Economic Value of Mountain Biking in Scotland

Report

for

Scottish Enterprise

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1. Introduction

The following report on behalf of Scottish Enterprise sets out the current economic impact generated by mountain biking tourism across Scotland, as well as identifying potential future opportunities for the sector.

1.1 Background

Scotland has many purpose built mountain biking trail facilities. The success of the 7stanes, seven mountain biking trail locations within the South of Scotland, has illustrated increased economic activity together with quality product development which has led to international recognition.

Detailed discussions have taken place between individual partner agencies namely Scottish Enterprise, EventScotland, Forestry Commission Scotland, Highlands and Islands Enterprise, Scottish Cycling, Scottish Natural Heritage, SportScotland and VisitScotland. Known as the Scottish Mountain Biking Development Consortium (SMBDC), these agencies are working together to establish a Strategic Framework for the Sustainable Development of Mountain Biking in Scotland which will promote partnership working at both national and local levels as well as a co-ordinated focus to ensure Scotland remains at the forefront of mountain biking development. To help support this process, this study was commissioned to establish the current economic impact of the sector and potential future opportunities.

1.2 Study Objectives

The overall aim of the study was to undertake research and present a report which establishes a baseline for the economic impact of mountain biking in Scotland, illustrating both current activity, together with potential opportunities in relation to the tourism offering.

This report:

- establishes the existing economic impact of mountain biking tourism across Scotland;

- identifies potential investment opportunities and initiatives for the future to further maximise the potential of mountain bike tourism;

- identifies future trends in mountain biking tourism with a view to establishing where Scotland has genuine competitive advantage and as a result can generate valuable impacts; and

- identifies potential opportunities for cross-over activity with other industries where appropriate, such as food and drink and textiles.

1.3 Overall Approach

There was already a considerable amount of market research that had been undertaken on the mountain biking market in Scotland. Therefore, our approach to this study was to utilise this existing research where appropriate and build upon it.

Our overall approach to the study involved:

– utilising existing research, updating it where required;

– linking together the separate research findings to provide a composite picture for Scotland. The previous research had different objectives, covered different areas and was undertaken at different times. A key part of the study involved collating and aggregating this data; and

– identifying and filling the gaps. Despite the large amount of information already in existence there were still gaps in knowledge.

The previous research was, therefore, supplemented by:

– stakeholder consultations;

– a survey of mountain biking club members (in Scotland and the North of England);

– a survey of onsite and offsite businesses linked to the mountain biking market;

– a survey of tour operators in the mountain biking market;

– consultations with key individuals in forest districts, mountain biking centres, private developments and local councils, as appropriate;

– consultations with trail designers/skills coaches; and

– review of trends/benchmarking of other areas.

Detailed reporting from the surveys and consultations is provided in the Appendices. In the report we focus on distilling the key findings from this and previous research to quantify the current market, identify development opportunities and factors that will need to be addressed to achieve this, and provide an assessment of the potential future market.

1.4 Report Structure

The remainder of this report is structured as follows:

– Chapter 2: Current Market and Economic Impact;

- Chapter 3: Experience from Elsewhere;
- Chapter 4: Issues, Gaps and Opportunities;
- Chapter 5: Future Economic Potential; and
- Chapter 6: Conclusions.

The Appendices provide the following feedback from the fieldwork:

- Appendix A: Individual Members Survey;
- Appendix B: Onsite & Offsite Businesses and Tour Operators Survey;
- Appendix C: Forest District and Mountain Biking Centre Consultations;
- Appendix D: Stakeholder Consultations;
- Appendix E: Trail Designers/Skills Coaches Consultations;
- Appendix F: Planned Developments;
- Appendix G: Experience from elsewhere;
- Appendix H: Off Road Cycling Markets;
- Appendix I: List of Consultees; and
- Appendix J: Mountain Biking Glossary.

2. Current Market and Economic Impact

2.1 Introduction

This Chapter sets out the current mountain biking market and its impact on the Scottish economy. It begins with a quantification of the wider market before focussing on the key part of the market where mountain biking is the main part of an individual's trip[1] rather than simply a component of a wider holiday/trip. Identifying the latter is important when looking at ways to influence and help support the future development of the market.

2.2 Market Trends

Recreational Cyclists

Mountain bikers cycle on average between 50 and 60 times a year i.e. once a week. This is the case whether they are recreational cyclists, cross-country mountain bikers or downhillers. For an explanation of recreational cycling terms, please see the glossary provided in **Appendix J**). All the research carried out by EKOS and TRC in Scotland and the North of England is very consistent in this. However, the majority of these trips are directly from home with friends, family or alone – in general these trips are taken to keep fit or as a casual recreational activity. The club research outlined in Appendix A demonstrates that club cyclists on average cycle more than twice a week i.e. 100 times a year.

The recreational cycling research carried out in Edinburgh, Peebles and Newcastle in 2007 for Scottish Enterprise highlighted that 10% of the adult population cycled for recreational purposes. **Table 2.1** shows their preferred choice of recreational cycling (i.e. first choice).

Table 2.1: Preferred Cycling Trip for Recreation	
First Choice	**%**
Single Track Off-Road	25.4%
Off-Road (Non-Single Track)	27.1%
Road Cycling	47.5%
Total	**100.0%**

Off-road cycling accounts for 52.5% of the (first choice) recreational cycling market.

Respondents were then asked if they went on cycling trips more than 10 miles away from home, where their main motivation was for recreational cycling. The results are given in **Table 2.2**.

1 It is not possible to entirely separate this part of the market out but the analysis brings us much closer to this and forms a more robust basis from which to make future investment decisions.

Table 2.2: Percentage Going on Trips 10 Miles from Home	
First Choice	**%**
Single Track Off-Road	84.7%
Off-Road (Non-Single Track)	16.2%
Road Cycling	5.7%

Single track riders are those most prepared to travel away from home to undertake recreational cycling (85%) i.e. the majority are day and overnight tourists. That compares with only one in 20 road cyclists, who mainly cycle close to home.

Research has also revealed that single track mountain bikers go on trips (10 miles from home) numerous times a year (on average 16). Research amongst mountain bike clubs shows their average to be 21 trips per annum compared with only six trips for other off-road first choice users. For off-road cyclists, both single track and non-single track, one in five of their annual trips away from home are overnight.

It is evident from the research that the number of non-single track users (as a first recreation choice) at 27% is similar to the single track market (25%) but both are lower than the road cycle market (48%). However, the majority of non-single track and road cyclists do not take recreational trips away from home and those that do take far fewer trips than the single track users.

The challenge for the future is to:

- encourage more people into the single track market (particularly to built centres) by improving access to a greater population;
- encourage a greater proportion of off-road cyclists to go on recreational trips both to ride single track and non-single track trails; and
- encourage road cyclists to cycle off-road and take recreational trips.

Built Mountain Bike Centres

Mountain bike built centres are a key driver of mountain bike activity (particularly tourism day and overnight visitors) amongst Scottish, other UK and overseas visitors. They are a key motivator in encouraging people to make visits away from home. Without the built infrastructure, people would predominantly cycle locally and spend little money in the economy.

Where the main motivation for an overnight recreational trip is mountain biking, this is dominated by visits to trail centres, particularly amongst non-Scottish residents.

There is evidence of Scottish residents staying overnight close to trail centres, particularly where they live more than two hours drive from the centre. In the North of Scotland, where there are fewer trail centres, local residents are often travelling more than three/four hours each way for a single track ride at a built trail centre.

However, it has been cited (anecdotally) that during the current economic climate, residents from the North East of Scotland, in particular, are travelling less to the trail centres in the Central Belt or making fewer overnight visits. Therefore, it is important not to become complacent about people's willingness to travel long distances to sites (particularly in difficult economic times).

There have been some important trends in the product offer at built centres and the market using them. Some of the key findings in relation to product development include:

- the development of freeride, jump park and pump tracks (see **Appendix J** for explanation) is changing the nature of the visitor market with youth and downhill/freeriders travelling to largely cross-country trail centres for these facilities for day and overnight stays;

- the development of a large number of red/intermediate trails has upskilled the market to this level and many of these riders are now looking for their next challenge; and

- whilst there has been development of additional blue trails at Glentress, Glentrool, Ae, etc, it appears that the beginners, family and older cyclists market have not yet really been fully developed/exploited. Built trail centres are still dominated by intermediate and advanced riders. However, those centres in a tourist area, such as Kirroughtree, have a higher proportion of beginners and families.

Trends in the type of markets using built centres include:

- there is evidence of greater use of trail centres by women, but males aged 24 to 35 still dominate;

- the development of trail centres has led to new business opportunities for skill and mountain bike development coaches. The coaches run themed technical skill days which individuals can join, as well as offering private lessons. In some instances, more than 50% of demand for these coaches is from people living outside Scotland. The number of qualified mountain bike and cycle trail leaders has also grown;

- weekend kids clubs are popular at trail centres and have come a long way since the 'full mental' club operating during the mid 1990s in Mabie Forest. Kids clubs are often oversubscribed (see Glentress);

- Glentress is still the main draw for visitors from the North of England and further South. A trip to Glentress is often linked with a visit to one or two other centres – Dalbeattie, Ae and Mabie in particular;

- Kirroughtree is attracting groups of visitors from Ireland, both as day visitors and for short breaks;

- there is evidence of greater club and group use at mountain bike centres for both day and overnight breaks, particularly at weekends;

- by far the greatest use of mountain bike centres is local residents with friends on day trips; and

- the demand from school and youth groups is growing as Local Authorities are witnessing health and fitness, leadership and entertainment benefits.

At present there is little linkage between purpose-built mountain bike centres and general wilderness routes. In Wales, mountain bike centres and mountain bike bases are marketed to help attract a wider market, boost length of stay and encourage repeat visits (this is discussed in greater detail later in **Chapter 4** which covers gaps/recommendations). The growth in the market is discussed later in Section 5.2.2 (where we consider the background to our future growth scenarios).

2.3 Current Economic Impact of the Mountain Biking Market (All Engaging)

2.3.1 Direct Expenditure

VisitScotland has produced figures on the current value of the overnight mountain biking market, as set out in **Table 2.3**.

Table 2.3: Volume & Value of Mountain Biking

	Trips in Scotland (m)	All Holiday Spend (£m)
2006	0.108	39
2007	0.197	65

Source: UK Tourism Survey 2006 & 2007, VisitScotland

This values the current overnight market (including both Scottish and Non-Scottish visitors) at £65 million. These are for activities undertaken "as part of their visit", that is, not necessarily the main purpose of their trip (all of their expenditure is included irrespective of the reason for their trip).

As part of this study we have estimated that the value of day visitor expenditure is £10.7 million (discussed in greater detail later in Section 2.6). Total direct expenditure on the mountain biking is therefore estimated at £75.7 million.

2.3.2 Multipliers

In addition to the direct impact there will also be two types of wider impact on the economy:

- **supplier effect**: an increase in sales in a business will require it to purchase more supplies than it would have otherwise. A proportion of this 'knock-on' effect will benefit suppliers in the local and Scottish economies; and

- **income effect**: an increase in sales in a business will usually lead to either an increase in employment or an increase in incomes for those already employed. A proportion of these increased incomes will be re-spent in the local and Scottish economies.

The Scottish Tourism Mulitplier Study (STMS) provides standard supplier and income multipliers for the tourism sector. This estimates that the combined supplier and income mulitplier is 1.57[2].

2.3.3 Total Expenditure (Direct, Indirect and Induced)

Applying the multiplier to the direct expenditure gives total expenditure of £119 million, as set out in **Table 2.4.**

Table 2.4: Total Expenditure	
Overnight	£65m
Day Visitor	£10.7m
Total Direct	**£75.7m**
Multiplier	1.57
Total (direct, indirect and induced)	**£118.8m**

Overnight expenditure, at £65m, accounts for 86% of total expenditure.

2.3.4 Employment Impact

The employment impact is calculated by applying an appropriate output:employment factor. We have applied an output:employment factor of £34,250 derived from the STMS[3]. Applying this factor gives a total of 3,470 FTE jobs in Scotland.

[2] We have applied the factor for rural locations as this will apply to the majority of the sites.
[3] An inflator has been applied to bring the figures up to 2009 values.

2.3.5 Gross Value Added

The annual gross value added has been calculated on the basis of GVA per employee within the tourism industry (£19,600[4]). The number of FTEs multiplied by GVA per employee gives annual GVA of £68million.

2.3.6 Overview

However, these figures include all visitors who have engaged in any mountain biking activity during their holiday. It includes all of their expenditure and does not take account of the extent to which it was their main motivation and/or a key part of their trip.

There is a need to analyse the market further to try to identify the part where mountain biking is the main motivation and/or a key part of an individual's trip. This is particularly important when it comes to identifying the potential future market growth and the part of the market that the public sector could hope to influence.

The focus needs to be on this part of the market rather than on those that simply undertake mountain biking as part of an entertainment activity for a wider holiday/short break. The growth for the latter part of the market would be much more limited and likely to simply displace existing expenditure.

2.4 Quantification of Current Demand (Main Motivation/Key Part of Trip)

2.4.1 Introduction

This section is aimed at quantifying the part of the market where mountain biking was the main motivation to visit and/or key part of a trip[5].

2.4.2 Built Centres

Total Demand

The consultants identified that there are currently 32 purpose-built mountain bike centres in Scotland, many marketed by VisitScotland. Overall it is estimated that these centres attract about 592,000 visits a year, 11,400 per week or 1,600 visits per day. If we exclude the main site Glentress (184,000), the total is 408,000 visits or an average of only 13,000 visits per site (31 excluding Glentress).

[4] Scottish Executive: *Scottish Annual Business Statistics* 2006
[5] Includes Scottish visitors

The quantification of the number of visits to trail centres has been based on trail and car park counters, as well as anecdotal estimates given by private landowners, Forest District managers, 7stanes project managers, etc.

The built centres have been broken down regionally into development clusters, as shown in **Table 2.5.**

Table 2.5: Built Centres		
Development Cluster	**Key Built Centres**	**Total Number of Sites**
Southern Scotland	7stanes* and Drumlanrig	9
West and Central Scotland	Carron Valley, Glenbranter, Fire Tower Trail, Pollok Park	7
The Highlands	Wolftrax, Learnie Red Rock, Highland Wildcat	11
The North East and Deeside	Kirkhill, Moray Monster Trails, Pitfichie	3
Perthshire, Fife and Angus	Balblair, Comrie Croft	2
Total		**32**

* Note: Glentress and Innerleithen have been classed as two separate sites

Demand for Built Centres Regionally

Visitation to centres on a regional basis is given in **Table 2.6**.

Table 2.6: Built Centres Regional Demand			
Development Cluster	**Number of Visits**	**%**	**Approximate Population (millions)**
Southern Scotland	409,635	69%	0.4
West and Central Scotland	42,878	7%	3.1
The Highlands	101,450	17%	0.3
The North East and Deeside	27,919	5%	0.5
Perthshire, Fife and Angus	10,000	2%	0.7
Total	**591,882**	**100%**	**5.0**

It can be seen from the table that the 7stanes and Southern Scotland currently dominate the built centre mountain bike market in Scotland with some 69% of all the visits.

Southern Scotland is strategically well placed as it attracts a significant proportion of visitors from outside Scotland, both day visitors and overnight tourists.

West and Central Scotland; Perthshire, Fife and Angus; and the North East and Deeside do not have any built trail centres of scale, therefore, together they account for only around 81,000 or 14% of all visits.

The demand for built trail centres has been broken down by visitor type i.e. day visitors and overnight visitors from within and outwith Scotland, as shown in **Table 2.7**.

Table 2.7: Built Centres Regional Demand by Visitor Type								
Development Cluster	**Total**		**Day Visitors**		**Overnight Scotland**		**Overnight Outwith Scotland**	
	Number of Visits	**%**	**Number of Visits**	**%**	**Number of Visits**	**%**	**Number of Visits**	**%**
Southern Scotland	**409,635**	**69%**	257,471	62.8%	41,964	10.2%	110,202	26.9%
West and Central Scotland	**42,878**	**7%**	34,518	80.5%	5,647	13.2%	2,713	6.3%
The Highlands	**101,450**	**17%**	56,658	55.8%	28,410	28.0%	16,383	16.1%
The North East and Deeside	**27,919**	**5%**	22,519	80.7%	3,629	13.0%	1,771	6.3%
Perthshire, Fife and Angus	**10,000**	**2%**	7,500	75.0%	2,000	20.0%	500	5.0%
Total	**591,882**	**100%**	**378,666**	**64.0%**	**81,650**	**13.8%**	**131,568**	**22.2%**

10% of visitors to Southern Scotland are day visitors from outwith Scotland

The built trail centres in Southern Scotland have the greatest proportion of tourist visitors from outside Scotland, whereas the Highlands has the greatest proportion of Scottish overnight visitors. Overall the Highlands has the greatest proportion (although not number) of overnight visitors to built trail centres. The North East of Scotland; West and Central Scotland; and Perthshire, Fife and Angus are dominated by a day visitor, local resident market, as well as visiting friends and relatives for overnight stays. This is due to the lack of a full trail centre in these locations which would help drive overnight tourism.

The estimated demand for built mountain bike centres across Scotland by day and overnight visitors is given in **Table 2.8**.

Table 2.8: Built Mountain Bike Centres Demand Summary		
	Number of Visits 000s	**%**
Day Visitors	378.7	64.0%
Overnight Visitors – Scottish Residents	81.6	13.8%
Overnight Visitors – Non-Scottish Residents	131.6	22.2%
Total Demand	**591.9**	**100.0%**

2.4.3 Estimated Demand Outwith Built Centres

In order to calculate the total volume of mountain bike tourism trips, it is also necessary to quantify the number of trips taken outside the built mountain bike centres.

Previous research has identified the number of times single track mountain bikers take trips away from home; how many times they visit built centres; and the proportion of visits that include an overnight stay. The 7stanes review indicated the average number of times trail centres were visited as part of an overnight trip. In addition, the average length of stay was also calculated.

As a result of this previous research, we have applied the factors (set out in **Table 2.9**) to our built centre trail counts to estimate the number of day and overnight trips by Scottish and non-Scottish residents as follows:

Table 2.9: Summary of Applied Factors	
	Factor
Average number of visits per trip at centres for day visitors	1.00
Average number of visits per trip at centres for Scottish overnight visitors	1.80
Average number of visits per trip at centres for Non-Scottish overnight visitors	2.84
Estimated number of trips taken to centres per annum by mountain bike day-trippers	4.50
Estimated number of trips taken to centres per annum by Scottish overnight visitors	2.00
Estimated number of trips taken to centres per annum by non-Scottish overnight visitors	1.00
Number of recreation trips taken by mountain bike day-trippers per annum outside built centres	7.75
Number of overnight recreation trips taken by Scottish residents per annum outside built centres	1.25
Number of overnight recreation trips taken by non-Scottish residents in Scotland per annum outside built centres (the main motivation for mountain bike tourism in Scotland is built centres)	0.25

Note: All these trips are taken in Scotland. Some Scottish residents will take trips (day and overnight mountain bike trips) outside Scotland. It is envisaged that non-Scottish residents will take most of their trips (day and overnight) outside Scotland.

The analysis has also been broken down regionally, as set out in **Table 2.10**.

Table 2.10: Summary of Mountain Bike Trips and Visits in Scotland (Mountain Biking Main Motivation for Visit and/or Key Part of Trip)

Total Trips (Centres and Wilderness)	**Total**		**Local Residents**		**Day Visitors**		**Overnight Scotland**		**Overnight Outwith Scotland**	
Southern Scotland	**68%**	**787.2**	27.0%	212.4	62.0%	488.5	4.8%	37.9	6.2%	48.5
West and Central Scotland	**9%**	**100.3**	65.7%	65.9	28.0%	28.1	5.1%	5.1	1.2%	1.2
The Highlands	**16%**	**187.1**	30.5%	57.1	51.9%	97.2	13.7%	25.6	3.9%	7.2
The North East and Deeside	**6%**	**65.4**	74.1%	48.4	19.7%	12.9	5.0%	3.3	1.2%	0.8
Perthshire, Fife and Angus	**2%**	**22.4**	66.7%	15.0	24.3%	5.4	8.0%	1.8	1.0%	0.2
Total	**100%**	**1,162.4**	**34.3%**	**398.7**	**54.4%**	**632.1**	**6.3%**	**73.7**	**5.0%**	**57.9**
Total Visits (Centres and Wilderness)										
Southern Scotland	**68%**	**906.8**	23.4%	212.4	53.9%	488.5	7.5%	68.2	15.2%	137.8
West and Central Scotland	**8%**	**106.5**	61.8%	65.9	26.4%	28.1	8.6%	9.2	3.2%	3.4
The Highlands	**17%**	**220.9**	25.8%	57.1	44.0%	97.2	20.9%	46.2	9.3%	20.5
The North East and Deeside	**5%**	**69.4**	69.7%	48.4	18.6%	12.9	8.5%	5.9	3.2%	2.2
Perthshire, Fife and Angus	**2%**	**24.3**	61.6%	15.0	22.4%	5.4	13.4%	3.3	2.6%	0.6
Total	**100%**	**1,328.0**	**30.0%**	**398.7**	**47.6%**	**632.1**	**10.0%**	**132.7**	**12.4%**	**164.5**

It is estimated that the total number of mountain bike trips to built centres and wilderness locations is 1.16 million a year (main motivation/key part of trip).

Of these trips, some 11.3% are overnight trips by Scottish and Non-Scottish residents. A total of 84% of trips by overnight visitors from outwith Scotland are to Southern Scotland. As highlighted earlier in Section 2.3.3 overnight visitor expenditure accounts for 86% of the total. Therefore, Southern Scotland is a key location for expenditure for those form outwith Scotland, where mountain biking is the main reason for visiting or a key part of their trip.

Scottish overnight residents on average spend 1.80 visits to mountain bike centres during their trip and Non-Scottish residents 2.84 visits.

The total number of mountain bike visits to trail centres and the wilderness is estimated at 1.3 million visits per annum, of which 22.5% are overnight.

2.5 Current Economic Impact (main reason/key part of visit)

2.5.1 Introduction

This Section provides an assessment of the current impact for those where it is the main motivation and/or a key part of their trip.

2.5.2 Visitor Numbers

The total number of mountain biking visits to built centres and wilderness areas has been estimated at 1.3 million as set out in **Table 2.11**[6].

Table 2.11: Annual Visits	
Built Centres	591,882
Wilderness	736,068
Total	1,327,950

2.6 Visitor Profile

Table 2.12 shows the origin of those visiting. Overnight accommodation is a significant item of expenditure, therefore, it is important to distinguish between day visitors and those staying overnight.

A total of 85% of visits were from Scottish residents and 78% were from day visitors.

[6] This is the number of trips rather than the number of visits as an individual may visit the site on more than one occasion on the same trip. The economic impact assessment is calculated using trips so as to avoid doublecounting.

Table 2.12: Visitor Origin and Type			
	Day	Overnight	Total
Scottish	75%	10%	85%
Non-Scottish	3%	12%	15%
Total	78%	22%	100%

2.7 Average Daily Expenditure and Length of Stay

Average spend is given in the **Table 2.13**. The average daily expenditure of has been split by visitor origin[7].

Table 2.13: Average daily spend per person by visitor type	
Day Visitors	
Scottish	£10
Non-Scottish	£15
Overnight Visitors	
Scottish	£32
Non-Scottish	£45

The average length of stay for Scottish residents staying overnight is estimated at 2.1 nights and for visitors from outwith Scotland at 4.4 nights[8].

Table 2.14: Length of stay for overnight visitors	
Scottish	2.1
Non-Scottish	4.4

2.8 Direct Expenditure

Direct expenditure is calculated as follows:

DE = dv.ndv + ov.l.nov

Where DE	direct expenditure
dv	average daily expenditure of day visitors
ndv	number of day visitors
ov	average daily expenditure of overnight visitors
l	average length of stay
nov	number of overnight visitors

[7] Based on previous evaluation evidence and inflated to 2009 prices.
[8] Based on previous evaluation evidence.

However, before applying the formula it is important to recognise that overnight visitors may be visiting a site on more than one day during their trip. We need to take account of this before applying the formula to aviod doublecounting of the impacts[9]. The average number of days that each category of overnight visitor is visiting a site is given in **Table 2.15**.

Table 2.15: Average number of days using site during a trip	
Scotland	1.8
Elsewhere in Scotland	2.9
Overseas	2.6

Applying the formula, whilst taking account of number of days the sites are used, gives direct expenditure figures[10] as detailed in **Table 2.16**.

Table 2.16: Direct Expenditure	
Day Visitors	£10,502,913
Overnight Visitors	£16,300,559
Total	£26,803,472

Therefore, the total direct expenditure resulting from mountain biking visitors is (main motivation to visit/key part of trip) £26.8 million.

2.9 Multipliers

As identified earlier in Section 2.3.2, the direct expenditure of mountain bikers will also have two types of wider impact on the economy – supplier and multiplier effects. Again we have applied the combined multplier of 1.57 from the STMS.

2.10 Total Expenditure (Direct, Indirect and Induced)

Applying the multiplier gives total expenditure of £42.1 million, as set out in **Table 2.17**.

Table 2.17: Total Expenditure	
Direct Expenditure	£26,803,472
Multiplier	1.57
Total	£42,081,450

However, we also need to take account of individuals where mountain biking was the main reason and/or key part of their trip but who never visit a built centre. This is estimated to generate a further £4.45 million of expenditure. This therefore gives a total expenditure of £46.54 million.

[9] This is because we are including the impact from all of their trip so do not want to count the same person twice.
[10] Expenditure was broken down by visitor origin before applying the formula.

2.11 Employment Impact

The employment impact is calculated by applying an appropriate output:employment factor. We have applied an output:employment factor of £34,250 derived from the STMS[11]. Applying this factor gives a total of 1,359 FTE jobs in Scotland.

2.12 Gross Value Added

The annual gross value added has been calculated on the basis of GVA per employee within the tourism industry (£19,600[12]). The number of FTEs multiplied by GVA per employee gives annual GVA of £26,630,828.

2.13 Summary

The current impact of the mountain biking market is estimated at:

- Expenditure of £119 million;
- Employment of 3,470; and
- GVA of £68 million.

However, this includes those where mountain biking is not the main reason/key part of their trip and includes all of their trip expenditure. Further analysis provides estimates for those where it is the main reason and/or a key part of their trip of:

- Expenditure of £46.5 million;
- Employment of 1,360 FTEs; and
- GVA of £26.6 million.

[11] An inflator has been applied to bring the figures up to 2009 values.
[12] Scottish Executive: *Scottish Annual Business Statistics* 2006

3. Experience from Elsewhere

3.1 Introduction

As part of the research for this project information was accessed on experience from elsewhere, including:

- Wales:
  - North Wales: Llandegla
  - South Wales: Afan Forest Park, Cwmcarn, Brechfa;
- North of England: Hamsterley, Grizedale, Kielder, Whinlatter and Dalby;
- Ireland: Portumna, Ballyhoura;
- America: Fruita; and
- Canada: Whistler.

A write-up of each of these areas has been included in **Appendix G** and a summary of the key market trends and future development aspirations has been summarised below.

3.2 Trends and Aspirations

This section presents the trends and issues in each the following areas: Wales, North of England, Ireland, the USA and Canada.

3.2.1 Wales

The Welsh Tourist Board identified that in 2006/07, cycling was the main reason for approximately 65,000 overnight trips and forms a part-reason for approximately 188,000 trips. That compares with walking at 893,000 trips to Wales as the main reason.

Since 2001 Wales has used a mountain bike market segmentation analysis breaking riders down into the following categories: trail riders, enthusiasts, downhillers/freeriders, family/leisure and sport riders (a definition has been provided in **Appendix H**).

This market segmentation has been monitored through a visitor survey at Afan Forest Park. **Table 3.1** shows the results of this survey.

Table 3.1: Visitor Survey Segmentation (Afan Forest Park)		
Type of User	**2002**	**2007**
Trail Riders	39%	45%
Family/Leisure	21%	19%
Sport Riders	15%	12%
Enthusiasts	12%	17%
Downhillers/Freeriders	11%	5%
Other	2%	2%

As the table shows, the overall proportion of trail and enthusiast riders (highly skilled) has increased from 51% to 62% of all demand. Whilst there has been a decline in the proportion of downhillers/freeriders this may be explained by an increase in the number using Cwmcarn (where the downhill offer has been improved). The results also show no proportional increase in the family market.

Mountain biking in South Wales is dominated by intermediate and experienced enthusiasts and trail riders in part due to the product offered. Unlike North Wales, trail usage has grown on Forestry Commission land from 64,000 trail 'counts' in 2004 to 170,000 trail 'counts' in 2008. This equates to a growth over the last five years of 165%. Growth was rapid throughout 2005/06, only slowing in 2007. However, the improved VisitWales marketing campaign and a regular uplift service at Cwmcarn helped to boost trail usage again in 2008.

However, North Wales is a different story, with mixed performance at different sites. For example in Coed y Brenin despite a new visitor centre and the trails being remodelled, the overall demand for mountain biking has declined. This is in direct contrast to the growth at Llandegla.

At Llandegla they have targeted a local market which includes Liverpool, Manchester, etc. The size of the local resident catchment is very large with more than 15 million people living within two hours drive of the forest. The forest tends to attract mainly enthusiasts.

Llandegla is viewed as the 'Glentress of North Wales' with a large number of riders and high turnover in the café/shop. Developments at Llandegla have had an impact on the Forestry Commission sites in the remainder of North Wales. It also demonstrates a potential partnership between the public and private sector which could be commercially viable in the mountain biking arena.

It is recognised that there is a need for more entry level trails in Wales, particularly in South Wales. These products should be aimed at beginners and families and must also have skills areas and other facilities to help build confidence and increase skills/progression. In addition, Wales needs more high-end trail products to keep the country at the cutting edge of the market.

In October 2008, VisitWales commissioned a new cycling tourism strategy called 'Selecting the Right Gear' which has objectives to maintain a world-class mountain bike product in Wales. These include:

- grouping the mountain bike centres in North and South Wales for promotion (see 7stanes);
- the need for mountain bike centres to diversify their appeal to a wider audience base;
- considering improved downhill facilities;
- improving connectivity between centres; and
- strengthening the natural trail riding product.

3.2.2 North of England

The English market for mountain biking is not as mature as in Scotland and Wales. There are a greater proportion of trail riders than enthusiasts who actively seek out the single track product. However, it is anticipated that the enthusiast market will grow in the future as more dedicated single track is added to the North of England.

In Kielder Forest, significant trail developments are planned. The Deadwater red trail opened in 2007 and attracted 12,000 riders in its first operating year. A total of 57km of trail should open this year and these trails will be aimed at enthusiasts and family riders. Kielder will be positioned to attract a short break and day visitor market targeting Scotland and the North of England, rather than local residents. This network development will establish Kielder as a significant mountain biking centre, much like Glentress, however, as no black routes are planned Kielder will cater only for beginner and intermediate riders.

Hamsterley Forest has witnessed a growth in off-road cycling since it developed skills trails in 2005. At present Hamsterley Forest has a commercially-run downhill trail facility which attracts visitors from outside the North East region. There is opportunity for this to grow and a revamp of the old cross-country trail network is underway. The local bike club, Trailblazers, has raised £130,000 for trail development. In addition, plans are currently being considered to extend the trail network to make Hamsterley a regional centre of significance.

The plans for Grizedale Forest include £6 million for a new visitor centre, café and bike shop. The existing 15km red route may be augmented in the future with a family single track trail.

A number of additional cycling related developments are being planned at Dalby Forest. Additions to the red trail product are under consideration, the aspiration being to provide an additional 8km of trail. The Forest management are hoping that Dalby will play host to the World Championship Cross Country Event, and as such are currently developing a 6km 'World Cup Course' loop.

Finally, plans are currently in development to improve accessibility in the cycling offer through creating an all ability trail, and offering rental of bikes designed for people with physical disabilities.

At Whinlatter Forest, refurbishment of the visitor facilities including a café, shop, car park and bike hire was recently completed. They are currently completing an 8km blue trail which will be opening in May 2009.

Consideration is currently being given to linking the five Northern Forests mentioned above to create a regional mountain biking destination. This may compete with the 7stanes. However, there is a wider opportunity if the 7stanes and Northern England forests can be marketed together and targeted at the South East England market where there are no built trail centres.

3.2.3 Ireland

The mountain biking market in Ireland is in its infancy, well behind Scotland in its development cycle. The Irish market at present is dominated by trail riders and therefore very few single track enthusiasts. Coillte, the Irish Forestry Body, has seen the need to develop a recreational/social trail network and this has been the focus at Portumna and the Ballyhouras with accessibility as the focus.

The trail product in the Ballyhouras is focused on the lower skilled enthusiast and the leisure rider. Trail counters recorded 36,000 riders in the first year of trading and whilst it is still very early days it demonstrates that there is a market at the lower skill level if accessible trails are developed.

It also provides an example of flexibility in developing trails that can be 'chopped and changed' so as to build longevity into the trails, and the use of 'natural' features, where possible (which helps to reduce maintenance costs).

3.2.4 Fruita, Colorado, USA

The mountain biking market in the USA is less mature than in either Scotland or Wales. The enthusiast market is virtually non existent and the majority of trail rides are trail or sport riders. The trail product in Fruita reflects this market demand. A local club has developed 250 miles of natural trails over the last 15 years in co-operation with the local Bureau of Land Management. The natural trail product has no prescribed routes with guidebooks and maps key components of the trail product. Riders effectively make up their own rides using the maps and guidance from local riders.

It is estimated that 250,000 riders use the trails each year. Although based on anecdotal evidence, it is suggested that overall visitor numbers and the proportion from outwith the USA have been increasing.

3.2.5 Whistler, Canada

The experience at Whistler is that demand for the mountain bike park has grown substantially over the last nine years. In 1999 there were approximately 11,500 visitors by 2008 this had grown to 106,000. The location also has a very strong visitor market at 71% compared with 29% that live within drive time of the Park. Recent developments have been focused on broadening the market by redefining the green and blue trails in the bike park whilst at the same time catering even more for a high end (double black) rider. The commercial bike park product at Whistler is extremely different to current products in the UK. The market in Scotland in particular is driven by cross country enthusiasts. The higher level cross country trails in the Whistler area have not been heavily used over the last decade and they have not witnessed high growth of the bike park. The Whistler experience is very much about short, sharp trails and high adrenaline and the visitor is fully immersed in the mountain bike culture. Similar to the 7stanes, demand growth at Whistler has slowed in the last few years, but the focus of the resort has been on the Winter Olympics in 2010. On the back of the success of the bike park, the local municipality have developed a wide range of valley bottom and cross country trails around Lost Lake, for example, aimed at families and the general visitor market.

3.2.6 Europe

Morzine and Les Gets are the most common known of the lift access mountain bike resorts in Europe. For the experienced rider, Les Gets boasts a Kona Bike Park at Mont Chery/Chavannes which includes a dirt jump park, freeride area, two downhill trails, a 4cross track and a mini skills area.

Les Gets has three lifts which operate throughout the summer. The wider Portes du Soleil has 650km of mountain biking tracks (all wilderness trails, former drove roads, footpaths, ski mobile tracks etc – not purpose built).

The resort is also marketed to families for mountain biking, with facilities such as:

- beginner downhill;
- two beginner skills areas;
- the mini jump park; and
- green and blue cross-country tracks.

It is understood that the number of hard core mountain bikers both downhill and cross country visiting Les Gets has peaked. High levels of demand resulted in a trail system which has not coped with the volume of usage (it was not designed for purpose) and as a result many of the trails require significant maintenance and rebuilding.

Whilst the resort remains the haunt of the die hard downhiller, the cross country riders are looking elsewhere to Lake Garda, the Sierra Nevada, or Chamonix for a better cross country experience. There has been growth in guided mountain bike trekking in these locations, particularly from a UK market. The competition for lift accessed routes continues to grow and as a result the number of visitors at Les Gets may continue to decline unless a family market can be enticed.

The Oisans in France, (Alp d'Huez and Les Deux Alpes) will be home to the French downhill, 4cross and Cross-country Championship in 2009 and the Mega Avalanche. With Alp d'Huez credentials as a major climb in the Tour de France, the area also embraces road and other cycling opportunities.

Vallnord Bike Park in Andorra will host the 2009 World Cup for downhill and 4cross for the second year running. The resort is going to open a third chair this year and six new downhill trails, including two red and two green. The Bike Park currently has 16 trails ranging from green to double black, six cross country routes, a 4cross area, a freeride area and BMX track etc.

In Sweden, Åre Bike Park is increasing in popularity with British clientele. The resort has 30 downhill trails of green to black standard. There are direct flights between Stanstead and Trondheim - 1.5 hours drive from Åre. This direct link to the UK is helping to capture a growing market.

3.3 Summary

As part of the study, we undertook research into mountain biking trends in a number of different locations. Some of the key lessons from elsewhere include:

- that new developments can adversely impact upon existing facilities within the same area/country. There is a need for co-ordination at a national level to provide a strategic approach to future development;
- that the family market can be attracted through provision of accessible trails;
- flexibility of the trail product to allow for refreshing it will be important to the appeal of the trails over a longer period;
- the focus for future growth should not only be focused on built centres but also include wilderness areas;
- the use of 'natural, features where possible rather than manmade should help to reduce maintenance costs; and
- there will be increasing competition, particularly from the North of England.

This together with analysis of the issues and opportunities for Scotland (reported in **Chapter 4**) has helped to inform the future growth scenarios and associated impacts for Scotland set out later in **Chapter 5**.

4. Issues, Gaps and Opportunities

4.1 Introduction

The purpose of this study is not only to establish the current market and economic impact of the mountain biking tourism in Scotland, but also to assess the future potential of the sector. The previous chapter considered experience from elsewhere. Research was also conducted into the various issues affecting the development of mountain biking tourism in Scotland, and ways to potentially address these issues. This Chapter discusses the potential gaps and opportunities in the market.

4.2 Issues

Full details of consultations are included in the Appendices, however the following section summarises the key issues reported.

4.2.1 Forestry Commission Sites

Forestry Commission Scotland (FCS) has no plans to invest in the creation of new trails and instead will be concentrating on maintenance and refreshment of existing products. Additionally FCS will no longer tolerate wild, unplanned trail building, indicating that the only developments on FCS land in the near future will be through partnership with the private sector or local clubs/community groups, etc. FCS has also adopted a more 'risk averse' policy and approach to trail management, making the trails generally safer and less extreme.

It was noted by many that development in the future is most likely to be on private or Council-owned land, rather than FCS. Small projects such as pump tracks, BMX trails and urban parks next to large centres of population will likely be key developments in the next few years. These will increase community and visiting friends and relatives (VFR) usage, but will not really be tourism destinations.

It was suggested that the full long-term cost of the 7stanes was not fully appreciated as it was developed. At present, the trails are in need of maintenance, improvement and enrichment. Comments were made that the level of investment required in the 7stanes may have slowed development in other areas of Scotland as overall public sector resources are limited.

However, there are developments currently taking place at Glentress, involving a £5m investment in a new cafe, bike shop, offices, meeting room, car park etc. There is also research work currently underway assessing the potential growth opportunities from large scale investment in the Galloway Forest Park. This may have implications for the future development of Kirroughtree and Glentrool – two of the 7stanes sites.

4.2.2 Trail Product

In terms of the trail product, it is considered that, in the future, it would be beneficial to create trails which more adequately reflect/make good use of the natural terrain and therefore require less maintenance (i.e. less artificially-built features).

At present, the vast majority of trails in Scotland are graded red or black. While it is recognised that these trails have largely been responsible for generating economic benefit and attracting tourists, a need has been clearly identified to increase the offering of blue and green graded trails in order to make the sport more accessible for beginners. However, it was also noted that there is an opportunity to create a second double black run for the extreme market.

There is an overall need to improve the visitor experience, and to create differentiation between each trail centre.

4.2.3 Participation

There has been an increase in family participation, particularly those with younger children. This has led to growing demand for more family-friendly trails. A growth in demand for accessible mountain biking trails for school groups and Local Authority outdoor education has also been observed.

The skills academies are operating at full capacity demonstrating a growing demand for skills tuition. It was noted that the demand for tuition is generated predominantly by experienced riders wishing to increase their skill level, rather than beginners learning about the sport.

Enthusiasts and extremists are the most likely to voice opinion, and are therefore the most often heard. There is a continuing desire for additional trail centres, creating highly technical trails on the 'doorstep' of mountain bikers, albeit from a minority of users. A balance needs to be reached in attracting new markets (beginners, families etc) by making mountain biking more accessible, whilst ensuring current markets (extremists, enthusiasts etc) are not alienated.

4.2.4 Promoting the Product

Wales has adopted an approach to marketing mountain biking trail centres, as well as mountain biking bases. Mountain biking bases are clusters of natural tracks, bridleways and trails which have been graded for physical and technical ability. Trail information, routes and maps are available to download. Scotland needs to develop this 'natural' wilderness trail product around built centres and in key tourist areas, to increase visitation length and trip expenditure.

4.3 Gaps and Opportunities

The consultation research carried out throughout this project aimed to identify potential opportunities for development of mountain biking in Scotland. All centres, clubs, businesses and agencies contacted were asked to provide comments on what facilities, markets or services may be lacking in the sector, and how they can be addressed. A summary of the existing gaps and potential opportunities identified include:

- there is a need for a quality regional trail centre in the North East of Scotland;

- with the growing demand for family-friendly trails, further safe off-road routes, both single track and non-single track are needed. There is a need to create more green/blue trail networks. These networks will also be useful in encouraging both local community and holiday visitor use;

- there is also an opportunity to increase the family market by improving the overall visitor experience through differentiation between individual centres. This can be achieved through themed trails and Geocaching/bike orienteering, etc on bikes. Aviemore was suggested as a possible location for a family-friendly trails centre with signed and mapped routes but not necessarily a built facility;

- there is a need for a greater critical mass of trails in the North of Scotland in order to increase the number of tourist visitors, specifically longer blue and red trails;

- it has been suggested that there is a requirement for space and facilities at forest centres suitable for instruction in order to encourage tuition and other activity training. There is also likely to be demand for shelters at trail centres to allow bike repair training. Skills trainers see this as a growing business opportunity;

- a prominent theme which appeared from the consultations was the idea that Scotland has the potential to improve its profile as a world class mountain bike destination. It was frequently commented that in order for this to happen, a commercial bike park, with good chairlift access, that is accessible to key overnight and tourist markets needs to be created;

- there is a need for shorter, longer and epic off-road routes, with fine views and incorporating forests. An opportunity also exists to further link purpose-built forest mountain biking centres with natural riding in the 'wilderness', creating 'petal' rides, beginning and ending at the built centre. This type of trail product will help to boost average length of stay and visitor spends (see mountain bike bases in Wales);

- ‘Petal’ rides with links to accommodation can be used to attract tourists. Mountain biking/cycling should be better promoted as a recreational activity whilst on holiday;

- there is continued evidence of demand for mountain bike facilities closer to the Central Belt – this area currently lacks a cluster of purpose-built centres such as that in the South of Scotland or the Highlands. However, if developed close to an urban centre it may be dominated by local demand (as tourist more likely to be coming for a city break). However, if located in Loch Lomond & The Trossachs National Park it may attract a larger proportion of tourists by linking into the outdoor market;

- there is a need for more social inclusion/accessible trails and more support for disabled bikers/four wheel bike riders. It was noted that the health and fitness agenda will also feature more strongly in mountain bike development in the future;

- there is a clear need for improved promotion and grading of trails in the countryside, rather than just at built centres. There needs to wider availability of self-guiding maps, with either signposting or points of reference descriptions of country trails, with guides to the levels of difficulty (see Wales).

4.4 Links to Other Sectors

Discussions were undertaken with SE Executives in the Food and Drink and Textile Teams which identified that there are links (and opportunities for improved links) to these key industries.

The tourism and food & drink sectors are inextricably linked. Food & drink forms a key part of a visit and can be a very important factor in shaping the overall visitor experience. This is even more so the case where food & drink is explicitly used as part of the tourism offer i.e. attracting people to an area to sample fresh, local products. Its importance has increased over recent years due to an increasing interest in food provenance, organic products and healthy eating. Within the tourism sector it is often referred to as “food tourism”. This part of the market has become a key area of focus for both the SE Tourism Team and SE Food & Drink Team. Not least in ways to collaborate and build linkages that will enhance the overall offer.

SE is currently in the process of commissioning a study to identify ways to strengthen the links between Scottish food producers and tourist facilities. The findings from this study should help identify ways that those operating in the mountain biking market can link into these wider opportunities, through promoting the strong food offer within different locations. This would particularly be the case where the link was to healthy eating which would fit strongly with the outdoor activities market.

The SE Food and Drink Team have also developed a buyers’ guide (available at www.scottishfoodanddrink.com) that is aimed at linking businesses with local food and drink producers.

This guide is split geographically and by product (they have recently extended the number of companies in the guide to approximately 1,500). This, therefore, provides an initial source for those operating in the mountain biking market to identify local suppliers.

Another key factor for mountain biking is about the importance of facilities at mountain biking locations. The sites with facilities onsite tend to attract larger visitor numbers that those that do not. These facilities ideally have a mix of mountain bike retail & hire, and catering. This encourages longer dwell times and provides spending opportunities.

However, it would not be viable to have onsite facilities at all of the sites. For locations without on-site facilities there is a need to link the visitors into facilities within the local towns and villages. This would include promoting local businesses within the onsite facilities, on websites and in leaflets used to promote the sites.

In the textiles market there is link through manufacture and retail within the outdoor clothing market. There may be opportunities to enhance this in the future by promoting Scottish businesses and retailers at mountain biking locations. There may also be opportunities in the "performance textiles" part of the market. Although the latter is likely to offer fewer niche opportunities it is certainly an area worth investigating further.

Finally there is an opportunity to link mountain biking more strongly to the wider retail market. Enhanced promotion and stronger linkages with the local retail offer will help to increase dwell times in an area and provide further spending opportunities. This will be important in trying to raise the average expenditure levels of mountain bikers. This will not, necessarily work with all of the market (the "enthusiasts" may have little interest in the wider retail offer) but a further broadening of the visitor market may make these linkages more achievable and beneficial in the future.

4.5 Summary

The gaps and opportunities identified here have been used to help establish an Outline Action Plan for the way forward (which is provided later in **Chapter 6**). There are also opportunities to link with other sectors notably food and drink, textiles and retail.

5. Future Economic Potential

5.1 Introduction

This Chapter provides an assessment of the potential future mountain biking market and the economic impact that would be associated with this.

5.2 Potential Market Growth

5.2.1 Factors Driving the Growth

The market will continue to grow. The level of market growth in Scotland will be dependent on the extent to which there is continued improvement in the sector's promotion and marketing, the filling of market gaps and a more strategic approach at the national level. Also it has been assumed that existing trail product will continue to be maintained, refreshed, upgraded and evolved.

Growth in the future will come from the following market sources:

- existing single track mountain bikers going on trips and visiting trail centres and the wilderness more often;
- new people (markets) taking up mountain biking and going on recreational trips to trail centres and the wilderness;
- other off-road cyclists using trail centres; and
- a greater proportion of the off-road cycle market going on recreational trips to trail centres and the wilderness.

This will be achieved by the following:

- providing more accessible trail networks/hierarchies (i.e. more green and blue single track trails);
- improving linkages between trail centres and the general countryside, and other activities attractive to a wider/mixed group market;
- signing, mapping and grading routes in the countryside (see MB Wales mountain bike bases approach);
- filling the geographic gaps in built trail centre provision;
- creating specialist niche products such as bike parks and specialist downhill venues;
- creating family-friendly cycling venues; and

- boosting access to the sport in urban areas by developing short niche entry level products, strengthening the youth market - improving health and fitness. At the same time, boosting the grassroots, creating potential visitors for the future.

5.2.2 Background to Growth Scenarios

In developing growth scenarios we need to consider a number of key factors:

- recent experience in Scotland;
- recent experience from elsewhere (it is worth considering the experience in Wales in more detail as it provides a very good comparator location); and
- proposed developments in the North of England (a key market for Scotland and potentially a key competitor).

These are discussed in greater detail below.

Scotland

Scotland has experienced substantial growth in the mountain biking market in recent years, not least in terms of the 7stanes where a 120% increase in visits was recorded between 2004 and 2007. However, this coincided with the opening of new facilities and development of new trails at existing centres. Considerable capital investment was made over this period. Between 2007 and 2008, growth slowed, with the number of visits to the 7stanes similar in both years.

It is not possible to simply extrapolate previous historic growth in the 7stanes into the future. Particularly, as the 7stanes and Scotland as a whole will face increasing competition from other areas (notably the North of England – discussed in greater detail in the next Section). There are growth opportunities in other parts of Scotland, the Highlands, North East and West Central Scotland. Whilst this will create internal competition for the 7stanes, there are still opportunities for the 7stanes in the development of a commercial bike park and the development of the family market.

However, whilst a larger proportion of the growth opportunities may lie in other areas of Scotland, it is extremely important not to neglect the 7stanes for a number of reasons:

- it attracts the greatest proportion of mountain bike visitors from outside Scotland;
- it needs to be able to compete with the new developments proposed, in England in particular;
- there are still key development opportunities, notably the Innerleithen Bike Park; and

– it is a key component to promoting and advancing Scotland's mountain biking reputation. Failure to maintain the 7stanes product and its market position could jeopardise Scotland's overall mountain bike reputation.

Wales

Looking at the experience of Wales, it achieved approximately 50% growth in visits between 2004 and 2008. However there are a number of key factors to note as follows:

– investment of £1.2 million at Llandegla. A new trail product with central facilities was created and initial weaknesses in the overall approach were addressed. This resulted in a large proportional increase in visitor numbers. This site is very similar to Glentress, both in the approach to product development and central facilities;

– a more formalised and professional uplift service at Cwmcarn. This has boosted visitor numbers and trail usage. Further increases have resulted following a £4 million investment in visitor centre facilities;

– a new community bike 'Hub' with café and bike hire was added at Afan Glyncorrwg for 2006/07 with a subsequent growth in visitor numbers in 2007/08;

– new Forestry Commission sites have been added in rural Wales at Brechfa and Dyfi Forests which albeit attracting low numbers of visitors, have contributed to the overall growth (similar to Newcastleton and Glentrool);

– other sites at best have stabilised and some sites (without onsite facilities) such as Gwydyr have declined;

– the number of visitors in 2008 to Coed y Brenin appears to have decreased. This in part may be due to teething problems with a large new visitor centre combined with additional competition from Llandegla; and

Wales has witnessed good overall growth but this has been achieved through continued investment in the trail product and central facilities in addition to repositioning and marketing through VisitWales (www.wales.com).

North of England

The North of England, in development terms, is perhaps five years behind both Wales and Scotland. However, it is now investing in facilities, for example, by the end of 2009 Kielder Forest will have added a full trail hierarchy and 57km of trails. Additionally a bike hire facility has been built and operating contracts secured.

Hamsterley Forest is considering a full scale upgrade and development of its trail network. So far it has secured £130,000 to upgrade its red trail which is being managed by the local bike group (Trailblazers).

In 2005, Dalby opened a £4.1 million visitor centre. Dalby is currently building a 6km World Cup cross-country loop to target the World Cup and other events. An all-ability trail is planned together with bikes for the disabled. Aspirations include an extension to the cross-country network.

Over the last five years Whinlatter has carried out a wholesale redevelopment of its café, visitor centre, car park and bike shop facilities. A new blue mountain bike trail of 8km will open in May 2009.

Summary

Although growth in the mountain biking market in Scotland (especially the 7stanes) has been substantial in recent years, this rate of growth cannot continue indefinitely. Wales has gone through a similar period and where they have made investments, there has been large growth (similar to the 7stanes in Scotland). However, where no investment has occurred growth has levelled off or declined.

There is increasing competition for Scotland from the North of England, one of its key markets. However, if investment is made there are still opportunities to grow the market in Scotland. On the basis of this, we have considered three scenarios: do nothing, partial growth and full growth. The quantification of these is discussed below.

5.2.3 Quantification of Future Demand

The future demand targets have been quantified as follows:

- existing single track users encouraged to take 1.25 more trips to built centres per year;
- attract 10% more/new single track cyclists to take trips to built centres and to the wilderness;
- encourage two more trips per year from off-road, non-single track users to built centres;
- encourage a further 20% of all off-road, non-single track cyclists to take trips to new off-road trail products;
- improving the range of wilderness cycle routes across Scotland, mapping and creating mountain bike bases (see Wales), improve/boost average spend opportunities; and
- 35% increase in overnight visitors from outside Scotland to trail centres and 50% increase of overnight visitors from outside Scotland to the wilderness by promoting a new integrated trail centre and wilderness product.

The above equates to approximately an additional 300,000 visits to built centres in Scotland per annum. It is anticipated that this growth would occur over the next five years or so. This equates to annual cumulative growth of around 8.5% per annum, 50% growth over the next five years.

In the wilderness, even with a new wilderness mapping route product, the growth is anticipated to be lower, say around 20% over the same period. This equates to a growth in wilderness cycling visits of 165,000.

The total growth in mountain biking cycle visits to both the built centres and the wilderness is estimated as approximately 465,000, a combined growth of 35% over the current level.

In calculating the anticipated built trail centre growth, it has been assumed that family markets, older cyclists, non-centre riders will be attracted to trail centres. Of the projected 300,000 new visits, approximately 100,000 are from existing riders riding more often and 200,000 visits are from new riders.

5.2.4 Breakdown of Growth Regionally

In Southern Scotland, the 7stanes product is fairly mature, although there could be some growth at sites where there is still development such as Newcastleton and opportunities to develop the family market at others such as Kirroughtree, Mabie and Glentress.

A commercial bike park at Innerleithen would also grow demand. Southern Scotland will need to work to maintain its markets over the next five years as other centres open in other parts of Scotland and in the North of England.

It has been assumed the 7stanes site will continue to be well maintained and managed, and trail products will be enriched and refreshed in order to maintain market share.

West and Central Scotland is the great unknown. There is an opportunity for trail centres close to the Central Belt. Small trail centres are emerging in country parks and on Council-owned land (see Gleniffer Braes, Paisley; Callendar Park, Falkirk – details on planned developments are given in **Appendix F**). Further sustained growth is anticipated at Carron Valley and there are opportunities for a centre in the Loch Lomond & The Trossachs National Park, particularly for families.

There are a number of developments planned in the Highlands including at the Lecht, Glencoe, Aonach Mor, Golspie and Glenlivet. Further growth is also anticipated at Wolftrax and the Witch's Trails. Wilderness routes also have significant potential in the Highlands, so this area is likely to be at the core of any natural trail mountain bike base development (particularly the Cairngorms National Park).

Any developments in the Highlands will benefit from further visitation from general holiday tourists, assuming trail networks are accessible, progressive and well marketed. This further demand boost by holiday tourists would strengthen the viability of purpose-built trail centres.

Geographically the North East of Scotland does not have a regional trail centre and there is evidence of both local resident and visitor demand. Royal Deeside is used for tourist cycling and the forests of Fetteresso, Pitfichie and Kirkhill have short tracks and trails.

There has been much talk in recent years of mountain bike facilities being developed in the Angus Glens by local bike clubs, at Craigvinean Forest and Allean Forest in Perthshire. If any of these projects are to proceed, they are likely to have some form of commercial/community input.

Based on the above, a breakdown of potential growth by development cluster has been estimated, as set out in **Table 5.1, over**.

There is a good opportunity for the Highlands of Scotland to increase the economic, social and health benefits from mountain biking. It is anticipated that over the next five years a third of the potential visit growth in Scotland could be located in the Highlands development cluster area. The Highlands will attract mountain bikers where their main motivation for a tourist trip is mountain biking, as well as general holiday tourists.

The collective branding and marketing of the 7stanes has worked well and created critical mass and boosted direct links to business, increasing average spend and visitation. Another benefit is directing new visitors to areas they would not have previously visited. Collective branding is a key consideration to help boost rural benefit in areas such as the Highlands.

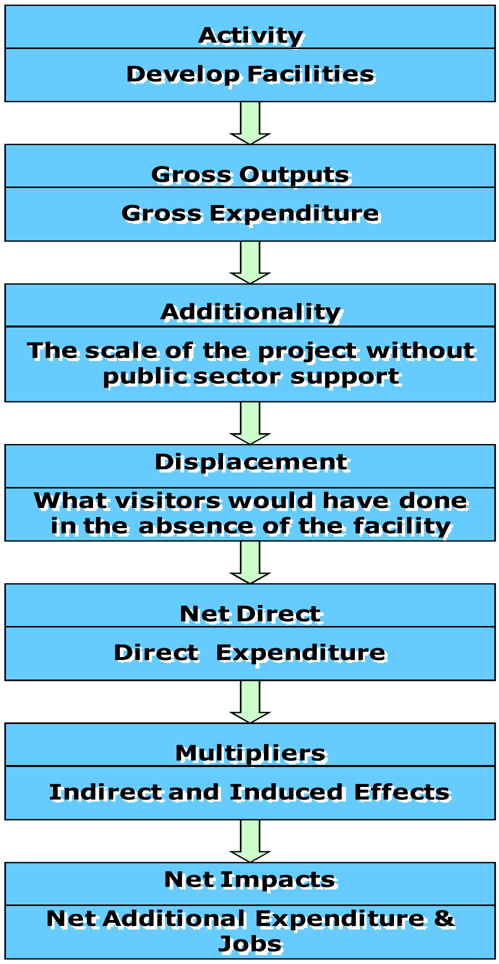
Table 5.1: Breakdown of Growth Regionally (Based on Product Gaps)												
Development Cluster	**Growth in Visits to Built Trail Centres**				**Growth in Wilderness Cycling**				**Overall Growth**			
	Existing Number of Visits to Trail Centres	**Estimated Number of New Visits to Trail Centres**	**Total Number of Visits**	**% Growth**	**Existing Number of Visits to Wilderness**	**Estimated Number of New Visits to Wilderness**	**Total Number of Visits**	**% Growth**	**Total Number of existing Visits**	**Total Growth in Visits**	**Total Number of visits**	**% Growth**
Southern Scotland	409,635	70,000	479,635	17%	497,199	20,000	517,199	4%	906,834	90,000	996,834	10%
West and Central Scotland	42,878	60,000	102,878	140%	63,656	50,000	113,656	79%	106,534	110,000	216,534	103%
The Highlands	101,450	90,000	191,450	89%	119,429	65,000	184,429	54%	220,879	155,000	375,879	70%
The North East and Deeside	27,919	50,000	77,919	179%	41,493	20,000	61,493	48%	69,412	70,000	139,412	101%
Perthshire, Fife and Angus	10,000	30,000	40,000	300%	14,292	10,000	24,292	70%	24,292	40,000	64,292	165%
Total	**591,882**	**300,000**	**891,882**	**51%**	**736,068**	**165,000**	**901,068**	**22%**	**1,327,950**	**465,000**	**1,792,950**	**35%**

5.3 Potential Economic Impact

5.3.1 Approach

Our approach is to initially estimate the potential gross increase in the mountain biking market. We then assess the potential net additional impact using the process set out in **Figure 1**.

Figure 1: Economic Impact Assessment Method



5.3.2 Scenarios

In our approach we consider three scenarios:

- Full Growth Potential – where all the developments and initiatives are implemented which allow the market to reach its full potential growth;

- Partial Growth – where not all of the developments and initiatives are implemented so only partial potential growth is achieved. Under this scenarios we have assumed that the Innerleithen Bike Park proceeds and that developments/initiatives elsewhere are at a scale of only 50%[13]; and

- Do Nothing – where no further developments and initiatives are undertaken[14].

5.4 Full Growth Potential

5.4.1 Visitor Numbers

The estimated number of additional visits is 461,972, as set out in **Table 5.2**.

Table 5.2: Additional Visits	
Built Centres	298,433
Wilderness	163,539
Total	461,972

5.4.2 Visitor Profile

Table 5.3 shows the origin of the visitors. A total of 85% would be visits from Scottish residents and 67% would be day visitors.

Table 5.3: Visitor Origin and Type			
	Day	Overnight	Total
Scottish	66%	19%	85%
Non-Scottish	1%	14%	15%
Total	67%	33%	100%

5.4.3 Average Daily Expenditure and Length of Stay

The average daily expenditure has been split by visitor origin[15]. This assumes an increase in average daily spend levels compared to the current market. This would be achieved through encouraging more visitors to built centres (with expenditure opportunities) and other activties and facilties within the local area i.e. retail, food & drink, etc.

[13] The Innerleithen Bike Park could not only be partially implemented.
[14] We have assumed that a minimal level of maintenance is undertaken (to address health and safety issues).
[15] Based on previous evaluation evidence and inflated to 2009 prices.

Table 5.4: Average daily spend per person by visitor type	
Day Visitors	
Scottish	£12.50
Non-Scottish	£17.50
Overnight Visitors	
Scottish	£40
Non-Scottish	£55

The average length of stay for Scottish residents staying overnight is estimated at 2.1 nights and for visitors from outwith Scotland at 4.4 nights[16].

Table 5.5: Length of stay for overnight visitors	
Scottish	2.1
Non-Scottish	4.4

5.4.4 Gross Expenditure

Gross expenditure is calculated as follows:

GE = dv.ndv + ov.l.nov

Where GE gross expenditure
dv average daily expenditure of day visitors
ndv number of day visitors
ov average daily expenditure of overnight visitors
l average length of stay
nov number of overnight visitors

However, before applying the formula it is important to recognise that overnight visitors may be visiting a site on more than one day during their trip.

We need to take account of this before applying the formula to aviod doublecounting of the impacts[17].

Applying the formula, whilst taking account of number of days the sites are used, gives gross expenditure figures[18] as detalied in the **Table 5.6**.

[16] Based on previous evaluation evidence.
[17] This is because we are including the impact from all of their trip so do not want to count the same person twice.
[18] Expenditure was broken down by visitor origin before applying the formula.

Table 5.6: Gross Expenditure	
Day Visitors	£3,907,089
Overnight Visitors	£14,124,907
Total	£18,031,997

The potential gross expenditure resulting from mountain biking visitors is £18.03 million. Overnight expenditure accounts for 78% of the total. However, we also need to take account of potential growth in those undertaking mountain biking as part of their holiday. The growth in this market will be more limited and has been estimated at a 10% increase equating to a further £4.87m. This would therefore give a gross direct expenditure increase in the market of £22.9m.

If we applied the multiplier to this it would give a total gross increase in the market of £35.96m.

5.4.5 Gross to Net

To calculate the net impact of the future developments in the market it is necessary to take account of additionality by making allowance for:

- deadweight;
- substitution;
- leakage;
- displacement; and
- multiplier effects.

Deadweight and Substitution

Deadweight refers to the likelihood that the developments would take place without public sector support. At this stage we do not know the specific detail for each development. Therefore, we have assumed that public sector support will be required for them to go ahead and deadweight has been assumed to be zero at this time[19].

Substitution is a measure of the extent to which an individual or business substitutes one activity for a similar one in order to take advantage of public sector assistance. As the projects are not yet defined then substitution would not be applicable at this stage[20].

[19] There is one known development the Innerleithen Bike Park but this has a deadweight of zero.
[20] Innerleithen Bike Park is defined but substitution for this project is zero.

Leakage

Leakage refers to the level of benefits that accrue to those outwith the target area. In this case the assessment is at the Scottish level and any leakage outwith Scotland would not feature in the calculations i.e. it is implicit within the process.

Displacement and Multipliers

There is also a need to discount any benefits from the developments that will displace economic activity that would have taken place anyway.

Displacement is an assessment of the extent to which the project has caused spending to be shifted from one part of the economy to another. The levels of displacement assumed at this time are given in **Table 5.7**. Scottish residents are more likely to make their expenditure elsewhere in the Scottish economy if they did not spend it on mountain biking. Non-Scottish residents would be more likely to make this expenditure outwith Scotland, so these factors are reflected in the displacment factors used. In the case of those undertaking it as part of their holiday, most would still be likely to come even if they were not mountain biking as part of their trip.

Table 5.7: Displacement Factors (%)	
Main reason/key part of trip	
Day Visitors	
Scottish	98
Non-Scottish	10
Overnight Visitors	
Scottish	90
Non-Scottish	10
Part of holiday	
Overnight	90

Taking account of additionality and displacement reduces spend by £12.87 million to give net direct expenditure of £10.04 million.

Multipliers and Net Additional Expenditure

The combined supplier and income mulitplier of 1.57 is applied to the direct expenditure to give net additional expenditure of £15.76 million.

Table 5.8: Net Additional Expenditure	
Gross expenditure	£22,901,941
Less displacement	£12,866,897
Net Direct expenditure	£10,035,044
Plus multipliers	1.57
Net additional Expenditure	£15,755,019

5.4.6 Optimism Bias

Optimism bias is where project appraisers have a tendency to overstate the benefits from a project and/or understate the costs and timing. However, recognising this to be the case we have built this into the process when quantifying the future growth in terms of increased visitor numbers. Therefore, we allowed for optimism bias before finalising the future growth in visitor numbers. We therefore, do not need to further reduce the benefits at this stage.

5.4.7 Net Employment Impact

The net employment impact is calculated by applying an appropriate output:employment factor. We have applied an output:employment factor of £34,250 derived from the STMS[21]. Applying this factor gives a total of 460 net additonal FTE jobs in Scotland.

5.4.8 Gross Value Added

The net additional annual gross value added has been calculated on the basis of GVA per employee within the tourism industry (£19,600[22]). The number of FTEs multiplied by GVA per employee gives annual net additional GVA of £9,016,011.

5.4.9 Impacts over Time

The analysis so far is on the basis of the level that could be achieved after a five year period. We need to plot the build up of impacts over time as shown in **Table 5.9**.

Table 5.9: Impacts Over Time (Full Growth Potential)

						Cumulative	
	2009/10	2010/11	2011/12	2012/13	2013/14	Year 3	Year 5
Expenditure	£1.6m	£3.9m	£7.1m	£11.8m	£15.8m	£12.6m	£40.2m
Employment	46	115	207	345	460	207	460
GVA	£0.9m	£2.3m	£4.1m	£6.8m	£9.0m	£7.2m	£23.0m

However, generally people prefer to receive goods and services now rather than later – known as the 'time preference'. Therefore, it is necessary to discount the impacts over time. A discount rate of 3.5% has been applied as recommended by the Green Book.

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21 An inflator has been applied to bring the figures up to 2009 values.
22 Scottish Executive: *Scottish Annual Business Statistics* 2006

Table 5.10: Discounted Impacts Over Time (Full Growth Potential)							
						Cumulative	
	2009/10	2010/11	2011/12	2012/13	2013/14	Year 3	Year 5
Expenditure	£1.5m	£3.7m	£6.4m	£10.3m	£13.3m	£11.6m	£35.2m
Employment	46	115	207	345	460	207	460
GVA	£0.9m	£2.1m	£3.7m	£5.9m	£7.6m	£6.6m	£20.1m

5.5 Do Nothing

5.5.1 Visitor Numbers

Under the 'Do Nothing' option our consideration is not the number of extra visitors but rather how many visitors may be lost from the market.

It has been estimated that over a five year period there could be a loss of 12.5% from Scottish visitors and 25% from Non-Scottish visitors.

Table 5.11: Additional Visits			
	Current	Decline	Future
Scottish	1,065,557	-133,195	932,363
Non-Scottish	96,836	-24,209	72,627
Total	1,162,393	-157,404	1,004,990

5.5.2 Gross Expenditure

Gross expenditure is calculated using the formula set out earlier in Section 5.4.4. Applying the formula provides an estimated gross decline in expenditure of £4.8 million.

Table 5.12: Decline in Gross Expenditure	
Day Visitors	£1,385,921
Overnight Visitors	£3,455,963
Total	£4,841,884

5.5.3 Displacement and Multipliers

However, not all of this decline will be lost to the Scottish economy rather some of it will remain by being displaced into other activity. Therefore we have applied displacement factors as set out in **Table 5.13**.

Table 5.13: Displacement Factors (%)	
Main reason/key part of trip	
Day Visitors	
Scottish	90
Non-Scottish	10
Overnight Visitors	
Scottish	70
Non-Scottish	20

As before the multiplier needs to be applied to these direct effects.

5.5.4 Net Expenditure Loss

The potential net expenditure loss from the Do Nothing option is estimated at £4.3 million

Table 5.14: Net Expenditure Loss	
Gross expenditure	£4,841,884
Less displacement	£2,131,219
Net Direct expenditure	£2,710,665
Plus multipliers	1.57
Net additional Expenditure	£4,255,745

5.5.5 Net Employment and Gross Value Added

The potential net loss of employment and GVA would be 124 FTEs and GVA of £2.44 million, respectively.

5.5.6 Impacts Over Time

The discounted impacts are set out in **Table 5.15**.

Table 5.15: Impacts Over Time (Net Loss)

						Cumulative	
	2009/10	2010/11	2011/12	2012/13	2013/14	Year 3	Year 5
Expenditure	-£0.8m	-£1.6m	-£2.3m	-£3.0m	-£3.6m	-£4.7m	-£11.3m
Employment	-25	-50	-75	-99	-124	-75	-124
GVA	-£0.5m	-£0.9m	-£1.3m	-£1.7m	-£2.1m	-£2.7m	-£6.4m

5.6 Partial Growth

A partial growth scenario has also been considered based on a 50% growth scenario (the exception to this being the Innerleithen Bike Park was has been assumed to go ahead, as 50% option on this is not possible).

5.6.1 Impacts

The impacts under the partial growth scenario are set out in **Table 5.16**.

Table 5.16: Impacts Over Time (Partial Growth)							
						Cumulative	
	2009/10	2010/11	2011/12	2012/13	2013/14	Year 3	Year 5
Expenditure	£0.9m	£2.2m	£4.0m	£6.7m	£8.9m	£7.1m	£22.7m
Employment	26	65	117	195	259	117	259
GVA	£0.5m	£1.3m	£2.3m	£3.8m	£5.1m	£4.1m	£13.0m

The discounted impacts are set out in **Table 5.17**.

Table 5.17: Discounted Impacts (Partial Growth)							
						Cumulative	
	2009/10	2010/11	2011/12	2012/13	2013/14	Year 3	Year 5
Expenditure	£0.9m	£2.1m	£3.6m	£5.8m	£7.5m	£6.5m	£19.8m
Employment	26	65	117	195	259	117	259
GVA	£0.5m	£1.2m	£2.1m	£3.3m	£4.3m	£3.7m	£11.3m

5.7 Impacts

The impacts under the two growth scenarios will comprise the net additional impacts that they will generate and the net loss that will be avoided (net safeguarded) by taking action. This is summarised in **Table 5.18**.

Table 5.18: Discounted Impacts (Net Additional and Net safeguarded)							
						Cumulative	
	2009/10	2010/11	2011/12	2012/13	2013/14	Year 3	Year 5
Partial Growth							
Expenditure	£1.7m	£3.7m	£5.9m	£8.8m	£11.1m	£11.3m	£31.1m
Employment	51	115	191	294	384	191	384
GVA	£1.0m	£2.1m	£3.4m	£5.0m	£6.3m	£6.4m	£17.8m
Full Growth							
Expenditure	£2.3m	£5.3m	£8.7m	£13.3m	£16.8m	£16.3m	£46.4m
Employment	71	165	282	444	584	282	584
GVA	£1.3m	£3.0m	£5.0m	£7.6m	£9.6m	£9.3m	£26.6m

5.8 Summary

Under the full growth scenario the potential future net additional expenditure by year five would be £20 million (£16.8 million when discounted). The employment associated with this would be 584 FTEs and a GVA of £11.5 million (£9.6 million when discounted).

Under the partial growth scenario the potential future net additional expenditure by year five would be £13.1 million (£11.1 million when discounted). The employment associated with this would be 384 FTEs and a GVA of £7.5 million (£6.3 million when discounted).

6. Conclusions

6.1 Introduction

This Chapter provides conclusions in terms of the current economic impact, issues to be addressed, opportunities and the associated potential economic impact. It also provides an Outline Action Plan to help inform the way forward.

6.2 Current Economic Impact

The current economic impact of the mountain biking tourism market in Scotland has been estimated at expenditure of £119m, employment of 3,470 and GVA of £68m. However, this includes all of those that engage with mountain biking (and all of their trip expenditure) irrespective of the main motivation for their trip. Further analysis aimed at narrowing the focus to those where it is the main reason and/or a key part of their trip provides an estimate of £46.5 million expenditure; 1,360 FTEs; and £26.6 million GVA.

Analysis shows that overnight expenditure accounts for 86% of total expenditure. A total of 84% of trips by overnight visitors from outwith Scotland are to Southern Scotland. Therefore, Southern Scotland is a key location for expenditure of those from outwith Scotland, where mountain biking is the main reason for visiting or a key part of their trip.

6.3 Issues, Gaps and Opportunities

Scotland has a strong profile within the mountain biking market borne from significant investment in good quality built facilities. This has attracted the attention of the mountain biking market and has led to a large increase in visitor numbers particularly within the 7stanes development. However, this success has also attracted the attention of competing locations (those that were already established in the market e.g. Wales and those that are newer entrants to it e.g. North of England).

These areas are developing their offer and in the face of this increasing competition Scotland cannot afford to rest on its laurels. A particular issue are the developments currently underway and planned for the North of England. If the North of England can get its product right (Keilder, Hamsterley, Whinlatter, Grizedale and Dalby) then Scotland, particularly Southern Scotland, could begin to lose market share.

Scotland needs to develop its product further whilst also maintaining the quality of existing facilities. This is particularly the case for the 7stanes, which currently account for 70% of visits to built trail centres. It is a key component to promoting and advancing Scotland's mountain biking reputation. Failure to maintain and refresh the 7stanes product and its market position could jeopardise Scotland's overall mountain bike reputation. There is also a key development opportunity in the Innerleithen Bike Park.

There are four key location gaps in product, namely the North East of Scotland, Perthshire/Angus, Glasgow/West of Scotland and South of Scotland. There is a need for an improved downhill/freeride venue in Scotland with better trail and market access. The proposed commercial bike park at Innerleithen (South of Scotland) would satisfy this opportunity.

Indeed, if the development of trail centres is to continue, new models in partnership with the private sector will be required.

At present much of the market is dominated by 'enthusiasts' who are very loyal and go on recreational trips away many times throughout the year. However, if more people can be enticed to enter the sport, then the number of recreational trips can be increased.

There is a need to continue to attract more children and families by making mountain biking more accessible – more green and blue routes, and attracting more school participation.

Scotland would benefit from the promotion and development of a family off-road cycle centre. A logical choice for such a centre would be a location which already attracts a substantial family tourist market, and is an established family holiday destination. Loch Lomond & The Trossachs National Park around Aberfoyle/Callander or the Cairngorms National Park, Aviemore have both been identified as potential candidates. The product should not only be focused on single track, but include signed and waymarked routes, forest road, tracks, paths – with added features of interest such as sculptures, discovery trails etc. This would support a family holiday market, particularly if linked to a range of other recreational activities.

Improved joint marketing/packaging and linkages between centres is required, particularly in the North of Scotland. There is also a growing need to package and market the 'wilderness', the natural trail product of Scotland. Graded mapped routes need to be introduced (see Wales). Wales has developed a series of 'mountain bike bases' in key locations – see Brecon Beacons National Park. These are 'natural trails', not built single track. It is recommended that this approach is adopted in key locations within both the Cairngorms and Loch Lomond & The Trossachs National Parks (see Queen Elizabeth Forest Park and Aviemore). This would then be a stepping stone for route development in other locations throughout Scotland. It is not necessary that all routes should be signed, but significant landscape or other navigational aids should be noted on downloadable maps/trail guides (see Alfred Wainwright Pictorial Guides to the Lakeland Fells equivalent). Trails should perhaps also be linked to a wide range of other activities to encourage families and children.

6.4 Links to Other Sectors

There are links to other SE key industries notably Food and Drink; and Textiles; and to the wider retail sector. However, there is an opportunity to develop further more formal links to the mutual benefit of the sectors. Activities and initiatives within these other sectors may provide opportunities for joint marketing or establishing more direct links between the mountain biking visitors and providers of Scottish Food & Drink, Textiles and the wider retail offer (for example through the buyers guide on scottishfoodanddrink.com).

6.5 Potential Market Growth

The potential market growth (under the full growth scenario) is set out in **Table 6.1**.

Table 6.1: Potential Market Growth					
Development Cluster	Current Visits	Future Visits	Growth	% growth in area	% of total growth
Southern Scotland	906,834	996,834	90,000	10%	20%
West and Central Scotland	106,534	216,534	110,000	103%	24%
The Highlands	220,879	375,879	155,000	70%	33%
The North East and Deeside	69,412	139,412	70,000	101%	15%
Perthshire, Fife and Angus	24,292	64,292	40,000	165%	9%
Total	**1,327,951**	**1,792,951**	**465,000**	**35%**	**100%**

The overall potential growth is estimated at 35% (this is in terms of visitor numbers rather than expenditure). For some areas the percentage increase is very high but they are starting from a lower base level. Therefore, whilst Southern Scotland would only see a 10% increase this is from the highest current level and it would account for 20% of the overall growth.

6.6 Potential Net Additional Economic Growth

The potential growth in the gross expenditure in the market over the next five years has been estimated at £36 million. This would increase the total gross market expenditure from £119m to £154m. However, part of this increase would result from encouraging Scottish residents and visitors to move their expenditure from other activities into mountain biking i.e. displacement of expenditure.

Therefore we have also considered the potential net impacts of the future growth in the market, as shown in **Table 6.2**.

Table 6.2: Discounted Impacts Over Time							
						Cumulative	
	2009/10	2010/11	2011/12	2012/13	2013/14	Year 3	Year 5
Full Growth							
Expenditure	£1.5m	£3.7m	£6.4m	£10.3m	£13.3m	£11.6m	£35.2m
Employment	46	115	207	345	460	207	460
GVA	£0.9m	£2.1m	£3.7m	£5.9m	£7.6m	£6.6m	£20.1m
Partial Growth							
Expenditure	£0.9m	£2.1m	£3.6m	£5.8m	£7.5m	£6.5m	£19.8m
Employment	26	65	117	195	259	117	259
GVA	£0.5m	£1.2m	£2.1m	£3.3m	£4.3m	£3.7m	£11.3m

However, it is not only about increasing the impact of the market but safeguarding what already exists. In light of increasing competition from other parts of the UK, particularly the North of England, part of the investment in the sector will be required to maintain existing market levels. A failure to maintain and refresh existing products, and develop new products would over time lead to a decline in the level of the market from outwith Scotland. It would also lead to leakage of the Scottish domestic market to England and Wales for overnight visits and, even some day visits. This would lead to a net loss from the existing market. There is a need to take action to avoid this net loss i.e. safeguard. The net additional impacts safeguarded are shown in **Table 6.3** (this is shown as a net loss as it would be the amount which would be lost from the existing market if action was not taken).

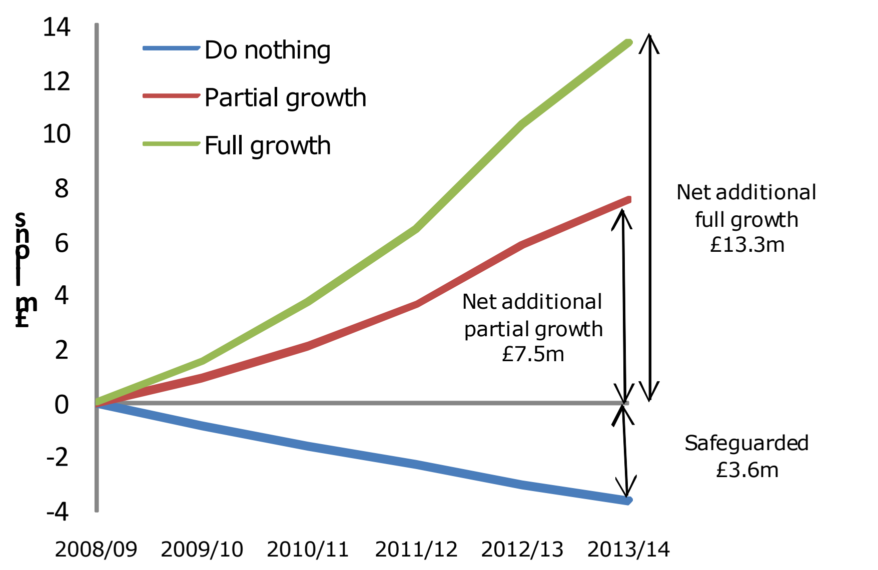
Table 6.3: Impacts Over Time (Net Loss)							
						Cumulative	
	2009/10	2010/11	2011/12	2012/13	2013/14	Year 3	Year 5
Expenditure	-£0.8m	-£1.6m	-£2.3m	-£3.0m	-£3.6m	-£4.7m	-£11.3m
Employment	-25	-50	-75	-99	-124	-75	-124
GVA	-£0.5m	-£0.9m	-£1.3m	-£1.7m	-£2.1m	-£2.7m	-£6.4m

Taking account of the net additional impact and net safeguarded gives total impacts as set out in **Table 6.4.** This shows the amount that would be safeguarded i.e. the net loss which would be avoided together with the net additional that would be created, giving the overall positive benefit.

Table 6.4: Discounted Impacts (Net Additional and Net safeguarded)							
						Cumulative	
	2009/10	2010/11	2011/12	2012/13	2013/14	Year 3	Year 5
Full Growth							
Expenditure	£2.3m	£5.3m	£8.7m	£13.3m	£16.8m	£16.3m	£46.4m
Employment	71	165	282	444	584	282	584
GVA	£1.3m	£3.0m	£5.0m	£7.6m	£9.6m	£9.3m	£26.6m
Partial Growth							
Expenditure	£1.7m	£3.7m	£5.9m	£8.8m	£11.1m	£11.3m	£31.1m
Employment	51	115	191	294	384	191	384
GVA	£1.0m	£2.1m	£3.4m	£5.0m	£6.3m	£6.4m	£17.8m

It is useful to represent the above figures in the form of a graph, as shown in **Figure 6.1**, over.

Figure 6.1: Discounted Impacts Over Time



The figure shows that there is an element of safeguarding of £3.6million by year five (2013/14). Under the full growth scenario, there would also be net additional growth of £13.3million, giving a total of £16.8million. With the partial growth scenario £3.6million is also safeguarded, with net additional growth of £7.5million, giving a total of £11.1million.

It is important to bear in mind that as products are developed there will be a need to assess the type of markets they will attract i.e. local, elsewhere in Scotland, outwith Scotland.

This will have an impact on the level of economic impact in geographical terms. Those attracting the largest number of visitors may not necessarily generate the largest level of net impacts.

6.7 Outline Action Plan

The overall aspiration for Scotland is to maintain its position as a world class mountain biking destination and continue to grow the mountain biking sector. In the face of increasing competition, it is especially important not to underestimate the importance of increasing investment. Cutting edge products, a level of national coordination, and the ability to broaden the market will be the key elements in realising this overall aim. Seven objectives have been identified and the key actions required in their achievement (presented in the **Table 6.5**).

Table 6.5: National Actions

Objective/ Opportunity	Action
Broaden the Market	– increase trail hierarchy at existing sites – develop trail networks at recognised tourist destination – develop a family focussed built centre (Cairngorms or LL&TTNP) – develop community projects to ensure access and grow market at grassroots level
Maximise the Downhill Market	– develop commercial bike park at Innerleithen – improve trail hierarchy at Glencoe, the Lecht, Aonoch Mor etc
Maintain and Grow Market Position	– maintain existing facilities (although maintenance is not sufficient) – continued refreshment and enrichment of existing trail products
Deliver an Enhanced Wilderness Product	– coordinated route mapping and promotion – establish links to built centre (both physically and promotionally) – establish links with spending opportunities – either built centres or local towns/villages
Increase Expenditure	– stronger links to local businesses/spending opportunities – links to visitor attractions and other activities etc – (links strongly to broadening of the market – particularly important where there is a lack of onsite facilities)
Improve Marketing and Promotion	– promote sites in geographical clusters (like 7stanes, Wales, South West England) – promote in conjunction with other activities (see VisitScotland Adventure Pass)
Coordination	– create a mechanism for coordination at a national level – allows for strategic development, marketing and promotion

6.7.1 Regional Mountain Biking Opportunities

The continued sustainability of mountain biking developments will be dependent on both the local resident population and visitors to the area. The mixture of these markets will be different for each location. Through examining the geographic spread of existing mountain biking centres, a number of geographic gaps have been identified, which provide opportunities for development. These opportunities are outlined in the table below.

Table 6.6: Regional Opportunities	
Area	**Opportunities**
The Highlands	– to be sustainable, focus should be on 'visitor' sites – two approaches: o Broaden base by creating family locations o Focus on extreme sport orientation – 'outdoor capital' – build on existing and develop new sites
Aberdeenshire	– focus on local resident and VFR market – create additional centre
West Central Scotland (The Trossachs)	– focus on family market – mix of local resident and tourists – include a wider range of activities – option for extreme level trails – however care should be taken not to pull market from 7stanes – 'try a sport'/skills training, etc
Fife/Angus	– small regional facility at Angus Glens – linked to new Centre in Aberdeenshire – alternative may be a small regional facility in Perthshire
South of Scotland	– commercial bike park with uplift at Innerleithen – continued enhancement, enrichment and refreshment – increase family offer at Kirroughtree, Mabie and Glentress

In terms of prioritising these geographic opportunities, this is set out in the table below. Although the first priority is ensuring that existing facilities remain competitive.

Table 6.7: Prioritisation of Opportunities	
Priority Level	**Opportunity**
Priority 1	– Co-ordination of approach to existing, including: o Maintenance o Enrichment/refreshment o Promotion (strong focus on South of Scotland and Highlands given distribution of existing facilities)
Priority 2	– Opportunity 1: Develop new downhill product o Commercial Bike Park (South of Scotland) – Opportunity 2: Develop the destinations (main tourist areas) o Highlands o West Central Scotland
Priority 3	– Develop other destinations (local/VFR focus) o Aberdeenshire o Perthshire/Angus

Appendix A – Individual Members Survey

A.1 Introduction

This Appendix provides analysis of a survey completed by individual members of a selection of mountain biking clubs based throughout Scotland and the North of England. The consultancy team was able to gain access to individual members through emailing their member clubs and asking each to forward on the link to the online questionnaire to their members.

The purpose of the survey was to allow us to confirm and compare the habits of enthusiast mountain bikers both as local residents and as mountain bike tourists. In total 287 individual members completed the online survey.

A.2 Background

A.2.1 Origin of Members

Table A.1 details the origin of the respondents.

Table A.1: Origin of Members		
	Number	%
Edinburgh	86	31%
Glasgow	28	10%
Aberdeen	28	10%
Tayside	16	6%
Fife	16	6%
Falkirk	15	5%
Lancashire	10	4%
Inverness	9	3%
East Ayrshire	7	3%
Renfrewshire	7	3%
Newcastle	6	2%
Milton Keynes	5	2%
Cheshire	2	1%
Scottish Borders	2	1%
Greater Manchester	2	1%
Belfast	1	0.4%
North Lanarkshire	1	0.4%
Other England	36	13%
Total	**277**	**100%**

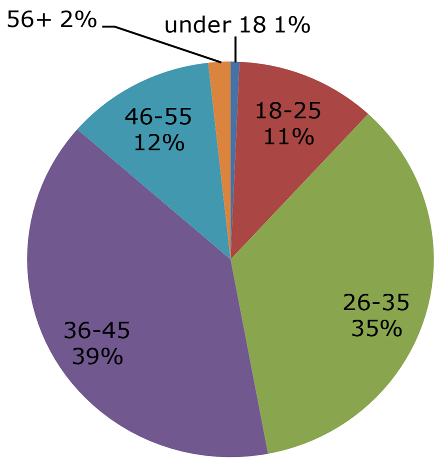
N=277, 10 no response

Just under a third of respondents (31%) originated from Edinburgh, with 10% from Glasgow and Aberdeen. The respondents also came from a number of other places throughout Scotland and England, with Lancashire being the most common region in the Northwest (4%).

A.2.2 Age Profile

As **Figure A.1** shows, the most common age group was 36-45 years, followed by those aged 26-35 (35%). The vast majority of respondents were male (91%).

Figure A.1: Age Profile



N=287

A.3 Membership

The respondents were asked which mountain biking club(s) they are a member of. In total, 165 individuals said that they are a member of a mountain bike club and the results are shown in **Table A.2**, over.

Table A.2: Member of Mountain Biking Club(s)		
	Number	%
Ecurie Neep Mountain Bike Club	22	13%
Edinburgh Road Club	21	13%
Edinburgh University Cycling Club	21	13%
Stirling Bike Club	16	10%
Bog Trotters	11	7%
Cyclone MBC	9	5%
Arran Bike Club	6	4%
Glasgow Mountain Bike Club	5	3%
Newcastle Mountain Bike Club	5	3%
Mukyriderz	4	2%
Woolybacks	3	2%
Dunfermline Cycle Club	3	2%
Bristol MBC	2	1%
Scottish Downhill Association	2	1%
Darwen MBC	2	1%
Blackburn and District MTB Club	2	1%
Moray MBC	2	1%
RAF Cycling Club	2	1%
HIMBA	2	1%
MidAirCrisis	2	1%
MTB Scotland	2	1%
Other	21	13%
Total	**165**	**100%**

N=165

As the table highlights, respondents are members of a large number of mountain biking clubs. Ecurie Neep Mountain Bike Club, Edinburgh Road Club and Edinburgh University Cycling Club were the most common (13%), followed by Stirling Bike Club (10%).

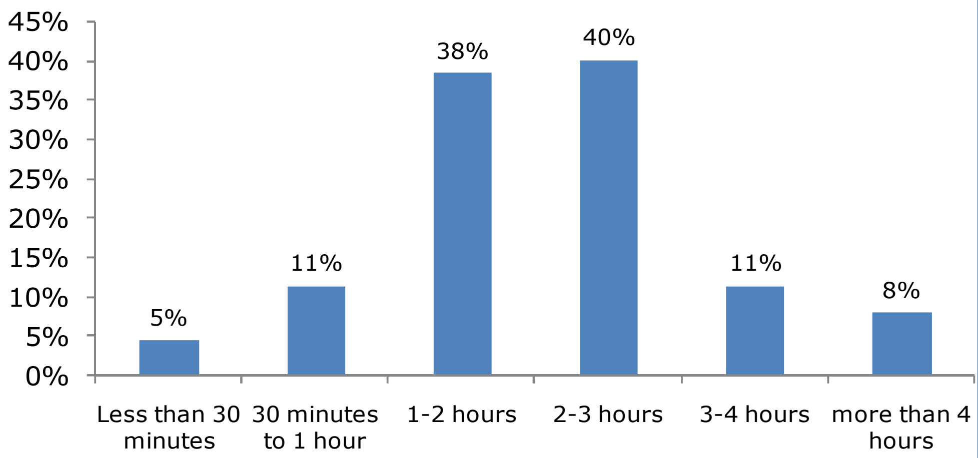
There were a number of other responses where only one member from each club completed the questionnaire. Some of these clubs were: Peebles Cycle Club, Deeside Thistle Cycling Club, Standard Life Mountain Bike Club and GASP Gritmunchers.

The vast majority of respondents, 93% (equivalent to 266 members) cycle all year round.

A.4 Travel Time

Members were asked how far from home they are prepared to travel to go on a mountain biking day trip. **Figure A.2** reports responses.

Figure A.2: Length of Time Prepared to Travel



The majority of respondents, (78%) stated that they would be prepared to travel for between 1-3 hours to go on a mountain biking day trip.

A.5 Frequency of Mountain Biking

Members were asked how often they mountain bike. They were asked to detail this according to how often they mountain bike when they are cycling directly from home, on a day trip away from home and on an overnight trip away from home. **Table A.3** shows the responses.

Table A.3: How Often Do You Mountain Bike?			
	Cycling directly from home	On a day trip away from home	On an overnight trip away from home
Everyday	4%	0%	0%
3-5 times per week	25%	2%	0%
1-2 times per week	43%	32%	1%
Once a fortnight	12%	29%	0%
Once per month	7%	26%	23%
Once every 3 months	3%	8%	36%
1-2 times per year	2%	3%	30%
Less often	3%	0%	10%
Total	**281**	**283**	**274**

Some 43% of those who cycle directly from home cycle 1-2 times per week and a quarter cycle more frequently (3-5 times per week). A relatively small proportion cycle once a fortnight and only 4% cycle everyday.

Approximately a third of respondents go on a day trip away from home to cycle 1-2 times per week. This is followed closely by those who go once a fortnight (29%) and once a month (26%).

Just under a quarter of respondents go on an overnight trip away from home to cycle once per month. Over a third go less frequently (once every three months), 30% go 1-2 times per year and a further 10% go less often.

A.6 Frequency of Visiting Mountain Biking Centres

Members were then asked to detail how often they visit purpose built mountain biking centres. Again, they were asked to detail this according to how often they visit when they are cycling directly from home, on a day trip away from home and on an overnight trip away from home. **Table A.4** illustrates responses.

Table A.4: How Often Do You Visit Purpose Built Mountain Biking Centres?			
	Cycling directly from home	On a day trip away from home	On an overnight trip away from home
Everyday	0%	0%	0%
3-5 times per week	0%	1%	0%
1-2 times per week	7%	13%	0%
Once a fortnight	6%	18%	1%
Once per month	7%	28%	14%
Once every 3 months	6%	24%	29%
1-2 times per year	4%	10%	33%
Less often	71%	4%	22%
Total	**214**	**268**	**249**

The majority of those who cycle directly from home do not often visit purpose built trail centres (71% less than once a year).

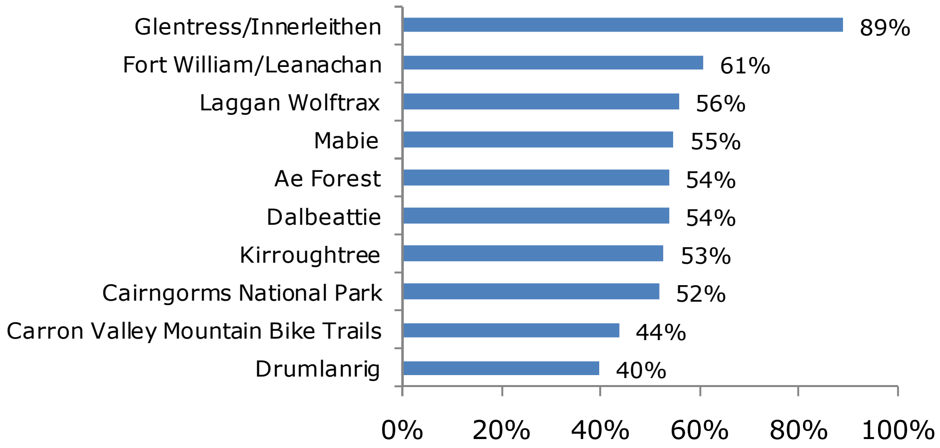
However, those who cycle on a day trip away from home use purpose built mountain biking centres more often, with 18% visiting them once a fortnight, 28% using them once per month and 24% visiting them once every three months.

Those who go on overnight trips away from home use the purpose built centres less frequently than those who go on day trips, with only 1% visiting them once a fortnight, and 14% once per month. However, a higher proportion visit them once every three months, 1-2 times per year or less often.

A.7 Sites Visited

The members were asked what sites in Scotland they have visited. In total, the respondents have visited over 30 different sites. **Figure A.3** shows which sites the highest proportion of respondents had visited.

Figure A.3: Scottish Sites Visited



Note: multiple responses allowed

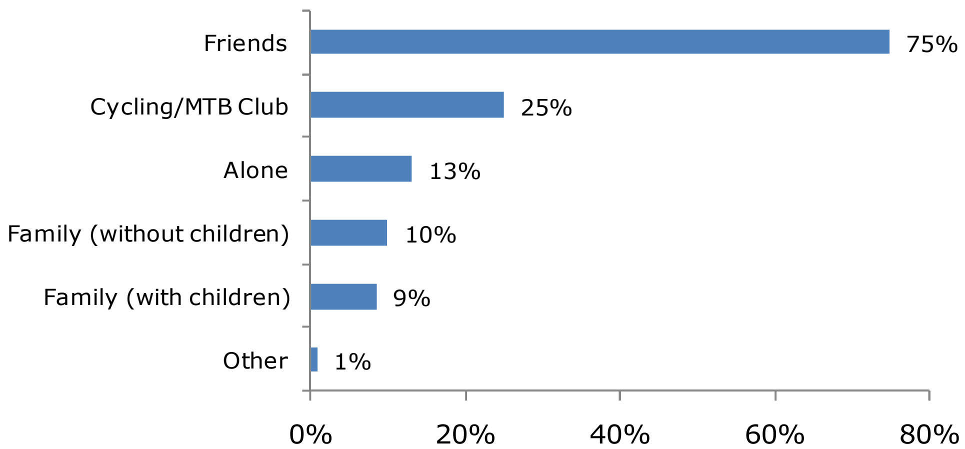
As the figure highlights, 89% had visited Glentress/Innerleithen, followed by Fort William/Leanachan (61%) and Laggan Wolftrax (56%).

A.9 Last Trip to a Mountain Biking Centre

Members were asked to detail how many riders were in their immediate party on their last trip to a mountain biking centre, and the average party size was five.

Members were also asked to detail who they cycled with on their last trip to a mountain biking centre and **Figure A.4** shows the responses.

Figure A.4: Who Members Cycled With



Note: multiple responses allowed

The majority of respondents cycled with friends (75%), with a quarter having cycled with their cycling/mountain bike club. Of the three respondents that cited other; one cycled with work colleagues, one cycled with individuals they met at the site and for the other it was a forum meet up.

A.10 Events Attended

Nearly two thirds of respondents (64%) have attended a mountain biking event in Scotland. Those that have attended an event were then asked to detail which event(s) they have attended and the most commonly cited responses included:

- Fort William World Cup: (49%);
- 10 Under The Ben: (15%);
- Selkirk Merida: (12%);
- SXC Series: (11%); and
- Strathpuffer 24: (9%).

A.11 Facilities Missing in the Mountain Biking Sector

Some 167 members gave responses as to what facilities are missing in the mountain biking sector in Scotland. The most commonly cited responses included:

- need chairlift at Innerleithen/more bike lifts (18%);
- lack of good trail centres in the Central Belt (16%);
- need better toilets/showers/changing facilities at some centres (12%);
- need quality trails in the North East (11%);
- better access to trails by public transport/room on buses for bikes (9%); and
- need more basic accommodation near some of the bigger MTB centres (7%).

There were a number of other comments noted including: more challenging trails; more trails for beginners/families; Scotland is years behind other places like Canada, France, Italy and Slovenia; a downhill rental package (bike, helmet, armour) would be brilliant for Innerleithen and Fort William; and more youth summer schools.

A.12 Other Comments

Additional comments given by members were overall generally positive, with respondents commenting on the well maintained centres and trails, and the quality of the 7stanes sites.

A.13 Summary

The most common age groups were 36-45 years and 26-35, accounting for 74% of the total.

Respondents are members of a large number of mountain bike clubs and the majority of members cycle all year round.

The majority of respondents (78%) are willing to travel between 1-3 hours to go on a mountain biking day trip. Under half of those who cycle directly from home do so 1-2 times per week and a third of those who go on a day trip away from home cycle 1-2 times per week. Just under a quarter of respondents go on an overnight trip away from home to cycle once per month.

The majority of those who cycle directly from home do not often visit purpose built trail centres (71%). However, those who cycle on a day trip and overnight do make greater use of the centres as a proportion of their overall trip.

The Scottish sites that the highest proportion of respondents had visited were Glentress/Innerleithen, Fort William/Leanachan and Laggan Wolftrax.

The average party size of members' last trip to a mountain biking centre was five and the majority cycled with friends.

Approximately two thirds of respondents have attended mountain biking events in Scotland, with the most commonly mentioned including the Fort William World Cup and 10 Under The Ben.

Over half of the members (58%) provided a response as to what facilities are missing in the mountain biking sector in Scotland; the most common responses included a need for a chairlift at Innerleithen/more bike lifts; a lack of good trail centres in the Central Belt; better toilets/changing facilities at some centres; and the need for quality trails in the North East.

Appendix B – Onsite & Offsite Businesses and Tour Operators Survey

B.1 Introduction

This Appendix provides analysis of the surveys undertaken with businesses located at mountain bike centres in Scotland (on-site businesses), and other businesses that are involved in mountain biking (off-site businesses). It also provides analysis of the survey undertaken with mountain biking tour operators.

B.2 On-Site and Off-Site Businesses

B.2.1 Introduction

In total 20 businesses were interviewed, of which 11 were businesses that are offsite but involved in mountain biking (i.e. off-site) and nine were businesses based at mountain bike centres across Scotland (i.e. on-site).

The survey sought to gather information on: where customers are from; their typical average spend; any significant change in their trading over the last three years; and whether they think there are any market gaps within the mountain biking sector in Scotland.

B.2.2 Customers

Businesses were asked to estimate the mix of customers by proportion of revenue. In total, 16 businesses provided us with information on the mix of their customers and their turnover. We took the turnover for each business and divided it by each type of customer to give us an average spend per customer group and aggregated this for all of the businesses to give us a total spend per group.

Table B.1: Mix of Customers By % Of Revenue

	%
Local Residents	44%
Day visitors	28%
Overnight visitors	28%

N=16

As the table highlights, the highest proportion of business turnover comes from local residents (44%).

B.2.4 Repeat Custom

Businesses were asked what percentage of their business is repeat custom. The responses were mixed as **Table B.2** shows.

Table B.2: What % Of Your Business Is Repeat Custom?		
Repeat Custom	**Number**	**%**
Almost 0%	1	5%
10%	1	5%
25-50%	4	20%
51-70%	7	35%
71-90%	7	35%
Total	**20**	**100%**

B.2.5 Direct Result of Mountain Biking

Off-site businesses were asked what proportion of their business is directly linked to mountain biking and **Table B.3** reports the responses.

Table B.3: What % Of Your Business Is A Direct Result of Mountain Biking		
Direct Result of MTB	**Number**	**%**
10-30%	2	18%
31-50%	3	27%
51-70%	3	27%
100%	3	27%
Total	**11**	**100%**

As the table highlights, more than half of the off-site businesses reported that more than 50% of their business is a direct result of mountain biking.

B.2.6 Turnover

Eighteen businesses provided details of their turnover as shown in **Table B.4**.

Table B.4: Turnover of Companies Surveyed		
Turnover	**Number of Companies**	**%**
Less than 100K	8	44%
100-250K	4	22%
250-500K	4	22%
500K-£1million	0	0%
More than £1million	2	11%
Total	**18**	**100%**

N=18, 2 did not provide a response

Most businesses, (44%) fell into the less than £100,000 turnover banding, with only two reporting turnover of more than £1million.

Businesses were then asked to detail percentage of revenue by quarter. **Table B.5** shows the responses.

Table B.5: Percentage of Revenue By Quarter	
	%
January-March	11%
April-June	33%
July-September	45%
October-December	15%

N=19, one business did not provide a response as they only opened in June last year

Unsurprisingly, the largest percentage of revenue is generated during the summer and shoulder months (April-September).

B.2.7 Changes in Trading

All of the businesses said that there have been changes in trading over the past three years. The most commonly cited responses included:

- increase in bike tourism/more people becoming aware of what's available to them/more trail users: (7);
- slowdown in sales/trade down: (5); and
- upsurge in commuter bikes/change in practice to include cycle to work schemes offered by employers: (2).

There were a number of other comments noted including: an increase in families; there has been more focus on repair work over the past year; and the sport is progressing and marketed better.

Respondents were then asked if they foresee significant changes in their business over the next three years with most (12 or 60% of businesses) commenting that they expect to see an increase in business/trading. A number of other comments were noted including: the downturn in the economy will lead to a reduction in sales; turnover has decreased each year since foot and mouth, and as a result don't think the business will exist in three years time; and we are campaigning for local trails so expect to see changes geared towards more specialist mountain biking if the project goes ahead.

B.2.8 Market Gaps Within Mountain Biking

In total, 13 businesses (65%) stated that there are market gaps within the mountain biking sector in Scotland and the most commonly cited responses included:

- lack of trails for beginners/families: (3);
- need to create a better infrastructure linking trails and facilities to accommodation providers/luggage forwarding service: (3);

– need to promote mountain biking more, especially in the Highlands: (2);

– lack of chairlifts: (2); and

– accommodation is poor in some areas/more B&Bs should listen to the needs of cyclists and be more 'bike friendly': (2).

B.2.9 Other Issues

Eleven businesses provided additional comments and these included:

– need better forest roads: (2);

– more funding for races and facilities: (2);

– need to promote cycling more in Scotland/teach people about the benefit of mountain biking: (2); and

– more cycling initiatives that are useable for people/investing in sensible routes: (2).

B.3 Tour Operators

B.3.1 Introduction

In total seven tour operators were interviewed by telephone. The survey sought to gather information on: the types of mountain biking holidays that the operators offer; the most popular destinations for holidays; who makes use of the holidays; cost of the holidays; and trends in the sector over the past three years.

B.3.2 Customer Profile

The majority of customers are male (71%), and overseas tourists make up the largest proportion of customers, as shown in **Table B.6**.

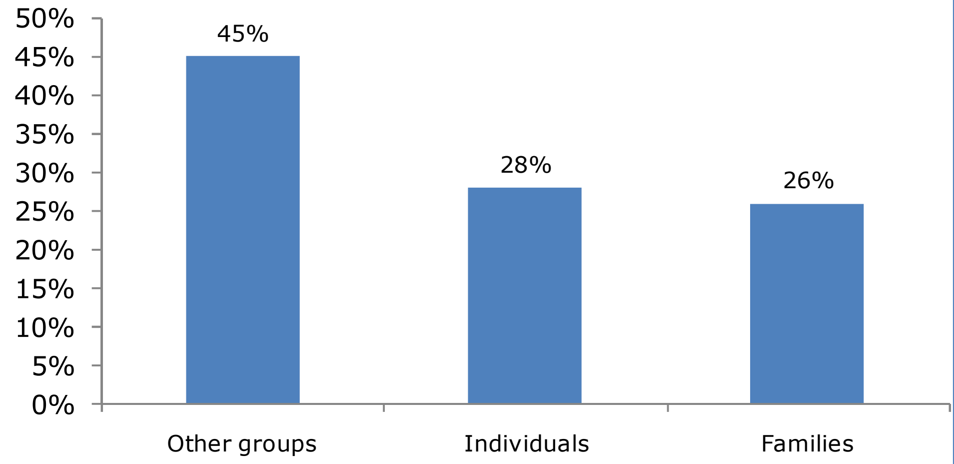
Table B.6: Origin of Customers

	%
Scotland	24%
Rest of UK	34%
Overseas	42%
Total	**100%**

Customers' age range varies from 20-65 years.

Tour operators were asked who makes use of their holidays and **Figure B.1** provides details.

Figure B.1: Who Makes Use of Holidays



Other groups make up the largest proportion of holiday goers (45%), followed by individuals (28%).

The number of mountain biking clients that the tour operators attract in a year varies with one having 20, two reporting that they have between 50-75 clients, three having between 100-125 and one having 400 clients.

B.3.2 Type of Holidays/Short Breaks

Five of the tour operators we spoke with offer mountain biking holidays and short breaks in Scotland. Of the other two; one offers mountain biking as an activity for people who go on holiday (1% of the business) and one offers training courses and guided one day tours.

For those who run mountain biking holidays and short breaks, one said it involves 95% of their business, one stated that it makes up 50% of their business, two said it accounts for 5-10% and for one it involves less than 5% of their business.

The mountain biking holidays offered by the tour operators involve a mix of staying in one location and travelling about between different locations (includes luggage forwarding service).

B.3.3 Trail Centres and Popular Destinations

Only three of the tour operators make use of purpose built trail centres and these are Laggan, Fort William, Glentress, Dalbeattie, Ae, Mabie, Kirroughtree and Abriachan.

The most popular destinations for mountain biking holidays in Scotland are the Highlands, the Scottish Borders (including 7stanes), the North West, Perthshire and Fort William.

B.3.3 When Holidays Operate

Four of the tour operators stated that their holidays operate all year round, and they all reported that their busiest time is from April-September. The other business that offers holidays operates from April to October (July-August is the busiest time).

For the other two tour operators, one stated that their training courses and guided day tours run from February to November, and the other operates all year round, with the busiest period from July to September.

B.3.4 Average Length of Stay and Expenditure

Three tour operators reported that the average length of their holidays are seven nights, one six nights and one typically 2/3 days.

Tour operators were asked to provide details on how much a visitor spends with them on a typical holiday. The cost varies, from £400-£800 per person for a weeks holiday, giving an average of £580. For a mountain bike training course, the cost is £70 per day and to have mountain biking included as an activity as part of a holiday is £55 per person per day.

B.3.5 Growth Over Last Three Years

Four of the tour operators reported that their business has grown over the last three years. One cited that they have trebled in size and they expect annual growth of 35-40% in mountain biking over the next three years. Two reported growth of 50%, and one stated they have grown a bit and they expect a 10-15% growth in mountain biking holidays over the next three years.

The other three operators stated that their business has been relatively static over the past three years and of these, one reported that they expect growth of 10% over the next three years and one expects to see growth of between 50-100%.

B.3.6 Market Gaps Within Mountain Biking

Only three tour operators stated that there are gaps within the mountain biking sector in Scotland and they all agreed that there is a lack of facilities for eating/drinking at some trail centres, with one adding that the Forestry Commission should work better with private businesses.

Only one tour operator provided an additional comment which was that they would like to see more facilities/services in rural areas.

B.4 Summary

Onsite and Offsite Businesses

The highest proportion of business turnover comes from local residents (44%).

Over half of the offsite businesses reported that more than 50% of their business is a direct result of mountain biking. Unsurprisingly, the largest percentage of revenue is generated during the summer months.

All of the businesses have noticed changes in trading over the past three years and the most commonly cited responses included: increase in bike tourism/more trail users and slowdown in sales. However 60% of businesses also commented that they expect to see an increase in business/trading over the next three years.

Approximately two thirds of businesses stated that there are market gaps within mountain biking in Scotland and the most commonly noted responses included a lack of trails for beginners/families and a need to create a better infrastructure to link trails and facilities to accommodation providers.

Tour Operators

The majority of customers are male (71%), and overseas tourists make up the largest proportion of customers. Customers' age range varies from 20-65 years, and groups (outwith families) make up the largest proportion of holiday goers.

The number of mountain biking clients that the tour operators attract in a year varies, with one having 20, two stating that they have between 50-75 and three having between 100-125 clients.

Five of the tour operators run mountain biking holidays and short breaks, and the types of holidays they offer include staying in one location and travelling about between different locations.

Three of the tour operators make use of purpose built trail centres and these include Laggan, Fort William and Glentress. The most popular destinations for mountain biking holidays include the Highlands and the Scottish Borders.

The most common length of stay for a mountain biking holiday is seven nights and the average cost of this is £580 per person.

Four tour operators reported growth in their business over the last three years, and three stated that they expect to see growth in mountain biking holidays over the next three years. The other three operators reported that their business has remained relatively static over the last three years, with two expecting growth over the coming three years.

Less than half of the tour operators said that there are gaps within the mountain biking sector in Scotland, of which all agreed that there is a lack of facilities for eating/drinking at some trail centres.

Appendix C – Forest District and Mountain Biking Centre Consultations

C.1 Introduction

Recreation Managers from each of the 15 Forest Districts were consulted in order to gain understanding of the current mountain biking product and the markets making use of it. Information was also gathered with a view to appreciating key future planned developments or opportunities at mountain biking sites on Forestry Commission Scotland (FCS) land, and any issues or constraints to this development.

Although the majority of mountain biking in Scotland occurs on FCS land, there are a number of key sites throughout the country which are owned/managed by other organisations including community trusts, Local Authorities and private estates. Representatives from a total of 10 non-FCS mountain biking sites were contacted in order to gain an understanding of additional products and markets. As explained below, the consultants' previous research indicated that the FCS is not currently looking to develop new trails. Any future development in the mountain biking sector will most likely come from the private sector. Therefore, it was important to keep appraised of any plans/opportunities for future developments at these sites.

The results of this research will be presented under five headings: general issues which appear to be common to Scotland as a whole; general national mountain biking trends; issues/trends distinctly affecting each Forest District; site specific issues/trends for non-FCS centres; and finally, market gaps in the Scottish mountain biking sector which may present opportunities for future development.

C.2 General Issues

The general issues identified from the consultations were that:

- for FCS sites the existing trail network and current network of built mountain bike centres will continue to be supported, undergo health and safety redesign, signage updates, maintenance, etc as required. However, the wider development of new trails and centres has currently stalled following an announcement by the Scottish Government in 2008;

- there is still potential for a regionally-focused trail network in the future, but this would need to be built and maintained without Forest Enterprise Scotland's resources. Developers would lease land and all development, ongoing maintenance costs and liabilities would fall on the developer;

- the Forest Districts will continue to work with local clubs and other organisations to maintain the existing network of both cross-country and downhill trails. However, Forest Districts will no longer tolerate unplanned, wild trail building. If such trails are discovered, following a brief period of consultation, they will be removed;

- FCS is planning to carry out a review of all its forest cycle facilities in 2009;

- there may be opportunities in the future around urban areas under the WIAT (Woodlands In and Around Towns) Scheme to improve access to the sport at a grassroots level. Again, funding from sources other than FCS would have to be secured;

- it is yet to be determined whether private landowners/investors are likely/willing to develop more facilities;

- it is recognised that the red and black trail networks have driven mountain bike tourism and economic benefit. In the future, blue and green trails can help with the development of the sport through attracting schools, families and older users. However, the direct economic benefit of these markets will be harder to quantify, as it is likely to consist of community and general tourist use, rather than specific mountain biking visitors/destination drivers; and

- enthusiasts and extremists are the most likely to voice opinions, and are therefore the most often heard. A balance needs to be reached in attracting new markets (beginners, families etc) by making mountain biking more accessible, whilst ensuring current markets (extremists, enthusiasts, etc) are not alienated.

C.3 General Trends

The consultees identified a number of trends in the mountain biking sector and the most commonly cited responses included:

- there is an increase in family participation, particularly amongst those with younger children. This has led to growing demand for more accessible, family-friendly trails;

- there has been a growth in demand for accessible mountain biking trails from school groups and Local Authority outdoor education providers (there are two current examples of schools incorporating the sport into the syllabus);

- there is a continuing desire for additional trail centres, creating highly technical trails on the 'doorstep' of mountain bikers, albeit from a minority of users;

- red trails are still generally the most popular, used by both visitors and local residents. This preference is due to the level of difficulty, which is challenging but also accessible to most riders with some experience;

- as stated above, there is recognition that users of the red and black trail networks have, to date, driven mountain bike tourism. These 'signature' trails are the most likely to encourage out of region visitors, and as such have generated the greatest level of economic benefit; and

- FCS has adopted a more 'risk adverse' policy and approach to trail management, making the trails generally safer and less extreme. There is a danger that in the future, as markets that exist continue to upskill, future trails may not satisfy upskilled demand in the long term.

C.4 Regional Forest Districts

This Section presents consultees' views on the issues and trends affecting each of the 15 Regional Forest Districts in Scotland.

Ae

- since the opening of the café, Ae Forest have noticed greater use by families/beginners; and

- little has changed at Mabie or Dalbeattie in the last few years, however the 'Stepping Stanes' project has been successful recently in attracting more young people.

Cowal and Trossachs

- there are no purpose built mountain biking centres in the area, however there has been significant and growing mountain bike use of Queen Elizabeth Forest Park (although not single track), Sustrans Route 7 between Aberfoyle and Callander, by families, couples and longer distance riders;

- a significant number of cyclists use Loch Katrine i.e. bike and boat (estimated at 10% to 15% of all users to the site);

- Loch Ard Forest has developed family-friendly cycling, with discovery sculptures along the route and Phase One has been completed. However, it is proving difficult to raise the capital for the remaining two phases. There has been an increase in family cycling in the area; and

- Ardgartan Peninsula is still well used by mountain bikers visitor to the area tend to use the Epic Route around the peninsula, shorter loops at Glen Loin tend to be used by local residents. The army use the area for recreation purposes using bikes.

- There is an opportunity for a single track linked to wider extreme sports development in the area.

Dornoch and Inverness

- new trails have created growth in the number of mountain bikers in the far North;

- there is a need for better co-ordinated marketing, particularly in the far North to encourage people to go on short breaks (trail centres to work closely together);

- the quality of suitable accommodation is viewed as a limiting factor; and

- Laggan Wolftrax would benefit from further development and permanent central facilities.

Fort Augustus

- there is a need for greater promotion to educate people that mountain biking is not just for experienced riders – it should be made more accessible to everyone;

- 90% of visitors to Balnain Bike Park and Glen Affric are day visitors from outside the region; and

- there is perhaps greater opportunity for self-guided cross-country mountain biking, rather than purpose built centres.

Galloway

- the red and black trails at Kirroughtree are very highly regarded, attracting an increasing number of overnight visitors from outside Scotland (Ireland, in particular, is a growing market);

- visitor numbers have been stable at Kirroughtree for the last few years, with growing club/group and school use;

- the short blue run at Glentrool is popular with families and beginners, visitor numbers have increased marginally in recent years;

- research is currently underway assessing the potential of large scale investment in Galloway Forest Park. This may have implications for Kirroughtree and Glentrool – two of the 7santes sites.

Lochaber

- although the Witches Trails and the Championship Downhill Trails are the only purpose-built sites, mountain biking happens all over the District in the countryside generally;

– approximately 30% of the District's mountain biking users are estimated to be locals;

– the market used to be predominantly men aged 30-50 years, however there has been a growth in the family market recently; and

– there are no plans for new trails, however there are plans to change a red trail into a blue trail to encourage more families/beginners.

Lorne

– there are no purpose-built mountain bike facilities in this Forest District and no new facilities are planned;

– a feasibility study was carried out at Brecklett Forest but the terrain was not suitable for blue or green trails so the project has been shelved;

– there is an increasing number of families using waymarked cycles routes in Lorne Forest; and

– local cycle clubs are holding an increasing number of events.

Lowlands

– there has been an increase in school visits to the Carron Valley led by Local Authority outdoor education staff;

– there is regular demand of two or three bike demo days a year; and

– Whitelee Forest, south of Glasgow has an access plan for multi-access trails, funded by wind farm developments, however, FCS will not host these. The plans will need to be developed by a local community bike club.

Moray and Aberdeenshire

– trails in the North East of Scotland are predominately for local use due to the absence of a main trail centre. There is a clear need for a trail centre of some significance in the North East; and

– resistance has been voiced to travelling longer distances, particularly from the North East of Scotland, in times of recession. The increasing prominence of green issues has also been sighted as a reason.

Tay

- although not purpose-built centres, Alean, Craigvinean, Angus Glens and Kinnoull Hill are all frequently used mountain biking sites (both Kinnoull Hill and Craigvinean have been used for competitions);

- local bike clubs in Pitlochry and the Angus Glens are considering trail development options;

- an increase in night riding has been observed, as well as an increase in older people participating in the sport; and

- the industry feels that there is a gap for a single track centre in Central Scotland, in Perthshire in particular.

Tweed Valley

- visitor numbers at Glentress seem to be fairly stable, although Newcastleton has shown some growth;

- Innerleithen is still being used, and new trail developments and re-grading of the red trail have helped to increase the popularity of the cross-country trail;

- development and trail refreshment at the key site, Glentress, is always ongoing. A refreshed skills area is required at Glentress and is due in summer 2009;

- a £5m investment is currently underway at Glentress. New visitor facilities at Glentress Peel expected to open in summer/autumn 2010 and will attract a wider forest tourism audience; and

- there are plans for Newcastleton to improve links with Kielder as development progresses south of the Border.

West Argyll

- there has been a general rise in mountain bike visitors throughout the District;

- poor trail surfaces radically reduce winter usage; and

- the area needs an improved family cycling resource to support the holiday and short break market in the area.

C.5 Non-FCS Mountain Biking Centres

This Section presents consultees' views on the issues and trends for non FCS mountain biking centres across Scotland. This included discussions with different organisations including private landowners, local authorities, local operators and other groups.

Abriachan Forest Trust

- the trails at Abriachan are a family-based product – there are no black runs. At present, the Trust have no plans to change this, or increase the difficulty level;
- 90% of visitors are day-trippers and overnight visitors from outside the region;
- there has been a trend over the last few years of families with younger children using the trails and older people/grandparents;
- the Forest Trust have plans to build a skills area with red, blue and green level training, to encourage more beginners to enter the sport; and
- a number of local schools (approximately 14) have started to use the trails as part of their education programmes.

Blairadam

- the trails at Blairadam Forest receive roughly 75% local users and 25% day visitors from Edinburgh/Lothian, Tayside, Perthshire and Strathclyde;
- there has been a steady growth in visitor numbers since the development group was established in 2004;
- Fife Council has opened a short trail network in Kirkcaldy, the first of a number of developments in the town; and
- it is felt the Central Belt is ignored, in terms of mountain biking, despite a strong demand from the population centres. It was noted that much of the development has taken place in remote, 'hard to reach' areas with poor public access.

Cairngorms

- there are a number of recognised trails and footpaths (but no dedicated mountain bike single track) throughout the National Park, however they are each managed individually by the landowners, both FCS and private; and
- a new off-road route is being developed between Aviemore and Glenmore Lodge.

Comrie Croft

- the trail centre in Perthshire is not long established, but has seen a steady growth in demand since its opening;
- the site is predominantly used by local or day visitors, school/youth groups; and

- the management of the Comrie Croft site are currently planning to extend their trail product, specifically incorporating more blue/green runs in order to make the site more accessible to beginners (at present the 6km of trails is mostly black/red graded).

Drumlanrig

- demand at Drumlanrig primarily comes from Glasgow/Central Belt;
- the site links with the 7stanes and as such receives a high number of visitors from outside Scotland; and
- the level of usage outside of the regular season is increasing, due to the fact that the facilities are free to use in winter.

Glencoe

- Glencoe's mountain biking product currently consists of only downhill track; 2km - black;
- visitors come from all over the UK, approximately 80% day trips and 20% overnight. A recent trend has seen greater volumes of English visitors; and
- business plans have been completed for new developments at Glencoe, including 7km of trail both cross-country and downhill, at a mixture of difficulty grades. It is hoped that this new venture will be open to the public by 2010.

Glenlivet (Crown Estate)

- the Crown Estate currently hosts a number of cross-country mountain biking trails; and
- a feasibility study is currently being completed for a downhill mountain biking centre with 40km of trail. If the result of the study is positive, it is hoped that development will commence before the end of 2009.

Glenmore Lodge

- the market at Glenmore Lodge skills circuit consists of local users (25%) and overnight stays for training courses (75%);
- a growth has been noticed in the market for tuition in general and, more specifically, for instructor courses; and
- conflicts have been noted between walkers and cyclists, which need to be further addressed.

Highland Wildcat

- the trails at Golspie receive an estimated 10,000 visitors, mostly day visitors, however the overnight market is growing;
- a new 3km skills area, due to open in 2009, will boost and broaden appeal to include families, schools and enthusiasts; and
- future developments at the site will involve further trail building, rather than central facilities.

Lecht

- Lecht Ski Resort are currently building two mountain biking trails for the summer season to open on the 1st June 2009;
- plans are for: one red trail, one blue trail (1.2km and 1.3km) with chairlift access; and
- the site management are open to considering further development once the first trails have opened and are established.

Nevis Range

- the downhill mountain biking trail product at the Nevis Range, used for the World Championships, is currently one downhill trail, graded red;
- the site currently has plans for two additional trails: one red, one black (orange) at 2.82km; and
- due to its strong reputation, and location at Fort William, the site receives a relatively high proportion of overnight visitors.

Pollok Country Park

- the park is essentially a community asset and almost all users are local residents;
- no recent trends were reported. It was noted that there has always been a wide age range of users, however the principal age range is young people (aged under 24);
- there are no plans to create changes to the trails other than maintenance – listed designed landscape;
- Glasgow City Council would like to establish a bike hire shop for the park, possibly located in an abandoned building at Pollokshaws West Railway Station;
- there is significant mountain biking use of the park in general using footpaths and other routes, however usage cannot be quantified; and

- the council representative also mentioned two additional mountain biking related proposed developments: the Cathkin Braes and Chirnsyde.

C.6 Market Gaps

The market gaps have been identified as:

- a need for a regional trail centre in the North East;

- with the growing demand for family-friendly trails, further safe off-road routes (both single track and non-single track) are needed;

- there is an opportunity to create more green/blue trail networks. These networks will likely also be useful in encouraging both local community and holiday visitor use;

- there is a need for a greater critical mass of trails in the far North of Scotland in order to increase the number of tourist visitors, specifically longer blue and red trails;

- it has been suggested that there is a requirement for space and facilities at forest centres suitable for instruction in order to encourage tuition and other training;

- a prominent theme which appeared from the consultations was the idea that Scotland has the potential to become a world class mountain bike destination. It was frequently commented that in order for this to happen, a commercial bike park, with good chairlift access, that is accessible to key overnight and tourist markets needs to be created;

- it was also noted that a chairlift facility is required to establish a premier downhill venue;

- there is a need for shorter, longer and epic off-road routes, with fine views and incorporating forests;

- an opportunity exists to further link purpose-built forest mountain biking centres with natural riding in the 'wilderness', creating 'petal' rides, beginning and ending at the built centre. This type of trail product will help to boost average length of stay and visitor spends;

- there is continued demand for mountain bike facilities close to the Central Belt – this area currently lacks a cluster of purpose-built centres. However, any such facility will likely be driven by local, rather then tourist demand;

- there is also an indication that demand exists for a freeride park and Northshore development (technical timber features) in the Central Belt area of Scotland;

– while no purpose-built facilities exist, the Queen Elizabeth Forest Park is nevertheless a popular mountain biking venue. There is potential to further develop this market with improved and more formal cycling provision. The development of a small gated freeride or family fun, with links to wilderness trails area may also be a possibility;

– there is a need for more social inclusion/accessible trails and more support for disabled bikers/four wheel bike riders;

– an opportunity has been acknowledged for better promotion of and education on the mountain biking product through improved provision of self-guiding maps;

– there is an opportunity to increase the family market by improving the overall visitor experiences through themed trails and Geocaching on bikes;

– a gap has been observed for linkages between centres North of the 7stanes to create multi-centre trips/packages; and

– it was noted that, in order to attract a broader audience to the sport, there needs to be more variety in the trail product. There is also an opportunity to create additional skills areas with varying levels of difficulty to encourage beginners into the sport.

Appendix D – Stakeholder Consultations

D.1 Introduction

As part of the study the consultants contacted a number of public sector agencies who have an interest within the mountain biking sector. These organisations were approached in order to get an overview of how they see the mountain biking sector in Scotland, in terms of its current state and possible future developments. Representatives from each of the following agencies were contacted:

- Scottish Enterprise;
- Scottish Cycling;
- SportScotland;
- VisitScotland;
- Highlands & Islands Enterprise;
- Scottish Downhill Association (SDA);
- Scottish Cross Country Association (SXC);
- Forestry Commission Scotland HQ, Edinburgh;
- CTC (National Cyclists Organisation);
- IMBA (International Mountain Biking Association); and
- SYHA (Scottish Youth Hostel Association).

D.2 Key Themes

The results of these consultations are reported below in an aggregate format, outlining the general views and themes of the research:

- it was noted that investment for future development in mountain biking will have to come from the private sector;
- it was felt by some that Scotland should be developing and evolving as a single destination, rather than the 7stanes overshadowing other trail centres;
- for example, Fort William and Innerleithen should work together for the World Championships, rather than competing;
- mountain biking clubs/enthusiasts tend to be the most vocal in putting forward their opinions;

- the events are well renowned and individual events can be oversubscribed, with the SDA and SXC now organising six and five national events per year, respectively;

- the SDA events have a capacity of approximately 300-310, with average participation at 270 people. At spectator events attendance reaches roughly 1,000-1,500 people. SXC have a capacity of approximately 350, however participation level is generally between 200 and 300;

- both organisations commented that there is potential for growth of regional events and qualifying events for the National Series. The SDA plan to reduce the number of national events by creating a network of regional events in the future;

- in terms of the downhill product, there is a need for more year round, rather than seasonal, trails, particularly in the North. There is also a need for more variety and for shorter tracks for beginners and children;

- a new development is planned for Whitelee Forest, which will open in September 2009;

- the Cathkin Braes trail development for the Commonwealth Games will involve an 8km events trail loop;

- there is a need for more iconic, long-distance trails and greater use of the natural trail product. The core paths network is already in place but requires better promotion, grading and mapping;

- 'Petal' rides present an opportunity to increase length of stay, and therefore, spend of visitors;

- small community projects, including urban parks, pump tracks and BMX parks are likely to be developed in the future;

- the women's mountain biking market is growing;

- it was commented that there should be more involvement from Local Authorities in the development of mountain biking products;

- a need for greater partnerships and packaging between small businesses was noted; and

- mountain biking should be linked further with other adventure sports and integrated with VisitScotland's 'Adventure Pass'.

Appendix E – Trail Designers/Skills Coaches

E.1 Introduction

In the mountain biking sector, trail designers and skills coaches can be considered leading experts. The nature of their work requires them to be up-to-date on the latest trails, techniques and markets. Six such professionals (Paul Mason, Pete Laing, Rik Aslop, Dafydd Davis, Chris Ball and David Webster) were consulted, with a view to refreshing the consultants' knowledge on the latest trends and opportunities arising in the Scottish mountain biking sector. The key themes from these consultations are reported below.

E.2 Issues and Trends

The key issues and trends arising in the Scottish mountain biking sector have been identified as:

- development in the future is most likely to be on private or Council-owned land, rather than Forestry Commission Scotland (FCS);
- it was suggested that the full long-term cost of the 7stanes was not fully understood as it was developed. At present, the trails are in need of maintenance, improvement and enrichment. The level of investment required has stalled development in other areas of Scotland as resources are limited;
- it is considered that, in the future, it would be beneficial to create trails which more reflect the natural environment and therefore require less maintenance;
- urban parks, next to large centres of population, will likely be key developments in the next few years;
- there is an overall need to improve the visitor experience, and to create more differentiation between each trail centre. This would be helped by further development in other parts of Scotland;
- the trail product offered for beginners needs to be improved. Currently, the majority of trails in Scotland are red graded, however additional blue and green trails will make the sport more accessible for new riders;
- there is a need for a quality regional trail centre in the North East of Scotland. This may be fulfilled by the '4 Hills' project;
- there is an opportunity to create a second double black graded trail in Scotland to advance the extreme market;
- the skills academies are operating at full capacity (roughly 300-400 coaching sessions per year), demonstrating a growing demand for skills tuition;

- it was noted that the demand for tuition is generated predominantly by experienced riders wishing to increase their skills level, rather than beginners learning about the sport. Demand tends to originate both within Scotland and outwith, at a fairly even split. However, demand from schools/youth groups is growing;

- the demand for private tuition is also growing;

- the development of trail centres has removed some barriers to the sport. However, it was felt that trail centres are currently too difficult for beginners. There needs to be a better progression from green to blue; and

- there should be better partnership and support between FCS and small mountain biking businesses. For example, businesses would like to be able to advertise at trail centres.

E.3 Gaps and Opportunities

A number of gaps and opportunities were identified, the most commonly cited responses included:

- there is an opportunity for a family-focused mountain biking centre in Aviemore;

- an important product for the future will be circular 'petal' rides in the natural wilderness, with links to accommodation for tourists to the area;

- there is a clear need for improved mapping, promotion and grading of trails in the countryside, rather than at purpose built centres. There needs to be wider availability of maps, with either signposting or points of reference and descriptions of country trails, with guides to the levels of difficulty;

- an opportunity was missed for a purpose built mountain biking centre at the Trossachs. There is, however, still an opportunity to make the area more 'cycle friendly';

- there is also potential for a small built venture at Queen Elizabeth Forest Park to create a pump track, freeride/skills area linked with cross-country routes, etc;

- attempts should be made to target tourists by offering mountain biking/cycling as an activity to participate in while on holiday. This potential also exists for the VFR market;

- there is an opportunity to develop shelters at trail centres to allow bike repair training; and

- for mountain biking to continue to develop, there is a need for a commercial bike park with a chairlift facility in Scotland.

Appendix F - Planned Developments

PLANNED NEW MOUNTAIN BIKING DEVELOPMENTS IN SCOTLAND							
Centre	**Location**	**Type**	**Status**	**Target Market**	**Contact Name**	**Organisation**	**Phone**
The Lecht Ski Resort	Strathdon, Aberdeenshire	2 downhill trails (red & blue) with chairlift	Opening June 2009	Beginner downhill	James McIntosh	The Lecht	01975 651 440
Glenlivet (Crown Estates)	Tomintoul, Aberdeenshire	Downhill MTB centre with 40km of cross country trails	Subject to feasibility study	Downhill & cross country, all levels	Vicky Hilton	Crown Estates	01479 870 070
Innerleithen	Innerleithen, Scottish Borders	Commercial bike park	Awaiting public sector	Downhill, freeride, markets	Hugh Insley	FCS	01750 721 120
Cathkin Braes	Rutherglen, Glasgow	Cross country events venue	Opening for 2014	Commonwealth Games & local legacy	Alan McLean	Glasgow City Council	0141 287 5064
Glennifer Braes	Paisley	Pumptrack and short cross-country loop	Feasibility study	Local residents, beginners	Anne Phillips	Renfrewshire Council	0141 842 5414
Callendar Estates	Falkirk	Pump track and short trail	Ongoing	Local residents, beginners	Rik Aslop	Rik's Bike Shed	01848 330 080
Kirkcaldy	Kirkcaldy	Pump track and short trail	Opened early 2009	Local residents	Derek Abbott	Fife Coast & Development Trust	07852 916 307
Lews Castle Estate	Stornoway	Short trails	Under investigation	Local families, visitors	Pete Laing	(Trail Designer)	07971 530 843
Chirnsyde Community	Possil, Glasgow	Small community project	Ongoing	Local residents, youths	Alan McLean	Glasgow City Council	0141 287 5064

PLANNED DEVELOPMENTS TO EXISTING MTB SITES IN SCOTLAND							
Centre	**Location**	**Type**	**Status**	**Target Market**	**Contact Name**	**Organisation**	**Phone**
Glentress	Scottish Borders	New visitors facilities	Due to open Summer/Autumn 2010	Broader market	Hugh Insley	FCS	01750 721 120
Glencoe	Glen Coe, Highlands	7km of trails, downhill (2-3 trails)	Hoped to be open by 2010	Downhill, various levels	David Campbell	Glencoe	07941 661 743
Nevis Range	Fort William	Two additional downhill trails (1 red, 1 black)	Under construction and ongoing	Downhill, advanced	Heather Negus	Nevis Range	01397 705 825
Abriachan Forest	Abriachan, Highlands	Skills area (red, blue & green)	Early planning stages	Local residents, beginners	Suzanne Barr	Abriachan Forest Trust	01463 861 259
Comrie Croft	Perthshire	Extend trails to include more blue/green	Early planning stages	Local residents	Colin McPhail	Comrie Croft	07933 781 133
OTHER ASPIRATIONS – TIMINGS & EXTENT OF TRAILS UNCLEAR							
Centre	**Location**	**Type**	**Status**	**Target Market**	**Contact**	**Organisation**	**Phone**
Allean Forest	Perthshire	Proposed family / beginners cross country trails	Proposed site – funding proposal prepared for SE Tayside, project stalled at SE re-organisation	Beginners, families, tourists to area	Peter Fullerton	FCS	01350 727 284
Angus Glens	Angus Glens	Proposed by local bike club	Pre-feasibility study	Local residents, visitors to area	Chris Feltham	AMBTA	01241 876 034
4 Hills Project	Aberdeen	Proposed by local bike club	Unknown	Local residents, visitors to area	Ewan Reid	FCS	01466 794 161

Also research is currently underway on the potential growth opportunities at Galloway Forest park which may have implications for two of the 7stanes sites – Kirroughtree and Glentrool.

Appendix G – Experience from Elsewhere

G.1 Introduction

This Appendix presents experience from elsewhere.

G.2 South Wales

The South Wales mountain bike offering focuses on three purpose-built mountain bike trail centres – Cwmcarn Forest, Afan Forest Park and Brechfa.

G2.1 Cwmcarn Forest

Background

Cwmcarn Forest is renowned for its downhill trail and regular minibus uplift service 'Cwmdown'. This Centre is located close to the M4 corridor just north of Newport and Cardiff and as a result, easily accessible to local markets and those from further afield via the motorway network.

Visitor Numbers

The forest attracts in excess of 300,000 visitors of which 20% (around 46,104) are mountain bikers. Mountain bike trails show nearly 82,000 rides – each rider is, on average, riding 1.8 trails per visit.

It is estimated that 57% live within the local Monmouthshire postcode. Nearly a quarter of visitors are from England. Only an estimated 8% of all visitors stay overnight.

The length of stay at Cwmcarn is a short half day visit and additional mountain bike facilities are required to boost length of stay/spend and overnight demand.

Mountain Bike Product

The trails have been built and are maintained by the Forestry Commission. A new visitor centre has recently opened and is run by Caerphilly Council. The visitor centre caters more for the general visitor rather than the mountain biker. At present there is no site shop, bike hire or bike wash facilities. Planning permission has been approved for a small building to be added in the car park to accommodate mountain bikers' needs and perhaps also add a coffee bar/kiosk.

The mountain bike trail network comprises a 1.9km downhill trail Y Mynydd and a 15.5km red trail Twich. A car parking charge will be reintroduced in April at a cost of £5 per car.

There are future plans to extend the car park and add a small skills area and possibly a jump track. The site would also benefit from better links to the nearby village. The facilities target the enthusiast cross-country riders and downhill freeriders only – there is no family cycling.

As the site is very constrained, it is unlikely that this can be rectified unless additional land can be leased for green, blue, family and an additional red trail. An additional downhill trail could be added if further uplift operators are secured. Cwmcarn will be a key venue as part of a regional branded trail product in the future.

G2.2 Afan Forest Park

Background

Afan Forest Park is one of the largest cross-country mountain bike trail networks in the UK.

The trails are maintained by a subcontractor paid for by the Forestry Commission. It is understood that the trail network is extremely natural and, as a result, has low maintenance costs.

The trail network at present has two trail heads, one at Afan Argoed visitor centre which is operated by Neath Port Talbot Council and comprises a traditional forest visitor centre and café (which is dated) and a bike shop.

Visitor Numbers

Afan Argoed visitor centre attracts 142,000 visitors per annum of which 56% in 2007 came for mountain biking. In 2006 this was an estimated 70%. However, this does not correlate with single track trail counter information. An estimated 58% of mountain bikers were from ABC1 socio-economic groupings.

An estimated 69% of all visitors to the Park were day visitors and 31% stayed overnight. Dwell time in the Park is fairly long and 79% of mountain bikers spent more than three hours in the Park. The trails attract a large proportion of repeat visits, more than a third of visitors are repeat.

There appears to be a growing number of family riders/beginners. This was only 12% in 2006, now 19% of mountain bikers. However there are no family single track trails, only forest roads and the longer distance (14 miles) Rheilffordd (river valley) route.

Afan has increased its number of hardcore trail riders (those which ride at least once a week) but the number of enthusiasts has fallen. Trail counter information records 72,000 rides from an estimated 55,000 riders. An estimated 67% of users travelled less than one hour to visit the Park and only 20% came from more than two hours away.

Mountain Bike Product

Afan has a total of four single track mountain bike trails; all graded as red intermediate aimed at the mountain bike enthusiast. The link between two of these trails forms W^2, a black graded route. The total trail length is 145km but 44km comprises the linked black route W^2.

Afan Forest Park at present has no family, beginner blue or green trails. There are also no skills areas, freeride areas or jump tracks.

Afan Forest Park has a second visitor centre developed and owned by the local community. The centre was built in 2006 for approximately £400,000 and attracts around 40,000 visitors. The centre comprises toilets, showers and changing facilities, a first floor café (privately operated and a similar style of food to 7stanes' Hub in the Forest).

Afan Forest Park is branded as a Kona Bike Park. This facility has the buzz and atmosphere of the Hub in the Forest.

The future plans are to make Afan Forest Park the biggest and best mountain bike facility in the UK. The potential is good given visitor catchment and access to markets. The key priority is to improve the trail hierarchy by adding blue and green family trails at Afan Argoed together with a skills loop.

G2.4 Glyncorrwg

At Glyncorrwg, a freeride area and jump track could be added together with a proper black graded trail. There is also the opportunity to perhaps add downhill tracks.

In the future this trail network will be targeted at a local day visit and club market but more importantly a South East England M4 catchment for day visitors and overnight stays.

G2.3 Brechfa

Brechfa is a relatively new trail centre which opened in 2007 and attracted around 12,500 riders last year. It is a typical IMBA style stacked loop system incorporating the full range of cross-country, green, blue and black trails. The green trail is unique in that it is mostly all single track.

The Raven (black trail) has many manmade features, jumps and berms. As this is a rural trail network, visitor numbers will be low but targeting family and other holidaymakers is key. The trail has two trail heads but no central facilities. At present there is limited benefit for the local community.

G2.5 Overall Lessons Learned

South East Wales Economic Forum, together with the Forestry Commission, Capital Tourism, Neath Port Talbot and Caerphilly Councils, are investigating the opportunity to create a branded Centre of Excellence for mountain biking. A cluster of mountain bike centres aimed at the overnight and short break visitor, it will be targeted at M4 corridor residents in particular. Family and more extreme riders will also be targeted.

In addition a purpose-built events venue to stage regional/national events, cyclocross and cross-country in particular has been suggested.

New facilities will ensure a good trail hierarchy from grassroot levels, which may include a new purpose-built trail centre and even a bike park. Various partnership models will be considered as development vehicles, a combination of private sector and public sector Local Council and economic regeneration conveyance money will be sourced.

The Centre of Excellence programme amounts to £21 million of physical development of which mountain biking and off-road cycling will be one of four bids.

G.3 North Wales

G3.1 Lllandegla Forest

Background

This is a formal mountain bike trail product based on a prescribed trail system within a privately owned and managed conifer plantation located approximately 7 miles from Wrexham in North East Wales. The forest covers 450 hectares of rolling hills in a rural area, close to the border with England, known as the Clwydian Hills. The mountain bike network is centred on one trail head and the trails are essentially not accessible from any other location. The core of the trail product is made up of approximately 28km of purpose built trails, approximately 10km of modified forest tracks and approximately 8km of forest roads. This is divided into four loops of differing degrees of difficulty to create a stacked loop system with a distinct trail hierarchy with trails becoming gradually more difficult as the distance from the trail head increases.

UPM Tilhill who own and manage the forest have developed a network of purpose-built mountain bike trails within the forest, since 1994. In 2004/05 Tilhill invested £350,000 as matched funding for £400,000 of public funding in the development of a purpose built car park and visitor centre, which included: a café; toilets; bike shop and hire; bike wash; and included the development of a trail network.

The initial trail development took place in a fairly haphazard way without any clear trail planning, design or construction standards being applied. This led to the development of key management issues that had a significant effect on the commercial viability of the trail product.

Since 2005 UPM Tilhill have invested a further £150,000 of their own money in addition to £200,000 additional public funding to replace parts of the existing trail infrastructure with the aim of lowering management and maintenance costs and this has had a significant effect on the viability of the site. The total cost of developing the trail product at this site between 2004 and present day is estimated at £1,200,000 with a total investment from Tilhill of £450,000.

Mountain Bike Product

The inner part of the trail system is designated as a Family Route and is 5km long. This leads in to a beginner route of 12km and this in turn provides a link into an Intermediate Loop of 18km. Linked to the Intermediate loop (and in turn the family and beginners loops) are several 'Black Runs', that provide alternative loops off the intermediate loop totalling about 10km in length. This creates a very effective trail hierarchy that theoretically makes the site accessible to a wide range of users and markets.

The trail product at Llandegla Forest is aimed at the enthusiast, freeride and leisure riders and is very much a day visit destination due to its proximity to Liverpool, Chester, Manchester and Wrexham.

In addition anecdotal evidence suggests that whilst Llandegla is not a stand alone short break destination, it does form part of the wider Welsh mountain biking 'offer' or product in that it forms part of a short break in combination with other venues such as Coed y Brenin, Gwydyr Forest or Penmachno. Llandegla is around one hour's drive from Coed y Brenin, Gwydyr and Penmachno and it would seem that short break visitors stop off at Llandegla on their way to or from the more iconic destinations.

Visitor Numbers

Llandegla Forest receives approximately 120,000 visitors per year. Visitor numbers rose very rapidly when the facility was developed with visitor numbers within the first year of operation (2004) around 75,000.

In relation to the size of the site visitor number are very high and the site is working at its maximum capacity at busy times. Indeed it would seem that there is insufficient parking at the site during peak periods.

Some key facts about Llandegla include:

- private forest owned and managed by UPM Tilhill;
- mountain bike facility let out to Oneplanet Adventure;
- prescribed trail system with 28km of purpose built trails;
- four waymarked routes covering 46km;
- visitor facilities: pay and display parking for 100 cars; café; bike shop, bike hire and workshop; mountain bike guiding and tuition; classroom/conference room; coin operated bike wash; and toilets.

Lessons Learned

Llandegla shows that creating accessible trail products close to large centres of population unlocks markets within those areas and that those markets are high spending even as day visitors. However Llandegla also shows that careful thought needs to be given to trail planning to allow for the unlocking of the market and with the consequent increases in levels of demand.

G.4 Ireland

G4.1 Portumna Forest Park, County Galway

Background

Portumna Forest Park is a Coillte (The Irish Forestry Board which is a semi state company) property of around 300 hectares located on the shores of Lough Derg adjacent to the market town of Portumna on the County Galway/Tipperary border.

The Forest Park is a very important local, community and regional recreation resource which is of great strategic importance since access and recreation opportunities are very limited in the surrounding area. It is heavily used on a daily basis by the local community for a wide range of activities. They make use of a very extensive network of forest roads and tracks, parts of which have been waymarked to produce prescribed routes. In addition the site was until recently characterised by numerous desired lines or unsanctioned trails in key areas that had developed over time and this led to the recreational use of the site being extremely unpredictable.

Coillte carried out key trail developments during 2005/06. These centred on the creation of a multi-use trail system that allowed for flexible use whilst also making the recreational use of the site more predictable and manageable. The trail development involved the construction of 15km of new trails to a variety of standards and types to create a trail hierarchy based on key access points and facilities and also the decommissioning of key parts of the old network.

Mountain Bike Product

The new trail system developed by Coillte is essentially a flexible social trail network that can be used in a wide variety of ways by a number of user groups of varying abilities.

The prescribe route system consists of several routes as follows:

- 3km all ability route;
- 5km easy route for all users;
- 7km moderate route for cyclists and pedestrians;

– 8km moderate route for cyclists and pedestrians; and

– 11km moderate route for cyclists and pedestrians.

Visitor Numbers

With an estimated 12,000 cyclists accessing the site and the trail system each year it would seem that off-road cyclists are an increasingly important user group, which could potentially be of high value.

Some key facts about Portumna include:

– very sensitive site with major conservation and forest management issues. The new trail was developed to manage recreational use and increase the value of the site as a recreational resource;

– estimated 25,000 visitors pa before trail development;

– estimated visitor numbers after trail development 50,000;

– estimated number of cyclists 12,000;

– prescribed trail network of 5 routes with 15km of purpose built trails; and

– trail hierarchy ranging from all ability to category 3 trails.

Lessons Learned

The trail development at Portumna Forest Park shows that off-road cycling can be successfully introduced to a very sensitive, valuable and constrained site without this leading to additional management resources. In addition the trail development shows that there is a demand for low key trails that are accessible to leisure and family riders.

G4.2 Ballyhoura Mountain Bike Trails, County Limerick

Background

Ballyhoura is an area of commercial forestry owned and managed by Coillte situated on high ground roughly half way between Limerick and Cork.

The mountain bike market in Ireland is extremely immature and is roughly the same profile shape as the UK market of 15 years ago. It has high levels of off-road bicycle ownership but low levels of participation in off-road cycling with a relatively small hard core of participants in off-road cycling including freeriders/downhillers, sport riders and trail riders. The Irish off-road cycling market is dominated by sport riders (competitive cyclists involved in racing) and trail riders (skilled outdoor enthusiasts who plan challenging rides on social trail networks) and this is largely due to the lack of any sanctioned or formal trail access for off-road cycling.

Mountain Bike Product

The mountain bike trail product in the Ballyhouras is five waymarked loops ranging from 7km to 50km in length. The trail system is a stacked loop that centres on one trail head and all trail loops are waymarked throughout and map boards are located at the start of each loop. Whilst all of the trails are waymarked, the trail system has been designed to allow for flexibility of use, that is trail loops can be 'chopped and changed' and the intention of this is to build both flexibility and longevity into the trail product.

The single track trails have been designed and built to be as unobtrusive and as 'natural' feeling as possible with very few artificial trail features, other than on key sections.

As a commercial semi-state company, Coillte (unlike the Forestry Commission in the UK) must insure itself against third party or public liability claims from trail users or other members of the public. Coillte does this by taking out insurance policies, which cover them for claims from members of the public.

Visitor Numbers

The Ballyhoura trails were opened to the public in February of 2008 and calibrated bike counters were installed at key locations. These now show that around 3,000 mountain bikers a month use the trails throughout the year, giving an estimated total of 36,000 up to the end of February 2009.

As outlined above this facility has been developed as a short break destination.

The trail product is very much centred on the lower end of the enthusiast and the higher end of the leisure riders and the nature of the purpose-built trails reflects this.

Lessons Learned

This development shows the importance of effective trail planning and design in delivering a genuinely sustainable trail product.

G.5 Fruita Colorado – USA

Background

Fruita is the name given to an extended area of trails that have been developed for mountain bikers around the town of Grand Junction. Grand Junction is a large town that grew up around a bend in the Colorado River at the junction of two major railway lines. The town itself has in the past been a centre for metal mining but has declined in recent years. The mountain bike trails have been developed by a local club in co-operation with the local Bureau of Land Management (BLM) staff partly as a reaction to the decline in employment and economic activity.

The social trail networks within each area can be accessed from key parking areas that are signposted from main roads and clearly indicated on local maps. Some of the areas are also interlinked by purpose built trails, however most of the areas are stand alone social trail networks. Whilst there is no formal waymarking as such, individual trails are named e.g. Joey's Ridge, Kessel, Prime Cut. There are signs indicating the start and finish of individual trails and riders effectively make up their own rides using the maps and guidance from local riders.

The Mountain Bike Product

The trails are of the very highest quality in a unique landscape and the trails are very well integrated in to that landscape. The trails have a very 'natural' look and feel and are both sympathetic to and reflect the landforms and this gives the trails a distinctive character.

The mountain bike market in the USA is less mature than it is in the UK since the enthusiast segment is virtually non existent and the majority of active mountain bikers are best described as trail riders and sport riders. Of these two segments trail riders would appear to be the most significant. The trail product reflects this in that there are no prescribed routes, no waymarking and few trail head facilities. Guidebooks and maps are a key component of the trail product in that accurate mapping is essential in riders gaining an understanding of the trail systems, whilst effective guidebooks enable easy access to the best riding.

The local club have developed the trail systems at each location over a period of approximately 15 years with practical support from both the BLM and IMBA.

Visitor Numbers

Anecdotal evidence gained from Fruita and Grand Junction bike shops, from IMBA bike patrollers and from key club members estimates that around 250,000 riders use the trail systems in any one year. Crucially the majority of this use is outwith the summer when temperatures are lower. In addition, anecdotal evidence would suggest that user numbers are increasing and that foreign visitors are increasing significance. Indeed one bike shop proprietor suggested that up to 25% of visitors are from outside of the USA.

Interestingly some anecdotal evidence would suggest that the trails around Fruita are drawing visitors away from Moab in Utah which is around two hours drive away and where there are no purpose built trails. This would suggest that mountain bikers prefer the purpose built single track of Fruita to the technical double track and rocks of Moab.

Lessons Learned

As highlighted Fruita is now a major mountain biking destination for riders from all over the world and this has had a very significant effect on the local economy.

Anecdotal evidence would suggest that accommodation providers, bike shops and restaurants in the Grand Junction and Fruita area are benefiting significantly from the influx of mountain bikers.

G.6 North of England

G6.1 Hamsterley

Background

Hamsterley is a small 3,000 hectare forest located 30 minutes west of Durham and within one hour drivetime of the Newcastle/Gateshead conurbation. In 2005 there was a major investment of £220,000 in a mountain bike skills park and a short blue (multi-purpose) trail the Grove link.

Visitor Numbers

At present the forest attracts some 187,000 visitors of which an estimated 36% are cyclists and mountain bikers. The Trailblazers group comprises 140/150 enthusiasts, many of whom cycle once per week.

The forest is also home to Descend, a privately-run network of downhill mountain bike tracks. The facility attracts some 200 riders/clubs members each week and an uplift facility is offered.

Mountain Bike Product

Hamsterley Forest has a network of very old, poorly surfaced, unsustainable mountain bike trails (one red and one black).

A local bike group, Trailblazers, has successfully raised £130,000 to commence developing a new red cycle trail at the forest. However, given poor ground conditions, this is only likely to realise between 4km and 5km of trail.

The business pays a rent to the Forestry Commission but carries out all the trail maintenance and construction of trails. Riders pay per use at the cost of £5 per day. The uplift costs £20 (10 uplifts) including the day pass cost – but is limited to the first 14 riders on a first-come first-served basis.

All trails are graded as double black for experienced downhillers. The business is commercially very fragile but has successfully supported one full-time proprietor and two part-time staff for the last five years.

A new cross-country trail network is planned for Hamsterley Forest which will be targeted at the local North East rider and overnight visitors, those in particular from outside the North East region. Descend already has members from Liverpool, Cumbria and Leeds.

The trail centre will also be used to target a visiting friends and relatives overnight and day visitor market – to help stop leakage of visitors outside the region. The plan is to also improve the family and beginner cycling provision. New facilities will also incorporate a visitor centre, café, permanent bike shop, Go Ape and children's adventure play area.

Consideration is being given to developing overnight accommodation in the forest in a joint venture with Forest Holidays. There are also opportunities for a greater focus on outdoor and further education etc.

It also would appear that consideration is being given to linking Kielder, Hamsterley, Dalby, Whinlatter and Grizedale into a Northern Mountain Biking brand, however current status of this project is not known.

G6.2 Kielder

Background

Kielder Water and Forest, located in the far North East of England, reportedly receives approximately 210,000 visitors per annum. A wide range of activates are available for visitors at Kielder including walking, cycling, fishing, horse riding and the arts.

Visitor Numbers

Trail counters indicate that the Deadwater trail is used by approximately 12,000 riders per year. The Kielder Trail Reivers are a local biking volunteer group who have been actively involved in the trail development at Kielder, and were responsible for building the Deadwater Trail.

Mountain Bike Product

Kielder forest provides a significant cycling offer to visitors, with three easy cycle trails (one graded green, two graded blue), and the 48km Cross Border Trail graded red for is significant length. The Forest also includes two mountain biking trails: Deadwater Mountain bike trail (15km, graded red), and Up and Over (2.4km, graded black), and a short (less than 1km) skills loop for beginners to practice and develop skills.

A number of mountain biking/cycling additions are currently being planned for Kielder, at various stages of development, which will give Kielder a total of 57km of trail network. A 15km red cross country trail will open in spring of this year. Additionally, a 12km cross country trail, graded blue, and a trials area with jumps etc are both expected to open in summer 2009. A further 12km red trail is intended to open in autumn.

G6.3 Dalby Forest

Background

Dalby Forest is situated on the southern slopes of the North York Moors National Park. The 3,500-hectare (8,600-acre) Forest includes: a visitor centre; astronomical centre; walking trails; cycle and mountain biking routes; a mountain biking skills area; Go Ape; and the Dalby Courtyard. In the last few years Dalby has undergone significant development, particularly the visitor centre, due to a £4.1 million investment by the Forestry Commission, over a period of four years. The Forest receives around 400,000 visitors per annum, approximately 40% of whom live within a one hour drive of the site. It is also noted that Dalby Forest attracts relatively high volume of visitors for overnight trips, with the average for visitors on holiday being 19%.

Visitor Numbers

A 2005 visitor survey conducted by TNS noted that roughly 30% of visitors to the forest cycle in some form, equating to approximately 120,000 people. Furthermore, trail counters indicate that around 65,000 riders make use of the single track mountain bike trails.

Mountain Bike Product

Cycling/mountain biking is a key activity at Dalby Forest as is the variety of trail product offered. Two forest cycle routes, graded green, are present 2km and 6km in length. Dalby also offers two blue trails, including the 80km 'Moor to Sea' cycle trail linking Pickering, Whitby and Scarborough, one red trail (23 km in length), and two black trails at 6km and 1km. The mountain biking product is completed with a skills area known as 'Dixon's Hollow', which was created with sponsorship from PACE Mountain Bikes and in partnership with SingletrAction (a local voluntary organisation which specialises in mountain bike trail building). Bike hire is available from the Dalby Courtyard from a commercial business.

A number of additional cycling related developments are being planned at Dalby. Additions to the red trail product are under consideration, the aspiration being to provide an additional 8km of trail. The Forest management are hoping that Dalby will play host to the World Championship Cross Country Event, and as such are currently developing a 6km 'World Cup Course' loop. Finally, plans are currently in development to improve accessibility in the cycling offer through creating an all ability trail, and offering rental of bikes designed for people with physical disabilities.

G6.5 Grizedale

Background

Grizedale is a forest destination centrally located in the Lake District National Park, Cumbria, of 2,450 hectares in size.

The combines a wide range of attractions, activities and visitor services with good accessibility and a relatively high profile. The visitor facilities at the forest are currently the subject of an extensive £6 million redevelopment, designed to "improve the quality of the visitor experience and support the local economy".

Visitor Numbers

The Grizedale Forest Centre attracts around 522,000 visitors per year, made up of a predominantly local visitor base, with 16% of visitors coming from Cumbria itself, and a further 30% coming from the north west of England. According to a 2004 visitor survey, a large proportion of visitors (42%) reported that they spend between 3 and 5 hours in the forest. This substantial duration of stay is likely due to the variety of activities available in the forest. The highest percentage of visitors (61%) undertook walking as an activity, however cycling was also popular with 23% cycling on waymarked tracks, and 4% cycling off waymarked tracks.

Mountain Bike Product

Grizedale's cycling offer includes five waymarked forest cycle trails, ranging from 3km to 22km with a variety of levels of difficulty. The Forest also includes the North Face Mountain Bike Trail, a 16km single track trail, graded red. Annual trail user counts for the routes at Grizedale are unknown, however it was noted that, at peak season, the trails can see up to 2000 riders in a week. The North Face trail continues to be developed and there are current plans to create a second mountain biking trail. This new trail will be graded blue, with a more family friendly focus.

G6.4 Whinlatter Forest

Whinlatter Forest, located in Cumbria, receives around 200,000 visitors annually. Activities available to visitors include walking, cycling, horse-riding, and wildlife watching.

At present the Forest only has one mountain biking trail, the Altura Mountain biking Trail, graded red, is roughly 12km in length. The trail has proven to be popular, although there are no trail count numbers available. A second trail is currently under construction at Whinlatter. This new trail, 8km in length, will be graded blue and targeted predominantly at the family market. Refurbishment of the visitor facilities including a café, shop, car park and bike hire was recently completed.

G6.5 Overall Lessons Learned

The North of England is well behind Scotland in its development phase. However, developments are currently underway and planned, which will compete with facilities in Scotland. Several of them are broader developments aimed at attracting the family market.

Appendix H – Off Road Cycling Markets

H.1 Families

The largest segment in terms of volume, the Families market includes cyclists of all ages and abilities using any type of bicycle in an off road setting (in this context 'off road' means traffic free rather than off tarmac). Typically, this segment ride in family groups with children under the supervision of adults, and can often include cyclists of limited ability. Bicycles used by this group may not necessarily be 'off road' bikes and can include, hybrids, touring bikes, BMX bikes and children's bikes.

This group therefore requires traffic free waymarked trails in a controlled and safe environment. The key components of a product targeted at Families are as follows:

- waymarked trails;
- little or no gradient;
- circular routes (not essential);
- consistent trail surface;
- easy riding;
- rides of between 1 and 2 hours; and
- routes linked to trailhead facilities such as parking, toilets, refreshments, bike hire and often children's play.

Successful examples of trail products aimed at this group are the Camel Trail in Cornwall and the Tarka Trail in Devon. In addition this group make extensive use of parts of the National Cycle Trail Network, particularly close to home. This group will use suitable trail products close to home or may make special journeys to make use of specific trail products, particularly where trail products are associated with facilities as outlined above.

Some members of this market segment are likely to be unable to fully control their machines, particularly on downhill gradients on uneven or loose surfaces. Trails appropriate for this group should allow for use in any direction and should have uniform sealed surfaces, such as bitmac, which remain at a consistent standard throughout. Gradients should not exceed 5% and should be a minimum of 2.5m wide.

H.2 Leisure

The Leisure market segment differs from the Families group in that it centres on the use of what can broadly be defined as mountain bikes (wheels of not less than 20 inches, cantilever brakes as a minimum and at least five gears) in an off road setting.

The two segments are otherwise similar, with Leisure market also including all ages and people using trailers, tag-a-longs and child seats.

Characterised by very occasional cyclists, the Leisure segment generally has limited levels of fitness and bike control skills. This market is essentially made up of people who have not spent a great deal of time on their bikes and are most likely to use them either close to home, or whilst on holiday. They are more likely to use their mountain bikes to have a day out in the country, rather than as an activity in its own right. Whilst actively seeking to ride off-road, leisure riders are unlikely to posses either the technical skills or fitness required to undertake difficult trails. Commonly used routes include disused railway lines, forest roads and minor roads.

Like the Families market, the key components of a product targeted at the Leisure segment are as follows:

- waymarked trails;
- little or no gradient;
- circular routes (not essential);
- consistent trail surface;
- easy riding;
- rides of between 1 and 2 hours; and
- routes linked to trailhead facilities such as parking, toilets, refreshments and bike hire.

Examples of this product can be found in the Camel Trail in Cornwall, The Mawddach trail in Snowdonia, at Pembray Country Park in West Wales and at the Centreparks Holiday resort in Nottinghamshire.

H.3 Trail Riders

Trail Riders are often skilled outdoor enthusiasts with an understanding of navigation and rights of way issues. It is common for members of this market segment to also take part in other outdoor activities such as hill walking, climbing, orienteering or canoeing. Trail Riders are predominantly males between 35 and 55 years old and have the necessary skills to plan their own rides, typically between 25 and 60km in length (2-5 hours duration).

The Trail Riders market segment make use of a wide variety of trails, including forest roads and informal access tracks. The 'journey' or 'adventure' aspect of mountain biking is often of most importance to Trail Riders and this is generally reflected in their choice of route. Whilst technically challenging routes or trails are appreciated by this segment, the aesthetic aspect of a ride is often of greater importance.

Trail Rider 'products' centre on informal routes using a very wide variety of trails, generally incorporating trail systems devised for other parts of the market. Relevant examples of this type of product would include the Black Trail at Glentress (Scotland) and The Skyline Trail in the Afan Valley (Wales). Both of these routes are aimed primarily at Enthusiast riders (see below) but their lengths (over 30km) make them very attractive to Trail Riders.

Trail riders are likely to make special journeys often staying in an area for two days or more to do a specific route or trail. They are not a large part of the market but are often members of pressure groups working for access for mountain bikers.

H.4 Sport Riders

Sport Riders are fit and able mountain bikers who regularly ride off-road and are frequently involved in racing. They are highly skilled at bike handling and actively seek out technically challenging trails. Singletrack descents i.e. narrow trails that only one bike can pass along at any one time, are usually a feature of any ride, and they are usually ridden as fast as possible.

The key components of a product targeted at the Sport Riders segment are as follows:

- waymarked trails;
- varied trails – both uphill and downhill riding;
- singletrack trails;
- technical though not extreme riding;
- rides of between 1 and 4 hours; and
- appropriate for events.

Routes used by Sport Riders can vary immensely in length, but are usually between 5 and 30 miles and always involve considerable climbing and descending. The majority of this market segment are not proficient map-readers and often ride on routes that are not rights of way for cyclists. They often ride the same routes repeatedly and increasingly create new trails in the areas they regularly ride. Such areas, particularly those on the urban fringe, are seeing a proliferation of what can be termed "social trails". That is, sections of singletrack which are not rights of way that have been created by local riders, mostly without consultation with landowners.

Sport Riders represent a relatively small part of the market yet are significant in that they are often members of clubs. Like Trail Riders, Sport Riders will travel to new areas for specific routes or events.

H.5 Enthusiasts

The Enthusiasts segment is by far the largest amongst mountain bikers and forms a very important segment of the cycling market. The segment has the most potential for growth, should suitable facilities be developed. The age range for Enthusiasts is generally 25 and 40 years, and both genders tend to be equally represented.

Enthusiasts are recreational riders who go mountain biking on average once a month. They are competent bike handlers who actively seek singletrack but do not have a particularly high fitness level.

Rides will typically stretch between 5 and 20 miles and, similar to Sport Riders, favourite routes will be frequented. This group are not particularly skilled in the outdoors and they do not posses the ability to plan their own routes in new areas.

Of all the mountain biking market segments, Enthusiasts are the most likely to make relatively frequent weekend trips away from home, often to do specific routes or trails. The key components of a product targeted at the Enthusiasts segment are as follows:

- waymarked trails;
- varied trails – both uphill and downhill riding;
- singletrack trails;
- technical though not extreme riding; and
- rides of between 1 and 4 hours.

The development of dedicated products aimed at this segment in recent years, has led to significant growth of the market. Enthusiasts now make up an estimated 75% of recreational mountain bikers in the UK, representing a high volume and value market.

H.6 Downhillers

Downhillers are a small, though significant, group of cyclists that are rapidly increasing in numbers. They are highly skilled riders who are interested in riding of a particularly challenging nature. The Downhillers segment is made up predominantly of young males between 14 and 25 years old, likely to participate in similar activities such as snowboarding, skateboarding or surfing.

Downhill riding is a highly specialised activity where technical challenge and speed are key. Bikes available for Downhillers are becoming increasingly specialised, including models that, because of their weight and high gearing, are virtually impossible to pedal uphill but that make it possible for a skilled rider to ride down virtually any terrain. Downhillers have begun developing their own trails with the desired challenges, which has led to problems for landowners and countryside managers.

Downhill courses are typically very steep and challenging with particular features such as steep drop-offs, bermed bends, and jumps. Many Downhillers are involved in racing and many recreational courses mirror the features of race courses. The key components of a product targeted at the Downhillers segment are as follows:

- easy access to both the top and bottom of courses;
- uplift;
- steep, technical riding;
- relatively wider trails;
- choice of different riding lines; and
- useable for events.

Very few examples of dedicated downhill products exist in the UK other than Nevis Range at Fort William and Innerleithen. Numerous examples of dedicated downhill facilities with formal uplift exist in North America and the Alps. Particularly as ski resorts are beginning to develop summer season businesses based around this market.

Downhillers are a small segment with high value potential. A number of the facilities required by Downhillers can be provided through commercial enterprises.

H.7 Freeriders

Freeriding is slightly different to Downhill in that it involves riders accessing similar trails but via cross country riding. Both Downhill and Freeride activities are particularly prevalent in urban fringe areas. This is most likely due to the fact that most participants are relatively young and therefore less able to travel to other areas.

The fact that both Downhillers and Freeriders are happy to concentrate their activities within a relatively small area indicates that there is also a social aspect to this sort of riding with groups of riders preferring to congregate. However, this can cause problems for other countryside users, particularly where visitor pressure is high.

The key components of a product targeted at the Freeriders segment are as follows:

- challenging obstacles and features;
- varying degrees of difficulty; and
- accessible.

Freeride facilities by their nature require ongoing, often intensive maintenance and management.

Appendix I – List of Consultees

List of Consultees	
Organisation	
Forestry Commission	**Other**
Aberdeenshire & Moray Forest District	Glasgow City Council
Ae Forest District	Renfrewshire Council
Cowal and Trossachs Forest District	Scottish Borders Council
Dornoch Forest District	Scottish Wildlife Trust
Fort Augustus Forest District	**Regional/National Organisations**
Galloway Forest District	Highlands & Islands Enterprise
Inverness Forest District	Forestry Commission Scotland HQ, Edinburgh
Lochaber Forest District	VisitScotland
Lorne Forest District	Scottish Cycling
Scottish Borders Forest District	SportScotland
Scottish Lowlands Forest District	Scottish Downhill Association (SDA)
Tay Forest District	Scottish Cross Country Association (SXC)
West Argyll Forest District	CTC (National Cyclists Organisation)
7stanes	IMBA (International Mountain Biking Association)
Marketing Co-ordinator	SYHA (Scottish Youth Hostel Association)
Private Estates & Community Groups	
Abriachan Forest Trust	
Cairngorms National Park	
Glenmore Lodge	
Highland Wildcat	
Comrie Croft, Perthshire	
Lecht	
Glencoe	
Nevis Range	
Blairadam	
Fife Coast & Development Trust	

We also undertook a business survey in which a total of 33 businesses were contacted.

Appendix J - Mountain Biking Glossary

GLOSSARY OF CYCLING TERMS	
4cross	An event which pits 4 riders on the same course from starting gates to finish. There can only be one winner per event.
Berm	An embankment on a trail (cambered corner).
Bike Trials	Slow negotiation of manmade and natural obstacles.
BMX	Form of cycling on bikes, generally with 20 inch wheels. The sport features races on sandy and hilly tracks as well as performances of tricks and stunts on flat ground, wooden ramps/urban parks.
Cross-Country	Traditional mountain biking that mixes many types of riding conditions into one course. Requires endurance, fitness and machine control. A cross-country bike is ultra-lightweight with front and sometimes rear suspension.
Cyclocross	A form of bicycle racing which consists of many laps of a short (2.5–3.5 km) course featuring pavement, wooded trails, grass, steep hills and obstacles requiring the rider to quickly dismount, carry the bike whilst navigating the obstruction and remount in one motion.
Dirt Jumping	Similar to BMX racing in that the rider jumps mounds of dirt. It differs in that the jumps are usually much larger and designed to lift the rider high into the air.
Downhill	Downhill courses are held over steep, downhill terrain, resulting in higher speed and rougher terrain than in cross-country racing. A downhill bike is specialised and has a long travel suspension and powerful brakes. It's a timed race from top to bottom.
Drop-Off	As terrain changes riders will experience natural drop-offs/sudden steep descents.
Freeride	Riding without restriction, regulation, rules, a time limit, a particular style, or a specified type of clothing. Involves complimenting the natural routes with minority sections of hand built/manmade structures. Blending all styles and techniques into one flowing ride with few stops along the way.
Geocaching	Geocaching is an outdoor treasure-hunting game in which the participants use a Global Positioning System (GPS) receiver or other navigational techniques to hide and seek containers (caches) anywhere in the world.
Night Riding	Using battery-powered headlights to ride off-road during night time.
North Shore	Raised platforms of wood, include a variety of assault course-style obstacles. Originally developed for cycling that allowed them to ride over the forest debris/boggy areas etc.
Off-Road Cycling	Cycling on any non-road surface such as footpaths, canal tow paths, singletrack etc on a mountain bike or hybrid type bicycle.
Pump Tracks	A pump track is generally a flat track with bumps and elevations through which the rider must suck and pump the bike up and down, rather than pedal to gain speed.

Recreational Cycling	Cycling of any kind as a form of recreation.
Road Cycling	Cycling on smooth road surfaces on a racing or touring type bike.
Single Track	Single track is a term used to describe a trail that is only wide enough for one person or mountain biker at a time. Single track is the most popular or sought after type of mountain bike trail.
Skills Loop	Technical features along a route i.e. seesaws, beams, drop-offs etc.
Skills Park	A special use area that features a variety of technical trail features.
Stacked Loops	Trail systems designed with many loops 'stacked' on each other, giving users many options for varied routes.
Sustrans	Sustrans is a sustainable transport charity which works on practical projects to encourage people to walk, cycle and use public transport in order to reduce motor traffic and its adverse effects.
Trailhead	An access point to a trail or trail system usually accompanied by various public facilities.
Uplift	Machine operated uplift of mountain bikes to top of mountain – most commonly used in Downhill.
Velodrome	A banked bicycle racing track. Can be indoors or outdoors, made out of wood (pine) or bitumen usually 333 metres in length.