

13 Appendix 1: Boundaries and statistical areas used in the analysis of the Cairngorms National Park

13.1 Boundaries

Several issues arise in considering the boundaries for a baseline assessment of the National Park.

- The original baseline assessment had to be carried out before the Park boundaries were set, and indeed may be seen as contributing to the original setting of those boundaries. It therefore necessarily covered a much larger area than the Park itself.
- There is the much smaller area which was originally designated as the Park.
- There was then the larger area, primarily adding Highland Perthshire, which is the new boundary of the National Park.

Alongside these changes on the ground, which are based on topographical, administrative and political (small p) reasons, there have also been statistical developments and changes.

The most important of these has been the availability of detailed information on a small area basis from Census 2001. Secondly, alongside this, economic and employment information, which is normally available to some extent at ward level, has been subject to changes in those wards as promulgated for political reasons by the Boundary Commission. Thirdly, using modelling techniques, it is possible to obtain much finer estimates for economic variables in quite small areas, bringing down to ward level some statistics which previously would not have been available even at a Scottish level.

Nevertheless, even with new data and advanced modelling techniques it is not possible to exactly provide economic statistics following the Park boundaries and so we have used 'best-fit' methods. This appendix shows the best-fit methods for:

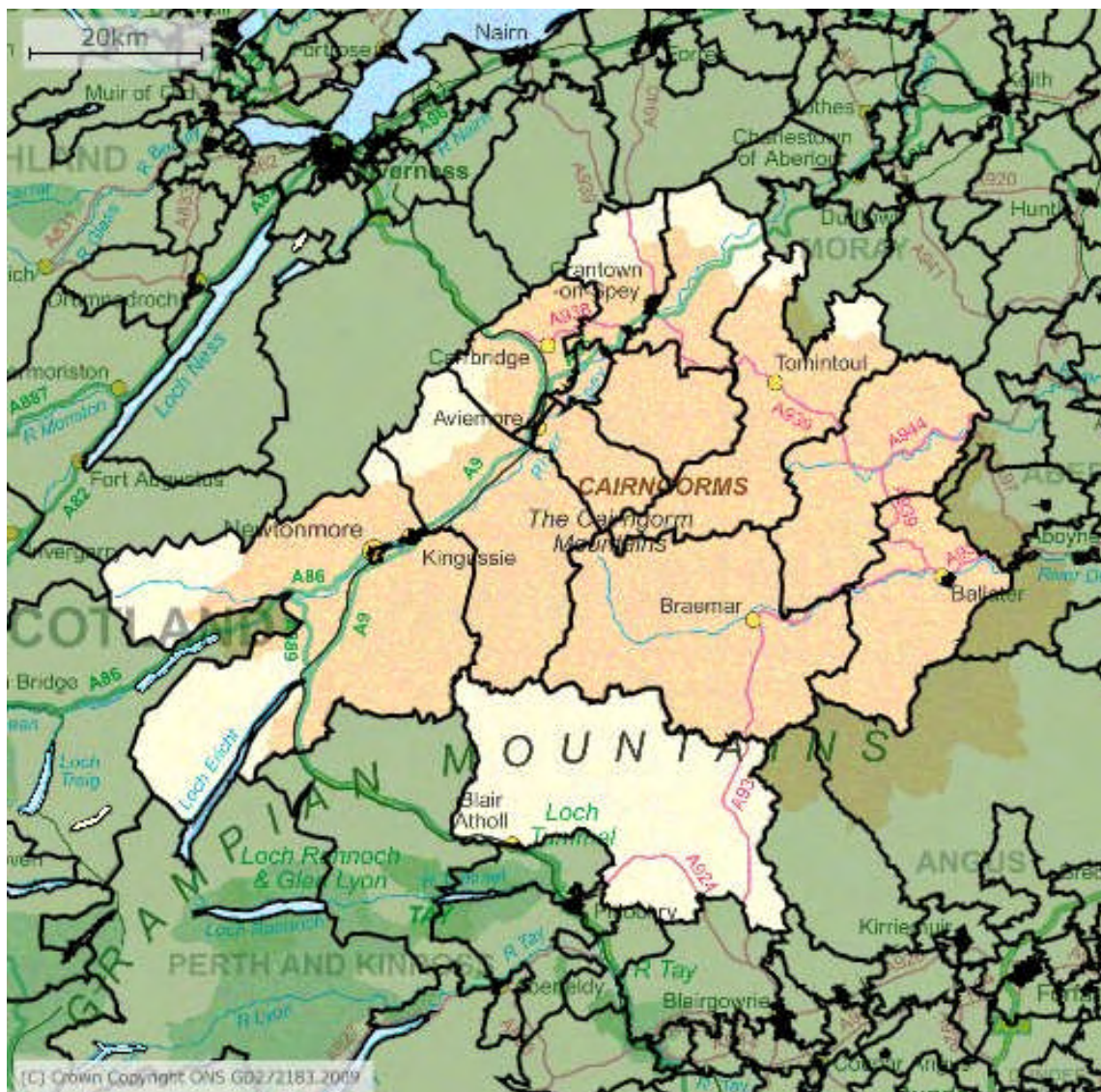
1. the demographic statistics;
2. the economic and employment statistics: and
3. the agricultural statistics

13.2 Demographics

When analysing the population and demographics of the Cairngorms National Park Scottish Data Zones a fine approximation can be used. Scottish Data Zones are based on groups of 2001 Census output areas and each Scottish Data Zone has a population of between 500 and 1,000. All demographic charts in this study have been based on the Scottish Data Zones shown below. A map of the resultant area is shown in Figure 101:

S01000301	S01000303	S01000312	S01000316	S01000360	S01004233
S01005147	S01003743	S01003747	S01003748	S01003749	S01003750
S01003751	S01003754	S01003755	S01003756	S01003759	S01003760
S01003764	S01003766	S01003767	S01003771	S01003772	

Figure 101 Data zone map

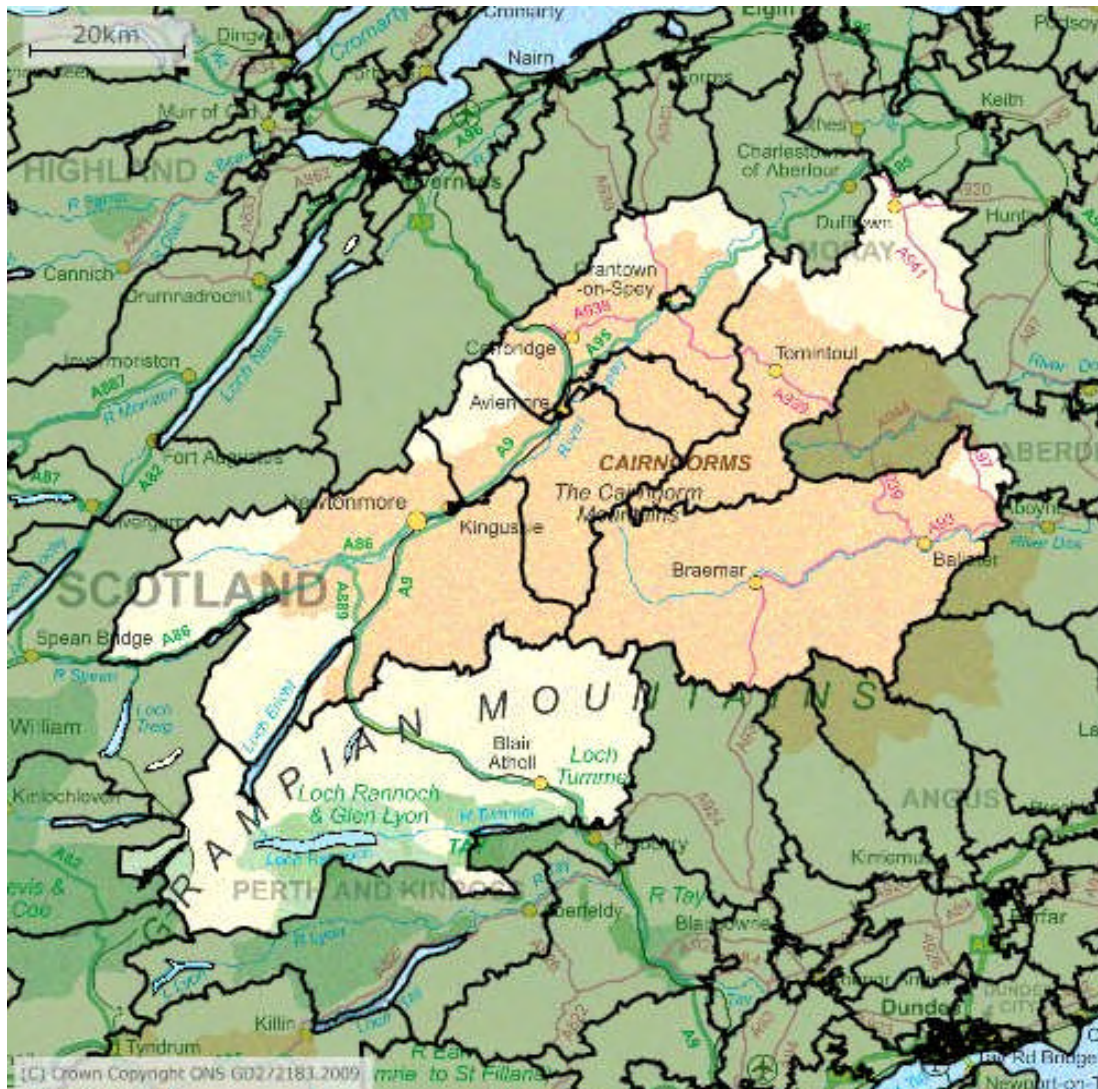


13.3 Economic data: employment and GVA

For economic data since 2003 the main boundary of the Cairngorms National Park has been formed using 2003 CAS Wards. 2003 CAS Wards are based on a best-fit approximation of 2001 electoral wards in terms of Census Areas, and are the second smallest area for which data can be obtained. The 2003 CAS Wards used for this study are shown below and a map of the respective area is shown in Figure 102.

- | | |
|--------------------------|------------------------------|
| 02C53: Upper Deeside | 18C71: Strathspey North East |
| 18C69: Badenoch East | 18C70: Strathspey South |
| 18C68: Badenoch West | 25C01: Rannoch and Atholl |
| 18C72: Granttown on Spey | 21C26: Glenlivet |

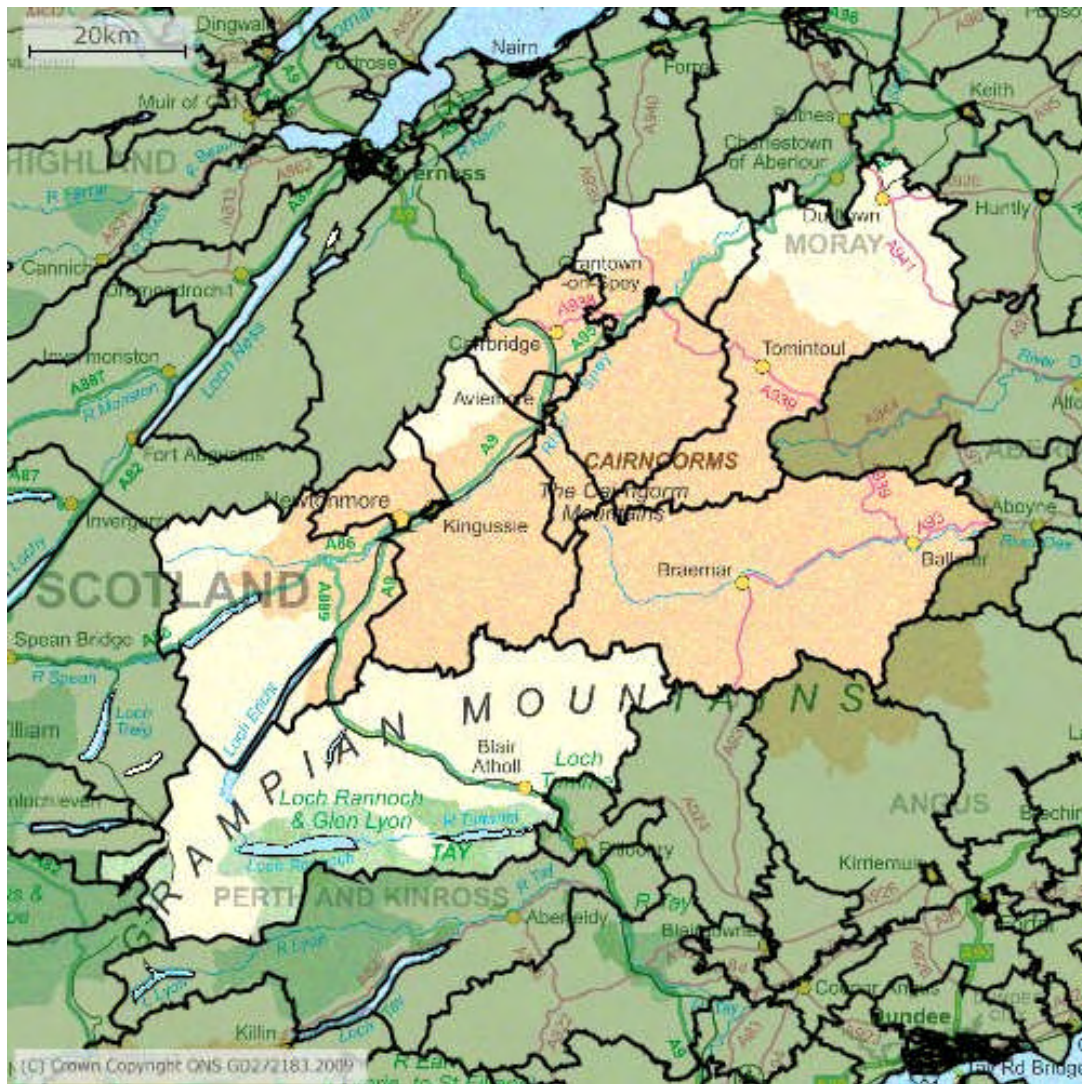
Figure 102 2003 CAS ward map



For data prior to 2003, 1991 Frozen Wards and 1981 Frozen Wards are used. These earlier wards do not directly correspond to 2003 CAS Wards but bear a close relationship. The 1991 Frozen Wards and the 1981 Frozen Wards used for this study are listed below and a map of the resultant area is shown in Figure 103.

73UD12 Rannoch and Atholl	71UB05 Badenoch and Strathspey No 5
72UF18 Glenlivet	71UB06 Badenoch and Strathspey No 6
72UE01 Upper Deeside	71UB07 Badenoch and Strathspey No 6a
71UB01 Badenoch and Strathspey No 1	71UB08 Badenoch and Strathspey No 7
71UB02 Badenoch and Strathspey No 2	71UB09 Badenoch and Strathspey No 8
71UB03 Badenoch and Strathspey No 3	71UB10 Badenoch and Strathspey No 9
71UB04 Badenoch and Strathspey No 4	71UB11 Badenoch and Strathspey No 10

Figure 103 1991 & 1981 frozen ward map



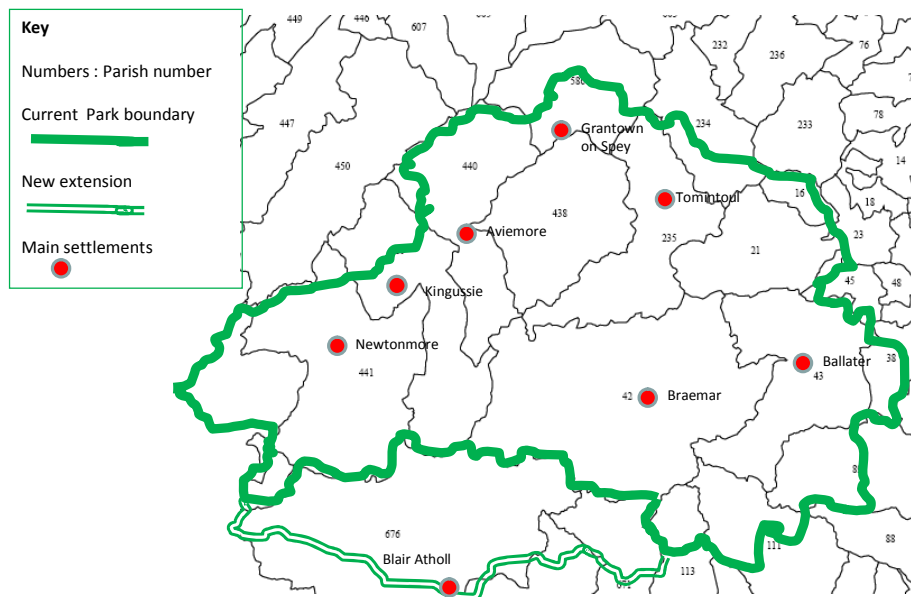
13.4 Agricultural data

Agricultural employment and land use data is published from the Agricultural Division of the Scottish Government, formerly SEERAD (Scottish Executive Environment and Rural Affairs Department). The information is taken from the Scottish Agricultural Census. The Scottish Agricultural Census uses different regional areas than other organisations and makes its measurements in SEERAD Agricultural Parishes.

For this study the SEERAD Agricultural Parishes used to approximate the Park are listed below. Figure 104 maps these areas.

440 Duthil	113 Glenisla	111 Cortachy & Clova
586 Cromdale	42 Crathine & Braemar	676 Blair Atholl
16 Glenbuchat	439 Alvie	671 Kirkmichael
21 Strathdon	441 Kingussie	38 Aboyne & Glen Tanar
43 Glenmuick Tullich & Glengairn	438 Abernethy	234 Inveravon
	235 Kirkmichael	89 Lochlee

Figure 104 Map of agricultural parishes in the Cairngorms area



13.5 The Park 'halo'

The influence of the Park does not stop at the Park's boundaries. In a number of places in the report it has been helpful to include information on a wider area. This has been done on an ad hoc basis. Bearing in mind that the enterprise networks have a particular interest in their

respective parts of the halo, additional information will be included in the Economic Atlas and Audit for the Inner Moray Firth area of Highlands and Islands Enterprise, and in a special appendix for Scottish Enterprise.

14 Appendix 2: Comparison with the earlier baseline study

An original intention of this study had been to compare the current state of the Park with that set out in the report *Economic Baseline for the Cairngorms National Park and surrounding area*, commissioned by the two Enterprise networks from SQW, Segal Quince Wicksteed in April 2003. Since the 2002 study was carried out before the boundary of the Park was finally confirmed, it was recognised that it would be necessary to adjust the data to take account of this. It is also necessary to take account of the planned extension to the Park boundary to the south. This exercise has been formally carried out, but is of very limited value for a number of reasons.

The first is that most of the original study was based on an area defined by postcodes, so that the boundaries were not just wider, but very much wider than the actual Park. They covered more than three times the actual population of the designated area and almost twice the employment. When an official population estimate was made for the area actually designated, then SQW did produce an addendum, but the adjustments made were rather over-simplified. For most items the figures in the addendum were prepared simply by taking 32.7 per cent of the figure in the original report. They did not, therefore, take account of the fact that the Park differs significantly from the surrounding areas – for example SQW’s revised employment estimates were far lower than the actual Park employment.

This issue became even more extreme for some variables in the body of the report because SQW were not able to source local data and so took data for the contributing council areas as typical of the Park. Since in most cases the Park represents the most mountainous and most sparsely populated parts of the relevant Council areas, and contains no coastline, this again generated figures that do not represent the Park. (In the case of Highland, where the Park may be more typical of ‘average’ landscape, the Council area figures are of course affected by the inclusion of Inverness).

As set out in Appendix 1, in many places in this report we have been able to make a much better approximation of the actual Park boundaries, using an area defined by statistical datazones, which much more closely approximates the actual designated boundaries. Where that has not been possible we have used local authority ward boundaries, and although these are not as good as datazones they are far better than the postcode areas used by SQW.

Figure 105 Key indicators from SQW report

	SQW Original	SQW Addendum	2003 actual/ best estimate	2007 actual/ best estimate
Population	51 882	16 973	15 774	16 558
Employment (male)	7 034	2 301	3 553	4 101
Employment (female)	8 102	2 651	4 404	4 430
Total employment (see notes)	15 134	4 951	7 957	8 532
% of population under 25	28%	28%	25%	25%
Number of businesses sic (see notes)	2 075	810	1 120	1 191
Total claimants unemployed for over six months	609	199	46	39
FTE employment (see notes)	10 671	3 631	4 594	5 414
Average turnover	£363	£413	574	597
Total output £mn (see notes)	750	335	643	711
Value added £m (see notes)	362	161	293	316

Notes: What in the SQW report is designated 'employment' appears to refer to non-farm employees. The corresponding figures for 2003 and 2007 are shown. In addition there were 409 people who were employees on farms in 2003, and about 1,300 self-employed people (in all industries).

The meaning and source of the SQW count of 'businesses' is unclear. The 2003 and 2007 figures shown are for statistical data units, which are essentially workplaces. Several workplaces may be part of the same business, and many are not businesses at all.

The figure in the final column for GVA and Gross Output refers to 2006, and the average figures for turnover shown are calculated by dividing the figures shown in the table.

It can be seen that none of the SQW figures, except for their revised population estimate which was taken from the Scottish Government after designation, are at all close to the actual or best estimate figures at the time of designation. In every case the discrepancy in the SQW figures far exceeds any plausible trend or change since designation. Even in the case of the population figure, the trend it would suggest from 2003 to 2007 is in the opposite direction to the trends shown over this period by Scottish Government figures prepared on a consistent boundary basis.

Historical perspective has therefore been provided, in most cases, by tracking the statistical data for the Park back through the date of designation, so that our data includes the data that SQW would have reported, if they had used datazones and wards or had made more finely tuned assumptions.

Conclusions

There is no significant benefit from attempting to compare current best estimates of the Park economy with the statistical data presented in the SQW report.

The absence of regular monitoring has meant that the discrepancy between the SQW report and the actual Park figures had gone largely unremarked, and this may have led to a number of misconceptions about the Park.

If it is desired to monitor the future economic development of the Park, it is of the greatest importance to set up a continuous monitoring system with regular reporting.

15 Appendix 3: 'STEAM' tourism data

Global Tourism Solutions (UK) Ltd makes a regular estimate of Park tourism businesses using their STEAM model. This uses accommodation counts and structural details of the local tourism economy, coupled with occupancy surveys, to generate estimates of tourism revenue and employment.

The employment figures reported in STEAM are plainly much higher than they should be. For example, STEAM reported 3109 full time equivalent direct jobs directly supported by the accommodation and food and drink purchases of tourists in 2007, but in 2007 there were only 1660 full time equivalent jobs in the entire hotel, restaurant and catering sector. The STEAM report specifically states that it covers only visitor spending, but some at least of those FTE jobs would have been engaged in non-tourist roles, such as serving local residents in the hotels, restaurants, and take-aways, or providing services to businesses. Similarly, STEAM says that 618 FTE transport jobs were supported directly by tourism spending, when there are only 130 FTE transport jobs in the whole of the Park, and a fifth of those are concerned with road freight. (There are also 140 jobs in the motor trade, more than half of which are likely to be serving tourists and which STEAM may count as 'transport'. Nevertheless the STEAM estimate must be three times the actual figure or more).

The STEAM report also suggests that 11.4 per cent of visitor spending is covered by VAT. It makes no mention of excise duties on drink and motor fuel, both of which products are normally significant elements of tourism outlays. Taking these into account, our detailed studies of tourism impacts in the Highlands and Perth and Kinross^[1] suggest about 20 per cent more should have been deducted to allow for indirect taxes.

On the other hand STEAM includes only 280 FTE jobs in recreation, which is the category that covers not only the winter sports, country sports and adventure activities, but also more passive services and attractions such as museums and visitor centres. There has been substantial investment in these attractions and amenities, from both the public and the private sector, including the ski and biking facilities and the funicular railway. As a result there are actually some 590 FTE recreational services jobs in the Park, apart from those employees included in farms, the estates or retailing (such as bike and ski hire from shops) or employed in local government and agencies. The recreational services industry alone is about 2.4 times as big in the Park as in an average community, and in an average community some of it would be serving tourists, so we think it is likely that at least 60 per cent of the recreational services jobs are tourism-related. There has also been significant public investment in the infrastructure to serve them, such as the ski roads. To underestimate the employment supported by attractions is a serious matter, but the fact is that the figure must be at least half as big again as the STEAM estimate.

Another cause for concern is the very high number of bedspaces reported in STEAM, a total of 13,900, of which 11,200 are in Badenoch and Strathspey. In the previous project mentioned above we identified 3,400 bedspaces in Badenoch and Strathspey, based on addresses and data supplied by VisitScotland from its databases. While it is appreciated that VisitScotland coverage is not complete, we believe that with the presence of significant national chains which are all covered by VisitScotland, it is likely to be rather more than the level of one third suggested by the STEAM figures. While VisitScotland would be amongst the first to acknowledge that its figures are an underestimate of the accommodation available, the STEAM figures appear far too high.

Some of the expenditure figures reported in STEAM, on the other hand, seem low. £15m is said to be spent by visitors on shopping, which is less than a tenth of the retail turnover in the Park. In value added terms the Park's retail sector is 20 per cent or more bigger than normal for a community of this size, and some of the higher-margin businesses such as clothing, sports equipment and fancy goods are more than twice as big. We would therefore expect the benefits that shops draw from tourists to be at least double the figure in the STEAM report.

It would require a special study to make a proper estimate of the tourism economy in the Park. On total tourism spend there is limited other data to compare with, but STEAM estimates about £100m direct spending by tourists in Badenoch and Strathspey in 2008. Our 2005 estimate for the district, prepared for the Scottish Government and Forestry Commission in conjunction with updating the UN-standard tourism satellite accounts, is £150m.

Crucially, STEAM reports tourism spend in 2008 of £186m generating 5,261 FTE jobs, or £35,300 per job. There were only 7,200 FTE jobs in the Park, in all industries and services and in the public sector. While recognising that the tourism industries are important, it is absurd to suggest that they cover such a great majority of jobs in the Park. The average turnover for businesses in the Park in 2008, including gross retail sales, was £120,000 per full time employee. Thus even though we believe that due to 'swings and roundabouts' effects the total STEAM tourism spend figures are not too far out, the STEAM model is exaggerating the benefit to the local economy by a factor of more than three. Furthermore, the 'swings and roundabouts' issue is an important one which cannot be set aside, because the disposition of tourism spending dictates what sort of investments will yield a return, and which ones will not.

Another potential issue arises from the multipliers used to estimate the indirect and induced effects. Based on our own studies of tourism in Scotland we would not demur too strongly from the actual values used, but we note from the documentation that the figures used in STEAM are taken from the so-called 'Surrey' study of Scottish tourism multipliers. Professor Gibson, our principal investigator, commissioned and managed this study on behalf of the Scottish Development Agency and the Scottish Office in 1991, when it was based on original data collection and the latest official statistics available then, which covered 1979. Although that work was, for the time, ground-breaking, the structure of the Scottish economy has changed substantially in the past 30 years, and it would not be difficult for STEAM to use much more recent data.

However, although we must dismiss the level of tourism employment suggested for the Park by STEAM, the GTS model methodology is consistent from year to year, and therefore it was suggested that the trends shown in the STEAM reports may be a guide to tourism developments. However, in the case of the Cairngorms, STEAM points to a decline in visitor numbers from before designation to the present, and an even steeper decline in real revenues, shown in Figure 51 above. However all other indicators, including employment in the hospitality industries, estimates of real GVA from DREAM®, visits to Park attractions, and traffic on the A9 all point to a real increase in tourism over these years, as does the subjective experience of the DMO.

16 Appendix 4: the DREAM® models

This report has made extensive use of the DREAM® models to expand the limited data which is available for small areas. DREAM® stands for Detailed Regional Economic Accounting Models, and it is a system designed to bring to localities some of the analysis that is normally only done at national level. Three models have been used.

16.1 DREAM®

The DREAM® *Detailed Regional Economic Accounting Model* owes some of its authority to the fact that it is fully reconciled with the United Kingdom national accounts, and reconciled as much as possible with all other sources of local and industrial economic data. In practical terms this means that it is constrained to fit the UK regional accounts industrial totals for the NUTS3 territories which are contained in the Cairngorms National Park, namely:

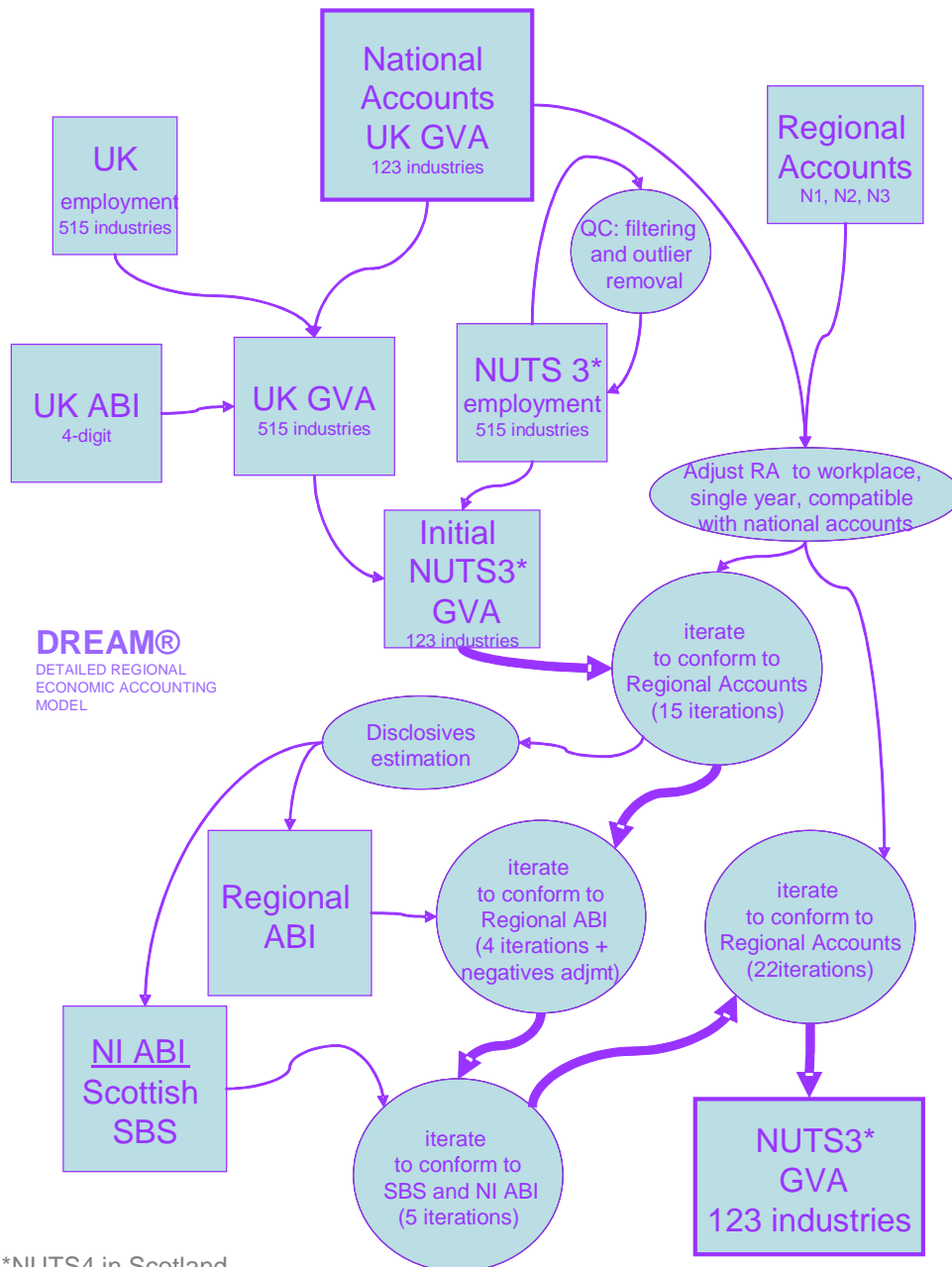
- UKM11 Aberdeen City, Aberdeenshire and North East Moray
- UKM21 Angus and Dundee City
- UKM27 Perth and Kinross and Stirling
- UKM42 Inverness and Nairn and Moray, Badenoch and Strathspey

It is also constrained, as far as is possible, to Scottish Business Statistics for Council Areas, which are based on the Annual Business Inquiry. The constraining process for GVA is iterative as shown in Figure 106. The main data sources relied on in the GVA estimation for DREAM®, not all of which are shown in the diagram, are:

- Census of Employment – Northern Ireland
- Census of Population and Annual Population Survey
- Commissioned workplace tabulations from UK Regional Accounts
- International Passenger Survey
- Midyear population estimates (based on birth and death registrations and the NHS Central Register)
- Northern Ireland ABI (not the same as GB ABI)
- Registers of Scotland (Sasines) and Land Registry House Price data
- Scottish Agricultural Statistics
- Scottish Annual Business Statistics
- UK Annual Business Inquiry – Financial
- UK Annual Business Inquiry – workplace and employment
- UK Farm Accounts
- UK National Accounts – Blue Book, various tables
- UK Regional Accounts at NUTS 1, NUTS 2 and NUTS 3 levels
- UK Supply and Use Tables
- UK Tourism Survey

Below the level of NUTS3 the principal basis for dividing up GVA is employment at ward level.

Figure 106 Estimation schema for NUTS3 / NUTS4 GVA



*NUTS4 in Scotland

A similar procedure was used to estimate earnings, with data from the Annual Survey of Hours and Earnings playing a similar role in that to the Annual Business Inquiry above. Again, it is reconciled so that employee compensation across the UK is consistent with the National and Regional Accounts.

16.2 DREAM® people – demographic analysis and projections

Whereas the overall DREAM® model focuses on adding geographic, industrial and economic detail to historic data, and updating it to the present, DREAM® people is used to present and

analyse demographic data which in its crude form is readily available, but can be hard to make sense of. It then builds on this analysis to project forward into the future.

Making a demographic projection involves making assumptions about how people will behave and how they will make major life-forming decisions. DREAM®people does this in a similar way to official demographic models: in some places it is simpler, and in other cases it is more subtle: most importantly it can be controlled by the user.

Scope	All people, ages 0-99 plus '100 and over'. DREAM®people projects ahead one-year at a time from the latest available mid-year population estimate (2007) and continues into the future without time limit.
Geography and time	DREAM®people for the enlarged Park is based on 23 statistical datazones. The recent official projection (GROS 2008) started in 2006 and had only 22 datazones, to correspond to the existing Park boundaries.
Births	Birth rates reflect regional differentials and national trends in fertility, applied to the local population of child-bearing age.
Deaths	Deaths reflect national trends in mortality rates through age 99, adjusted by the age-specific mortality ratio for the Cairngorms.
Migration total	Migration is estimated as the sum of five identified flows as indicated below. In all cases we have used the rates from 2002 to 2007 as the main influence on our future assumptions, but we note below what we would expect to be the main causal factors behind these rates.
Migration by age	<ol style="list-style-type: none"> 1. Bellwether migration of early career 21 to 33 olds. Our judgement is that such rates are normally based primarily on the labour market including wage levels. An influx from new EU states has been important. 2. Prime working migration of 34 to 49 year olds. The rates at which young families move is normally considered to be based on labour markets and housing. 3. 50 to 67 'end career' migration. This takes place at rates based mainly on housing markets especially equity release. 4. 0 to 15 year old child migration is based on prime migration (category 2, and local family size (which may depend on the housing stock). 5. Student age migration takes place at rates based on the age participation index for higher education, and to some extent employment. The pattern of movements across the country depends directly on the provision of higher education facilities.
Household formation	The expected number of households is based on the age and gender mix of the population. National rates, and officially-expected trends in those rates, are applied. The results are then adjusted to take account of differences between the Cairngorms and national averages over the past five years.

16.3 DREAM[®]job – method for commuting estimates

DREAM[®]job is a comprehensive system for examining work and worklessness in an area, and the relationships of that area with the residents and workplaces in surrounding areas. It measures and projects jobs and skills gaps and labour supply and demand.

The part of the DREAM[®]job model that has been used in this audit is the commuting estimates. These add finer geographic detail to commuting data which can readily be obtained from the Census 2001 for Council areas, and update it to take account of shifts in residence and employment.

Although in principle small-area to small-area commuting data is available from the Census, it would be prohibitively expensive and time consuming to use this data 'from the bottom up'. Instead the DREAM[®]job system constructs a gravity model of all commuting flows between Scottish local authorities. The parameters from this model link the number of jobs at the destination workplace and the number of employed residents at the origin to the distance between them. Those local authorities consisting of more than one NUTS4 area are then subdivided and the distance parameter used to estimate individual commuting flows.

Having used this method to expand from 32 x 32 council areas to 40 x 40 NUTS4 areas, we update the working age population and the number of jobs in each area, and produce an estimated updated commuting flow, after taking account of unemployment and changes in workforce participation. The technique applied is the RAS matrix adjustment technique familiar to input output modellers and social accountants.

17 Appendix 5: cycle of information availability

The following table shows the publication cycles for the main official statistical sources drawn upon in this economic audit. Few of these statistics are available to Park level, and Park estimates have been made for this report using the DREAM® Detailed Regional Economic Accounting Model. The table is therefore followed by some paragraphs to explain the DREAM® updating cycle.

Table 21 Publication cycle for official statistics

Data	Published by	Normal publication schedule	Park level official data?	NOMIS/ SCOTSTAT?	DREAM® update?
Agricultural Employment, holdings and activities	Scottish Agricultural Census - June	October year t	Parishes on application		
Claimant unemployment	ONS JSA Claimant Count via Nomis	Third Wednesday of following month	Wards		Monthly, DREAM® monitor, seasonally adjusted
Commuting/ Distance to Work	Census of Population	Census year + 2			Annual estimate, year t+1
Economic Activity (employment) Rates/ Economic Inactivity Rates, including self employment	Annual Population Survey	Quarterly seven months after quarter end	Council areas, sample errors significant	N	To Park level (based on wards)
Education Attainment	Annual Population Survey	Quarterly seven months after quarter end	Council areas, sample errors significant	N	
Employees/ Business Units	Annual Business Inquiry (ABI)	December year t+1	Wards	N, to Licence Holders	January To Park level (based on wards)
Employment by Occupation	Quarterly seven months after quarter end	Quarterly seven months after quarter end	Council areas, sample errors significant		By industry sector and Council area, nine months after quarter end.

Data	Published by	Normal publication schedule	Park level official data?	NOMIS/ SCOTSTAT?	DREAM® update?
Further Education Awards(Academic year t-1:t)	Scottish Funding Council	January year t+1			
GVA	ONS Regional Accounts	December, year t+1	Council area only, 6 industries		To Park level September, year t+1, 123 industries
GVA (ABI estimates)	Scottish Annual Business Statistics (NOT consistent with National/ Regional Accounts)	August, Year t+3	Council areas only	S	Park level, by industry
GVA (Volume Index)	Scottish Government	Four months after quarter end	Scotland	S	DREAM® monitor Monthly, to Park level, , two months after month end
Hours and Earnings	Annual Survey of Hours and Earnings (ASHE), April	November year t	Council areas, sample errors significant	N	To Park level (based on wards and industries)
House prices	Registers of Scotland	Week 1 of following month	Yes, on subscription		Monthly, DREAM® monitor, seasonally adjusted
House sales	Registers of Scotland	Week 1 of following month	Yes, on subscription		Monthly, DREAM® monitor, seasonally adjusted
Household income	ONS Regional Accounts	October, year t+1	Council areas only		Park level, January t+2

Data	Published by	Normal publication schedule	Park level official data?	NOMIS/ SCOTSTAT?	DREAM® update?
ILO Unemployment	Annual Population Survey	Quarterly seven months after quarter end	Council areas, sample errors significant	N	To Park level (based on wards) To Park level (based on wards)
Jobs Density	ONS via Nomis	April, year t+2	Council areas		
Mid year Population Estimates Scotland – council areas	GROS (General Register Office for Scotland)	April, year t+1	Approx 10 months later	S	May, year t+1
Mid-2008 Population Estimates for Settlements and Localities in Scotland	GROS (General Register Office for Scotland)	March, year t+2		S	May, year t+1
Mid-year-based Population Projections	GROS (General Register Office for Scotland)	February, base year +2	Council areas. Park ca 6 months later	S	May, year t+1
Mortality	GROS (General Register Office for Scotland)	September year t+1	Council area. Datazones later	S	
National Insurance Registrations	Department of Work and Pensions	Quarterly five months after quarter-end	Council areas only	N	
New Business Start Ups	Committee of Scottish Clearing Banks	Three months after quarter-end	Council areas		Not in DREAM
Notified Vacancies	Jobcentre Plus via Nomis	Third Wednesday of following month			Monthly, DREAM® monitor, seasonally adjusted
Profits & investment	ONS National Accounts	August, year t+1	UK level only, by industry		Park level, by industry

Data	Published by	Normal publication schedule	Park level official data?	NOMIS/ SCOTSTAT?	DREAM® update?
School Leaver Destinations	Scottish Government: Destination of Leavers from Scottish Schools (Academic year t-1:t)	November/ December year t			
Secondary School Examination Results	SQA Examination results in Scottish Schools (Academic year t-1:t)	November year t	By school		
VAT Registered Businesses	Dept for Business, Innovation and Skills- VAT registrations/ deregistrations by industry	December , year t+1	Council areas	N	January
Volume and Value of Landings	SEGRAD/ DEFRA Sea Fisheries Statistics	September year t+1	Ports		

The updating schedule for the cogentsi DREAM® models available to Park level consists of Monthly updates in the DREAM® monitor system: unemployment (seasonally adjusted), housing transactions (price and volume, seasonally adjusted) GVA index.

DREAM® model portfolio updates scheduled for January, May and September. These updates are contingent on official statistics being published to schedule, particularly the Annual Business Inquiry (Parts 1 and 2), the National Accounts (including the Supply and Use Tables), and the Regional Accounts. Delays in the publication of official data can make it sensible to defer a DREAM® update, and this is at cogentsi's discretion.