between the household and population projections is due to the trend in more people living alone or in smaller households. In the Cairngorms National Park, the average household size is projected to drop from 2.15 people in 2012 to 1.93 people in 2037 (**Figure 95**).

Housing Deprivation

The relationship between the availability of good quality housing and the health and well-being of people is now well recognised (National Housing Federation, 2014; Parliamentary Office of Science and Technology, 2011).

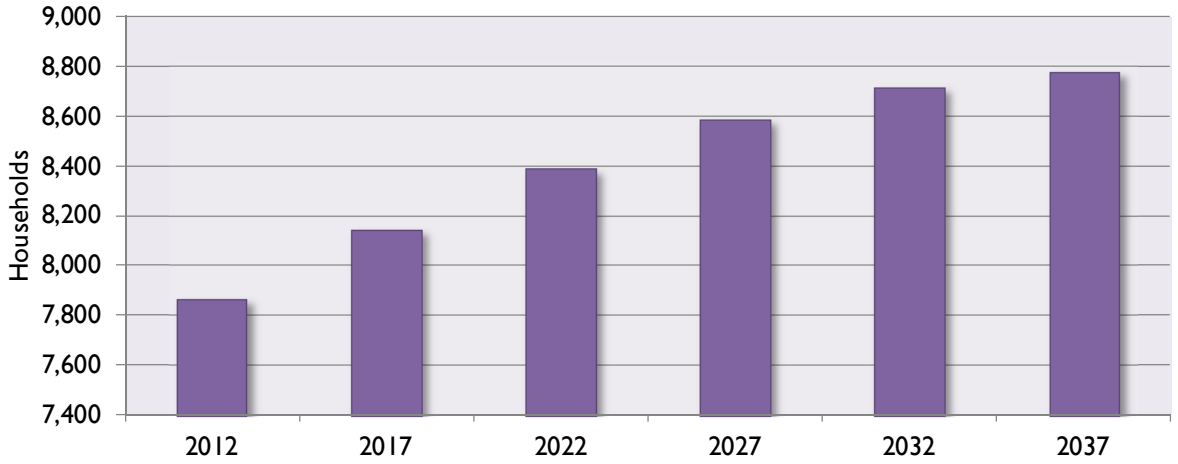

Figure 9 Overall household projections for the Cairngorms National Parks, 2012 to 2037 (NRS, 2014).

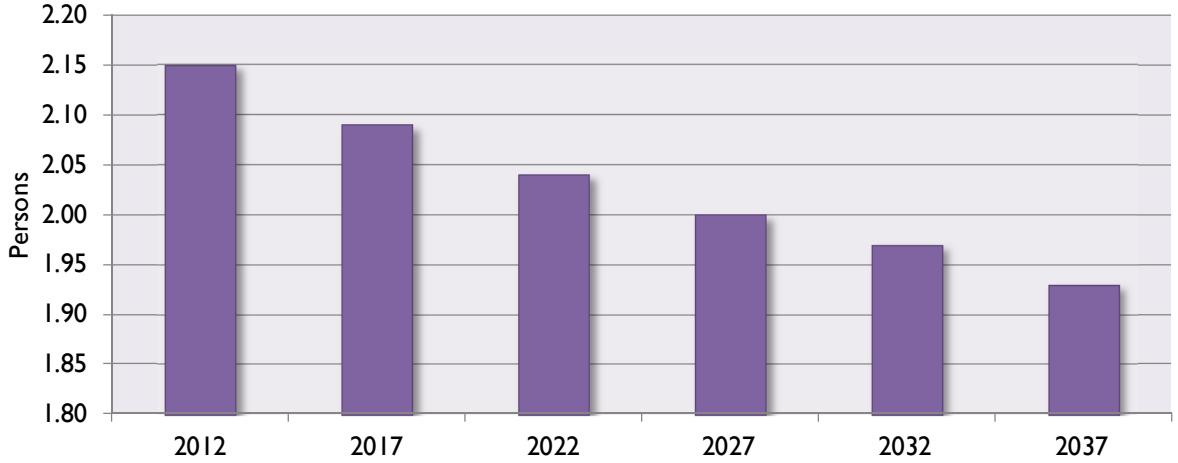

Figure 10 Projected household size for the Cairngorms National Park, 2012 to 2037 (NRS, 2014)

For example, children who are brought up in disadvantaged neighbourhoods, in poor quality housing or insecure accommodation are more likely to be exposed to avoidable health risks such as damp, cold, accidents, community safety concerns, inadequate pre-school and early-years provision, poor schools, and a lack of safe play areas (Shelter, 2006). Similarly, growing older in poor quality, unaffordable or inappropriate housing has a negative impact on quality of life the maintenance of independence in retirement (The Housing and Ageing Alliance, 2013). Research carried out in England, showed an average life expectancy gap of seven years between the richest and poorest areas of the country. People living in poorer areas and households with the lowest incomes spend a greater proportion of their lives (an additional 17 years on average) coping with the impact of long-term illness and associated disability (Marmot, 2010).

Fortunately, there is not a high level of housing related deprivation within the National Park, with no data zones falling

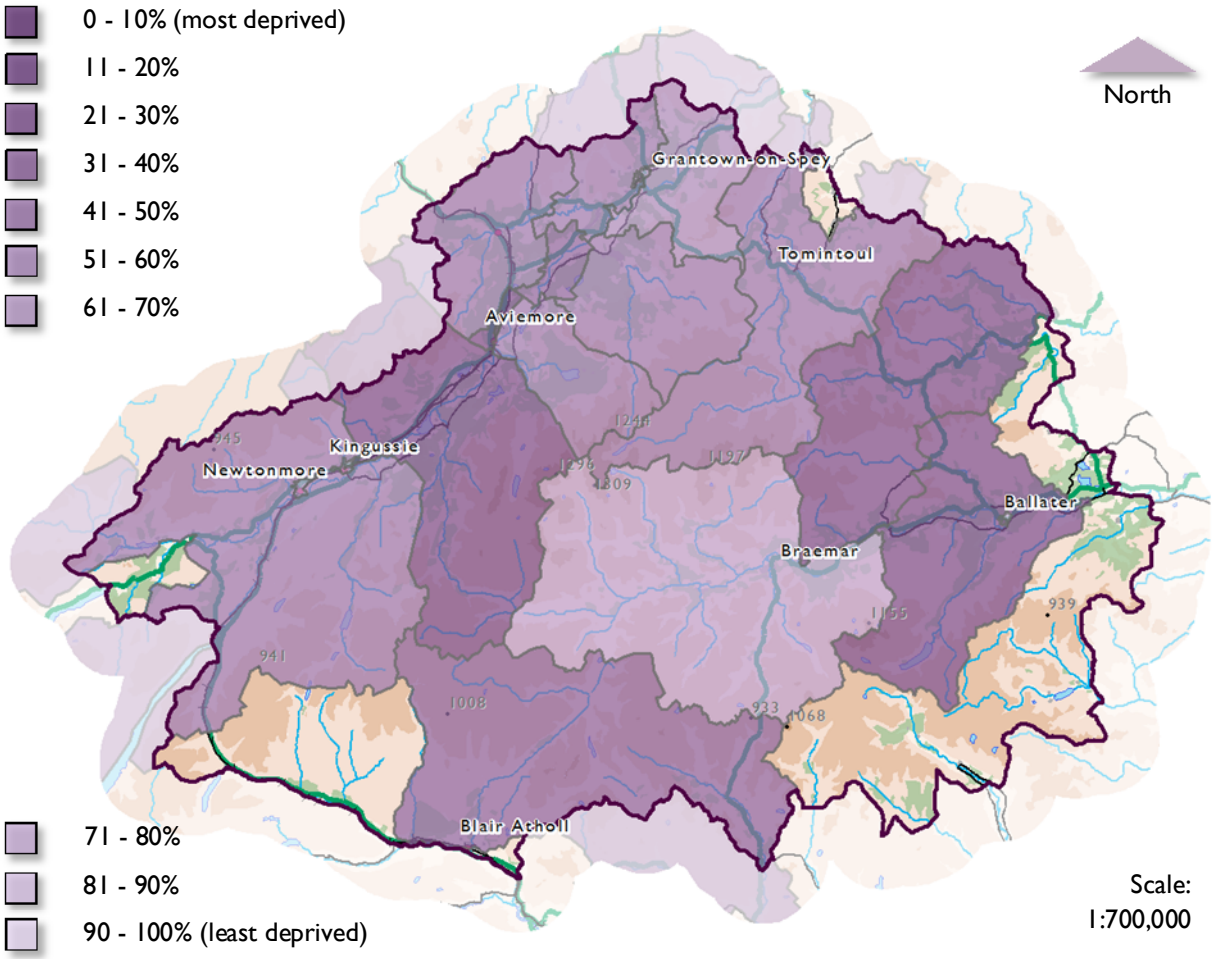

Figure 11 Housing deprivation by decile according to the SIMD (2012).

within the 20% most deprived (see **Figure 96**). There are however areas of the National Park where certain indicators of housing deprivation exceed the national average.

In particular, many areas of the National Park have relatively high proportions of the

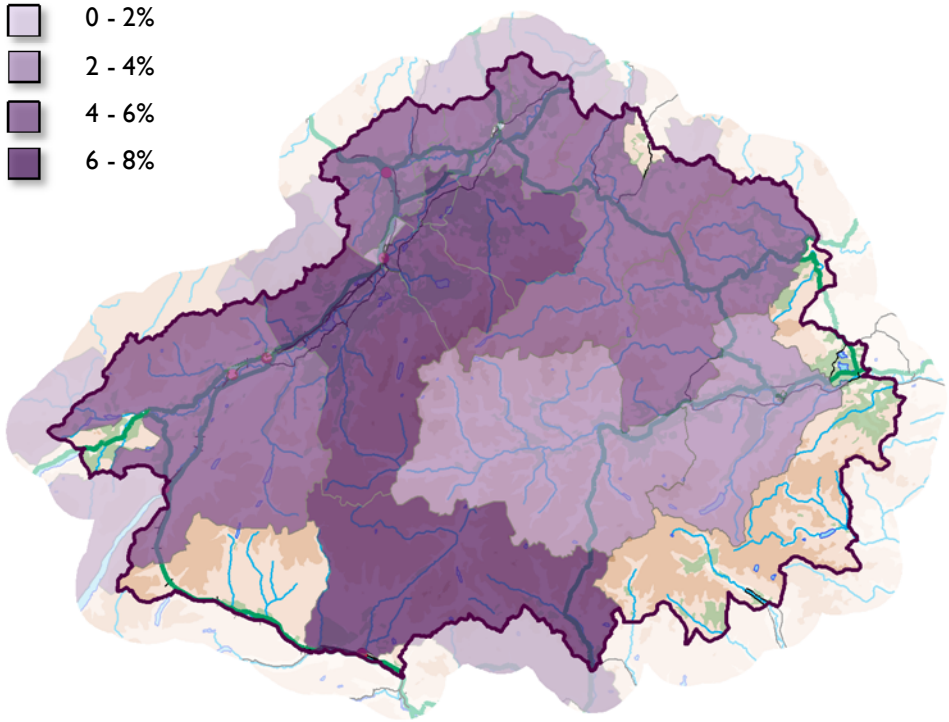

Figure 12 2001 Proportion of household population without central heating, 2011 (Census table LC1403SC). Crown copyright 2013.

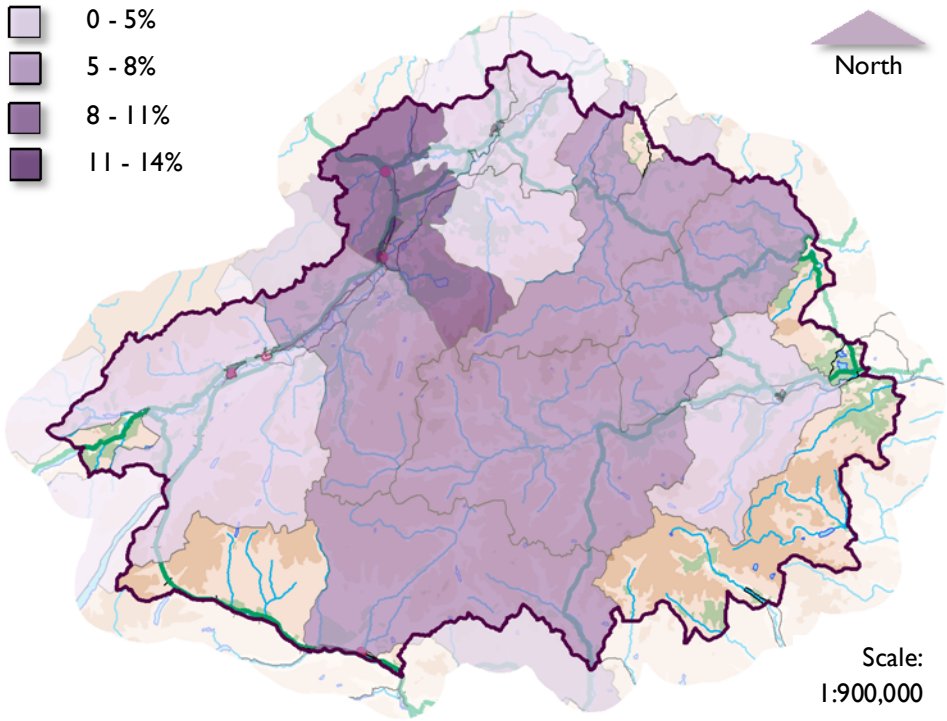

Figure 13 Proportion of household population living in overcrowded households, 2001 (SIMD, 2012).

For further information on variables, see www.scotlandscensus.gov.uk/variables

In order to protect against disclosure of personal information, some records have been swapped between different geographic areas. Some cell values will be affected, particularly small values at the most detailed geographies.

household population living in homes with no central heating, equating to around 4.3% across the whole area (Scotland 2.3%) (**Figure 97**). Levels of household overcrowding are relatively low within the National Park (**Figure 98**), with the vast majority of data zones falling below the Scottish average of around 13.9%. It should be noted however that data on overcrowding comes, via the 2012 SIMD, from the 2001 Census and therefore, owing to its age, a degree of caution should be applied when quoting these statistics.

Economic Activity

2013 mid-year estimates indicates that the National Park had a working age population of 10,909 people (51.9% of total population), with 5,666 males and 5,243 females. Those of pensionable age numbered 4,539 (24.6% of total population) with 1,911 males and 2,628 females.

Educational achievement within the National Park is a little higher than the Scottish average. In terms of qualifications, the 2011 Census (Table LC5102SC)

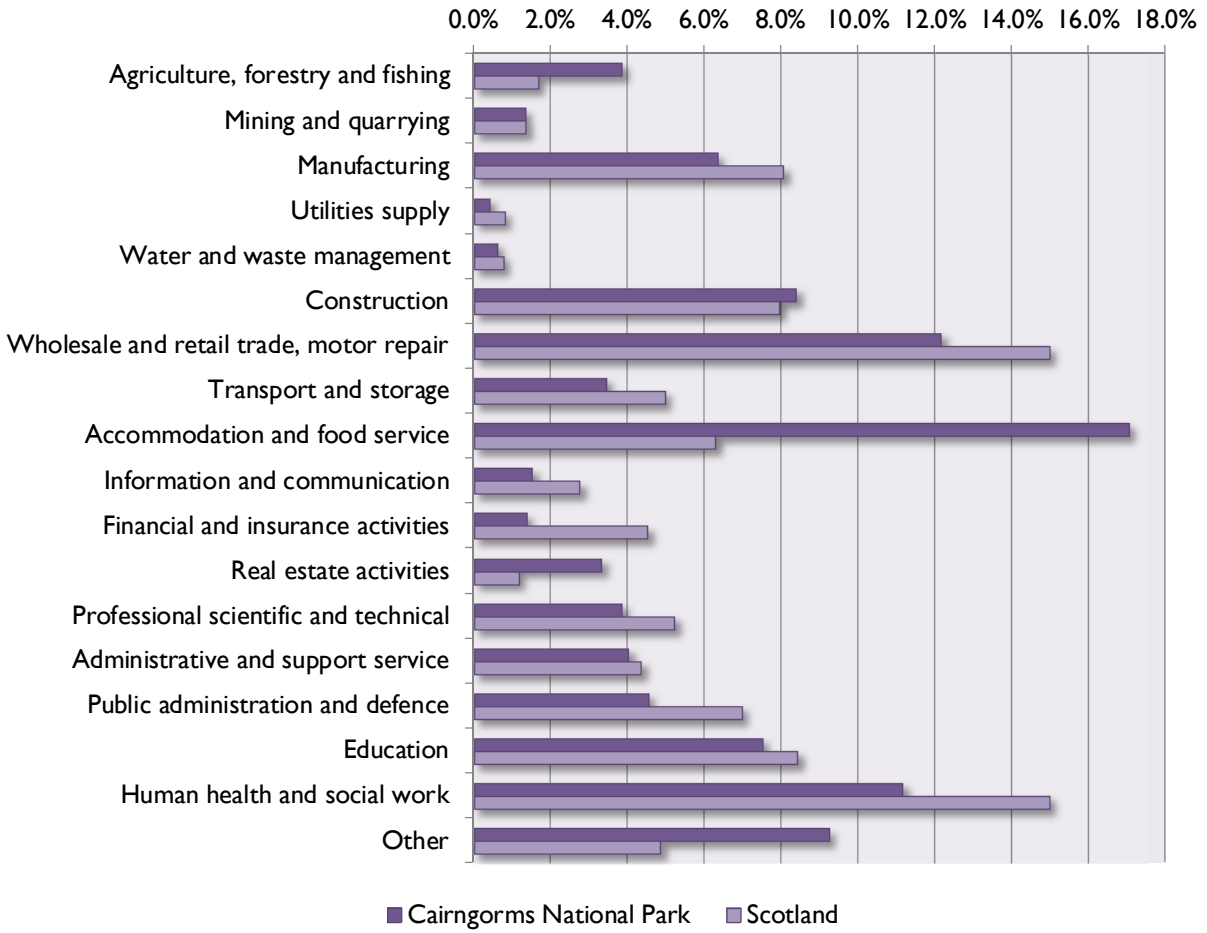

Figure 14 Proportion of all people aged 16 to 74 in employment the week before the census by industry (Census table KS605SC). Crown copyright 2013.

For further information on variables, see www.scotlandscensus.gov.uk/variables

In order to protect against disclosure of personal information, some records have been swapped between different geographic areas. Some cell values will be affected, particularly small values at the most detailed geographies.

suggests that around 76.8% of the 16+ Census population had NVQ1 level and above (Scotland 73.2%), and around 30.8% had NVQ4 and above (Scotland 26.1%).

According to the Census (Table LC6107SC) of the economically active in 2011 (around 10,487 individuals, or 66.1% of the 16+ population), around 95% were classed as being in employment, which is slightly higher than the Scottish level of 91.9%. Of the inactive, who numbered 5,377 (around 33.9% of the 16+ population), 75.1% were inactive due to retirement. This is much higher than the Scottish retirement level of 59.9%. There are two reasons for this. Firstly, as shown by **Figure 86** the National Park has a higher proportion of those over the age of 55 than the national average, and secondly, owing to the absence of a higher education facility within the National Park, there are relatively few full time students residing within its boundary.

The Census profile of full time (72.8%) and part time (27.2%) employee jobs (excludes self-employed, government, trainees and HM Forces) (Table LC6109SC) is generally consistent with Scotland as a whole. The significance of certain employment sectors differs quite significantly however, with the proportion of those employed in agriculture, forestry and fishery, accommodation and food and 'other' forms of work far exceeding the Scottish average (**Figure 99**).

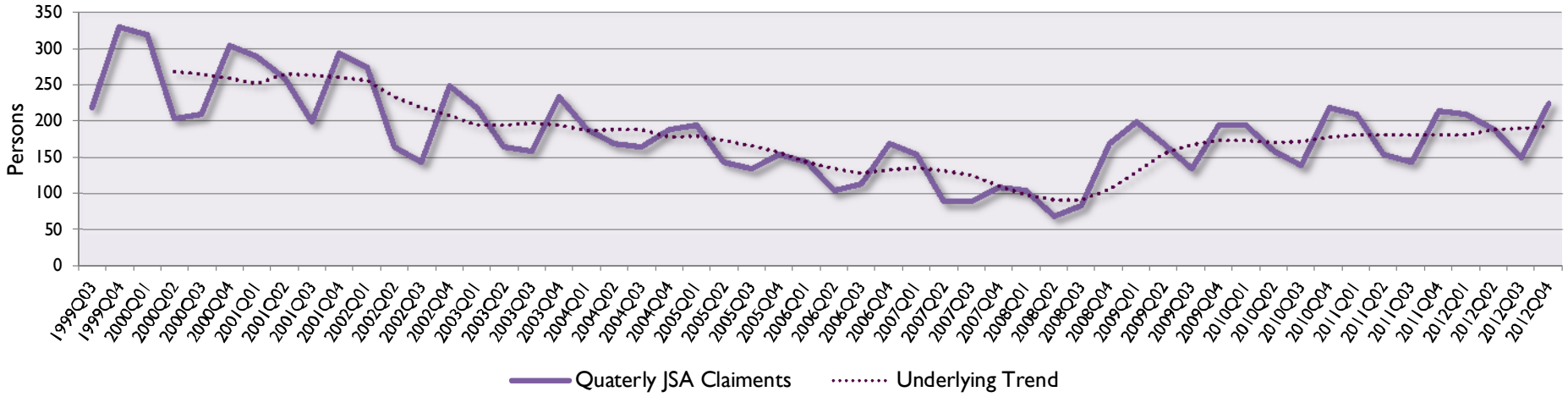

Figure 15 Job Seekers Allowance (JSA) claimants within the Cairngorms National Park (Source: http://www.sns.gov.uk/default.aspx).

According to SIMD 2012 data, the National Park has relatively low levels of employment related deprivation, which it rates using indicators such as Working Age Unemployment Claimant Count, Working Age Incapacity Benefit recipients and Working Age Severe Disablement Allowance recipients. None of the data zones within the National Park fall into any of the most deprived categories, with 10 out of the 23 falling within the 20% least deprived.

Indeed, unemployment levels within the National Park are relatively low. Out of work benefits issued to those of working age in the area (JSA) in quarter 4 of 2012 stood at 225 (1.7%), below the Scottish figure of 4%.

The nature of employment within the National Park is however extremely seasonal, with JSA claimants peaking in the winter months (**Figure 100**). Unemployment is at its lowest in July, which coincides with Scottish school and public holidays.

In employment terms, claimant data suggests that the recession began in the National Park in March 2008. It continued to get worse at the rate of about two jobs per week until July 2009 when the position began to improve, with a stabilisation in the level of those claiming JSA. Most recent data suggests that claimant numbers are beginning to fall, though it is still too soon say whether this represents the beginnings of a durable recovery (CogentSi, 2010; CogentSi, 2013).

Wages and Income

Due to the low level of unemployment within the National Park, levels of income deprivation are relatively low according to the SIMD 2012. However, this masks the fact that there is strong evidence to suggest that average earnings within the National Park are well below the Scottish and British averages.

There is no official up-to-date data available for earnings specifically in the National Park, however an idea may be gained from the Local Authorities that contribute towards the National Park's area. Of these, only Aberdeenshire is above to the Scottish median income (**Table 25**). However, the shire figures will be heavily influenced by high earners living near and working in or near the city of Aberdeen, which is by far the best-paying Council area in Scotland. Therefore, Aberdeenshire residents who are actually living within the Park are likely to have smaller incomes more in line with the figures for other parts of the National Park.

Table 1 Median gross weekly earnings by residence, 2014 (Source: ONS annual survey of hours and earnings - resident analysis; www.nomisweb.co.uk).

Area	Median Gross Weekly Earnings
Great Britain	£520.2
Scotland	£519.4
Aberdeenshire	£509.8
Angus	£467.7
Highland	£487.9
Moray	£434.3
Perth & Kinross	£481.2

The likelihood is that the nature of earnings for National Park residents is closer to the Moray and Angus figures than it is to Highland and Perthshire, because both the industrial and urban structure in the

National Park is much closer to the first two Local Authorities. Indeed, there is evidence that it is likely to be below the Moray and Angus figures.

To aid understanding of the incomes of residents within the National Park, CongestSi (2010) calculated earnings by industry in each of its contributing NUTS3[3] areas. With the exception of utilities and distilling, the National Park tends to focus on the lower paying industries, notably the hospitality industries and retailing. Using these estimates of employee compensation industry-by-industry, annual earnings levels per head for National Park residents for 2006 were estimated at significantly lower levels than the contributing NUTS3 areas. One factor behind this is the relatively light representation of the public sector in the National Park's economy. Since they pay according to national scales, public authorities in rural areas tend to be amongst the better payers.

[3] NUTS' is the standard statistical geography of the European Union. The (enlarged) Park consists of part of four of Scotland's 23 NUTS3 areas.

Average annual compensation of (non-agricultural) employees in the National Park in 2006 was estimated at £18,370, which is 74% of the Scottish average of £24,840 (CogentSi, 2010).

Another indicator of the income of National Park's residents may be found in research carried out by Herriot-Watt University on developing local and small area estimates of income distribution, poverty and deprivation (Bramley & Watkins, 2013). This study offers a snap shot of household incomes at a data zone level in 2008 / 2009. It should be noted that the figures presented in this study are not directly comparable to those in **Table 25**, since the Herriot-Watt figures represent household income rather than individual worker pay. The Herriot-Watt figures also include welfare payments (e.g. pensions, tax credits, JSA etc.) within their figures, which are also not present within the **Table 25** figures. It is not possible to use the figures to create an aggregate of the National Park either since it is not appropriate to sum the median figures or percentages for individual data zones. Therefore analysis must take place at a data zone by data zone level.

What the data presents in **Table 26** therefore is an idea of the variation in median household incomes across the National Park. An analysis of these figures (**Figure 101**) shows that the National Park's median gross household income (£503) is above that of Scotland (£467) and, with the exception of Aberdeenshire, is comparable with all of its constituent Local Authorities. It also shows that the distribution of incomes is much narrower than these areas, with the maximum income being lower and the minimum income being higher.

The figures also demonstrate a great deal of variation between the proportions of households on low incomes. For example, 20% of households in S01000303 have a gross income of less than £300 per week, while the figure is 38% for households in S01004233 (see **Figure 110** for location of data zones). Most are however around the median of 25%, which is below the Scottish 28%.

Table 2 Estimated household income for data zones within the Cairngorms National Park 2008 / 2009 (Bramley & Watkins, 2013).

Local Authority	Data Zone (2001)	Weekly median net[4] household income	Weekly median gross[5] household income	Households with a gross income of less than £300 per week	Households with a gross income of less than £400 per week	Households with a gross income of less than £500 per week	Households with a gross income of less than £600 per week	Households with a gross income of less than £800 per week
Aberdeen-shire	S01000301	£476	£586	22%	31%	42%	49%	65%
	S01000303	£510	£625	20%	28%	37%	44%	60%
	S01000312	£470	£573	23%	33%	45%	49%	64%
	S01000316	£405	£510	29%	42%	53%	58%	71%
	S01000360	£459	£560	26%	34%	45%	51%	67%
Highland	S01003743	£451	£495	27%	35%	43%	52%	69%
	S01003747	£415	£487	24%	37%	49%	57%	76%
	S01003748	£441	£511	23%	35%	45%	52%	70%
	S01003749	£428	£517	23%	36%	44%	53%	71%
	S01003750	£437	£515	26%	36%	45%	53%	70%
	S01003751	£401	£473	25%	37%	49%	57%	77%
	S01003754	£338	£430	29%	44%	54%	62%	78%
	S01003755	£364	£460	26%	40%	49%	58%	74%
	S01003756	£391	£457	30%	41%	52%	59%	76%
	S01003759	£414	£484	27%	38%	49%	56%	74%
	S01003760	£446	£525	22%	33%	42%	51%	70%
	S01003764	£396	£485	26%	39%	49%	59%	77%
	S01003766	£341	£432	31%	45%	55%	61%	75%
	S01003767	£412	£484	25%	37%	49%	56%	73%

[4] Net income covers income from all sources (as in Gross Income) but after the deduction of income taxes and national insurance contributions.

[5] Gross income is income from all sources (wages, salaries, pensions, benefits, rent, interest, maintenance) before the deduction of tax and national insurance contributions.

Local Authority	Data Zone (2001)	Weekly median net[6] household income	Weekly median gross[7] household income	Households with a gross income of less than £300 per week	Households with a gross income of less than £400 per week	Households with a gross income of less than £500 per week	Households with a gross income of less than £600 per week	Households with a gross income of less than £800 per week
Highland	S01003771	£469	£513	24%	32%	39%	49%	66%
	S01003772	£460	£503	25%	34%	41%	50%	66%
Moray	S01004233	£388	£484	38%	46%	58%	61%	78%
PKC	S01005147	£443	£549	25%	33%	45%	53%	69%

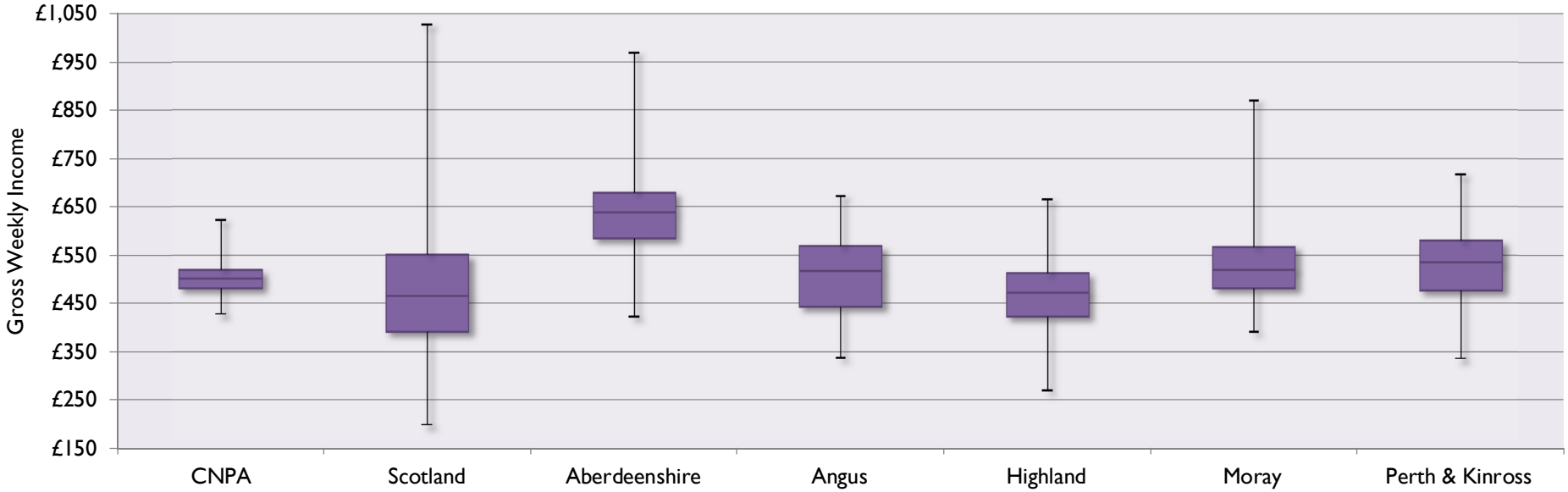

Figure 16 Box plots of gross median weekly income for data zones in 2008 / 2009 (based on Bramley & Watkins, 2013).

[6] Net income covers income from all sources (as in Gross Income) but after the deduction of income taxes and national insurance contributions.

[7] Gross income is income from all sources (wages, salaries, pensions, benefits, rent, interest, maintenance) before the deduction of tax and national insurance contributions.

Commuting

The 2011 Census indicated that of the 9,700 people aged 16 -74 in employment around 4,771 (49.2%) of them commuted to work via car, van or motor cycle (Census table LC7101SC) (**Figure 102**). This is lower than the Scottish level of 56%, a reflection of the fact that the National Park has a relatively high level of home working (22.9%). The use of public transport is particularly low within the National Park, a reflection of the difficulties of providing good service in such a rural area.

Most commuting occurs within the National Park, since most of its population is too far from major centres of employment for commuting out to be a very large scale phenomenon. In fact, over half of workers travel less than 10km to their place of work (**Figure 103**). Even with improved connectivity bought about by the A9 Dualling Strategy (see **Topic 5: Material Asset**, p. 96), there is very little chance of the Cairngorms National Park becoming a

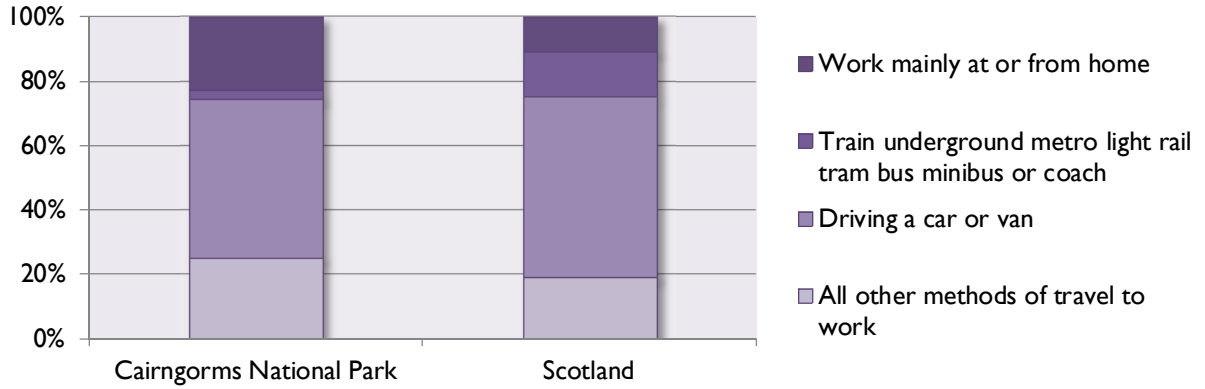

Figure 17 Method of travel to work, 2011 (Census table LC7101SC).

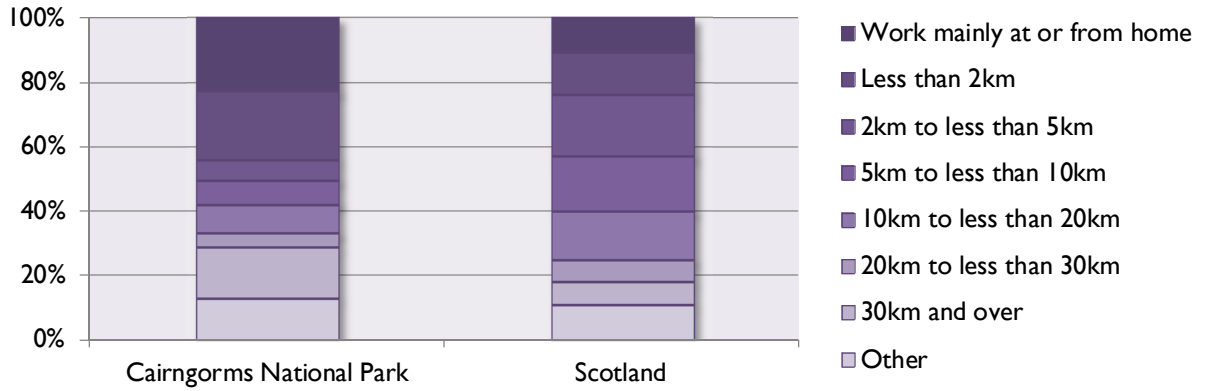

Figure 18 Distance travelled to work, 2011 (Census table LC7102SC)[89]. Crown copyright 2014.
For further information on variables, see www.scotlandscensus.gov.uk/variables
In order to protect against disclosure of personal information, some records have been swapped between different geographic areas. Some cell values will be affected, particularly small values at the most detailed geographies.

[8] The distance travelled is a calculation of the straight line between the postcode of place of residence and postcode of workplace.
[9] 'Other' Includes no fixed place of work, working on an offshore installation and working outside the UK

dormitory suburb to any significant extent (CogentSi, 2010).

Nevertheless, within the National Park the range of employment opportunities which are not tied to visitors, the land, or local services is only limited, and so people with special skills who want to live in the National Park may need to travel outwith the area to work. According to the 2011 Census, some 287 people were commuting out of the Badenoch and Strathspey Travel to Work Area (TTWA) and into the neighbouring Inverness and Dingwall TTWA for work (Highland Council, 2015). Correspondingly, the National Park does not have so many jobs that it attracts commuters in from long distances, but nevertheless there are small communities and isolated residences around the National Park, but outwith its boundaries; for example the Badenoch and Strathspey TTWA had around 6 workers commuting in from the neighbouring Lochaber TTWA (Highland Council, 2015). For these surrounding residents the National Park offers the best job prospects available (CogentSi, 2010).

Human Health

Life Expectancy

Human Health covers a wide range of issues, many of which have strong relationships with other topic areas. Life expectancy is a good indicator of the overall health of a population. While there is no official data available for life expectancy specifically within the National Park, quantitative reasoning, based on statistics available for Local Authorities, Health Board Areas, SIMD deciles and Urban / Rural Categories, may be used to gain a reasonable estimate.

Taking the Local Authorities and Health Board areas that cover the National Park's area (**Table 27**) as a starting point, it can be seen that all have life expectancies that are above the Scottish average. Estimates range from 77.6 to 79.3 for males and 81.4 to 82.8 for females and it is not unreasonable to assume that the National Park's overall life expectancy falls somewhere within this range.

Table 3 Life expectancy at birth in Scotland, 2011-2013, by Local Authority and NHS Board area (National Records of Scotland, 2014).

Area	Male	Female
Scotland	76.9	81.0
Local Authority		
Aberdeenshire	79.2	82.2
Angus	78.5	81.6
Highland	77.7	82.2
Moray	77.9	81.7
Perth & Kinross	79.3	82.8
Health Boards		
Grampian	78.3	81.8
Highland	77.8	82.0
Tayside	77.6	81.4

Estimates may also be derived from the SIMD 2012; according to NRS (2014), male and female life expectancy increases and the gap between male and female life expectancy decreases as the level of deprivation decreases. Consequently, NRS have estimated life expectancy according to SIMD decile. Based on the position of the National Park's data zones within the SIMD therefore, an estimate of its life expectancy may be derived. Furthermore, because data zones represent discreet geographies, potential variations in life expectancy across the National Park may be mapped (**Figure 104**).

It should be noted that the SIMD measures deprivation and not affluence, therefore the data displayed by **Figure 104** should not be translated as 'life expectancy of the rich versus that of the poor'. It should also be noted that NRS estimates are generalised and the criteria that result in an overall SIMD rank may vary greatly between data zones. The life expectancies presented therefore should not be viewed as geography specific absolutes, but as rough

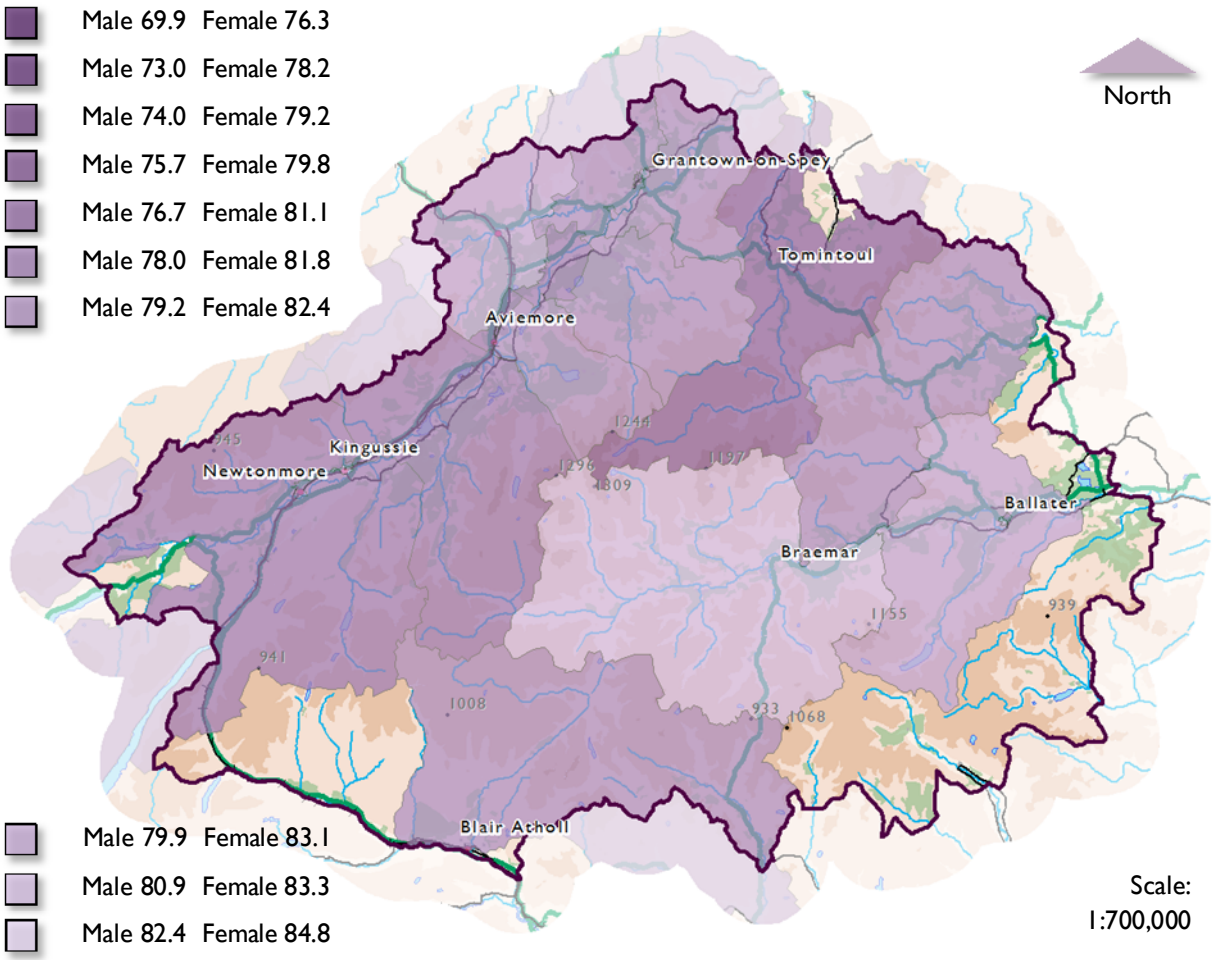

Figure 19 Life expectancy within the Cairngorms National Park by SIMD Decile. Based on NRS (2014).

approximations based on national data.

Estimating life expectancy via this means offers a range of 76.7 to 80.9 for males and 81.1 to 83.3 for females living within the National Park. This is a broader range than the estimate based on the Local Authorities and Health Boards, but is close enough to support the theory that the life expectancy falls within this initial estimate.

If the deprivation based estimates are weighted according to the population of the National Park's data zones, then the estimated life expectancy of the National Park is 79 for males and 82.3 females. This estimate is not unreasonable as it falls within 1% of figures for the Scottish Government's Urban Rural Classification areas, which estimates life expectancy for males to be 79.2 and females to be 82.6 in remote rural areas[10] (National Records of Scotland, 2014), which the whole of the Cairngorms National Park is identified as.

[10] Defined as "areas with a population of less than 3,000 people, and with a drive time of over 30 minutes to a settlement of 10,000 or more."

Irrespective of the exact figures, it is possible to say with some confidence that the residents of the Cairngorms National Park have a greater life expectancy than the Scottish average and live around 6 to 9 years longer than people living in the most deprived parts of Scotland.

Health

Evidence suggests that the population in the National Park is healthier than the Scottish average. According to the 2011 Census, the proportion of people with long term health problems whereby their day-to-day activities are limited a lot was only 6.8% (Scotland 9.6%) while the proportion of people claiming very good to fair health was higher (96.6% compared to Scotland's 94.4%) and the proportion claiming bad to very bad health lower (3.4% compared to Scotland's 6.1%) (**Table 28**). This is supported by evidence from the proportion of Incapacity Benefit and Severe Disability Allowance claimants within the National Park, which in 2012 ranged between 1.1 and 1.8% of the 16+ population, compared to Scotland's 2.7 to 4.1%.

Table 4 Census health indices, 2011.

Indicator	CNP	Scot.
Long-term health problem or disability (Table LC3101SC)		
Day-to-day activities limited a lot	6.8%	9.6%
Day-to-day activities limited a little	10.2%	10.1%
Day-to-day activities not limited	83.0%	80.4%
General health (Table LC3102SC)		
Very good health	55.6%	52.5%
Good health	30.7%	29.7%
Fair health	10.3%	12.2%
Bad health	2.7%	4.3%
Very bad health	0.7%	1.3%
Provision of unpaid care (Table LC3301SC)		
Provides no unpaid care	90.9%	90.6%
Provides 1 to 19 hours unpaid care a week	5.7%	5.2%
Provides 20 to 34 hours unpaid care a week	0.8%	0.9%
Provides 35 to 49 hours unpaid care a week	0.6%	0.8%
Provides 50 or more hours unpaid care a week	2.0%	2.5%

The Health Domain of the SIMD also provides an indication of the relative healthiness of the National Park, with 5 of its 23 data zones falling within the 10% least deprived. The SIMD does however demonstrate an element of geographical variation, with 6 data zones, mostly in Badenoch and Strathspey falling within the 41 to 50% most deprived range. This is not necessarily an indication of poor health within these areas, but rather an indication that health related deprivation is closer to the Scottish median in these locations.

Index of Multiple Deprivation

SIMD domains (see **Figure 105** for summary) have been drawn upon throughout this report and since the level of deprivation experienced by an area can have significant influence on the health and wellbeing of its population, it is also worth considering the SIMD's overall ranking of data zones within the National Park as well as briefly summarising the factors that have led to this situation.

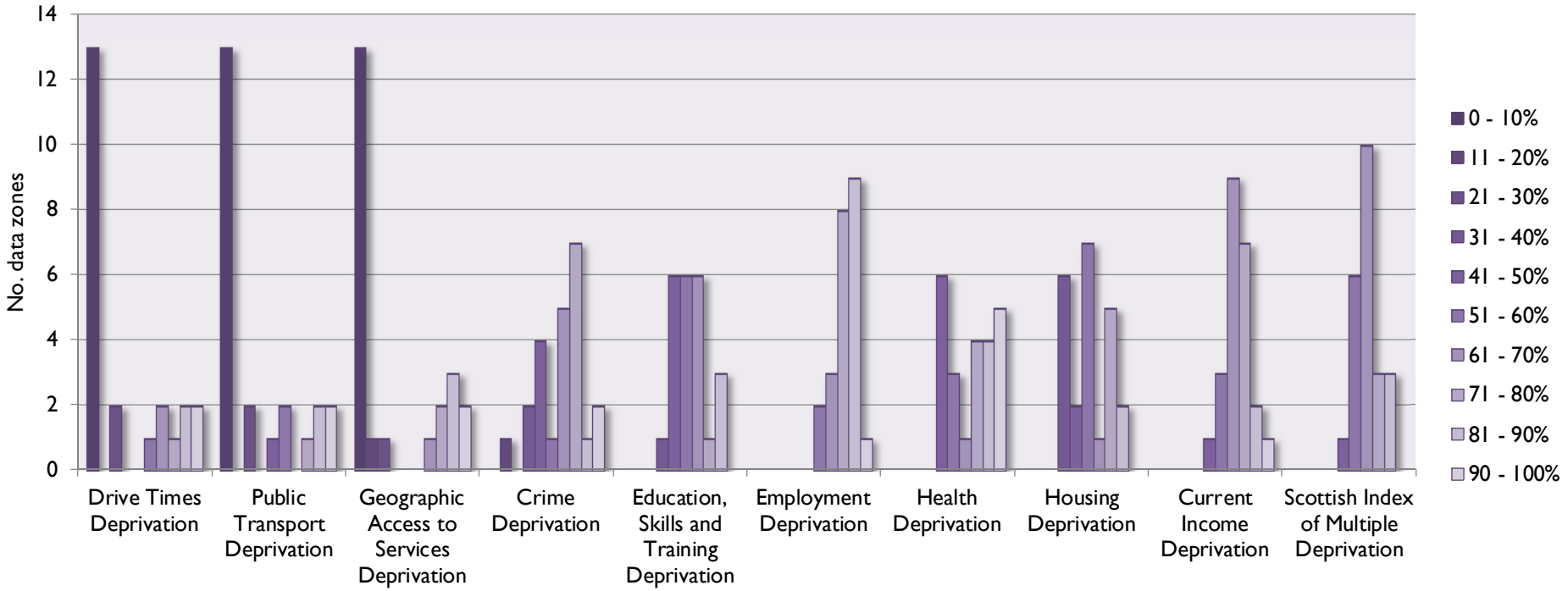

Figure 20 Distribution of SIMD 2012 deciles acoording to data zones within the Cainrgorms National Park.

According to the SIMD 2012, overall deprivation levels within the National Park are relatively low (**Figure 106**). Three data zones (S01000301, S01000312 and S01003748) fall within the 20% least deprived, while only one, S01004233, is ranked as being among the most deprived, falling within the 41 to 50% range. Again, this does not an indication of significant deprivation, but is an indication that this data zone has a level of deprivation closer to the Scottish median than other locations within the National Park.

Most domains possess a low level of deprivation, and it is only the domains relating to drive times, public transport and access to services that show any signs of significant deprivation. This is consistent with the rest of remote rural Scotland, where the sparse nature of settlement makes long distances between services inevitable.

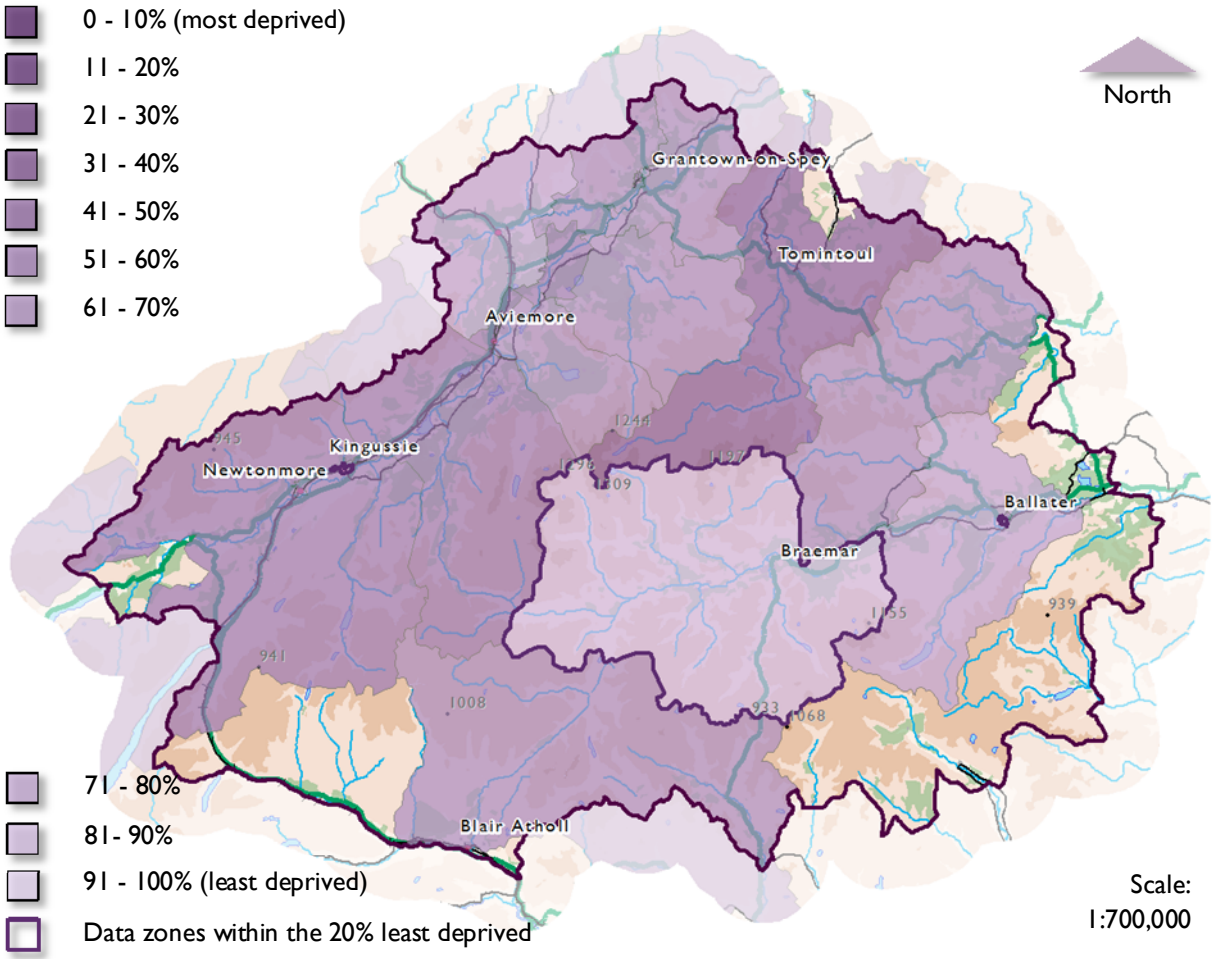

Figure 21 Overall SIMD 2012 deciles acoording to data zones within the Cairngorms National Park (SIMD, 2012).

The 2012 SIMD is the fourth version of the index. However, because SIMD is a relative measure (it ranks Scotland's data zones relative to each other), it is not straightforward to interpret any change in a data zone's rank from one version of the index to another. Additionally, analysis of change over time is complicated because there have been changes to the methodology and changes to some of the indicators used. Disclosure control methods can also complicate analysis of change over time for some SIMD indicators because when cell values are suppressed, this may lead to data zones having empty cells for one or more of the versions of the SIMD.

Bearing in mind the cautions expressed above, there are ways of undertaking a limited amount of analysis of change over time. **Figure 107** and **Figure 108** offer two different means of measuring relative change, the former showing changes in overall rank and distribution of data zones and the latter showing the number of people falling within an overall SIMD decile.

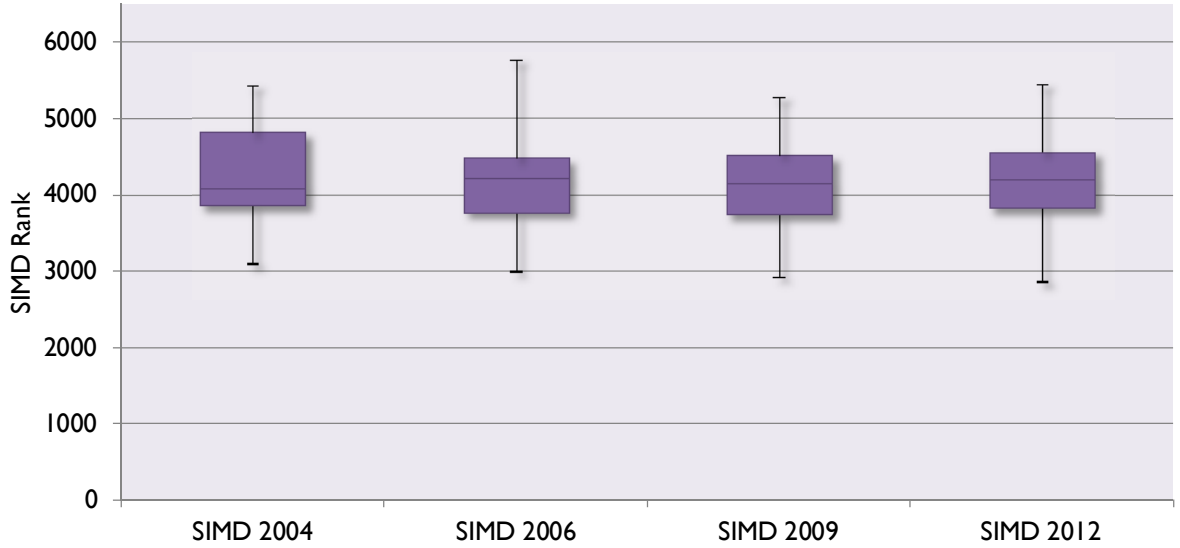

Figure 22 Boxplots showing the distribution of data zones in the Cairngorms National Park by their overall SIMD rank.

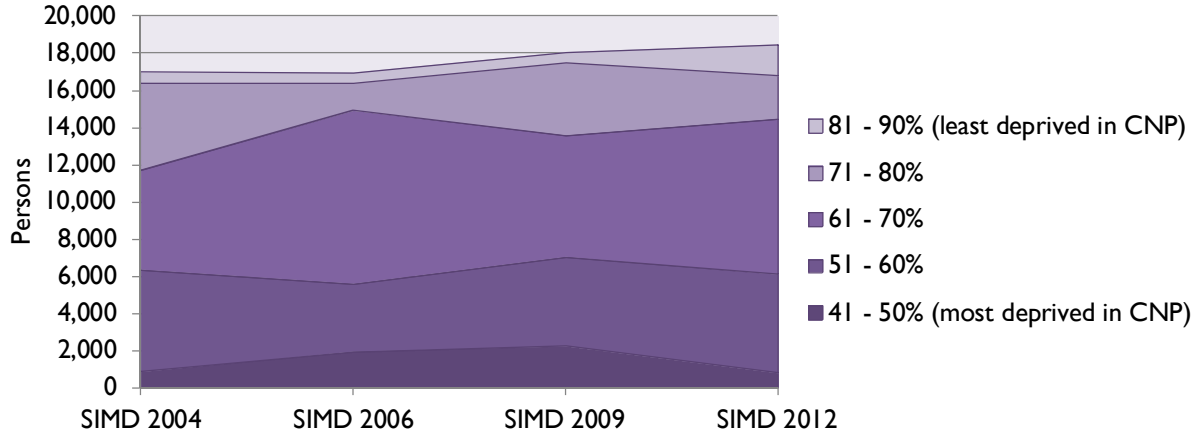

Figure 23 Population distribution by the overall SIMD decile for data zones in the Cairngorms National Park.

Outdoor Recreation

Standardised measures of deprivation aside, there are many factors that can have an influence on a population's health and it is probable that the high quality environment described in this report is a contributory factors. Another factor is likely to be the ability of the population to easily access this environment for leisure and recreational purposes.

Significantly, the Cairngorms National Park is a world renowned area where both residents and visitors can enjoy an unparalleled range of outdoor recreation opportunities. People are able to explore the area on foot, in a wheelchair, on horse-back, on a bicycle or even in a boat or canoe, as long as they do so in a responsible manner, with respect for other people and for the environment, and in accordance with the Scottish Outdoor Access Code.

One important means of access is via the National Park's public footpath network, of which the Core Paths network plays a

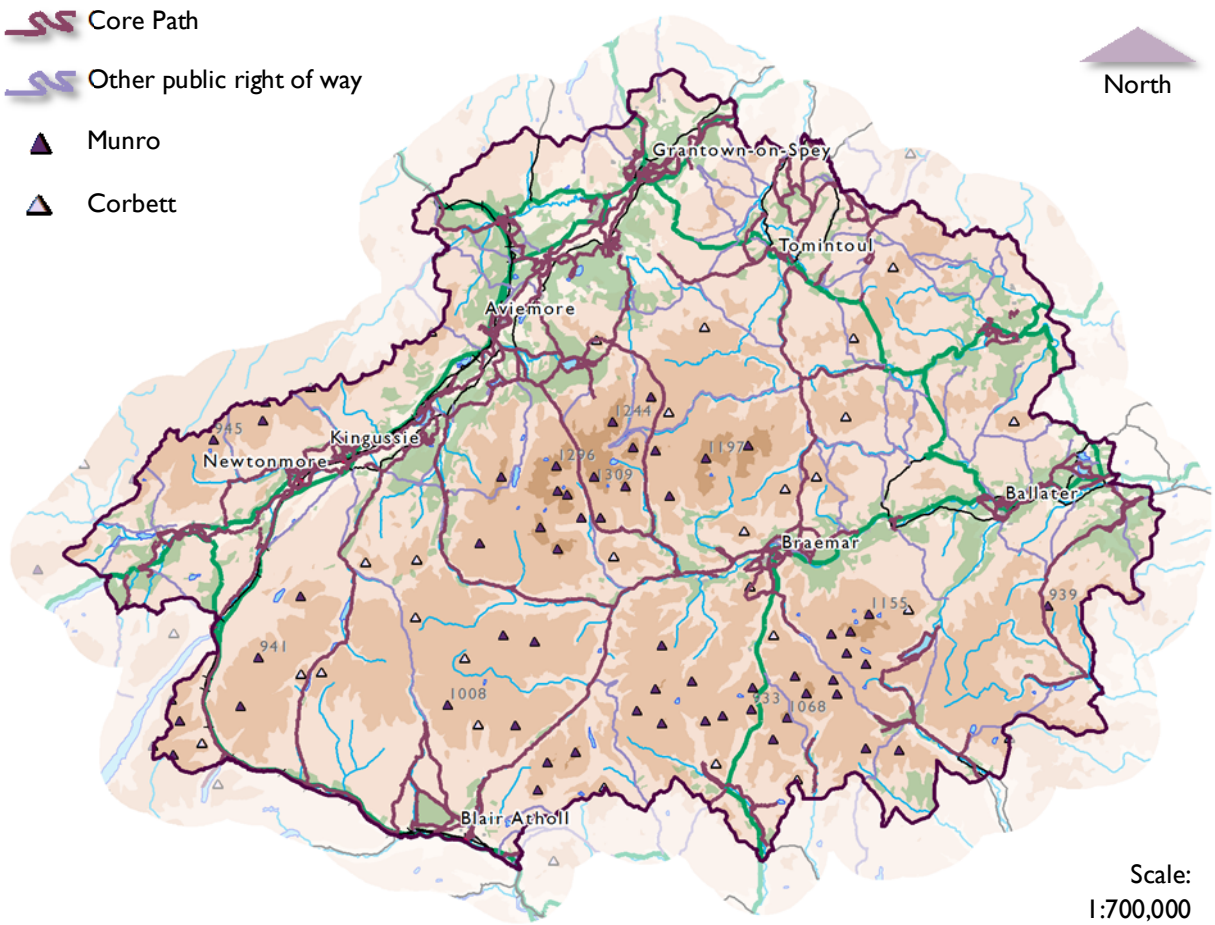

Figure 24 Public footpath network and 'listed' mountains of the Cairngorms National Park.

significant role (see **Figure 109**). The CNPA has a duty under the Land Reform (Scotland) Act 2003 to prepare a Core Paths Plan. Section 17 (1) Act states that the core paths network should be: '… *sufficient for the purpose of giving the public reasonable access throughout the area*'.

The CNPA has recently published its Core Paths Plan (2015), which was developed in Partnership with the Local Outdoor Access Forum and Inclusive Cairngorms. The aim of the Plan is to help people enjoy and understand the special qualities of the National Park through the identification of outdoor access opportunities. The path network should satisfy the needs of visitors and local people to get around, and link to the wider path network and beyond.

The network is made up of a mixture of existing and new paths, which together provide a cohesive system. The National Park now has a network that totals 1,073km of core path, 88km of which is on water (River Spey). Furthermore, over 300km of the network has been signed and promoted with a further 100 or so km to be developed and improved.

Key Messages

The Cairngorms National Park has seen significant population growth over its lifetime, although this is now projected to slow down significantly over the next 25 years. The population change will result in a particular set of needs to be addressed by the Plan, including the need to provide accommodation for at least 910 households over this period.

Unemployment is low although the median wage remains below that of Scotland. Gross household incomes, are however slightly higher. The National Park retains a high proportion of its workforce with the most commuting via private motor vehicle.

Overall, deprivation levels are low and the life expectancy of the population is estimated to be above Scotland's as a whole. Instances of life limiting conditions are low and claimants of related benefits few.

The National Park has an extensive and well maintained public footpath network and many man-made and natural features that provide attractive objectives and encourage healthy recreational activities.

Inter-relationships with other topics

- Topic 1: Climatic Factors 62
- Topic 3: Water 74
- Topic 5: Material Assets 96
- Topic 6: Biodiversity, Fauna and Flora 114
- Topic 7: Landscape and Cultural Heritage 154