BRECON BEACONS NATIONAL PARK

STEAM REPORT 2009

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NATIONAL PARK

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CHARTS

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OVERVIEW OF STEAM

</div>

1.   INTRODUCTION

The Scarborough Tourism Economic Activity Monitor is derived from a model developed by David James and Frank Hart in the process of developing a ten-year tourism policy for the province of Saskatchewan, Canada, in 1981. In 1985, following the establishment of Canada's National Task Force on Tourism Data, Messrs. Hart and James were appointed co-Chairmen of the Working Party to consider Local Area Statistics. This work focused on the city of Edmonton, Alberta, Canada, and became the first attempt to develop the effective use of supply-side generated local area tourism statistics drawing on the model developed in Saskatchewan in 1981. Encouraged by the successful experiment in Edmonton, the outputs of which were accepted by Edmonton City Council and its Convention and Tourism Authority, a part experiment focused on the City of Toronto's convention business followed. This experiment provided much needed data for the Toronto Convention Bureau.

In 1988, David James was appointed Director of Tourism and Amenities for Scarborough Borough Council and it was in that context that the Local Area Tourism Statistics model was transferred to the UK. The model was first run on behalf of Scarborough Borough Council in 1990. In 1991, the North Yorkshire County Council, together with the District Councils in the County, embarked on a pilot programme to evaluate the now-named "Scarborough/Scottish Tourism Economic Activity Monitor" (STEAM). At the same time, STEAM was adopted by a number of Local Authorities in England, Scotland and Wales.

2.   VALIDATION OF STEAM

The STEAM process has been validated within the context of a number of public and private initiatives which have taken place since 1987 in respect of tourism statistics.

In 1987, a Tourism Statistics Advisory Group (TSAG) was established by the Employment Department to establish a forum to create strategic oversight of statistics relevant to tourism and leisure. Very early in its work it identified the need to review present and future needs for national tourism statistics, and in order to do this needed to establish commercial user needs.

In 1990, The Tourism Society, with the support and involvement of the Employment Department, by means of a small working group, established a forum to be held on 18 April 1991, which assembled over seventy senior managers. The forum, chaired by Liam Strong, Director of Marketing and Operations at British Airways, and in the presence of Viscount Ullswater, then Minister for Tourism, unanimously established the Joint Industry Committee for Tourism Statistics (JICTOURS). The press release issued that day stated:

> *"The agreement reached at this meeting represents the best opportunity the commercial sector has had to improve UK tourism statistics for over a decade. JICTOURS will develop a costed package of development proposals for tourism statistics to be agreed, implemented and funded in partnership between Government (Employment Department), Commercial Users in the industry and Tourist Boards."*

JICTOURS established sub-groups to consider the sector needs for Tourism Statistics, one sector being "Local Authorities". Its paper defined the sector, its needs, use of existing data, key terms/categories to be measured, willingness to pool data and model criteria. This last element stated the following:

"It is understood that, at least in the foreseeable future, national surveys will never be conducted on a scale (size of samples) which will make it possible to disaggregate data at District level. Accepting that as a fact of life, Districts wish to see the development of approved statistical models for <u>estimating volume</u>, value and expenditure and basic tourism characteristics. Such models, to be endorsed as suitable for tourist board and government purposes, would have to be relevant to the different types of authority noted in Section 1.
They would draw on available survey data, be used to produce estimates according to agreed statistical criteria and be adjusted to meet local circumstances.

Because such models could be capable of application in different authorities around Britain it is recommended that their construction should be part of the JICTOURS recommendations."

Following meetings between Professor Victor Middleton, Chairman of JICTOURS, Brian Batty, Employment Department, and David James, it was agreed that a JICTOURS Local Statistics Tourism Group (LSTG) should be formed made up of representatives from the National Tourist Boards, Regional Tourist Boards, the Association of District Councils, the British Resorts Association, various Local Authorities and, initially, the Employment Department, subsequently, the Department of National Heritage. JICTOURS – LSTG commissioned an independent study of STEAM, which was carried out by Professor Stephen Wanhill of the University of Wales. The main objectives were:

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1. *To conduct a critical analysis of the working process of the model highlighting both its strengths and weaknesses.*

2. *To comment on the quality of information (accommodation occupancy, stock levels, tariff rates, necessary for the model to be run on a reliable and consistent basis).*

3. *To comment on the sensitivity analysis completed and to make suggestions for any further work on sensitivity analysis required.*

4. *To comment on the methodology for estimating indirect expenditure and in particular the estimates produced by the model on tourism employment.*

5. *To comment on the computer programmes used to generate the estimate produced by STEAM.*

6. *To comment on the "adjustment processes" which take place with the tourism experts in the area once the provisional results are produced by the model.*

7. *To make any other comments the researchers consider necessary. For example, definitions, future improvements and the need for additional national, regional and local benchmarks to further improve the output of the model.*

As much of the model, its formulae and its processes are commercially confidential, and are required to remain so, it was necessary that Professor Wanhill was given full access to the model, its workings and all background material. At the JICTOURS – LSTG meeting, 23 December 1993, his findings were presented in full, but where it involved the formulae of the model it was on the basis of strict confidentiality to the members of JICTOURS – LSTG. Subsequently the Department of National Heritage and the National Tourist Boards of England, Scotland and Wales each received the full text of his report. In brief, Professor Wanhill's report can be summarised best by himself:

"The report's overall conclusion is that STEAM is mathematically acceptable as a model of tourism flows, but never can be, and does not pretend to be, a statistically robust measurement of tourism in the manner of randomly drawn sample surveys of visitors. The thorough study is supportive of the model but also makes a number of recommendations to improve STEAM."

At its next meeting, 23rd February 1994, following confirmation that the recommendations to improve STEAM had been adopted, it was agreed *"no further testing needed to be initiated for the group's purposes. David James sought and obtained the group's endorsement of the STEAM model."*

During 1995, Professor Victor Middleton prepared a report for the British Resorts Association, "Measuring the Local Impact of Tourism". The STEAM model and methodology was made available to the author. The report reviewed a variety of modelling approaches, their strengths and weaknesses, and, for STEAM, stated,

"It seems probable that supply side (bottom up) models, of which this is the leading example in the UK, will be needed to fulfil the management requirements of local authorities who have decided to play a significant role in managing tourism locally."

Concurrently, in Denmark, an evaluation process was conducted on behalf of the Danish Ministry of Business and Industry by the Danish Tourist Board. STEAM is handled in Denmark, on behalf of GTS (UK) Ltd, by the Bornholm Research Centre.

In 1996, the Department for Culture, Media and Sport, in conjunction with the National Tourist Boards and the University of North London, set out to review the existing situation concerning local area statistics with a view to publishing guidance for Local Authorities. This evolved and was concluded by the DCMS publishing a set of Guidance Notes on Local Area Statistics which was published in 1998.

The development of STEAM in England since 1993 has been a period of steady sustained growth with, presently, nearly 200 clients, including East Midlands Tourism, the Northwest Regional Development Agency, One NorthEast, most National Parks, and numerous Local Authorities. These Local Authorities are of all sizes ranging from Rutland to Birmingham, and all types, whether urban, rural, resort or industrial.

In Scotland, during the three year period ending 1997, Scottish Enterprise Network (SEN), in conjunction with its thirteen Local Enterprise Companies, embarked on a practical evaluation of STEAM examining not only the capacity of the model, but the robustness of the local variable inputs. Considerable collateral primary research was commissioned by SEN concerning rates of daily expenditure, length of stay, and stays with friends and relatives. This led, subsequently, to a five-year contract on behalf of a partnership led by the Scottish Tourist Board, Scottish Enterprise, Highlands & Islands Enterprise, the Local Enterprise Companies and the Area Tourist Boards. Latterly, this contract has been renewed by VisitScotland until 2008 with an option for two more years.

In 1997, Tourism South and West Wales was licensed by GTS (UK) Ltd to operate STEAM throughout Wales and TSWW provided STEAM reports for nineteen Welsh Unitary Authorities for a four-year period. Since 2002, GTS (UK) Ltd now provides a continuing service for all 22 Welsh Unitary Authorities, two National Parks in Wales and the Statistical Directorate of the National Assembly for Wales. These programmes are co-ordinated in Wales by the company's Projects Manager (Wales).

Since 2007, STEAM has been expanding its development in Northern Ireland with, presently, two Tourism Partnership Areas and 15 Local Councils benefiting from STEAM reports.

3.   A BRIEF OUTLINE OF STEAM

3.1   STEAM - The Model

STEAM is a spreadsheet model, which is more of a process in which the values of the relationships or equations defined on the spreadsheet are specified at each stage by the user. Thus, although the logic of the model is constant, the nature of data input will alter from area to area depending on the amount of survey material available and qualitative expert opinion concerning the structure of the tourism sector in the local economy. It is not a statistically estimated model in the manner of an input-output model of the local economy. The model is designed to provide a robust indicative base for monitoring trends based on monthly and annual outputs within acceptable statistical confidence levels. This statement forms the background to the objectives of the study and the methodological processes applied.

STEAM approaches the measurement of tourism at the local level from the supply side, which has the benefit of immediacy and relative inexpensiveness. The traditional measurement of tourism activity is from the demand side, but, as is well known, surveying visitors is both time-consuming and costly. This is further complicated when economic impact assessment is made, which requires surveys of businesses and the consumption patterns of local people. STEAM is not designed to provide a precise and accurate measurement of tourism in a local area, but rather to provide an indicative base for monitoring trends. The confidence level of the model is calculated to be within the ranges of plus or minus 10% in respect of the yearly outputs and plus or minus 5% in respect of trend.

STEAM reports are produced on behalf of clients by a technical team located at the GTS (UK) Ltd Data Processing Centre in New Holland and also in Swansea. A rigorous quality control regime is in place to ensure the highest standards are consistently maintained.

3.2 The STEAM Outputs

STEAM quantifies the local economic impact of tourism, from both stay and day visitors, by

- *Analysis of bed stock (by category month by month, year on year);*
- *Analysis of bed stock seasonal availability (by category of accommodation);*
- *Estimates of revenue generated by tourists (by category of accommodation and distribution by activity by month);*
- *Categories of serviced accommodation will be: under 10 rooms; 11-50 rooms; over 50 rooms; over 100 rooms;*
- *Categories of non-serviced accommodation: Camping and Caravanning (Touring); Caravanning (Static); Flats, Chalets and Cottages; Hostels; Schools and Colleges;*
- *Estimates of number of tourists and number of tourist days (by category of accommodation by month);*
- *Estimates of employment supported by tourism;*
- *Estimates of traffic implications of tourism (by month);*
- *Trend information annually for all output categories by zone.*

3.3 STEAM Inputs

At a minimum, the implementation of STEAM depends on:

- **Information on occupancy percentages each month for each type of accommodation;**
- **Bed stock for each type of accommodation within the areas to be surveyed;**
- **Attendance at attractions/major events by month;**
- **TIC visitor figures by month.**

The model is built up from the above basic information, by drawing on data from published or unpublished sources, local interviews and supplementary trade enquiries to define the economic parameters within which the local tourism sector operates. The specific information set out above is obtained from a variety of sources:

a) **Bed Stocks**
   The STEAM model can accommodate up to nine sub-categories of Serviced Accommodation, and the same for Non-Serviced Accommodation. The type and number of such sub-categories of tourist accommodation are specified in conjunction with the client using definitions compatible with national definitions. The sources of information in building such a database are Local Authority Tourist Guides, Tourist Boards, Internet, Yellow Pages.

b) **Number of Establishments**
   The same categories and sub-categories are used as for "Bed Stocks" and use the same sources of information.

c) **Use of Tourist Accommodation**
   This information is primarily obtained from the Tourist Board occupancy surveys and, on occasion, augmented by information obtained from Local Authority occupancy surveys and information provided, in confidence, by groups of accommodation providers.

d) **Tourist Accommodation: Employment**
   STEAM has developed a large array of data sets which provide core employment data by type and size of accommodation providers and the occupancy thresholds which trigger incremental levels of employment.

e) **Staying with Friends and Relatives**
   Through primary research, STEAM has created an array of proxy variables which can be used in various types and sizes of destination. Wherever and whenever practicable these various proxy variables are benchmarked by additional local research in differing destination types.

f) Day Visitors

STEAM Tourist Day Visitors are regarded as those day visiting whose stay is three hours or more for a non-routine purpose originating outside the local area, whether from home or from a non-resident accommodation outside the object area. National and regional day visitor surveys present ongoing opportunities for benchmarking provided they are statistically valid in the context of the local area.

Information is also obtained on a monthly basis from attractions and events in an area which, together with Tourist Information Centre visitors, provides additional local benchmarking information concerning seasonality and monthly changes, year on year.

g) Rates of Daily Expenditure

Following primary research commissioned by Scottish Enterprise in 1996 from System Three (now TNS), a series of subsequent tourism expenditure surveys have been commissioned over the years by local authorities in conjunction with GTS structured specifically for the STEAM input demands. Whilst commissioned for specific areas, the consistency and frequency of these surveys has allowed the development of proxy values for other areas not able to afford such surveys.

h) Economic Multipliers

Multipliers, in respect of both tourist economic impacts and employment generated indirectly, are calculated using multipliers created by the Surrey Group for an array of destination types.

i) Indexing

STEAM Reports are all indexed so that year on year real comparisons can be made rather than inflation affected. Within each report, Appendices 1 and 2 provide non-indexed outputs so that tourism economic impacts for both the present and past years can be compared in actual values.

j) Benchmarking

STEAM takes advantage of all available benchmarking sources, including the United Kingdom Tourist Statistics, the International Passenger Survey, the United Kingdom Leisure Day Visitor Survey, the National Online Manpower Information Service, Local Surveys and those prepared commercially from time to time.

4. STEAM REPORT FORMAT

4.1 Introduction

Each STEAM Report consists of four main sections:
- Numeric Executive Summary
- Comparison Tables
- Appendices
- Charts

4.2 Numeric Executive Summary (NES)

This page provides an annual headline summary for the reporting year which consists of five segments. Each segment makes comparisons between the current year and the previous year concerning each of the main topics which are summarised below:

a) Analysis by Sector of Expenditure

This segment of the NES identifies the distribution of visitor spending into the local economy. The year on year comparison eliminates inflationary effects by use of the Retail Price Index (RPI).

b) Revenue by Category of Expenditure

This segment illustrates the revenue generated in the local economy by the four main categories of visitor. (The RPI is also used).

c) Tourist Days

This segment identifies, by category of visitor, the annual number of Visitor Days spent in the local (study) area. Visitor Days are calculated by multiplying the staying visitors by average length of stay and adding the Day Visitors.

d) Tourist Numbers
The count of all visitors annually, regardless of their length of stay.

e) Sectors in which Employment is Supported
This information is provided in the form of full time equivalents (FTE's) by category of employment. The employment indicated in STEAM reporting is only that generated by estimated visitor spending. There are employment generators other than STEAM; for example, residents' spend.

4.3 Comparison Tables (CT Pages)

This section of the report provides the monthly STEAM present and previous year outputs which form the basis for the previous section (NES). In addition, it provides monthly estimates of vehicle numbers and the days they spent in the study area.

4.4 Appendices

Appendix 1 (This Year) and **Appendix 2 (Last Year)** contain the full details by month and by year of:
- Economic Impact
- Population
- Employment
- Tourist Days/Tourist Numbers
- Vehicle Days/Vehicle Numbers
- Bed Stock

Appendix 3
Provides a glossary of terms which is self-explanatory.

Appendix 4
Considers the relationship of direct and indirect effects of tourism.

Appendix 5
Sources some of the data available by which the employment generated by visitor expenditure can be estimated.

Appendix 6
Reviews Day Visitors and their impacts.

Appendix 7
Report on statistical confidence levels in STEAM.

4.5 Charts

Provides an indicative group of charts. These charts illustrate the capacity of the Excel spreadsheet to generate them. Appendices 1 and 2 of the electronic report are the basis for their generation.

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All £'s 2009 indexed
(RPI Factor 08/09 +1.0014)

Analysis by Sector of Expenditure			
(£'s millions)	**2009**	**2008**	**% change**
Accommodation	16.23	19.40	-16
Food & Drink	38.13	41.41	-8
Recreation	12.66	13.76	-8
Shopping	29.39	31.83	-8
Transport	28.36	30.90	-8
Total Direct Revenue	**124.78**	**137.29**	-9
Indirect Expenditure	50.85	55.85	-9
VAT	21.84	24.03	-9
TOTAL	**197.46**	**217.17**	**-9**

Revenue by Category of Visitor			
(£'s millions)	**2009**	**2008**	**% change**
Serviced Accommodation	26.09	30.47	-14
Non-Serviced Accommodation	69.75	85.58	-19
SFR	6.02	6.01	0
Day Visitors	95.60	95.11	1
TOTAL	**197.46**	**217.17**	**-9**

Tourist Days			
(Thousands)	**2009**	**2008**	**% change**
Serviced Accommodation	215.7	250.4	-14
Non-Serviced Accommodation	952.5	1,168.6	-18
SFR	125.4	124.8	0
Day Visitors	3,727.7	3,702.4	1
TOTAL	**5,021.3**	**5,246.2**	**-4**

Tourist Numbers			
(Thousands)	**2009**	**2008**	**% change**
Serviced Accommodation	121.0	143.0	-15
Non-Serviced Accommodation	144.9	175.0	-17
SFR	52.7	52.4	0
Day Visitors	3,727.7	3,702.4	1
TOTAL	**4,046.2**	**4,072.8**	**-1**

Sectors in which Employment is supported			
(FTE's)	**2009**	**2008**	**% change**
Direct Employment			
Accommodation	1,115	1,139	-2
Food & Drink	889	965	-8
Recreation	358	389	-8
Shopping	624	676	-8
Transport	295	322	-8
Total Direct Employment	3,281	3,491	-6
Indirect Employment	782	859	-9
TOTAL	**4,063**	**4,349**	**-7**

Economic Impact Analysis by Category of Tourist and by Industrial Sector

Brecon Beacons National Park

Analysis by Category by Sector of Expenditure

Serviced Accommodation Analysis by Sector of Expenditure (£'s millions)	2009
Accommodation	8.88
Food & Drink	3.60
Recreation	1.13
Shopping	1.99
Transport	1.95
Total Direct Revenue	**17.56**
VAT	3.07
Total Direct Expenditure	**20.64**

Non-Serviced Accommodation Analysis by Sector of Expenditure (£'s millions)	2009
Accommodation	7.35
Food & Drink	11.96
Recreation	4.18
Shopping	9.37
Transport	10.15
Total Direct Revenue	**43.00**
VAT	7.52
Total Direct Expenditure	**50.52**

SFR Analysis by Sector of Expenditure (£'s millions)	2009
Food & Drink	1.25
Recreation	0.43
Shopping	1.19
Transport	1.02
Total Direct Revenue	**3.89**
VAT	0.68
Total Direct Expenditure	**4.57**

Day Visitors Analysis by Sector of Expenditure (£'s millions)	2009
Food & Drink	21.32
Recreation	6.92
Shopping	16.84
Transport	15.24
Total Direct Revenue	**60.33**
VAT	10.56
Total Direct Expenditure	**70.89**

Analysis by Sector of Expenditure (£'s millions)	2009
Accommodation	16.23
Food & Drink	38.13
Recreation	12.66
Shopping	29.39
Transport	28.36
VAT	21.84
Total Direct Expenditure	**146.62**
Indirect Expenditure	50.85
Total Economic Impact	**197.46**

STEAM *Bedstock Analysis*

Accommodation Category	Brecon Beacons National Park 2009		Brecon Beacons National Park 2008	
	Establishments	**Beds / Sleeping Spaces**	**Establishments**	**Beds / Sleeping Spaces**
Serviced Accommodation				
+50 room hotels				
11-50 room hotels	23	993	23	993
<10 room hotels/others	148	1127	155	1178
Serviced Total	*171*	*2120*	*178*	*2171*
Non-Serviced Accommodation				
Self catering	286	2456	283	2452
Static caravans/chalets	5	360	5	288
Touring caravans/camping	60	4725	59	4785
Not-for-hire statics		476		476
Non-Serviced Accommodation Total	*351*	*8017*	*347*	*8001*
TOTAL	**522**	**10,137**	**525**	**10,172**

Tourism Impacts 2009

	UK	World
January	Weather – below average temperatures but above average sunshine. UK officially entered recession. PKF hotel occupancy figures continued to worsen.	US consumer confidence at lowest level since 1967. Global air travel down 6% on previous January
February	Heavy snowfall disrupted transport networks. Weak retail sales.	US consumer confidence declined further. Eurozone unemployment levels rose. Global air travel down 10% on previous February. UNWTO report international tourism decline of 8% in Jan and Feb 2009.
March	Interest rates cut to 0.5%. Considerably above average sunshine and temperatures and below average rainfall. PKF hotel occupancy down on previous March.	Eurozone consumer confidence declined, and US consumer confidence remained low. Swine flu outbreak began.

April	Easter Sunday April 12th. Sunshine and temperatures well above average. UK consumer confidence improved considerably, to June 08 levels.	Eurozone & US consumer confidence increased.
May	Rainfall, temperature & sunshine all above average.	Swine flu pandemic status increased.
June	Above average sunshine and temperature; below average rainfall. PKF hotel occupancy fell again compared with 2008.	Eurozone & US consumer confidence low.
July	Wettest July on record across England and Wales. Hotel occupancy again down on previous year	Global aviation demand down 3% compared with July 2008
August	Rainfall exceptionally above average	US and Eurozone consumer confidence improved slightly. Further increases in oil prices.

September	Above average temperatures and below average rainfall. PKF hotel occupancy down on September 2008	
October	Temperatures well above average. UK recession reported as longest on record.	US economy moves out of recession.
November	Rainfall well above average. Flooding in Cumbria, and ferry traffic disrupted by strong winds. UK retail sales fall.	American Express reports two thirds of European businesses have cut travel budgets during 2009 by average 31%
December	Prolonged cold weather and snow throughout UK.	US consumer confidence improved slightly. Sterling 5.5% cheaper than December 2008 for average visitor.

Analysis by Sector of Expenditure (£'s millions)	2009	2008	2007	2006	2005	2004
Accommodation	16.2	19.4	18.5	18.1	17.2	18.4
Food & Drink	38.1	41.4	38.3	37.1	36.2	36.1
Recreation	12.7	13.8	12.7	12.3	12.0	11.9
Shopping	29.4	31.8	29.4	28.5	27.8	27.6
Transport	28.4	30.9	28.4	27.4	26.6	26.5
Indirect Expenditure	50.8	55.8	51.9	50.4	48.5	48.8
VAT	21.8	24.0	22.3	21.6	21.0	21.1
TOTAL	**197.5**	**217.2**	**201.5**	**195.5**	**189.3**	**190.4**

Revenue by Category of Visitor (£'s millions)	2009	2008	2007	2006	2005	2004
Serviced Accommodation	26.1	30.5	30.4	29.8	30.0	32.6
Non-Serviced Accommodation	69.7	85.6	72.6	69.1	61.4	63.8
SFR	6.0	6.0	6.0	6.0	5.9	5.9
Day Visitors	95.6	95.1	92.5	90.6	92.0	88.2
TOTAL	**197.5**	**217.2**	**201.5**	**195.5**	**189.3**	**190.4**

Tourist Days (Thousands)	2009	2008	2007	2006	2005	2004
Serviced Accommodation	216	250	251	244	246	268
Non-Serviced Accommodation	952	1,169	983	934	833	864
SFR	125	125	124	124	124	122
Day Visitors	3,728	3,702	3,605	3,534	3,586	3,438
TOTAL	**5,021**	**5,246**	**4,963**	**4,836**	**4,789**	**4,692**

Tourist Numbers (Thousands)	2009	2008	2007	2006	2005	2004
Serviced Accommodation	121	143	143	150	151	160
Non-Serviced Accommodation	145	175	151	144	126	131
SFR	53	52	52	52	52	51
Day Visitors	3,728	3,702	3,605	3,534	3,586	3,438
TOTAL	**4,046**	**4,073**	**3,951**	**3,880**	**3,916**	**3,780**

Sectors in which Employment is supported (FTE's)	2009	2008	2007	2006	2005	2004
Direct Employment						
Accommodation	1,115	1,139	1,143	1,129	1,126	1,126
Food & Drink	889	965	892	865	844	841
Recreation	358	389	359	348	339	338
Shopping	624	676	624	605	590	586
Transport	295	322	295	286	277	276
Total Direct Employment	3,281	3,491	3,314	3,233	3,176	3,167
Indirect Employment	782	859	798	775	746	750
TOTAL	**4,063**	**4,349**	**4,112**	**4,008**	**3,922**	**3,917**

Brecon Beacons National Park 2009

Economic Impact
Relative Impact of Tourist Categories

- Day Visitors 49%
- Serviced Accommodation 13%
- Non-Serviced Accommodation 35%
- SFR (Staying with Friends & Relatives) 3%
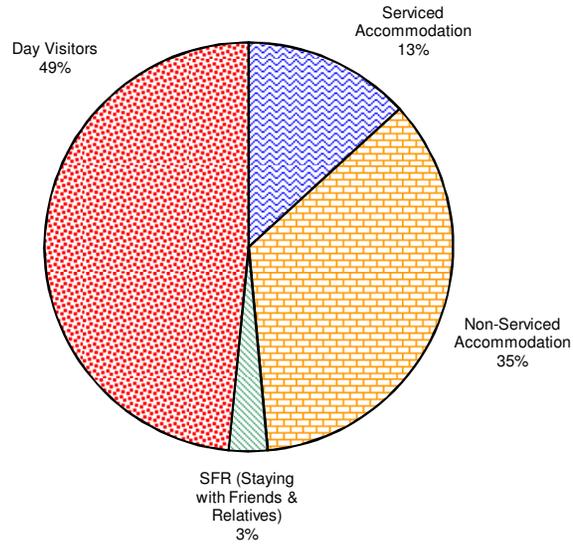
Economic Impact (£M's)
Seasonality of Tourist Categories

- Serviced Accommodation
- Non-Serviced Accommodation
- SFR (Staying with Friends & Relatives)
- Day Visitors

Economic Impact (£M's) Year on Year

Employment (000's) Year on Year

Tourist Days (M's) Year on Year

Tourist Numbers (M's) Year on Year
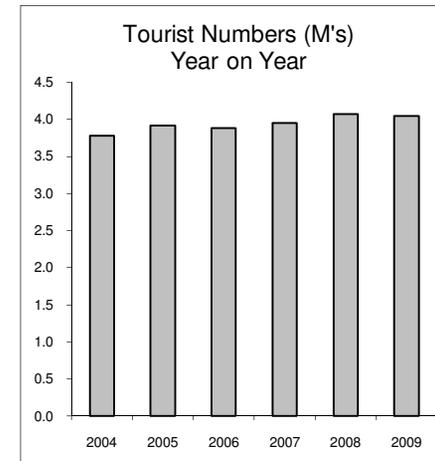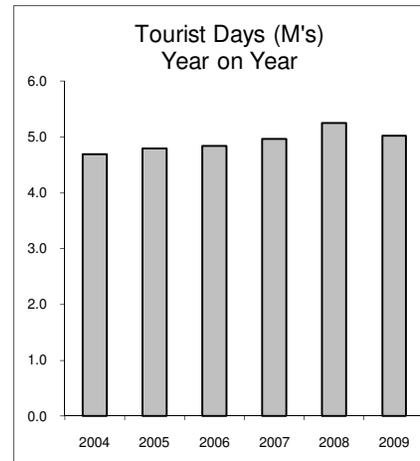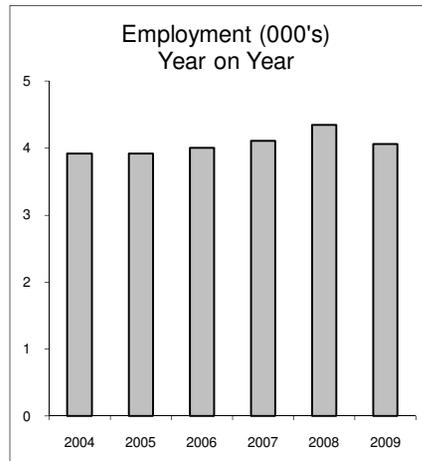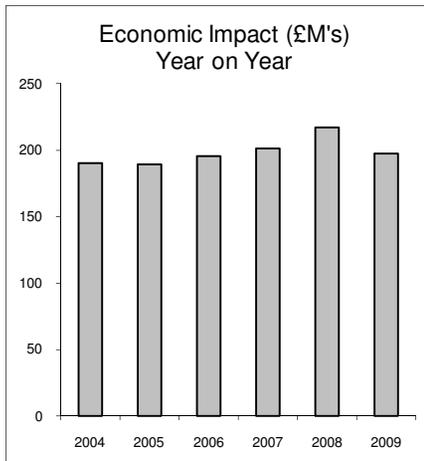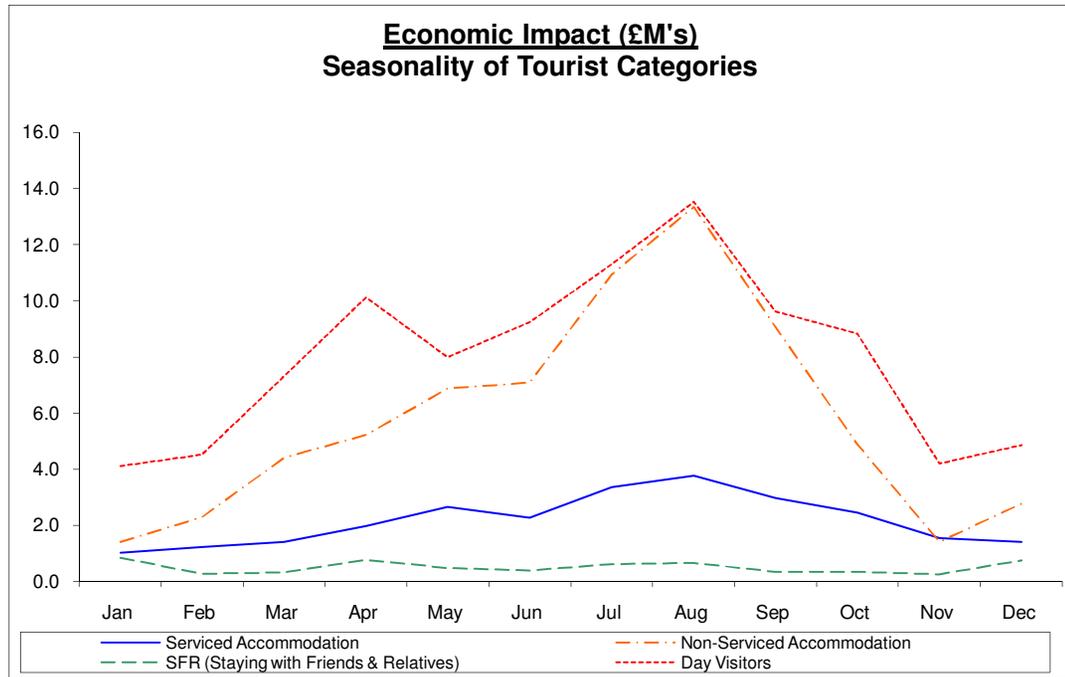
Brecon Beacons National Park 2009

Seasonality Comparisons of Major Indicators

Economic Impact (£M's)

Employment (000's)

Tourist Days (000's)

Tourist Numbers (000's)

	2004	2005	2006	2007	2008	2009
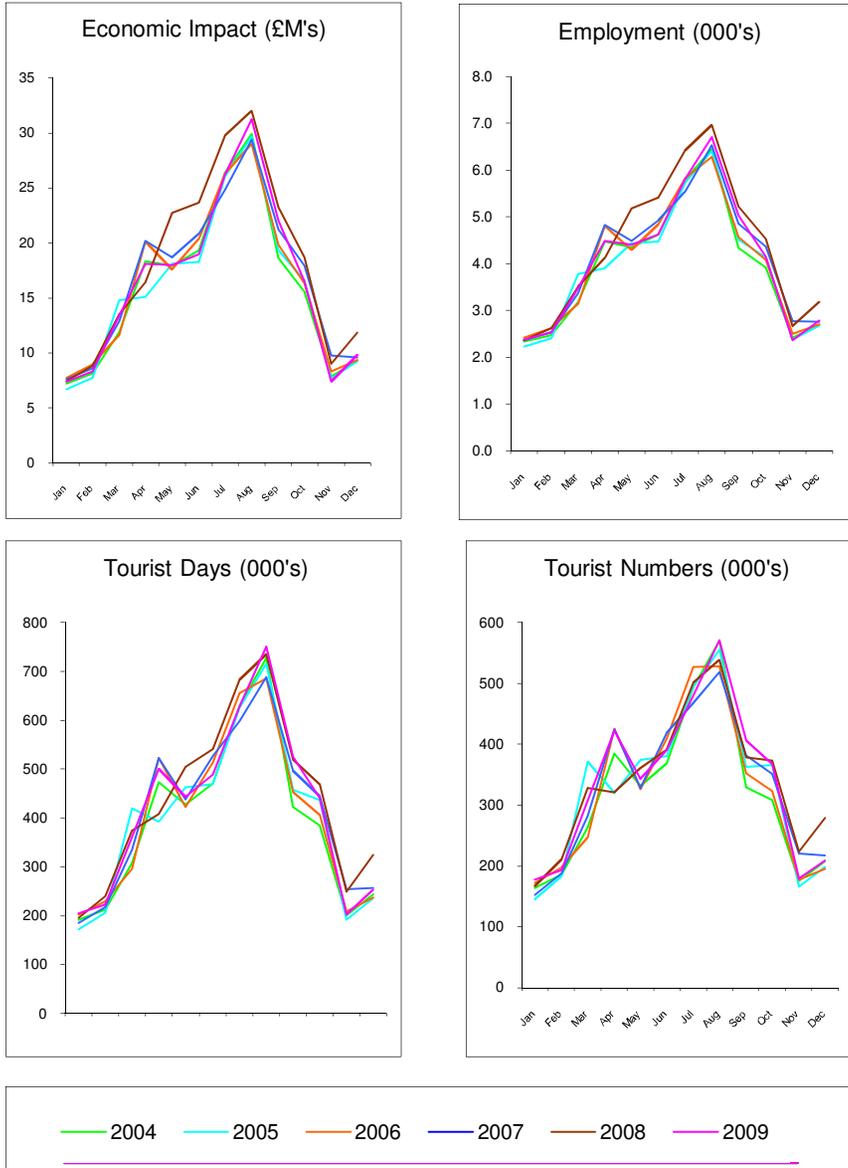
Relative Impact Changes

Economic Impact (£M's)

	2004	2005	2006	2007	2008	2009
Day Visitors	88,175	91,969	90,644	92,459	95,110	95,603
SFR (Staying with Friends & Relatives)	5,875	5,938	5,974	5,956	6,007	6,024
Non-Serviced Accommodation	63,770	61,417	69,149	72,634	85,582	69,746
Serviced Accommodation	32,626	29,958	29,769	30,401	30,468	26,089

Economic Impact	Expenditure									£000's			TOTAL
	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	
Direct Expenditure	5,486	6,143	9,875	13,446	13,442	14,112	19,498	23,229	16,340	12,273	5,527	7,245	**146,616**
Indirect Expenditure	1,898	2,176	3,564	4,649	4,577	4,850	6,733	8,030	5,690	4,232	1,885	2,562	**50,846**
Total	7,385	8,319	13,439	18,095	18,019	18,962	26,231	31,259	22,030	16,506	7,412	9,806	**197,463**

Economic Impact	Expenditure and Revenue									£000's			TOTAL
	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	
Direct Revenue	4,669	5,228	8,404	11,444	11,440	12,010	16,594	19,769	13,906	10,446	4,704	6,166	**124,780**
Indirect Expenditure	1,898	2,176	3,564	4,649	4,577	4,850	6,733	8,030	5,690	4,232	1,885	2,562	**50,846**
VAT	817	915	1,471	2,003	2,002	2,102	2,904	3,460	2,434	1,828	823	1,079	**21,836**
Total	7,385	8,319	13,439	18,095	18,019	18,962	26,231	31,259	22,030	16,506	7,412	9,806	**197,463**

Economic Impact	Generated by Category of Visitor									£000's			TOTAL
	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	
Serviced Accommodation	1,025	1,232	1,411	1,984	2,659	2,267	3,357	3,762	2,984	2,453	1,538	1,417	**26,089**
Non-Serviced Accommodation	1,418	2,287	4,404	5,231	6,888	7,083	10,949	13,334	9,088	4,888	1,402	2,776	**69,746**
SFR	838	282	320	764	492	379	614	650	335	335	261	755	**6,024**
Day Visitors	4,104	4,518	7,304	10,116	7,981	9,233	11,311	13,513	9,624	8,830	4,211	4,858	**95,603**
Total	7,385	8,319	13,439	18,095	18,019	18,962	26,231	31,259	22,030	16,506	7,412	9,806	**197,463**

Economic Impact	Sectors in which expenditure is made									£000's			
Direct Expenditure	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	**TOTAL**
Accommodation	515	706	1,032	1,126	1,418	1,314	2,397	2,776	2,169	1,267	674	835	**16,231**
Food & Drink	1,462	1,600	2,593	3,625	3,522	3,752	4,966	5,938	4,115	3,245	1,441	1,877	**38,135**
Recreation	481	527	858	1,199	1,172	1,248	1,656	1,982	1,371	1,072	472	620	**12,658**
Shopping	1,145	1,229	2,005	2,814	2,699	2,890	3,831	4,586	3,164	2,484	1,092	1,456	**29,393**
Transport	1,066	1,166	1,917	2,680	2,629	2,806	3,743	4,487	3,088	2,378	1,026	1,378	**28,363**
Total Direct Expenditure	4,669	5,228	8,404	11,444	11,440	12,010	16,594	19,769	13,906	10,446	4,704	6,166	**124,780**
VAT	817	915	1,471	2,003	2,002	2,102	2,904	3,460	2,434	1,828	823	1,079	**21,836**
Indirect Expenditure	1,898	2,176	3,564	4,649	4,577	4,850	6,733	8,030	5,690	4,232	1,885	2,562	**50,846**
Total	7,385	8,319	13,439	18,095	18,019	18,962	26,231	31,259	22,030	16,506	7,412	9,806	**197,463**

Population													Avg
Total Population	34,107	34,107	34,107	34,107	34,107	34,107	34,107	34,107	34,107	34,107	34,107	34,107	**34,107**

Employment	Supported by tourism activity in these Categories									FTE's			FTE's
	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	**FTE's**
Serviced Accommodation	665	694	720	779	840	807	860	890	831	822	723	706	**778**
Non-Serviced Accommodation	612	699	950	1,200	1,438	1,461	1,892	2,191	1,635	1,153	613	759	**1,217**
SFR	129	43	49	117	76	58	94	100	51	51	40	116	**77**
Day Visitors	623	686	1,108	1,535	1,211	1,401	1,716	2,050	1,460	1,340	639	737	**1,209**
Total Direct Employment	2,028	2,121	2,827	3,631	3,565	3,727	4,562	5,231	3,978	3,367	2,015	2,318	**3,281**
Indirect Employment	350	401	658	858	844	895	1,242	1,481	1,050	781	348	473	**782**
Total	2,379	2,523	3,485	4,489	4,409	4,622	5,805	6,713	5,028	4,148	2,363	2,791	**4,063**

Employment	Sectors in which employment is supported									FTE's			FTE's
	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	**FTE's**
Accommodation	1,032	1,036	1,061	1,159	1,166	1,168	1,168	1,169	1,170	1,166	1,046	1,040	**1,115**
Food & Drink	409	447	725	1,013	985	1,049	1,388	1,660	1,151	907	403	525	**889**
Recreation	163	179	291	407	398	423	562	673	465	364	160	210	**358**
Shopping	292	313	511	717	688	737	977	1,169	806	633	278	371	**624**
Transport	133	146	239	335	328	350	468	560	386	297	128	172	**295**
Total Direct Employment	2,028	2,121	2,827	3,631	3,565	3,727	4,562	5,231	3,978	3,367	2,015	2,318	**3,281**
Indirect Employment	350	401	658	858	844	895	1,242	1,481	1,050	781	348	473	**782**
Total	2,379	2,523	3,485	4,489	4,409	4,622	5,805	6,713	5,028	4,148	2,363	2,791	**4,063**

BRECON BEACONS NATIONAL PARK 2009

Appendix 1.3

Tourist Days

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	TOTAL
Serviced Accommodation	9.0	10.8	12.3	17.4	23.3	19.9	25.2	28.3	22.4	21.5	13.4	12.3	216
Non-Serviced Accommodation	18.5	29.6	57.3	73.4	98.5	100.9	149.1	181.6	121.3	68.0	18.5	35.9	952
SFR	17.4	5.9	6.7	15.9	10.2	7.9	12.8	13.5	7.0	7.0	5.4	15.7	125
Day Visitors	160.0	176.2	284.8	394.4	311.2	360.0	441.0	526.9	375.2	344.3	164.2	189.4	3,728
Total Tourist Days 000's	204.9	222.4	361.0	501.1	443.2	488.6	628.1	750.4	526.0	440.7	201.5	253.4	5,021

Tourist Numbers

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	TOTAL
Serviced Accommodation	5.0	7.0	7.2	10.6	13.0	12.0	13.2	15.1	11.2	11.5	8.4	6.8	121
Non-Serviced Accommodation	5.2	7.2	11.8	11.1	14.0	14.2	20.7	23.7	17.3	9.5	4.0	6.3	145
SFR	7.0	2.8	3.1	5.9	4.7	3.8	5.1	5.2	3.2	3.3	2.7	6.0	53
Day Visitors	160.0	176.2	284.8	394.4	311.2	360.0	441.0	526.9	375.2	344.3	164.2	189.4	3,728
Total Tourist Numbers 000's	177.2	193.2	306.9	422.1	342.8	389.9	480.0	570.9	407.0	368.5	179.2	208.6	4,046

Vehicle Days

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	TOTAL
Serviced Accommodation	2.3	3.8	4.5	4.6	6.7	5.6	6.7	7.5	6.0	5.7	3.6	3.3	60
Non-Serviced Accommodation	4.7	9.5	15.2	17.9	26.0	26.7	37.3	44.9	32.1	16.9	4.7	7.3	243
SFR	5.2	1.7	2.0	4.7	3.0	2.3	3.8	4.0	2.1	2.1	1.6	4.7	37
Day Visitors	31.6	39.8	64.3	77.9	61.5	81.3	87.1	104.1	74.1	77.7	37.1	37.4	774
Total Vehicle Days 000's	43.8	54.8	85.9	105.2	97.2	115.9	134.9	160.5	114.2	102.4	47.0	52.6	1,114

Vehicle Numbers

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	TOTAL
Serviced Accommodation	1.3	2.5	2.7	2.8	3.7	3.4	3.5	4.0	3.0	3.1	2.3	1.8	34
Non-Serviced Accommodation	1.3	2.3	3.1	2.7	3.7	3.8	5.2	5.9	4.6	2.4	1.0	1.3	37
SFR	2.1	0.8	0.9	1.7	1.4	1.1	1.5	1.5	1.0	1.0	0.8	1.8	16
Day Visitors	31.6	39.8	64.3	77.9	61.5	81.3	87.1	104.1	74.1	77.7	37.1	37.4	774
Total Vehicle Numbers 000's	36.3	45.4	71.0	85.2	70.3	89.5	97.3	115.5	82.7	84.1	41.1	42.3	861

BED STOCK (number of beds) — Average Available Sleeping Spaces

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	MAX
Serviced Accommodation	2,008	2,072	2,101	2,115	2,120	2,120	2,120	2,120	2,120	2,120	2,080	2,052	2,120
Non-Serviced Accommodation	3,886	3,608	4,293	7,783	7,939	8,017	8,017	8,017	8,017	7,879	3,886	3,774	8,017
Total BED STOCK (number of beds)	5,894	5,680	6,394	9,898	10,059	10,137	10,137	10,137	10,137	9,999	5,966	5,826	10,137

Economic Impact	Expenditure and Revenue											£000's	TOTAL
	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	
Direct Expenditure	5,568	6,519	9,993	12,204	16,911	17,553	22,056	23,726	17,227	13,834	6,720	8,782	161,093
Indirect Expenditure	1,893	2,292	3,494	4,221	5,777	6,058	7,634	8,232	5,970	4,806	2,311	3,082	55,770
Total	7,461	8,811	13,487	16,425	22,689	23,611	29,690	31,958	23,197	18,640	9,031	11,865	216,863

Economic Impact	Expenditure and Revenue											£000's	TOTAL
	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	
Direct Revenue	4,739	5,548	8,504	10,386	14,393	14,938	18,771	20,192	14,661	11,774	5,719	7,474	137,100
Indirect Expenditure	1,893	2,292	3,494	4,221	5,777	6,058	7,634	8,232	5,970	4,806	2,311	3,082	55,770
VAT	829	971	1,488	1,818	2,519	2,614	3,285	3,534	2,566	2,060	1,001	1,308	23,993
Total	7,461	8,811	13,487	16,425	22,689	23,611	29,690	31,958	23,197	18,640	9,031	11,865	216,863

Economic Impact	Generated by Category of Visitor											£000's	TOTAL
	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	
Serviced Accommodation	1,487	1,370	1,976	2,316	3,760	3,095	3,583	3,833	3,168	2,459	1,705	1,672	30,425
Non-Serviced Accommodation	1,358	2,180	3,337	5,891	10,310	11,187	13,815	14,869	10,917	7,015	1,771	2,810	85,462
SFR	834	280	319	761	489	377	612	648	334	333	260	752	5,998
Day Visitors	3,781	4,980	7,854	7,457	8,130	8,951	11,680	12,608	8,778	8,832	5,295	6,630	94,977
Total	7,461	8,811	13,487	16,425	22,689	23,611	29,690	31,958	23,197	18,640	9,031	11,865	216,863

Economic Impact	Sectors in which expenditure is made											£000's	
Direct Expenditure	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	TOTAL
Accommodation	703	783	1,081	1,332	2,124	1,947	2,755	2,992	2,387	1,493	814	958	19,369
Food & Drink	1,434	1,694	2,634	3,181	4,310	4,543	5,586	6,000	4,292	3,617	1,753	2,304	41,348
Recreation	469	554	864	1,056	1,439	1,521	1,869	2,007	1,435	1,200	572	756	13,743
Shopping	1,109	1,300	2,021	2,452	3,281	3,481	4,312	4,632	3,297	2,777	1,334	1,786	31,783
Transport	1,024	1,218	1,904	2,365	3,238	3,447	4,248	4,561	3,251	2,687	1,246	1,670	30,858
Total Direct Expenditure	4,739	5,548	8,504	10,386	14,393	14,938	18,771	20,192	14,661	11,774	5,719	7,474	137,100
VAT	829	971	1,488	1,818	2,519	2,614	3,285	3,534	2,566	2,060	1,001	1,308	23,993
Indirect Expenditure	1,893	2,292	3,494	4,221	5,777	6,058	7,634	8,232	5,970	4,806	2,311	3,082	55,770
Total	7,461	8,811	13,487	16,425	22,689	23,611	29,690	31,958	23,197	18,640	9,031	11,865	216,863

Population													Avg
Total Population	33,952	33,952	33,952	33,952	33,952	33,952	33,952	33,952	33,952	33,952	33,952	33,952	**33,952**

Employment	Supported by tourism activity in these Categories								FTE's				FTE's
	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	**FTE's**
Serviced Accommodation	711	714	781	822	946	897	892	910	856	833	749	736	**821**
Non-Serviced Accommodation	598	680	835	1,270	1,859	1,973	2,250	2,524	1,878	1,418	647	756	**1,391**
SFR	128	43	49	117	75	58	94	100	51	51	40	116	**77**
Day Visitors	574	757	1,193	1,133	1,235	1,360	1,775	1,916	1,334	1,342	805	1,007	**1,203**
Total Direct Employment	2,012	2,194	2,859	3,343	4,117	4,289	5,012	5,449	4,119	3,644	2,240	2,615	**3,491**
Indirect Employment	350	423	645	780	1,067	1,119	1,410	1,521	1,103	888	427	569	**859**
Total	2,361	2,617	3,504	4,123	5,184	5,408	6,422	6,969	5,222	4,531	2,667	3,184	**4,349**

Employment	Sectors in which employment is supported								FTE's				FTE's
	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	**FTE's**
Accommodation	1,040	1,047	1,074	1,172	1,178	1,180	1,180	1,334	1,182	1,178	1,058	1,048	**1,139**
Food & Drink	401	474	737	891	1,207	1,272	1,564	1,680	1,202	1,013	491	645	**965**
Recreation	159	188	294	359	489	517	635	682	487	408	194	257	**389**
Shopping	283	332	516	626	837	889	1,101	1,182	842	709	341	456	**676**
Transport	128	152	238	296	405	431	531	570	407	336	156	209	**322**
Total Direct Employment	2,012	2,194	2,859	3,343	4,117	4,289	5,012	5,449	4,119	3,644	2,240	2,615	**3,491**
Indirect Employment	350	423	645	780	1,067	1,119	1,410	1,521	1,103	888	427	569	**859**
Total	2,361	2,617	3,504	4,123	5,184	5,408	6,422	6,969	5,222	4,531	2,667	3,184	**4,349**

Tourist Days — 000's

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	TOTAL
Serviced Accommodation	12.7	11.6	17.0	20.1	32.6	27.1	26.8	28.6	23.5	21.2	14.7	14.3	250
Non-Serviced Accommodation	17.7	28.2	43.9	82.0	145.3	157.4	188.1	201.8	147.4	97.3	23.2	36.3	1,169
SFR	17.4	5.8	6.6	15.8	10.2	7.8	12.7	13.5	6.9	6.9	5.4	15.6	125
Day Visitors	147.4	194.1	306.2	290.7	316.9	348.9	455.3	491.5	342.2	344.3	206.4	258.5	3,702
Total Tourist Days 000's	195.2	239.8	373.8	408.6	505.0	541.3	683.0	735.4	520.0	469.8	249.6	324.7	5,246

Tourist Numbers — 000's

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	TOTAL
Serviced Accommodation	7.9	7.7	10.1	12.3	18.3	16.3	14.1	15.3	11.9	11.6	9.4	8.0	143
Non-Serviced Accommodation	5.0	6.9	9.0	12.5	20.8	22.2	26.2	26.3	21.1	13.7	5.0	6.4	175
SFR	6.9	2.8	3.1	5.9	4.6	3.7	5.1	5.2	3.2	3.2	2.7	6.0	52
Day Visitors	147.4	194.1	306.2	290.7	316.9	348.9	455.3	491.5	342.2	344.3	206.4	258.5	3,702
Total Tourist Numbers 000's	167.2	211.5	328.4	321.4	360.6	391.2	500.7	538.3	378.4	372.8	223.5	278.9	4,073

Vehicle Days — 000's

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	TOTAL
Serviced Accommodation	3.4	4.2	6.4	5.4	9.4	7.7	7.2	7.7	6.3	5.8	4.0	3.9	71
Non-Serviced Accommodation	4.5	9.0	11.7	20.1	39.1	42.6	47.9	50.1	39.6	24.9	6.0	7.4	303
SFR	5.2	1.7	2.0	4.7	3.0	2.3	3.8	4.0	2.1	2.1	1.6	4.6	37
Day Visitors	29.1	43.8	69.1	57.4	62.6	78.8	89.9	97.1	67.6	77.7	46.6	51.0	771
Total Vehicle Days 000's	42.1	58.8	89.2	87.6	114.1	131.3	148.8	158.8	115.6	110.4	58.1	67.0	1,182

Vehicle Numbers — 000's

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	TOTAL
Serviced Accommodation	2.1	2.8	3.8	3.3	5.3	4.6	3.8	4.1	3.2	3.2	2.6	2.2	41
Non-Serviced Accommodation	1.3	2.2	2.4	3.1	5.6	6.0	6.7	6.5	5.7	3.5	1.3	1.3	46
SFR	2.1	0.8	0.9	1.7	1.4	1.1	1.5	1.5	0.9	1.0	0.8	1.8	16
Day Visitors	29.1	43.8	69.1	57.4	62.6	78.8	89.9	97.1	67.6	77.7	46.6	51.0	771
Total Vehicle Numbers 000's	34.5	49.7	76.2	65.5	74.8	90.5	101.9	109.2	77.4	85.3	51.3	56.3	873

BED STOCK (number of beds) — Average Available Sleeping Spaces

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	MAX
Serviced Accommodation	2,053	2,123	2,152	2,166	2,171	2,171	2,171	2,171	2,171	2,171	2,131	2,097	2,171
Non-Serviced Accommodation	3,862	3,584	4,277	7,767	7,923	8,001	8,001	8,001	8,001	7,863	3,870	3,750	8,001
Total BED STOCK (number of beds)	5,915	5,707	6,429	9,933	10,094	10,172	10,172	10,172	10,172	10,034	6,001	5,847	10,172

GLOSSARY OF TERMS

Average direct daily expenditure   derived from total direct revenue divided by the total number of visitor days

Average revenue per head   derived from total revenue divided by the total number of visitors

Bed stock   number of bed spaces

Category of expenditure   denotes areas of economic impact generated by: Accommodation, Food & Drink, Recreation, Shopping and Transport

Category of visitor   visitors are categorised according to type of accommodation used (+50 Room Hotels, 11-50 Room Hotels, <10 Room Hotels; Self-Catering, Touring/Camping) or as 'Day Visitors' or 'SFRs'

Commercial accommodation   denotes +50 Room Hotels, 11-50 Room Hotels, <10 Room Hotels, Guest Houses/B&Bs, Self-Catering, and Touring/Camping

Day visitors:
- Tourist day visits   tourist day visits are defined as visits commencing from a home location for a non-routine purpose, for a duration of not less than 3 hours outside the normal habitat of the visitor. For STEAM purposes, day visits emanating from outside of the reporting area commencing from a location other than their permanent residence are also measured

- Intra-district tourist day visits   in addition to tourist day visits, as defined for STEAM purposes, intra-district day visits are those by persons residing within a district making day visits within that district

- Leisure day visits   in addition to tourist day visits, as defined for STEAM purposes, a leisure day visit is a trip taken from a person's home and not taken whilst staying away from home. Trips must be round trips taken from a person's home within the same day without spending a night away from home. The usual convention is that there is no minimum stay requirement; however, for the purposes of this report, a minimum stay of 3 hours is required

Direct revenue   denotes visitor expenditure within a zone or Borough area

Expenditure	denotes expenditure on direct items (Accommodation, Food & Drink, Recreation, Shopping and Transport) and indirect items
FTE	denotes full-time equivalent jobs
GTS (UK) Ltd	Global Tourism Solutions (UK) Ltd
High season	from April through to October
Indirect revenue	denotes secondary expenditure within a zone or Borough area. Measured in STEAM through the application of proxy variable multipliers derived from the Scottish Tourism Multiplier Study (1992)
Low season	from November through to March
Non-commercial accommodation	denotes resident households used as accommodation by SFR
Non-serviced accommodation	denotes Self-Catering, and Touring/ Camping
Peak month	the month where the majority of the Borough's volume, value or bed space availability occurs
Revenue	denotes income derived from expenditure
STEAM	Scarborough Tourism Economic Activity Monitor
Serviced accommodation	denotes +50 Room Hotels, 11-50 Room Hotels, <10 Room Hotels, and Guest Houses/B&Bs
Touring/Camping	Touring Caravans and Camping
Tourist	denotes someone staying overnight
SFR	Staying with Friends and Relatives
Visitor	denotes the aggregate of tourists, Day Visitors and SFR
Visitor activity	denotes visitor numbers and/or visitor days (i.e. visitor volume)
Visitor days	denotes the total number of visitors multiplied by the average length of stay
Visitor numbers	denotes the total number of visitors (Tourists, Day Visitors and SFR)
Zone	denotes sub-Borough area as defined by the Borough representatives

ECONOMIC EFFECTS

[Source: "A Guidance Pack from the Department for Culture, Media & Sport" 1998]

1. Indicators of the economic effects of tourism activity in the local area are likely to include estimates of local income, jobs and business linkages. The direct measurement of tourism activity, especially of tourism expenditure, presents only a partial picture of the economic impact of the tourism activity in an area:

   • The gross *direct* economic impact of tourism is the total value of tourism spending in the area. This covers the 'front-line' effects, looking at tourism spending in hotels, restaurants, shops, taxis, i.e. any business that receives visitor expenditure directly. The net direct impact, however, needs to take into account the value of goods and services that are imported into the area in order to supply the tourist with goods and services.

   • *indirect* effects arise from the generation of economic activity by subsequent rounds of expenditure (*e.g. as hotels purchase food and drinks from local suppliers and use the services of local laundries, builders, banks, utility companies, etc.*) Not all these effects will arise in the local area since some such expenditure will go to suppliers elsewhere in the region or nationally.

   • *induced* effects arise from the spending of income accruing to local residents from wages and profits during the direct and indirect rounds.

   • *leakages* of expenditure out of the local economy: such as savings and taxation, as well as the costs of imports of goods and services from outside the area already mentioned above.

   • *opportunity costs:* to take into account the cost of using scarce resources for tourism as opposed to alternative uses, as, for example, spending on the provision of tourist information centres, car parking and other facilities used by visitors. When tourism substitutes one form of expenditure and economic activity for another, this is known as the displacement effect.

   • *investment activity* arising from capital investment in new facilities for visitors by private or public sectors (which also involve some consideration of opportunity cost.)

2. These are complex issues. There is guidance from HM Treasury on economic impact assessments. Employment effects are similarly difficult to measure precisely, but one simple approach is to track employment in 'tourism related industries'.

3. In conclusion, there is a frequently occurring temptation to attribute over-precision to the ability to measure indirect effects. Wherever appropriate and possible, STEAM reports separate direct and indirect estimates.

EMPLOYMENT

STEAM, both as a model and a process, takes advantage of various sources of information both to drive the model and benchmark the outputs. Such sources of information include:

- Some sub-regional estimates of numbers employed in tourism-related industries are available from NOMIS (National Online Manpower Information System) at the University of Durham. Some data are available quarterly from NOMIS, which allows the marked seasonal patterns in tourism employment to be taken into account.

- Local business surveys which give average numbers of core staff per type and size of establishment. Employment can be estimated by applying these averages to the local stock data.

- STEAM makes adjustments to the core staff in accordance with occupancy percentages above certain thresholds. This takes account of the times when temporary or part-time staff will be required.

- Employment resulting from tourist expenditure upon food and drink, recreation and leisure, shopping and transport, is more the stuff of 'multipliers' than direct estimation.

- The Office for National Statistics (ONS) publishes quarterly statistics covering employment in the following tourism related industries. (These are used to provide the official estimates for employment in the tourism related industries.)

  Standard Industrial Classification (1992) Class
  55.1 Hotels
  55.2 Camping sites and other provision of short stay accommodation
  55.3 Restaurants
  55.4 Bars, public houses and nightclubs
  63.3 Travel agencies and tour operators
  92.5 Library, archives, museums and other cultural activities
  92.6 Sporting activities
  92.7 Other recreational activities

  (Note that some of these categories are combined in the ONS tables but the data may be available from NOMIS)

DAY VISITORS AND THEIR IMPACTS IN STEAM

Defining Tourist Day Visits

STEAM defines a tourist day visit as one which crosses a boundary from one area into another area, for a period of at least three hours for non-routine leisure purposes.

The Source of Tourist Day Visitor Estimates

- STEAM uses as its baseline, elements of research undertaken by CURDS[1] (Centre for Urban and Regional Development Studies) and the TORG (Transport Operations Research Group) as the start point for calculation of local authority tourism day visitor volume estimates.
- The CURDS / TORG report was commissioned by the Departments of Employment and National Heritage and the method used in the research became established as the method of estimating the number of leisure day visits to each English local authority district. This was for the purpose of calculating the related element local government Standard Spending Assessment.
- These *leisure day visits* are defined as <u>non-routine</u> trips undertaken (away from home, but not involving an overnight stay) for one of four broad leisure purposes:
  o Outdoor activities
  o Visiting primary attractions (inc. shopping, eating out, sport, theatre)
  o Visiting scarce attractions (inc. sightseeing, shows, museums, zoos)
  o Visiting friends and relatives
- The research splits these into *intra* (source and destination of visitor within the district) and *other* (source of visitor from outside the district)
- Both *intra* and *other* trips are longer than 3 hours duration and are for "leisure purposes" as defined in the 1988/89 Leisure Day Visit Survey.
- STEAM uses the *other* data by district as the source data for the baseline day visitor estimates, thus excluding trips made by visitors originating from within the destination district.

Seasonality and Trends in Day Visitor Volume

- The baseline day visitor figure is further affected by a set of statistics to vary it from year to year and to spread the annual figure across the months, as required in the STEAM modelling process.
- The process of spreading the annual figure across the months utilises Tourist Information Centre visitor numbers and Visitor Attractions data. To be suitable for the task, these statistics must be:
  o available for the full 12 months of the year, and
  o be consistently measured for at least two years
- The process of identifying the change in tourist numbers from year to year (on a month-on-month basis) again utilises Tourist Information Centre visitor numbers and visitor numbers to attractions - these statistics are checked for consistency before use. Both monthly and annual estimates of visitor numbers can be utilised in the model.

Expenditure by Tourist Day Visitors

STEAM uses visitor expenditure data from visitor surveys to assist in the calculation of expenditure by all types of visitor. In the vast majority of cases this derives from survey work undertaken by Taylor Nelson Sofres (TNS) in England, Scotland and Wales on behalf of national agencies and other partners, including Global Tourism Solutions (UK) Ltd (GTS).

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[1] Both at the University of Newcastle upon Tyne

As new sources of expenditure data become available, GTS re-assesses the expenditure assumptions in the Model, and where appropriate, updates these assumptions based on new data (where it is sufficiently robust). In this way, the expenditure data used to produce this report replaces previously available TNS survey data from Scotland. Where new survey data shows significant changes in Rates of Daily Expenditure (RatODEs), GTS, with its clients, assesses the need to update previous economic impact estimates, to ensure consistency across an established trend period.

The STEAM Model applies Rates of Daily Expenditure based on visitor expenditure on:
- Food and Drink
- Recreation
- Shopping
- Transport

Additionally, for *staying visitors*, expenditure on tourist accommodation is estimated using accommodation capacity information (bed stock), accommodation tariffs and performance data (occupancy).

The baseline expenditure data is updated annually to reflect the impact of inflation, using the Retail Price Index (RPI)

STATISTICAL CONFIDENCE LEVELS IN STEAM

STEAM is a model, so any level of confidence in the results depends on the sampling errors in the data inputs.   So how do we test STEAM?

- Quality control to ensure there are no data entry errors and that data inputs are *fit for purpose*
- Critical to all models is: 'Do random shocks[2] destabilise them or do they converge?' We have evaluated STEAM for convergence and shown that it does so quite easily.   Thus the *Law of Large Numbers* holds, in that any disturbances amongst the component parts are smoothed out when it comes to aggregation, so any outliers in the input data do not have a disproportionate impact on the overall results.
- On behalf of GTS (UK) Ltd, Professor Stephen Wanhill has tested the aggregate data from 2000-2004 in the model by devising *Psuedo Sampling Errors* and by examining in detail the outputs for all of Wales (selected for this exercise on the basis of size and length of trend series).   At Fisher's 95% Confidence Level this gave us +/- 5.06% for expenditure, +/- 3.01% for employment and +/- 3.56% for tourist days, based on our estimate of the percentage of coverage of the known accommodation stock and day visits in Wales as a whole.

Should more stringent confidence levels be applied (99.9% for example), the sampling error remains low, being +/- 8.49% for expenditure, +/- 5.05% for employment and +/- 5.97% for tourist days, again based on our estimate of the percentage of coverage of the known accommodation stock and day visits in Wales as a whole for the period 2000 to 2004.

Sir Ronald Fisher[3] devised these standard statistical confidence tests for quality control purposes in the 1920s. The choice of 95% confidence level to test statistical results has subsequently become an accepted standard practice. It means that we can be 95% confident that the true result lies within the boundaries +/- given.

By way of comparison, the 95% confidence level sampling errors in the 2004 International Passenger Survey were +/- 3.1% for expenditure, +/- 3.0% for tourist numbers and +/- 4.6% for tourist nights. This is at a UK level – at infra-national and regional levels these errors would be higher.

We are satisfied that STEAM offers reliable and robust outputs which our clients can place their confidence in, year on year.
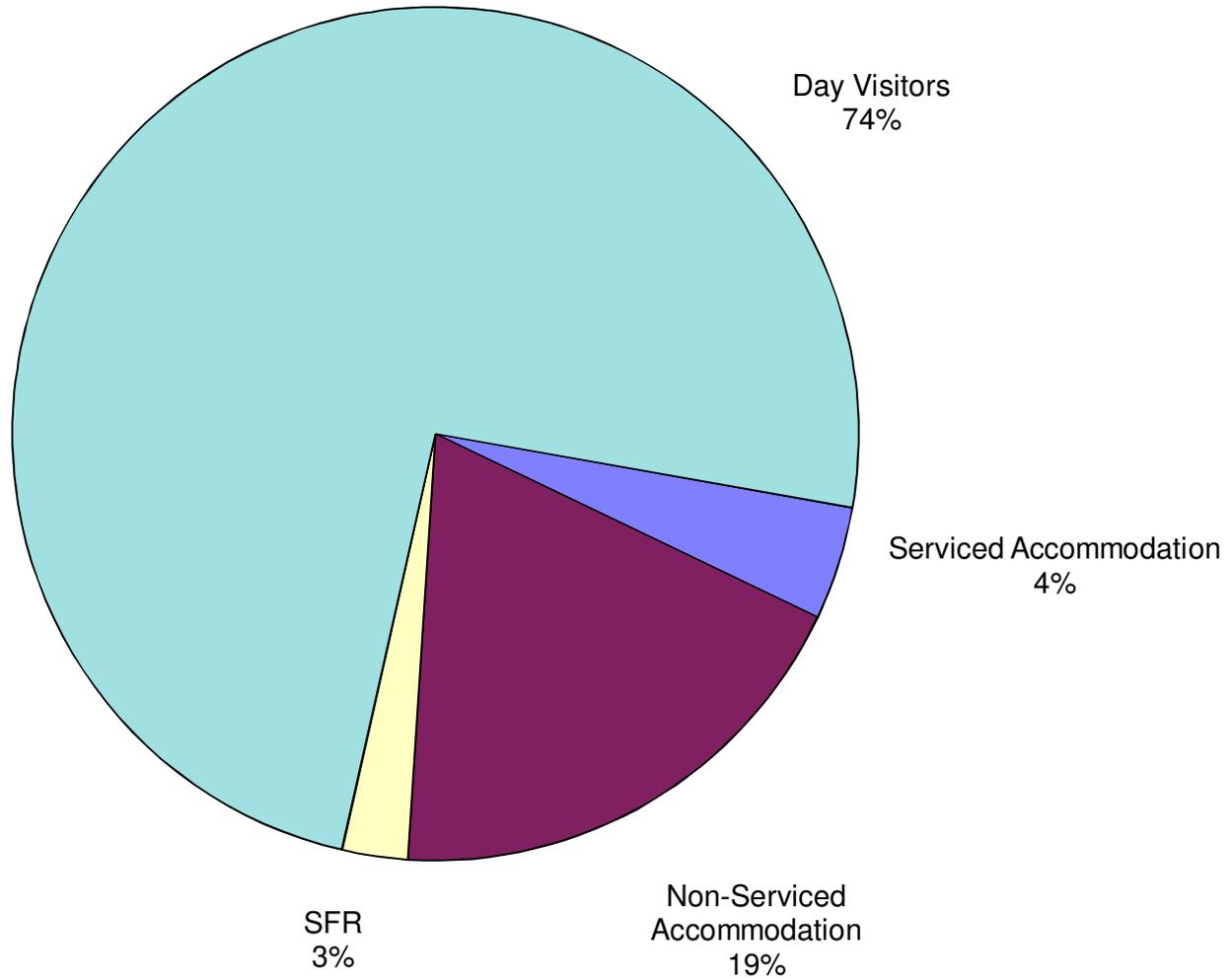
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[2] Caused by unusual or eccentric events
[3] Sir Ronald Aylmer Fisher (1890 – 1967)

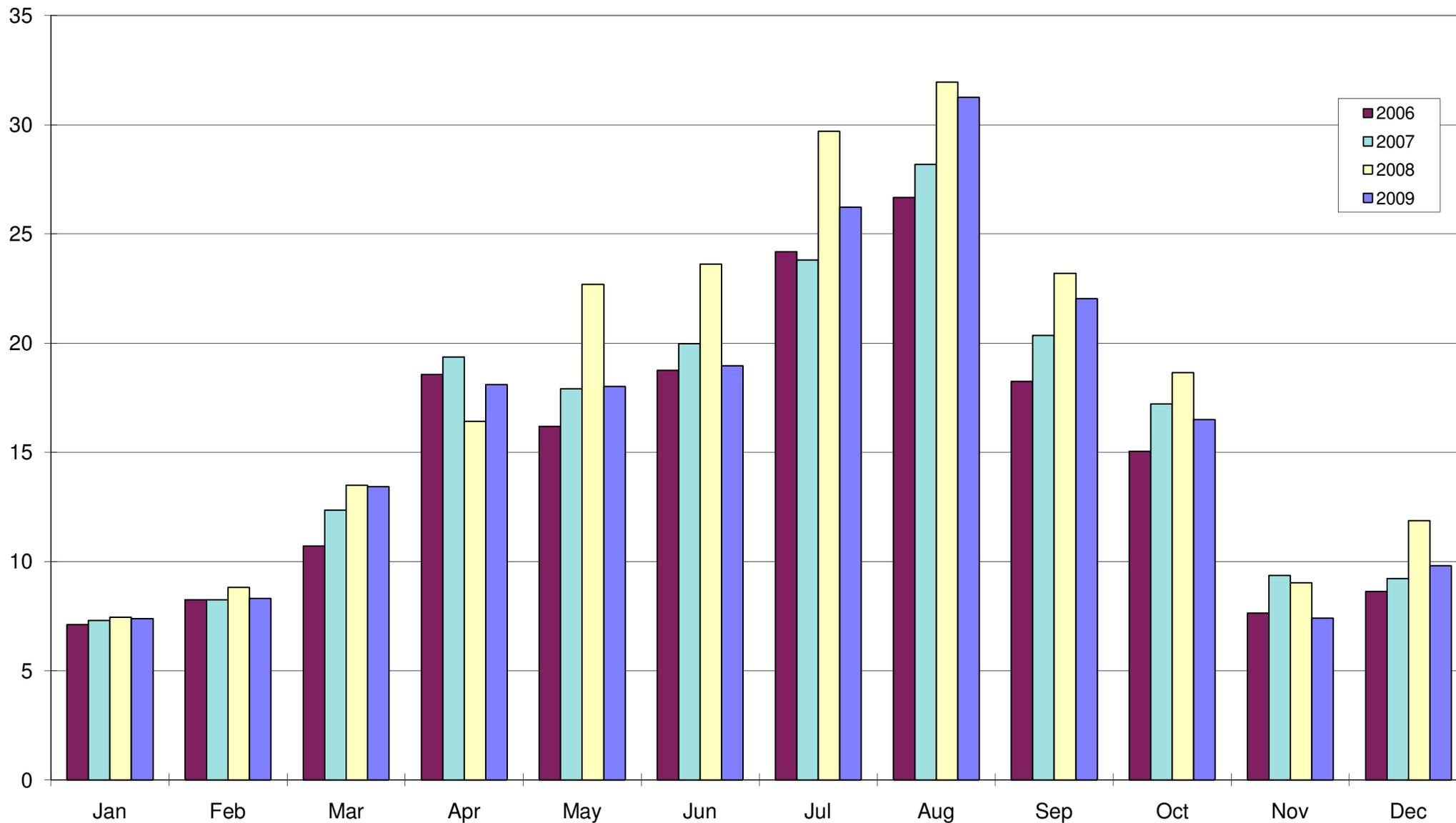**BRECON BEACONS NATIONAL PARK 2009**

CHART 1

5.0 MILLION TOURIST DAYS : 2009 : BY TYPE OF TOURIST

Day Visitors
74%

Serviced Accommodation
4%

Non-Serviced
Accommodation
19%

SFR
3%

BRECON BEACONS NATIONAL PARK 2009
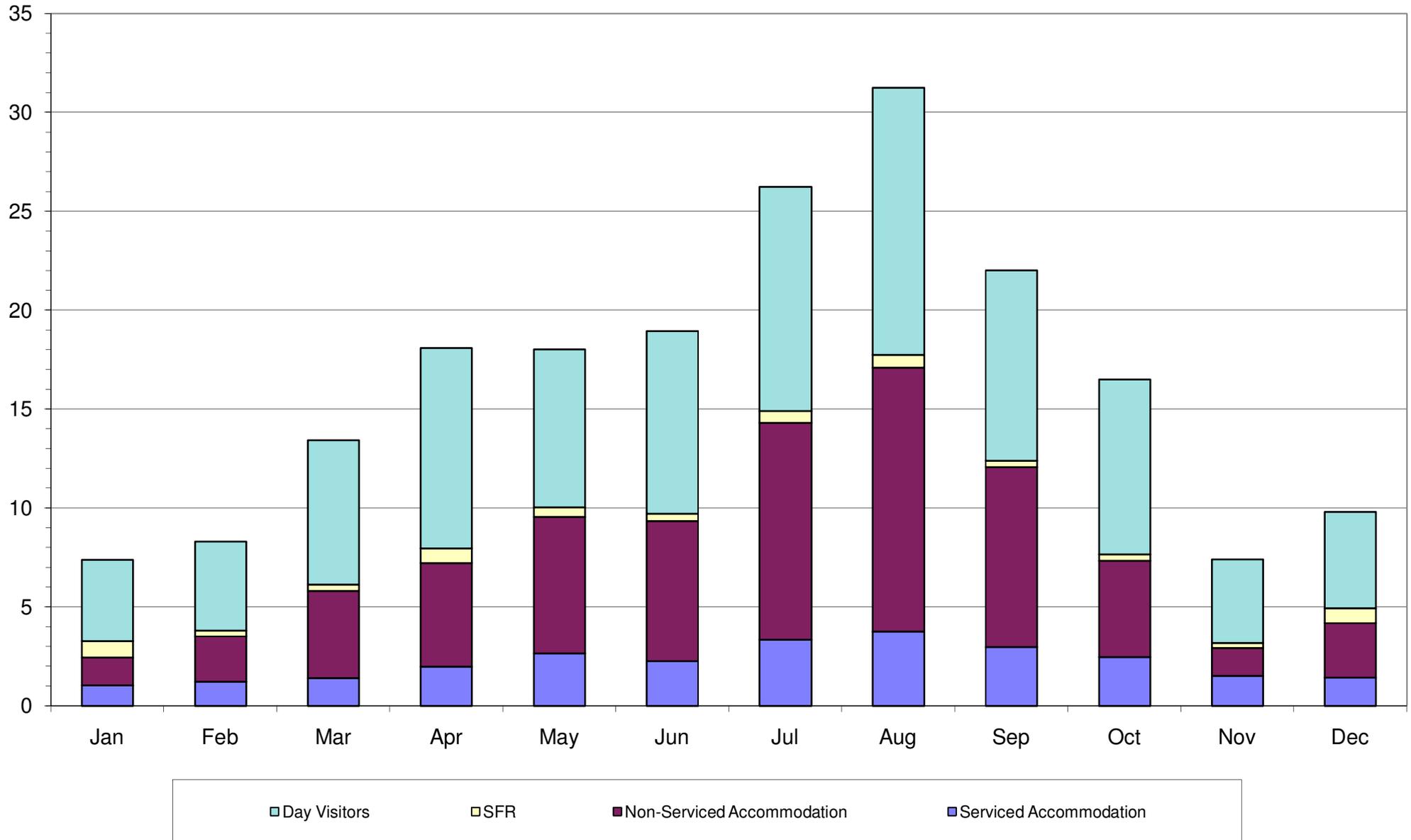
CHART 2

TOURISM EXPENDITURE : 2006 - 2009 : BY MONTH (£M's)

BRECON BEACONS NATIONAL PARK 2009

CHART 3

TOURISM EXPENDITURE 2009 : BY TYPE OF TOURIST : BY MONTH (£M's)

Day Visitors   SFR   Non-Serviced Accommodation   Serviced Accommodation

TOURISM EXPENDITURE : BY INDUSTRY SECTOR
2009 COMPARED WITH 2008 (£M's)

BRECON BEACONS NATIONAL PARK 2009

CHART 5
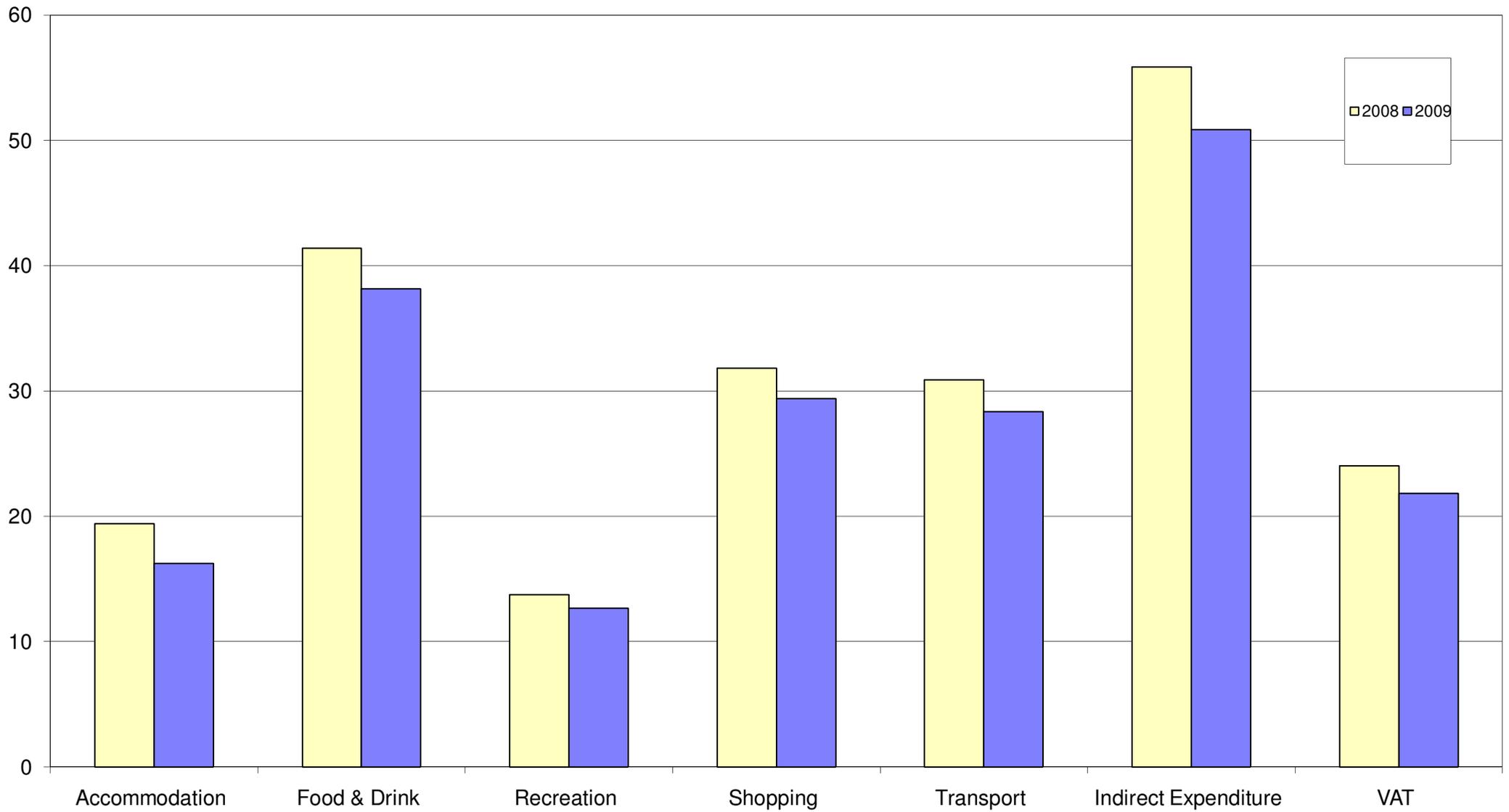
ANNUAL TOURISM EXPENDITURE (£M's)