THE ECONOMIC IMPACT OF THE EDEN PROJECT

Geoff Broom Associates

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Foreword

Before the end of Eden's first full year of operation there was already mounting anecdotal evidence that the Project had become a significant factor in the economic regeneration of the county and the region. We owed it to ourselves, to our funders and to our many friends in the region to try to quantify that, to prepare a body of robust data and to analyse it with imagination and skill. Fast! These kind of studies tend to appear long after they can serve any useful purpose.

Hence this report from Geoff Broom Associates.

In six short weeks the fieldwork was complete and the preliminary results presented to the media and an array of interested parties at the Project on December 17th 2001.

The research project was co-ordinated by Andrew Jasper working initially with a business mailing list kindly donated by PROSPER – thanks to Chris Dunston, Roger Thompson and Heather Branson. The data processing of surveys was by AcumeniA and Geoff Broom advised on the overall approach and carried out the final analysis and preparation of this report.

We are grateful to that small team and, of course, to the nearly 600 businesses who were kind enough to reply so quickly and in such rich detail.

The report can only be a snapshot of "The Eden Effect" taken at the end of the beginning of the Project which is still less than a year old .We plan it to be the first step along the road of measuring, analysing and understanding Eden's economic role so that we can really make the difference in the region which we promised and which the people of Cornwall and the South West so richly deserve.

We look forward to sharing the next set of data with you later in 2002.

Dave Meneer

Marketing Director.

February 2002.

1. Introduction

1.1. Context of Eden Project

1.1.1. The South West Region has long been an important tourist destination within England. As with other UK destinations, the Region has faced increasing competition from Europe and further afield in respect to its main traditional UK long holiday market, with losses in this sector only being partially offset by growth in the additional/short break market and overseas visitors.

1.1.2. The main attractions of the Region have been its countryside and coast, particularly in Devon and Cornwall, but these natural elements have been reinforced and complemented by individual tourist leisure provision. These leisure attractions range from historic sites such as Stonehenge and Tintagel Castle to wildlife and marine facilities such as Paignton Zoo and the National Marine Aquarium and more leisure orientated attractions such as Lands End and Flambards. Many have been established for many years, but the advent of lottery funding has led to the development of a number of new leisure facilities and additional investment in existing operations. Altogether leisure facilities in Devon and Cornwall with over 30,000 visitors hosted nearly 13 million visits in 1999, the last year for which figures are currently available.

1.1.3. Although an important element in the overall attractiveness of the Region, few individual leisure facilities however are sufficiently important or distinctive enough to draw significant numbers of additional people to the area specifically because of their location in the South West. Thus recent investment in leisure facilities has strengthened the local market and help sustain the industry in the region but is unlikely to have had a significant effect in attracting new visitors to the region as a whole.

1.1.4. The Eden Project, because of its size and profile, does have the potential to make a difference to the perceived attractiveness of Cornwall and the South West Region. Between March and November 2001, Eden has attracted nearly 1.7 million visitors, more than 10% of the total visitor numbers visiting leisure facilities in Devon and Cornwall in 1999. It is by far the biggest individual attraction in the Region, with no other attraction reaching the 1 million mark. The Roman Baths at Bath and Stonehenge at 930,000 and 800,000 respectively are the next largest leisure facilities in terms of visitor numbers in the South West.

1.1.5. This report therefore seeks to identify the economic impact of the Eden Project on the local area and wider region.

1.2. The approach

1.2.1. The economic impact of the Eden Project will arise from a number of effects. These include:

- Visitor spending at Eden, which in turn will result in:
  - Business turnover at Eden
  - Direct employment at Eden
  - Spending by Eden on the purchase of supplies and services in other businesses, increasing their turnover
  - Indirect jobs in those supplier businesses resulting from Eden purchasing
- External effects arising from spending off site by visitors to Eden, on accommodation, shopping, catering, other leisure activities and travel. This spending will result in:
  - Additional turnover in tourism related businesses
  - Direct employment in those businesses
  - Spending on suppliers of goods and services by tourism related businesses
  - Indirect jobs in those supplier businesses
- Income induced impacts, that is to say effects generated by the spending of wages by employees whose jobs are directly or indirectly supported by visitor spending. This expenditure will support turnover and jobs across the service sector.

1.2.2. The gross impact will be the sum of all these effects. However, not all the gross expenditure and associated effects will arise as a result of the development of the Eden Project. Thus a high proportion of visitors to Eden may well have taken a decision to holiday in the area without being aware of or influenced by the location of the Eden Project. Although the spending on their visit to Eden will be additional, the other spending on their holiday would have occurred in any event. Even the additional spending at Eden may have been at the expense of spending at other alternative leisure facilities.

1.2.3. Thus the net additional spending generated by Eden will consist of:

- the expenditure at Eden itself,
- spending on suppliers by Eden,
- external expenditure by visitors whose choice of holiday location was primarily influenced by the development of the Eden Project.
- Minus any expenditure displaced from existing leisure facilities as a result of holidaymakers choosing to substitute a visit to Eden instead of a visit to those leisure facilities.

1.2.4. The approach to the study therefore involves seeking to identify the volumes of visitor by type to the Eden Project, the degree to which visitors were influenced in their choice of holiday location by Eden, their expenditure on and off the Eden site, and the level of spending on supplies and services by Eden and tourism related businesses benefiting from spending by visitors to Eden.

1.2.5. Two particular issues which affect the outcome relate to:

- The degree to which visitors were **influenced** by the Eden Project in their choice of holiday location. It is assumed that all day visitors from home specifically chose to visit Eden and therefore are additional. The visitor survey at Eden sought to identify whether Eden had influenced the holiday location of staying visitors, but it did not seek any further information on the degree of influence which Eden may have had. For the purpose of this study, it is assumed that all staying visitors who indicated that they were influenced by Eden were additional. In practice, the proportion who were solely influenced by Eden is likely to be significantly smaller given the range of factors which individuals will take into account in making such choices.
- The degree of **displacement** caused by the Eden Project in attracting visitors away from existing leisure facilities. Normally a guide to the level of displacement caused by a new attraction can be gained by the relative loss or slower growth of existing leisure facilities in the catchment area of the newcomer. However, the pattern of visitor activity in Devon and Cornwall was seriously affected by the Foot and Mouth epidemic which led to an atypical pattern of visits obscuring any other impacts such as the opening of the Eden Project. Furthermore, it is possible that the displacement effects could be positive if the Eden Project led to additional holidaymaking in the area thereby increasing the overall activity at leisure facilities.

1.2.6. In the light of these issues, the overall outputs of the study will need to be treated with some caution. Future survey work could usefully seek further information on these aspects which could allow subsequent revision of the final figures from this report.

1.2.7. It should also be noted that

- Additional economic effects arise from capital expenditure on the construction of the site. No allowance has been made for such activity in this study.
- The visitor numbers only relate to visitors to the site from March through to November. The figures and therefore impact for a full year will be larger.

1.3. Data sources

1.3.1. A number of data sources have been utilised in compiling this report. They include:

- Employment and supply expenditure information from the Eden Project
- A visitor survey undertaken at Eden between May and August which contacted a total of 1,395 respondents representing 4,500 visitors. The survey was organised in three stages, namely May-June, July and August, and collected information on the origin of visitors, day or holiday based, the accommodation used, length of stay, and party size as well as a wide variety of information on perceptions, likes and dislikes.

- A business survey of tourism related businesses in four case study areas at Penzance, St Austell, Plymouth and Exeter, seeking to identify the relative importance and impact of tourism and the Eden Project on their businesses. Overall, 1,913 businesses in the four areas were contacted, and 530 completed questionnaires were returned, a response rate of 28%. (Further details of the breakdown are set out in appendix 1).
- A business survey of Eden Project suppliers seeking to identify the relative importance of the Eden Project for their businesses and the pattern of secondary spending by the supply businesses. Some 60 businesses were contacted of which 47 returned completed questionnaires, a response rate of 78%.
- Regional or county information from a range of national survey sources including the United Kingdom Tourism Survey, the International Passenger Survey, the United Kingdom Leisure Day Visits survey, Sightseeing in the UK, and the New Earnings Survey
- The process has also made use of the Cambridge Tourism Economic Impact Model which uses information from a number of business surveys in various locations in England on the relative impact of different forms of tourism expenditure.

1.3.2. As far as possible, data collected in the various Eden based surveys has been used, with other sources providing additional material not available from the local surveys.

2. Visitor flows to Eden

2.1. Visitors to the Eden Project

2.1.1. The number of visitors to the Eden Project is calculated by Eden to amount to 1,592,000 between March and November 2001. Of the total:

- 1.1 million or 70% are staying in holiday accommodation
- 477,000 or 30% are day visitors travelling from home
- Of those staying on holiday, nearly half indicated that they were influenced to come to the area as a result of the Eden Project.

2.1.2. Only a minority of visitors were staying locally in the St Austell area. Of the total:

- 10% stayed in St Austell area
- 14% stayed in the Newquay area
- 49% elsewhere in Cornwall
- 16% in Devon
- 4% elsewhere in the South West region
- 6% outside the South West

2.1.3. Of those whose holiday location had been influenced by the Eden Project, the distribution was slightly different with rather higher proportions staying in the local area.

Table 2.1: Visits to Eden by area and type

	Staying on holiday		Day visit from home	All visits
	Eden Influenced	Other holiday		
StAustell	70,641	44,511	11,504	126,656
Newquay	92,579	65,076	3,801	161,456
Elsewhere in Cornwall	171,027	377,007	96,347	644,381
Devon	128,082	54,671	256,053	438,806
Elsewhere in South West	23,548	16,774	83,973	124,295
Elsewhere	48,825	21,595	25,987	96,407
Total	534,702	579,633	477,665	1,592,000

2.1.4. Day visitors from home were drawn from a wide area with a quarter coming from within Cornwall as a whole, half coming from homes in Devon, 18% coming from elsewhere in the South West region and 6% travelling into the South West from elsewhere in the UK.

2.2. Number of nights associated with "Eden" visits

2.2.1. Holidaymakers making trips to the Eden Project stayed a total of 7.5 million nights in holiday accommodation. Of these:

- 3 million were by people influenced by Eden to come to the area
- 4.5 million were by other holidaymakers.

2.2.2. Overall, the former group generally spent a shorter time on their holidays, staying on average 5.6 nights compared to 7.8 nights by other holidaymakers who visited Eden during their stay.

Table 2.2 Nights spent by holidaymakers visiting Eden

	Eden influenced		Other holidays		All nights
	Nights	Ave nights per trip	Nights	Ave nights per trip	
StAustell	364,639	5.2	357,054	8.0	721,692
Newquay	477,773	5.2	504,764	7.8	982,537
Elsewhere in Cornwall	1,051,673	6.1	2,954,020	7.8	4,005,693
Devon	731,446	5.7	411,416	7.5	1,142,861
Elsewhere in South West	127,162	5.4	127,311	7.6	254,473
Outside South West	233,143	4.8	165,674	7.7	398,817
Total	2,985,835	5.6	4,520,238	7.8	7,506,073

2.2.3. Of the total nights, only around 10% were spent in the St Austell area but threequarters stayed in Cornwall as a whole. However, of those influenced in their choice of location by the Eden Project, the proportion staying in St Austell and Newquay areas rose, although the overall proportion in Cornwall as a whole fell to 63%, with Devon attracting an increased proportion.

2.2.4. In addition, some holiday nights whose location was influenced by Eden were actually spent outside the South West region.

Table 2.3 Distribution of holiday nights

	Eden influenced	Other holidays	All holidays
StAustell	12%	8%	10%
Newquay	16%	11%	13%
Elsewhere in Cornwall	35%	65%	53%
Devon	24%	9%	15%
Elsewhere in South West	4%	3%	3%
Outside South West	8%	4%	5%

2.3. Accommodation used

2.3.1. Of the total 7.5 million holiday nights spent by visitors to the Eden Project, a third were spent in self catering cottages and flats, a quarter in camping and caravan sites, 18% in hotels and 13% in B&Bs. There was a marked difference in the accommodation used by visitors whose holiday choice had been influenced by the Eden Project, with serviced accommodation being significantly more important.

Table 2.4 Accommodation used on holiday

	Eden influenced nights		Other holiday nights		All holiday nights	
	000's	%	000's	%	000's	%
Hotel	805	27%	527	12%	1,332	18%
B&B	574	19%	419	9%	993	13%
Self catering	754	25%	1,829	40%	2,584	34%
Camping & caravans	527	18%	1,309	29%	1,836	24%
Staying with friends	206	7%	356	8%	562	7%
Hostel	28	1%	16	0%	44	1%
Other	91	3%	65	1%	155	2%
Total	2,986		4,520		7,506	

2.3.2. Serviced accommodation was particularly important for visitors to Eden in the Newquay area which hosts many of the coach borne parties visiting Eden.

Outside St Austell and Newquay, self catering accommodation was the most popular form of accommodation in Cornwall for visitors to Eden.

Table 2.5 Distribution of accommodation nights by location (000 nights)

	Serviced	Self cater	Caravan	With friends	Other	Total
Eden influenced						
St Austell	190	59	68	22	27	365
Newquay	327	54	85	9	4	478
Elsewhere in Cornwall	344	385	235	73	15	1,052
Devon	299	207	88	73	65	731
Elsewhere in South west	62	27	11	21	7	127
Outside SW	158	23	42	9	2	233
Other holiday						
St Austell	74	109	108	21	45	357
Newquay	148	104	209	40	5	505
Elsewhere in Cornwall	602	1,304	799	221	27	2,954
Devon	78	183	100	48	3	411
Elsewhere in South west	19	52	45	11	1	127
Outside SW	25	78	48	15	1	166

2.4. Day visits by origin area

2.4.1. Of the day visits from home, a large proportion came from outside the County, notably from Devon and elsewhere in the South West region. This partly reflects the distribution of resident population, although the numbers coming from the St Austell and Newquay area appear to be low compared to the rest of Devon and Cornwall.

Table 2.6 Origins of day visitors

<table>
<tr><th></th><th>% of day visitors</th><th>% of South West Region population</th></tr>
<tr><td>StAustell</td><td>2%</td><td rowspan="2">2%</td></tr>
<tr><td>Newquay</td><td>1%</td></tr>
<tr><td>Elsewhere in Cornwall</td><td>20%</td><td>8%</td></tr>
<tr><td>Devon</td><td>54%</td><td>22%</td></tr>
<tr><td>Elsewhere in South West</td><td>18%</td><td>68%</td></tr>
<tr><td>Outside South West</td><td>5%</td><td>Na</td></tr>
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2.4.2. Some 5% of day trips travel into the South West region from elsewhere in the UK.

3. Direct Impact of Eden Project

3.1. Employment at the Eden Project

3.1.1. The main direct economic impact of the Eden Project is the employment provided on site. A total of 435 employees are recorded on the Eden files for the current year.

3.1.2. A high proportion of employees reside in the St Austell area, which accounts for threequarters of the total. Only 1% travel into Cornwall to work, although the proportion rises to 3% for monthly paid staff.

Table 3.1 Employees at Eden

	Weekly paid		Monthly paid		Total	
	No	%	No	%	No	%
St Austell area	268	86%	67	55%	335	77%
Newquay area	15	5%	10	8%	25	6%
Rest of Cornwall	40	8%	36	30%	61	14%
Devon	1	0%	2	2%	3	1%
Rest of South West	0	0%	1	1%	1	0%
Elsewhere	3	1%	1	1%	4	1%
Total	313	100%	122	100%	435	100%

3.1.3. The high proportion of staff recruited from the local area ensures that much of the income earned as wages and salaries is retained in the area and supports additional employment as those wages are spent.

4. Linkage effects arising from Eden Project

4.1. Spend on supplies and services

4.1.1. Apart from direct economic impacts arising from employment at the site, the Eden Project will generate additional employment in suppliers of goods and services to the site.

4.1.2. Total expenditure on the purchase of supplies and services for the operation of the Eden Project, ie excluding any capital investment on the site, amounted to £6.7 million over the period. Of this total, £1.8 million each was spent on the purchase of supplies for the retail and catering operations and £5.2 million on the operation of the site, administration, marketing and other operational elements.

4.1.3. The distribution of purchases varies between the different forms of supply. Catering supplies are primarily drawn from Cornwall, which accounted for 81% of the total spend. Some 61% of retail supplies were also purchased within Cornwall, but only 46% of other Eden supplies came from within the County. Overall, 17% of total spending on supplies was from suppliers in the St Austell area.

Table 4.1 Supply purchases by type and area

	Retail supplies	Catering supplies	Other Eden supplies	Total
St Austell area	£151,942	£277,764	£694,201	£1,123,907
Newquay area	£64,050	£72,090	£138,109	£274,249
Rest of Cornwall	£884,443	£1,113,357	£1,562,386	£1,398,156
Outside Cornwall	£701,352	£340,663	£2,830,152	£3,872,167
Devon	*£159,398*	*£77,423*	*£643,216*	*£880,038*
Rest of South West	*£143,458*	*£69,681*	*£578,895*	*£792,034*
Elsewhere	*£398,495*	*£193,559*	*£1,608,041*	*£2,200,095*
Total	£1,801,787	£1,803,874	£5,224,848	£6,668,479

Note: Detailed breakdown of expenditure outside Cornwall is not available. The split between Devon, the rest of the South West and elsewhere has been based on previous studies for the National Trust in Cornwall and is shown in italics as indicative of the likely split of expenditure.

4.2. Estimated employment supported

4.2.1. The expenditure on supplies generates additional turnover within the supply businesses. Part of this turnover is used to pay wages to employees in the business so that a proportion of the jobs in that business will be dependent on the purchases made by the Eden Project. In some cases, the additional turnover has resulted in additional jobs - around a third of suppliers indicated that they had taken on additional staff – while in other cases it has underpinned and maintained existing levels of employment which might otherwise have decreased.

4.2.2. The survey of businesses providing supplies for Eden has collected information on employment and turnover in the individual companies. From this information it is possible to calculate that the average level of turnover per job in these companies is £33,800. By using this figure, it is possible to estimate the number of jobs supported or maintained in supplier businesses by Eden purchases.

4.2.3. On this basis, it is estimated that Eden purchases has secured 197 jobs in supplier businesses, of which 33 arise in the St Austell area.

Table 4.2 Estimated employment secured from Eden supply purchases

	Spend	Jobs	FTE jobs
StAustell	£1,123,907	33	29.2
Newquay	£274,249	8	7.1
Rest of Cornwall	£1,398,156	41	36.3
Devon	£880,038	26	22.8
Rest of South West	£792,034	23	20.6
Elsewhere	£2,200,095	65	57.1
Total	£6,668,479	197	173.1

4.3. Impact of supplier spend

4.3.1. The supplier businesses will themselves spend money on the purchase of goods from other suppliers and producers in a second round of supply purchases. The business survey sought information on the distribution of these purchases from the Eden suppliers. The proportion of local purchases was very small, although just under half was obtained within the South West Region. This would suggest an additional 40 jobs secured in the region as a whole.

4.4. Impact on investment

4.4.1. Information was sought from the suppliers on whether the Eden Project was likely to influence investment in their business. 40% of the suppliers indicated that they expected to increase investment in their businesses as a result of the Eden Project. This will in turn have an effect on employment in supporting work in construction and building trades.

5. External effects arising from off site visitor spend

5.1. Estimated gross staying visitor spend

5.1.1. The level of tourism spending associated with tourists who make a visit to Eden can be estimated by applying average spend levels per head per night to the total number of visitor days and nights spent in the region by visitors to Eden.

5.1.2. The United Kingdom Visitor Survey and the International Passenger Survey provide information on the number of nights and spend by UK and overseas holidaymakers staying in different forms of holiday accommodation in Devon and Cornwall. In 1999, these have been calculated for each individual per night at

- £52.46 for people staying in hotels
- £48.79 in bed and breakfast establishments
- £41.53 in self catering accommodation
- £32.79 in caravans and tents
- £19.79 for people staying with friends and relatives
- £40.24 for those staying in group accommodation
- £32.23 in other accommodation including second homes and boats.

5.1.3. The United Kingdom Leisure Day Visits survey also provides estimates of the spend per tourism day visit (defined as those lasting 3 hours or more and taken on an irregular basis) for visits to the countryside, town and coast. A figure of £19.47 per day for trips to Eden has been derived from the national figures including an adjustment to take account of the level of admission fees at Eden.

5.1.4. Applying these spend per day figures to the volume of nights and days estimated in chapter 2 of this report, it is estimated that total spending associated with trips involving a visit to Eden amounted to £313 million. Of this total:

- £127 million or 41% is associated with holiday visits whose location was influenced by the existence of the Eden Project
- £177 million or 56% is associated with other holiday visits to the area
- £9 million or 3% is associated with day visits from home.

5.1.5. Of the total spending, around 9% was spent in the St Austell area, and just under threequarters in Cornwall as a whole. Around 6% was associated with trips based in holiday accommodation or homes outside the South West Region.

Table 5.1 Estimated spending associated with trips involving a visit to Eden

	Holidays influenced by Eden	Other holidays	Day visits from home	Total spending
St Austell	£15,398,379	£13,813,814	£224,002	£29,436,195
Newquay	£22,395,605	£19,680,557	£74,004	£42,150,166
Rest of Cornwall	£42,788,994	£116,294,559	£1,875,977	£160,959,530
Devon	£30,496,040	£15,789,923	£4,985,626	£51,271,589
Rest of South West	£5,189,815	£4,791,457	£1,635,050	£11,616,322
Elsewhere	£10,742,439	£6,348,814	£505,996	£17,597,249
Total	£127,011,272	£176,719,124	£9,300,655	£313,031,051

Note: Figures at 1999 values

5.1.6. The national surveys provide a breakdown of the main elements of expenditure associated with holiday and day visit spending. Using these breakdowns, it is possible to identify the main sectors of visitor spending. Overall, accommodation accounted for 38% of spending followed by catering with 27%.

Table 5.2 Breakdown of tourist expenditure by sector (£000)

	Accomm	Retail	Catering	Attraction	Travel	Total
St Austell	£11,393	£3,840	£7,973	£1,809	£4,422	£29,436
Newquay	£16,410	£5,484	£11,389	£2,543	£6,325	£42,150
Rest of Cornwall	£62,043	£21,036	£43,667	£10,017	£24,197	£160,960
Devon	£18,052	£6,960	£14,397	£4,032	£7,831	£51,272
Rest of S.W.	£3,893	£1,607	£3,318	£1,010	£1,788	£11,616
Elsewhere	£6,666	£2,318	£4,807	£1,153	£2,654	£17,597
Total	£118,455	£41,245	£85,551	£20,564	£47,216	£313,031
%	38%	13%	27%	7%	15%	100%

Note: Figures may not sum due to rounding error. Figures at 1999 values

5.2. Expenditure external to Eden

5.2.1. A proportion of the total expenditure by tourists will be spent at Eden in the form of entrance fees, retail and catering purchases. Such expenditure supports the direct employment at Eden itself as well as indirectly in suppliers to Eden. Total visitor spend at Eden was some £16.3 million, of which:

- £7.8 million was made up of admission fees together with Friends subscriptions
- £4.4 million was spent on buying goods
- £4.1 million was spent on refreshments.

5.2.2. Total off site spending by tourists on trips associated with Eden is therefore estimated at £296.7 million.

Table 5.3 Off site expenditure by tourists visiting Eden

	Accomm	Retail	Catering	Attraction	Travel	Total
St Austell	£11,393	£3,490	£7,649	£1,188	£4,422	£28,141
Newquay	£16,410	£5,038	£10,976	£1,751	£6,325	£40,499
Rest of Cornwall	£62,043	£19,263	£42,026	£6,874	£24,197	£154,403
Devon	£18,052	£5,736	£13,263	£1,880	£7,831	£46,762
Rest of South West	£3,893	£1,260	£2,997	£401	£1,788	£10,339
Elsewhere	£6,666	£2,050	£4,560	£679	£2,654	£16,608
Total	£118,455	£36,837	£81,470	£12,774	£47,216	£296,752
%	40%	12%	27%	4%	16%	100%

Note Figures at 1999 values

5.3. Direct and indirect impacts of off site visitor spending

5.3.1. The offsite spending by visitors to Eden as set out in table 5.3 above generates jobs and income to those tourist related businesses in direct receipt of visitor spending. It also generates jobs indirectly in suppliers to those businesses and as a result of spending by employees whose jobs are directly or indirectly supported by visitor expenditure.

5.3.2. The survey of tourism related businesses in the four case study areas of St Austell, Penzance, Plymouth and Exeter provided information on the average level of turnover required in each tourism related sector to support a job in those businesses. The average level required at 1999 values was:

- £37,110 turnover per job in the accommodation sector
- £101,122 in the retail sector
- £26,511 in the catering sector
- £17,518 in the leisure providers sector
- £18,071 in the transport sector.

5.3.3. Using these survey derived figures it is possible to estimate the number of direct jobs underpinned by off site tourist expenditure. In total, it is estimated that 9,002 jobs were maintained throughout the region and elsewhere, of which 848 were in the St Austell area, and a further 5,897 jobs elsewhere in Cornwall.

Table 5.4 Estimated jobs secured by off site expenditure by sector

	Accomm	Retail	Catering	Leisure	Travel	Total
St Austell	307	35	289	95	123	848
Newquay	442	50	414	140	175	1,221
Rest of Cornwall	1,672	190	1,585	549	679	4,676
Devon	486	57	500	150	241	1,435
Rest of South West	105	12	113	32	58	320
Elsewhere	180	20	172	54	76	502
Total	3,192	364	3,073	1,021	1,352	9,002

Note: In the above table, it is assumed that half of travel expenditure associated with staying holiday trips takes place at the home origin and therefore is excluded from consideration at the local level. In the case of leisure providers, visitor expenditure only accounts for 70% of employment given the financial support from local authorities and voluntary bodies in a proportion of leisure providers.

5.3.4. In addition to the direct jobs arising, it is estimated that upto an additional 2,227 indirect jobs[1] are secured in suppliers of goods and services to tourism related businesses and 1,294 induced jobs arising from the spending of employees in businesses directly or indirectly supported by visitor expenditure.

5.3.5. Taking account of seasonal and part time working in the sector, it is estimated that the direct Full Time Equivalent Jobs amount to 6,131, with 1,953 indirect FTE jobs in suppliers and 1,135 FTE induced jobs arising from the spending of income.

Table 5.5 Summary of employment secured by off site tourist expenditure

	Estimate actual jobs				Estimated FTE jobs			
	Direct	Indirect	Induced	Total	Direct	Indirect	Induced	Total
St Austell	848	189	106	1,144	578	166	93	837
Newquay	1,221	291	122	1,634	832	255	107	1,194
Rest of Cornwall	4,676	1,181	718	6,575	3,184	1,036	630	4,850
Devon	1,435	359	221	2,015	978	315	194	1,487
Rest of South West	320	80	49	449	218	70	43	331
Elsewhere	502	127	78	707	342	111	68	521
Total	9,002	2,227	1,294	12,523	6,131	1,953	1,135	9,220

5.4. Impacts associated with Eden influenced holiday trips

5.4.1. Much of the expenditure and the resulting employment would have occurred even if Eden had not been developed. Therefore in seeking to identify the impact of the Eden Project on the local economy, it is important to distinguish between trips and associated spending which resulted from the development of the Project.

[1] Based on the use of the Cambridge model. The ratios are derived from a range of tourism business studies in different types of locality in England.

5.4.2. It has previously been noted in chapter 2 that a significant proportion of visitors to Eden were influenced in their choice of holiday destination by the existence of the Eden Project. Although there are likely to be additional reasons for their choice as well as the Eden Project, it is assumed for the purposes of this exercise that Eden was the decisive factor in their holiday trip choice to come to the South West and therefore their trips are likely to have been additional to what might otherwise have been expected.

5.4.3. The total expenditure associated with holiday trips influenced by the Eden Project is estimated to be £127 million.

Table 5.6 Expenditure associated with holiday trips attracted by Eden

	Accomm	Retail	Catering	Leisure	Travel	Total
St Austell	£6,005	£2,002	£4,158	£924	£2,310	£15,398
Newquay	£8,734	£2,911	£6,047	£1,344	£3,359	£22,396
Rest of Cornwall	£16,688	£5,563	£11,553	£2,567	£6,418	£42,789
Devon	£11,893	£3,964	£8,234	£1,830	£4,574	£30,496
Rest of S.W.	£2,024	£675	£1,401	£311	£778	£5,190
Elsewhere	£4,190	£1,397	£2,900	£645	£1,611	£10,742
Total	£49,534	£16,511	£34,293	£7,621	£19,052	£127,011
%	39%	13%	27%	6%	15%	100%

Note Figures at 1999 values.

5.4.4. Expenditure at Eden by staying tourists attracted to the South West by the Eden Project is estimated at £5.5 million, resulting in a total off site spend of £121 million.

Table 5.7 Off site expenditure associated with Eden influenced holiday trips (£000s)

	Accomm	Retail	Catering	Leisure	Travel	Total
St Austell	£6,005	£1,806	£3,976	£575	£2,310	£14,672
Newquay	£8,734	£2,654	£5,809	£886	£3,359	£21,442
Rest of Cornwall	£16,688	£5,089	£11,115	£1,725	£6,418	£41,035
Devon	£11,893	£3,609	£7,905	£1,198	£4,574	£29,181
Rest of S.W.	£2,024	£609	£1,341	£195	£778	£4,948

Elsewhere	£4,190	£1,261	£2,775	£403	£1,611	£10,240
Total	£49,534	£15,028	£32,920	£4,984	£19,052	£121,518
%	41%	12%	27%	4%	16%	100%

5.4.5. Employment secured by the off site spend is estimated at 3,651 jobs, of which 12% arise in the St Austell area and a further 51% elsewhere in Cornwall.

Table 5.8 Jobs secured as a result of off site expenditure by Eden influenced holidaymakers

	Accomm	Retail	Catering	Leisure	Travel	Total
St Austell	162	18	150	46	64	440
Newquay	235	26	219	71	93	644
Rest of Cornwall	450	50	419	138	178	1,235
Devon	320	36	298	96	127	877
Rest of S.W.	55	6	51	16	22	148
Elsewhere	113	12	105	32	45	307
Total	1,335	149	1,242	398	527	3,651

Note See comments under table 5.4

5.4.6. Indirect jobs maintained or supported in suppliers are estimated at 905 jobs with a further 518 income induced jobs.

5.4.7. Total FTE equivalent direct jobs are estimated at 2,485 jobs with 794 FTE supply jobs and 454 income induced jobs.

Table 5.9 Summary of employment secured by Eden influenced holiday off site spend

	Estimate actual jobs				Estimated FTE jobs			
	Direct	Indirect	Induced	Total	Direct	Indirect	Induced	Total
St Austell	848	189	106	1,144	578	166	93	837
Newquay	1,221	291	122	1,634	832	255	107	1,194
Rest of Cornwall	4,676	1,181	718	6,575	3,184	1,036	630	4,850
Devon	1,435	359	221	2,015	978	315	194	1,487
Rest of S	320	80	49	449	218	70	43	331

W								
Elsewhere	502	127	78	707	342	111	68	521
Total	9,002	2,227	1,294	12,523	6,131	1,953	1,135	9,220

5.5. Day Visitor spending

5.5.1. Day visitors from home will have chosen to come to Eden for their visit, and therefore will be largely additional to tourism activity in the St Austell area. A substantial proportion of the spending associated with the day trip will be absorbed by admission, retail and catering spend at the Eden site, but there will also be an element of off site spending away from the site. It is assumed that this additional spending will take place at the origin area of the trip, although in practice some of it is likely to take place in the St Austell area.

5.5.2. Total visitor spending by day visitors at the Eden site is estimated to be £5 million, with a further £4.3 million of off site spending.

Table 5.10 Off site expenditure associated with day trips from home to Eden

	Retail	Catering	Leisure	Travel	Total
St Austell	£10,076	£55,438	£0	£39,898	£105,412
Newquay	£3,308	£18,296	£0	£13,181	£34,786
Rest of Cornwall	£84,666	£464,544	£0	£334,141	£883,351
Devon	£223,730	£1,233,396	£0	£888,019	£2,345,145
Rest of S W	£73,311	£404,438	£0	£291,228	£768,978
Elsewhere	£22,821	£125,284	£0	£90,126	£238,231
Total	£417,911	£2,301,396	£0	£1,656,595	£4,375,902

Note: It is assumed that no other leisure facilities are visited during the trip. In practice it is likely that some trips will involve additional attraction visits. All figures at 1999 values

5.5.3. The number of jobs secured by off site spending is estimated at 183 in tourism related businesses with a further 37 in supplier businesses and 26 income induced jobs. Nearly all the direct jobs arise in the catering and travel sectors.

Table 5.11 Jobs arising from off site day visitor spending

	Retail	Catering	Leisure	Travel	Total	Indirect	Induced
St Austell	0	2	0	2	4	1	0
Newquay	0	1	0	1	1	0	0
Rest of Cornwall	1	18	0	18	37	8	6
Devon	2	47	0	49	98	20	14
Rest of South West	1	15	0	16	32	7	5
Elsewhere	0	5	0	5	10	2	1
Total	4	87	0	92	183	37	26

Note: It is assumed that no additional spending takes place at leisure facilities. All transport spend is included in the analysis.

5.5.4. Of the spending and associated jobs, it is likely that the additional catering and retail spend will take place largely in the St Austell area, but that travel expenditure will largely take place at the origin of the trip. On this basis, the additional direct jobs arising in the St Austell area will be 93 in total together with 19 indirect jobs and 13 income induced jobs.

Table 5.12 Notional distribution of off site day visitor impact

	Off site spend	Direct jobs	Indirect jobs	Induced jobs
St Austell	£2,759,205	93	19	13
Newquay	£13,181	1	0	0
Rest of Cornwall	£334,141	18	4	3
Devon	£888,019	49	10	7
Rest of South West	£291,228	16	3	2
Elsewhere	£90,126	5	1	1
Total	£4,375,902	183	37	26

6. Impact of Eden on tourism related businesses in case study areas

6.1. Positive impacts on the business

6.1.1. Respondents to the survey were asked if the Eden Project had any positive effects on their businesses in 2001. Overall, 39% of businesses recorded a positive effect, rising to 70% of tourism related businesses in St Austell, but with a lesser impacts in Plymouth and Exeter at around 15% of businesses.

6.1.2. Of the different business sectors, travel and accommodation were the most positive with over half of businesses in these sectors indicating positive effects. In contrast, only around a quarter of operators in the leisure facilities sector recorded positive effects.

Table 6.1 Proportion of businesses recording positive effect

	St Austell	Plymouth	Penzance	Exeter	Overall
Accommodation	87%	35%	39%	39%	51%
Retail	66%	8%	18%	10%	35%
Catering	74%	15%	27%	4%	38%
Leisure providers	58%	6%	24%	14%	24%
Travel	67%	100%	80%	0%	57%
Overall	70%	16%	28%	15%	39%

6.1.3. The main positive effects identified in the response were:

- Increases in the number of customers at 29%
- Increases in turnover at 25%
- Improvements in image at 22%
- Increases in staffing at 5%.

6.1.4. While travel and accommodation businesses enjoyed the highest increases in customers and turnover, increases in staffing were highest in the catering and accommodation sectors. In terms of location, St Austell recorded the highest positive effects across the board, followed by Penzance, with Plymouth and Exeter reflecting the least impact. Only St Austell businesses indicated any increase in staff numbers.

6.1.5. Insufficient information was returned to allow an overall calculation of the value of the increase in turnover, but the average recorded for St Austell businesses was some 18%.

Table 6.2 Positive effects by type and sector

	Turnover	Customer	Staff	Easier to recruit	Image	All
By business type						
Accommodation	31%	36%	7%	0%	31%	51%
Retail	25%	30%	3%	0%	23%	35%
Catering	28%	31%	9%	0%	19%	38%
Leisure providers	6%	17%	0%	0%	15%	24%
Travel	39%	43%	4%	0%	17%	57%
By location						
St Austell	54%	57%	12%	0%	38%	70%
Plymouth	6%	10%	0%	0%	7%	16%
Penzance	12%	22%	0%	0%	22%	28%
Exeter	7%	9%	0%	0%	10%	15%
Overall	25%	31%	5%	0%	23%	39%

6.2. Negative impacts on businesses

6.2.1. Some 18% of respondents recorded a negative impact on their business, a much lower proportion than the 39% recording positive effects. All the business sectors recorded a similar level of negative effects except for businesses concerned with transport who recorded higher levels. As with the pattern of positive impacts, negative impacts were concentrated in St Austell where 40% of businesses experienced such effects, compared to 9% in Penzance and only 1% in Exeter.

Table 6.3 Proportion of businesses recording negative effects

	St Austell	Plymouth	Penzance	Exeter	Overall
Accommodation	45%	0%	15%	4%	18%
Retail	38%	5%	3%	0%	18%
Catering	38%	5%	7%	0%	17%
Leisure providers	50%	0%	18%	0%	17%
Travel	42%	0%	20%	0%	26%
Overall	40%	3%	9%	1%	18%

6.2.2. The main negative effects identified by businesses were:

- The worsening of traffic at 13%
- Increased difficulties of recruitment at 7%
- Reduction in customers at 2%
- Reduction in turnover at 2%

6.2.3. Negative effects arising from increased traffic were most strongly felt by the travel related businesses and retailers, while recruitment difficulties were most strongly felt by accommodation and catering establishments. In terms of location, a third of all businesses in St Austell reported traffic impacts, but the negative effects outside St Austell were much lower.

Table 6.4 Negative effects by type and sector

	Turnover	Customer	Staff	Difficult to recruit	Traffic	All
By business type						
Accommodation	2%	3%	1%	11%	10%	18%
Retail	1%	1%	0%	5%	15%	18%
Catering	2%	1%	0%	10%	9%	17%
Leisure providers	2%	4%	0%	2%	13%	17%
Travel	0%	4%	0%	0%	22%	26%
By location						
St Austell	2%	2%	0%	15%	34%	40%
Plymouth	0%	1%	0%	2%	1%	3%
Penzance	3%	5%	1%	1%	1%	9%
Exeter	1%	0%	0%	1%	0%	1%
Overall	2%	2%	0%	7%	13%	18%

6.3. Perceived impact on Cornwall

6.3.1. Businesses were asked what they considered the overall impact of the Eden Project on the economy and the image of Cornwall.

6.3.2. Some 62% of all respondents considered that the Eden Project had a very positive impact on the Cornish economy, while a further 21% suggested that it had a fairly positive impact. Less than 0.5% suggested it had a negative impact, while 1% suggested no impact and 17% were unsure. Generally, the pattern is similar across the business sectors, although the leisure providers and travel sectors were slightly less positive than the others. In terms of location, St Austell and Penzance are more positive than the Devon locations.

Table 6.5 Perceptions on the impact of Eden on the Cornish Economy

	Very negative	Fairly negative	No effect	Fairly positive	Very positive	Unsure
By business type						
Accommodation	1%	0%	0%	20%	64%	15%
Retail	0%	0%	2%	22%	61%	14%
Catering	0%	0%	1%	16%	67%	16%
Leisure providers	0%	0%	0%	20%	44%	35%
Travel	0%	0%	0%	35%	52%	13%
By location						
St Austell	0%	0%	1%	19%	76%	5%
Plymouth	0%	0%	1%	17%	41%	40%
Penzance	1%	1%	1%	24%	63%	9%
Exeter	0%	0%	1%	24%	47%	28%
Overall	0%	0%	1%	21%	61%	17%

6.3.3. A similar pattern emerges in respect of perceived changes in the image of Cornwall with almost three quarters of all respondents indicating a very positive effect. There was little differentiation between the business sectors, while Cornish businesses were generally more positive than Devon operators.

Table 6.6 Perceptions on the impact of Eden on the image of Cornwall

	Very negative	Fairly negative	No effect	Fairly positive	Very positive	Unsure
By business type						
Accommodation	0%	1%	2%	21%	72%	4%
Retail	0%	0%	0%	19%	73%	7%
Catering	0%	0%	0%	13%	81%	6%
Leisure providers	0%	0%	4%	27%	61%	7%
Travel	0%	0%	5%	19%	71%	4%

	Very negative	Fairly negative	No effect	Fairly positive	Very positive	Unsure
By location						
St Austell	1%	0%	1%	15%	81%	3%
Plymouth	0%	1%	1%	20%	65%	13%
Penzance	0%	0%	1%	24%	71%	4%
Exeter	0%	0%	1%	22%	67%	9%
Overall	0%	0%	1%	19%	73%	6%

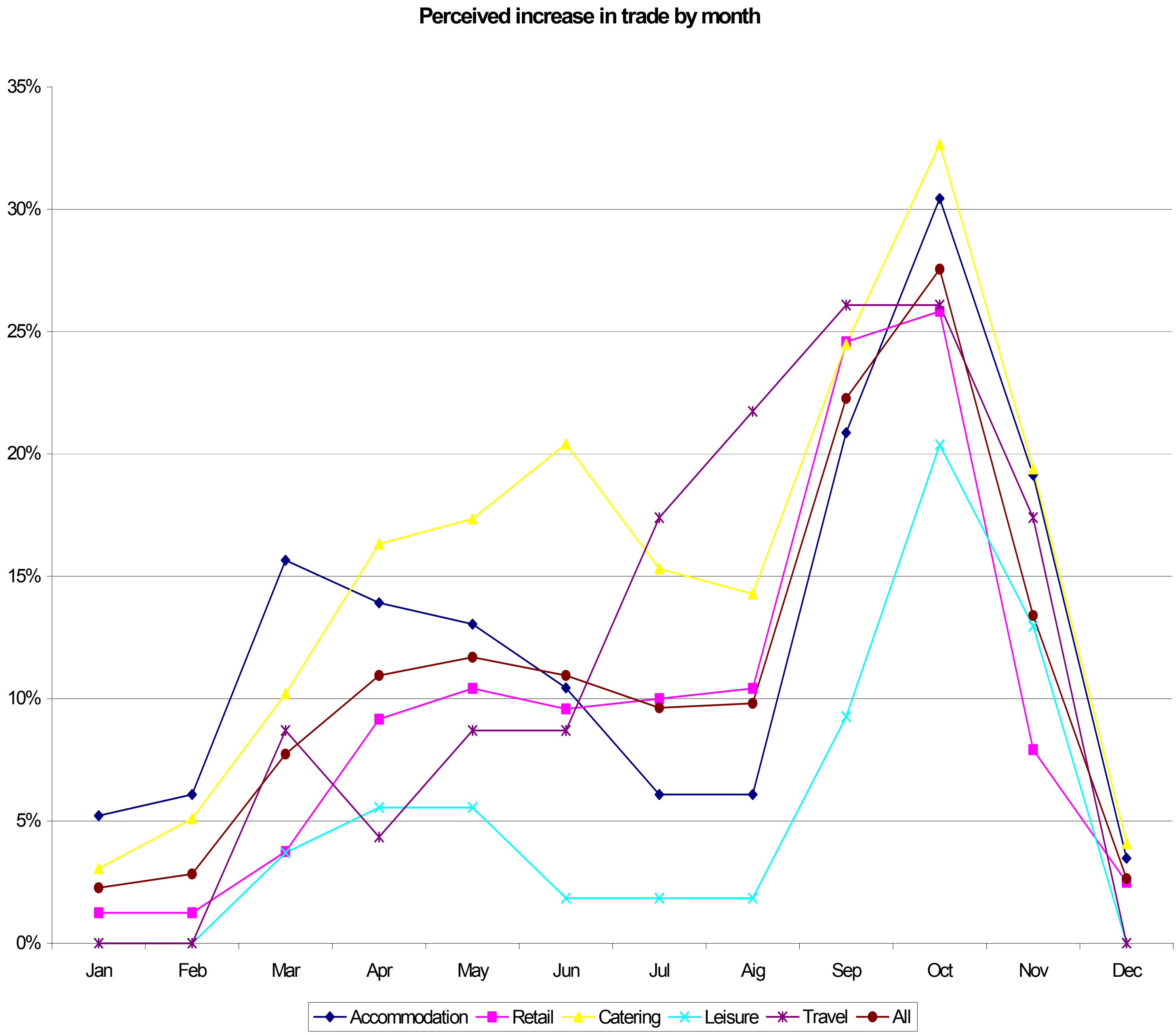
6.4. Effect on tourism season

6.4.1. The businesses responding to the survey were asked whether they considered that the opening of the Eden Project had led to any changes in the length of the holiday season. Just under half of all businesses suggested that there was a noticeable effect. Catering establishments were the most positive followed by travel and retail businesses while leisure providers and accommodation were least positive. In terms of location, businesses in St Austell were much more likely to suggest an impact, with Devon businesses least likely to indicate a lengthening.

Table 6.7 Perceived effects on the length of the season

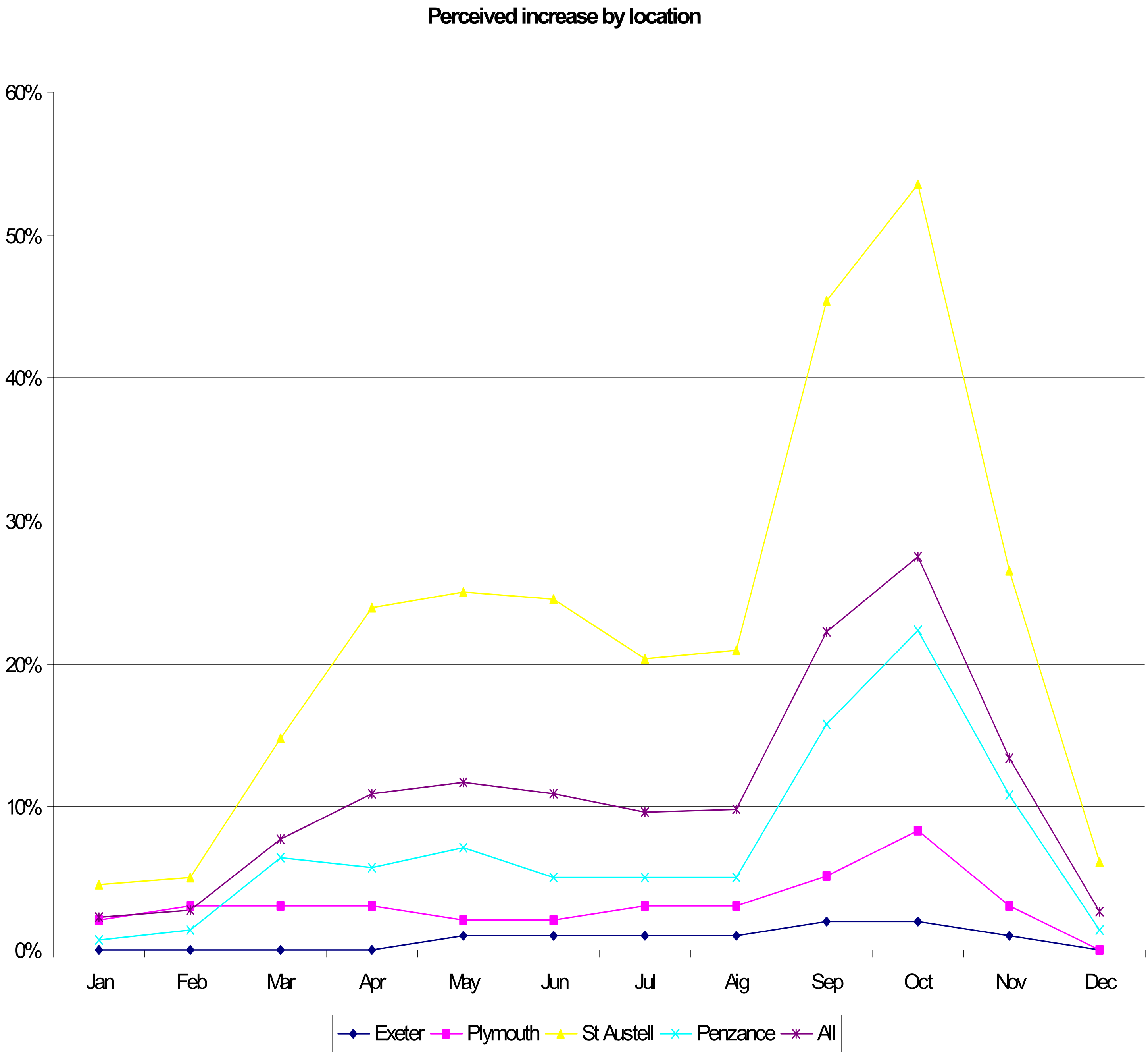
	Increase	Decrease	No change
By business sector			
Accommodation	41%	1%	58%
Retail	49%	1%	50%
Catering	57%	0%	43%
Leisure providers	36%	0%	64%
Travel	50%	0%	50%
By location			
St Austell	77%	0%	23%
Plymouth	20%	0%	80%
Penzance	35%	2%	63%
Exeter	10%	0%	90%
Overall	47%	1%	52%

6.4.2. As might be anticipated, the main peak in terms of the lengthening of the season due to the Eden Project arises in October, although the accommodation sector also identified a lower subsidiary effect in March.



Note: Percentages represent proportion of businesses indicating an effect during the month.

6.4.3. In terms of location, St Austell businesses indicated the greatest increase in trade, with a 54% of respondents indicating an increase in October. By contrast, Exeter businesses perceived the least impact, with at best a 2% increase in September and October.



6.5. Investment intentions

6.5.1. The business survey sought information from respondents as to whether the Eden Project had affected their investment plans for 2002. While a majority did not indicate any change, overall 12% of businesses suggested that they intended to increase their investment during the year, although 1% were intending to decrease investment.

6.5.2. Not surprisingly, the main focus for increased investment is the St Austell area, with more limited activity in Penzance. Catering and accommodation providers were the main sectors expressing interest.

Table 6.8 Effect on investment plans for 2002

	Increase	Decrease	No change
By business sector			
Accommodation	16%	1%	83%
Retail	8%	0%	92%
Catering	22%	2%	76%
Leisure providers	8%	0%	92%
Travel	4%	0%	96%
By location			
St Austell	27%	1%	73%
Plymouth	3%	0%	97%
Penzance	6%	1%	93%
Exeter	1%	0%	99%
Overall	12%	1%	87%

7. Total estimated impact of Eden Project

7.1. Area definition

7.1.1. The additional amount of tourism activity generated by the Eden Project will depend on the defined area. Thus the impact at County level will be greater than for an individual District since it will include additional activity stimulated outside the District. This chapter will focus on the additional activity generated in:

- The St Austell area, including Fowey and Mevagissey
- Cornwall County as a whole including the St Austell area
- The South West Region including Cornwall.

7.2. Additional tourism activity

7.2.1. The additional tourism activity is defined as activity which would not have occurred without the development of the Eden Project. Broadly this is taken to be day trips focused on the Eden Project and trips from holidaymakers which have been influenced in their choice of holiday destination by Eden. Additional day trips will also arise from holiday makers staying outside the local area.

7.2.2. For the **St Austell area**, the additional visits attracted to the area are considered to be:

- Day trips from home to the Eden Project excluding those originating in the St Austell area
- Holiday based visits to Eden by those influenced to holiday in the area by the existence of the Project
- Other holiday based visits to Eden apart from those already staying on holiday in the St Austell area

7.2.3. In addition to the days represented by the above, additional days will arise in the area as a result of those holidaymakers staying in the St Austell area whose trip was influenced by the Eden Project.

7.2.4. For **Cornwall**, the additional activity will consist of:

- Day trips from home to the Eden Project excluding those originating from homes in Cornwall
- Holiday based visits to Eden by those influenced to holiday in the area by the existence of the Project

- Other holiday based visits to Eden from those staying in holiday accommodation outside the County

7.2.5. As with St Austell, additional nights will arise in connection with holiday trips staying in the County which were influenced to come by the Eden Project.

7.2.6. For the **South West Region** as a whole, the additional activity is taken to be:

- Day visits to Eden from outside the Region
- Holiday based visits to Eden by those influenced to holiday in the area by the existence of the Project
- Day visits to Eden by holiday makers staying outside the South West

7.2.7. Again additional nights will arise from holidaymakers staying in the Region whose holiday destination choice was influenced by Eden.

Table 7.1 Additional tourism activity generated by Eden

	St Austell area	Cornwall	South West
Visits			
Day trips from home	466,160	366,013	25,987
Eden influenced holidays	534,702	534,702	534,702
Other holidays	535,122	93,039	21,595
Total visits	1,535,985	993,754	582,283
Visitor Days			
Day trips from home	466,160	366,013	25,987
Eden influenced holidays	828,700	2,094,539	2,752,692
Other holidays	535,122	93,039	21,595
Total visitor days	1,829,982	2,553,592	2,800,274

7.3. Business turnover stimulated by the Eden Project

7.3.1. Business turnover will arise directly from spending by visitors at Eden and in off site spending in tourism related establishments, together with spending by those business in the purchase of supplies and services.

7.3.2. In the case of **St Austell**, business turnover will include:

- Visitor spending at Eden
- Off site spending by day visitors attracted to St Austell by the Eden Project
- Off site spending by holidaymakers staying in the area whose choice was influenced by the existence of the Eden Project
- Spending by Eden on the purchase of supplies and services in the St Austell area
- Spending by tourism related businesses in receipt of visitor spending in the St Austell area on the purchase of supplies and services from local suppliers.

7.3.3. In addition, there is likely to be an element of additional off site spend by other holidaymakers who have travelled into the area to visit Eden and who spend part of their day elsewhere in the local area. Unfortunately, we do not have relevant information to illustrate such spending patterns, and therefore no allowance for such spending has been made. Further business spending will arise as a result of spending by employees in tourism supported jobs, but this has not been included in the business turnover figures.

7.3.4. For **Cornwall**, business spending in addition to that in St Austell will arise from:

- Eden influenced holidaymakers staying elsewhere in Cornwall
- Supply spending by businesses in receipt of visitor spending by the above group
- Supply spending by Eden in businesses in Cornwall in addition to those in St Austell area.

7.3.5. Spending off site by day visitors from homes within Cornwall is however discounted.

7.3.6. For the **South West Region** as a whole, spending in addition to Cornwall will arise from:

- Eden influenced holidaymakers staying elsewhere in the South West
- Supply spending by businesses in receipt of visitor spending by the above group
- Supply spending by Eden in businesses in the South West in addition to those in Cornwall.

7.3.7. Off site spending by day visitors from homes within the South West is however discounted.

7.3.8. Overall, business turnover stimulated in the St Austell area is estimated to amount to £55 million, rising to £139 million in Cornwall as a whole, and £184 million in the South West as a whole.

Table 7.2 Additional tourism activity generated by Eden

	St Austell area	Cornwall	South West
Visitor spend at Eden	£16,323,580	£16,323,580	£16,323,580
Eden spend on suppliers	£1,123,907	£2,796,312	£4,468,384
Off site spend by day visits from outside the area	£2,653,794	£2,082,980	£148,105
Off site spending by Eden influenced holidaymakers	£14,672,488	£77,149,949	£111,278,686
Supply spending by tourism related businesses	£20,101,281	£40,218,089	£51,438,424
Total business turnover	£54,875,049	£138,570,910	£183,657,178

7.4. Employment stimulated by the Eden Project

7.4.1. Employment will arise as a direct result of visitor spending at Eden and in other tourism related businesses, indirectly in suppliers to those businesses and generated by the spending of income by employees whose jobs are maintained or supported directly or indirectly by tourism spending.

7.4.2. On the basis of the business turnover flows identified in the previous section, the total number of jobs secured by the Eden Project in the St Austell area is estimated at 1,330, rising to 3,950 for Cornwall as a whole and 5,587 in the South West Region as a whole.

Table 7.3 Employment stimulated by Eden Project

	St Austell	Cornwall	South West
Eden Project jobs	435	435	435
Eden suppliers	33	76	125
Off site day visit	89	65	5
Off site Eden holidaymakers	440	2,319	3,344
Tourism suppliers	116	576	828
Income induced	90	346	711
Total jobs	1,203	3,817	5,448

Note: The above jobs include part time and seasonal working. Tourism supplier jobs based on business surveys elsewhere in UK and may be high in the South West context.

7.5. Income to local residents by area

7.5.1. The jobs identified in the previous section generate wages for the employees. By using average wage costs for the South West derived from the New Earnings Survey it is possible to estimate the total income in terms of gross wages and salaries generated in each area. Wage levels for Cornwall have been adjusted downwards by 10% to take account of below average earnings for the County

7.5.2. Overall it is estimated that some £11.6 million of wage and salary income is generated in the St Austell area, rising to £36 million in Cornwall as a whole and £53 million for the South West.

Table 7.4 Estimated income associated with Eden stimulated employment

	St Austell	Cornwall	South West
Eden Project jobs	£4.5	£4.5	£4.5
Eden suppliers	£0.4	£1.0	£1.7
Off site day visit	£0.7	£0.5	£0.0
Off site Eden holidaymakers	£3.6	£18.7	£27.9
Tourism suppliers	£1.5	£7.3	£10.9
Income induced	£0.9	£3.6	£7.7
Total jobs	£11.6	£35.6	£52.7

Note: Values in £ million at 99 values. Details of the calculations are set out in Appendix 3.

Appendix 1: Business survey breakdown

The business survey involved two target groups, namely:

- Businesses from which the Eden Project purchases supplies and services
- Tourism related businesses in the St Austell, Plymouth, Penzance and Exeter areas.

The suppliers survey

A list of 60 suppliers was identified from the Eden accounts, and questionnaires forwarded to the businesses. The questionnaire sought information on:

- Whether the Eden Project had any positive effects in 2001
- Whether the Eden Project had any negative effects in 2001
- What has been the overall impact on the economy of Cornwall of the Eden Project
- What has been the overall impact on the image of Cornwall of the Eden Project
- Has the Eden Project affected your investment plans for 2002
- What proportion of your turnover comes from people staying on holiday and has there been any effect on the length of holiday season
- What proportion of your purchases are made in the local area, South West and elsewhere
- An indication of turnover and employment in the business.

Of the 60 companies contacted, 47 returned completed questionnaires, a response rate of 78%.

Tourism related business survey

The tourism related business survey contacted businesses in the four selected areas. The areas were chosen to illustrate the differing impacts of the Eden Project in varying locations in Cornwall and Devon.

Tourism related businesses were defined as those in which visitors are likely to make direct purchases, namely accommodation, retail outlets, catering establishments, leisure providers and travel related businesses. The latter included petrol filling stations, taxis and public transport operators. Lists of eligible businesses in each category for each area were obtained from PROSPER, and questionnaires circulated by post. In order to ensure a reasonably representative response, telephone reminders were made to a sample of sub groups where the response was particularly low.

Overall, a total of 1,913 businesses received questionnaires and completed returns were obtained from 530, a response rate of 28%.

	Questionnaires sent	Responses received	Response rate
St Austell			
Accommodation	51	31	61%
Retail	199	102	51%
Catering	80	39	49%
Leisure	26	12	46%
Travel	24	12	50%
Total	**380**	**196**	**52%**
Plymouth			
Accommodation	99	20	20%
Retail	199	37	19%
Catering	199	20	10%
Leisure	47	18	38%
Travel	17	1	6%
Total	**561**	**96**	**17%**
Penzance			
Accommodation	92	41	45%
Retail	200	61	31%
Catering	110	15	14%
Leisure	37	17	46%
Travel	14	5	36%
Total	**453**	**139**	**31%**
Exeter			
Accommodation	53	23	43%
Retail	200	40	20%
Catering	191	24	13%
Leisure	58	7	12%
Travel	17	5	29%
Total	**519**	**99**	**19%**

Business Sector Totals			
Accommodation	295	115	39%
Retail	798	240	30%
Catering	580	98	17%
Leisure	168	54	32%
Travel	72	23	32%
Location Totals			
Exeter	519	99	19%
Plymouth	561	96	17%
St Austell	380	196	52%
Penzance	453	139	31%
Total	1,913	530	28%

The questionnaire used for the tourism related businesses was identical to the suppliers questionnaire except for the omission of the question on the location of the purchases of business supplies.

Both business surveys were carried out by Acumenia.

Appendix 2 Estimate of Full Time Equivalent employment

The employment stimulated by the Eden Project has been estimated from the analysis of the various surveys in section 7 of this study. The estimates are set out in table A below.

Table A Employment stimulated by Eden Project (actual jobs)

	St Austell	Cornwall	South West
Eden Project jobs	435	435	435
Eden suppliers	33	76	125
Off site day visit	89	65	5
Off site Eden holidaymakers	440	2,319	3,344
Tourism suppliers	116	576	828
Income induced	90	346	711
Total jobs	1,203	3,817	5,448

In order to provide a basis for estimating the local income generated, it is preferable to convert the estimates of actual jobs, which contain part time and seasonal jobs, into Full Time Equivalents.

Table B below sets out estimates of FTE jobs based on the estimates of actual jobs set out in table A. The estimates assume that:

- All jobs at Eden are full time . In practice there are some additional seasonal jobs at the height of the season but these have not been included in the totals.
- A job arising in tourism related businesses as a result of day and staying visitor spend is the equivalent of 0.69 FTE jobs, based on business survey outcomes used in the Cambridge Model.
- A job arising in supply businesses as a result of purchases by tourism related businesses is equivalent to 0.88 FTE jobs, based on national figures in the service sector.

Table B Estimated employment stimulated by Eden Project (FTE jobs)

	St Austell	Cornwall	South West
Eden Project jobs	435.0	435.0	435.0
Eden suppliers	29.2	67.0	110.0
Off site day visit	61.2	44.6	3.4
Off site Eden holidaymakers	303.1	1,599.1	2,306.0
Tourism suppliers	102.1	505.3	726.3
Income induced	78.9	303.6	623.4
Total jobs	1,009.5	2,954.6	4,204.1

The totals for tourism suppliers and income induced jobs should be treated with caution as they are based on business studies in locations outside the South West. Other work such as the Devon and Cornwall Input/Output model suggests rather lower multiplier ratios.

Appendix 3 Estimates of Local Income

Local income has been estimated using average annual salaries derived from the New Earnings survey and the estimate of FTE jobs. Annual wage levels derived from the New Earnings Survey for 1999 have been taken as:

- £11,800 for accommodation
- £13,600 for retail
- £11,800 for catering
- £16,300 for leisure providers
- £15,700 for travel/transport
- £16,100 for wholesale and retail distribution
- £13,000 as a composite figure for off site spending based on the number of jobs in each sector supported by visitor off site spending.

In estimating the gross income from wages and salaries, the following figures have been used:

- For Eden employment, the annual wage costs have been assumed to be double the total paid between April and September
- For Eden Suppliers, the figure for wholesale and retail distribution (£16,100)
- For off site day visit jobs, the composite figure for off site spending (£13,000)
- For off site Eden holidaymakers, the composite figure for off site spending (£13,000)
- For tourism suppliers, the figure for wholesale and retail distribution (£16,100)
- For income induced jobs, the composite figure for off site spending. (£13,000)

Table C Estimate of income based on SW Region wage rates

	St Austell	Cornwall	South West
Eden Project jobs	£4.5	£4.5	£4.5
Eden suppliers	£0.5	£1.1	£1.8
Off site day visit	£0.8	£0.6	£0.0
Off site Eden holidaymakers	£3.9	£20.8	£30.0
Tourism suppliers	£1.6	£8.1	£11.7
Income induced	£1.0	£4.0	£8.1
Total income	£12.4	£39.1	£56.2

It is likely that the regional figures may be high in respect of local employment in Cornwall and Devon where overall earnings are lower than the regional average. While part of the differential is accounted for by a different economic structure in different parts of the region, the fact that the average wage and earnings opportunity are below the regional average in Cornwall is likely to depress wage levels across the sectors as a whole.

Therefore in estimating wage income in St Austell and in Cornwall, it has been assumed that wage levels in the respective sectors are 10% below the regional average. The figures for wage income for Eden employees remains the same since it is based on recorded figures, while the figures for the South West take account of the lower earnings of jobs in Cornwall.

Table D Estimates of local income assuming below average wage rates

	St Austell	Cornwall	South West
Eden Project jobs	£4.5	£4.5	£4.5
Eden suppliers	£0.4	£1.0	£1.7
Off site day visit	£0.7	£0.5	£0.0
Off site Eden holidaymakers	£3.6	£18.7	£27.9
Tourism suppliers	£1.5	£7.3	£10.9
Income induced	£0.9	£3.6	£7.7
Total income	£11.6	£35.6	£52.7

Appendix 4 Displacement effects

The opening of a major new attraction such as Eden is likely to have an impact in altering the previous pattern of visits to leisure providers in the area. Unfortunately, the opening of the Eden Project coincided with the onset of the Foot and Mouth epidemic and the closure of much of the countryside public rights of way network. The epidemic had a major impact on visitor patterns to rural areas. As a result, it is not possible to separate out the effect of the Eden Project from the impact of the Foot and Mouth epidemic of the visitor numbers to existing leisure providers.

The displacement effects associated with Eden are likely to include:

- Attraction to Eden of day trips by people on holiday in Cornwall and beyond who might otherwise have visited alternative leisure attractions.

- Attraction of day visits from home from people who might otherwise have visited alternative leisure attractions

- Visits to other leisure attractions by people who were stimulated to take a holiday in Cornwall and elsewhere because of the Eden Project

- Visits to Eden from home by people who might otherwise have not undertaken any visit or visited leisure attractions outside Cornwall or the Region

The first two effects will tend to reduce visits to alternative leisure providers, while the third will tend to stimulate additional visits to alternative leisure providers which might not otherwise have occurred.

Other evidence for calculating likely displacement effects is limited. However, early versions of the UK Leisure Day Visit survey (UKLDVS) included questions on day visits from holiday bases. In 1993, the Survey estimated that 32.5 million leisure day trips were taken from holiday bases in the West Country. The United Kingdom Tourism Survey indicates that there were a total of 59.7 million holiday nights spent in the West Country in that year, suggesting that there were an average of 0.54 leisure day trips per holiday night. The UKLDVS also indicated that visits to leisure providers accounted for 14% of holiday based day trips.

The additional nights associated with holiday visits stimulated by Eden in Cornwall amounts to 1.9 million. Applying the ratio from the 1993 survey would suggest that this would generate around 1 million leisure day trips from holiday accommodation, of which 334,000 were visits to Eden. The implication from this calculation is that an additional 666,000 day trips were stimulated in Cornwall by holidaymakers attracted to the county by the Eden Project. However, most of these trips may not have involved a visit to a tourist attraction but rather a range of other activities, so that there may have been no significant numbers of additional visits to alternative leisure providers.

A major effect of the Eden Project however is to draw in considerable numbers of additional visitors to the St Austell area. There is an expectation that leisure providers in the vicinity of Eden may therefore have received visits from people who had already visited Eden on that day. There is some anecdotal evidence that Heligan Gardens has also enjoyed a substantial increase in visitor numbers during 2001, which may reflect this effect.

Finally, the adverse displacement on leisure providers will be spread widely across Cornwall and Devon given the wide dispersal of resident and holiday based accommodation.

Appendix 5 Notes for future monitoring

This report has benefited from the considerable data base assembled in the visitor and business surveys. However, the analysis has also indicated some areas where additional information would enable firmer and more robust conclusions to be drawn.

In considering future monitoring activity, it is suggested that consideration might be given to the following aspects:

- Extending the visitor survey into additional months particularly in the shoulder and winter periods. The analysis of shoulder months in this study was based on the findings from the May-June survey, which may not be truly representative of other shoulder months.

- Coach parties were excluded from the August survey. This appears to have depressed the number of visits ascribed to the Newquay area and its hotel accommodation. They should be included as a matter of course.

- Further probing of the importance of the Eden Project to the decision to come to the area should be sought to allow a more accurate view of the stimulus provided by Eden. Questions along the following lines might be considered include:

  “ Could you indicate the relative importance of the Eden Project in your decision to come to this area on a scale of 1 to 10, with 1 representing no influence and 10 representing that Eden was the sole reason for making the trip?”

  “If the Eden Project was closed, would you still have taken a holiday in this area (or made a day trip to this area)?”

- In order to ascertain whether additional trips to leisure providers are being made by people drawn into the St Austell area by the Eden Project, it would be useful to ask visitors whether they have already, or intend to visit another attraction on the day of their visit to Eden, and if so, which attraction.