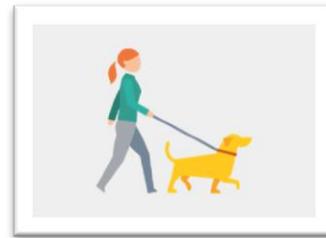
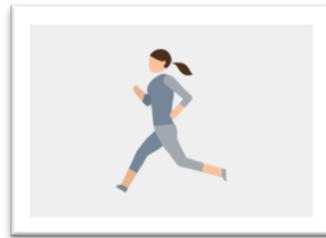
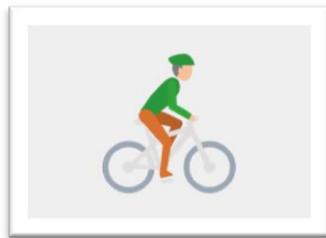
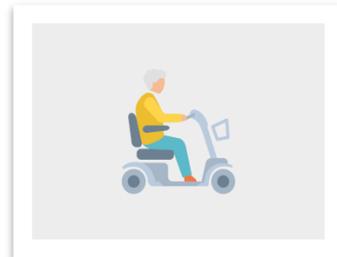
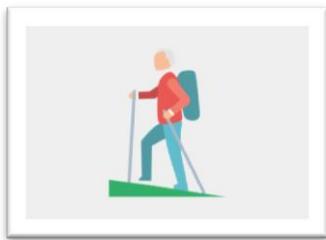


Scottish Natural Heritage

Scotland's networks of paths and trails: key research findings



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Background

This report was compiled to provide the partners involved in the creation of a National Walking and Cycling Network (NWCN) in Scotland with access to recent research data on Scotland's networks of paths and trails and on participation in walking and cycling.

A variety of research has been undertaken over the last ten years or so, including studies measuring public awareness and usage of paths and trails; counts and user surveys on individual routes and networks; economic impact studies; estimates of the costs of building and maintaining paths; and research into the health, social and environmental benefits associated with walking and cycling routes.

Much of this work has been undertaken by NWCN partners and useful data are also available from a number of Scottish Government surveys.

This report presents a collation of statistics from a range of research and other sources and summarises the main findings under seven headings, with a set of 'headlines' accompanying each topic.

The research and monitoring studies referenced in the report are listed in the Appendix and are the latest available at the time of publication.

Key findings – summary

Path resource

- ◆ There are an estimated **84,000km of paths in Scotland**, including farm, estate and forestry tracks, upland paths, and those specifically constructed for the purpose of recreation.
- ◆ This path resource includes the **6,000km of paths and trails that currently make up Scotland's strategic *National Walking and Cycling Network (NWCN)***, comprising Scotland's Great Trails, the National Cycle Network and Scottish Canal towpaths.
- ◆ The NWCN project delivery plan aims **to grow the NWCN from 6,000km to 8,000km by 2035**, reflecting the Scottish Government's aspiration for a strategic network of long-distance paths and routes across Scotland to support recreation, tourism and active travel.
- ◆ In 2017, just over half of adults in Scotland, when prompted, stated that they were aware that Scotland has a *National Walking and Cycling Network* (55%).
- ◆ Among the three individual networks that make up the NWCN, public awareness of the National Cycle Network is relatively high (65% of adults aware); awareness of Scottish Canal tow paths and Scotland's Great Trails is lower (at 55% and 44% of adults, respectively).
- ◆ Almost a quarter of adults in Scotland say they've used the National Cycle Network in the last year (23%); usage of Scottish Canal tow paths and Scotland's Great Trails is lower (at 17% and 12% of adults, respectively).

The cost of building and maintaining paths

- ◆ Path maintenance costs vary depending on the type and age of the route, the weather conditions and the type of usage.
- ◆ The expected **spend to benefit ratio for investment in paths is 1:7**, i.e. every £1 invested will deliver £7 of economic, health, environmental and social benefits.

Participation in walking and cycling

- ◆ Walking is the most popular **outdoor recreation** pursuit among people in Scotland: it features as an activity in around 327 million visits to the outdoors each year (83% of all visits).
- ◆ Cycling (including mountain biking) features in an estimated 30 million outdoor visits per annum (7% of all visits) and running or jogging features in an estimated 21 million outdoor visits per annum (5% of all visits).
- ◆ Most outdoor visits, particularly those which include walking, involve the use of a path (76% of all outdoor visits and 82% of visits which include walking).

- ◆ Walking is also popular among **tourists**: more than 5 million walking trips are taken in Scotland each year by domestic tourists (GB residents).
- ◆ The **proportion of people in Scotland walking or cycling for transport or pleasure has increased significantly over the last ten years**. In 2016, 69% of adults in Scotland had walked as a means of transport in the previous week (compared to 52% in 2007) and 61% had walked just for pleasure (compared to 47% in 2007). In 2016, 6% of adults had cycled as a means of transport in the previous week (compared to 3% in 2007) and 7% had cycled just for pleasure (compared to 5% in 2007).

Journeys made in Scotland

- ◆ Most of the **journeys** made by people in Scotland are for the purpose of commuting (23%), shopping (23%) or visiting friends and relatives (11%).
- ◆ **Most journeys are short**: 69% last for 20 minutes or less and 55% are less than 5km in length.
- ◆ Around a quarter of **all journeys** made in 2016 by people in Scotland were made by **active travel** (24% on foot and 1% by bike), compared to almost two thirds which were made by car or van (64%).
- ◆ Fifteen per cent of **journeys to work** made in 2016 by people in Scotland were made by **active travel** (12% were made on foot and 3% by bike), compared to 67% which were made by car or van.
- ◆ There has been very little variation since 2007 in the proportion of all journeys made on foot and by bike.

Route user estimates

The following **annual visit estimates** for some of Scotland's Great Trails are derived from a mixture of sources including counter data, route user surveys and the numbers of route completion certificates issued. Please note that some estimates are simply based on observation and other anecdotal evidence.

- ◆ Fife Coastal path: 500,000 visits, including 35,000 end to end users
- ◆ John Muir Way: 240,000 - 300,000 visits, including 4,900 - 6,000 end to end users
- ◆ Clyde Walkway: 155,000 visits, including 7,750 multi-day or end to end users
- ◆ River Ayr Way: 137,000 visits, including 41,000 end to end users
- ◆ West Highland Way: 120,000 visits, including 36,000 end to end users

- ◆ Southern Upland Way: 80,000 visits, including 1,000 end to end users
- ◆ Speyside Way: 52,750 visits, including 2,750 end to end users
- ◆ Great Glen Way: 30,000 visits, including 4,500 end to end users
- ◆ Moray Coastal Trail: 23,000 visits, including 1,000 end to end users
- ◆ Borders Abbeys Way: 15,000 visits, including 2,380 end to end users
- ◆ Cateran Trail: 8,000 visits
- ◆ West Island Way: 6,000 – 7,000 visits
- ◆ Ayrshire Coastal Path: 3,000 visits
- ◆ Rob Roy Way: 3,000 visits, including 450 end to end users
- ◆ Dava Way: 3,000 visits, including 400 end to end users
- ◆ St Cuthbert's Way: 2,579 end to end users
- ◆ Three Lochs Way: 1,500 visits, including 300 end to end users
- ◆ Kintyre Way: 1,000 – 2,000 end to end users

There is a general paucity of data on use of **upland paths** although some estimates are available. The Ben Nevis mountain path is an extremely popular route with visitor numbers estimated to be more than 100,000 a year.

Network user estimates

- ◆ **Network user estimates** are available for the National Cycle Network, Scottish Canal towpaths and the National Walking and Cycling Network.
- ◆ The different survey methodologies used to arrive at these estimates are likely to account to some extent for the differences between NWCN user estimates and those for the individual networks within the NWCN.
- ◆ An estimated 121 million trips are made on the NCN each year (63 million cycle trips and 58 million pedestrian trips).
- ◆ An estimated 24 million visits are made on Scottish Canal towpaths each year (48% by walkers and 41% by cyclists).

- ◆ Research undertaken on the NWCN estimated that 8.8 million trips were made on the network in 2016 (8.5 million walking trips and 0.3 million cycling trips). These estimates are based on data from a selection of automatic counter sites and limitations associated with the availability and quality of counter data on the NWCN may mean that the number of cycling trips taken on the network has been under-estimated.

Economic impacts

- ◆ **Outdoor visits** in Scotland, most of which involve walking or cycling, generate around £2.6 billion in expenditure per annum, with an average spend per visit of £9 (including those who spend nothing).
- ◆ **Hillwalking** and **mountain biking** both make significant contributions to the Scottish economy with estimated annual expenditure in excess of £65 million for hillwalking and £75.5 million for mountain biking.
- ◆ Cycle tourism and home-based leisure cycling on **the NCN** is estimated to be worth £375 million.
- ◆ Construction and maintenance of **the NCN** is estimated to contribute £12 million to the small-medium sized civil engineering sector in Scotland.
- ◆ VisitScotland estimates that the annual economic impact of **walking tourism** is £1.6 billion.
- ◆ On the **Scottish Canals towpath network**, total visitor expenditure is estimated to be £29.3 million per annum. This supports 544 tourism-related jobs and £12.0 million in associated GVA.
- ◆ Activities undertaken on and around **Scottish canals** are estimated to generate a minimum of £11 million in direct tourism benefits and £23 million in indirect benefits.
- ◆ The estimated economic impact of trips taken for recreational purposes on the **NWCN** is £85 million of expenditure in the local economies.
- ◆ It is estimated that the £2 million cost of creating the **John Muir Way** will generate £16.3 million in direct expenditure and create or safeguard 700 FTE jobs from coast to coast users in the first five years (based on an estimated 9,000 coast to coast users in the first year of opening). In addition, it is estimated that £8.8 million of direct visitor expenditure and 384 FTE jobs could be generated from increased day use.
- ◆ The **Fife Coastal Path** supports an estimated 800 – 900 FTE jobs in Fife, with annual net expenditure associated with the route estimated between £24m and £29m annually.

Visitor expenditure data

- ◆ Average visitor expenditure estimates vary for different routes and will be influenced by factors such as the route's location, its proximity to centres of population, the visitor infrastructure available locally and the types of visitors the route attracts (e.g. locals, day visitors or tourists). The estimates below are taken from different survey sources and may not therefore be directly comparable (they may, for example, include different elements of expenditure or some estimates may be per party rather than per head).
- ◆ On the **John Muir Way** (which has a high proportion of local usage), 29% of users spend money during their visit. The average amount spent (including those who spent nothing) was £3 (2014/15).
- ◆ On the **Great Glen Way**, average spend is estimated at £15 per day visitor and £45 per day for end to end users (or £228 for the entire trip) (2012).
- ◆ On the **Fife Coastal Path**, 60% of users spend money during their visit. The average amount spent (including those who spend nothing) was £26 (2007).
- ◆ Average spend per person per day among end to end users of the **Southern Upland Way** was estimated at £41 (or £595 for the entire trip, excluding travel to and from the route) (2005).
- ◆ Average spend per recreational trip on the **NWCN** is estimated at £11 for walkers and £6 for cyclists.
- ◆ Average spend per visit on **Scottish canal towpaths** is estimated to be £31 per visit.

Health impacts

- ◆ People in Scotland **visit the outdoors** for a variety of reasons, but 'health and exercise' (43% of outdoor visits) and 'dog walking' (42% of outdoor visits) are mentioned most frequently.
- ◆ 9 in 10 visitors to the outdoors report improvements to their physical or mental health as a result of their visit.
- ◆ The positive contribution which visiting the outdoors can make to mental health and well-being is illustrated by the fact that around a quarter of outdoor visits are taken to relax and unwind (27%) and 13% to enjoy peace and quiet.
- ◆ More than 300,000 people in Scotland attend **Health Walks**, with 4,513 new walkers registering in 2016. It is estimated that every £1 invested in walking programmes generates £9 in benefits.

- ◆ More than half of **NWCN users** stated that the existence of the route allowed them to make their journey actively rather than by motorised transport (52%).
- ◆ More than three quarters of **NWCN users** stated that the existence of the route had helped them increase their level of physical activity (78%).
- ◆ The health benefits of the **NCN** are estimated to be worth £321 million (the value of reduced mortality resulting from additional physical activity).
- ◆ **Scottish Canal towpaths** are estimated to generate £11.5 million in health benefits each year through increased physical activity. For every £1 invested, there's a return of £7 in health benefits.
- ◆ On the **John Muir Way**, 61% of users cited health and exercise as a reason for visiting.

Key findings – in detail

1. Path resource in Scotland

Headlines

In 2005, the Scottish Paths Record estimated that there were around 84,000km of paths in Scotland, including farm, estate and forestry tracks, upland paths, and those specifically constructed for the purpose of recreation.

This path resource includes the 6,000km of paths and trails which currently make up Scotland's strategic *National Walking and Cycling Network (NWCN)*, comprising Scotland's Great Trails, the National Cycle Network and Scottish Canal towpaths.

The NWCN project delivery plan aims to grow the current resource from 6,000km to 8,000km by 2035, reflecting the Scottish Government's aspiration for a strategic network of long-distance paths and routes across Scotland to support recreation, tourism and active travel.

In 2017, just over half of adults in Scotland stated that they were aware that Scotland has a *National Walking and Cycling Network* (55%).

Among the three individual networks that make up the NWCN, awareness of the National Cycle Network among the general public in Scotland is relatively high (at 65%); awareness of Scottish Canal tow paths and Scotland's Great Trails is lower (at 55% and 44% of adults, respectively).

Almost a quarter of adults in Scotland say they've used the National Cycle Network in the last year (23%); usage of Scottish Canal tow paths and Scotland's Great Trails is lower (at 17% and 12% of adults, respectively).

Ease of access was the main reason people gave for **not** using path networks like these more frequently: 29% of infrequent network users perceived that paths like these were 'too far from my home'.

1.1 The Scottish Paths Record

In 2005, shortly after the enactment of the Land Reform (Scotland) Act 2003, the Scottish Paths Record was developed by Scottish Natural Heritage (in partnership with Local Authorities and with the support of the Scottish Government) to provide a baseline record of all paths and tracks in Scotland. The Scottish Paths Record estimated that there were more than 84,000km of paths in Scotland at that time, including farm, estate and forestry tracks, upland paths, and those specifically constructed for the purpose of recreation. Local Authorities have been responsible for updating path data for their area since 2005.

1.2 National Walking and Cycling Network

Scotland's path resource includes the 6,000km of paths which make up the *National Walking and Cycling Network*, a strategic network comprising Scotland's Great Trails, the National Cycle Network and Scottish Canal towpaths. Some paths and routes are included in more than one of the three individual networks which make up the NWCN.

The NWCN project delivery plan¹ aims to grow this resource from 6,000km to 8,000km by 2035, reflecting the Scottish Government's aspiration for a strategic network of long-distance paths and routes across Scotland to support recreation, tourism and active travel. The project will build on existing path and trail networks by closing key gaps, upgrading connecting routes, encouraging multi-use of paths and linking with public transport.

The project is being led by Scottish Natural Heritage in partnership with Sustrans and Scottish Canals and is supported by a range of other partners.

A map of the NWCN is available [here](#).

1.3 Scotland's Great Trails

Scotland's Great Trails comprise:

- ~ 29 trails suitable for walking, cycling, horse-riding and/or canoeing, comprising around 1,955 miles (or 3,141km) of well-managed paths from the Borders to the Highlands;
- ~ each trail is at least 25 miles in length, waymarked, largely off-road and provides access to a range of visitor services;
- ~ as the crow flies, 92% of the Scottish population (or 4.8 million people) lives within 10 miles of at least one of Scotland's Great Trails², 73% of the Scottish population (or 3.9 million people) lives within 5 miles and 32% of the Scottish population (1.7 million people) lives within 1 mile.
- ~ a map of Scotland's Great Trails is available [here](#)

1.4 National Cycle Network

The National Cycle network comprises:

- ~ 2,371 miles (3,815 km) of routes of which 644 miles (1,036 km) is traffic free;
- ~ 60% of the Scottish population lives within 1 mile and 41% of the Scottish population lives within a third of a mile of an NCN route³

¹ <https://www.nature.scot/enjoying-outdoors/places-visit/routes-explore/national-walking-and-cycling-network>

² SNH GIS analysis May 2018

³ Sustrans, September 2013 <https://www.sustrans.org.uk/scotland/national-cycle-network>

~ a map of NCN in Scotland is available [here](#).

1.5 Canal towpaths

Scotland's canal towpaths comprise:

- ~ 137 miles (219km) of paths, including the Caledonian Canal (60 miles), the Crinan Canal (9 miles), the Forth & Clyde Canals (35 miles), the Monkland Canal (3 miles) and the Union Canal (30 miles);
- ~ 20% of Scotland's most deprived communities live on the banks of the lowland canals.⁴

1.6 Core Paths

- ~ As at 31 March 2016, there are 21,602km of core paths in Scotland that give the public reasonable access throughout their area;
- ~ 57% of core paths (12,341km) are sign-posted.⁵

1.7 Rights of Way in Scotland

[ScotWays](#) have compiled a Catalogue of Rights of Way in Scotland (CROW) which records over 8,000 routes, covering almost 18,000km.

To be designated a Right of Way a route must meet the following criteria:

- ~ link two public places (e.g. public roads or other Rights of Way);
- ~ follow a more or less defined route;
- ~ have been used openly and peaceably by the general public as a matter of right (i.e. not just with the permission of the landowner);
- ~ have been used without substantial interruption for at least 20 years.

Rights of Way are categorised in the catalogue by their legal status: 'asserted routes' are routes where either the landowner accepts the route as a Right of Way or the Local Authority has indicated it would be willing to take court action if required; 'vindicated routes' have been declared as a Right of Way by the courts and have evidence of continued use; 'claimed routes' (which comprise the majority of Rights of Way in Scotland) are not vindicated or asserted but considered to meet the necessary conditions of being a Right of Way; 'other routes' recorded in the catalogue are all permissive routes and those created by agreement or which do not yet satisfy the required conditions of a Right of Way.

⁴ *Monitoring the economic and social impact of Scottish canals, MVA Systra Group, July 2013.*

⁵ [Monitoring the implementation of Part 1 of the Land Reform Scotland Act 2003.](#)

Table 1: Numbers and length of Rights of Way in Scotland

Category of Right of Way routes	Total numbers of routes	% total routes	Total length of routes (km)	% total length
Asserted	1,113	14	1,635.15	9
Claimed	6,038	74	13,851.28	79
Lost	65	1	58.44	*
Other Route	744	9	1,778.11	10
Vindicated	131	2	370.71	2
TOTAL	8,091	100	17,693.69	100

* Less than 1%

Source: Catalogue of Rights of Way in Scotland (CROW), ScotWays, June 2018

1.8 Upland paths

Scotland's upland paths are used and enjoyed by millions of walkers, climbers and mountain bikers every year. These paths have developed and evolved over time as a result of people visiting Scotland's upland areas. Some are simply desire lines that have had no work done while others have been specially constructed. These paths play a key role in supporting, and sometimes enabling, a range of recreational activities as well as managing impacts on the sensitive landscapes and habitats in which they take place.

1.9 Awareness of Scotland's walking and cycling infrastructure among the general public

SNH's research, '*Awareness and usage of the NWCN among the general public in Scotland*', was undertaken in November 2017 to measure public awareness and usage of Scotland's networks of path and routes.

When prompted, just over half of all respondents stated that they were aware that Scotland has a *National Walking and Cycling Network*, comprising Scotland's Great Trails, the National Cycle Network and Scottish Canal's tow paths (55%).

Among the networks of paths in Scotland, *Rights of Way* (78% aware) and the *National Cycle Network* (65% aware) were most well-known. More than half of respondents had heard of *Scottish Canal's tow paths* (55%) and just under half were aware of *Scotland's Great Trails* (44%). In comparison, only a minority of respondents had heard of *Core Paths* (14%). Overall, most respondents had heard of at least one of the networks that make up the NWCN in Scotland, i.e., Scotland's Great Trails, the National Cycle Network or Scottish Canal's tow paths (80%).

Almost a quarter of all respondents were aware of using the NCN in the last 12 months (23%); fewer were aware of using Scottish Canal's tow paths (17%) or Scotland's Great Trails (12%). Overall, a third of all respondents were aware of using at least one of the networks that make up the NWCN in Scotland i.e., Scotland's Great Trails, the National Cycle Network or Scottish Canal's tow paths (34%).

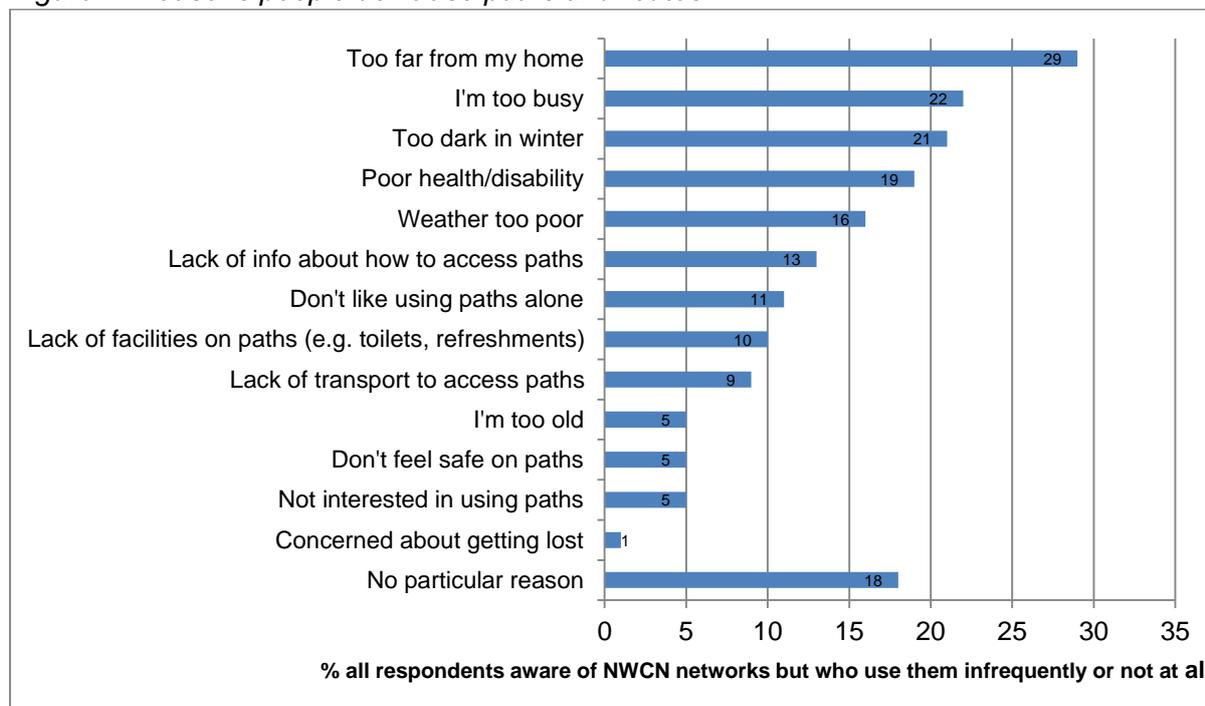
Table 2: Awareness and usage of Scotland's networks of paths and routes

	% Adults aware of network	% Adults who have used network in last 12 months
Rights of Way	78%	Not asked
National Cycle network	65%	23%
Canal tow paths	55%	17%
Scotland's Great Trails	44%	12%
Core paths	14%	Not asked

Source: Awareness and usage of the NWCN among the general public in Scotland 2017, SNH, November 2017

When asked why they didn't make **more** use of Scotland's networks of paths and routes, respondents were most likely to state that the networks described were 'too far from my home' (mentioned by 29%).

Figure 1: Reasons people don't use paths and routes



Base: All respondents who are aware of SGTs, the NCN or SCTPs but use these routes infrequently or not at all (n= 314)

Source: Awareness and usage of the NWCN among the general public in Scotland 2017, SNH, November 2017

2. The cost of building and maintaining paths

This section of the report includes information on the costs of building and maintaining paths.

Headlines

The expected spend to benefit ratio for investment in paths and trails is 1:7, i.e. every £1 invested will deliver £7 of economic, health, environmental and social benefits.

An Edge Auditor survey estimates the **current asset value** of the John Muir Way at £24,500 per km. The **10 Year Capital Programme** (the sum of the works required over the next ten years to meet agreed route standards or ensure user safety) was estimated at approximately £975 per km per annum.

2.1 The benefits of building and maintaining paths

Spend on paths and trails has the potential to generate a wide range of economic, social, health and environmental benefits by:

- enhancing Scotland's tourism offer and supporting tourism growth, especially in more remote rural communities;
- creating and sustaining employment and volunteering opportunities connected with the management and maintenance of the network and associated visitor services;
- supporting more sustainable travel choices by encouraging more people to walk and cycle and promoting greater use of public transport to access trails;
- extending the range of recreational opportunities available, with consequent benefits to people's health and well-being;
- enhancing opportunities to explore, experience and enjoy Scotland's nature, landscapes and cultural heritage.

The expected spend to benefit ratio is 1:7, i.e. every £1 invested will deliver £7 of benefits⁶.

2.2 Capital cost of delivering NWCN projects

The total capital cost of delivering NWCN projects over 20 years (2015 – 2035) is estimated at around £50 million (£20-25 million for cycleway projects, £10 million for canal projects and £15-20 million for Long Distance Route projects)⁷.

⁶ *The health benefits of the Forth & Clyde and Union Canals (MVA Consultancy)*

⁷ *NPF3 LDR proposal – key facts and figures January 2014 (A1137989).*

2.3 Costs associated with maintaining a path network

Bearing in mind that costs will vary depending on the type and age of route, weather conditions and usage, the following estimates are available:

- ~ in May 2018, Falkirk Council estimated the cost of maintaining around 450km of more than 600km of path networks in the Falkirk Council area to be 31p per linear metre per year (down from 40p in 2010). This cost reduction has been achieved as a result of a change to the maintenance regime hierarchy which now comprises three maintenance visits per annum to primary routes, two visits per annum to secondary routes and one visit per annum to all other routes. This has enabled the Council to cover more of the network each year at a reduced cost;
- ~ at the Long Distance Routes Managers' Forum in November 2010, a ballpark figure of 12.5p per metre per year was offered for maintaining vegetation on the core path network in Dumfries & Galloway.

2.4 Edge Auditor pilot: estimates for the John Muir Way

Towards the end of 2017, Edge Auditor, a mobile device app which enables users to collect GIS data using a regular smartphone or tablet, was piloted on a 20.74km section of the John Muir Way to assess its suitability as a tool for surveying entire long-distance routes.

The aim of the pilot was to:

- create an inventory of existing route assets (including the length of surfaced paths; signage; and structures such as steps, stiles, gates, bridges and boardwalks);
- report on the condition of route assets (e.g. the number of problem areas such as path surface defects, missing or damaged signs)
- estimate the cost of any improvements, replacements or upgrades required to meet agreed route standards or ensure user safety.

Based on the survey undertaken, the **current asset value** of the John Muir Way was estimated at £24,500 per km. The **10 Year Capital Programme** (the sum of the works required over the next one year (to address immediate problems), five and ten years) was set at approximately £975 per km per annum (equivalent to £0.98 a metre).

Edge Auditor is currently being used to audit a further 35km section of the John Muir Way in Falkirk and a 35km section of the Speyside Way in Cairngorm National Park.

3. Participation in walking and cycling

People in Scotland walk and cycle just for pleasure (e.g. for outdoor recreation and tourism) and as a means of transport (for active travel). This section includes the latest estimates of the numbers of people participating in walking and cycling.

Headlines

Walking is the most popular **outdoor recreation pursuit** among people living in Scotland: in 2013/14 it featured as an activity in 327 million visits to the outdoors (83% of all visits).

Cycling (including mountain biking) features in 30 million visits to the outdoors each year (7% of all visits) and running or jogging features in 21 million visits each year (5% of all visits).

Paths and paths networks are important: 76% of all visits to the outdoors involve the use of a path (76%) and 58% involve the use of a path with waymarking or signposting.

The total value of expenditure on visits to the outdoors in 2012 was £2.6 billion. The average spend per visit (including those who spent nothing) was £9.

People in Scotland visit the outdoors for a variety of reasons, but 'health and exercise' (43% of visits) and dog walking (42% of visits) are mentioned most frequently.

The positive contribution which visiting the outdoors can make to mental health and well-being is illustrated by the fact that around a quarter of outdoor visits are taken to relax and unwind (27%) and 13% to enjoy peace and quiet.

More than 300,000 people in Scotland attend Health Walks, with 4,513 new walkers registering in 2016. It is estimated that every £1 invested in walking programmes generates £9 in benefits.

Walking is also a popular pursuit among **tourists** in Scotland. In 2015, walking featured as an activity in more than 5 million trips taken by GB tourists in Scotland. VisitScotland estimates that the annual economic impact of walking tourism is £1.26 billion.

The proportion of people walking either for transport or pleasure has increased significantly over the last ten years. In 2016, 69% of adults in Scotland walked as a means of transport on at least one day in the previous week (compared to 52% in 2007) and 61% walked just for pleasure (compared to 47% in 2007).

Participation in cycling has also increased over the last ten years. In 2016, 6% of adults cycled as a means of transport on at least one day in the previous week (compared to 3% in 2007) and 7% cycled just for pleasure (compared to 5% in 2007).

Most of the journeys made by people in Scotland are for commuting (23%), shopping (23%) and visiting friends and relatives (11%).

Most journeys made are short: 69% last for 20 minutes or less and 55% are less than 5km in length.

Around a quarter of **all journeys** made in 2016 by people in Scotland were made by active travel (24% on foot and 1% by bike), compared to almost two thirds which were made by car or van (64%).

Fifteen per cent of **journeys to work** made in 2016 by people in Scotland were made by active travel (12% were made on foot and 3% by bike), compared to 67% which were made by car or van.

There has been very little variation since 2007 in the proportion of journeys made on foot and by bike.

In 2016, 53% of children **travelled to school** in an active way (52% on foot and just over 1% by bike).

3.1 Outdoor recreation

3.1.1 Running, cycling and walking

Table 3 shows the most recent estimates of the numbers of outdoor recreation visits which feature walking, cycling or running.

In 2013/14 people in Scotland took 396 million visits to the outdoors for recreation; 327 million of these visits included walking (83% of the total), 30 million included cycling or mountain biking (8%) and 21 million included running or jogging (5%).

Table 3: Number of outdoor recreation visits featuring walking, cycling and running 2013/14

Activity undertaken	No. outdoor recreation visits including this activity	% All outdoor recreation visits including this activity
Any walking	327 million	83%
<i>Walking < 2 miles</i>	<i>133.9 million</i>	<i>34%</i>
<i>Walking 2 – 8 miles</i>	<i>179.0 million</i>	<i>45%</i>
<i>Walking > 8 miles</i>	<i>11.2 million</i>	<i>3%</i>
<i>Hill walking/mountaineering</i>	<i>9.8 million</i>	<i>2%</i>
Any cycling/mountain biking	30 million	7%
Running/jogging	21 million	5%

Source: Scotland's People and Nature Survey 2013/14

As shown in Table 4, there has been relatively little variation since 2004 in the proportion of all outdoor recreation visits which include walking, cycling/mountain biking and running/jogging.

Table 4: % All outdoor recreation visits including walking, cycling/mountain biking and running/jogging

	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013/14
	%	%	%	%	%	%	%	%	%	%
All walking	80	80	79	84	88	84	83	83	84	83
Walking <2 miles	35	37	33	42	44	42	36	39	36	34
Walking 2-8 miles	45	42	47	46	49	48	49	49	53	45
Walking >8 miles	4	4	5	3	6	4	5	5	4	3
Hillwalking or mountaineering	5	3	3	3	3	2	3	2	3	2
Any cycling or mountain biking	8	7	7	6	6	7	6	8	8	7
Running/ jogging	4	4	3	4	4	3	5	4	4	5

Source: Scottish Recreation Survey (2004 – 2012); Scotland's People and Nature Survey 2013/14

3.1.2 Use of paths for outdoor recreation

Around three-quarters (76%) of all outdoor recreation visits (and 84% of those taken in the countryside) involve the use of a path or a path network. The use of paths on visits to the outdoors has remained consistent since 2007 (in the range 74%-77% of all visits), following an increase from 66% in 2004.

Most outdoor visits which feature **walking** involve the use of a path (82%). People on longer walks (85% of those walking between 2 and 8 miles and 95% of those walking more than 8 miles) are more likely than those on shorter walks (76% of those walking less than 2 miles) to use a path.⁸

The vast majority of visits to **upland areas** involve the use of a path (88%).⁹ SNH's 2017 survey of upland path users indicated that women and less experienced hill users are more likely to be deterred by the absence of a path or to take its condition into account when planning their route, suggesting that path provision may play a role in ensuring Scotland's upland areas are accessible to all. While there is a general paucity of data on the use of **upland paths**, some estimates (based on electronic counter data) are available. The Ben Nevis mountain path is an extremely popular route with visitor numbers estimated to be more than 100,000 a year. The Buachaille Etive Mor in Glencoe is estimated to attract more than 23,000 visitors a year while the Old Man of Storr on Skye is estimated to attract more than 84,000 visitors a year.

The proportion of outdoor visits which make use of **signposted or waymarked** paths has increased from 44% of all visits in 2005 to 58% in 2013/14.

⁸ <https://www.nature.scot/snh-commissioned-report-679-scotlands-people-and-nature-survey-201314>

⁹ <https://www.nature.scot/survey-upland-path-users-scotland-2017>

Table 5: Use of paths on outdoor recreation trips 2004 – 2013/14

	2004 %	2005 %	2006 %	2007 %	2008 %	2009 %	2010 %	2011 %	2012 %	2013/14 %
Used any path or network of paths	66	73	70	74	76	74	71	76	77	76
Used path or network of paths with waymarks or signposting	49	44	43	49	53	54	53	56	55	58
Did not use path or network of paths	34	27	29	25	24	26	28	24	23	24
Base	534	2,680	2,013	2,169	2,284	2,436	2,370	2,542	2,038	2,272

Source: Scottish Recreation Survey 2004 – 2012; Scotland's People and Nature Survey 2013/14

3.1.3 Expenditure on outdoor visits

In 2012, the Scottish Recreation Survey estimated that total expenditure on outdoor visits was £2.6 billion. The average spend per visit (including those who spend nothing) was £9. Food and drink was the main item of expenditure (incurred on 23% of all visits).

Table 6: Expenditure on outdoor visits

Main items of expenditure on visits to the outdoors	% visits including each item of expenditure
Food and drink	23
Fuel	8
Gifts/souvenirs	3
Car parking	2
Bus/train/ferry fares	2

Source: Scottish Recreation Survey 2012

Hillwalking and mountain biking both make significant contributions to the Scottish economy with estimated annual expenditure in excess of £65 million for hillwalking¹⁰ and £75.5 million for mountain biking¹¹.

3.1.4 Reasons for visiting the outdoors

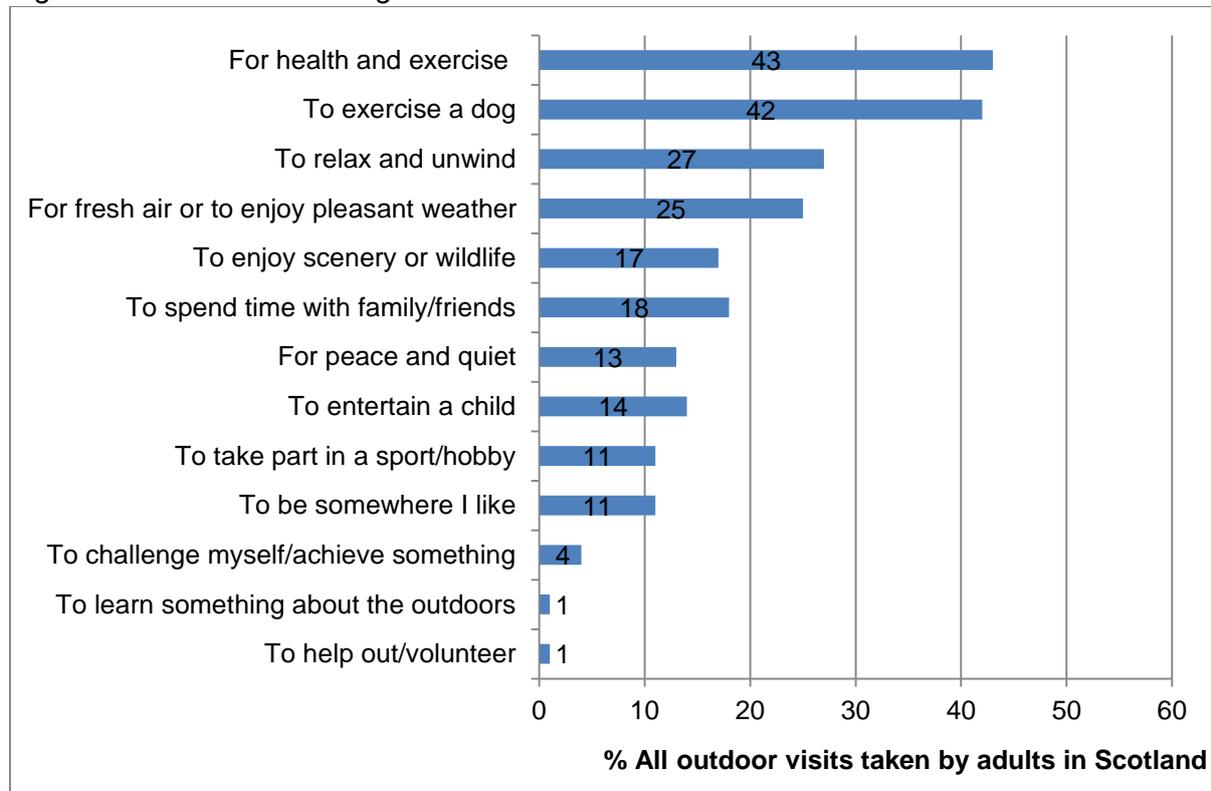
People in Scotland visit the outdoors for a variety of reasons, but 'health and exercise' (43% of outdoor visits) and 'dog walking' (42% of outdoor visits) are mentioned most frequently.

¹⁰ Estimate based on Scottish Recreation Survey data 2007 - 2012

¹¹ Economic Value of Mountain Biking in Scotland (Scottish Enterprise); EKOS Ltd., Tourism Resources Company April 2009

The positive contribution which visiting the outdoors can make to mental health and well-being is illustrated by the fact that around a quarter of outdoor visits are taken to relax and unwind (27%) and 13% to enjoy peace and quiet.

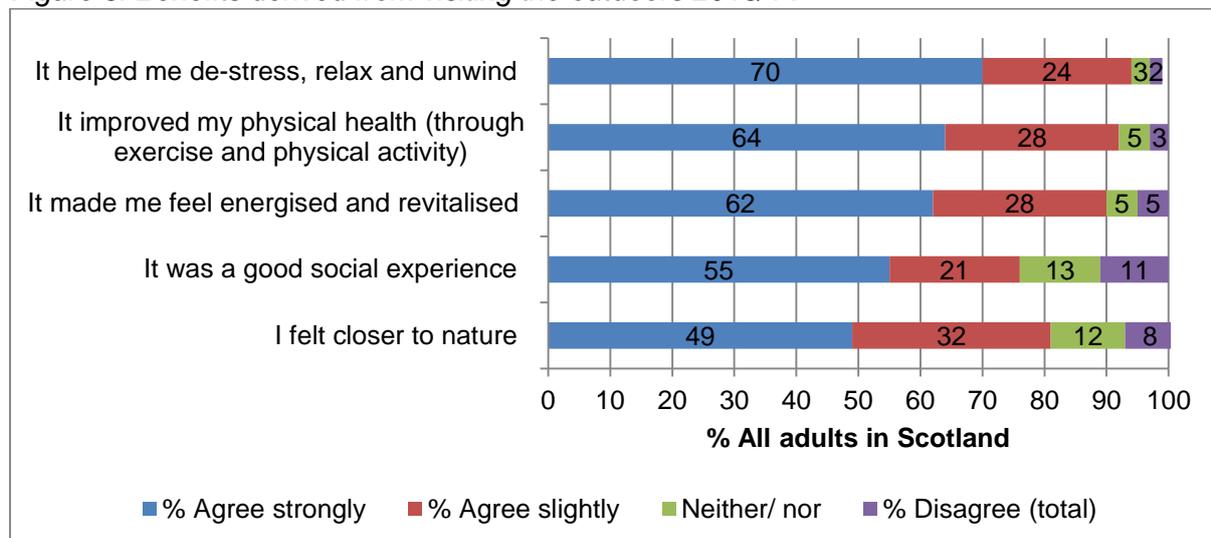
Figure 2: Reasons for visiting the outdoors



Source: Scotland's People and Nature Survey 2013/14

When prompted, most outdoor visitors agree that they benefit from their visits, with more than 9 in 10 reporting improvements to their mental and physical health or an increase in their energy levels. In addition, a majority of outdoor visitors enjoy the social experience or the sense of being closer to nature.

Figure 3: Benefits derived from visiting the outdoors 2013/14



Source: Scotland's People and Nature Survey 2013/14

3.2 Tourism

In 2015 GB residents took an estimated 12 million **tourist trips** in Scotland (i.e. trips involving at least one night away from home). As shown in Table 7, 3.1 million of these trips included a short walk (26%), 2.1 million included a long walk (18%), 261,000 included road cycling (2%) and 122,000 included mountain biking (1%). VisitScotland estimates that the annual economic impact of walking tourism is £1.26 billion.¹²

In the same year, GB residents (87% of whom were Scottish residents) took an estimated 142 million tourism **day visits** in Scotland. As shown in Table 7, 8 million of these visits included a short walk (6%), 7 million included a long walk (5%) and 1 million included road cycling (1%).

Table 7: Number of tourism trips and day visits including walking and cycling 2015

Tourism trips		Volume & value	Tourism day visits		Volume & value
Walking			Walking		
No. trips including a short/walk stroll (up to 2 miles/1 hour)		3.1 million	No. trips including a short/walk stroll (up to 2 miles/1 hour)		8 million
Average spend per trip including a short/walk stroll (up to 2 miles/1 hour)		£314	Average daily spend on trips including a short/walk stroll (up to 2 miles/1 hour)		£37
No. trips including a long walk/hike/ramble (minimum 2 miles/1 hour)		2.1 million	No. trips including a long walk/hike/ramble (minimum 2 miles/1 hour)		7 million
Average spend per trip including a long walk/hike/ramble (minimum 2 miles/1 hour)		£375	Average daily spend on trips including a long walk/hike/ramble (minimum 2 miles/1 hour)		£19
Cycling			Cycling		
No. trips including cycling on road/surfaced path ¹³		261,000	No. trips including cycling on road/surfaced path		1 million
Average spend per trip including cycling on road/surfaced path		£285	Average daily spend on trips including cycling on road/surfaced path		£32
No. trips including mountain biking		122,000	No data available		
Average spend per trip including mountain biking		£355	No data available		

Source: Great Britain Tourism Survey 2015 (tourism trips); Great Britain Day Visits Survey 2015 (tourism day visits)

¹² This estimate is based on the numbers of domestic tourist trips in Scotland in 2015 which included sightseeing on foot; a short walk or stroll of up to 2 miles in length/1 hour in duration; a long walk/hike/ramble of a minimum of 2 miles in length/ 1 hour in duration; and centre-based walking around a city or town centre.

¹³ These estimates are based on a 3-year average 2013 - 2015

3.3 Participation in walking and cycling in the previous 7 days

In 2016, two thirds of adults had walked as a means of transport on at least one day in the previous week (69%) and a similar proportion had walked just for pleasure (61%). The proportion of people walking either for transport or pleasure has increased significantly over the last ten years: up from 52% walking for transport in 2007 to 69% in 2016 and from 47% walking for pleasure in 2007 to 61% in 2016.

Frequency of walking decreases with age: 77% of those aged 16 – 19 had walked as a means of transport and 59% had walked for pleasure in the last week compared to 44% and 31% respectively among those aged 80 plus).

When asked what discourages them from walking more, the main reasons given by respondents were ‘nothing’ (54%), ‘the weather’ (18%) and ‘health’ (16%).

Six per cent of adults had cycled as a means of transport on at least one day in the previous week and 7% had cycled just for pleasure. Participation in cycling has also increased over the last ten years: up from 3% cycling for transport in 2007 to 6% in 2016 and up from 5% cycling for pleasure in 2007 to 7% in 2016.

Like walking, frequency of cycling decreases with age, typically from age 50 – 59.

Table 8: Walking and cycling frequency in Scotland in the previous 7 days (for journeys over a quarter of a mile) 2007 - 2016

	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016
Walked on 1 or more days (%)										
Walked as means of transport	52.0	52.5	59.0	62.0	63.1	65.8		66.9		68.6
Walked just for pleasure	46.9	45.1	48.4	51.3	54.0	54.9		58.3		61.4
Cycled on 1 or more days (%)										
Cycled as a means of transport	3.2	3.8				6.1		6.1		5.9
Cycled just for pleasure	4.6	3.8				5.9		6.1		6.5

NB Question on cycling not included 2009 – 2011 and asked every other year from 2012

Source: *Transport and Travel in Scotland 2016 (Transport Scotland); Scottish Household Survey and Travel Diary*

3.4 Active travel

3.4.1 Journeys

In 2016, 75% of adults in Scotland reported travelling on the previous day. Most of these journeys were taken for the purpose of commuting (23%), shopping (23%) or visiting friends and relatives (11%).

The majority of journeys taken by people in Scotland were of short duration: 69% lasted up to 20 minutes and 37% lasted for between 5 – 10 minutes. Only 17% of journeys lasted more than half an hour.

More than half of all journeys were less than 5km in length (55%) and around a fifth were less than 1km in length. Most journeys of less than 1km were made on foot (65%).

3.4.2 Modal share of journeys

As shown in Table 9, around a quarter of **all journeys** in 2016 were made by active travel (24% were made on foot and 1% by bike), compared to almost two thirds which were made by car or van (64%). There has been relatively little variation since 2007 in the proportion of journeys made on foot and by bike. The vision of the Scottish Government's Cycling Action plan for Scotland (CAPS) is for 10% of 'everyday trips' (e.g. trips made for commuting, shopping, travel to education) to be made by bike by 2020.

Fifteen per cent of **journeys to work** in 2016 were made by active travel (12% were made on foot and 3% by bike), compared to 67% which were made by car or van. Those more likely to walk to work included women (15%), young people aged 16 - 19 (34%) and people in lower income households (19% of those in households with an annual net income of up to £10,000 and 23% of those in households with an annual net income of £10,001 to £15,000). Men (4%) and those aged 30 – 39 (4%) were more likely to cycle to work.

Among those who don't cycle to work, the main reasons given (in 2014) were 'it's too far' (33%), 'too many cars on the road' (18%), 'the weather' (16%) and 'traffic travels too fast' (12%)

In 2016, 53% of children travelled to school in an active way (52% on foot and just over 1% by bike). Younger children were more likely than older children to walk to school (59% of 4 – 11 year olds compared to 42% of 12 – 18 year olds).

The proportion of children walking to school has remained at between 49% - 53% since 2007; the proportion of children cycling to school has remained between 1% and 2% over the same time period. Among those walking to school, 89% did so because the school was close by.

Table 9: Modal share of all journeys in Scotland 2007 - 2016

	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016
Modal share of all journeys (%)										
Walking	22	22	22	22	22	26	23	25	22	24
Bicycle	0.7	1.0	0.9	0.8	1.3	1.2	1.0	1.4	1.2	1.2
Driver car/van	50	50	51	51	50	48	50	48	50	51
Passenger car/van	13	14	13	14	13	13	14	13	13	13
Bus	9	9	9	9	9	8	9	9	10	8
Rail/underground	2	2	2	1	2	2	2	2	2	2
Modal share of journeys to work (%)										
Walking	12	13	12	13	13	14	13	13	14	12
Bicycle	1.7	2.3	2.4	2.3	2.0	2.0	2.5	2.6	2.2	2.6
Driver car/van	61	60	61	61	59	61	61	61	60	62
Passenger car/van	7	6	6	6	8	6	6	6	6	5
Bus	13	12	12	11	12	10	11	10	11	10
Rail/underground	4	4	4	4	4	4	4	4	4	5
Modal share of journeys to school (%)										
Walking	52.8	48.8	50.0	49.7	50.6	51.4	51.7	51.2	48.8	51.8
Bicycle	0.8	1.5	1.0	1.4	1.4	0.8	1.2	1.7	1.2	1.4
Car/van	22	24	24	23	23	24	24	25	26	26
Bus (school or service)	22	24	22	24	22	21	20	20	21	19

NB Break in time series after 2011 due to change in travel diary methodology

Source: Transport and Travel in Scotland 2016 (Transport Scotland); Scottish Household Survey and Travel Diary

In 2016, a third of households had access to at least one bike which could be used by an adult and 18% had access to two or more bikes. Household access to bikes increased with household income: 60% of households with an income of £40,000 or more have access to one or more bikes compared to 19% of households with an income of £10,000. Bicycle access was also higher in rural areas than urban areas (30% of households in large urban areas compared to 44% of those in accessible rural areas and 43% of those in remote rural areas had access to a bike).

The proportion of households with access to a bike has remained at between 34% - 37% since 2007.

Table 10: Household with access to one or more bikes 2007 - 2016

Households with access to one or more bikes for adults (%)	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016
	36.9	36.8	35.5	34.3	35.1	35.0	34.3	34.4	35.1	33.8

Source: Transport and Travel in Scotland 2016 (Transport Scotland); Scottish Household Survey and Travel Diary

3.5 Health walks

3.5.1 Participation in Health Walks

GIS analysis undertaken by the University of Glasgow for Paths for All in June 2017 shows that 85% of the Scottish population live within 2km of a health walk.

In terms of health walk provision, the density is higher in more deprived areas. Fife, Highland and Glasgow have the highest number of health walks overall; Orkney, the Scottish Borders, Clackmannanshire and Stirling have the highest number of health walks per head of population.

Seventy-eight per cent of people taking part in Health Walks live in urban areas. Three quarters of Health Walks take place in towns and cities (74%) and 26% in rural areas.

A total of 4,513 new walkers registered for Health Walks in Scotland in 2016, bringing total attendance at health walks in Scotland up to 305,845 walkers¹⁴. Research undertaken by Paths for All shows that the proportion of walkers who are regularly physically active six months after joining a walking group rose steadily from 65% of walkers in 2010/11 to 71% in 2016. The vast majority are still members of their walking group 6 months after joining and have also taken up other activities, with longer walks followed by keep fit and swimming most popular. More than half have also increased their active travel behaviour as a result of walking with the group (63%).

3.5.2 Social return on investment

Social Return On Investment studies (SROI) commissioned by Paths for All to measure the impacts of walking programmes in Glasgow, Stirling and the Scottish Borders in 2010 found that every £1 invested generated around £9 of benefits. By applying a sensitivity analysis, or varying any assumptions made in the calculation, the value of the benefits derived ranges from £6 to £14.

¹⁴ *Paths for All, Research and data summary, July 2017*

4. The National Walking and Cycling Network (NWCN)

This section of the report includes baseline estimates (2016) of the numbers and types of trips made on the National Walking and Cycling Network in Scotland.

Headlines

An estimated **8.8 million trips** were made on the National Walking and Cycling Network in 2016; 8.5 million trips were taken by walkers and 0.3 million by cyclists.

Eighty-six per cent of all trips were recreational (including 87% of walking trips and 67% of cycling trips).

The estimated economic impact of recreational trips taken on the NWCN is £85 million of expenditure in the local economy. The average spend per trip is estimated at £11 for walkers and £6 for cyclists.

Fourteen per cent of trips were purposeful trips, e.g. for commuting to work or for shopping (including 13% of walking trips and 33% of cycling trips).

More than half of those interviewed on an NWCN route stated that the existence of the route had allowed them to make their journey actively rather than by a motorised vehicle (52%).

More than three quarters of those interviewed on an NWCN route stated that the route had helped them increase their level of physical activity (78%).

4.1 Numbers of trips made on the NWCN

The '*National Walking and Cycling Network - baseline monitoring report 2016*', undertaken by Sustrans in partnership with SNH, provides a baseline measure of usage of the NWCN along with evidence regarding the impacts of walking and cycling visits on health, active travel, tourism and the economy.

Table 11 provides estimates of the numbers of visits undertaken on the NWCN in 2016. An estimated **8.8 million trips** occurred on the network in 2016. This includes 8.5 million walking and 0.3 million cyclist trips.

An estimated 7.6 million walking and cycling trips (86% of all walking and cycling trips) were taken for **recreational purposes**. This includes 7.4 million walking trips (87% of all walking trips) and 0.2 million cycling trips (67% of all cyclist trips).

An estimated 1.2 million trips were **purposeful trips**, i.e. trips taken for a purpose other than leisure or exercise, for example, to travel to work, for shopping or to visit friends. This includes 1.1 million walking trips (13% of all walking trips) and 0.1 million cyclist trips (33% of all cyclist trips).

Table 11: Total number of walking and cycling trips made on the NWCN in 2016

Trips on NWCN in 2016 ¹⁵	Walking (including dog walking)	Cycling	Total
All	8.4 million	0.3 million	8.8 million
Recreational only	7.4 million	0.2 million	7.6 million
Purposeful only	1.1 million	0.1 million	1.2 million

Source: National Walking and Cycling Network - baseline monitoring report 2016, Sustrans, SNH

4.2 Economic impact of the NWCN

Table 12 shows total expenditure on all recreational trips made on the NWCN in 2016. The estimated economic impact of trips taken for **recreational purposes** is **£85 million of expenditure** in the local economy. The recreational spend per trip is estimated at £11.35 and £5.96 for walkers and cyclists respectively.

Table 12: Total spend on all recreational cycling and walking trips made on the NWCN in 2016

Recreational spend on NWCN in 2016	Walking (including dog walking)	Cycling	Total
All	£83.9 million	£1.1 million	£85 million

Source: National Walking and Cycling Network - baseline monitoring report 2016, Sustrans, SNH

Feedback from a **survey of local businesses** shows that businesses located on or near the NWCN **viewed the development of the network positively**.

While the majority of all users had started their journey from home (79%), a fifth had started their journey from a holiday base, indicating the appeal of the route for tourists (21%).

4.3 Health impacts of the NWCN

The research included 17 route user surveys conducted on a cross section of NWCN routes.

- ~ 84% of all respondents were using the NWCN for recreational purposes, with a further 16% using the route for a particular purpose (including commuting, shopping, and personal business).
- ~ Just under half of route users surveyed were walking (46%) with a further third (32%) cycling. The remainder were running/jogging, dog walking, wheelchair users and horse-riding¹⁶.

¹⁵ Please note that estimates of the total number of walking and cycling trips on the network have been drawn from a selection of automatic counter sites on the NWCN. The proportion of cycling trips in this estimate may be lower than is observed at any one site on the network, due to limitations associated with the availability and quality of counter data across the NWCN. This has resulted in a high proportion of the network being associated with a count site where high pedestrian usage is observed compared to cyclist usage. We are considering how to improve the coverage of the data underlying our network usage estimate to improve robustness for future estimations. .

- ~ Over half of those surveyed (52%) stated that the existence of the NWCN route allowed them to **make their journey actively** rather than by a motorised vehicle.
- ~ just over half of all route users (53%) **achieve the recommended 30 minutes of physical activity on five or more days per week**¹⁷.
- ~ 78% of all users stated that the NWCN **helped them to increase their physical activity** (either by a small or large amount), with 41% of all route users saying this was by a large amount.

¹⁶ Please note that the modal split of route user survey respondents should not be considered the modal split of all network use; instead, the modal split from user surveys should be understood to also reflect the location of the interview and overall willingness of different user types to stop for surveying.

¹⁷ NHS guidelines recommend at least 150 minutes of moderate aerobic activity such as cycling or fast walking every week. <http://www.nhs.uk/Livewell/fitness/Pages/physical-activity-guidelines-for-adults.aspx>

5. Scotland's Great Trails

The following data on use of Scotland's Great Trails are derived from a mixture of sources including counter data, route user surveys and numbers of route completion certificates as well as estimates based on observation and other anecdotal evidence.

Headlines

Scotland's Great Trails are an important source of tourism revenue, especially for the more remote rural communities they pass through.

Usage and visitor expenditure estimates are available for a number of Scotland's Great Trails, including the following:

An estimated 240,000 – 300,000 visits were made on the John Muir Way in the first year after opening (2014/15).

An estimated 500,000 visits are made to the Fife Coastal path each year, including 35,000 visits made by end to end users. The route is estimated to support 800 – 900 FTE jobs in Fife; annual net expenditure associated with the route is estimated at £24 million - £29 million per annum.

The West Highland Way, which attracts 120,000 visits each year, including 36,000 end to end users, is estimated to generate £5.5 million per annum for the local economy.

The Rob Roy Way, which attracts 3,000 visits each year, including 450 end to end users, is estimated to generate £900,000 per annum for the local economy.

The Kintyre Way attracts 1,000 – 2,000 end to end users each year.

Average visitor expenditure estimates vary for different routes and will be influenced by factors such as the route's location and the types of visitors it attracts (e.g. local, day visitors or tourists).

On the John Muir Way (which has a high proportion of local usage), 29% of users spend money during their visit. The average amount spent (including those who spent nothing) was £3 (2014/15).

On the Great Glen Way, average spend is estimated at £15 per day visitor and £45 per day for end to end users (or £228 for the entire trip) (2012).

On the Fife Coastal Path, 60% of users spend money during their visit. The average amount spent (including those who spend nothing) was £26 (2007).

Average spend per person per day among end to end users of the Southern Upland Way in 2005 was estimated at £41 (or £595 for the entire trip, excluding travel to and from the route).

5.1 John Muir Way

Analysis undertaken by SNH's GIS team in 2014 (using 2011 census data and a Scottish population estimate of 5.3 million) estimates that:

- ~ 46.5% of the Scottish population (2,463,894 people) live within 10 miles of the John Muir Way.
- ~ 24.4% of the Scottish population (1,291,741 people) live within 5 miles of John Muir Way

The [Greenspace Use and Attitudes Survey 2017](#) included a couple of questions about awareness and use of the John Muir Way among Scotland's urban population. The research found that:

- ~ 44% of adults living in Scotland's towns and cities stated that they were aware of the John Muir Way and 39% said they had used the route;
- ~ awareness and usage of the route was higher among people living within the CSGN area; and within the CSGN area, awareness and usage was highest among people living in the Forth Valley and in Lothian & Fife.

The [John Muir Coast to Coast Economic Benefit Study](#) undertaken in 2012, before the official opening of the route in April 2014, estimated that the £2m cost of creating the John Muir Way would generate £16.3 million of direct expenditure and create or safeguard 700 FTE jobs from coast to coast users in the first 5 years (this analysis was based on an estimated 9,000 coast to coast users in the first year of opening). In addition, it estimated that £8.8 million of direct visitor expenditure and 384 FTE jobs could be generated from increased day use.

The [John Muir Way Visitor Survey 2014/15](#) was commissioned by SNH soon after the official opening of the route in April 2014 and ran over a period of 12 months. It provided a baseline estimate of usage as well as insights into user profiles and visitors' experiences. The research estimated that:

- ~ **240,000 – 300,000 visits** were made on the route over the 12 month period of the research (NB this estimate may be viewed as conservative as the choice of interview locations selected for the research means that the numbers of visits taken by local users such as dog walkers and commuters are likely to be underestimated).
- ~ 4,900 – 6,000 visits were taken to complete the route end to end over consecutive days (2% of all visits)
- ~ 46,000 – 57,000 visits were taken with the intention of completing the route in sections across several visits (19% of all visits);
- ~ 183,000 – 227,000 visits were taken by walkers (75% of the total) and 59,000 – 73,000 by cyclists (24% of the total);
- ~ 61% of respondents were aware they were on a named path and 49% were aware it was called the John Muir Way.

In terms of route usage, the research indicated:

- ~ the fact that the path was part of the John Muir Way had played a part in the decision to visit for 26% of users; 10% of users stated that this was their sole reason for visiting;
- ~ 9% of users stated they had already walked the entire route and a further 15% planned to do so in future;
- ~ most users were aware of the path through general knowledge or had always known about it (67%);
- ~ most users were on a short trip of less than three hours away from home (85%); almost half had travelled less than 2 miles from home to reach the path;
- ~ 57% of users were visiting alone and 42% were accompanied by a dog;
- ~ almost half of users were aged 55 and over; there was a strong bias towards male users and those in the ABC1 social grade (professional and managerial occupations);
- ~ 33% of users were classed as people who seldom visits the outdoors, highlighting the potential of the route to attract this hard to reach audience;
- ~ 61% of users cited health and exercise as a reason for visiting;
- ~ 30% of users spend some money during their visit. The average amount spent by those who spent something was £18 (reducing to £3 when those who spend nothing are included in the analysis).

5.2 Fife Coastal Path

The [Fife Coastal Path Usage and Impact Study 2007](#) estimated that the Fife Coastal Path supports The research included interviews with 800 – 900 FTE jobs in Fife, with annual net expenditure associated with the route estimated between £24m and £29m annually. Sixty per cent of path users spend money during their visit; average spend per path user (including those who spend nothing) was estimated at £26.

The [Fife Coast Usage and Impact Study 2016](#), undertaken to evaluate the use and impact of the Fife coast, estimated that 3.36 million visits were made to the Fife coast in 2015. An estimated 1% of these visitors were walking the Fife Coastal Path end to end (equivalent to 36,000 visitors per annum).

A survey of the general public in Scotland, undertaken as part of the research, estimated that 10% of adults in Scotland had visited the Fife Coastal Path within the previous 12 months.

Visitor expenditure on the Fife coast was estimated at:

- ~ £9.64 per person per trip among visitors on a short trip of less than three hours
- ~ £14.16 per person per trip among day visitors on a trip of more than 3 hours
- ~ £49.90 per person per day among visitors staying away from home in the area

Total direct and indirect expenditure impacts (after taxation) on the Fife coast were estimated to be £214.8 million. Direct and indirect expenditure generated by end to end users of the Fife Coastal Path is estimated to be £3.7 million.

The number of FTE safeguarded or created jobs resulting from visitor expenditure is estimated to be 4,338 (after application of Type 1 multipliers).

5.3. Southern Upland Way

The [Southern Upland Way, an under-used resource for southern Scotland 2005](#) was commissioned to investigate and report on current usage and future potential of the Southern Upland Way and included the following estimates and findings:

It estimated that 1,000 end to end visitors per annum and 53,000 other visitors use the path each year.

Among the end to end users:

- ~ 56% were male
- ~ 48% were travelling in pairs
- ~ 55% were aged 45-64
- ~ 88% were walking west to east
- ~ 69% were UK residents with just over half coming from England
- ~ average time to complete the route was 16.6 days
- ~ average spend per person per day was £41
- ~ average spend on trip (excluding travel to and from the route) was £595
- ~ A fifth of walkers made use of a tent during their trip and the same proportion had used a bothy
- ~ A third of walkers used a baggage transfer service

Among the other users:

- ~ 51% were male
- ~ 68% were on a short walk and 29% were on a day walk
- ~ 94% knew they were on the SUW, although, for most, the route itself wasn't the main purpose of their visit. 66% had used the route previously
- ~ 97% were from the UK (72% were from Scotland and 25% from England)
- ~ 40% lived within 30 miles of the route

The research also included interviews with a sample of local service providers. In terms of economic benefit, the route had more relevance to some providers than others. While some providers within the route corridor rated it 'very important' to their business, most did not consider it to be particularly important, with the level

economic importance attributed declining rapidly as distance from the route increased.

5.4 [Mull long-distance route: a socio-economic study](#)

SNH's 2014 research on a proposed long-distance route on Mull includes forecasts (see Table 12, below) for average daily spend among route users. These estimates took account of average spend data from other route user surveys and are based on a projected trip length of 4 nights for walkers and 2 nights for cyclists.

Table 13: Average visitor spend forecasts on Mull long-distance route.

Type of route user	Average daily spend estimates
Local users from within the route corridor	£0
Visitors incorporating short sections of the route within their existing stay	£15
Day visitors staying an additional night to walk part of the route	£45
Full-length walkers (including UK and overseas visitors)	£50
Full-length cyclists	£53

Source: Mull long-distance route: a socio-economic study, SNH Commissioned report No. 743, 2014

5.5 Scotland's Great Trails - user estimates

SNH's [Mull long-distance route: a socio-economic study](#) also includes a summary of the available 2012 usage data for a number of Scotland's Great Trails.

Table 14: Scotland's Great Trails – Usage estimates 2012

SGT	Total annual visits	Total annual end to end visits	% day visits	% multi-day visits	% end to end visits
Ayrshire Coastal Path	3,000		84	16	1-2
Berwickshire Coastal Path		2,000			
Borders Abbeys Way	15,000	2,380			
Cateran Trail*	2,600	2,000	10	10	80
Clyde Walkway	155,000	7,750 multi day/end to end	95	5	
Dava Way	3,000	400	90	5	5
Fife Coastal Path	500,000	35,000	72	26	7
Forth – Clyde/ Union canal towpath			90	5	5
Great Glen Way	30,000	4,500	75	10	15
Kintyre Way		1,000 – 2,000			
Moray Coastal Trail	23,000	1,000			

River Ayr Way	137,000	41,000	70	30	
Rob Roy Way	3,000	450	60	25	15
Southern Upland Way	80,000	1,000	83	12	5
Speyside Way	52,750	2,750	93		7
St Cuthbert's Way		2,579			
Three Lochs Way	1,500	300	70	10	20
West Highland Way	120,000	36,000	45	10	45
West Island Way	6,000 – 7,000				

Source: Mull long-distance route: a socio-economic study, SNH Commissioned report No. 743, 2014

*In 2018, the numbers of visits made on the Cateran Trail is estimated at 8,000.

5.6 Economic impact of Scotland's Great Trails

SNH's 'State of Scotland's Great Trails' report, March 2013 reports that Scotland's Great Trails are an important source of tourism revenue, especially for the more remote rural communities they pass through. The West Highland Way is estimated to generate £5.5 million a year for the local economy and the Rob Roy Way generates £900,000 a year. Accommodation providers, shops and cafes, baggage handlers, transport providers, equipment hire companies and nearby attractions all benefit from having these trails passing through the area. Charity and challenge events bring participants and spectators into many rural areas of Scotland, with all the associated economic benefit to local businesses.

6. National Cycle Network

This section includes the latest estimates of usage of the National Cycle Network in Scotland and data relating to the NCN's impacts on health and the economy.

Headlines

121 million trips were made on the National Cycle Network (NCN) in Scotland in 2014 (63 million cycling and 58 million pedestrian trips), an increase of 16% on the previous year.

The majority of trips made on the NCN are for leisure purposes (71%) and 15% are for commuting. Cyclists are more likely than pedestrians to be commuting (23% and 11%, respectively).

The health benefits of walking and cycling on the National Cycle Network in 2014 (i.e. the value of reduced mortality resulting from physical activity) are estimated to be worth £321 million (£229 million for walking and £92 million for cycling).

The indicative value of leisure cycling and cycle tourism on the NCN in 2014 is estimated to be £375 million.

6.1 Trips made on the NCN

An estimated 121 million trips were made on the NCN in Scotland in 2014, split fairly evenly between pedestrian and cycle trips. The numbers of trips made on the NCN increased by 16% between 2013 and 2014, with the biggest increase occurring in cycling trips (up by 24%).

Table 15: Numbers of trips taken on the National Cycle Network in Scotland 2012 - 2014

	Total no. trips on the NCN	No. cycling trips	No. pedestrian trips
2012	97 million	48 million	49 million
2013	104 million	51 million	53 million
2014	121 million	63 million	58 million
% change 2013 - 2014	+16%	+24%	+9%

Source: Report on the outcomes of the 2012 – 2015 Grant to Sustrans from the Scottish Government, Third Annual Report, August 2015: Sustrans Scotland

Aggregated data from Route User Intercept Surveys (RUIS) undertaken on the NCN in 2014 indicate that the majority of trips taken on the network are for leisure purposes (71%). Fifteen per cent of all trips (compared to 23% of cycling trips and 11% of pedestrian trips) are taken for commuting purposes.

Table 16: Purpose of trips taken on the NCN 2014

Purpose of trip	% all trips
Leisure	71
Commuting	15
Shopping	9
Personal business	3
Education	1
Other	2

Source: Report on the outcomes of the 2012 – 2015 Grant to Sustrans from the Scottish Government, Third Annual Report, August 2015: Sustrans Scotland

6.2 Health benefits

Using the World Health Organisations' Economic Assessment Tool (HEAT), Sustrans estimate the health benefits of walking and cycling on the NCN in 2014 (i.e. the value of reduced mortality resulting from physical activity) to be worth £321 million (£229 million from walking and £92 million from cycling).

Table 17: Value of health benefits attributed to walking and cycling on the NCN 2012 – 2014

Activity	2012	2013	2014
Walking	£58 million	£66 million	£229 million
Cycling	£39 million	£44 million	£92 million
Total	£97 million	£110 million	£321 million

Source: Report on the outcomes of the 2012 – 2015 Grant to Sustrans from the Scottish Government, Third Annual Report, August 2015: Sustrans Scotland

Aggregated data from Route User Intercept Surveys (RUIS) undertaken on the NCN in 2014 show that a majority of respondents said the routes had helped them increase the amount of physical activity they regularly undertake¹⁸.

The iConnect [Fit for Life](#) research sought to determine if a programme of 84 new community links delivered by Sustrans (and funded by the Big Lottery Fund) between 2008 and 2013 had helped more people switch from using cars to walking or cycling, getting them more physically active and reducing carbon emissions. Its findings can be summarised as follows:

- ~ Walking and cycling routes have most impact on physical activity when they run close to where people live. People living within 1km (0.6 miles) of a route increased the time they spent walking and cycling by an average of 45 minutes a week more than people living 4km (2.5 miles) away.
- ~ Routes that change the environment in a highly visible and dramatic way can enhance the impact.

¹⁸ Report on the outcomes of the 2012 – 2015 Grant to Sustrans from the Scottish Government, Third Annual Report, August 2015: Sustrans Scotland

- ~ Community links do increase levels of walking and cycling although behavioural change can take time and benefits may build up gradually. Increasing the volume of recreational trips is a good starting point; however, a better understanding is required of the factors which enable a transition from increased recreational trips to increased functional trips (e.g. shopping or commuting trips).
- ~ Interventions that support walking and cycling do enable people to become more active and increases in physical activity were observed across the community, among both men and women and among people of different ages and social groups.
- ~ Increased walking and cycling activity was not off-set by reductions in other forms of physical activity, suggesting that new routes encourage people to become more active overall.

6.3 Economic benefits

Construction and maintenance of the NCN is estimated to contribute £12 million to the small-medium sized civil engineering sector in Scotland¹⁹.

Using the Cycle Route Economic Impact Model, Sustrans estimate the indicative value of cycle tourism and home-based leisure usage of cycle routes at £375 million.

Table 18: Indicative value of tourism and leisure-based cycling in Scotland 2012 - 2014

Type of cycling	2012	2013	2014
Tourist	£32 million	£101 million	£126 million
Home-based	£221 million	£197 million	£249 million
Total route expenditure	£253 million	£298 million	£375 million

Source: Report on the outcomes of the 2012 – 2015 Grant to Sustrans from the Scottish Government, Third Annual Report, August 2015: Sustrans Scotland

¹⁹ *Evidence to the I & IC Committee on the draft budget 2012 – 13 and spending review 2011. Sustrans, October, 2011)*

7. Scottish Canal's towpaths

This section includes the latest estimates of the numbers of visits to canal towpaths and data relating to the impacts of these visits on health and the economy.

Headlines

Around 24 million visits were made to Scottish canal towpaths in 2010 (up from 4.5 million in 1997)

Visits to the canal network are split fairly evenly between walkers (48% of visits) and cyclists (41% of visits).

More than half of visits are leisure-based (57%) and 43% are visits to a specific destination (e.g. commuting to work, shopping).

The Scottish canal network is estimated to generate health benefits (from increased levels of walking and cycling) worth £11.5 million per annum. For every £1 invested, there's a return of £7 in health benefits.

Visitors to the Scottish canal network spend around £30.50 per visit. Total visitor expenditure is estimated to be £29.3 million per annum. This supports 544 tourism-related jobs and £12.0 million in associated GVA.

7.1. Towpath visits

In 2011, the British Waterways Scotland and Waterways Trust Scotland report, *The health benefits of the Forth & Clyde and Union Canals (MVA Consultancy)*, estimated that after the re-opening of the Lowland canal network to navigation in 1999, canal towpath use increased from 4.5 million visits in 1997 to 24 million visits in 2010. Towpath usage is split fairly evenly between walkers and cyclists (48% and 41% of visits, respectively). More than half of towpath journeys were taken for leisure purposes (57%) and 43% for travel to a specific destination (e.g. work, shopping). Of the journeys taken to travel to a specific destination, 62% were taken by people travelling to work.

7.2. Health benefits

In 2011, the British Waterways Scotland and Waterways Trust Scotland report, *The health benefits of the Forth & Clyde and Union Canals (MVA Consultancy)*, quantified the value of the health benefits generated by use of Scotland's Lowland canal towpaths for walking, running and cycling. The research measured the proportion of 'additional' physical activity undertaken (i.e. physical activity which would not have been carried out if the towpath network had been unavailable) and used the findings to quantify and monetise the associated health benefits in terms of: increased physical activity; absenteeism; air quality; and road safety.

The study found that:

- ~ the lowland canals generated 3.9 million 'additional' person kilometres per annum, equating to a physical health benefit of £6.4 million per annum. For

every £1 invested in the canal towpath network, there is a return of £7 of health benefits;

- ~ the towpaths removed more than a million cycle kilometres from the roads, with an annual safety benefit valued at £220,000;
- ~ additional physical activity on canal towpaths leads to savings of £77,000 in terms of reduced absenteeism and a reduction of 85,000 hours per annum of exposure to poor air quality.

In 2016, Scottish Canals commissioned Peter Brett to undertake a review of economic development and activity around the Scottish canal network since 2010. The approach previously employed by the MVA consultancy (above) was utilised to calculate ‘additional’ person kilometres for the period 2012 – 2016 and to monetise the associated health benefits. It was estimated that the canal network delivered 5 million ‘additional’ person kilometres during this period and that the average monetised benefit associated with this additional exercise was £11.5 million per annum – 80% higher than the estimated value in 2010.

Table 19: Value of health benefits attributed to cycling on Scottish Canal towpaths 2012 - 2016

Year	Monetised health benefits
2012	£10,735,659
2013	£12,987,865
2014	£11,015,429
2015	£11,974,465
2016	£10,756,263
2012 – 2016 average	£11,494,910
2010	£6,371,675

Source: Scottish Canals Monitoring report 2010 – 2015 (Peter Brett)

7.3 Economic benefits

In 2013, the Scottish Canals report, *Monitoring the economic and social impact of Scottish canals (MVA Systra group)*, estimated that activities on and around Scottish canals result in a minimum of £11 million of direct tourism benefits and £23m of indirect benefits. Of this, long-distance walking is estimated to generate £6.5 million of direct tourism benefits and £14.3 million of indirect benefits annually, while the Great Glen Canoe Trail generates approximately £1.35 million a year in direct local expenditure, with gross induced impacts of £3 million in the wider community.

The Scottish Canals Monitoring report 2010 – 2015 (Peter Brett) estimated that on average visitors to the canal network spend £30.50 per visit. Total visitor expenditure during this period was estimated to be £29.3 million per annum. This amount supports 544 tourism-related jobs and £12.0 million in associated GVA.

The report also included information on visitor numbers and spend at key locations along the network:

Table 20: Visitor numbers and spend at key locations on Scottish Canal network

Location	Nos. visits	Type of visit	Economic impact
Falkirk Wheel	476,778 visits in 2008 605,432 visits in 2015	Sustrans estimate that 95% of visits are leisure based.	
The Helix	952,506 visits in 2014/15	Falkirk Community Trust Annual Report 2014-15 estimates that 75% of visits are leisure-based	
Stockfield Junction	40,000 visits in 2008 195,171 visits in 2015	69% of these visits (134,668) were leisure related	Assuming spend per leisure trip of £30.50, total leisure spend is estimated to be £4.0 million. This supports an additional 76 tourism-related jobs and £1.6 million in GVA.
Edinburgh Canal Network	475,707 visits in 2010 700,000 visits in 2015 (Scottish Canals estimate)	Sustrans estimate that around half of visits are leisure related and more than 40% are commuters.	345,000 leisure visitors gives an estimated expenditure figure of £10.4 million. This supports 194 tourism-related jobs, equating to £4.3 million in GVA.
Highland Canal network	Great Glen Way counter data for 2014 indicate that 24,000 long-distance walkers and nearly 20,000 day walkers used the Caledonian Canal sections of the route		Long-distance walkers spend approximately £228 per trip and day walkers around £15 a day. It is assumed that approximately £5.9 million is spent by walkers using the Great Glen Way. This expenditure would support 109 direct jobs and a further 32 indirect/induced jobs, equating to £4.8 million in GVA.
	The Great Glen Way is estimated to attract 7,000 whole route cyclists and a further 5,000 day cyclist per annum	Average spend is assumed to be £97 a day for overnight cyclists (Visit Scotland) and £5 a day for day cyclists.	Assuming a 3-night cycle trip, cyclists are estimated to spend an £2 million along the GGW. This would support 38 direct jobs and a further 11 indirect/induced jobs, generating an estimated £1.6 million in GVA. Assuming a third of this benefit can be attributed to the stretch of route along the canal, this would equate to approximately 13 direct jobs, 4 indirect/induced jobs and an estimated £0.53 million in GVA.
	The Great Glen Canoe Trail, which also uses part of the Caledonian Canal, was used by 1,934 paddlers in 2015.	Average spend is assumed to be £32 per day	Assuming a trip of 3 days, the Great Glen canoe trail generates around £0.18 million per annum, supporting 3 direct jobs and 1 direct/indirect job and generates £0.15 million in GVA.

Source: Scottish Canals Monitoring report 2010 – 2015 (Peter Brett)

Appendix - References

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SNH website (SGTs)

<https://www.nature.scot/enjoying-outdoors/places-visit/routes-explore/scotlands-great-trails>

Scotland's Great Trails website

<http://www.scotlandsgreattrails.com/>

Sustrans website (NCN)

<https://www.sustrans.org.uk/scotland/national-cycle-network>

Scottish Canals website

<https://www.scottishcanals.co.uk/activities/walking-running/>

SG website (Core Paths)

[*Monitoring the implementation of Part 1 of the Land Reform Scotland Act 2003*](#)

ScotWays website

<https://www.scotways.com/>

VisitScotland website (walking and cycling)

www.visitscotland.com/walking

www.visitscotland.com/cycling