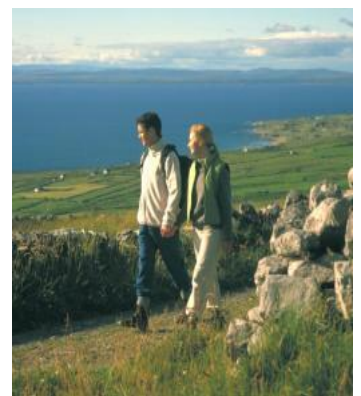


Fitzpatrick Associates



Update on the Economic Value of Recreational Trails in Ireland





Update on the Economic Value of Recreational Trails in Ireland

Final Report

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Executive Summary

This report is an update on the economic value of recreational trails in Ireland. It has been prepared for the Irish Sports Council by Fitzpatrick Associates, Economic Consultants. The objective of the report is to update, as best as possible based on existing accessible secondary data, previous estimates of economic benefit of public recreational trails, which were prepared in the 2005 report *“Economic Value of Trails and Forest Recreation in the Republic of Ireland”*.

This executive summary provides a brief overview of the findings, while the full details are contained in the main report.

KEY FINDINGS

- Investment in the development of recreational trails has grown from at least €1.8 mn in 2005 up to at least €9.2 mn in 2010.
- Total direct expenditure arising from the use of recreational trails for walking is estimated at between €184.1 mn and €233.7 mn.
- Total direct expenditure arising from the use of recreational trails for cycling is estimated at between €3.4 mn and €4.4 mn.
- Between 2,900 and 3,700 FTE jobs could be directly supported by domestic expenditure on the use of recreational trails for walking and cycling.
- Overseas visitors engaging in hiking and hillwalking generate expenditure of €640 mn, while overseas visitors engaging in cycling generated expenditure of €180 mn.
- Overseas tourism spend on walking and/or cycling could also potentially support between 9,800 and 12,600 FTE jobs.
- Domestic expenditure on trails could generate taxes of between €37.5 mn and €47.6 mn per annum.
- Expenditure by overseas visitors engaged in walking and/or cycling could generate between €130 mn and €165 mn per annum in Exchequer revenue.
- Using the World Health Organisation (WHO) Health Economic Assessment Tool (HEAT), the annual monetised value from use of recreational trails in Ireland for walking and cycling is estimated at nearly €69 mn.

There has been considerable recent investment and development of recreational trails ...

Investment in recreational trails has grown significantly since 2005. In that year, investment in the development of trails by a number of key agencies came to nearly €1.8 mn. By 2010, this figure had grown to nearly €9.2 mn. This investment has, in turn, resulted in a significant expansion in the level of designated recreational trails infrastructure available in Ireland, through both (a) better management and designation of existing but previously unclassified trails and (b) actual development of new trails. In 2005, there were 72 recognised waymarked walking trails in Ireland, covering a total distance of 3,661 km. Since then, however, through various initiatives and with the co-operation of several agencies, a further 477 recognised trails have been designated, covering an additional distance of 5,572 km.

... which has helped to promote the use of trails for walking and cycling.

Estimates suggest that the size of the adult population that engages in recreational walking has grown steadily in the last five years, from an estimated 1,923,000 adults in 2006 up to 2,168,000 adults in 2010, or growth of nearly 13%. Furthermore, estimates suggest that the number of people who use trails for recreational walking has grown from 250,000 in 2006 up to more than 325,000 in 2010, or a growth of 30%. Indicative estimates also suggest that the total annual number of visits to recreational trails by walkers may have grown from between 7.5 mn and 10.0 mn in 2006 up to between 9.8 mn and 13.0 mn in 2010.

The size of the adult population that engages in recreational cycling, meanwhile, is estimated to have grown from 83,000 adults in 2006 up to 104,000 adults in 2010. This represents growth of nearly 26%, though from a much lower base than for recreational walking. Moreover, the estimates suggest that the number of people who use trails for recreational cycling may have grown from 4,100 in 2006 up to 6,200 in 2010, a growth of over 50%, while the total annual number of visits by cyclists may have grown from between 83,000 and 124,000 in 2006 up to between 125,000 and 187,000 in 2010.

Trails usage is now delivering significant economic value in spend and jobs ...

Usage of recreational trails for both walking and cycling also creates significant economic value, including expenditure and employment. Estimates used in this study, for example, suggest that walking visits to trails were worth between €148.9 mn and €198.5 mn in direct spend in 2010, while expenditure on other items by walking users was worth a further €35.2 mn in direct spend. This gives a total direct expenditure for walking of between €184.1 mn and €233.7 mn.

Estimates suggest that cycling visits to trails, meanwhile, were worth between €1.9 mn and €2.9 mn in direct spend in 2010, while expenditure on other items by cycling users was worth a further €1.5 mn in direct spend. This gives a total direct expenditure for cycling of between €3.4 mn and €4.4 mn.

Furthermore, creating and sustaining jobs in Ireland is once again a key policy priority, particularly given the recent sharp deterioration in the Irish economy and the subsequent sharp rise in unemployment. In this context, money spent while using recreational trails contributes to creating and sustaining jobs. Based on an assumption that every €65,000 in expenditure supports one full-time equivalent (FTE) job, this study's estimates would therefore suggest that between 2,900 and 3,700 FTE jobs could be directly supported by domestic expenditure on recreational trails.

... and its value has the potential to continue to grow in the coming years.

Looking ahead, it is also important to acknowledge the potential that recreational trails provide for generating further economic impact and employment. Growth scenarios prepared for this study, for example, suggest that walking visits to trails have the potential to grow by between 7% and 25% up to 2015, while cycling visits to trails have the potential to grow by between 18% and 47% in the same period. The value of direct walking expenditure on trails, meanwhile, could grow to between €249.3 mn and €290.9 mn, while the value of direct cycling expenditure on trails could grow to between €5.2 mn and €6.5 mn. Based on these numbers, use of recreational trails for walking and cycling would therefore have the potential to support a total of between 3,900 and 4,600 FTE jobs by 2015, or between 250 and 900 new FTE jobs since 2010.

Walking and cycling are also important attractions bringing visitors to Ireland ...

Walking and cycling are popular activities engaged in by overseas visitors to Ireland. Statistics available from Fáilte Ireland, for example, show that hiking/hillwalking is the most popular activity of five key active pursuits engaged in by overseas tourists (including walking, cycling, golf, angling and equestrian pursuits), with an average of 680,000 overseas visitors between 2008 and 2010. Cycling, meanwhile, attracted an average of 133,000 overseas visitors per annum in the same period. In addition, growth in walking and cycling among overseas tourists appears a lot stronger than for other activities, with growth of 49% in each case between 2006 and 2010. However, it should be noted that year-on-year estimates can be subject to volatility.

Of course, expenditure by overseas tourists engaging in walking and cycling activities also generates economic impacts. In 2010, overseas visitors engaging in hiking and hillwalking generated expenditure of €640 mn, spend by visitors who engaged in off-road walking alone generated expenditure of €183 mn, while overseas visitors engaging in cycling generated expenditure of €180 mn. In employment terms, it is estimated that direct spend by tourists engaging in walking and/or cycling could therefore potentially support between 9,800 and 12,600 FTE jobs, while spend by those who engaged in off-road walking alone could support about 2,800 jobs.

... and they are a welcome source of revenue for the Exchequer.

In addition, expenditure by both domestic participants and overseas tourists generates revenues for the Exchequer. For example, based on the assumption that every euro of expenditure on recreational trails generates 20 cent for the Exchequer, the study suggests that domestic expenditure on trails could generate taxes of between €37.5 mn and €47.6 mn per annum, while expenditure by overseas visitors engaged in walking and/or cycling could generate between €130 mn and €165 mn per annum.

In addition, recreational trails can contribute to a variety of other socio-economic positives.

Finally, other important socio-economic benefits that can be at least partially attributed to the use of recreational trails for walking and cycling include:

- a notional value, or “willingness to pay”, for walking and cycling on recreational trails, estimated at between €53 mn and €71 mn in 2010;
- the health benefits of walking and cycling on recreational trails, which are estimated to save over 40 lives each year, with a monetised annual value of nearly €69 mn and a current value of future benefits over 10 years at more than €530 mn;
- contribution to other benefits such as promoting better social inclusion and opportunities for more socially disadvantaged groups to engage in physical activity;
- promoting a better regional and spatial spread of economic activity;
- other benefits to general well being (e.g. helping reduce anxiety and stress levels);
- improved community engagement arising from participation in walking and cycling;
- improved safety benefits, as better infrastructure for off-road recreational trails can divert walking and cycling activity off main roads.



GREAT WESTERN GREENWAY – ECONOMIC IMPACT CASE STUDY

The Great Western Greenway (Westport-Newport-Mulranny-Achill) is a traffic-free cycling and walking facility that primarily follows the line of the old Great Western Railway, which closed in 1937. The first 18 km of the Greenway, from Newport to Mulranny, opened in 2010, while the two extensions linking south to Westport and east to Achill formally opened in July 2011, lengthening the route to 42 km, mostly off-road.

The development of the Greenway has involved a partnership between Fáilte Ireland, the Department of Transport, Tourism and Sport and Mayo Co. Council, as the major funders of the project, with substantial support also provided by the local community and local landowners. Some €5.6 mn was invested by the project funders up to 2011. However, this development was only been made possible through agreement with the local landowners, who have allowed permissive access to users to pass through their lands.

In August 2011, Fáilte Ireland commissioned Fitzpatrick Associates to carry out a case study of the economic impact of the Greenway*, using count data and surveys provided by Mayo Co. Council as well as other data held by Fáilte Ireland. This study found that the Greenway, despite being open for only a relatively short time, was attracting the equivalent of about 80,000 visits in a calendar year, including 34,000 visits from local (Co. Mayo) residents, 30,000 visits from other domestic visitors and 16,000 visits from overseas visitors.

This level of usage was, in turn, generating a projected total direct expenditure of €7.2 mn in the local area in the full year. This included: over €0.9 mn in expenditure by local residents; over €3.5 mn in expenditure by domestic visitors; and nearly €2.8 mn in expenditure by overseas visitors.

The Greenway was therefore contributing to about €6.3 mn in new money coming into the local (Co. Mayo) economy in a full year, and about €2.8 mn in new money coming into the national economy. Furthermore, €3.8 mn of this spend (including €1.3 mn in overseas spend) was directly attributable to the impact of the Greenway, i.e. it was spending by visitors who identified the Greenway as an important factor in their decision to visit the local area.

Finally, research carried out for the study, through consultations with key local businesses and a wider survey of other local businesses, also suggests that the Greenway is having a noticeable impact on businesses in its area. For example, it shows that:

- **nearly 47% of businesses surveyed or consulted indicated that the Greenway has led to an increase in business turnover;**
- **about 31% of businesses surveyed or consulted suggested that the Greenway has led to an increase in their expenditure in the local area;**
- **the Greenway has helped to create an estimated 38 new FTE jobs, with a further 56 existing FTE jobs being sustained.**

**Great Western Greenway – Economic Impact Case Study*, Report Prepared for Fáilte Ireland by Fitzpatrick Associates, October 2011.

1. Introduction

1.1 Background

The National Trails Advisory Committee, a sub-committee of the Irish Sports Council, is currently preparing a submission, which makes the case for establishing a fund to support the ongoing maintenance of approved recreational trails in Ireland.

As an input to this submission, the Committee is seeking to update information available on the economic value of recreational trails in Ireland. In particular, it wishes to update values contained in the report *“Economic Value of Trails and Forest Recreation in the Republic of Ireland”*, which was prepared by Fitzpatrick Associates for Coillte and the Irish Sports Council in 2005¹.

The objective of this report is therefore to update, based on existing accessible secondary data and consultations, this information on the economic benefit of public recreational trails in Ireland.

1.2 2005 Study – Key Findings

The 2005 study examined the economic value of both recreational trails and other non-trails forest recreation. This involved extensive primary research work, through both postal and on-site surveys, including a questionnaire to 3,000 households in Ireland and interviews with some 640 trail and forest users at 15 on-site locations throughout the country. In addition, the primary research was supplemented by a review of existing literature, international comparative case studies and consultations with key stakeholders.

For recreational trails, the study found that direct economic expenditure by Irish trail users, on items such as food, drink, accommodation and trail equipment, was about €307 mn annually at that time, while the non-market value of trails, or the “willingness to pay”² for trails, was about €95 mn. Other key findings on participation, user expenditures and economic value, meanwhile, included the following:

- **according to the National Survey of Recreational Walking³, carried out in 2003, there were 74% of the adult population at that time who engaged in recreational walking on a regular basis;**
- **according to the same survey, 13% of those who engaged in recreational walking were also regular users of recreational trails;**
- **one-third of all users spent money in local businesses as part of their trip;**

¹ *Economic Value of Trails and Forest Recreation in the Republic of Ireland*, Report Prepared by Fitzpatrick Associates for Coillte and the Irish Sports Council, September 2005.

² Willingness to pay is the maximum amount a person would be willing to pay, sacrifice or exchange in order to receive a good or service or to avoid something undesired, such as pollution.

³ *National Survey of Recreational Walking*, Report Prepared by the Economic and Social Research Institute (ESRI) for the Irish Sports Council, 2003.

- **34% of users were likely to purchase food in a local pub, restaurant, café or shop;**
- **10% spent money on drink in local pubs;**
- **5% of users spent money on local accommodation;**
- **about 5% of users spent money on local crafts or other non-food items;**
- **the overall average direct economic expenditure per user was €14.91;**
- **the average direct economic expenditure per overnight visitor was €64.00, which was an important source of income for local bed and breakfast (B&B) and farmhouse accommodation businesses;**
- **the average non-market value, or willingness to pay, per user was €5.40.**

Furthermore, the study found that developed recreational trails were an integral part of the walking tourism product in Ireland. Fáilte Ireland data, in particular, estimated that about 260,000 overseas tourists engaged in hiking or hillwalking in Ireland in 2004, with total expenditure by these visitors at just under €138 mn. In addition, the data also showed that cycling tourism was worth about €80 mn in annual expenditure to the Irish economy in the same year.

1.3 Methodology

The methodology used for carrying out the research described in this report has incorporated a number of key elements. These have included:

- identifying relevant recent surveys and other data, including the data from the Irish Sports Monitor (published by the Irish Sports Council), other Irish Sports Council data, Fáilte Ireland data and any other relevant data available from key sources;
- selected consultation with and feedback from key informants, including the Irish Sports Council, Fáilte Ireland, the National Trails Advisory Committee etc;
- a literature search of recent studies on the value of recreational trails, e.g. for more recent studies on the economic value of trails in Ireland and, in particular, for wider insights on the impact of trails on employment;
- a review of general economic data that may affect relevant parameter values, i.e. prices, household incomes, average earnings and household expenditure.

It should also be noted that this is not a full update of the previous 2005 study. It is therefore mainly a desk-based study, it has not incorporated any primary survey research or case study elements, and its intention is to use any more up-to-date information available to provide indicative estimates for the current economic value of recreational trails. In addition, it has sought to update economic values for recreational trails only, and not for other forest recreation (as per the previous study).

Lastly, it should be remembered that the data in the report refers only to the economic value of recreational trails (with the exception of the data for tourism activity). The economic value of other recreational walking and cycling, or of walking and cycling for non-recreational purposes, is not included.

1.4 Structure

This section is the first of six sections in the report. The remaining sections of the report are as follows:

- Section 2 examines development trends in recreational trails in recent years, including investment in trails and growth in the “stock” of trails available;
- Section 3 examines usage trends in recent years, including domestic use of recreational trails and overseas visitor use of trails, when engaged in walking and cycling, while holidaying in Ireland;
- Section 4 examines the economic benefits of recreational trails and overseas tourism, including spend by domestic participants, spend by overseas visitors, illustration of the potential impact on employment and Exchequer revenues, and the willingness to pay for recreational trails;
- Section 5 examines other socio-economic benefits of recreational trails, including the health benefits involved, spatial benefits, safety benefits etc;
- Section 6 provides some scenarios for the future potential of recreational trails, both in terms of usage and economic value.



2. Recreational Trails – Development Trends

2.1 Overview

The purpose of this section is to review recent trends in the development of recreational trails. This includes a review of recent trends in:

- investment in recreational trails;
- growth in trails infrastructure and activity.

2.2 Investment in Trails

Table 2.1 below provides selected evidence for growth in investment in recreational trails between 2005 and 2010, based on information available from a number of Government Departments and State Agencies. These include the Department of the Environment, Community and Local Government (DECLG), the Department of Transport, Tourism and Sport (DTTAS), Fáilte Ireland, Coillte, the Irish Sports Council and the Heritage Council.

The figures suggest that investment in recreational trails has grown significantly since 2005. In that year, for example, investment by a number of Government Departments and Agencies listed came to nearly €1.8 mn. By 2010, however, this figure had grown to nearly €9.2 mn, or a growth of 415%. Also, it should be noted that annual investment has grown steadily over time, increasing from the aforementioned €1.8 mn in 2005 up to €2.8 mn in 2006, €5.6 mn in 2007, €8.0 mn in 2008, €8.3 mn in 2009 and finally €9.2 mn in 2010.

TABLE 2.1: INVESTMENT IN RECREATIONAL TRAILS IN IRELAND 2005-10 – SELECTED EVIDENCE						
	2005	2006	2007	2008	2009	2010
	(€000s)	(€000s)	(€000s)	(€000s)	(€000s)	(€000s)
DECLG	-	-	-	1,159	2,486	2,920
DTTAS	-	-	-	-	1,280	1,500
Fáilte Ireland	1,500	2,500	4,555	4,555	3,010	3,010
Coillte			360	1,609	617	856
Irish Sports Council	265	249	649	710	655	556
Heritage Council	19	5	2	-	-	-
Local Authorities	-	-	-	-	205	343
TOTAL	1,784	2,754	5,566	8,033	8,253	9,185
Note: Fáilte Ireland invested over €9.1 mn in product in the two year period of 2007 and 2008, and another €6.0 mn in the two year period of 2009 and 2010. In each case, this investment has been split evenly between years in the table above. Also, note that some of the investment listed under Fáilte Ireland, Coillte and local authorities above was provided by the Department of the Environment, Community and Local Government.						
SOURCE: VARIOUS DEPARTMENT AND AGENCIES, DATA SUPPLIED TO THE NATIONAL TRAILS OFFICE						

2.3 Growth of Trails

Since 2005, there has been a significant expansion in the amount of designated recreational trails infrastructure available in Ireland, which in turn has expanded the opportunities available for recreational walkers and cyclists to use trails. This expansion has come about through both:

- a) better management and designation of existing but previously unclassified trails and
- b) actual development of new trails.

A summary of designated recreational trails is included in Table 2.2 below. In 2005, there were 72 recognised waymarked walking trails in Ireland, covering a total distance of 3,661 km. Since then, through various initiatives and with the co-operation of several agencies, a further 477 recognised trails have been designated, covering a total distance of 5,572 km. Therefore, there are now 549 accredited trails in the country, covering a total length of 9,233 km. This represents growth in trail accreditation (by length) of more than 150%, while the infrastructure also incorporates a good mix of walking trails (6,101 km) and cycling trails (3,003 km) as well as a small number of “greenways” (82 km) and equestrian trails (47 km).

	Number	Length (km)
National Waymarked Trails	43	3,496
Link/Loop of National Waymarked Trails	28	208
National Looped Walks	174	1,288
Pilgrim Paths	3	60
National Parks and Wildlife Service	48	265
Coillte Trails	167	517
Cycling Trails	54	3,003
Equestrian Trails	2	47
Greenways	3	82
Other Trails	27	267
TOTAL	549	9,233
<i>Slí na Slainte Routes</i>	<i>160+</i>	-

SOURCE: IRISH SPORTS COUNCIL – NATIONAL TRAILS OFFICE

Moreover, recent data available from a selection of trail counters around Ireland suggest that many trails have become popular with users. For example, data from a sample of just 40 trails, available from the National Trails Office, show nearly 400,000 visits in 2010. The level of usage on individual routes within this sample, meanwhile, varied from as low as 1,000 visits up to as high as 38,000 visits within a year.

Furthermore, Fáilte Ireland counts at three other sites show a total of about 45,000 visits in 2010, with annual usage levels that range from 8,000 visits up to 23,000 visits.

Finally, Coillte data for another 10 trails at mountain bike sites show a further 240,000 visits in 2010. Usage on these trails, meanwhile, ranged from a low of about 9,000 visits up to a high of about 62,000 visits.

3. Recreational Trails – Usage Trends

3.1 Overview

The purpose of this section is to review recent trends in the use of recreational walking and cycling in Ireland, and in particular the use of recreational trails. This includes a review of recent trends in:

- domestic participation;
- overseas visitor walking and cycling activity in Ireland.

The review of trends in both domestic participation and overseas tourism examines the period between 2006 and 2010. However, both “higher” and “lower” estimates are provided for the level of domestic use of recreational trails for walking and cycling between 2006 and 2010. These figures therefore provide a range within which the level of domestic activity is likely to have fallen.

In addition, it should be noted that the estimates for usage by the domestic population apply only to the adult population (aged 15 or over). Use of recreational trails by children would also deliver benefits, however, which cannot be quantified here but should nonetheless be acknowledged. While the direct economic contribution from this source might not be significant, for example, there would certainly be substantial health benefits associated with children’s use of recreational trails for walking and cycling.

3.2 Domestic Participation

3.2.1 Method

Estimating levels of domestic participation in the use of recreational trails has involved three discrete steps. These steps are:

- estimating the size of the adult population that engaged in recreational walking or cycling in each year;
- estimating the proportion of recreational walkers or cyclists that use recreational trails;
- estimating the average number of visits made to recreational trails each year by a single trail user.

Each of these steps is then used to calculate the estimated usage of recreational trails in Ireland, as outlined in Box 3.1 below.

Box 3.1

Adult population (aged 15 or over)

x % of population that engages in recreational walking or cycling

= Number of people aged 15 or over who engage in recreational walking or cycling

x % of recreational walkers or cyclists that use recreational trails

= Number of recreational walkers or cyclists that use recreational trails

x Average number of trail visits by a recreational walker or cyclist

= Number of annual visits to recreational trails

Section 3.2.2 and Section 3.2.3 below follow these steps to produce higher and lower estimates of the use of trails for recreational walking and cycling respectively.

3.2.2 Recreational Walking

Table 3.1 below provides indicative estimates for the size of the adult population engaged in all recreational walking (including recreational trails) between 2006 and 2010. The estimates are based on assumptions made using:

- (a) Central Statistics Office (CSO) estimates for the size of the population aged 15 or over each year;
- (b) Irish Sports Council estimates, published in the Irish Sports Monitor⁴, for the percentage of the adult population (aged 16 or over) that engage in recreational walking in each year.

TABLE 3.1: TRENDS IN PARTICIPATION IN RECREATIONAL WALKING IN IRELAND 2006-10					
	2006	2007	2008	2009	2010
Population aged 15 or over	3,375,300	3,455,200	3,509,800	3,521,600	3,511,700
<i>Growth per annum (%)</i>	-	2.4%	1.6%	0.3%	-0.3%
% engaged in walking	57.0%	58.1%	57.5%	60.5%	61.7%
<i>Change per annum (%)</i>		+1.1%	-0.6%	+3.0%	+1.2%
Population engaged in walking	1,922,597	2,007,471	2,018,135	2,130,568	2,168,016
<i>Growth per annum (%)</i>	-	4.4%	0.5%	5.6%	1.8%
Note: At the time of writing, results from the Irish Sports Monitor for the percentage engaged in recreational walking are only available for 2007, 2008 and 2009. Therefore, 2007-09 trend data has been used as a proxy for making 2006 and 2010 calculations.					
SOURCE: DERIVED FROM CENTRAL STATISTICS OFFICE AND IRISH SPORTS COUNCIL DATA					

⁴ The Irish Sports Monitor has been established as an ongoing survey of participation in sport in Ireland. First introduced in 2007, its primary aim is to measure participation levels with sufficient accuracy to allow levels and trends to be monitored over a number of years. The project involves the collection of several thousand questionnaire responses by telephone each year, from a representative sample of the Irish public aged 16 and over, and the monitoring and analysis of the resulting patterns and trends relating to participation in Irish sport.

The estimates suggest that the size of the adult population that engages in recreational walking has grown steadily in the last five years, from 1,923,000 adults in 2006 up to 2,168,000 adults in 2010. This represents growth of nearly 13% over five years. Furthermore, trends in Irish Sports Monitor data, when assuming that 2007-09 growth trends also applied to both 2006 and 2010, suggest that the percentage of adults that engage in recreational walking has increased from 57% to 62% in the same period⁵.

Table 3.2 below, meanwhile, provides the higher and lower estimates for trends in the use of trails by those who engaged in recreational walking between 2006 and 2010. These estimates take account of the estimates outlined in Table 3.1 above, but they also rely on two key assumptions:

- (a) that the proportion of recreational walkers who use trails has grown steadily over the period, given recent investment in the product and expansion of the number of trails available. Previously, the 2005 study by Fitzpatrick Associates assumed that 13% of those who engaged in recreational walking were also using recreational trails⁶. In this report, however, under both higher and lower assumptions, it has been assumed that this has grown incrementally to 15% between 2006 and 2010;
- (b) that those who use trails for recreational walking make an average of 40 visits each year under the higher estimate or an average of 30 visits each year under the lower estimate⁷.

TABLE 3.2: INDICATIVE TRENDS FOR RECREATIONAL TRAILS WALKING IN IRELAND 2006-10					
	2006	2007	2008	2009	2010
Higher					
Population engaged in walking	1,922,597	2,007,471	2,018,135	2,130,568	2,168,016
% using trails	13.0%	13.5%	14.0%	14.5%	15.0%
Population using trails	249,938	271,009	282,539	308,932	325,202
Average visits to trails per annum	40	40	40	40	40
Total visits to trails per annum	9,997,506	10,840,344	11,301,556	12,357,294	13,008,094
Lower					
Population engaged in walking	1,922,597	2,007,471	2,018,135	2,130,568	2,168,016
% using trails	13.0%	13.5%	14.0%	14.5%	15.0%
Population using trails	249,938	271,009	282,539	308,932	325,202
Average visits to trails per annum	30	30	30	30	30
Total visits to trails per annum	7,498,130	8,130,258	8,476,167	9,267,971	9,756,070

SOURCE: FITZPATRICK ASSOCIATES ESTIMATES

⁵ Note that this figure is lower than the 74% recorded in the National Survey of Recreational Walking, published in 2003 and used in the 2005 Fitzpatrick Associates study.

⁶ This was based on the findings of the National Survey of Recreational Walking.

⁷ In this regard, it should be noted that the higher estimate used is significantly less than the figure drawn from the findings of the 2005 study by Fitzpatrick Associates, which was an average of 60 visits per year.

Based on these assumptions, the estimates suggest that the number of people who use trails for recreational walking has grown from 250,000 in 2006 up to more than 325,000 in 2010, a growth of 30%. Furthermore, based on an average annual number of trail visits of between 30 and 40 per annum, the estimated total annual number of visits has also grown from between 7.5 mn and 10.0 mn in 2006 up to between 9.8 mn and 13.0 mn in 2010.

Finally, it should be noted that walking is a popular activity among domestic tourists. Data from Fáilte Ireland, for example, shows that the proportion of domestic tourists that engage in hiking or walking has increased from 19% in 2005 up to 21% in 2010. However, this activity would already be counted within the estimates referred to above.

3.2.3 Recreational Cycling

Table 3.3 below provides indicative estimates for the size of the adult population engaged in all recreational cycling (including recreational trails) between 2006 and 2010. The estimates are again based on CSO estimates for the size of the population aged 15 or over each year and Irish Sports Monitor estimates for the percentage of the adult population (aged 16 or over) that engage in recreational cycling in each year.

	2006	2007	2008	2009	2010
Population aged 15 or over	3,375,300	3,455,200	3,509,800	3,521,600	3,511,700
<i>Growth per annum (%)</i>	-	2.4%	1.6%	0.3%	-0.3%
% engaged in cycling	2.5%	2.5%	1.9%	2.8%	3.0%
<i>Change per annum (%)</i>		-	-0.6%	+0.9%	+0.2%
Population engaged in cycling	82,728	86,380	66,686	98,605	104,060
<i>Growth per annum (%)</i>	-	4.4%	-22.8%	47.9%	5.5%

Note: At the time of writing, results from the Irish Sports Monitor for the percentage engaged in recreational cycling are only available for 2007, 2008 and 2009. Therefore, 2007-09 trend data has been used as a proxy for making 2006 and 2010 calculations.

SOURCE: DERIVED FROM CENTRAL STATISTICS OFFICE AND IRISH SPORTS COUNCIL DATA

The estimates suggest that the size of the adult population that engages in recreational cycling has grown from 83,000 adults in 2006 up to 104,000 adults in 2010. This represents growth of nearly 26% over five years, though from a much lower base than for recreational walking. Also, trends in Irish Sports Monitor data, when again assuming that 2007-09 growth trends applied to both 2006 and 2010, suggest that the percentage of adults that engage in recreational cycling has increased from 2.5% to 3.0% in the same period.

Moreover, further data from Cycling Ireland, the National Governing Body (NGB) for the sport of cycling in Ireland, would suggest a growth in participation. This includes:

- a 100% increase in membership of the organisation in three years (from 5,000 members in 2008 up to 10,000 members in 2011);
- evidence of a large number of new cycling clubs being formed;
- a 50% increase in the number of cycling events and charity cycles being run across the country;

- increase in participant numbers and demand for major cycling events, e.g. the Ring of Kerry Cycle had over 5,500 cyclists taking part in 2011, an increase of 66% from 2009, while the Irish Sports Council/An Post Cycle Series has seen an increase of over 150% in participation since 2009.

Table 3.4 below, meanwhile, provides higher and lower estimates for indicative trends in the use of trails by those who engaged in recreational cycling between 2006 and 2010. These estimates take account of the estimates outlined in Table 2.3 above, but they also rely on the following assumptions:

- that the proportion of recreational cyclists who use trails has grown steadily over the period, given investment in a number of cycling trail facilities, usage of facilities etc;
- unlike recreational walking, however, there is no previous estimate available for the percentage of recreational cyclists that use trails. It has therefore been assumed that figure is significantly lower than for recreational walking⁸, but that it has grown incrementally from 5% up to 6% between 2006 and 2010, both under higher and lower estimates;
- that those who use trails for recreational cycling make an average of 30 visits each year under the higher estimate and an average of 20 visits each year under the lower estimate.

TABLE 3.4: INDICATIVE TRENDS FOR RECREATIONAL TRAILS CYCLING IN IRELAND 2006-10					
	2006	2007	2008	2009	2010
Higher					
Population engaged in cycling	82,728	86,380	66,686	98,605	104,060
% using trails	5.0%	5.5%	5.5%	6.0%	6.0%
Population using trails	4,136	4,751	3,668	5,916	6,244
Average visits to trails per annum	30	30	30	30	30
Total visits to trails per annum	124,092	142,527	110,032	177,489	187,308
Lower					
Population engaged in cycling	82,728	86,380	66,686	98,605	104,060
% using trails	5.0%	5.5%	5.5%	6.0%	6.0%
Population using trails	4,136	4,751	3,668	5,916	6,244
Average visits to trails per annum	20	20	20	20	20
Total visits to trails per annum	82,728	95,018	73,355	118,326	124,872

SOURCE: FITZPATRICK ASSOCIATES ESTIMATES

Based on these assumptions, the estimates suggest that the number of people who use trails for recreational cycling has grown from 4,100 in 2006 up to 6,200 in 2010, a growth of over 50%. Furthermore, based on an average annual number of visits of between 20 and 30 per annum, the estimated total annual number of visits has also grown from between 83,000 and 124,000 in 2006 up to between 125,000 and 187,000 in 2010.

⁸ Consultations with the National Trails Office in the Irish Sports Council would suggest that this is most likely the case.

Again, it should be noted that cycling is a popular activity among domestic tourists. In this case, Fáilte Ireland data shows that the proportion of domestic tourists that engage in cycling has remained steady at about 6% between 2005 and 2010. Also, however, as with domestic walking tourism, this activity would already be counted within the estimates referred to above.

3.3 Overseas Tourism

As well as being popular activities among the domestic population, walking and cycling are also key activities that attract overseas tourists to Ireland. Table 3.5, for example, shows recent trends in the number of overseas tourists visiting Ireland that engage in certain key activities, based on Survey of Overseas Travellers (SOT) data available from Fáilte Ireland. The figures show that hiking/hillwalking is the most popular activity of five key active pursuits engaged in by overseas tourists, with an average of 680,000 overseas visitors engaging in it between 2008 and 2010. Cycling, meanwhile, attracted an average of 133,000 overseas visitors between 2008 and 2010, similar to the numbers engaging in angling (132,000) and slightly below the numbers engaging in golf (149,000).

	2006	2007	2008	2009	2010	Growth 2006-10 (%)	Three Year Average 2008-10
<i>Hiking and Hillwalking</i>	<i>466,000</i>	<i>787,000</i>	<i>517,000</i>	<i>830,000</i>	<i>693,000</i>	<i>48.7%</i>	<i>680,000</i>
Golf	246,000	214,000	141,000	143,000	164,000	-33.3%	149,333
<i>Cycling</i>	<i>110,000</i>	<i>142,000</i>	<i>120,000</i>	<i>114,000</i>	<i>164,000</i>	<i>49.0%</i>	<i>132,667</i>
Angling	143,000	157,000	142,000	132,000	123,000	-14.0%	132,333
Equestrian	50,000	69,000	50,000	46,000	60,000	20.0%	52,000

SOURCE: FÁILTE IRELAND

Furthermore, it is notable that growth in walking and cycling among overseas tourists appears a lot stronger than for other activities. Visitors engaging in hiking and hillwalking grew by 49% between 2006 and 2010, while visitors engaging in cycling also grew by 49%. Growth for other activities, on the other hand, was 20% for equestrian pursuits, a decline of 33% for golf⁹ and a decline of 13% for angling. However, it should be noted that year-on-year estimates can be subject to volatility.

⁹ Regarding the market for golf, it should be noted that Ireland hosted the Ryder Cup in 2006, which would have contributed to high visitor numbers in that year.

Table 3.6, meanwhile, shows recent trends in the number of overseas holidaymakers visiting Ireland that engage in certain key activities, i.e. those visitors who come to Ireland primarily to engage in a holiday. The figures again show that hiking/hillwalking is the most popular activity for overseas holidaymakers, with an average of nearly 475,000 holidaymakers engaging in it between 2008 and 2010, while cycling attracted an average of nearly 87,000 holidaymakers between 2008 and 2010.

TABLE 3.6: OVERSEAS HOLIDAYMAKERS ENGAGED IN WALKING AND CYCLING 2006-10							
	2006	2007	2008	2009	2010	Growth 2006-10 (%)	Three Year Average 2008-10
<i>Hiking and Hillwalking</i>	350,000	684,000	383,000	576,000	462,000	32.0%	473,667
Golf	177,000	158,000	93,000	93,000	106,000	-40.1%	97,333
<i>Cycling</i>	74,000	118,000	83,000	67,000	107,000	44.6%	85,667
Angling	106,000	133,000	110,000	88,000	80,000	-24.5%	92,667
Equestrian	37,000	55,000	29,000	25,000	41,000	10.8%	31,667

SOURCE: FÁILTE IRELAND

In addition, holidaymakers engaging in hiking and hillwalking grew by 32% between 2006 and 2010, while holidaymakers engaging in cycling grew by 45%. Growth for other activities, on the other hand, was 11% for equestrian pursuits, a decline of 40% for golf and a decline of 25% for angling.

Overseas visitors who engaged in walking also engaged in a variety of different types of walking. For example: 58% participated in walking on pathways; 42% participated in walking on roads; 41% engaged in cross-country walks; 35% took part in hill walks; 18% used waymarked ways; and 11% used looped walks. About 8%, meanwhile, engaged in walking that was accompanied by a guide.

Furthermore, it should be noted that 366,000 overseas holidaymakers in 2009, and 245,000 holidaymakers in 2010, stated that hiking and hillwalking was an important factor in their decision to holiday in Ireland. Also, the number of overseas visitors and holidaymakers who walked off-road for 5 km or more in 2009, i.e. using recreational trails or similar product, totalled 388,000 and 274,000 respectively. In addition, there were 42,000 holidaymakers in 2009 and 54,000 holidaymakers in 2010 who stated that cycling was an important factor in their decision to holiday in Ireland.

4. Recreational Trails – Economic Benefits

4.1 Overview

The purpose of this section is to provide an update on the economic value of recreational trails in Ireland. This includes:

- the value of domestic participation;
- the value of overseas tourism;
- illustrative examples of the potential spin-off for employment and Exchequer revenues;
- users' willingness to pay for recreational trails.

4.2 Domestic Participation – Use Values

4.2.1 Method

Estimating the use values arising from domestic use of recreational trails has involved two discrete steps. These steps are:

- estimating the use value of visits to recreational trails;
- estimating the use value associated with expenditure on equipment (e.g. clothing and footwear) used on visits to recreational trails.

The first step involves multiplying total visits to recreational trails (derived in Section 3.2 above), both for walking and cycling, by a figure for average direct spend per trail visit, taking account of recent trends in prices, household incomes and earnings. How this is done is outlined in Box 4.1 below.

Box 4.1

Number of annual visits to recreational trails
 x Average direct expenditure per trail visit
 = Use value of total annual visits to recreational trails

The second step, meanwhile, involves multiplying the number of users of recreational trails for walking and cycling (also derived in Section 3.2 above) by a figure for average annual spend on equipment. This again takes account of recent trends in prices, household incomes and earnings, and is outlined in Box 4.2 below.

Box 4.2

Number of users of recreational trails
 x Average annual spend on equipment
 = Use value of total annual spend on equipment

Section 4.2.2 below provides estimates for the use value derived from expenditure on visits to recreational trails, while Section 4.2.3 provides estimates for the use value derived from other expenditure.

4.2.2 Expenditure on Trails Visits

Section 3.2 above has estimated, on an indicative basis, that between 9.8 mn and 13.0 mn walking visits and between 125,000 and 187,000 cycling visits were made to recreational trails in 2010. The use value of these visits, in turn, depends on the average spend that can be attributed to each individual visit.

As noted in Section 1.2 above, the user survey carried out as part of the 2005 study by Fitzpatrick Associates estimated that the average spend per visit at that time was €14.91. This typically included spend on items such as food, drink and (to a much lesser extent) accommodation, local crafts for tourists etc. While many users would have spent less than this amount, many others would have spent more, and in some cases considerably more (e.g. tourists who spend on accommodation). Therefore, the findings of the 2005 study appeared reasonable as an average across all users.

Between 2005 and 2010, however, average spend per visit would have been subject to changes in prices, household income, average earnings etc. Recent trends in this regard are outlined in Table A1.1 and Table A1.5 in Annex 1, which show that:

- consumer prices generally increased by about 7% between 2005 and 2010;
- prices for food and non-alcoholic drink rose by just over 2% in the same period, prices for recreation and cultural pursuits also grew by about 2%, while prices in restaurants and hotels grew by about 9%;
- household incomes grew up to the 2007-08 period, but average earnings have declined in the years since then;
- consumer spending in Ireland generally has fallen dramatically during 2008, 2009 and 2010.

These trends would suggest that average spend per visit is unlikely to have increased dramatically between 2005 and 2010. At the same time, a recent study in the United States has suggested that people's spending on activities like recreational walking and cycling can be quite resilient, even during periods of recession¹⁰. Therefore, it is assumed here that average spend per visit has increased, but only in line with the increase in prices for food and non-alcoholic beverages referred to above, i.e. 2.3%.

¹⁰ For example, see Loomis, J. and Keske, C., "Did the Great Recession Reduce Visitor Spending and Willingness to Pay? Evidence from 2006 and 2009", *Contemporary Economic Policy*, Vol. 29, Issue 4, October 2011.

On this basis, average spend per visit in 2010 is estimated at €15.26. Table 4.1 below, in turn, takes this estimate and applies it to the estimated number of annual visits to recreational trails, both for walking and cycling and under higher and lower estimates, to give an estimate for total direct expenditure from visits to recreational trails. These estimates suggest that:

- walking visits to trails were worth between €148.9 mn and €198.5 mn in direct spend in 2010;
- cycling visits to trails were worth between €1.9 mn and €2.9 mn in direct spend in 2010.

TABLE 4.1: ESTIMATED DIRECT EXPENDITURE FROM VISITS TO RECREATIONAL TRAILS 2010		
	Walking	Cycling
Higher		
Total annual visits to recreational trails	13,008,094	187,308
Average spend per visit	€15.26	€15.26
Total direct expenditure on visits to recreational trails	€198,484,076	€2,858,044
Lower		
Total annual visits to recreational trails	9,756,070	124,872
Average spend per visit	€15.26	€15.26
Total direct expenditure on visits to recreational trails	€148,863,057	€1,905,363

SOURCE: FITZPATRICK ASSOCIATES ESTIMATES

Other related expenditure, e.g. spend on equipment, clothing and footwear, is now discussed in Section 4.2.3 below.

4.2.3 Other Expenditure

Section 3.2 above has estimated that there were 325,000 walking users and 6,200 cycling users of recreational trails in 2010, under both higher and lower estimates. In addition to the use value generated by the visits that these users make to trails, further use values are also generated by their annual expenditure on equipment, clothing, footwear etc.

The user survey carried out as part of the 2005 study by Fitzpatrick Associates estimated that the average annual expenditure per user on clothing, footwear and other equipment, including both walkers and cyclists, was €161 per annum. For walkers or hikers only, however, who represented nearly 94% of users surveyed, the typical annual spend was found to be about €150 per annum. The 2005 estimate for annual expenditure for walkers is therefore assumed to be €150 per annum, while the base year estimate for cyclists is assumed to be €300 per annum¹¹.

¹¹ An average spend of €161 per annum across 100% of users interviewed in the 2005 study, but an average spend of only €150 per annum across the 93.4% of users who were either walkers or hikers, means that the average spend for the other 6.6% of users (including cycling, running, horse riding, orienteering etc) was about €320 per annum.

Furthermore, price changes between 2005 and 2010 are again likely to have had an impact on annual expenditure trends. Key trends in this regard are outlined in Tables A1.1, A1.2, A1.3 and A1.4 in Annex 1, which show that:

- prices for clothing and footwear generally declined by nearly 28% between 2005 and 2010. Furthermore, more detailed data which examines price trends for clothing and footwear separately also suggest that this size of drop was consistent for both categories of item;
- monthly changes in consumer prices for bicycles show a decline of between 8% and 10% between 2005 and 2010, with an average decline of about 9%.

These trends would suggest that average annual expenditure on other items is likely to have decreased between 2005 and 2010 because the prices of such items have dropped in the intervening period. In line with price trends, average annual expenditure in 2010 is therefore assumed to be 28% less for clothing, footwear and related items and 9% less for bicycles and related equipment.

On this basis, average annual spend on other items in 2010 is estimated at €108.22 for walking users and €244.55 for cycling users¹². Table 4.2 then takes these estimates and applies them to the estimated number of walking and cycling users of recreational trails to give an estimate for total direct expenditure on other items. These estimates suggest that:

- expenditure on other items by walking users was worth €35.2 mn in direct spend in 2010, under both higher and lower estimates;
- expenditure on other items by cycling users was worth €1.5 mn in direct spend in 2010, under both higher and lower estimates.

TABLE 4.2: ESTIMATED DIRECT EXPENDITURE – OTHER EXPENDITURE 2010		
	Walking	Cycling
Total annual users of recreational trails	325,202	6,244
Average annual spend on other items	€108.22	€244.55
Total direct expenditure on other items	€35,194,703	€1,526,882

SOURCE: FITZPATRICK ASSOCIATES ESTIMATES

Section 4.3 below deals with the final major category of direct expenditure, which is overseas tourism.

¹² For walking users, this assumes a 28% fall in the 2005 level of spend of €150. For cycling users, it assumes a 28% fall on one half of the assumed 2005 level of spend of €300 (to take account of changes in the price of clothing and footwear) and a 9% fall on the other half of spend (to take account of changes in the price of bicycles and related equipment).

4.3 Overseas Tourism

As well as generating direct expenditure through domestic use of recreational trails (including domestic tourism), trails also contribute to the spend generated by overseas walking and cycling visitors.

The most recent figures available for expenditure by overseas tourists engaging in walking and cycling activities relate to 2010. In that year, overseas visitors engaging in hiking and hillwalking generated expenditure of €640 mn, while overseas visitors engaging in cycling generated expenditure of €180 mn¹³. Included in these figures were over €415 mn generated by holidaymakers engaging in hiking and hillwalking and €100 mn generated by holidaymakers engaging in cycling.

TABLE 4.3: REVENUE EARNED FROM OVERSEAS VISITORS 2010 – WALKING AND CYCLING		
	Walking (€)	Cycling (€)
Visitors	640,000,000	180,000,000
Holidaymakers	416,000,000	100,000,000

SOURCE: FÁILTE IRELAND

Lastly, it is notable that holidaymakers who stated that walking was an important factor in their choice of destination spent an estimated €215 mn while in Ireland. Also, visitors who walked off-road, for more than 5 km on average, spent an estimated €183 mn while in Ireland. For cycling, meanwhile, holidaymakers who stated that it was an important factor in their choice of destination spent an estimated €52 mn while in Ireland.

4.4 Employment

Creating and sustaining jobs in Ireland is a key policy priority, particularly given the sharp deterioration in the Irish economy in recent years and the subsequent sharp rise in unemployment. In this context, it is therefore important to note that money spent while using recreational trails also contributes to creating and sustaining jobs. Table 4.4 below, for example, provides estimates of the number of jobs, in terms of full-time equivalents (FTEs), supported from a given level of expenditure at a number of recreational trails in the United States and Canada. Taking a simple average across all studies, these figures suggest that an average spend of about \$58,000 in 2010 prices would sustain one FTE job, which is equivalent to about €43,000.

In addition, earlier evidence from studies for Fáilte Ireland suggested that every £1 mn of overseas tourism revenue generated 26.8 FTE jobs, while every £1 mn of domestic tourism revenue generated 22.1 FTE jobs. In terms of spend per jobs, in 2010 prices, these figures would equate to €68,000 per FTE job and €83,000 per FTE job respectively. However, it should also be noted that this analysis relates to 1995 data.

¹³ It should be noted that there may be double counting between revenues earned from walking and cycling tourism since some overseas visitors may participate in both activities while in Ireland.

Study	User Group	Year	Spend (\$/€000s)	Jobs (FTEs)	Spend per Job
Virginia Creeper Trail	Non-locals	2003	\$1,200	27.4	\$43,800
Washington and Old Dominion Trail	Non-locals	2004	\$1,400	34.0	\$41,200
Trans Canada Trail – Ontario	All Users	2003	\$2,330,129	42,471.0	\$54,900
Trans Canada Trail – Ontario	Non-locals	2003	\$143,600	2,324.0	\$61,800
<i>Average</i>					\$50,400
<i>Average – 2010 Prices</i>					\$57,900
Fáilte Ireland – Overseas Tourism	Non-locals	1995	€1,000	26.8	€37,313
Fáilte Ireland – Domestic Tourism	Non-locals	1995	€1,000	22.1	€45,208
Scottish Tourism Multiplier Study	Non-locals	1992	€1,000	27.7	€36,100

SOURCE: VARIOUS – SEE ANNEX 2

There are no robust estimates available for the number of jobs supported by expenditure on recreational trails. Furthermore, the number of jobs supported from a given level of expenditure will also vary in individual cases, e.g. because of differences in the share of local and non-local users, or as a result of “leakages” out of the local economy.

For illustrative purposes, therefore, we assume here that every €65,000 in expenditure supports one FTE job. This estimate is in turn used in Table 4.5 below to give an example of the number of FTE jobs that could be supported by domestic expenditure on recreational trails, both under higher and lower estimates for usage and spend. Based on this assumption, the figures suggest that between 2,900 and 3,700 FTE jobs could be directly supported by domestic expenditure on trails.

Furthermore, it should be noted that an even larger number of FTEs is probably supported if indirect expenditure arising from trails activity is also included, e.g. spend by suppliers to walking and cycling shops, food outlets, restaurants etc.

	Walking	Cycling
Higher		
Total direct expenditure on visits to recreational trails	€198,484,076	€2,858,044
Total direct expenditure on other items	€35,194,703	€1,526,882
TOTAL EXPENDITURE – DOMESTIC PARTICIPATION	€233,678,779	€4,384,926
Indicative output per job	€65,000	€65,000
Indicative employment (FTEs)	3,595	67
Lower		
Total direct expenditure on visits to recreational trails	€148,863,057	€1,905,363
Total direct expenditure on other items	€35,194,703	€1,526,882
TOTAL EXPENDITURE – DOMESTIC PARTICIPATION	€184,057,760	€3,432,245
Indicative output per job	€65,000	€65,000
Indicative employment (FTEs)	2,832	53

SOURCE: FITZPATRICK ASSOCIATES ESTIMATES

Table 4.6, meanwhile, uses the same ratio for spend per FTE job to derive an illustrative estimate for jobs supported by walking and cycling tourism¹⁴. In this case, it is estimated that direct spend by tourists engaged in walking activities could potentially support about 9,800 jobs, spend by those who engaged in off-road walking alone (€183 mn) could support about 2,800 jobs, while direct spend by tourists engaged in cycling activities could similarly support about 2,800 jobs¹⁵. Again, however, further FTE jobs would be supported by indirect expenditure arising from trails activity.

TABLE 4.6: OVERSEAS TOURISM ESTIMATES AND INDICATIVE IMPACT ON EMPLOYMENT		
	Walking	Cycling
Revenue earned from overseas tourism	€640,000,000	€180,000,000
Indicative output per job	€65,000	€65,000
Indicative employment (FTEs)	9,846	2,769

SOURCE: FITZPATRICK ASSOCIATES ESTIMATES

As an example, it is also notable that a number of agencies and organisations have employed both full-time and part-time staff to work on the planning, development and promotion of recreational trails in Ireland over the 2005-10 period. This includes:

- Rural Recreation Officers that have been employed by Integrated Local Development Companies (ILDCs). To date, 12 of these officers have been working at local level on the development of walking and cycling trails;
- the Forest Recreation Unit at Coillte, the State forestry company, which was established in 2007 and which employs five members of staff, working on recreational trail planning and development projects;
- Walking Officers that have been employed by a number of local authorities in recent years, e.g. Wicklow Trails Officer, Mayo Walking Officer, Donegal Walking Officer, Waterford Trails Co-ordinator.

In addition, the former Department of Community, Equality and Gaeltacht Affairs established the Rural Recreation Scheme in 2007. This scheme has employed approximately 2,500 farmers on a part-time basis over the past four years, and it makes a significant contribution to the maintenance and upkeep of walking, cycling and other trails in a number of counties around the country.

Finally, information available from Fáilte Ireland suggests that there are about 60 walking and cycling operators and/or walking and cycling guides nationally, with about 500 businesses in total being involved in “activity tourism” (including walking and cycling).

¹⁴ Fáilte Ireland data for 2009 shows that dividing total employment by tourism earnings gives an average value of 36 jobs per €1 mn in tourism spend. However, this includes both full-time and part-time jobs, and does not represent FTEs supported.

¹⁵ As noted earlier, there may be double counting between revenues earned from walking and cycling tourism since some overseas visitors may participate in both activities while in Ireland. Similarly, therefore, there would also be double counting in the number of jobs supported in each case.

4.5 Exchequer Benefits

As well as helping to create and sustain jobs, expenditure on recreational trails also generates revenues for the Exchequer. A previous 2002 study of the tourism industry, for example, suggested that each euro spent by an overseas visitor generated 30 cents for the Exchequer, while each euro spent by a domestic visitor generated 29 cents for the Exchequer¹⁶. However, more recent Fáilte Ireland data from 2009 shows that the estimated tax take on overseas tourism expenditure is now 24%.

There are no robust estimates available for the tax take generated by domestic expenditure on recreational trails. For illustrative purposes, we assume here that every euro of expenditure on recreational trails generates 20 cent for the Exchequer. On this basis, as per Table 4.7 below, domestic expenditure on trails could generate taxes of between €37.5 mn and €47.6 mn per annum, based on higher and lower estimates.

TABLE 4.7: DOMESTIC EXPENDITURE – INDICATIVE EXCHEQUER IMPACT		
	Walking	Cycling
Higher		
Total direct expenditure on visits to recreational trails	€198,484,076	€2,858,044
Total direct expenditure on other items	€35,194,703	€1,526,882
TOTAL EXPENDITURE – DOMESTIC PARTICIPATION	€233,678,779	€4,384,926
Exchequer impact (20%)	€46,735,756	€876,985
Lower		
Total direct expenditure on visits to recreational trails	€148,863,057	€1,905,363
Total direct expenditure on other items	€35,194,703	€1,526,882
TOTAL EXPENDITURE – DOMESTIC PARTICIPATION	€184,057,760	€3,432,245
Exchequer impact (20%)	€36,811,552	€686,449

SOURCE: FITZPATRICK ASSOCIATES ESTIMATES

Similarly, assuming the same contribution, expenditure by overseas visitors engaged in walking could generate nearly €130 mn for the Exchequer, while expenditure by overseas visitors engaged in cycling could generate over €35 mn¹⁷. Spend by those who engaged in off-road walking alone (€183 mn) could also potentially generate over €35 mn.

TABLE 4.8: OVERSEAS TOURISM – INDICATIVE EXCHEQUER IMPACT		
	Walking	Cycling
Revenue earned from overseas tourism	€640,000,000	€180,000,000
Exchequer impact (20%)	€128,000,000	€36,000,000

SOURCE: FITZPATRICK ASSOCIATES ESTIMATES

¹⁶ *The Impact of Tourism on the Economy of Ireland*, Report Prepared for Fáilte Ireland by Tourism and Transport Consult International, August 2002.

¹⁷ Given that the most recent estimate for tax take in overseas tourism expenditure is 24%, the estimate of 20% used here for walking and cycling tourism may be conservative. Again, the potential for double counting between expenditure on walking and cycling tourism should also be acknowledged.

4.6 Economic Benefits – Willingness to Pay

Finally, estimating the willingness to pay for recreational trails involves multiplying total visits to trails, derived in Section 3.2 above, by a figure for the average notional willingness to pay per trail visit (see Box 4.3 below). While this does not represent actual expenditure, as the use of trails is generally free of charge, it nonetheless acknowledges that their use still has a value for users, which can be monetised.

Box 4.3

Number of annual visits to recreational trails
 x Average willingness to pay per trail visit
 = Willingness to pay for total annual visits to recreational trails

The user survey carried out as part of the 2005 study by Fitzpatrick Associates estimated that the average willingness to pay for a visit to a recreational trail at that time was €5.40. In the meantime, Section 4.2.2 above has shown that actual prices for relevant expenditure items have changed little since 2005. In addition, as noted earlier, a recent study in the United States has suggested that people’s spending on activities like recreational walking and cycling can be quite resilient during periods of recession¹⁸. Therefore, it is assumed here that average willingness to pay has remained unchanged in the intervening period.

On this basis, average willingness to pay in 2010 is estimated at €5.40. Table 4.9 below takes this estimate and applies it to the estimated number of annual visits to recreational trails, both for walking and cycling and under higher and lower estimates, to give an estimate for total willingness to pay from visits to trails. These estimates suggest that:

- walking visits to trails had a notional willingness to pay of between €52.7 mn and €70.2 mn in 2010;
- cycling visits to trails had a notional willingness to pay of between €0.7 mn and €1.0 mn in 2010.

TABLE 4.9: ESTIMATED WILLINGNESS TO PAY FOR VISITS TO RECREATIONAL TRAILS 2010		
	Walking	Cycling
Higher		
Total annual visits to recreational trails	13,008,094	187,308
Average willingness to pay	€5.40	€5.40
Total willingness to pay for visits to recreational trails	€70,243,706	€1,011,465
Lower		
Total annual visits to recreational trails	9,756,070	124,872
Average willingness to pay	€5.40	€5.40
Total willingness to pay for visits to recreational trails	€52,682,779	€674,310

SOURCE: FITZPATRICK ASSOCIATES ESTIMATES

¹⁸ See Loomis, J. and Keske, C. (2011).

5. Other Socio-economic Benefits

5.1 Overview

The purpose of this section is to provide a review of other socio-economic benefits arising from recreational trails in Ireland. This includes:

- a review of the health benefits of recreational trails, including an estimate of their monetised benefits;
- a review of other socio-economic benefits, such as the benefits of participation in activities, the benefits from regional and spatial spread of economic activity, the safety benefits arising from providing off-road facilities etc.

5.2 Health Benefits

Among the major ancillary socio-economic benefits associated with recreational walking and cycling are the health benefits associated with the activities. In particular, the benefits of regular participation in physical activity compared to a more sedentary lifestyle are thought to be substantial, so these benefits should be considered from a policy perspective if an intervention causes more people to become physically active.

Furthermore, tools have been developed to offer improved means of assessing the health benefits of such activities, including tools that monetise the benefits. For example, the Health Economic Assessment Tool (HEAT), which has been developed by the World Health Organisation (WHO), is an online resource to estimate the economic savings that can result from reduced mortality arising from regular cycling and/or walking¹⁹. It is based on best available evidence, with parameters that can be adapted to fit specific situations.

Table 5.1 below uses the HEAT model to provide an assessment of the monetised benefits of the use of recreational trails in Ireland, both for walking and cycling, based on the higher estimates for 2010 levels of usage estimated in Section 2 above. For walking, the table shows that the estimated 13.0 mn annual trips taken by an estimated 325,000 users saves over 40 lives each year. This has an annual monetised benefit of nearly €65 mn, or a current value of future benefits over 10 years (when discounted at a rate of 5% per annum²⁰) of over €500 mn.

¹⁹ For further information, see www.heatwalkingcycling.org.

²⁰ The 5% discount rate used here is the default value proposed by the HEAT model. Using a 4% discount rate, which the Department of Finance recommends for cost-benefit analysis of the use of public funds, would give a slightly higher NPV. In the case of walking, for example, the NPV over 10 years would be about 5% higher than the value shown in Table 5.1.

TABLE 5.1: HEALTH BENEFITS OF RECREATIONAL TRAILS – MONETISED VALUE

	Walking	Cycling
No. of users of recreational trails	325,202	6,244
Average number of trips per annum	40	30
No. of annual trips to recreational trails	13,008,094	187,308
Average trip duration (minutes)	30	60
No. of users who would be expected to die if they were not active regularly	1,485.0	28.5
No. of deaths per year prevented by the given level of activity	41.2	2.5
Value of a statistical life (€)	1,574,000	1,574,000
Annual benefit of the activity (€)	64,889,000	3,915,000
Total benefits of the activity accumulated over 10 years (€)	648,890,000	39,147,000
Current value of the average annual benefit, averaged across 10 years (€)	50,106,000	3,023,000
Current value of the total benefits accumulated over 10 years (€)	501,056,000	30,228,000
Note: Current value of future benefits discounted at a rate of 5% per annum.		
SOURCE: FITZPATRICK ASSOCIATES ESTIMATES USING WHO'S HEAT MODEL		

For cycling, meanwhile, the table shows that the estimated 187,000 annual trips taken by an estimated 6,200 users saves about three lives each year. This has an annual monetised benefit of more than €3.9 mn, or a current value of future benefits over 10 years (when discounted at 5% per annum) of over €30 mn.

It is obvious, therefore, that the socio-economic benefits that accrue from the use of recreational trails in Ireland can be substantial and should be recognised as a “saving” to the Exchequer, e.g. in terms of the cost of healthcare or social welfare provision.

5.3 Other Benefits

It should also be remembered that sport and recreational exercise, including the use of recreational trails, contribute not only to improvements in health but also to social capital and other socio-economic benefits. These benefits include:

- promoting better social inclusion and opportunities for more socially disadvantaged groups to engage in physical activity. This is because walking and cycling are inexpensive activities, and improved facilities therefore make these activities more accessible for an even greater number of people;
- promoting a better regional and spatial spread of economic activity. For example, tourism activity displays a better regional and spatial spread of activity than many other sectors, and it can be particularly important in areas where there are limited other opportunities for economic development. Furthermore, walking and cycling tourism often benefits more rural or remote parts of Ireland, which are removed from the major established tourism destinations;

- other benefits to the general well being of the population, e.g. walking and cycling can allow people to escape from the pressures of modern living, gaining relaxation, refreshment and challenge, and thus helping reduce anxiety and stress levels;
- improved community engagement arising from participation in walking and cycling. For example, walking and cycling allows and provides more opportunities for personal and social interaction between people, which can lead to a greater sense of community;
- improved safety benefits, as better infrastructure for off-road recreational trails can divert walking and cycling activity off the main roads, thereby reducing the potential for traffic related accident and injury. Also, promoting walking and cycling in areas that are safe and pleasant can help communities become more sustainable and “liveable”.



6. Future Potential

6.1 Overview

The purpose of this section is to develop some alternative scenarios on the usage and economic value of recreational trails in Ireland. It focuses specifically on the potential of domestic participation, and includes analysis of low, medium and high scenarios for:

- usage of recreational trails by the domestic population;
- the economic value derived from this use of recreational trails;
- the employment potential of recreational trails.

6.2 Usage of Trails

Table 6.1 presents alternative scenarios for growth in recreational walking up to 2015, using the higher 2010 estimates as the base year. It gives a low, medium and high scenario, using the following assumptions:

- the overall proportion of the population that engages in recreational walking will continue to grow, up to nearly 65% by 2015;
- the proportion of those using recreational trails will (a) remain at 15.0% under a low scenario, (b) grow to 16.3% under a medium scenario and (c) grow to 17.5% under a high scenario;
- the average number of trail visits per annum will remain unchanged at 40.

On this basis, estimates suggest that visits to trails have the potential to grow by between 7% and 25% up to 2015, or up to between 13.9 mn visits and 16.2 mn visits per annum, depending on which scenario is used.

TABLE 6.1: FUTURE POTENTIAL OF RECREATIONAL TRAILS – USAGE – WALKING				
	2010 Base Year	2015 Low Scenario	2015 Medium Scenario	2015 High Scenario
Population aged 15 or over	3,511,700	3,564,789	3,564,789	3,564,789
% engaged in walking	61.7%	64.9%	64.9%	64.9%
Population engaged in walking	2,168,016	2,313,054	2,313,054	2,313,054
% using trails	15.0%	15.0%	16.3%	17.5%
Population using trails	325,202	346,958	375,871	404,784
Average visits to trails per annum	40	40	40	40
Total visits to trails per annum	13,008,094	13,878,322	15,034,848	16,191,375
<i>Growth (%)</i>	-	6.7%	15.6%	24.5%

SOURCE: FITZPATRICK ASSOCIATES ESTIMATES

Table 6.2 below, meanwhile, presents a number of alternative scenarios for growth in domestic recreational cycling up to 2015, again using the higher estimates for 2010 as the base year. It gives a low, medium and high scenario, using the following assumptions:

- the overall proportion of the population that engages in recreational cycling will continue to grow, up to about 3.4% by 2015;
- the proportion of those using recreational trails will (a) remain at 6.0% under a low scenario, (b) grow to 6.8% under a medium scenario and (c) grow to 7.5% under a high scenario;
- the average number of trail visits per annum will remain unchanged at 30.

On this basis, the estimates suggest that visits to recreational trails have the potential to grow by between 18% and 47% up to 2015, or up to between 220,000 visits and 275,000 visits per annum, depending on which scenario is used.

TABLE 6.2: FUTURE POTENTIAL OF RECREATIONAL TRAILS – USAGE – CYCLING				
	2010 Base Year	2015 Low Scenario	2015 Medium Scenario	2015 High Scenario
Population aged 15 or over	3,511,700	3,564,789	3,564,789	3,564,789
% engaged in cycling	3.0%	3.4%	3.4%	3.4%
Population engaged in cycling	104,060	122,458	122,458	122,458
% using trails	6.0%	6.0%	6.8%	7.5%
Population using trails	6,244	7,347	8,266	9,184
Average visits to trails per annum	30	30	30	30
Total visits to trails per annum	187,308	220,424	247,977	275,530
<i>Growth (%)</i>	-	17.7%	32.4%	47.1%

SOURCE: FITZPATRICK ASSOCIATES ESTIMATES

6.3 Economic Value of Trails

Table 6.3 below presents a number of alternative scenarios for the economic value of domestic recreational walking up to 2015, based on the usage scenarios outlined in Section 6.2 above. It gives a low, medium and high scenario for expenditure, with estimates in 2010 prices.

The table shows that the value of direct walking expenditure on recreational trails could again grow by between 7% and 25% in real terms, or up to between €249.3 mn and €290.9 mn, depending on which scenario is used.

TABLE 6.3: FUTURE POTENTIAL OF RECREATIONAL TRAILS – ECONOMIC VALUE – WALKING				
	2010 Base Year	2015 Low Scenario	2015 Medium Scenario	2015 High Scenario
Annual visits to trails	13,008,094	13,878,322	15,034,848	16,191,375
Average spend per visit	€15.26	€15.26	€15.26	€15.26
Direct expenditure on visits to trails	€198,484,076	€211,762,453	€229,409,324	€247,056,196
Annual users of trails	325,202	346,958	375,871	404,784
Average annual spend on other items	€108.22	€108.22	€108.22	€108.22
Direct expenditure on other items	€35,194,703	€37,549,192	€40,678,292	€43,807,391
TOTAL DIRECT EXPENDITURE	€233,678,779	€249,311,646	€270,087,616	€290,863,586
<i>Growth (%)</i>	-	6.7%	15.6%	24.5%
Note: All expenditure estimates are shown in 2010 prices.				
SOURCE: FITZPATRICK ASSOCIATES ESTIMATES				

Table 6.4 below, meanwhile, presents a number of alternative scenarios for the economic value of domestic recreational cycling up to 2015, again using the usage estimates presented in Section 6.2 above. It also gives a low, medium and high scenario, with estimates in 2010 prices.

This table shows that the value of direct cycling expenditure on recreational trails could grow by between 18% and 47% in real terms, or up to between €5.2 mn and €6.5 mn, depending on which scenario is used.

TABLE 6.4: FUTURE POTENTIAL OF RECREATIONAL TRAILS – ECONOMIC VALUE – CYCLING				
	2010 Base Year	2015 Low Scenario	2015 Medium Scenario	2015 High Scenario
Annual visits to trails	187,308	220,424	247,977	275,530
Average spend per visit	€15.26	€15.26	€15.26	€15.26
Direct expenditure on visits to trails	€2,858,044	€3,363,346	€3,783,764	€4,204,182
Annual users of trails	6,244	7,347	8,266	9,184
Average annual spend on other items	€244.55	€244.55	€244.55	€244.55
Direct expenditure on other items	€1,526,882	€1,796,834	€2,021,438	€2,246,042
TOTAL DIRECT EXPENDITURE	€4,384,926	€5,160,180	€5,805,202	€6,450,224
<i>Growth (%)</i>	-	17.7%	32.4%	47.1%
Note: All expenditure estimates are shown in 2010 prices.				
SOURCE: FITZPATRICK ASSOCIATES ESTIMATES				

6.4 Employment Potential of Trails

As noted earlier, creating and sustaining jobs in Ireland is once again a key policy priority, given the sharp deterioration in the Irish economy and the subsequent sharp rise in unemployment. Therefore, it is important to acknowledge the role that the development and maintenance of recreational trails can play into the future in creating and sustaining jobs.

Based on the scenarios for economic potential outlined above, and on the basis that every €65,000 in expenditure supports one FTE job, use of recreational trails for walking and cycling would have the potential to support between 3,900 and 4,600 FTE jobs by 2015. This would also mean that between 250 and 900 new FTE jobs could be supported between 2010 and 2015 as a result of domestic expenditure on trails walking and cycling.

TABLE 6.5: FUTURE POTENTIAL OF RECREATIONAL TRAILS – EMPLOYMENT				
	2010 Base Year	2015 Low Scenario	2015 Medium Scenario	2015 High Scenario
Walking				
Total direct expenditure	€233,678,779	€249,311,646	€270,087,616	€290,863,586
Indicative output per job	€65,000	€65,000	€65,000	€65,000
Indicative employment (FTEs)	3,595	3,836	4,155	4,475
Cycling				
Total direct expenditure	€4,384,926	€5,160,180	€5,805,202	€6,450,224
Indicative output per job	€65,000	€65,000	€65,000	€65,000
Indicative employment (FTEs)	67	79	89	99
Note: All expenditure estimates are shown in 2010 prices.				
SOURCE: FITZPATRICK ASSOCIATES ESTIMATES				



Annexes

Annex 1 Supplementary Tables

	2005	2006	2007	2008	2009	2010	Growth 2005-10 (%)
All items	94.3	98.0	102.8	107.0	102.2	101.2	7.3%
Food and non-alcoholic beverages	98.4	99.8	102.6	109.3	105.5	100.7	2.3%
Alcoholic beverages, tobacco	95.3	96.4	101.5	106.4	113.1	110.2	15.6%
Clothing and footwear	99.1	97.2	94.0	89.4	78.9	71.5	-27.9%
Housing, water, utilities and fuels	78.7	91.3	109.9	120.5	94.0	95.2	21.0%
Furnishings, equipment, maintenance	101.2	99.9	98.2	96.6	93.6	89.8	-11.3%
Health	94.9	99.1	102.0	108.1	111.9	112.6	18.7%
Transport	98.2	101.6	103.8	107.3	103.0	106.2	8.1%
Communication	100.4	99.9	100.4	101.4	101.9	103.3	2.9%
Recreation and culture	97.9	99.2	100.7	102.0	101.7	99.9	2.0%
Education	92.4	96.9	101.8	108.0	114.9	122.2	32.3%
Restaurants and hotels	95.2	98.9	103.0	106.2	106.2	103.4	8.6%
Miscellaneous goods and services	97.8	99.3	100.3	102.7	110.5	111.7	14.2%

SOURCE: CENTRAL STATISTICS OFFICE

	2005	2006	2007	2008	2009	2010	Growth 2005-10 (%)
January	87.2	86.6	85.0	81.3	76.5	67.9	-22.1%
February	97.8	97.7	95.3	92.3	82.3	72.6	-25.8%
March	101.2	99.7	97.1	93.9	85.7	74.0	-26.9%
April	101.1	99.9	96.2	93.8	82.5	73.5	-27.3%
May	101.4	99.9	96.2	93.8	82.5	73.5	-27.5%
June	100.0	98.7	95.0	92.3	80.9	71.8	-28.2%
July	89.7	87.5	86.7	81.9	72.7	66.6	-25.8%
August	98.0	94.4	91.7	87.0	75.7	69.4	-29.2%
September	101.7	99.9	96.2	90.9	78.2	72.6	-28.6%
October	100.4	98.7	95.4	88.8	77.4	72.2	-28.1%
November	102.4	100.3	97.4	90.1	77.6	73.5	-28.2%
December	101.9	100.0	93.9	87.8	74.8	72.0	-29.3%

SOURCE: CENTRAL STATISTICS OFFICE

	2005	2006	2007	2008	2009	2010	Growth 2005-10 (%)
January	93.1	89.0	89.4	83.3	74.2	68.2	-26.7%
February	101.0	98.8	94.4	91.5	79.8	72.3	-28.4%
March	104.3	100.6	97.4	92.9	85.0	73.6	-29.4%
April	104.8	100.4	96.6	92.5	82.5	73.7	-29.7%
May	104.9	100.4	96.6	92.5	82.5	73.7	-29.7%
June	103.2	100.2	96.8	92.3	81.3	72.6	-29.7%
July	95.8	92.6	89.6	83.7	74.7	67.5	-29.5%
August	100.0	96.9	91.8	87.0	74.8	68.8	-31.2%
September	102.9	100.4	95.0	89.8	78.2	71.2	-30.8%
October	101.7	99.9	95.1	89.6	77.7	70.7	-30.5%
November	103.1	100.6	95.7	89.9	77.7	72.0	-30.2%
December	102.6	100.0	93.4	87.3	74.9	70.2	-31.6%

SOURCE: CENTRAL STATISTICS OFFICE

	2005	2006	2007	2008	2009	2010	Growth 2005-10 (%)
January	101.0	100.4	98.3	97.1	96.3	90.9	-10.0%
February	101.0	100.5	99.3	98.8	97.8	91.4	-9.5%
March	101.1	100.4	99.1	98.8	96.5	91.7	-9.3%
April	101.3	100.3	99.0	98.3	96.5	90.9	-10.3%
May	101.0	99.9	99.4	98.5	96.4	91.1	-9.8%
June	101.0	100.1	99.9	98.0	96.2	91.7	-9.2%
July	101.0	99.8	99.4	98.1	95.5	91.3	-9.6%
August	101.0	100.0	99.1	98.5	94.8	92.6	-8.3%
September	101.3	100.1	99.2	98.8	94.5	93.2	-8.0%
October	101.3	100.4	99.4	99.1	93.8	93.4	-7.8%
November	101.4	100.5	98.9	99.5	93.2	92.4	-8.9%
December	101.0	100.0	99.1	98.8	91.8	92.2	-8.7%

SOURCE: CENTRAL STATISTICS OFFICE

TABLE A1.5: HOUSEHOLD INCOME, EARNINGS AND CONSUMER SPENDING 2005-10						
	2005	2006	2007	2008	2009	2010
Total income per person (€)	24,899	25,977	27,760	27,916	n/a	n/a
<i>Growth per annum (%)</i>		4.3%	6.9%	0.6%	n/a	n/a
Disposable income per person (€)	20,166	20,928	22,331	22,615	n/a	n/a
<i>Growth per annum (%)</i>		3.8%	6.7%	1.3%	n/a	n/a
Average weekly earnings – EHECS (€)	n/a	n/a	n/a	706.90	705.93	690.24
<i>Growth per annum (%)</i>	n/a	n/a	n/a	-	-0.1%	-2.2%
Average annual earnings – EHECS (€)	n/a	n/a	n/a	36,796	36,778	35,913
<i>Growth per annum (%)</i>	n/a	n/a	n/a	-	-0.1%	-2.4%
Mean annual earnings – NES (€)	n/a	n/a	37,726	40,775	40,379	n/a
<i>Growth per annum (%)</i>	n/a	n/a	-	8.1%	-1.0%	n/a
Consumer spending (€mn, 2009 prices)	78,847	84,071	89,379	88,156	81,779	81,036
<i>Growth per annum (%)</i>	-	6.6%	6.3%	-1.4%	-7.2%	-0.9%
Note: "n/a" = not available. EHECS = Earnings, Hours and Employment Costs Survey. NES = National Employment Survey.						
SOURCE: CENTRAL STATISTICS OFFICE						

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