State of the Park Report

Technical Annex 4

Socio-Economic Resources

4.1 Introduction

The socio-economic review is developed under the following headings:

- Population;
- Economy;
- Society;
- Infrastructure;
- Housing.

Data on population, some aspects of the economy and housing is available from the 2001 Census and is capable of close resolution to the Park area. The data will not, however, be available in updated form to illustrate trends until 2011.

Some data on the economy is produced annually at ward level and represents the main opportunity for identifying trends in the medium term. Social health data is developed at ward level on a three to four yearly basis and again will allow medium term trends to be identified.

There is a considerable range of softer issues for which data is not available for the Park and where national or regional research is neither systematic nor regular. Periodic, primary research will be required to allow greater insight into these characteristics of the Park.

4.2 Population

4.2.1 General

The primary source for population data is the decennial Census. The most recent Census was carried out in 2001, and the small area data relevant to the Park boundary was released in 2003.

The Census is carried out by the Office for National Statistics using a specially-developed administrative boundary called the Census Output Area. These are relatively small geographical units composed of a cluster of Postcode Areas, and are the smallest unit for which Census data is made available. The Park is composed of some 138 of these Census Output Areas.

The Office for National Statistics uses the Census Output Areas to build up ward, Local Authority and regional analyses.

As Census data is only updated every 10 years, its use as a management tool is limited. Census data will allow the Park Authority to understand the current situation and in a decade will allow progress to be reviewed, but will not provide ongoing feedback on the progress of Park policies.

4.2.2 Population Density

The Park is estimated to have a population of some 16,024 people, based on 2001 Census returns. The Park has a much lower population density than Scotland as a whole. Occupying an area of 3,800 square kilometres or 408,782 hectares, it has a population density of just 0.04 people per hectare. This compares to a Scottish average of 0.65 people per hectare. Population projections provided by the General Register Office for Scotland in December 2005 indicate that if the fertility, mortality and migration of recent years continue within the Park, then:

- The population of the Park will increase by 9% between 2001 and 2025;

- The rate of increase will slow over the projection period;

- The population increase will occur predominantly in the 60+ age groups;
- There will be population decrease in younger age groups;
- Population change will be stimulated by in-migration occurring predominantly in the 40 to 60 age group, perhaps a reflection that many of those who move to the Park see it as a retirement area;
- The number of households will increase by 19.6% between 2001 and 2016, partly due to an increase in the private household population, but mainly a result of the decrease in the average household size;
- One person households will increase most quickly between 2001 and 2016 (+42.7%) as a result of the increasing elderly population who are most likely to live in such a household;
- The ageing population predicted by these projections will have important planning and policy implications in terms of meeting the needs of an ageing population and encouraging a reduction in the net loss of young adults.

Table 4.2.2 compares the total and density of population in the Park with that of Scotland.

Table 4.2.2: Population Density		
	Park	**Scotland**
All People	16,024	5,062,011
Area (hectares)	408,782	7,792,452
Density (number of people per hectare)	0.04	0.65

Source: 2001 Census, General Register Office for Scotland

As would be expected, the Park has a much lower population density than Scotland as a whole.

4.2.3 Age Distribution

Table 4.2.3 compares the age distribution of the population of the Park with that of Scotland at the 2001 Census.

Table 4.2.3: Population and Age of Population					
Age	**Park**	**Park %**	**Scotland**	**Scotland %**	**Park Deviation from Scotland (%)**
All People	16,024		5,062,011		
0 to 4	839	5.2	276,874	5.5	-0.3
5 to 9	900	5.6	307,138	6.1	-0.5
10 to 14	945	5.9	322,870	6.4	-0.5
15 to 19	833	5.2	317,273	6.3	-1.1
20 to 24	635	4.0	314,387	6.2	-2.2
25 to 29	807	5.0	317,303	6.3	-1.3
30 to 44	3,320	20.7	1,162,958	23.0	-2.3
45 to 59	3,617	22.6	976,575	19.3	3.3
60 to 64	1,017	6.3	261,733	5.2	1.1
65 to 74	1,688	10.5	446,033	8.8	1.7
75 to 84	1,063	6.6	270,512	5.3	1.3

85 to 89	221	1.4	59,241	1.2	0.2
90 and over	139	0.9	29,114	0.6	0.3

Source: 2001 Census, General Register Office for Scotland

Based on the returns for the 2001 Census, the Park is estimated to have a population of 16,024 persons.

Breakdown of the population by age band shows that the Park population is more heavily weighted towards older age groups. Until around age 50 the proportions of the Park population are below those for the rest of Scotland. However, after age 50, at every age band, the Park has a larger proportion of population than Scotland as a whole.

At a time when the population is ageing generally, with consequent implications for demand for public services and ability to pay for services, the situation in the Park is more extreme than for Scotland as a whole.

4.2.4 Gender

Table 4.2.4 shows the population balance by gender at the Park and Scottish levels at the time of the 2001 Census.

Table 4.2.4: Population by Gender

	Park	Park %	Scotland	Scotland %	Park Deviation from Scotland (%)
Male	7,821	48.8	2,432,494	48.1	0.7
Female	8,203	51.2	2,629,517	51.9	-0.7
All	16,024	100.0	5,062,011	100.0	0.0

Source: 2001 Census, General Register Office for Scotland

The Park population has generally the same male-female composition as the Scottish population as a whole. Females make up a slightly higher percentage of the population in both cases, a fact attributable to greater female longevity. The proportion of females in the Park is slightly above the Scottish average, reflecting its more aged population.

4.2.5 Ethnic Group

Table 4.2.5 compares the ethnic makeup of the Park population with that of Scotland as a whole.

There are two striking characteristics of the ethnic composition of the Park population:

- It is overwhelmingly White;
- It contains a very significant Other White British component.

Scotland as a whole has only a 2% non-White population, which is far lower than the corresponding figure for Great Britain. The ethnic composition in the Park is even more extreme, with only 1 in 200 residents non-White.

Table 4.2.5: Population by Ethnic Group

	Park	Park %	Scotland	Scotland %	Park Deviation

					from Scotland (%)
White Scottish	12,493	77.96	4,459,071	88.09	-10.13
Other White British	2,975	18.57	373,685	7.38	11.19
White Irish	101	0.63	49,428	0.98	-0.35
Other White	376	2.35	78,150	1.54	0.81
Indian	2	0.01	1,5037	0.30	-0.29
Pakistani	1	0.01	31,793	0.63	-0.62
Bangladeshi	10	0.06	1,981	0.04	0.02
Other South Asian	5	0.03	6,196	0.12	-0.09
Chinese	12	0.07	16,310	0.32	-0.25
Caribbean	2	0.01	1,778	0.04	-0.03
African	5	0.03	5,118	0.10	-0.07
Black Scottish or Other Black	2	0.01	1,129	0.02	-0.01
Any Mixed Background	22	0.14	12,764	0.25	-0.11
Other Ethnic Group	18	0.11	9,571	0.19	-0.08

Source: 2001 Census, General Register Office for Scotland

The incidence of Other White British (English, Welsh and Northern Irish) within the Park is 2.5 times greater than in the general Scottish population and accounts for almost 1 in 5 residents of the Park. Other White is also proportionately larger than Scotland as a whole, while White Irish is slightly lower.

4.2.6 Occupational Status

Table 4.2.6 shows the over-16 years of age populations of the Park and Scotland by occupational grade.

Table 4.2.6: Population by Occupational Grade

	Park	Park %	Scotland	Scotland %	Park Deviation from Scotland (%)
AB Higher and intermediate managerial/administrative/professional	2,055	16.3	759,779	19.0	-2.7
C1 Supervisory, clerical, junior managerial/administrative/professional	3,760	29.8	1,064,188	26.6	3.2
C2 Skilled manual workers	2,525	20.0	584,157	14.6	5.4
D Semi-skilled and unskilled manual workers	2,173	17.2	701,260	17.5	-0.3
E On state benefit, unemployed, lowest grade workers	2,103	16.7	898,082	22.4	-5.7

Source: 2001 Census, General Register Office for Scotland

Census returns find that the Park population is more skewed towards the C1 and C2 occupational classes, when compared with the Scottish population as a whole – 50% of the Park population is classed as belonging to these two groups, compared to 41.2% of the Scottish population as a whole.

The Park population has smaller proportion of workers classified as the highest AB grade. However, the shortfall is perhaps less than might have been anticipated, given the relative absence of medium and large employers, and limited local demand for specialist services.

The relative proportions of semi-skilled and unskilled workers are around the same as for the Scottish population as a whole, but the Park does have a lower proportion of individuals in the lowest occupational grade, unemployed or subsisting on other state benefits. This finding is consistent with that in other rural areas which have not seen the large-scale migration from inactivity into sickness or other benefit which has been a salient characteristic in many urban areas in the past decade.

Key Points

- In a situation where the average age of the Scottish population is increasing generally due to the ageing of people born in the post-war baby boom and reducing levels of fertility, the age distribution of the Park population is even more extreme, reflecting out-migration by younger people and in-migration of people intending to retire in the Park.
- The extreme age profile of Park residents is likely to generate considerable demands for community and social facilities and for social services, from a limited tax base, with implications for Local Authority and Health budgets.
- The occupational make-up of the Park population is skewed towards supervisory, administrative, junior professional and skilled manual workers relative to the Scottish population. At the same time, there is above average, higher-level, educational attainment. It would appear that, in common with many other rural areas, a significant number of Park residents may be over-qualified relative to the available work.
- The Park population is overwhelmingly White and contains a very large component of people who have migrated from England and Wales. This may have implications for the propensity of Park residents to relate to an increasingly multi-cultural Scottish and British society and the opportunities this affords.

4.2.7 Information Gaps – Population

- Forecast demands for community and social facilities and for social services based on projected age profile.

4.3 Economy

4.3.1 General

There are two main sources of data on economic activity that are relevant, given the small size of the Park:

- The Census provides an authoritative structure of the working population in 2001, but regular updates are not available.

- The Annual Business Inquiry provides a detailed picture of business structure and employment trends and is available in time series. However, in view of the small numbers per industrial sector, the data is subject to restrictions on publication, but may be used privately by those covered by a relevant Chancellor of the Exchequer's notice. The data is sample-based and in a small area base such as the Park may be subject to some distortion.

A third source, the Labour Force Survey, contains similar data on the working population to that contained in the Census and is produced monthly. However, it is based on a very small sample (1 in 10,000) and, accordingly, cannot produce useable results at the level of the Park.

4.3.2 Labour Market

Economic Activity
Table 4.3.2a shows the working age population, defined as those between 16 and 74 years of age, by economic activity.

Table 4.3.2a: Economic Activity					
	Park	**Park %**	**Scotland**	**Scotland %**	**Park Deviation from Scotland (%)**
Economically active	8,198	70.0	2,424,082	65.0	5.0
Employee total	5,903	50.4	1,916,655	51.4	-1.0
Employee part-time	1,499	12.8	414,896	11.1	1.7
Employee full-time	4,404	37.6	1,501,759	40.3	-2.7
Self-employed	1,748	14.9	246,251	6.6	8.3
Unemployed	371	3.2	148,124	4.0	-0.8
Full-time students	176	1.5	113,052	3.0	-1.5
Economically inactive	3,521	30.0	1,306,251	35.0	-5.0
Retired	1,924	16.4	518,247	13.9	2.5
Student	238	2.0	159,690	4.3	-2.3
Looking after home/family	577	4.9	205,582	5.5	-0.6
Permanently sick/disabled	428	3.7	277,592	7.4	-3.7
Other	354	3.0	145,139	3.9	-0.9

Source: 2001 Census, General Register Office for Scotland

Analysis of the working age population shows that there are a number of distinctive elements in the Park population:

- The Park contains a higher proportion of economically active people than Scotland as a whole, and a higher number of these are self-employed. These findings are typical of rural Scotland, although the level of self-employment is notably high.

- At just over 50%, the proportion of people working as employees is comparable with that at the Scottish level, but the Park population has a notably higher level of part-time employment.

- The proportion of full-time students is less than half of that for Scotland as a whole, as is to be expected given the absence of any tertiary education institution within the Park.

- As noted above, the proportion of people designated as permanently sick/disabled in the Park is half that for the Scottish population as a whole, notwithstanding the greater average age of Park residents.

- As reflected in the age profile examined earlier, the proportion of retired people in the population is higher in the Park than Scotland as a whole.

Table 4.3.2b shows the pattern of economic activity by gender.

Table 4.3.2b: Economic Activity – Males and Females in the Park				
	Male	**Male %**	**Female**	**Female %**
Economically active	4,489	76.9	3,769	63.8
Employee total	3,014	51.6	2,922	49.5

Employee part-time	262	4.5	1,293	21.9
Employee full-time	2,753	47.1	1,629	27.6
Self-employed	1,165	19.9	608	10.3
Unemployed	236	4.0	132	2.2
Full-time students	73	1.3	106	1.8
Economically inactive	1,351	23.1	2,140	36.2
Retired	832	14.2	1,075	18.2
Student	114	2.0	124	2.1
Looking after home/family	38	0.7	533	9.0
Permanently sick/disabled	216	3.7	207	3.5
Other	151	2.6	201	3.4

Source: 2001 Census, General Register Office for Scotland

The analysis suggests that a segregation of roles by gender along traditional lines is being sustained in the Park to a greater degree than in the national population:

- The number of economically active males within the Park outstrips the number of females to a degree which contrasts with national level data.
- There is a striking segregation among people with employed status, with the preponderance of males in full-time employment, whereas female employees are more evenly divided between full and part-time employment.
- A higher proportion of males in the Park are in self-employment, with rates almost double that of female self-employment.
- Male unemployment is higher than female, but to a greater extent than can be explained solely by the higher rate of participation of males in the workforce.
- Participation in study, whether full-time or not, is much the same for males and females.
- Women are much more likely to be economically inactive in order to look after children and family than men and to a degree which is considerably greater than at national level.

In addition, a higher proportion of retirees are women; this is to be expected given higher female longevity noted in the age profile of the population.

Qualifications in the Workforce
Table 4.3.2c compares the level of qualifications among residents at the Park and Scottish levels.

Table 4.3.2c: Qualifications

	Park	Park %	Scotland	Scotland %	Park Deviation from Scotland (%)
No qualifications or qualifications outwith these groups	3,597	30.7	1,239,947	33.2	-2.5
Group 1 – 'O' Grade, Standard Grade, SVQ Level 1 or 2	3,035	25.9	921,074	24.7	1.2
Group 2 – 'H' Grade, SVQ Level 3	1,734	14.8	584,060	15.7	-0.9
Group 3 – HNC, HND, SVQ Level 4	692	5.9	259,389	7.0	-1.1

Group 4 – First degree, higher degree, professional qualifications	2,661	22.7	726,609	19.5	3.2

Source: 2001 Census, General Register Office for Scotland

The structure of the workforce by qualifications in the Park is generally similar with that for Scotland as a whole, but with some differences at the margins.

The Park population is better qualified than the Scottish population as a whole. In 2001 69.3% of people in the Park held some kind of qualification, compared to 66.9% in Scotland as a whole.

There is a certain amount of polarisation within those holding qualifications. The Park population has proportionately more people in Group 1, the lowest level of qualification, fewer in Group 2, and fewer still in Group 3, where most higher technical qualifications would be expected. The most striking disparity is between the proportion of the Park population with a Group 4 qualification and Scotland as a whole, where the Park population has significantly higher educational attainment.

Hours Worked

Table 4.3.2d compares the incidence of full and part-time working by Park residents and the population of Scotland.

Table 4.3.2d: Hours Worked

	Park	Park %	Scotland	Scotland %	Park Deviation from Scotland (%)
Part-time	2,010	25.7	550,669	24.4	1.3
1 to 2 hours	17	0.2	3,188	0.1	0.1
3 to 5 hours	75	1.0	15,573	0.7	-0.6
6 to 15 hours	580	7.4	144,496	6.4	1.0
16 to 30 hours	1,338	17.1	387,412	17.1	0.0
Full-time	5,809	74.3	1,710,612	75.6	-1.3
31 to 37 hours	965	12.3	456,866	20.2	-7.9
38 to 48 hours	3,134	40.1	934,377	41.3	-1.2
49 to 59 hours	797	10.2	177,795	7.9	2.3
60 hours and over	913	11.7	141,574	6.3	5.4

Source: 2001 Census, General Register Office for Scotland

A very slightly higher proportion of the Park population works hours that correspond to the definition of part-time working. Within the part-time work category, hours worked are comparable with that of the Scottish population as a whole.

For full-time workers within the Park, hours worked tend to be longer than in Scotland as a whole. Almost a quarter of employed residents of the Park work more than 48 hours per week compared with 15% at the Scottish level.

Key Points

- The level of economic activity in the working age population of the Park is 5% higher than the Scottish average.
- Among those who are working, almost a quarter are self-employed, compared with just over a tenth in Scotland as a whole.
- A higher proportion of those employed in the Park are working part-time, compared with Scotland, and part-time jobs are highly skewed towards women.

- Those in full-time employment tend to work longer hours than in the rest of Scotland.

4.3.3 Industry and Employment

General
The analysis firstly examines employment by broad industry group drawing on the 2001 Census findings. This is augmented by more detailed analysis making use of the Annual Business Inquiry. The roles of agriculture and sporting estates in the Park economy are examined further in separate sections.

Employment by Industry
Table 4.3.3a shows the distribution of those in employment by broad industry group at the time of the 2001 Census.

Table 4.3.3a: Industry of Employment

	Park	Park %	Scotland	Scotland %	Park Deviation from Scotland (%)
Agriculture, hunting and forestry	442	5.7	48,391	2.1	3.6
Fishing	11	0.1	6,784	0.3	-0.2
Mining and quarrying	108	1.4	28,040	1.2	0.2
Manufacturing	566	7.2	299,167	13.2	-6.0
Electricity, gas and water supply	44	0.6	22,613	1.0	-0.4
Construction	629	8.0	169,144	7.5	0.5
Wholesale and retail trade, repairs	983	12.6	325,398	14.4	-1.8
Hotels and restaurants	1,515	19.4	129,798	5.7	13.7
Transport, storage and communications	396	5.1	151,506	6.7	-1.6
Financial intermediaries	94	1.2	104,923	4.6	-3.4
Real estate, renting and business activities	704	9.0	252,585	11.2	-2.2
Public administration, defence, social security	320	4.1	158,064	7.0	-2.9
Education	489	6.3	165,074	7.3	-1.0
Health and social work	758	9.7	279,720	12.4	-2.7
Other	765	9.8	120,074	5.3	4.5

Source: 2001 Census, General Register Office for Scotland

The pattern of employment reveals an economy which is relatively narrow compared with that for Scotland as a whole and where there is a small number of sectors that are over-represented and a larger number where representation is below average. However, this pattern is common to many rural areas, including much of the Highlands and Islands.

A higher proportion of the Park population are employed in the primary industries of agriculture, hunting and forestry, as would be expected in a more rural area. The numbers are still low in absolute terms, however, although these are areas where self-employment is likely to account for a significant proportion of the total.

Employment in fishing (which includes both freshwater and marine) is low, perhaps surprisingly given the anticipated role of fishing in the local economy. Again, this may be an area where self-employment plays an important role.

Mining and quarrying employment is in line with its representation in the Scottish population as a whole, suggesting only limited extraction activity in the Park or surrounding area.

Manufacturing employment is low, although recent studies at UK level have shown that a significant amount of manufacturing activity takes place in rural areas.

Employment in Electricity, gas and water supply, Construction and Wholesale and retail trade is at much the same level in both the Park and Scotland as a whole.

Employment in Hotels and restaurants is very much higher than in Scotland as a whole, reflecting the relative importance of the tourism sector.

Employment in Financial intermediaries (banks, insurance companies, etc) is lower in the Park than in Scotland as a whole. Similarly, employment in Real estates activities is lower. These are areas of service business which have been relatively dynamic at the national level.

Employment in public services, as represented by Public administration, Education, and Health and social work, is significantly lower than Scotland as a whole. This is likely to reflect a combination of factors including:

- A relative weighting towards locally-focused public sector activity in the Park;
- The absence of tertiary education institutions;
- A reduced need for social workers, the distribution of which tends to be skewed towards urban areas.

The Other employment category has a much higher proportion of respondents in the Park than Scotland as a whole, representing forms of employment not captured by the Standard Industrial Classification. The Other category includes other community, social and personal service activities, as well as private households with employed persons.

Table 4.3.3b analyses employment by gender across the broad industry groupings captured in the 2001 Census and shows that:

- There is a very high level of gender segregation by sector, considerably more than at national level;

- The primary industries of Agriculture, hunting, forestry, Fishing and Mining and quarrying mostly employ men within the Park;

- The Manufacturing sector also has a heavy preponderance of male employment, as does Construction and Electricity, gas and water supply;

- Women form a higher proportion of workers in the Wholesale and retail trade and in the Hotels and restaurants sectors;

- In terms of public sector employment male and female workers are evenly represented in Public administration, but Education and Health and social work both employ much higher numbers of women.

Table 4.3.3b: Industry of Employment – Male and Female

	Male	Male %	Female	Female %
Agriculture, hunting and forestry	368	8.8	78	2.2
Fishing	11	0.3	0	0.0

Mining and quarrying	105	2.5	5	0.1
Manufacturing	432	10.3	159	4.4
Electricity, gas and water supply	49	1.2	3	0.1
Construction	586	14.0	49	1.4
Wholesale and retail trade, repairs	454	10.8	534	14.7
Hotels and restaurants	664	15.8	855	23.6
Transport, storage and communications	274	6.5	122	3.4
Financial intermediaries	40	1.0	54	1.5
Real estate, renting and business activities	412	9.8	292	8.1
Public administration and defence, social security	165	3.9	155	4.3
Education	133	3.2	356	9.8
Health and social work	125	3.0	633	17.5
Other	415	9.9	350	9.7

Source: 2001 Census, General Register Office for Scotland

Higher Resolution Analysis of Employment and Business Base

A higher resolution analysis covering the aggregate of employed and self-employed people by detailed industry group is available through the Annual Business Inquiry, which provides data on jobs and business units by both geographical area and industry. The Annual Business Inquiry has been in operation since 1998, replacing the Annual Employment Survey (the two datasets are not directly comparable).

The Annual Business Inquiry can provide information at a very detailed level with regard to both industry (Standard Industrial Classification 4-digit) and geographical coverage (down to ward level). Our analysis is based on those sectors where there was a presence in the National Park in 2002 (the latest published dataset), and examines changes in employee numbers and the number of businesses within the Park's boundary compared with changes at the national level over the period 1998 to 2002.

Employee Analysis

With regard to the Primary Sector, there were a total of 247 employees recorded within the Park's boundary in 2002, compared with 251 in 1998. In 2002 employment was concentrated in two sub-sectors, Agricultural services activities (107 employees) and Forestry and logging (64 employees). The trend since 1998 has been limited growth in the former and decline in the latter. Future employment growth on a significant scale would not be anticipated in any of the sub-sectors based on these trends and developments at a national level (where there was a decline over the same period of time).

In contrast to Primary Sector employment, the Park has experienced some growth within Manufacturing between 1998 and 2002. An additional 45 jobs were recorded during this period, equivalent to a 5.7% increase. This compared favourably with the national experience, where a 14.7% decline in the number of manufacturing jobs was registered over the same period. The emergence of employment in two sub-sectors (Publishing of books and Manufacture of plastic plates/sheets) accounted for most of the net growth in the Park, while employment in the largest sub-sector (Manufacture of alcoholic beverages) was sustained.

The most significant manufacturing employment losses in the Park occurred within the Processing/preserving of fish (-26 jobs) and Manufacture of wooden containers (-12) sub-sectors. In general terms, employment across manufacturing sub-sectors has been sustained, and this is likely to be based on a combination of well-established small and medium-sized enterprises and, increasingly, micro-enterprises. At the same time, there is a strong dependence on the Manufacture of alcoholic beverages – linked with the four distilleries in and around the Park boundary – with nearly half of manufacturing employment within this category.

The large number of service sub-sectors complicates analysis of Service Sector employment in the Park. Nevertheless, in overall terms, employment within Service sub-sectors declined marginally between 1998 and 2002, compared with positive growth of 13.3% at the national level.

Construction-related activities declined during the period, with a net loss of some 38 jobs, a decline of 8.6%. The largest falls were in General construction, Plumbing, Other building installation, Plastering and the Production/distribution of electricity. These were partly off-set by increases in employment in Roads construction and the Collection/purification of water, along with small increases in more specialised trades. The decline in construction-related activities in the Park and surrounding area contrasts with an increase in these activities of 11.2% at the Scottish level.

Within the Park the most significant positive changes occurred within the following sub-sectors:

- Other retail sale: specialised stores (58 jobs or a 49.6% increase);
- Other provision of lodgings not elsewhere classified (39 jobs or a 45.3% increase);
- Fire service activities (47 jobs or a 587.5% increase);
- Primary education (188 jobs or an 81.7% increase);
- General secondary education (154 jobs);
- Other recreational activities not elsewhere classified (35 jobs or a 79.5% increase).

Especially striking is the role of the Public Sector in employment growth with education and fire service jobs prominent. More minor growth is noted in some tourism-related and retailing sub-sectors.

The most significant losses in the Park between 1998 and 2002 occurred within:

- Retail sale of automotive fuel (-24 jobs or a 48% decrease);
- Retail sale of clothing (-25 jobs or a 44.6% decrease);
- Hotels and motels, with restaurant (-120 jobs or an 8.6% decrease);
- Restaurants (-94 jobs or a 28.0% decrease);
- Catering (-63 jobs or a 55.3% decrease);
- Freight transport by road (-35 jobs or a 32.7% decrease);
- Other monetary intermediation (-23 jobs or a 37.1% decrease);
- General public service activities (-69 jobs or a -31.2% decrease);
- Social work activities with accommodation (-40 jobs or a 25.2% decrease);
- Social work activities without accommodation (-55 jobs or a 46.2% decrease);
- General construction of buildings, etc (-53 jobs or a 35.1% decrease).

The fragility of the tourism industry is reflected in these figures, which show that there were 277 less jobs in the Hotels and motels, Restaurants and Catering sub-sectors. However, there remained 1,278 Hotels and motels jobs in the Park in December 2002, reflecting the continued importance of tourism to the local economy.

Workplace Analysis
The Annual Business Inquiry definition of business data units does not readily correspond to the commonly-used terms of firms, companies or businesses by which employers are identified. They are generally equivalent to workplaces, but the method of data collection can result in two or more units being present in the same workplace (for example, a bank may have several branches and offices in a city, each one of these would be counted as a separate data unit).

Bearing this in mind, within the Park's boundary the number of business units within the Primary Sector was consistent between 1998 and 2002, with 49 units recorded in December 2002. Five additional units were recorded between 2001 and 2002, reflecting positive changes in the Forestry and logging sub-sector. Elsewhere the number of units remained consistent, while at national level a small decline was experienced, with the most significant growth recorded within Forestry and logging-related activities.

There was a significant increase in the number of Manufacturing business units within the Park's boundary between 1998 and 2002. A total of 18 additional units were recorded over this period, from 52 in 1998 to 70 in 2001, representing a 34.6% increase. This trend was in contrast with the national experience, where there was a decline of 6.0% in the business stock.

The Park's Manufacturing businesses are spread across 26 sub-sectors. Of the 70 recorded units in 2002, 20 were in the Manufacture of alcoholic beverages, reflecting the area's distilleries and related businesses. Three additional units were recorded in this sector between 1998 and 2002. A similar number of additional units were recorded in the Sawmilling and planing of wood sub-sector.

Within Services, an additional 39 business units was recorded in the Park across 123 sub-sectors between 1998 and 2002. More than a third of this net increase was attributed to Other retail sale: specialised stores. In addition, 10 business units were recorded in the Letting of own property and Other business activities not elsewhere classified sub-sectors.

In the Construction Sector, there were declines in business units mirroring the declines noted in employment. The number of business units in General construction, Other building installation, Painting and glazing and Plumbing all declined significantly. Business units engaged in Roads construction also declined slightly, despite the increase in employment, suggesting consolidation in the sub-sector. Production/distribution of electricity also declined, but from a low base. There was a substantial increase in Installation: electrical wires and fittings and in Collection/purification of water – this sub-sector went from no business units in 1998 to five in 2002, similar to the increase at Scottish level. Overall, business units in these sub-sectors in and around the Park declined by 4.8% against an increase at the Scottish level of 1.5%.

Elsewhere, the most significant increases were recorded in:

- Maintenance and repair of vehicles (+5 or an increase of 35.7%);
- Retail: non-specialised food stores, etc (5 or 17.2%);
- Restaurants (7 or 16.3%);
- Fire service activities (5 or 500.0%);
- Primary education (5 or 23.8%);
- Other sporting activities (5 or 19.2%);
- Collection/purification of water (5 from 0).

The most significant decreases within the Park's boundary were recorded in:

- General public service activities (-18 or -66.7%);
- Social work activities with accommodation (-6 or -35.3%);
- Social work activities without accommodation (-5 or -38.5%);
- Other service activities not elsewhere classified (-8 or -19.5%);
- General construction (-5 or -16.7%).

This appears to reflect some consolidation of public service activities.

Overall, developments within the business base in the Service Sector have been encouraging in the Park, with growth achieved at a faster rate than the national average. At the same time, net growth can be attributed to a small number of sub-sectors related to the tourism industry and public services. There is little evidence of growth in sectors characterised by added value.

Synthesis

The data for the 1998 to 2002 period shows that, overall, changes in employment and the business base have been positive. Growth has generally been achieved at a faster rate than at national level, although this is based on fewer economic activities across the board. The main concern is the decline of Services employment within the Park's boundary, particularly when compared with positive national trends, while there also tends to be a dependence on a limited number of sectors.

The Primary Sector, although sustained in terms of employees and number of business units between 1998 and 2002, is based upon limited developments within the Forestry and Agricultural services sub-sectors. Although these sub-sectors may be sustainable in the longer term, it would be expected that the Primary Sector overall is likely to downsize in the medium to longer term on the basis of established trends.

Recent trends in the Manufacturing Sector are interesting in the Park, given that positive trends both in terms of the number of employees and business units run counter to the national experience. Although there is some evidence of growth in some sub-sectors, there is a strong dependence on the Manufacture of alcoholic beverages within the Park boundary.

Finally, although there has been an increase in Services-related businesses within the Park, there was a small decline in the numbers employed between 1998 and 2002. This tension is particularly apparent within sub-sectors related to tourism and may reflect some restructuring of the tourism offering. Nevertheless, the industry remains very important to the Park. In terms of Service Sector employment, the public sector services (especially education) have played a prominent role. However, there is little evidence to suggest an emergence of growing higher value added activities or new sectors of activity. Environmental concerns are likely to constrain the development of renewable energy activities which, along with Information and Communication Technology-based services, are seen as major opportunities for introducing new sectors of activity into Scotland's rural areas.

Key Points

- There is significant segregation of the workforce by gender, full and part-time working. This, together with the higher than average number of women looking after home and family, points to a resilience of more traditional gender roles within the Park than in Scottish society generally.
- The industrial structure of the Park is relatively narrow compared with Scotland, but this should not be over-emphasised. A very wide range of activities is taking place, although many do so at a low level.
- Primary Sector employment in the Park is a limited proportion of the total and is static. Manufacturing, substantially skewed towards brewing and distilling, is of a similar scale and has grown in recent years, counter to the trend at national level.
- Services account for the largest proportion of jobs. Within this, tourism-related activity is important, but is experiencing restructuring, while the Public Sector has accounted for much of recent growth.
- The Park economy is underrepresented in the areas of services that have been dynamic at national level in recent years. Furthermore, environmental constraints associated with National Park designation are likely to constrain development of some of the opportunities to introduce new sectors of activity to rural areas, such as renewable energy.
- Overall, development of the economy of the Park is beset by a range of challenges. In this context, exploiting opportunities afforded by National Park status is likely to be of significant importance.

4.3.4 Agriculture

Parish-based Data

The primary source of data on agriculture in Scotland is the annual Agricultural Census compiled by the Scottish Executive's Environment and Rural Affairs Department.

The Agricultural Census analyses agricultural production at national level, at the level of 14 synthetic regions and then at parish level. The Cairngorms National Park is covered by 15 parishes:

Table 4.3.4a: Agricultural Parishes in the Park, 2003	
Parish Name	**Parish Number**
Glenbuchat	16
Strathdon	21
Aboyne and Glentanar	38
Crathie and Braemar	42
Glenmuick, Tullich and Glengairn	43
Lochlee	89
Cortachy and Clova	111
Inveravon	234
Kirkmichael	235
Abernethy	438
Alvie	439
Duthil	440
Kingussie	441
Laggan	442
Cromdale	586

Source: Scottish Executive Environment and Rural Affairs Department

The parishes of Laggan 442, Lochlee 89, Cromdale 586, Inveravon 234 and Cortachy and Clova 111 all cross the Park boundary by approximately 50% of their land area. The natural endowments in each parish will vary, so one cannot take 50% of any parish value and attribute it to the Park only.

Data for the Park parishes was obtained for the years 1990, 1998 and 2003 in order to review both the current position and recent trends.

The Agricultural Census is protective of individual and commercial privacy, and takes great care not to disclose data that would allow individuals or agricultural units to be identified. Even when combining the 15 agricultural parishes, data is sometimes suppressed for this reason. At parish level, the non-disclosure of data is likely to seriously hamper the usability of the Agricultural Census.

Overview

The Cairngorms National Park incorporates some traditionally strong hill and upland farming areas, eg in Upper Deeside, Strathspey, Tomintoul and Glenlivet, with climate and soil conditions allowing for cropping in the small areas of better land. This farming activity is associated with large areas of moorland which, apart from areas of rough grazing, are largely non-agricultural. Much of the land is in the ownership of large estates, with land either farmed in-hand or tenanted. Major landowners include private individuals, charities, agencies and other organisations. The Crown Estate is a particularly significant landowner. Average holding size is relatively high, exceeding 600 hectares, which compares with a Scottish average of 122 hectares.

The principal farm enterprises are normally a mix of beef cows and breeding ewes, with some of the better units able to finish stock as well as produce arable crops. Principal livestock outputs are store calves and lambs, although as in other areas more farmers are now seeking to add value through finishing stock. A small number of farms in the straths grow more substantial areas of crop such as malting barley for the distilling trade.

Although holdings are larger on average than the Scottish norm, productivity is likely to be relatively low as a result of the activities undertaken and their limitations in terms of income generation. The 1998 Scottish Agricultural College Land Use and Economic Activity in Possible National Park Areas study estimated that 30% of the total agricultural output of the area was direct subsidy or market support, and that 86% of this subsidy related to livestock, both proportions significantly exceeding the Scottish average.

Ownership

Table 4.3.4b: Ownership of Land in the Park Parishes, 1990-2003

	1990		1998		2003		% change 1990 to 2003	
Park	**Units**	**Hectares**	**Units**	**Hectares**	**Units**	**Hectares**	**Units**	**Hectares**
Owned Area	238	242,894	294	271,566	330	271,625	38.7	11.8
Rented Area	375	148,471	312	134,090	286	134,471	-23.7	-9.4
Seasonal Let	74	38,475	107	19,552	121	10,986	63.5	-71.4
Seasonal Rented	39	10,490	75	15,644	82	23,197	110.3	121.1

Source: Scottish Agricultural Census

During the period 1990 to 2003, the number of agricultural units owned by farmers in the Park parishes increased by almost 40%, and the total land owned by more than 10%. There was a corresponding drop in rented agricultural units and in rented land. This reflects the national trend over the period.

Table 4.3.4c: Balance of Owned versus Rented Land, 2003 (hectares)

	Rented Hectares	Percentage	Owned Hectares	Percentage
Park Parishes	134,471	33.1	271,625	66.9
Highland	438,559	24.1	1,378,663	75.9
Scotland	1,660,823	30.1	3,859,677	69.9

Source: Scottish Agricultural Census

In 2003, the Park parishes had a lower percentage of agricultural land owned by the farmers working it than either the Highland region or Scotland as a whole, and a correspondingly higher level of rented land.

It is possible that this reflects a continuing trend of landowners taking farms back in-hand, rather than an increase in the number of owner occupiers where the data indicates a drop in the number of full-time occupiers. The estates survey undertaken by the Cairngorms Partnership between 1998 and 2000 supports this interpretation.

Employment

Table 4.3.4d: Occupiers of Agricultural Land in the Park Parishes, 1990-2003

	1990		1998		2003		% difference between 1990 and 2003	
	Units	**Number**	**Units**	**Number**	**Units**	**Number**	**Units**	**Number**
FT occupiers	209	209	174	174	160	160	-23.4	-16.7
PT occupiers >50%	57	57	41	41	47	47	-17.5	-28.1
PT occupiers <50%	79	79	113	113	123	123	55.7	43.0

Source: Scottish Agricultural Census

The number of full-time occupiers declined during the period by nearly 17%, slightly under the Scottish average. Part-time occupiers who devoted more than half of their time to farming declined by 28%, as opposed to a decline in the Scottish average of 37%. There was a corresponding increase in the percentage of part-time occupiers who devoted less than half of their time to farming, again broadly consistent with the national trend.

Table 4.3.4e: Occupiers and Spouses, 2003

	Full-time		Half-time or More		Less Than Half-time		Total
	Number	**%**	**Number**	**%**	**Number**	**%**	
Park	160	48.5	47	14.2	123	37.3	330
Highland	1,328	25.8	855	16.6	2,962	57.6	5,145
Scotland	11,167	39.6	3,788	13.4	13,256	47.0	28,211

Source: Scottish Agricultural Census

The Park parishes had a higher level of full-time occupiers than either the Highlands or Scotland as a whole, despite the decline noted above. The proportion of Park parish occupiers who work half-time or more was also higher than the Scottish average, but slightly below that of the Highlands. These figures appear to reflect the extensive, but improved, livestock systems employed in the area. The Highland region, followed by Scotland as a whole, had higher proportions of occupiers who work less than half-time.

Table 4.3.4f: Spousal Involvement in Agriculture in the Park Parishes, 1990-2003

	1990		1998		2003		% difference between 1990 and 2003	
	Units	**Number**	**Units**	**Number**	**Units**	**Number**	**Units**	**Number**
FT spouse	33	33	26	26	25	25	-21.2	-24.2
PT spouse >50%	47	47	34	34	37	37	-27.7	-21.3
PT spouse <50%	568	58	565	87	95	95	-84.7	6.5

Source: Scottish Agricultural Census

Spousal involvement in farming in the Park parishes had declined during the period, both full-time involvement and substantial (more than 50% of working time) part-time involvement. The reduction in full-time spousal involvement was substantially less than the decline in Scotland as a whole of 36%. This may reflect the lack of labour flexibility associated with extensive livestock production. Combined, the total drop in full-time and substantial part-time involvement was 18 people, which compares to an increase in less intensive part-time working (defined as less than 50% of working time) of 37 persons. This appears to be a structural adjustment in the way in which agricultural labour requirements are met and may well be balanced by other forms of employment for the individuals concerned.

Table 4.3.4g: Spousal Involvement in Agriculture in the Park Parishes, Highland Region and Scotland, 2003

Spouses	Full-time		Half-time or More		Less than Half-time	
	Number	**%**	**Number**	**%**	**Number**	**%**
Park	25	15.9	37	23.6	95	60.5
Highland	285	11.5	342	13.8	1,847	74.7
Scotland	2,137	14.9	2,380	16.6	9,781	68.4

Source: Scottish Agricultural Census

The Park parishes had a higher average level of spousal involvement in agriculture than either the Highland region or Scotland as a whole. Full-time spousal involvement was slightly higher than the Scottish average, and much higher than the Highland average. Spouses working half-time or more were much more common in the Park parishes than either Highland or in Scotland as a whole.

Table 4.3.4h: Male Employment in Agriculture in the Park Parishes, 1990-2003

	1990		1998		2003		% difference 1998 and 2003	
FT male business partners	0	.	22	25	20	21	-9.1	-16.0
FT hired males	0	.	66	92	64	97	-3.0	5.4
FT family males	0	.	31	32	32	33	3.2	3.1
PT hired males	24	29	37	48	29	38	20.8	20.8
PT family males	20	22	19	22	26	32	30.0	30.0
Male casual and seasonal	19	22	20	28	26	33	36.8	36.8

Source: Scottish Agricultural Census

No male employment was recorded by the Agricultural Census in 1990. From 1998 to 2003 there was a decline in full-time male business partners. This has been from a small base, but is contrary to the upward trend nationally. There were small increases in the number of full-time hired males and male family members employed, contrasting with the national downward trend. Possibly this is compensating for the reduced number of occupiers and indicates more in-hand farming using employed staff. Hired males substantially outnumbered family males.

The number of part-time hired males, family males and male casual and seasonal workers all increased during the period 1990 to 2003.

Table 4.3.4i: Female Employment in Agriculture in the Park Parishes, 1990-2003

	1990		1998		2003		% difference	
FT female business partners	0	.	*	*	*	*		
FT hired females	*	*	5	7	*	*		
FT family females	6	6	*	*	8	8	33.3	33.3
PT hired females	*	*	7	14	9	11	28.6	-21.4
PT family females	8	9	13	15	12	13	50.0	44.4
Females casual and seasonal	*	*	*	*	5	6		

Source: Scottish Agricultural Census

Data for female business partners has been completely suppressed by the Agricultural Census due to the small numbers involved. Similarly, data for full-time family females, part-time hired females and female casual and seasonal labour has been partially suppressed.

Where the data permits comparison, there was an increase in full-time family female and part-time family female employment, albeit from a low base.

The level of female employment in farming in the Cairngorms is very low compared with male employment.

Land-Use

Table 4.3.4j provides a breakdown of the principal forms of land-use in the Cairngorms National Park by area and proportion and allows for comparison and contrast with the Scottish average.

Table 4.3.4j: Land-use in the Park Parishes and in Scotland, 2003 (hectares)				
	Park	**%**	**Scotland**	**%**
Crops	3,256.6	0.8	643,313.5	11.7
Grass	24,168.6	6.0	1,252,818.4	22.7
Rough grazing	358,522.8	88.3	3,313,492.0	60.0
Woodland	18,999.7	4.7	236,638.8	4.3
Other land	1,148.3	0.3	74,237.2	1.3
Total land	**406,096.0**	**100.0**	**5,520,499.9**	**100.0**

Source: Scottish Agricultural Census

The three major forms of agricultural land-use in Scotland are cropping, improved grassland and rough grazing. The Park is clearly differentiated from the Scottish norm, with woodland being of much greater significance than crops. Rough grazing is also proportionately much more significant in the Park, almost 30% higher than the Scottish average and higher than the Highland area average of 84%. Improved grassland represents only 26% of the Scottish proportion. This clearly shows the limitations on agricultural production in the Park.

The most significant change in land-use in the Park parishes between 1990 and 2003 was the increase in woodland, with almost twice as many agricultural units including woodland, and the acreage devoted to woodland increasing by one and a half times. This may reflect the greater recognition of the wider public benefits of woodland and forests, increased land ownership and management involvement by environmentally oriented charities and changes in support, eg through the Woodland Grant Scheme, livestock exclusion payments, woodland improvement and management grants.

Crops and grass land also increased in acreage, although there was a drop in cultivation in 1998. Rough grazing also increased slightly against the national and Highlands and Islands Enterprise area trends, although a significant number of agricultural units withdrew from this area.

Other land, defined as derelict land, roads, yards, buildings, etc, declined significantly by some 75%.

The total land in agricultural use increased during the period by 3.8%.

Arable Farming

Crops

Table 4.3.4k: Main Crops Grown in the Park Parishes, 1990-2003								
	1990		**1998**		**2003**		**% difference 1990 to 2003**	
	Units	Hectares	Units	Hectares	Units	Hectares	Units	Hectares
Spring barley	124	1,666.2	119	1,974.08	94	1,568.59	-24.2	-5.9
Turnips, swedes stockfeed	161	810.9	87	444.84	66	305.98	-59.0	-62.3
Other crops stockfeed	13	60	13	68.32	31	263.23	138.5	338.7
Rape for stockfeed	67	368.5	57	381.51	31	176.2	-53.7	-52.2
Spring oats	52	221.8	26	133.89	20	103.72	-61.5	-53.2
Kale and cabbage stockfeed	25	53.4	10	69.9	9	39.71	-64.0	-25.6

Winter barley	11	134.4	8	29.954	7	32.218	-36.4	-76.0
Main crop potatoes	56	18.7	26	23.27	15	18.47	-73.2	-1.2
Vegetables for human consumption	*	*	5	1.13	*	*		

Source: Scottish Agricultural Census

The main crop grown in the Park parishes during the period was spring barley, with more than 1,500 hectares devoted to its production in 2003. This is likely to be predominantly for malting purposes. The area devoted to spring barley is subject to seasonal variation, and this is reflected in the data. Of greater significance is the reduction in the number of holdings producing spring barley, as this represents a more fundamental change in cropping practice.

The next most significant crops in the area were fodder crops intended to feed livestock, covering a combined area of 785.12 hectares in 2003. With the exception of the category Other crops stockfeed, the area devoted to these crops had also declined since 1990. While the data does not provide further definition, it is likely that the increase in the category of Other crops stockfeed is related to an increase in game cover crops for low ground pheasant shoots.

Other crops produced in the area were spring oats (which had declined some 50% in acreage since 1990, as opposed to the Scottish decline of 25%), winter barley and main crop potatoes. These are grown in very small areas.

Vegetables for human consumption were grown in the relevant parishes, but in numbers so small that they were suppressed by the Agricultural Census. Only in 1998 was there a sufficiently high level of cultivation for the Census to publish data.

Set-Aside

In 1992 the policy of 'set-aside' was introduced, where farmers were paid not to use all their land.

Table 4.3.4l: Set-Aside in the Park Parishes, 1998-2003						
	1998		**2003**		**% difference between 1998 and 2003**	
	Units	Hectares	Units	Hectares	Units	Hectares
Set-Aside	33	230	39	369	18.2	61.0

Source: Scottish Agricultural Census

Thirty-three agricultural units in the Park parishes had taken up the offer of set-aside payments by 1998, covering a total of 229.3 hectares, or only some 6.6% of the total eligible area under agricultural use. This had expanded to 39 units by 2003, and some 369 hectares, 11.3% of the eligible land in agricultural use.

By comparison, around 4.3% of all Scottish agricultural land was devoted to set-aside in 2003. However, the proportion of set-aside in the Park parishes is still higher than that in the Highlands, where set-aside amounted to only 0.3% of farming land in 2003.

Livestock Farming

Cattle

Table 4.3.4m: Cattle in the Park Parishes, 1990-2003				
	1990	**1998**	**2003**	**% difference 1990 to 2003**

	Units	No.	Units	No.	Units	No.	Units	No.
Dairy cows in milk	10	490	8	345	11	270	10.0	-44.9
Beef cows in milk	241	11,574	199	10,022	182	9,313	-24.5	-19.5
Dairy cows in calf	10	167	8	61	9	179	-10.0	7.2
Beef cows in calf	140	1,571	147	2,043	138	2,339	-1.4	48.9
Dairy heifers	12	51	6	31	7	28	-41.7	-45.1
Beef heifers	163	1,075	148	920	157	1,113	-3.7	3.5
Bulls	219	364	194	347	183	380	-16.4	4.4
Other male	467	7,184	474	6,566	442	7,056	-5.4	-1.8
Other female	601	8,145	567	7,462	532	7,042	-11.5	-13.5

Source: Scottish Agricultural Census

There was an almost 10% decline in cattle numbers in the Park parishes during the period 1990 to 2003, and a 24% decline in the number of agricultural units raising cattle.

Dairy cows in calf, Dairy heifers and Beef cows in milk experienced the largest falls.

The production of beef cattle increased, with Beef cows in calf and, to a lesser extent, Beef heifers both increasing in number.

Table 4.3.4n: Cattle in the Park Parishes, Highland Region and Scotland, 2003

	Park			**Highland**			**Scotland**		
	Units	No.	Average no. per unit	Units	No.	Average no. per unit	Units	No.	Average no. per unit
Dairy cows in milk	11	270	24.5	77	2,721	35.3	1,964	173,879	88.5
Beef cows in milk	182	9,313	51.2	1,632	42,750	26.2	9,221	388,311	42.1
Dairy cows in calf	9	179	19.9	52	522	10.0	1,658	25,398	15.3
Beef cows in calf	138	2,339	16.9	1,176	12,607	10.7	6,936	101,283	14.6
Bulls	183	380	2.1	958	2,262	2.4	8,104	20,799	2.6

Source: Scottish Agricultural Census

Sheep

Table 4.3.4o: Sheep in the Park Parishes, 1990-2003

	1990		**1998**		**2003**		**% difference 1990 to 2003**	
	Units	No.	Units	No.	Units	No.	Units	No.
Breeding ewes	252	91,988	222	85,698	202	77,386	-19.8	-15.9
Rams	224	2,880	201	2,595	189	2,401	-15.6	-16.6
Other breeding sheep	190	21,908	185	20,880	162	18,731	-14.7	-14.5
Other sheep	66	1,027	64	785	57	1,817	-13.6	76.9
Lambs	253	104,803	222	97,894	209	89,059	-17.4	-15.0

Source: Scottish Agricultural Census

Sheep-raising declined by some 15% during the 1990 to 2003 period, with the number of agricultural units involved in sheep production also declining. The decline was comparable across all categories of sheep, with the exception of Other sheep, which increased substantially, but from a very low base.

Table 4.3.4p: Sheep in the Park Parishes, Highland Region and Scotland, 2003

	Park			Highland			Scotland		
	Units	No.	Average no. per unit	Units	No.	Average no. per unit	Units	No.	Average no. per unit
Breeding ewes	202	77,386	383	2,961	496,876	167.8	14,632	3.208m	219.2
Rams	189	2,401	13	2,120	16,156	7.6	11,633	100,326	8.6
Other breeding sheep	162	18,731	116	2,523	122,693	48.6	11,837	785,538	66.4
Other sheep	57	1,817	32	988	13,349	13.5	4,962	84,828	17.1
Lambs	209	89,059	426	2,992	507,736	169.7	14,967	3.862m	258.0

Source: Scottish Agricultural Census

Farmed Deer
Anecdotally, there is believed to be some farming of deer within the Park. However, this is not reported in the Scottish Executive's parish level Agricultural Census data.

Pigs

Table 4.3.4q: Pigs in the Park Parishes, 1990-2003

	1990		**1998**		**2003**		**% difference 1990 to 2003**	
	Units	No.	Units	No.	Units	No.	Units	No.
Pigs	8	2,142	7	5,629	6	4,835	-25.0	125.7

Source: Scottish Agricultural Census

Only a small number of agricultural units in the Park parishes were involved in pig production, and this number declined by a quarter between 1990 and 2003. However, during the same period, the number of pigs raised more than doubled, although production in 2003 was less than it was during 1998. This is a higher rate of increase than the Scotland-wide trend for the period, and the 1998 peak is consistent with cyclical trends.

Horses

Table 4.3.4r: Horses in the Park Parishes, 19900-2003

	1990		**1998**		**2003**		**% difference 1990 to 2003**	
	Units	No.	Units	No.	Units	No.	Units	No.
Horses used in agriculture	*	*	*	*	7	13		
All other horses	51	172	55	266	52	291	2.0	69.2

Source: Scottish Agricultural Census

Horses used in agriculture, and the agricultural units making use of them, were too few in number to be published by the Agricultural Census, except in 2003.

Other horse types were more numerous, and the horse population grew from 172 to 291, an increase of almost 70%, between 1990 and 2003. These are largely horses for recreational use, and the increase is broadly consistent with the wider Scottish situation where there was an increase of some 58% over the period.

Goats

Table 4.3.4s: Goats in the Park Parishes, 1990-2003								
	1990		**1998**		**2003**		**% difference 1990 to 2003**	
	Units	No.	Units	No.	Units	No.	Units	No.
Goats	14	67	9	32	7	13	-50.0	-80.6

Source: Scottish Agricultural Census

Goat numbers are very small and of little commercial significance. Numbers and the agricultural units raising goats declined dramatically during the period 1990 to 2003. The number of agricultural units declined by 50%, and goat numbers declined by some 80%.

Poultry

Table 4.3.4t: Poultry in the Park Parishes, 1990-2003								
	1990		**1998**		**2003**		**% difference 1990 to 2003**	
	Units	No.	Units	No.	Units	No.	Units	No.
Hens for laying	39	327	37	550	43	626	9.3	91.4
Moulted hens	62	967	33	494	29	619	-113.8	-36.0
Pullets for laying	23	65	15	42	20	84	-15.0	29.2

Source: Scottish Agricultural Census

There was only a limited amount of poultry production in the Park parishes, with 68 agricultural units raising poultry of some kind in 2003. The number of agricultural units raising poultry declined by almost 40% between 1990 and 2003, but the number of poultry raised increased slightly by 2.3%. Hens and Pullets for laying were the categories experiencing the largest increases in unit numbers. The scale of production suggests that poultry is raised principally for domestic consumption within the Park.

Organic Farming

Table 4.3.4u: Organic Farming in the Park Parishes, 2003		
	Units	**Number**
Organic farming (Total or Partial)	32	32

Source: Scottish Agricultural Census

The adoption of organic farming practices was included in the Scottish Agricultural Census after 1998, therefore the data only covers 2003.

Thirty-two agricultural units had adopted some form of organic farming practice in 2003, some 7% of the 330 agricultural units in the relevant parishes as opposed to a Scottish total of 1.4%. In 2003 Scotland had 58% of the UK's total organic land, but only 18% of producers. At a Scottish level some 8% of agricultural land is organic or in the process of conversion. As 77% of all UK organic land is rough grazing, this pattern is to be expected.

Key Points

- The pattern of tenure of agricultural land within the Park follows the trend at national level in favour of owner management and consolidation of units, largely as a result of landowners taking farms back in-hand.
- Within the Park there is a strong trend towards farming becoming a part-time occupation. The Agricultural Census data points to less than 600 people involved in farming within the Park, of which just over 300 are full-time.

- Agricultural land-use within the Park is dominated by rough grazing. The small area in crop cultivation is heavily biased towards production of spring barley, likely to be mainly for malting purposes, with the vast majority of the rest given over to fodder crops. The most striking trend in land-use since 1990 has been the increase in woodland, although this still accounts for less than 5% of land.
- Livestock within the Park is dominated by sheep (189,000) and cattle (28,000) which, respectively, sustained a decline of 15% and 10% between 1990 and 2003, reflecting the employment trend in agriculture. A further striking trend is the 70% growth in the number of horses used for leisure purposes in this period, although the total remained relatively small in absolute terms at just under 300.

4.3.5 Estates

The only published source of information on estates within the Park appears to be the 1999 study on landowners in the Cairngorms Partnership area (a larger area than the current Park area).

Discussions with the Scottish Rural Business and Property Association found that while the Association held details of its members, this was only the extent of land-holdings. No information was held on the kinds of activities undertaken by members on their land or the employment associated with activities.

The Cairngorms Partnership study canvassed some 152 landowners during 1998-1999. Sixty-two landowners replied, a 40.7% response rate, although it was reported that these respondents accounted for some 70% of all land in the Cairngorms Partnership area.

Findings from the Cairngorms Partnership Survey

Employment
The survey returns identified 422 full-time jobs, and 126 full-time equivalent part-time jobs based on the estates. Of these 199 full-time equivalents were linked to fieldsports (red and roe deer stalking, high and low ground shooting and fishing). Forty-six of the respondents were directly involved in fieldsports, the remaining 14 had no employment in this activity because the sporting rights were let or the estate was used predominately for another purpose.

Agricultural employment on in-hand farms was 41 full-time equivalents. A total of 238 farms were owned by the respondents, some 111,888 hectares in all. The extent to which farms and land were let was not stated.

No other employment figures were published for the other activities in the survey, ie nature conservation, commerce and tourism, outdoor recreation and access, and business management.

Investments
Investments by estate owners were captured by the survey. In 1998-1999, the following expenditures were declared:

Table 4.3.5a: Expenditure by Respondent Estates in the Cairngorms Partnership, 1998-1999

Category	Expenditure	Of which grant
Woodland	£2,403,489	£468,548
Fieldsports	£3,631,758	£64,500
Agriculture	£2,014,449	£818,128
Outdoor recreation and access	£939,597	£331,737
Housing	£1,531,284	£39,000
Total expenditure (including business management)	£17,416,279	£1,689,957

Source: Cairngorms Estates: a survey of landowners in the Cairngorms Partnership area

The survey did not collect data on estate turnover or income. No view on the economic health of the estates can therefore be formed.

Respondents were asked for their views on the future prospects for these lines of activity. The majority of respondents were pessimistic about the prospects for woodland, agriculture and tourism, but more positive about the prospects for business administration. Opinion on fieldsports was evenly divided.

The majority of respondents expected staff numbers to remain steady. Where a change was anticipated, a decline in employment was anticipated in woodland and agriculture, but an increase in fieldsports, tourism and business administration.

Housing
Survey respondents provided over 1,000 homes during the period 1998-1999. Of these, 263 were tied homes, 235 given over to tenant farmers, 434 for rent as private residences and 69 for other purposes.

Half of the respondents reported a policy of favouring local needs when allocating housing, either to those who worked locally or had local connections. Some tied houses were provided rent-free for employees.

Community Involvement
Twenty-four of the 62 respondents took part in some kind of community project in 1998-1999. Activities included community footpath projects, community woodland initiatives, financial and other assistance to Community Councils, voluntary and recreation groups, and local events such as Highland Games and Open Days.

Over half of the respondents reported providing facilities for local community use free-of-charge. These facilities included the use of private halls, the use of land for events and sports and properties for use by organised groups.

Evidence from the 2001 Census
As reported above, Census returns for the Park identified employment in agriculture, hunting, forestry and fishing as follows:

Table 4.3.5b: Potential Estate-related Employment as measured by 2001 Census

Category	**Park**	**Park %**	**Scotland**	**Scotland %**	**Park deviation from Scotland**
Agriculture, hunting and forestry	442	5.7	48,391	2.1	3.6
Fishing	11	0.1	6,784	0.3	-0.2

Source: 2001 Census, General Register Office for Scotland

The primary industries of agriculture, hunting and forestry are aggregated together by the Census. A significant proportion of this category is likely to be agricultural employment, whether on farms owned by large estates or in other categories of employment. The Agricultural Census for 2003, which covers a larger area than the Park, identifies some 160 full-time agriculture occupiers, 47 half-time or more occupiers, and 123 less than half-time. There were also 21 business partners, 97 full-time hired employees, 41 full-time family employees, 49 part-time hired employees, 45 part-time family employees, and 39 casual and seasonal workers.

For fishing, which includes freshwater fishing activity, there were only 11 employees identified by the Census, a lower figure than the national average.

Other estate-related employment is likely to be subsumed under other employment categories, such as hospitality and business activities.

It is possible that some of the employment generated by the Cairngorms National Park estates goes to workers who live outwith the Park boundary. Some estate-related employment may also be recorded as self-employment.

The role of the estates in the Cairngorms economy is clearly significant, especially as these entities are active in the most remote and rural areas of the Park. Existing data sources are not able to identify the type and extent of estate-related economic activity. It would require a dedicated research effort to canvass the estates to determine their current economic contribution and future prospects.

Key Points
Data covering sporting estates within the Park is patchy. Available sources suggest:

- Almost half of the full-time equivalent jobs on estates are linked to fieldsports, and this activity may be close to agriculture in terms of its significance as an employer within the Park.
- Estates are a significant focus of investment and absorption of investment subsidy within the Park. This investment is distributed across a range of activities including cultivation of woodlands, fieldsports, community access and facilities and housing.
- Public access is afforded by most estates, but mainly on a managed basis.

4.3.6 Information Gaps – Economy

- Reason for segregation of roles by gender;
- Reason for gender segregation among employed people in relation to full and part-time work;
- Comprehensive analysis of numbers employed in agriculture, hunting, forestry and fishing;
- Type and extent of estate-related economic activity, employment and investment;
- Employment figures for nature conservation, commerce and tourism, outdoor recreation and access and business management sectors.

4.4 Society

4.4.1 General

The analysis of Park society variously examines:

- Relative deprivation against a range of measures: income, employment, employment skills and training, health and accessibility;
- Social capital, considered in terms of electoral participation, community organisation and volunteering and social infrastructure;
- Young people;
- Crime and community safety.

4.4.2 Measures of Deprivation

General
The Scottish Indices of Deprivation are an attempt to measure relative deprivation at a local level. Based on earlier work in England and Wales, the Indices bring together a number of measurements of social well-being, including income, employment, education, health and access to public services.

The Park is estimated to be covered by the following wards: Glenlivet, Upper Deeside, Donside and Cromar, Kirriemuir West, Kirriemuir East, Brechin North Esk, Grantown-on-Spey, Strathspey North East, Strathspey South, Badenoch West, Badenoch East.

At the ward level there are six Indices for each ward in Scotland: five Domain Indices (which are combined to make the overall Scottish Index of Multiple Deprivation) and an overall Scottish Index of Multiple Deprivation. The Deprivation Indices are each assigned a rank. There are 1,222 wards in Scotland. The most deprived ward for each Index is given a rank of 1 and the least deprived ward is given a rank of 1,222. The ranks show how a ward compares to all the other wards in Scotland and are easily interpretable.

The scores for the Income and Employment Deprivation Indices are rates. So, for example, if a ward scores 30.1 in the Income Domain, this means that 30.1% of the ward's population are Income deprived. The scores for the remaining three domains are not rates. Within a domain, the higher the score, the more deprived the ward.

The quartile of the ranking of scores has been identified, with 1 denoting the worst 25% of Scottish wards and 4 the best.

Income Deprivation
Table 4.4.2a shows that, in terms of incomes, all but one of the wards in the Park (Kirriemuir East) are in the best 50% of Scottish wards.

Table 4.4.2a: Income Ranking, 2003

Ward Name	SIMD Score	SIMD, rank of SIMD score (out of 1,222 wards)	Ranking Quartile
Glenlivet Ward	11.57	707	3
Upper Deeside Ward	5.47	1,065	4
Donside And Cromar Ward	6.51	1,002	4
Kirriemuir West Ward	8.85	890	3
Kirriemuir East Ward	14.02	541	2
Brechin North Esk Ward	12.30	652	3
Grantown Spey Ward	11.98	677	3
Strathspey North East Ward	8.69	899	3
Strathspey South Ward	11.79	692	3
Badenoch West Ward	8.32	919	4
Badenoch East Ward	7.32	959	4

Source: Scottish Indices of Deprivation, Scottish Executive

The Income Deprivation measure covers the following indicators of deprivation:

- Adults in Income Support households (Department for Work and Pensions, April 2001);
- Children in Income Support households (Department for Work and Pensions, April 2001);
- Adults in Income-based Job Seekers Allowance households (Department for Work and Pensions, April 2001);
- Children in Income-based Job Seekers Allowance households (Department for Work and Pensions, April 2001);
- Adults in Working Families Tax Credit households below a low income threshold (Department for Work and Pensions, April 2001);
- Children in Working Families Tax Credit households below a low income threshold (Department for Work and Pensions, April 2001);

- Adults in Disability Tax Credit households below a low income threshold (Department for Work and Pensions, April 2001);
- Children in Disability Tax Credit households below a low income threshold (Department for Work and Pensions, April 2001).

Employment

Table 4.4.2 b: Employment Ranking, 2003			
Ward Name	**SIMD Score**	**SIMD, rank of SIMD score (out of 1,222 wards)**	**Ranking Quartile**
Glenlivet Ward	8.99	875	3
Upper Deeside Ward	5.36	1,099	4
Donside And Cromar Ward	6.01	1,063	4
Kirriemuir West Ward	8.18	935	4
Kirriemuir East Ward	11.98	660	3
Brechin North Esk Ward	11.54	696	3
Grantown Spey Ward	8.60	904	3
Strathspey North East Ward	8.76	894	3
Strathspey South Ward	10.78	749	3
Badenoch West Ward	4.90	1,124	4
Badenoch East Ward	6.09	1,057	4

Source: Scottish Indices of Deprivation, Scottish Executive

This domain seeks to measure enforced exclusion from the world of work. The domain does not seek to capture income deprivation to which joblessness leads, since this is tackled in the Income Deprivation Domain. Employment deprived people are thus defined as those who want to work, but are unable to do so through unemployment, sickness or disability.

The following indicators were used in calculating the employment index:

- Unemployment claimant count of those aged under 60 (Office for National Statistics, April 2001);
- Incapacity Benefit recipients aged under 60 (Department for Work and Pensions, April 2001);
- Severe Disablement Allowance recipients aged under 60 (Department for Work and Pensions, April 2001);
- Compulsory New Deal participants – New Deal for the under 25s and New Deal for 25+ not included in the unemployment claimant count (Department for Work and Pensions, April 2001).

All wards in the Park are within the best 50% of Scotland's wards where employment is concerned.

Education, Skills and Training
The intention of the Education, Skills and Training theme is to measure in as consistent a way as possible the key educational characteristics of the local area that might contribute to the overall level of deprivation and disadvantage. Previous attempts to measure educational deprivation at the local level have tended to include both social and educational measures, typically using indicators such as free school meals as a proxy for income deprivation. On the basis of the approach that has been adopted for the Scottish Index of Multiple Deprivation, free school meals is not needed in the Education Domain, as the Income Domain captures children in families receiving Income Support or Income-based Job Seekers Allowance, which are the eligibility criteria for receiving free school meals. Low income is certainly a correlate and probably, in part, a cause of educational deprivation, but it is not a direct measure of educational deprivation as such.

Table 4.4.2c: Education, Skills and Training Ranking, 2003			
Ward Name	**SIMD Score**	**SIMD, rank of SIMD score (out of 1,222 wards)**	**Ranking Quartile**
Glenlivet Ward	-.72	963	4
Upper Deeside Ward	.09	559	2
Donside And Cromar Ward	-1.09	1,086	4
Kirriemuir West Ward	-.74	969	4
Kirriemuir East Ward	-.46	843	3
Brechin North Esk Ward	.18	514	2
Grantown Spey Ward	.00	603	2
Strathspey North East Ward	-.90	1,034	4
Strathspey South Ward	-.57	898	3
Badenoch West Ward	-.71	958	4
Badenoch East Ward	-.54	888	3

Source: Scottish Indices of Deprivation, Scottish Executive

The following indicators were used in calculating the educational, skills and training index:

- Working age adults with no qualifications;
- Pupils aged 16+ who are not in full-time education;
- Proportions of the 17+ population who have not successfully applied to Higher Education;
- Pupil performance on SQA at Stage 4;
- Secondary level absences.

There is a greater variation in the education, skills and training ranking than for most other measures and three out of 11 wards are in the worst 50%, although none is in the worst 25% of wards in Scotland.

Health
This theme identifies areas with relatively high proportions of people who are losing years of life because of premature death or whose quality of life is impaired by poor health.

Ill health is closely linked to other aspects of deprivation, but it is also an important aspect of deprivation in its own right. It may require unique policy responses and service provision. The researchers therefore consider it useful to be able to specifically identify geographical areas of health deprivation.

The following indicators were used in calculating the health index:

- Comparative Mortality Factor for under 75s (essentially the number of actual deaths compared to the number of expected deaths);
- Hospital episodes related to alcohol use;
- Hospital episodes related to drug use;
- Comparative Illness Factor;
- Emergency admissions to hospital;
- Proportion of population being prescribed drugs for anxiety or depression or psychosis;
- Proportion of live singleton births of low birth weight (<2,500g).

Table 4.4.2d: Health Ranking, 2003			
Ward Name	**SIMD Score**	**SIMD, rank of SIMD score**	**Ranking Quartile**

		(out of 1,222 wards)	
Glenlivet Ward	-.52	891	3
Upper Deeside Ward	-1.23	1,141	4
Donside And Cromar Ward	-1.21	1,138	4
Kirriemuir West Ward	-1.05	1,103	4
Kirriemuir East Ward	-.61	930	4
Brechin North Esk Ward	-.42	832	3
Grantown Spey Ward	-.60	925	4
Strathspey North East Ward	-.87	1,038	4
Strathspey South Ward	-.81	1,014	4
Badenoch West Ward	-.88	1,044	4
Badenoch East Ward	-.74	987	4

Source: Scottish Indices of Deprivation, Scottish Executive

The Park population enjoys a very high standard of health, on average, with all but two wards in the best 25% in Scotland.

Accessibility
The purpose of this theme is to measure the extent to which people have poor geographical access to key local services.

Table 4.4.2e: Access to Services Ranking, 2003

Ward Name	SIMD Score	SIMD, rank of SIMD score (out of 1,222 wards)	Ranking Quartile
Glenlivet Ward	1.22	132	1
Upper Deeside Ward	.99	188	1
Donside And Cromar Ward	1.51	70	1
Kirriemuir West Ward	.99	184	1
Kirriemuir East Ward	.86	211	1
Brechin North Esk Ward	.82	218	1
Grantown Spey Ward	-1.00	1,103	4
Strathspey North East Ward	1.61	55	1
Strathspey South Ward	.65	261	1
Badenoch West Ward	1.52	67	1
Badenoch East Ward	1.32	99	1

Source: Scottish Indices of Deprivation, Scottish Executive

The indicators selected relate to health, food, finance, education, fuel and communication:

- Road distance to a surgery or health centre;
- Road distance to a general stores or supermarket;
- Road distance to a primary school;
- Road distance to a petrol station;
- Road distance to a bank or building society;
- Road distance to community internet facilities.

Poor geographical access to services is considered as a component of multiple deprivation, as it captures an additional aspect of what it is to be multiply deprived. This theme has also been included in the most recent Indices of Deprivation for England, Wales and Northern Ireland.

Although the validity of this measure is less clear than others, it may be seen that the Park scores badly in terms of accessibility as defined in the index. All but one ward are in Scotland's worst 25%.

Multiple Deprivation

Table 4.4.2f: Overall Multiple Deprivation Ranking, 2003

Ward Name	SIMD Score	SIMD, rank of SIMD score (out of 1,222 wards)	Ranking Quartile
Glenlivet Ward	12.79	776	3
Upper Deeside Ward	8.72	949	4
Donside And Cromar Ward	9.12	933	4
Kirriemuir West Ward	9.34	921	4
Kirriemuir East Ward	15.82	655	3
Brechin North Esk Ward	16.18	641	3
Grantown Spey Ward	9.65	909	3
Strathspey North East Ward	11.96	817	3
Strathspey South Ward	12.34	801	3
Badenoch West Ward	10.13	894	3
Badenoch East Ward	9.95	899	3

Source: Scottish Indices of Deprivation, Scottish Executive

The overall Scottish Index of Multiple Deprivation classifies the wards by combining information from all five themes: Income, Employment, Health, Education, and Access. The overall ward level score is ranked in the same way as the other theme indices - the bigger the score, the more deprived the ward. The most deprived ward according to the Scottish Index of Multiple Deprivation is assigned a rank of 1, and the least deprived ward a rank of 1,222.

All of the wards that cover the Park are in the upper half of the deprivation index, that is, they are less deprived than average. Three of the wards, Upper Deeside, Donside and Cromar and Kirriemuir West, are in the best 25% of wards in Scotland. The remainder are in the second best quartile. Therefore, according to Scottish Index of Multiple Deprivation research, the area covering the Park and beyond enjoys a good socio-economic status.

Key Points

- Socio-economic conditions within the Park are generally above the Scottish average. In relation to most measures, very few wards are outside the best 50% in Scotland.
- Accessibility, although measured less comprehensively than other factors, is the main area of consistent weakness.
- Performance in terms of Education, Skills and Training is patchy, with three out of 11 wards being outside of the best 50% in Scotland.

4.4.3 Social Capital

General

Social capital, according to the definition favoured by the Scottish Council for Voluntary Organisations, is the social connections and attendant norms and trust that bind society together. As such, this form of capital cannot be directly measured or quantified in an objective fashion.

Social capital is usually measured through surveying the members of a community to determine their perceptions of levels of trust within a community, their participation in community organisations and activities and their participation in family, social and professional networks.

Relevant national surveys, which could be used as benchmarks for any local survey effort, include:

- The British Cohort Survey surveys a 1970s birth cohort at regular intervals and includes coverage of the social capital topics of leisure activities, civic engagement, participation, citizenship, values, and social activities;

- The British Election Survey, compiled by the University of Essex since 1964, includes coverage of political citizenship and civic engagement and is based on a sample of some 4,500 people;

- The British Household Panel Survey, a survey of 5,500 households compiled by the University of Essex, includes social capital topics of neighbourhood, participation and reciprocity;

- The Scottish Social Attitudes Survey, a survey of some 1,600 adults, includes coverage of the social capital topics of confidence in political structures, participation and support networks.

All of these studies have sample sizes which mean that they cannot be used for local or regional analysis.

Electoral Participation
One published source of social capital data is participation in political activity, considered to be one indicator of how involved members of a population are in society. **Tables 5.4.3a and 5.4.3b** present an analysis of election results from the 2003 Scottish Parliament elections and the 2001 General Election for the relevant wards.

Table 4.4.3a: 2001 General Election			
Name	**Electorate**	**Votes**	**Turnout**
Inverness East, Nairn and Lochaber	66,452	42,459	63.9
Moray	57,898	33,223	57.4
West Aberdeenshire and Kincardine	61,391	37,914	61.7
North Tayside	61,645	38,519	62.5
Scotland	3,978,871	2,315,703	58.2

Source: Electoral Commission

Table 4.4.3b: 2003 Scottish Parliament Election			
Name	**Electorate**	**Votes**	**Turnout**
Inverness East, Nairn and Lochaber	66,694	34,795	52.2
Moray	58,242	26,981	46.3
West Aberdeenshire and Kincardine	62,542	31,636	50.6
North Tayside	62,697	33,343	53.2
Scotland	3,877,359	1,916,579	49.43

Source: Electoral Commission

In the constituencies covering the Cairngorms National Park, turnout was generally higher than in Scotland as a whole (the exception being Moray), indicating politically engaged communities. However, the constituency areas, at some 60,000 eligible voters each, dwarf the Park population, which has only some 16,000 persons in total, including those not eligible to vote. It is therefore not possible to simply measure political engagement of the Park population on this basis.

Voluntary Organisations and Volunteering

The Scottish Council for Voluntary Organisations maintains a database of voluntary organisations in Scotland, their size and field of activity. In principle, it would be possible to use this database (for a fee) to identify voluntary organisations active within the Park. However, the organisation's research section has indicated that the database cannot be considered comprehensive, with the majority of database entries being readily-identifiable registered charities. Many local organisations and groups in the Park may be too small or too informally organised to have charitable status. In addition, the database is likely to contain out-of-date data.

A basic analysis of the data published by the Scottish Council for Voluntary Organisations (**Table 4.4.3c**), indicated that the Local Authority areas covering the Park (Highland, Aberdeenshire, Moray and Angus) all have a higher number of voluntary organisations per 1,000 people than the Scottish average of 5.08 organisations per 1,000. There were significant differences between the Park Local Authority areas, with Highland having a higher number of organisations than the remaining three areas and Moray, at 5.44 organisations per 1,000 people, coming closest to the national average. However, it has to be remembered that the data primarily relates to larger organisations with charitable status.

Table 4.4.3c: Voluntary Organisations by Scottish Local Authority Area per 1,000 people, 2004

Local Authority Area	Number of Voluntary Organisations per 1,000 People
Highland	9.6
Aberdeenshire	6.56
Angus	6.24
Moray	5.44
Scotland	5.08

Source: Scottish Council for Voluntary Organisations Almanac, 2004

The Scottish Council for Voluntary Organisations also notes that rural Local Authority areas typically have proportionately higher numbers of voluntary organisations than urban areas. The higher number of organisations may, in part, be a product of a larger Local Authority area needing a larger number of organisations to meet local needs. The total voluntary effort in a Local Authority area may not, therefore, be directly linked to the number of organisations. To determine the full extent of voluntary activity, each active organisation would need to be contacted and surveyed.

Volunteer Development Scotland, using a variety of data sources, estimated that of the 38% of Scottish adults who had formally volunteered during 2003, 76% did so in voluntary, community or faith-based organisations.

Paid employment is concentrated in the smallest and largest organisations, as measured by turnover, according to the Scottish Council for Voluntary Organisations Panel.

Table 4.4.3d: Distribution of Workforce by Organisation size in the Regulated Voluntary Sector, 2001

Turnover	Percentage of paid employees	Percentage of volunteers	Percentage of regulated voluntary sector
Under £25k	20%	48%	72%
£25k to £50k	6%	12%	9%
£50k to £100k	11%	10%	7%
£100k to £500k	22%	22%	9%
£500k to £1m	11%	4%	1%
Over £1m	30%	5%	1%

Source: Scottish Council for Voluntary Organisations Panel, 2001

An NFO poll for Volunteer Development Scotland estimated that 43% of the adult Scottish population had taken part in some form of volunteering activity during 2004.

A Scottish Council for Voluntary Organisations' study in 1999-2000 attempted to map the distribution of the volunteer workforce on a geographical basis, as part of the Four Nations Voluntary Sector research project.

Table 4.4.3e: Workforce Data from Scottish Local Mapping Studies, 2000

Area	Year of survey	Number of voluntary organisations identified	Total annual income	Paid workforce	Volunteers
Argyll and Bute	2002	1,180	£28m	600	N/A
Renfrewshire	2003	607	£54m	3,324	17,146
Moray	1999	1,400	£7m	1,000	18,000
West Lothian	1999	1,800	£30m	4,500	21,000
Dundee	1999	1,200	£70m	9,150	13,285

Source: Scottish Council for Voluntary Organisations

The study highlighted major differences between the four study areas, with urban areas having a higher level of paid employment and rural areas a higher level of volunteering activity. From this, it was concluded that annual income was not a good indicator of the economic contribution of volunteer activity in rural areas.

Paid workers in the voluntary sector have a higher level of temporary contracts, between 13.3% (Labour Force Survey, 2000) and 14% (Scottish Council for Voluntary Organisations, 1998), which compares to 6.6% of all Scottish employees (Scottish Council for Voluntary Organisations, 2000). It is also higher than the rest of the UK voluntary sector at 10.6% (Labour Force Survey, 2000).

Current research on pay in the voluntary sector is incomplete, but previous research (Scottish Council for Voluntary Organisations, 1999) found that there were wide variations in salary level for the same job roles and variations by gender. Chief Executives of voluntary organisations were also found to earn less than their counterparts in the public and private sectors (Association for Chief Officers of Scottish Voluntary Organisations, 2002).

The type of volunteering activity in Scotland was recently estimated as follows:

Table 4.4.3f: Volunteering Activity in Scotland, 2004

Fundraising	25%
Organising and running events	12%
Providing a service or offering support	11%
Helping with sports or recreational activities	11%
Serving on a committee	10%
Helping with administration or office activities	6%
Working in the environment	4%
Campaigning or advocacy	3%

Source: Volunteer Development Scotland/NFO Omnibus Survey, October 2004

It should be noted that volunteering activity is not restricted to the voluntary or third sector; the same survey identified the breakdown of volunteering activity as being Voluntary (41%), Public (25%) and Private (34%).

From the available data, it can be inferred that the voluntary or third sector will play an important role in the Park. However, identifying and measuring the type and extent of this activity will require dedicated, locally-focused research. The available evidence suggests that the character of voluntary activity may differ significantly from the national, more urban pattern.

4.4.4 Social Infrastructure

There is no published source for physical infrastructure used for community purposes. Facilities may also be in private hands or used on an informal basis, making it harder to identify these structures.

Of the most commonly-used infrastructure types – community centres, libraries and village/town halls – a cursory search reveals the following endowments within the Park:

Table 4.4.4a: Social Infrastructure in the Park, 2005

Settlement	Community Centre	Library	Village/Town Hall
Aberdeenshire			
Braemar			Yes
Ballater		Yes	Yes
Strathdon			
Moray			
Tomintoul		Yes	Yes
Highland			
Dalwhinnie			Yes
Newtonmore		Yes	Yes
Kingussie		Yes	Yes
Aviemore		Yes	Yes
Carrbridge			Yes
Grantown-on-Spey		Yes	Yes
Nethy Bridge	Yes		Yes
Laggan			Yes
Angus			
Clova			Yes

Source: Local Authority Websites

The Park population appears to be poorly served by community centres – facilities funded by Local Authorities. However, the Park population may be being served in this regard by community centres located outwith the Park boundary. For example, Tomintoul is served by the Speyside Community Centre located in Aberlour. The pattern of community and voluntary activity in the Park will therefore be partly conditioned by existing infrastructure and arrangements outside the Park.

The provision of library facilities within the Park was greater, with six of the settlements having some form of library provision. Outlying areas in the Park may be served by mobile libraries, but these will not provide the physical facilities, including meeting space and internet facilities, which fixed libraries are able to provide.

Village and town halls were present in almost all the major Park settlements. Village halls have an important role as a focal point for community activity and access to services. The Park appears to be well-served in terms of number of village halls, but the condition, adequacy of space and facilities and security of funding arrangements are unknown.

4.4.5 Childcare

Childcare provision is an important element in enabling families to access employment and educational opportunities and is particularly important for mothers seeking to re-enter the workforce.

Table 4.4.5a: Childcare Provision in the Park, 2005						
	Childminder	**Crèche**	**Daycare**	**Nursery**	**Pre-school**	**Out of school**
Aberdeenshire						
Braemar				1		
Ballater	1	1	1	3		
Strathdon						
Moray						
Tomintoul	2					
Highland						
Dalwhinnie				1		
Newtonmore	1			3	2	
Kingussie	1		1	1	2	1
Aviemore	4		2	2		
Carrbridge						
Grantown-on-Spey	5			1	1	1
Nethy Bridge				1	1	
Laggan	1			1		
Angus						
Clova						

Source: ChildcareLink

The national ChildcareLink service identifies a range of childcare provision in the Park, although this is clearly more developed and formalised in some settlements than in others. Whether existing provision is adequate to meet needs cannot be determined without considerable further research.

Key Points

- It is not possible to measure electoral participation among Park residents as the Park forms a fragment of four constituencies. However, in three out of the four relevant constituencies, turnout was above the Scottish average in recent national elections.
- Likewise, voluntary activity cannot be measured at the level of the Park from secondary sources. Nevertheless, in all of the Local Authority areas within which the Park lies, the density of voluntary organisations is above the Scottish average.
- With regard to infrastructure supporting community activity, all of the main settlements have a village or town hall, while six of the larger ones also have a library.

4.4.6 Young People

No published data on the position of young people within the Park and their needs was identified. The four Local Authorities each have their own approach to identifying and working to meet the needs of young people:

- The Highland Council operates a Joint Committee on children and young people, and through its policy document 'For Highland's Children' is developing its approach to young people, but no specific research is attached to this;

- Aberdeenshire Council – no relevant activity identified;

- Moray Council has a Children's Service Plan, but this does not apparently include an analysis of need;

- Angus Council has a Young Angus Citizen's Panel, an extension of its Citizen's Panel, which is intended to canvass young people on issues and potential solutions.

The Dialogue Youth Initiative, supported by the Scottish Executive, operates within each Local Authority area canvassing young people on issues and needs and will be used in developing appropriate services.

4.4.7 Crime and Community Safety

The Park is covered by the Grampian and Northern Constabulary areas. The Northern Constabulary area has the most rural population of any police area in Scotland, and the lowest recorded crime rate. Grampian Police area, which takes in the city of Aberdeen, has the third lowest rate of recorded crime of the eight Scottish police areas.

Table 4.4.7a: Crime in Scottish Police Areas, 2003

	Number of crimes per 10,000 people	Percentage change 2002-2003	Percentage of crimes cleared up
Central	693	6.1	65
Dumfries and Galloway	730	7.5	52
Fife	897	-9.5	46
Grampian	724	-9.3	39
Lothian and Borders	878	-5.0	41
Northern	524	3.3	66
Strathclyde	840	-7.4	47
Tayside	769	-7.4	53
Scotland	805	-4.7	47

Source: Scottish Executive

The trend in recorded crime in the Northern Police area was a 3.3% increase between 2002 and 2003 against a 4.7% fall in Scotland as a whole. Recorded crime in Grampian declined by 9.3% during the same period.

Northern Constabulary recorded the highest crime clear-up rate during this period, almost 20% higher than the Scottish average. By contrast, Grampian Police had the lowest clear-up rate of any Scottish police force at 39%.

Within the Constabulary areas, there are separate operational commands. For the Northern Constabulary area, there are eight operational commands – Inverness; Ross, Cromarty and Skye;

Lochaber; Badenoch, Strathspey and Nairn; Orkney; Shetland; and the Western Isles. For Grampian Police the operational areas are Aberdeen; North Aberdeenshire; South Aberdeenshire; and Moray.

The Badenoch, Strathspey and Nairn, Moray and South Aberdeenshire areas cover the Park. However, it is not possible to make a comparison of crime rates between operational areas, as the populations for these operational areas are not measured.

Table 4.4.7b: Comparison between Scottish Crime Survey and Recorded Crimes, 1999

Type of crime	Scottish Crime Survey	Recorded crime	Percentage difference
Vandalism	218	55	396
Acquisitive	120	66	182
Housebreaking	84	36	233
Theft of a motor vehicle	18	21	86
Bicycle theft	18	9	200
Violence	211	59	358
Assault	188	54	348
Robbery	22	4	550
Total comparable crimes	549	180	305

Source: Scottish Executive

Recorded crime is not the sole measure of the impact of crime on society. Not all crimes are reported to or detected by the police; also, reporting and detection levels are independent of crime rates. Surveys have shown that the rate of crime experienced by people can be much higher than the level of crime reported. The most recent Scottish Crime Survey in 2000 recorded very substantial differences between the number of crimes experienced and those reported, with on average the rate of experienced crime being three times higher than that reported.

The 2000 Scottish Crime Survey canvassed 5,059 adults on their experience of crime (the British Crime Survey covers England and Wales, although it has on occasion been extended to lowland Scotland).

Key Points

- Data on crime and community safety issues are not available at spatial levels from which conditions in the Park can be inferred with any reliability. The Park mainly lies within police areas that have a rate of reported crime below the Scottish average. This is considered likely to apply to much of the Park.

4.4.8 Information Gaps – Society

- Updated analysis using new Scottish Index of Multiple Deprivation;
- Level of electoral participation;
- Voluntary Organisations operating within the Park;
- Physical infrastructure used for community purposes;
- Adequacy of childcare provision;
- Position and needs of young people.

4.5 Infrastructure

4.5.1 General

The analysis of infrastructure in this chapter variously covers:

- Transport services;

- Telecommunications;
- Energy;
- Waste management and disposal;
- Constraints on development;
- Housing.

4.5.2 Transport Services

Roads
A Class roads cross the Park in three main axes:

- Although following a serpentine line in the Park, the A9 trunk road essentially provides a north and south access on the western side of the Park, initially to Inverness and Perth and, thereafter, to the national road network. Within the Park there is only a very short section of the A9 which is dualled.

- The A939 follows generally a north west to south east route from north of Grantown-on-Spey to Ballater, affording access eastwards into Aberdeenshire via the A944/A97 and via the A93.

- The A93 enters the south eastern edge of the Park, running eastward through Deeside from the direction of Aberdeen, before turning south at Braemar through Glenshee and affording access to lowland Perth and Kinross and Angus.

There are two complexes of B Class roads in the Park:

- The first principally comprises the B970 and B9152, which include former alignments of the A9 and provide access to local communities through Strathspey from Newtonmore to Grantown-on-Spey and beyond.

- The second comprises the B9008 and B9136, providing local access in Glenlivet and Strathavon off the A939 in Morayshire.

Data on traffic levels is yet to be obtained from The Highland Council, Aberdeenshire Council and Bear/ Scottish Executive, but are included for Moray Council area.

Table 4.5.2a: Traffic Levels on Trunk and A Class Roads

Road	Weekday Average	Weekend Average	Heavy Goods Vehicles % Weekdays
A9 Dalwhinnie to Slochd			
A86 Moy to Kingussie			
A93 Devil's Elbow to Dinnet			
A95 Granish to Tormore			
A97 Dinnet to Glenkindie			
A939 Aitnoch to Dirdhu			
A939 Cock Bridge to Bridge of Gairn			
A939 Cock Bridge to Bridge of Brown	950	1,320 Lecht side 1,200 Bridge of Brown side	5% Grantown side 4% Lecht side

A944 Colnabaichin to Heughhead			

Source: Local Authorities/Scottish Executive

It was reported that traffic counts were being carried out biennially or thereabouts, although the data was not always processed and, accordingly, systematic trend data ws not available from all Local Authority or national sources.

Informal discussions to date have not identified any planned road improvements beyond maintenance. In general, existing road specifications were considered to be more than adequate for current levels of traffic. Trunk roads were noted as being subject to local congestion as a result of grouping of Heavy Goods Vehicles and caravans impeding the passage of faster traffic, particularly in the summer months.

Rail and Rail Services
The Inverness to Perth rail line passes through the Park, running alongside the A9 over the Slochd and through Strathspey. There are stations at (north to south) Carrbridge, Aviemore, Kingussie, Newtonmore and Dalwhinnie.

On weekdays and Saturdays there are nine services per day in each direction. All stop at Aviemore and Kingussie, but stops at other stations are intermittent and timetabling limits use of rail for commuting purposes.

On Sundays the frequency of service falls to five per day.

Bus Services
Bus services provide the most extensive form of public transport within the Park and to regional and national destinations.

Table 4.5.2b: Frequency of Bus Services and Linkage to Main Settlements

Bus Service	Route	Frequency	DW	LG	NM	KE	AM	CB	BG	NB	GS	TT	SD	BT	BM
072 Royal Mail	Ballater to Linn of Dee	1 Mon-Sat												X	X
075 Royal Mail	Forres to Braemoray	1 Mon-Sat						X							
099 Royal Mail	Dalwhinnie to Drummin	1 Mon-Sat	X	X											
109 Royal Mail	Grantown to Lochnellan	2 Mon-Fri, 1 Sat									X				
15 Rapsons	Inverness to Grantown to Aviemore	5 Mon-Fri, 2 Sat					X	X	X	X	X				
31 Rapsons	Dalfaber to Cairngorm	12 Mon-Sat					X								
34 Rapsons	Aviemore to Grantown to Tormore	8 Mon-Fri to Grantown, 4 to Tormore					X		X	X	X				
34C Rapsons	Aviemore to Grantown	1 School Days Only					X				X				
35 Rapsons	Inverness to Newtonmore	2 Mon-Sat			X	X	X	X							
35A Rapsons	Inverness to Newtonmore	1 Sat Only			X	X	X								
36 Rapsons	Aviemore to Carrbridge to Grantown	3 Mon-Sat					X	X			X				
38 Rapsons	Aviemore to Kingussie	4 School Days Only				X	X								
136 Rapsons	Aviemore to Carrbridge to Grantown	3 School Days Only					X	X			X				
201 Stagecoach Bluebird	Aberdeen to Ballater	16-18 Mon-Sat Ballater, 7-9 Braemar; 5-7 Sun												X	X
362 Robert	Dufftown to Tomintoul	2 Sat Only										X			
363 Hays/Smith/Reids	Tomintoul to Aberlour and Elgin	1-2 School Days Only										X			
500 Deveron	Cullen to Aviemore	1 Sat and Sun, Summer Only					X		X		X				
CB8	Alford to Inverurie	Not Given											X		
538 National Express	Inverness to Coventry	1 Mon-Sun					X								
588 National Express	Inverness to London	1 Mon-Sun					X								
957 Scottish Citylink	Edinburgh to Inverness	2-3 Mon-Sun	X		X	X	X								
995 Scottish Citylink	Perth to Inverness	4 Mon-Sun					X								
997 Scottish Citylink	Edinburgh to Inverness	Mon-Sun 3-4			X	X	X								

DW	LG	NM	KE	AM	CB	BG	NB	GS	TT	SD	BT	BM
Dalwhinnie	Laggan	Newtonmore	Kingussie	Aviemore	Carrbridge	Bt of Garten	Nethybridge	Grantown	Tomintoul	Strathdon	Ballater	Braemar

Source: Web-based Resources, Major Bus Company Timetable

Aviemore is a major hub for long distance bus services passing along the A9 (although Dalwhinnie, Newtonmore and Kingussie are also served) and local buses linking other locations in Strathspey. Between long distance and local buses, connections between Aviemore and Inverness average better than one per hour daytime. Connections between the main settlements in Strathspey (Newtonmore, Kingussie, Aviemore, Grantown-on-Spey) are also relatively good and are reinforced by additional services on schooldays. However, the more remote settlements are served more sparsely, including by post or community buses with frequencies of as little as one per day Monday to Saturday.

Bus connections between the Strathspey and Deeside areas of the Park are weak. In Deeside itself connections between Ballater and Aberdeen are regular throughout the day, although the service extends to Braemar at a lower, but still significant, frequency. Services are maintained at a similar level on a Saturday, but are notably lower on a Sunday.

For most of the main settlements, bus services provide a viable basis for travel-to-work for the normal working day in Inverness (from Strathspey) and Aberdeen (from Deeside).

Courier Services

Table 4.5.2c: Courier Depot Locations, January 2005

Location	**TNT**	**Parcelforce**	**DHL**
Aberdeenshire	Aberdeen	Aberdeen	Aberdeen
Braemar	Aberdeen	Aberdeen	Aberdeen
Ballater	Aberdeen	Aberdeen	Aberdeen
Strathdon	Aberdeen	Aberdeen	Aberdeen
Moray			
Tomintoul	Aberdeen	Aberdeen	Aberdeen
Highland			
Dalwhinnie	Inverness	Inverness	Inverness
Newtonmore	Aberdeen	Inverness	Inverness
Kingussie	Inverness	Inverness	Inverness
Aviemore	Inverness	Inverness	Inverness
Carrbridge	Inverness	Inverness	Inverness
Grantown-on-Spey	Edinburgh	Edinburgh	Inverness
Nethy Bridge	Inverness	Inverness	Inverness
Angus			
Clova	Stirling/Edinburgh	Perth	Edinburgh

Courier services are an important element in the logistics of businesses, particularly those requiring rapid access to inputs or to clients. Analysis shows that for the main Park settlements courier depots are located at a significant distance, typically in Aberdeen or Inverness. The distance of the depots may impose time penalties on Park businesses in terms of pick-up and deliveries.

4.5.3 Telecommunications

Fixed Telephony

Landline telephone provision is nearly universal in the UK. The government no longer compiles statistics on households with access to a telephone.

Mobile Phone Coverage

Table 4.5.3a: Mobile Phone Coverage, Major Park Settlements and Networks, December 2004

Location	Orange	O2	T-Mobile	Vodafone	3
Aberdeenshire	OK	OK			
Braemar	OK	OK	No	OK	OK
Ballater	OK	OK	OK	OK	OK
Strathdon	OK	OK	No	OK	OK
Moray					
Tomintoul	OK	OK	No	OK	OK
Highland					
Dalwhinnie	OK	OK	No	OK	OK
Newtonmore	OK	OK	OK	OK	OK
Kingussie	OK	OK	OK	OK	OK
Aviemore	OK	OK	OK	OK	OK
Carrbridge	OK	OK	OK	OK	OK
Grantown-on-Spey	OK	OK	OK	OK	OK
Nethy Bridge					
Angus					
Clova	No	No/Low	No	No	No

Source: Orange, O2, T-Mobile, Vodafone, 3

Mobile phone coverage is reported to be good in the majority of the Park's major settlements, with the exception of the T-Mobile network which has more limited coverage. Clova has no, or next-to-no, coverage due to the surrounding mountains and its distance from transmitter masts.

Mobile phone coverage outside of the main settlements is much more variable, and reception in much of the Park will depend on the topography at the user's location and the extent to which the hills are blocking transmissions to the phone masts. From the maps provided by the main mobile network providers, it is evident that there are substantial areas of the Park with low or no mobile coverage.

Broadband

Currently access to broadband internet services via British Telecommunications' phone lines is limited within the Park. A number of major settlements have had their local exchanges upgraded to handle broadband traffic, but Braemar, Strathdon and Kingussie are reported to be awaiting upgrade.

Table 4.5.3b: Broadband Availability through British Telecommunications' Lines, Major Park Settlements, 2004

Location	Availability	Notes
Aberdeenshire		
Braemar	Due March 2005	Speeds up to 1Mb
Ballater	No	
Strathdon	Due April 2005	Speeds up to 1Mb
Moray		
Tomintoul	No	
Highland		
Dalwhinnie	No	
Newtonmore	Yes	Speeds up to 1Mb
Kingussie	No	
Aviemore	Yes	Speeds up to 1Mb

Carrbridge	Yes	Speeds up to 1Mb
Grantown-on-Spey	Yes	Speeds up to 1Mb
Nethy Bridge		
Angus		
Clova	No	

Source: British Telecommunications

Alternative connections to broadband services are possible, for instance through satellite transmission, but these are expensive.

4.5.4 Energy

Electricity
There is no nationally significant energy generation within the Park. The Park's population obtain their electricity from the National Grid, which in turn draws upon a variety of sources of power generation, ie nuclear, gas, coal, hydro-electric and wind turbines.

Scotland generated 12.8% of the UK's electricity in 2002, and the country is a net exporter of energy. In 2003 around 37% of Scotland's electricity came from nuclear power stations, 20.2% from gas, and 6.0% from hydro (2003 was considered a 'dry' year), with the remainder made up from coal and oil.

The Scottish Executive has set a target of 18% of electricity generation coming from renewable sources by 2010. To achieve this target a very significant number of land-based wind turbines will require installation and connection to the National Grid.

Gas
A postcode analysis of data obtained from Transco, the company responsible for operating the domestic gas supply network, indicates that most major settlements within the Park do not have access to mains gas, the exceptions being Tomintoul and Grantown-on-Spey. The absence of mains gas for many householders means that Park residents depend on electricity and/or use of bottled gas or oil (both of which must travel by road) for cooking and heating.

4.5.5 Waste Management and Disposal

Solid Waste Disposal
Responsibility for waste disposal lies with the four Local Authorities whose boundaries cover the Park. Waste disposal and recycling arrangements vary according to each Local Authority's management approach and facilities.

The Highland Council operates one landfill site within the Park, but for the other three authorities – Angus, Moray and Aberdeenshire – waste will be removed from the Park and disposed of in more distant landfills.

Highland
The Highland Council operates the Granish landfill site, just north of Aviemore, within the Park's boundaries. This landfill will take waste from both the Park and the surrounding area.

In 1999/2000, Granish disposed of some 6,900 tonnes of household and commercial waste, 1,044 tonnes of various wastes (bulky collections, street sweepings, fly-tipping and clinical waste), and 5,585 tonnes of other waste (including industrial and construction and demolition waste).

Aberdeenshire

Aberdeenshire Council operates three landfill sites, at Brandon Howe, Banff; Crow's Nest, Banchory; and Piddrichie, Drumlithie. None of these sites are within the Park boundary. The Council's waste strategy indicates that waste from the Park is likely to be transferred to the Crow's Nest site in Banchory.

Three private landfill sites are also operated within the Aberdeenshire Council area: Stoneyhill, Peterhead; Westerton, Potterton; and Tarbothill, Murcar. Again, none of these sites are within the Park boundary.

Angus
Angus Council operates two adjacent landfill sites at Forfar. These are outwith the Park.

Moray
Moray Council operates one landfill site at Nether Dallachy, Spey Bay.

4.5.6 Recycling Facilities

The availability of recycling facilities will depend upon each individual Local Authority's approach. For the most part, these facilities serve as collection points for easily recyclable waste, which is then transferred in bulk to be reprocessed.

Highland
The Highland Council operates the following recycling facilities:

Table 4.5.6a: Recycling Facilities operated by The Highland Council in the Park		
Town	**Location**	**Materials Accepted**
Aviemore	Dalfaber Industrial Estate	Cans, Cardboard, Glass, Textiles
Aviemore	Tesco Car Park	Cans, Glass, Steel Cans
Aviemore	Recycling Centre, Granish	Cans, Batteries, Garden Waste, Glass, Oil, Wood, Scrap Metal
Boat of Garten	Lorry Park	Glass
Carrbridge	Car Park	Glass
Dalwhinnie	Car Park	Glass
Dulnain Bridge	Picnic Area	Glass
Grantown-on-Spey	Burnfield Car Park	Cans, Glass, Textiles
Grantown-on-Spey	Recycling Centre	Cans, Garden Waste, Glass, Oil, Cans
Kingcraig	Village Hall	Glass, Paper
Kingussie	Market Stance	Cans, Batteries, Garden Waste, Glass, Oils, Paper, Textiles
Laggan		Glass
Nethybridge	Village Hall	Glass, Paper
Newtonmore	Glen Road Car Park	Glass
*Paper recycling is available at all schools in Badenoch and Strathspey		

Source:The Highland Council

Aberdeenshire
In the Aberdeenshire Council area of the Park, the following recycling points are operated:

- Ballater Recycling Point: glass, paper, cans, plastic bottles, textiles;
- Braemar Recyling Point: glass, paper, cans, plastic bottles, textiles.

Angus

Angus Council operates a kerbside waste recycling service for collection of glass bottles and containers, metal food and drinks' containers, newspapers, magazines and plastic containers.

Moray
Moray Council operates one recycling point within the Park at Tomintoul. This accepts glass.

Moray Council also operates a number of larger recycling centres, four of which (Buckie, Elgin, Forres and Keith) accept all types of material. All of these sites are a considerable distance from the Park.

The closest minor recycling centre to the Park is in Dufftown. This centre handles cans, car batteries, glass, paper and cardboard and textiles.

Key Points

- The road network in the Park is adequate for current levels of demand, although localised or periodic congestion may still occur. No significant upgrading projects are presently planned.
- Bus services are the main form of public transport, providing local access and facilitating travel-to-work outside the Park. Most main settlements are reasonably well-served, having regard to the rurality of the Park. However, more outlying areas and those off main routes are less frequently served, although a relatively small proportion of residents are likely to be so affected.
- Fixed telephone infrastructure is universal, and only minor gaps in mobile telephone coverage remain, although some areas shaded by topography are likely to exist.
- Broadband is currently or imminently available in six out of the 12 main settlements in the Park.
- There is no significant energy generation within the Park. Electricity distribution is essentially universal, but mains gas is only available in Grantown-on-Spey and Tomintoul.
- With the exception of the Highland Local Authority area, waste generated within the Park is transported to landfill and other disposal sites outside its boundary. Collection points for the main domestic recyclates have been established in the Park's main settlements, and active recycling schemes are being introduced.
- Consultation with planning authorities and Scottish Water suggest that drainage represents the main infrastructural constraint to development within the Park.

4.5.7 Information Gaps – Infrastructure

- Adequacy of road network.

4.6 Housing

4.6.1 Demographic Background

Based on current analysis of the housing system, it is evident that there are various housing challenges facing the Park in the future. A summary of population projections provided by the General Register Office for Scotland in December 2005 is outlined at 5.2.2 above. Overall projections show a growth in one person households and an ageing population.

One of the main components of growth is the potential increase in the elderly population forecast in the main Local Authority areas. Given the profile of the current population in the Park, it is anticipated that this could be a significant issue in the future for housing strategic planning. To illustrate the point, the growth in single pensioner households between 1991 and 2001 is estimated at 12%. If the growth of single pensioners in owner occupation is examined in isolation, it shows that the increase was 40% over the 10 year period.

4.6.2 Housing Stock and Tenure

Table 4.6.2a compares the structure of the housing stock by use at the Park and Scottish levels.

Table 4.6.2a: Household Spaces					
	Park	**Park %**	**Scotland**	**Scotland %**	**Park Deviation from Scotland (%)**
All Household Spaces	8,976		2,308,939		
Occupied household space	6,969	77.6	2,192,246	94.9	-17.3
Unoccupied household space	2,007	22.4	116,693	5.1	17.3
Of which:					
Vacant household space	356	4.0	29,299	1.3	2.7
Second residence/holiday accommodation	1,651	18.4	87,394	3.8	14.6

Source: 2001 Census, General Register Office for Scotland

There is a notably lower utilisation of household spaces in the Park, with more than a fifth of all household spaces unoccupied or vacant, compared with 5% at the Scottish level. The difference in balance between occupied and unoccupied household spaces is primarily attributable to the much higher level of second residences and holiday accommodation within the Park. The level of vacant household space in the Park is also significantly higher than the Scottish average.

Holiday accommodation and second homes let to non-family members will be an important component of the Park's tourism industry. The number of household spaces which are dedicated to holiday use and are therefore less suitable for domestic use, such as chalets or self-catering apartments, cannot be determined from the Census data.

The reasons for the higher level of vacancies cannot be determined from the Census data. Possible causes may be the condition or location of the properties or the preferences of the owner.

Table 4.6.2b analyses the structure of the housing stock in the Park and its occupancy and compares it with that for Scotland as a whole.

Table 4.6.2b: Households by Accommodation Type					
	Park	**Park %**	**Scotland**	**Scotland %**	**Park Deviation from Scotland (%)**
All People in households	15,481		4,976,005		
In an unshared dwelling	15,474	100.0	4,973,266	99.9	0.1
House or bungalow	14,369	92.8	3,539,053	71.1	21.7
Detached	8,439	54.5	1,183,729	23.8	30.7
Semi-detached	4,074	26.3	1,281,572	25.8	0.5
Terraced (including end-terrace)	1,856	12.0	1,073,752	21.6	-9.6
Flat, maisonette or apartment	1,042	6.7	1,426,026	28.7	-22.0
In a purpose-built block of flats	584	3.8	1,305,469	26.2	-22.4
Part of a converted or shared house	166	1.1	89,995	1.8	-0.7
In a commercial building	292	1.9	30,562	0.6	1.3

Caravan or other mobile or temporary structure	63	0.4	8,187	0.2	0.2
In a shared dwelling	7	0.0	2,739	0.1	-0.1

Source: 2001 Census, General Register Office for Scotland

A number of features are prominent:

- The housing stock in the Park consists of far more detached housing than is the case for the Scottish population as a whole;
- By comparison with Scotland only a very small proportion of the Park population lives in flats or apartments;
- While the total number of people living in a caravan or similar structure is small, it is still double the proportion for Scotland as a whole.

As a predominately rural area the Park has fewer of the pressures of urban areas to maximise the utilisation of space – which has led to the characteristically urban forms of tenements and, more recently, flats. Persons building or buying property in rural areas may also prefer detached housing.

Amenities and Quality of Stock
Table 4.6.2c examines the amenities within household spaces an in Park and in Scotland and provides some indication of the relative quality of the housing stock.

At both spatial levels the vast majority of household spaces appear to be well appointed. However, the housing stock in the Park appears to enjoy slightly fewer amenities than the average at the Scottish level. Slightly fewer household spaces have central heating or enjoy the sole use of a bath/shower and toilet, but the absolute numbers in the latter category are small. These small differences may reflect the age of the housing stock in the Park.

Table 4.6.2c: Amenities

	Park	Park %	Scotland	Scotland %	Park Deviation from Scotland (%)
All Occupied Household Spaces	6,969		2,192,246		
With central heating	6,372	91.4	2,034,824	92.8	-1.4
With sole use of bath/shower and toilet	6,356	91.2	2,031,440	92.7	-1.5
Without sole use of bath/shower and toilet	16	0.3	3,384	0.2	0.1
Without central heating	597	8.6	157,422	7.2	1.4
With sole use of bath/shower and toilet	585	8.4	155,663	7.1	1.3
Without sole use of bath/shower and toilet	12	0.2	1,759	0.08	0.12

Source: 2001 Census, General Register Office for Scotland

Table 4.6.2d compares the size of the housing stock in the Park with that in Scotland as a whole.

Table 4.6.2d: Number of Rooms

	Park	Park %	Scotland	Scotland %	Park Deviation from Scotland (%)

All Households	6,969		2,192,246		
1 room	36	0.5	21,952	1.0	-0.5
2 rooms	157	2.3	98,292	4.5	-2.2
3 rooms	708	10.1	317,358	14.5	-4.4
4 rooms	1,557	22.2	668,124	30.5	-8.3
5 rooms	1,768	25.4	556,109	25.4	0.0
6 rooms	1,110	16.0	249,303	11.4	4.6
7 rooms	630	9.0	125,729	5.7	3.3
8 or more rooms	1,003	14.5	155,379	7.1	7.4

Source: 2001 Census, General Register Office for Scotland

It may be seen that the housing stock within the Park is more generously proportioned than in Scotland as a whole. A much higher proportion of houses within the Park have more than six rooms. This skewing means that the availability of smaller houses is more constrained. In the Park just over a third of houses has four or fewer rooms compared with half at the Scottish level.

A related topic is examined in **Table 5.6.2e,** which explores the density of occupancy.

Table 4.6.2e: Number of Persons per Room

	All Households	Up to 0.5 persons per room	Over 0.5 and up to 1.0 persons per room	Over 1.0 and up to 1.5 persons per room	Over 1.5 persons per room
Park	6,920	5,210	1,619	74	17
Park %		75.3	23.4	1.1	0.2
Scotland	2,192,246	1,463,741	680,124	36,630	11,751
Scotland %		66.8	31.0	1.7	0.5

Source: 2001 Census, General Register Office for Scotland

To some degree reflecting the greater proportion of large houses in the Park, there is a larger number of households having two or more rooms per occupant. However, as with the rest of Scotland, the proportions of households with less than one room per person is very small. Together with the data on vacant and unoccupied spaces, there is no indication that at the aggregate level there is a shortage of accommodation in the Park, given its population.

Housing Tenure

Table 4.6.2f examines the housing tenure at the Park and Scottish levels.

The percentage of properties owned by their occupiers is much the same in both the Park and Scotland as a whole. It is notable that a significantly higher percentage of houses in the Park are owned outright. This may be due to the higher proportion of older people in the Park who have paid off mortgages or possibly the result of family members inheriting houses.

A slightly higher proportion of householders within the Park hold their property through shared ownership.

Social rented housing is less common within the Park. Although within this sector the Park has a higher proportion of Local Authority/Scottish Homes' properties than Scotland as a whole, the Other social rented sector – primarily housing associations – is less well represented.

Conversely, private rented housing in the Park is more common than in Scotland as a whole. The proportions of furnished private rented housing in the Park and Scotland overall are about the same, but there is a lower proportion of this type of housing being sourced through a private landlord in the Park and a greater dependence on accommodation made available through an employer.

Unfurnished private rented accommodation in the Park reflects much the same proportions as can be measured in Scotland as a whole. The most significant difference is in the proportion of households living rent-free.

Table 4.6.2f: Housing Tenure

	Park	Park %	Scotland	Scotland %	Park Deviation from Scotland (%)
All Households	6,969		2,192,246		
Owned	4,372	62.7	1,372,103	62.6	0.1
Owns outright	2,372	54.3	513,557	37.4	16.9
Owns with a mortgage or loan	1,925	44	846,090	61.7	-17.7
Shared ownership	75	1.7	12,456	0.9	0.8
Social rented					
Total social rented	1,139	16.3	595,143	27.1	-10.8
Rented Local Authority/Scottish Homes)	950	83.4	472,894	79.5	3.9
Other social rented	189	16.6	122,249	20.5	-3.9
Private rented furnished					
Total private rented furnished	296	4.2	79,187	3.6	0.6
Private landlord or letting agency – furnished	239	80.7	68,210	86.1	-5.4
Employer of a household member – furnished	23	7.8	1,035	1.3	6.5
Relative or friend of a household member – furnished	31	10.5	7,243	9.1	1.4
Other – furnished	3	1	2,699	3.4	-2.4
Private rented unfurnished					
Total private rented unfurnished	661	9.5	68,064	3.1	6.4
Private landlord or letting agency – unfurnished	541	81.8	55,391	81.4	0.4
Employer of a household member – unfurnished	42	6.4	3,698	5.4	1
Relative or friend of a household member –unfurnished	38	5.7	5,387	7.9	-2.2
Other – unfurnished	40	6.1	3,588	5.3	0.8
Other					
Living rent-free	501	7.2	77,749	3.5	3.7

Source: 2001 Census, General Register Office for Scotland

4.6.3 House Prices and Affordability

A key issue identified has been the affordability of housing in the Park. Affordability of rural housing is an issue in many parts of the UK, driven by a variety of factors, including on the demand side incomers and second home owners driving up property prices while low wage occupations mean rural residents find house prices too high, and on the supply side, a shortage of suitable housing, including flats and starter homes, along with restrictive planning controls that prevent the supply of housing expanding to meet demand.

The Scottish Executive's report on the Role of the Planning System in the Provision of Housing (2001) noted that constraints on the supply of land through the planning system has an impact on the housing market and on housing provision. This may be exacerbated in the case of the Park by the recognised thrust of Scottish housing policy towards new housing development being located in existing areas of concentrated development and on brownfield land.

Table 4.6.3a shows the distribution of housing transactions by value in the Park for the period August 2003 to December 2003, using data from the Land Register for Scotland, which details date of property transaction and property sale price by postcode area.

Table 4.6.3a: Housing Transactions, August 2003 to December 2003

	Up to £49,000	**£50,000 -99,999**	**£100,000 - 149,999**	**£150,000 -199,999**	**£200,000 -249,999**	**£250,000 - 499,999**	**£500,000 and Over**	**Total**
Number of Transactions	69	106	52	77	18	20	9	**351**
% of Transactions	19.7	30.2	14.8	21.9	5.1	5.7	2.6	**100.0**

Source: Land Register for Scotland

A total of 351 properties were sold in the period of analysis at an average price of £137,000. There was considerable movement in all segments of the market below £200,000. Almost exactly half of transactions were below £100,000 in value. While interesting in itself, it is not clear how representative this transaction data is of privately-owned stock and whether there is a low turnover in particular segments of the market. Furthermore, although there was a considerable number of transactions recorded at the more affordable end of the market, it is not possible to draw conclusions on the balance of supply and demand.

4.6.4 Housing Development

Planning Authorities
The four Local Authorities covering the Park, Highland, Aberdeenshire, Moray and Angus, were contacted and asked if they were aware of any particular constraints to development within the Park. None of the respondents produce a regular assessment of development opportunities or constraints.

In 2003 The Highland Council produced a land audit for the Badenoch and Strathspey area, which includes a substantial part of the Park's most populated areas. The document covers three areas: committed sites (those with planning consent); local plan allocations (those without planning consent); and local plan allocation phasing, which takes account of the various requirements for development.

Of the 51 sites identified, 20 were noted as requiring further work before development. In every case, the further work required was drainage. In one single case both roads and drainage were required.

Scottish Water
The Developer Service Team of Scottish Water were contacted and asked about the availability of data on development constraints relating to water supply and waste water. The respondents were able to confirm that a database detailing existing and potential water connections exists. This database is used to respond to development proposals on an ad hoc basis, informing the applicant of the availability of water supply and any issues surrounding the siting of the development.

The database is not used to generate regular reports on the water supply situation in a settlement or locality and could not therefore be used to inform the State of the Park Report.

Key Points

- The proportion of second homes and holiday accommodation within the Park is four times the Scottish average.
- There is a very considerable level of under-utilisation of the housing stock in the Park relative to the Scottish average. The level of vacancy is also greater.
- The level of amenities within the housing stock in the Park is marginally lower than the Scottish average.
- The housing stock in the Park is considerably skewed towards generously proportioned, detached housing, and there is relatively less smaller and flatted accommodation. This may have implications for the affordability of housing, particularly first homes, and may be compounded by the relatively small social housing sector.
- More detailed study is required to draw sound conclusions on the availability of affordable housing. There are some characteristics of the housing stock that suggest this could be a problem, but this is not obvious from data on the selling price of houses in the Park.

4.6.5 Information Gaps – Housing

- The number of household spaces dedicated to holiday use and therefore less suitable for domestic use, such as chalets or self-catering apartments;
- Reasons for high level of vacant household spaces;
- Availability of affordable housing.