SHARED USE PATHS IN SCOTLAND

Guidance on promoting, developing and managing paths for responsible shared use

paths for all

Scottish Natural Heritage
All of nature for all of Scotland

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Guidance on promoting, developing and managing paths for responsible shared use

Summary

This guidance focuses on the promotion, development and management of paths in ways which enable, encourage and sustain active travel, recreation and enjoyment, by walkers, cyclists, horse riders, people with disabilities and other-non-motorised users, and in ways which encourage respect for the environment and other path users.

Following brief introductions to Scotland's path networks, access rights, path users and the benefits of shared use paths, the guidance illustrates how:

- path managers, user groups and other interested parties can promote awareness and responsible shared use of paths
- effective paths planning, design and management can enable different types of users to share paths in harmony with each other.

Key themes and messages underpinning this guidance include:

- Scotland's path networks provide extensive, often traffic-free, opportunities for everyday travel, tourism, recreation and healthy exercise by a wide range of users.
- The establishment of statutory access rights and core path networks has increased expectations for quality path networks and the need to ensure that people use paths with care for the environment and respect of other users.
- Communications and awareness programmes can:
  - Increase awareness of path networks, and the opportunities and benefits these provide, amongst wider audiences, especially non- and infrequent users of paths
  - provide information on paths and their characteristics (e.g. gradients, widths), so that potential users, and especially those with specific requirements (e.g. wheelchair users, cyclists with trailers), can assess the suitability of individual paths for their use
  - make path users aware of wildlife, farming and other management considerations encourage good path etiquette and seek to influence the behaviour of those whose behaviour or attitudes may cause concerns to other path users.
- The development of this guidance has resulted in an 'Etiquette for Shared Use Paths' . It is recommended that this Etiquette be publicised by path managers to promote safe and courteous use of shared use paths.
- Liaison with, and the involvement of, path users in paths planning and management can ensure that paths meet their needs and aspirations, harness local knowledge and enthusiasm, identify concerns over path conditions or use, and encourage care for path networks, as well as providing valuable support for path managers.
- While many current paths sustain shared use, or require only minor improvements (e.g. drainage works), programmes to develop or up-grade paths or path networks will involve aspects of path planning, design, monitoring and maintenance.
- In planning for shared use, it is important to consider the functions of local and wider path networks, to ensure that these provide a variety of path types (e.g. 'natural' paths, sealed surface paths) to cater for the needs and activities of all users.
- The guidance includes advice on:
  - criteria for sustainable shared use paths and path networks
  - key stages in the paths planning, development and management process

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- paths design, construction, drainage, segregated surfaces, verges and landscaping, gaps, gates and access controls, speed controls, quiet roads and converting footways, provision for people with disabilities, enhancing personal security and minimising anti-social behaviour monitoring the use and condition of paths
- maintaining paths, including the importance of establishing effective maintenance arrangements from the inception of a path project and as an on-going process.

Sources of further information and advice on shared use paths are provided throughout the guidance, along with examples of good practice.

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SHARED USE PATHS IN SCOTLAND

Guidance on promoting, developing and managing paths for responsible shared use

Introduction

Scotland's extensive path networks offer attractive and diverse opportunities for active travel, recreation and outdoor enjoyment. Our statutory rights of access and the establishment of core path networks have resulted in most paths being available for shared use by walkers, cyclists, horse riders, other non-motorised users and persons with a disability using a motor vehicle built or adapted for their use.

This guidance provides information and advice on:

- the importance of shared use paths and their benefits for users and society
- promoting awareness, and responsible and courteous use, of shared use paths
- providing and managing paths to sustain shared use.

The advice will be of interest and assistance to:

- community organisations, local access forums, path user groups and other voluntary groups and partnerships (e.g. tourism groups)
- farmers and other land and access managers
- local and national park authorities' members and staff
- others with interests in Scotland's outdoors and path networks.

The advice should be used flexibly, taking account of local circumstances and available resources.

This document is not a comprehensive manual on shared use paths; rather, it is intended as an initial source of information and advice. Readers wishing further advice on shared use paths should consult:

- their local authority's access officer, Paths for All, SNH or other organisations with access interests
- Lowland Paths - Planning, Design, Construction and Maintenance
- Contact information and additional references are provided in section 6. Links (blue text) are provided to more detailed web-based information, publications and other sources of support.

Cross references (purple text) enable quick transfers between text or between text and illustrations.

Paths for All acknowledges, with gratitude, the information and advice provided by individuals and organisations consulted during the preparation of this guidance, including through participation in interviews and a consultative workshop, and the provision of illustrations and case study information.

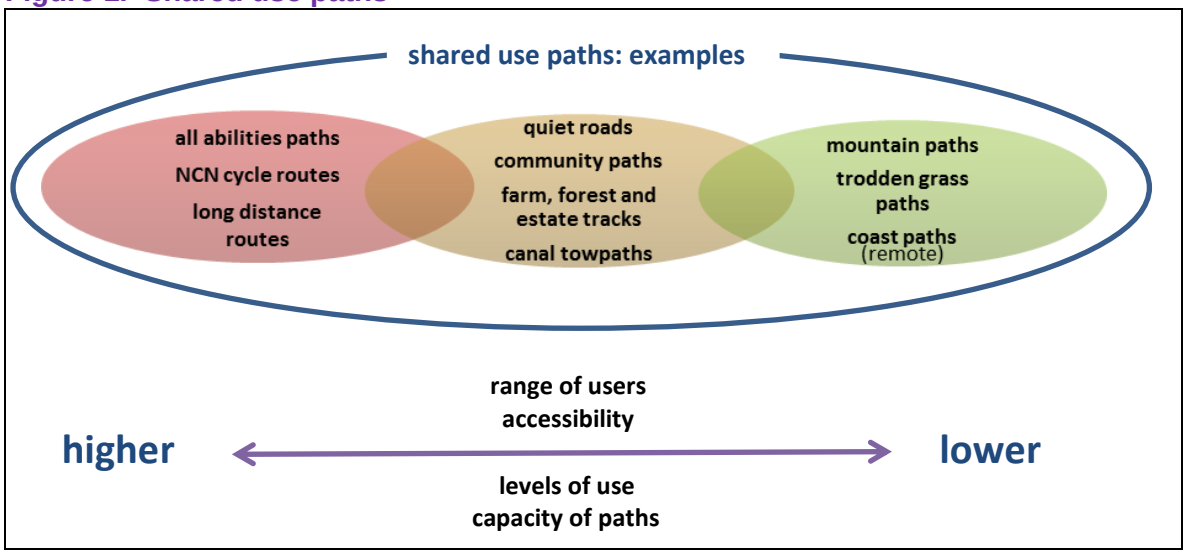
Scottish Natural Heritage funded this guidance, which expands, up-dates and supersedes SNH's Information and Advisory Note on 'Shared use paths and tracks' (1997). Separate advice on promoting and managing rivers and other inland waters for shared use is available in Using Inland Water Responsibly: Guidance for all water users.

1. Shared Use Paths: The Context

1.1 Shared use paths

Scotland's path networks comprise a wide variety of paths, quiet roads, cycle routes, farm and forest tracks, and more natural paths and grass trods – in and around urban areas and in the wider countryside. For brevity, this guidance refers to all such routes as 'paths'.

Figure 1. Shared use paths



Shared use paths range from shorter local paths to extensive strategic routes and the levels and types of use these can sustain vary between paths. Many shared use paths have been adopted as core paths and such paths often comprise parts of community greenspaces, longer distance routes, or the National Cycle Network. The feasibility of creating several new long distance trails, including a Scottish Coastal Way and a route across Central Scotland, is currently being investigated.

The development and promotion of core path networks, new longer distance routes, cycle paths (e.g. NCN routes) and other paths over recent decades have enhanced opportunities for off-road walking, cycling and riding. In 2009, three-quarters (74%) of outdoor trips were on some type of path, including 54% of trips on a signed and/or waymarked path or path network.

While access rights (section 1.3), cover the majority of paths, some paths may be unavailable or unsuitable for shared use, for example:

- footways (i.e. pavements) are subject to the roads legislation and are only available for use by pedestrians, unless adopted as a core path or converted to a cycle track (section 3.13)
- some mountain paths, heritage paths and other paths can only sustain use on foot, and the work required to up-grade such paths may be contrary to objectives for retaining the landscape, wild land, natural heritage or social history values of these paths and/or the landscapes through which they pass
- land management activities (e.g. timber harvesting) may require temporary or longer-term restrictions on the use of certain paths
- physical conditions (e.g. wetland, machair) may pose practical constraints, or prevent responsible access, by some users (e.g. horse riders on soft grass paths).

1.2 Use and users of shared use paths

Shared use paths support a wide range of users and a diversity of activities, including:

- everyday trips to work, school, shops and similar destinations
- recreation and sports activities – alone, or in family, club or other groups
- tourism, leisure and other outdoor pursuits − such as landscape viewing, wildlife watching and photography.

Figure 2. Users of shared use paths (examples)

Pedestrians	Cyclists	Equestrians	Less Able/ Disabled Users	Sports & Events Participants
▪ casual walkers ▪ joggers/runners ▪ long distance walkers ▪ dog walkers ▪ families with push-chairs	▪ recreational and family cyclists ▪ touring cyclists ▪ mountain bikers ▪ tandem cyclists ▪ recumbent cyclists ▪ hand-cyclists	▪ horse/pony riders (e.g. hacks/treks) ▪ long distance/ endurance riders ▪ carriage drivers	▪ elderly and infirm ▪ people with hearing/ sight impairments ▪ people with learning difficulties ▪ wheelchair or mobility scooter users	▪ roller skaters/ bladers ▪ x-country skiers ▪ dogsports training ▪ charity/challenge event participants

Walkers, cyclists and horse riders comprise the majority of paths users. The Scottish Recreation Survey estimates that around 351 million outdoor leisure and recreation trips were taken by adults resident in Scotland in 2009, of which:

- 84% included a walk – mostly under 2 miles (42%) or between 2 and 8 miles (48%)
- additional trips on foot included dog walking (3%) and running or jogging (3%)
- 7% included cycling or mountain biking
- 1% included horse riding.

Tourists use and value Scotland's path networks. UK Travel Survey data indicate that between 2006 and 2008, UK residents on holiday in Scotland took around 4.9 million walking trips/year (62% under 2 miles) and 0.28 million cycling trips/year (3-year averages). Expenditures on such trips benefit Scotland's economy and communities; for example, UK tourists who walked and/or cycled while on holiday in Scotland spent an average of £2.25 billion/year in 2006-2008 (VisitScotland, 2010).

1.3 The case for shared use paths

Shared use paths can contribute significantly to the enjoyment of Scotland's access rights by people of all ages and abilities, help to achieve strategic objectives and public policies at the national and local scales, and deliver social, environmental and economic benefits.

Access rights and responsibilities

The Land Reform (Scotland) Act 2003 introduced rights of access over most land, which:

- must be exercised responsibly
- extend to a wide range of non-motorised activities− including walking, cycling and riding, and to people with a disability, including those using a vehicle built or adapted for their use
- apply to most paths − unless within the curtilage of private properties, farmyards and other excluded land. Public rights of way may provide access through such properties, but may be more restrictive than the statutory access rights.

The Scottish Outdoor Access Code sets out access takers' and land managers' rights and responsibilities and explains where and when any restrictions on access may apply.

Section 1. Shared Use Paths: The Context

The Land Reform legislation introduced the concept of core paths, required local and national park authorities to prepare core path plans, and gave them powers to implement and manage core path networks. Most access authorities have completed the preparation and adoption of core path plans for their areas. All core paths are available for shared use, subject to decisions being made by users as to whether their activities can be undertaken responsibly, given local conditions and any land management requirements or other constraints.

The access legislation and the public's expectations of core path networks have resulted in:

- paths playing increasing roles in facilitating enjoyment of access rights and assisting the management of access, especially in areas of farmland and wildlife importance
- a need for local authorities and their partners to ensure that core paths meet expected standards and for land managers to work with local authorities to integrate access and land management, including by providing good paths and managing access positively
- requirements to enhance awareness of access rights and responsibilities and to promote respect and courtesy between path users.

Other legislation is relevant to the provision and management of shared use paths, including the equality, health and safety and roads legislation. Relevant legislation is highlighted in this guidance; in particular, references to the equality legislation in section 3.12 and roads legislation in section 3.13.

SNH's A Brief Guide to Laws relevant to Outdoor Access in Scotland and Transport Scotland's Cycling by Design 2010 provide useful information on legislation of relevance to shared use paths.

Strategic objectives and policy frameworks

The Scottish Government's strategic objectives are to create a wealthier and fairer, smarter, healthier, safer and stronger and greener Scotland. The provision and promotion of path networks for active travel and enjoyment can contribute towards achieving several of these objectives and paths programmes feature in national strategies for land use planning, rural development, forestry, transport, tourism, physical activity, sport, health, meeting climate change targets and promoting sustainable communities.

Paths for All's Website provides links to many relevant strategies and illustrates how path programmes can help to achieve the national outcomes in the Scottish Government's National Performance Framework.

The national objectives underpin:

- SNH's policies in Paths – linking people, places and nature, which presents aspirations for the promotion, management and funding of paths, the more regular use of paths, their roles in supporting recreation and active travel, and the development of a more coherent network of long distance routes
- Paths for All's vision of Paths for people … a happier, healthier, greener, more active Scotland and its strategic priority for increasing the number, quality, accessibility and shared use of paths
- the Cycling Action Plan for Scotland, which advocates provision for safe cycling on quiet roads, National Cycle Network routes and off-road paths to help to achieve the national target of 10% of all journeys being made on cycles by 2020.

Section 1. Shared Use Paths: The Context

Encouraging healthy activity is a national priority and safe, attractive and convenient walking and cycling routes are vital to the success of Health Walks, Active Nation and other health promotion programmes, and encouraging active travel for everyday journeys. In the latter context, Sustrans has been leading the Connect2 and Safe Routes to Schools schemes.

The Central Scotland Green Network is identified as a development of national importance in National Planning Framework for Scotland 2, with the intention of transforming environmental quality and recreational opportunities across Central Scotland. Shared use paths and other green infrastructure will be amongst the investment priorities. Also, programmes to improve and promote the use of paths have been advocated as part of the legacy programmes for the 2012 Olympic Games and 2014 Commonwealth Games.

At a more local level:

- shared use paths can help to achieve specific outcomes and targets in the Single Outcome Agreements agreed annually between each local authority and the Scottish Government
- policies and proposals for developing and managing core path networks are the principal focus of core path plans. It is intended that these plans should be incorporated into local and national park authorities' local plans, as soon as practical
- paths programmes may feature, also, in local strategies for walking, cycling, sustainable travel, tourism, sport, outdoor recreation and healthy communities.

Benefits of shared use paths

Community and economic benefits of developing and promoting multi-use paths include:

- providing safe, traffic-free or quiet road routes for trips to work, school or shops, recreation and tourism, by people of all ages and abilities
- linking communities, services and public transport; thereby, promoting social inclusion
- promoting active lifestyles and path users' fitness, health and well-being
- encouraging enjoyment of the outdoors and appreciation of the environment
- extending the range of activities which can be undertaken on paths and giving users confidence to enjoy their activities in accordance with access rights and responsibilities
- increasing visitor opportunities and encouraging day and tourist visits, with benefits for local economies and businesses
- creating amenity greenspace and wildlife corridors and enhancing the image and attraction of areas, as places to live, work and invest in
- assisting land managers, by encouraging visitors to keep to managed paths
- reducing reliance on car travel and carbon emissions.

Box 1 (overleaf) provides examples of the types of benefits which may be derived from shared use paths and path networks.

Box 1. Benefits of Shared use paths (examples)

Active travel and physical activity

- the National Cycle Network (NCN) attracted over 37 million trips in 2009 – an increase of almost 32% in trips from 2007. Around one-third of NCN cyclists were new, or re-starting, cyclists (Sustrans, 2010).

Health

- over 43% of interviewees on NCN routes in 2009 undertook least 30 minutes of physical exercise on 5 or more days in the previous week and over two-thirds agreed that the availability of the route had encouraged their exercise (Sustrans, 2010).
- an increase of 1-in-100 persons walking regularly for exercise could save the NHS in Scotland around £85 million/year and similar benefits are likely from cycling (RSPB, 2004).

Road safety

- off-road paths can enhance safety for walkers and cyclists. There were 2,595 pedestrian casualties (61 deaths) and 728 cyclist casualties (9 deaths) on Scotland's roads in 2008 (Scottish Government, 2009).

Economic

- the C2C Cycle Route from Cumbria to the North Sea Coast attracted some 241,00 trips in 2006, with expenditures of £10.7 million, which created or safeguarded around 173 full-time equivalent jobs (OneNorthEast, uclan & Sustrans, 2007).
- funding of local walking and cycling routes is estimated to produce typical benefit:cost ratios of 20:1, compared with 3:1 for road and rail schemes (Sustrans, undated).
- a switch of 20% of car commuter trips to walking or cycling could save £0.6-2.0 billion/year for the Scottish economy, including health, safety, environmental and associated benefits (Transform Scotland, 2008).

Climate change

- estimated savings in CO_2 emissions from car users switching to cycling or walking on NCN paths, range from over 3 tonnes/year on a path near Oban, to 10 tonnes/year on the Devon Way at Alloa, 84 tonnes/year on a path in Edinburgh and 116 tonnes/year at Glasgow Green (Sustrans, 2010).

Further examples of the potential benefits of paths are provided in Walkipedia 2010 and Opportunities for Walking and Path Networks to Deliver on National Indicators & Outcomes – SOA Supporting Evidence: 2010 (Paths for All, 2010).

1.4 Path users' preferences

While detailed national surveys of walkers, cyclists and horse riders (e.g. SNH: 1996,1999, 1999) pre-date more recent initiatives to develop path networks and improve the quality of path infrastructure, these surveys show the importance of attractive, signed and well-maintained local and longer distance paths, quiet roads, off-road cycling and riding routes. Figure 3 summarises the principal likes and dislikes of path users. Satisfying users' aspirations will encourage more use of paths and enhance path users' experiences.

Figure 3. Path users' likes and dislikes (examples)

Likes	Dislikes
▪ varied network of paths - especially circular paths ▪ traffic free-paths, quiet roads and safe crossings ▪ paths to schools, public transport, shops, etc. ▪ views, natural and cultural features of interest ▪ attractive, high quality environments ▪ well-drained and unobstructed paths ▪ well-maintained 'harder' surfaces for cycling and disabled people and 'softer' surfaces for riding ▪ easy to negotiate bridges, gates, etc. ▪ perceived personal safety and comfort ▪ seats, secure parking, rest/passing places, toilets (esp. disabled persons) ▪ pre-visit/visit information (esp. visitors) ▪ signing and/or waymarking of routes	▪ fragmented path network ▪ paths not linking to desired destinations ▪ lack of features of interest (especially visitors) ▪ poor environmental quality, litter, fly-tipping, etc. ▪ traffic volume & speeds and hazardous road crossings ▪ overgrowing vegetation; many gates and other barriers ▪ poor maintenance, water-logged or potholed paths ▪ long hard surfaces (walking, riding), loose/sharp stones (all users) and paths damaged by horses/bikes ▪ vandalism, anti-social behaviour or motorbikes ▪ uncontrolled dogs ▪ inadequate facilities for infirm and disabled users ▪ lack of signs, Internet information, mapboards, etc. (except more natural paths)

Concerns arising from the shared use of paths

For some people, the concept of a shared use path conjures up images of potential conflict. Research for the Countryside Agency (2001) shows that tensions between different types of path users arise more often from how people perceive other users and their activities, than from users experiencing conflict and '… most people's experience of meeting others on the routes was peaceful, un-intrusive, co-operative and agreeable'.

The above research and similar studies show that instances of conflict between different types of path users are generally infrequent, slight and short-lasting; nevertheless, any conflicts or discomforts are likely to detract from the enjoyment of a path and may deter its future use and visits to an area. Consequently, such issues will be of concern for path planners and managers.

Principal causes of concerns to path users, and examples of these, include:

a. lack of awareness, appreciation or understanding of:

- ♦ access rights and responsibilities – for example, cyclists' and horse riders' rights to use paths and their need to respect the safety and enjoyment of other users
- ♦ safe use of paths – such as cyclists and horse riders alerting walkers or wheelchair users of their approach from behind and passing them safely

b. differences in users' expectations or preferences:

- sole users' desires for solitude versus ramblers groups' enjoying social interaction
- preferences amongst many walkers and horse riders for more natural paths versus wheelchair users' and cyclists' preferences for harder surfaces

c. personal safety and comfort:

- concerns over potential for collisions – for example, between walkers and cyclists
- feelings of intimidation – where users may be wary of horses or dogs
- unpredictable movements of other users and, especially, uncontrolled dogs

d. environmental damage or nuisances:

- ♦ damage to vegetation and path surfaces – for example, by horses and mountain bikes
- ♦ fouling of paths by dogs or horses.

e. anti-social behaviour or illegal activities:

- vandalism or abusive behaviour
- illegal use of paths by motorbikes.

These latter issues are not directly attributable to the *bona fide* use of paths.

Issues arising from interactions between different types of path users are likely to be greatest where users are unaware or insensitive to the access rights, needs and perceptions of others, or where paths have high levels of use, are poorly designed or constructed (e.g. inadequate widths, waterlogged sections), or have 'pinch-points' (e.g. narrow bridges, chicanes).

Advice in the following sections is intended to assist path managers and others to promote responsible and courteous use of paths and to plan, develop and manage shared use paths in ways which minimise issues between users and maximise enjoyment of path networks.

2. Promoting Paths and Responsible Shared Use

2.1 Promoting awareness and responsible shared use of paths

The introduction of statutory access rights and establishment of core path networks have extended opportunities for the active enjoyment of paths, often by a wider range of users. The challenges now are:

- to bring the opportunities and potential benefits of path networks to the attention of a wider audience, especially infrequent users and non-users of paths
- to ensure the responsible use of paths and encourage users to show courtesy and respect for others.

The following sections discuss how communications, information, education and involvement can help path managers and others to meet these challenges.

2.2 Effective communications

Communication programmes can play key roles in:

- promoting awareness of access rights and responsibilities
- delivering information on paths and path networks − to encourage their use and enable potential users (e.g. tourists, horse riders, people with disabilities) to decide on the suitability of specific paths for their activities
- raising awareness of land management activities, wildlife and cultural heritage sensitivities and related factors, which need to take into consideration by path users
- encouraging responsible access, respect and courtesy amongst path users
- influencing the behaviour of path users, who may be causing damage, or posing hazards or nuisances to others.

The extent of communications programmes will vary in relation to the scale of the paths or path networks involved, users' awareness of access rights and opportunities, and the extent of any concerns or issues resulting from, for example, inter-user conflicts, surface damage by cycles or horses, or dog fouling.

The effective delivery of awareness and education programmes and the best use of resources will be achieved where path managers or others work to a communications plan.

Box 2. A planned approach to communications

An effective communications plan need not be lengthy or complex, but will outline:

- principal objectives
- target audiences
- key messages
- communications media
- action programme – including tasks, priorities, responsibilities and timing
- costs and funding sources
- monitoring and evaluation procedures

The audiences for paths awareness and educational programmes may comprise current and/or potential path users, including local communities, path users − in general, or specific groups (e.g. off-road cyclists, dog walkers), day visitors, tourists, and school and youth groups. 'Messages' should target each audience and relate directly to the objectives of the communication plan; for example, informing visitors of available paths, promoting responsible path use, or resolving inter-user conflicts.

Guidance on identifying and assessing user markets and promoting awareness of paths and consideration for others is available in the advisory documents on:

- Promoting Paths for People: A marketing guide and toolkit
- Management for People
- Communication, not conflict: using communication to encourage considerate shared recreational use of the outdoors.

2.3 Getting your Message Across

Some of the principal means of communicating awareness and responsible access messages are outlined below.

a. person-to-person communications

Often the best way to deliver information and advice to path users is on a person-to-person basis, by, for example:

- ranger patrols – such as local authority rangers, Forestry Commission Scotland's 7 Stanes mountain bike rangers and Sustrans' voluntary rangers
- visitor centre or tourist information centre staff
- accommodation providers and staff at cycle hire shops, riding stables and outdoor equipment shops − who may be the principal point of contact for visiting and less experienced users of the outdoors
- user groups – which can provide training, advice and events for novice and other users and apply peer pressure to influence those who may be behaving irresponsibly or without courtesy, often through not appreciating the consequences of their actions.

Information packs, awareness events and other materials (e.g. path leaflets) can enable these contacts to raise users' awareness of path networks and their responsible use and alert visitors to safety or other issues.

Where staff or volunteers may make direct contact with path users, they should:

- wear identification (e.g. 'Ranger' label, name badge)
- be briefed on the Access Code, path networks, visitor services, aspects of interest (e.g. wildlife, history), access issues and how to avoid confrontation
- report criminal or anti-social behaviour to the Police, but not get directly involved.

b. publications, newsprint and magazines

Publications are a principal means of raising awareness of paths and associated facilities and attractions, encouraging active travel and promoting responsible access. Some publications focus primarily on promoting the Access Code or activity- or location-specific codes, such as:

- British Horse Society Scotland's and SRPBA's wallet card promoting 'Equestrian Access: Riding, Carriage Driving and Managing Land Responsibly'
- leaflets on Enjoying Scotland's Outdoors, Off-Road Cycling: good practice advice and Horse Riding in the Pentland Hills Regional Park

others incorporate such messages in publications with wider content, for example:

- paths maps and guides – such as the 'South of Scotland Countryside Trails' map booklet and Spokes' cycle maps
- booklets interpreting the natural and cultural heritage
- visitor brochures and guides – for example, Forestry Commission Scotland's forest park guides and VisitScotland's activity holiday brochures.

News releases and articles on paths and path-related events and campaigns may be of interest to editors and contributors to TV and radio programmes, national and local press, local authority, community and club newsletters, and outdoors magazines. Path managers should develop media contacts and can encourage interest through press briefings, media visits, campaign launches and celebrity events.

c. the Internet and social media

The Internet, social media and text messaging are increasingly the main sources of communications and information for many people. These can be used imaginatively to promote awareness and dialogue on paths and encourage their responsible use.

Path management organisations' and user groups' websites can include:

- information on paths – such as location, attractions, gradients and visitor services
- promotion of the Access Code and path etiquette
- news, events programmes, blogs, discussion forum and photo gallery
- ways of supporting paths and path management (e.g. Friends groups, donations)
- contacts for further information and to report path problems.

The Phototrails and Walking on Wheels Trust websites provide valuable information on selected paths for people with a disability (section 5, Case Study D) and the Peak District Interpretive Partnership uses its Peak Experience website imaginatively to promote interest in the Peak District's paths and heritage and to communicate with the public and build a community of interest (Case Study E).

Social media (e.g. Twitter, Facebook, Flickr, YouTube) provide dynamic means of building communities of interest, sharing information, experiences and opinions, and promoting dialogue, within these communities and amongst wider audiences. Due to the extent of the available media, path managers and others will require to be selective and ensure that all content is clear, concise, accurate and topical. While social media provide low cost means of communication, they require:

- a planned approach − including identification of target audiences and priority messages
- on-going commitment of staff or volunteers − to maintain sites, provide news and blogs, respond to enquiries, maintain forums, etc..

d. events, projects and campaigns

These may comprise:

- schools' projects and competitions – for example, schools' projects associated with Greenlink in North Lanarkshire (Case Study A)
- exhibitions and displays at shopping centres, festivals and outdoor events
- awareness-raising events for dog and horse owners – for example, North Ayrshire Council's Paws for Thought and From the Horse's Mouth campaigns (Case Study B)
- campaigns to promote path etiquette – such as Bike Polite campaigns (Case Study C)
- rangers' talks and guided walks or cycle rides
- activity sharing events – for example, horse riders, cyclists and wheelchair users swapping modes of travel to experience paths from each others' perspectives.

Events and campaigns maybe supported by posters, leaflets and media publicity, training materials (e.g. schools' worksheets), benefits for participants (e.g. free maps, bicycle clinic), competitions(e.g. dog agility competitions) and demonstrations (e.g. mountain bike displays).

2.4 Codes and path etiquette

The Scottish Outdoor Access Code provides detailed guidance on the access rights and responsibilities introduced by the Land Reform (Scotland) Act 2003. The Code is underpinned by three core principles; that the public and land managers should:

- respect the interests of other people
- care for the environment
- take responsibilities for their own actions.

Advice in the Code refers to a variety of activities and situations, including many of direct relevance to shared use paths.

Various other activity- and location-specific codes have been developed to advise how access can be enjoyed responsibly, safely and with respect for others and for land management requirements. Activity codes include:

- Are you riding responsibly? The Scottish Outdoor Access Code
- Getting the best from shared use paths: A guide for cyclists and horse riders
- Dog Owners: What the Scottish Outdoor Access Code means for dog owners.

While such codes provide valuable advice, some are lengthy and only apply to specific users or activities.

The consultation process that guided the preparation of this advice resulted in consensus that a simple and concise 'Etiquette for Shared Use Paths' is required and general agreement on key 'messages', which may comprise the Etiquette (Box 3). It is recommended that the suggested Etiquette should be adopted by all path managers and promoted in paths leaflets, mapboards, websites and other media, so that it becomes widely known by paths users.

Box 3. Etiquette for Shared Use Paths

Enjoy Scotland's outdoors. Walkers, cyclists, horse riders, other non-motorised users, and people with disabilities using a wheelchair or motorised vehicle built or adapted for their use, have a legal right of access on most paths and other land, provided they act responsibly. The Scottish Outdoor Access Code explains your access rights and responsibilities.

Please …

- Expect to meet others – including cyclists, horse riders and people with disabilities.
- Be considerate and courteous to other path users.
- Keep to the left and let other users pass safely.
- Cyclists and riders should give way to walkers and other path users. If passing, warn of your approach with a friendly call or two rings of your bell, slow down and leave space.
- Avoid using paths, verges or soft ground, if you may cause erosion.
- Avoid disturbing wildlife or disrupting farming or forestry operation. Follow land managers' advice.
- Keep dogs under close control and out of the way of other path users.
- Remove litter and dog dirt and avoid horses fouling the path.

Motorcycles and motor vehicles are not allowed on the path. Let path managers know of any issues you encounter.

Note: Information boards and publications should provide contact information for path managers.

In addition to promoting a path Etiquette through publications and other media, it may be publicised through:

- point of sale tags – for example, Mountain Biking Northern Ireland, the Countryside Access and Activities Network and their partners produced 'Rules of the trail' handlebar tags to be attached to mountain bikes for sale or for hire
- wrist/ankle bands and horse's and dog's collar tags – as given out during North Ayrshire Council's and Spokes' responsible access campaigns (section 5, Case Study B; Case Study C)
- distribution of poop scoops and dog dirt bags.

Commercial sponsorship may support the production and distribution of such items.

2.5 Connecting people and paths

Active engagement of communities, users and other stakeholders in paths programmes can:

- raise awareness of paths and enthusiasm for using these
- engender pride in, and care for, paths and the wider environment
- provide insights into current and potential path users, including their needs, aspirations and use of paths
- increase understanding of any concerns regarding the use of paths by different users and agree measures to reconcile these
- harness local ideas, skills and energy for paths planning and maintenance.

Figure 4. Stakeholders in shared use paths (examples)

- local residents and community groups
- walkers and walking clubs
- cyclists and cycling clubs
- riders and riding and carriage driving clubs
- people with disabilities and their organisations
- schools and youth groups
- conservation and heritage groups/organisations
- volunteers (e.g. voluntary rangers, walk leaders)
- land owners and managers
- local authorities (e.g. members, staff)
- countryside/greenspace trusts, etc.
- Government departments
- national agencies
- health promotion organisations
- tourism groups and organisations
- businesses (e.g. cycle shops, stables)

Ways in which path managers and others may involve people in paths programmes are outlined below. More detailed advice on community engagement is available in:

- the Scottish Government's Community Engagement: How To Guide
- Involve's advice at www.peopleandparticipation.net
- SNH's Management for People manual.

Consultations and surveys

Consultations and surveys can elicit information on, for example:

- path user markets and the use of path networks
- opportunities for extending or enhancing paths, signing and ancillary facilities
- issues concerning the use or condition of paths
- potential participation in path-related activities – such as health walks or pathworks.

Consultations may involve public meetings, workshops and focus groups and consultations and surveys may be undertaken on-line, or by postal, 'phone or face-to-face interviews, and may target households, path users, or the wider public at community centres, schools or workplaces. Care should be taken to reach non-users of paths and under-represented groups (e.g. elderly people, ethnic groups, people with disabilities).

The previous references provide more detailed advice on consultation programmes and SNH's Visitor Monitoring Manual provides guidance on visitor surveys.

User groups, forums and partnerships

Path user groups, local access forums and partnerships can:

- promote dialogue within, and between, interest groups and foster mutual understanding of management issues and commitment to resolve these
- encourage groups to exert peer pressure on path users to act responsibly
- harness the expertise and resources of groups to support path and visitor management and enable managers to share or devolve responsibilities for paths
- demonstrate to communities, potential funders and other supporters a commitment to more inclusive approaches to paths decision-making and management.

High profile members of such groups (e.g. sports or media personalities) can act as 'champions' for path programmes; for example, to encourage use by under-represented groups, or promote courtesy between users.

Involving volunteers in paths and visitor management

In addition to voluntary organisations with landowning, recreational and environmental interests, many groups and individuals provide vital support for paths programmes; for example, through developing, signing and maintaining paths, fund-raising, or providing ranger services. Also, volunteers promote and lead activities, such as health walks, school buses and guided cycle rides, and provide cycling proficiency, pathwork and other training.

While volunteering supports paths and their use, it can benefit volunteers by providing –

- social contacts, sociability and enjoyment
- satisfaction of 'putting something back in' to the environment and activities they enjoy
- skills training, personal development and confidence building
- healthy exercise, fitness, and physical and mental health benefits.

The good practice examples in section 5 illustrate voluntary involvement in shared use paths. Other notable examples, include:

- Glentress Trailfairies – a mountain bikers' group, which undertakes trail building and maintenance and is led by Forestry Commission Scotland's Mountain Bike Ranger at Glentress in the Scottish Borders
- Friends of the Pentlands – an independent voluntary organisation, which acts as catalyst for the conservation and enhancement of the Pentland Hills, including through promoting the Access Code, undertaking paths improvement, signing and maintenance projects and a guided walks programme
- Helensburgh & District Access Trust – a partnership of the community councils, local and national park authorities, landowners, farmers, tourism, walking and riding interests, which has signed local path networks, is developing and promoting the Three Lochs Way longer distance trail, and has raised £140,000 for access work
- Dava Way Association – a voluntary group which has raised funds and created, maintains, promotes and runs events on the Dava Way, a 38 km shared use path linking Forres and Grantown-upon-Spey.

2.6 Requirements for successful liaison and involvement programmes

Successful liaison and involvement programmes in respect of shared use paths require:

- a planned and targeted programme
- realism amongst all involved as to what can be achieved
- a lead organisation(s) to take the initiative and commit adequate staff time, funds and other resources to make programmes work
- commitment by organisations with path responsibilities to break down 'them-and-us' attitudes, which may prevent dialogue and partnership working
- desires to reach out to, and involve, under-represented groups and interests
- responsive approaches − whereby key parties are prepared to consider and embrace change in users' attitudes and behaviour, or how paths are managed or promoted
- support for those involved − for example, training to develop personal and group skills in communications, management decision-making, or pathworks.

3. Getting Paths Right!

3.1 Effective planning and development of path networks

Good path infrastructure is critical to sustaining appropriate levels of shared use on path networks and enabling users to travel on and enjoy paths safely and in harmony with others.

This section focuses on achieving high quality, sustainable path networks. The information and guidance covers a wide range of path situations and some will be of more relevance to larger-scale projects to develop or up-grade paths and path networks. Consequently, readers are invited to focus on the underlying principles and criteria outlined in this section and adapt the more detailed advice to suit local circumstances.

Underpinning this advice are quality and sustainability criteria for the development, improvement and management of paths and path networks, as outlined below.

Box 4. Criteria for high quality and sustainable paths and path networks

These criteria provide an aspirational 'menu' of key qualities, which may be aimed for when developing or up-grading paths and path networks for shared use and to ensure these have strong user appeal. Some criteria are less relevant to paths with low levels of use, or in remoter areas. Practical and financial constraints may not enable all the criteria to be met in the short-term, but they offer sound longer-term aims for path managers.

a. Fit for purpose and sustainability

- path surfaces and facilities should meet users' needs and levels of use
- paths should satisfy, and preferably exceed, minimum design standards (e.g. widths, surfaces, gradients) for expected types of use
- paths should be well-drained and free of surface defects, over-growing vegetation, litter, etc.
- maintenance should be considered from the outset, to minimise future needs and costs
- the condition of paths should be monitored, reported on, and issues resolved speedily; volunteers may assist path monitoring and maintenance
- arrangements should be in place to enable users to report problems and to ensure an effective response.

b. Safety

- paths should enable safe off-road travel and seek to avoid road or rail crossings
- personal safety should be addressed and potential hazards eliminated or reduced
- paths should avoid and/or users be alerted to potential natural hazards or hazards associated with land use activities (e.g. quarrying, timber extraction)
- path users' consideration for the safety and comfort of others should be promoted.

c. Accessibility

- path networks should include all-abilities paths, with seats, passing places, etc.
- a least restrictive approach should be adopted for the design, construction, ancillary facilities (e.g. toilets, car parks) and information for all paths
- features should be avoided which may pose a hazard to visually impaired users (e.g. bollards, barriers) or restrict access by infirm, disabled or other users (e.g. stiles, gradients)
- information should be accessible to users with a disability, including those with a sight impairment.

d. Continuity, connections and convenience

- paths should be continuous and avoid unnecessary deviations
- paths should provide access to, and link, settlements, attractions and public transport, where appropriate
- coherent national and local path networks should enable onward journeys and circular trips of varying lengths
- cyclists, wheelchair users and others should be able to maintain momentum, with easy gradients, places to pass and avoidance of frequent stops at gates, road crossings, etc.
- basic amenities should be provided on more popular routes (e.g. car parks, seats)

e. Variety and attractiveness

- path networks should provide variety, including varying degrees of accessibility and challenge (e.g. short, accessible circuits; challenging longer paths) and varied scenery
- paths should be attractive and their scale and construction should be sensitive to the landscape setting
- opportunities should be taken to enhance, and encourage appreciation of, the landscape, wildlife and cultural values associated with paths.

f. Farming and land management requirements

- paths planning, design and management should take account of reasonable requirements and concerns of farmers and land managers
- alternative routes should be provided to avoid sensitive areas or hazardous operations, including farmyards and timber handling areas
- paths should avoid fields used for tupping, rearing lambs, calves and game birds, or similar uses; otherwise, users − especially dog owners, should be warned of potential hazards and their responsibilities.

g. Information

- pre-visit and on-site information should indicate key characteristics of paths (e.g. distances, destinations, gradients) − enabling users to make decisions based on their capabilities
- information should include details of public transport, attractions and visitor services
- all information should promote safety, responsible access and 'leave no trace'
- signing and waymarking can guide visitors, reassure less experienced users and assist wildlife and land management by encouraging users to keep to managed paths.

3.2 The paths planning, development and management process

Developing or substantially up-grading a path or a path network to sustain shared use may require substantial investment, unless an existing path is available or the project is small in scale. The paths planning, development and management process shown in Figure 5 illustrates the principal stages and key tasks which may be involved − from an initial decision to assess the feasibility of the paths project, through to its on-going management. Consultations and engagement with communities, user groups, land managers and other stakeholders, including implementation partners, will be vital throughout the process.

Application of this process should be proportionate to the scale of the paths project and predicted levels of use and will be of most relevant to projects involving the development or major up-grading of strategic paths or paths networks.

More detailed advice on paths planning and development is available in:

- Core Paths Plans: A guide to good practice
- Lowland Paths - Planning, Design, Construction and Maintenance
- other advisory documents listed in section 6.

Figure 5. Illustrative paths planning, development and management process

Consultations, Engagement and Communications (see section 2)

a. on-going consultations, engagement and path awareness building with –

- communities, user groups, schools, etc.
- landowners and managers
- local access forum, access officer, etc.
- tourism and other businesses
- potential path partners and funders
- planning authority and other regulators

b. promoting responsible access and sharing of paths through–

- promoting codes and path etiquette on websites, social media, leaflets and local, national and specialist media
- promoting codes and etiquette at path access points, etc.
- talks and events for communities and user groups
- awareness/training days for dog owners, horse riders, etc.
- opportunities to experience other users' activities
- projects in schools, youth groups, etc.
- ranger patrols and liaison with users on paths

c. path information and marketing, including –

- information and marketing planning, design and review
- path information on access, tourism and other websites
- path publicity in local and national and specialist media
- maps and leaflets distributed through libraries, TICs, B&Bs, etc.
- path mapboards in town/village centres, stations and car parks

1. Initial Feasibility Assessments

- initiation of path proposal
- assess strategic context (e.g. policy 'fit', core path network)
- assess current/potential user markets (residents & visitors)
- assess resources (e.g. current paths, attractions, services)
- identify landownerships, environmental constraints, etc.
- identify potential funding sources and path partners
- identify longer-term maintenance arrangements (+/- exit strategy)
- develop concept proposal
- agreement to proceed

2. Design and Implementation

- assess options and negotiate preferred route
- design path and facilities for long-term sustainability
- regulatory and environmental assessments and approvals
- assess costs and gain budgetary approvals
- prepare implementation programme
- prepare tenders and award/manage contracts
- construct path and associated facilities

3. Monitoring and Management

- undertake and review risk assessments
- monitor path condition and respond to issues
- monitor use and user satisfaction and respond to issues
- programme and implement maintenance requirements

The following guidance does not repeat the advice in the documents referred to above, but 'signposts' references and highlights key considerations, which should be taken into account in the design, construction and management of shared use paths.

3.3 Factors influencing decisions on paths development or up-grading

Variety is a vital quality of Scotland's path networks and the opportunities these provide for active travel, recreation and tourism. As discussed in section 1, paths range from:

- high quality, intensively used urban cycle paths, parkland paths and promenades; to
- coastal, mountain, farm and forest tracks and grass trods – often with low levels of use and in remoter and more natural landscapes.

It is essential, therefore, that:

- the essential diversity of path networks is retained in future path programmes
- it is recognised that standard approaches to providing shared use paths (e.g. standard surfaces, widths and signage) would be undesirable, inappropriate and impractical.

Opportunities exist across path networks:

- to ensure a diversity of path types and characteristics
- to enable the range of access rights provided by the Land Reform legislation to be exercised
- to meet the obligations of the Equality legislation,

without requiring that all paths be developed or improved to full shared use and all-abilities standards.

Figure 6 shows some of the principal factors and considerations, which may influence decisions on whether individual paths are developed or up-graded to shared use standards. This Figure and the potential 'scoring' system are illustrative and may be adapted to local circumstances.

3.4 Path design

The context for each path project will be unique and path design and specifications will require to take account of specific factors, such as current and predicted levels and types of path use, other path uses (e.g. farm vehicles, livestock movements), landscape settings, ground conditions, climatic conditions (e.g. rainfall levels) and the resources (e.g. funding, labour) available for path construction and longer-term maintenance.

Key elements of successful shared use path design and construction can be summarised as:

a. **landscape 'fit'** – the path should be unobtrusive in its landscape setting
b. **sustainable and fit for purpose surfaces** – taking account of levels and types of path uses. In general, paths should provide a relatively smooth, firm and dry surface
c. **adequate widths**– to cater for a range of users and enable them to travel and pass in safety and comfort
d. **least restrictive access** – an obstruction-free path, catering for people of a wide range of ages and capabilities, insofar as practical and appropriate (section 3.12)
e. **effective drainage** – to prevent surface damage, waterlogging and lateral spread resulting from users avoiding wet or muddy sections of path
f. **appropriate signage and information** – to facilitate awareness of the path and encourage its safe and responsible use

Figure 6. Factors which may influence path development or up-grading for shared use

Key Factors	Considerations	Illustrative 'scoring' of potential for path development/up-grading
User demand:	Extent of current use of path by communities, visitors, etc.?	low: 0 1 2 3 4 5 :high n/a
	Level of demand for path development/improvements?	low: 0 1 2 3 4 5 :high n/a
	Potential to extend levels/types of activities path caters for (e.g. cycling, riding)?	low: 0 1 2 3 4 5 :high n/a
Accessibility:	Potential to meet accessibility standards, or provide least restrictive access?	low: 0 1 2 3 4 5 :high n/a
	Availability of alternative accessible paths in vicinity, providing similar opportunities?	high: 0 1 2 3 4 5 :low n/a
Safety:	Potential of path improvements to enhance safety of users?	low: 0 1 2 3 4 5 :high n/a
	Potential risks to users' safety from up-grading path or increasing levels/types of use (e.g. cliff edge or canal paths)?	high: 0 1 2 3 4 5 :low n/a
Path Networks:	Potential to enhance current/provide new core path?	low: 0 1 2 3 4 5 :high n/a
	Potential to enhance current/provide new strategic path (e.g. NCN/long distance route)?	low: 0 1 2 3 4 5 :high n/a
Active Travel:	Demand or scope to increase walking or cycling to work or school?	low: 0 1 2 3 4 5 :high n/a
	Potential to develop path as a Safe Route to School, Connect2 or similar route?	low: 0 1 2 3 4 5 :high n/a
Recreation/Tourism:	Extent of day visitor or tourism use of path?	low: 0 1 2 3 4 5 :high n/a
	Potential to increase day visitors' and tourists' use of path?	low: 0 1 2 3 4 5 :high n/a
Development Schemes:	Potential contribution to a residential, regeneration or other development scheme?	low: 0 1 2 3 4 5 :high n/a
	Potential for developer contribution(s) towards pathworks?	low: 0 1 2 3 4 5 :high n/a
Land Ownership/ Management:	Potential availability of land for path development/improvements?	low: 0 1 2 3 4 5 :high n/a
	Current/potential impacts on farming, forestry or other land use activities?	high: 0 1 2 3 4 5 :low n/a
Natural & Cultural Heritage:	Potential impacts on landscape and/or 'wild country' character?	high: 0 1 2 3 4 5 :low n/a
	Potential impacts on wildlife species or habitats?	high: 0 1 2 3 4 5 :low n/a
	Potential impacts on cultural heritage (e.g. historic sites)?	high: 0 1 2 3 4 5 :low n/a
	Potential of path to 'showcase' natural/cultural heritage?	low: 0 1 2 3 4 5 :high n/a
Financial/Other Resources:	Current/potential availability of funding for path development or improvements?	low: 0 1 2 3 4 5 :high n/a
	Current/potential availability of funding for longer-term maintenance?	low: 0 1 2 3 4 5 :high n/a
	Availability of staff or volunteers to implement schemes and manage path?	low: 0 1 2 3 4 5 :high n/a
Benefit Assessment:	Value for money assessment of path development/improvements?	low: 0 1 2 3 4 5 :high n/a
	Social return on investment (SROI) assessment of path development/improvements?	low: 0 1 2 3 4 5 :high n/a

Note: Factors are not listed in any particular priority order. Scoring should be used to illustrate potential, not as a strict quantitative assessment of potential..

g. **quality construction** – skilled and experienced path builders, working to good specifications and supervision, and in appropriate conditions (e.g. warm conditions for the cold laying of road planings). Advice on the selection of contractors is provided in SNH's Upland Path Management manual

h. **effective maintenance** – to maintain the path structure and amenities, avoid hazards and discomfort, and safeguard investment. Initial path design and capital investment in construction or improvements should seek to minimise future maintenance burdens.

3.5 Path dimensions

Path widths may be constrained by topography, landscape features (e.g. rivers, tree belts), or road and rail corridors, buildings, walls, fences or other structures. Similarly, the vertical clearance of the path 'tunnel' may be restricted by over-bridges, under-passes and overhanging signs, branches or other obstacles.

Various statutory and advisory guidance recommends minimum dimensions for cycle paths, equestrian routes and all-abilities paths. The minimum widths should not be used as design targets, as, for example, cyclists will require additional path widths to maintain balance on steep upward slopes and to allow for increased speed and minimise potential conflicts with other users on downward slopes.

Figure 7 collates many of the recommended dimensions for the principal features of shared use paths and should meet the requirements of most path users. The dimensions shown represent those required by the categories of users with the greatest requirements (e.g. horse riders, mobility scooter users), although carriage drivers may require path dimensions in excess of those identified. Many of these dimensions exceed those recommended in the Fieldfare Trust's Countryside for All Good Practice Guide, as horse riders, cyclists and other users may require dimensions (e.g. vertical and horizontal clearances) in excess of those required by people with a disability.

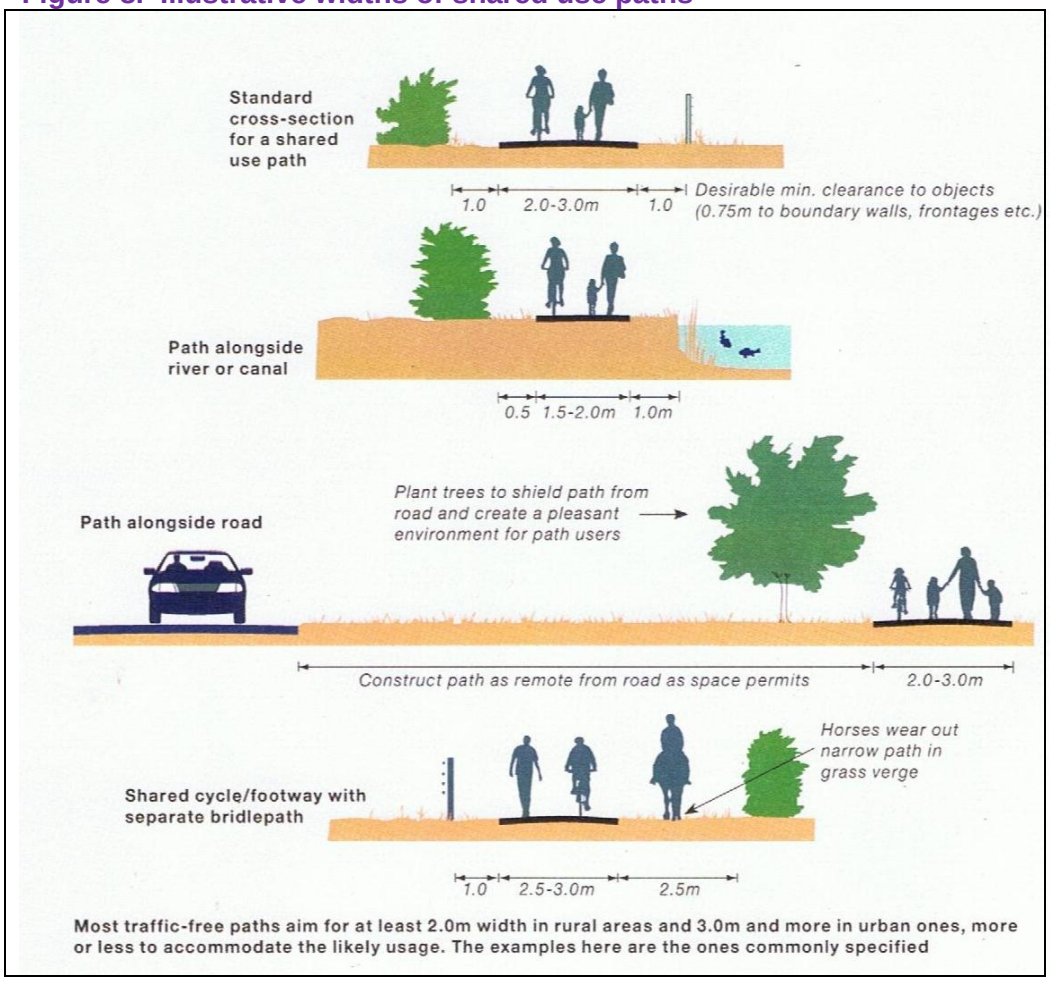
Figure 7. Recommended dimensions for shared use paths

Path Features	Recommended Dimensions
path corridor widths: all paths strategic paths	recommended: 5m (3m path; 1m verges) recommended: 10m
surface widths: urban/strategic paths rural/other paths short restricted sections	minimum: 3m minimum: 2m minimum: 1.5m (+ passing places <50m apart in urban areas/formal landscapes; <100 m in urban fringe/ managed landscapes; <150m in open/semi-wild/wild country)
gradients	maximum: 1:12 (1:10 in open/semi-wild/wild country)
crossfall (for drainage)	1% to 2.5%
horizontal clearances (path to boundary features)	minimum: 0.75m (between path and wall, fence, etc.) minimum: 1m (between path and hedge/soft feature) minimum: 1m (between path and river or canal)
vertical clearances (e.g. path to tree branch, sign or bridge)	preferred: 3.7m (path used by horses) minimum: 3m (path used by horses) preferred: 2.7m (cyclepath; no horses) minimum: 2.4m (cyclepath; no horses)

Sources: dimensions collated from guidance by Fieldfare Trust, Sustrans, SEStran, BHS, etc..

Figure 8 is taken from Sustrans' Connect2 and Greenways Design Guide and illustrates minimum widths for shared use paths in several different contexts.

Figure 8. Illustrative widths of shared use paths



Where the recommended minimum dimensions cannot be met on a path, advance information should be made available users to make their own decisions as to whether the path is suitable for their use.

3.6 Path surfaces

Figure 9 illustrates the more common types of path surfaces and demonstrates the difficulties in providing a surface that will suit all types of users. In particular, leisure cyclists and people in wheelchairs or on mobility scooters will often desire a surface which is relatively smooth, has low rolling resistance and easy gradients, while horse riders and longer distance walkers prefer 'softer' surfaces to provide comfort and avoid stress injuries. Some materials can be uncomfortable, unsustainable or potentially hazardous; for example, wood bark/chips require frequent replenishment and sharp stones may damage horses' hooves.

Locally available aggregates and similar materials will often provide the best landscape 'fit'. 'Harder' bitmac or rolled asphalt surfaces are more suited to strategic cycle routes and paths in, or between, urban areas, with higher levels of use, including walkers and cyclists travelling to work or school; whereas, more natural surfaces (e.g. whindust, firm grass) will be more appropriate in rural locations and semi-/urban greenspaces with low to medium levels of use. A range of recycled materials are available (e.g. road planings, tyre rubber), which may be used independently, or mixed with aggregates or a tar-based binder.

Figure 9. Path surfaces and their suitability for different users

Surface treatments	Types of users for which surface type is -	
	more suitable	**less suitable/unsuitable**
sealed surface (e.g. asphalt, bitmac, foamed bitumen combined with road planings)	▪ cyclists (all) ▪ disabled users ▪ short/medium distance walkers ▪ roller bladers, etc.	▪ horse riders (esp. stone mastic asphalt) ▪ longer distance walkers ▪ dogsports
unbound surface [1] (e.g. whindust or granite dust, with aggregate base; well drained, not rutted)	▪ walkers ▪ cyclists ▪ disabled users ▪ horse riders	▪ roller bladers, etc.
compacted stone/earth (e.g. farm track - well drained, not potholed; soil reversal machine built path)	▪ walkers ▪ off-road cyclists ▪ horse riders	▪ disabled users (esp. infirm people and wheelchair users)
grass/vegetation/sand on reinforced base (e.g. railway ballast, gravel or geotextile base)	▪ walkers ▪ horse riders ▪ off-road cyclists	▪ disabled users (esp. infirm people and wheelchair users)
grass/vegetation on firm, natural base with good drainage	▪ walkers ▪ horse riders ▪ mountain bikers	▪ disabled users ▪ cyclists (except mountain bikers)
larger stones (e.g. forest roads with type 1 stone surface)	unsuitable top surfacing material for all non-motorised users (uncomfortable for all users; difficult to travel on and potentially hazardous for cyclists, horses and disabled users)	

Notes: [1]assumes surfaces are well maintained and dry.

Due to variations in the needs of different users, decisions on surfacing materials may require an element of compromise, with the choice of materials being based on the principal purposes of the path (e.g. commuting or recreation), likely levels and types of use, and landscape context. Longer distance paths may comprise a variety of surfaces over their length.

Surface treatments are discussed in:

- Lowland Paths - Planning, Design, Construction and Maintenance
- Paths for All's report on Quarried and Recycled Materials for Path Construction.

Often, existing paths and tracks may only require minor improvements to support moderate levels of shared use and this may be achieved inexpensively by:

- improving drainage
- removing mud and loose stones and top-dressing the path – for example, with a type 1 stone sub-surface and compacted whindust top-surface; or, where there is already a firm base, with whindust or a mix of soil, gravel and grass seed.

Where new paths are being constructed or paths significantly up-graded, the choice, depth and combination of base materials will be important and will largely depend on site conditions (e.g. soils, water table), types and levels of use, and potential loading (e.g. horses). Again, more detailed advice is available in the Lowland Paths guide.

Sites which are environmentally sensitive (e.g. heritage sites) or have difficult ground conditions may require particular design solutions (e.g. traditional materials on canal towpaths, 'floating' paths in boggy areas). In more remote areas, machine-built paths using soil reversal techniques (i.e. laying glacial till/sand and gravel excavated from a new lateral drainage ditch on a platform of vegetation stripped from the ditch) have proved successful and saved costs of transporting materials from a distant source.

3.7 Drainage

Good drainage is a key requirement for a sustainable path. This may be achieved through:

- lateral ditches – alongside the path, or on very wet ground (e.g. peat moorland) at some distance from the path, to prevent water flowing onto, or undermining, the path
- cross-drains/culverts – to prevent water flowing along the path and enable drainage from the high side of a path on a slope to the lower side. Water bars should be located across the line of travel and covered to enable passage by wheeled users
- cambers or cross-falls – to prevent standing or flowing water on the path surface.

The integrated design of slopes, bends and level sections of paths, along with crossfalls, can assist the run-off of surface water and prevent water flowing along the path at potentially damaging levels or speeds.

3.8 Segregated path surfaces

Segregated paths comprise paths where different combinations of uses may be separated physically, or by some form of signage, for example:

- formal paths (e.g. cycle tracks) − where cycling and pedestrian 'lanes' may be differentiated by a white line, or a variation in level or surfacing material or colour
- informal paths or roads (e.g. farm or forest roads) − where a grass verge or centre line may cater for horse riders and some walkers, and a harder surface may be available for use by cyclists, other wheeled users (e.g. mobile scooter users) and walkers seeking a firm surface
- 'parallel' paths – paths running along a similar alignment in the vicinity of, or at a distance from, each other, such as a forest road with separate grass horse path.

Separate paths can enhance the safety and comfort of more vulnerable path users, but the development and management of such paths may prove more costly than shared use paths. Also, groups representing blind and partially-sighted users have expressed concerns (e.g. during development of the National Cycle Network) regarding potential hazards to such users, where pedestrian and cycle lanes are differentiated by a flat white line, rather than a tactile boundary.

3.9 Path verges and landscaping

Grass verges alongside paths can provide 'spreading room' to enable users to pass, or rest and enjoy the scenery and wildlife. Also, verges and their vegetation can contribute to the green infrastructure of an area and the scenic and biodiversity values of path corridors may be enhanced by planting trees and wildflowers.

Planting near a path should be under 0.8 metres in height, to avoid it impeding sightlines. Any higher planting should be set back from the path. Where personal security is a potential concern, planting and other landscaping should not restrict visibility or surveillance from surrounding properties or create potential hiding places (section 3.14).

Unless the verge is intended for, and can sustain use by, horses, seats, signs and other infrastructure (e.g. lampposts) should be located within the verge, not on the path, where these may create an obstacle – especially for people with a disability or sight impairment.

Verges should not be higher than the surface of the path to allow drainage and those at a slightly lower level can help to prevent the build-up of organic material and vegetation along the path edge, which may reduce its usable width. Maintenance should minimise vegetation incursion into, and over, the path surface and at higher levels (e.g. overhanging branches), where it may pose a hazard to cyclists and riders.

3.10 Gaps, gates and access controls

Ideally, paths should be barrier-free and enable unrestricted passage by all legitimate users. However, livestock management, or access by unauthorised motorcycles or vehicles, may lead to requirements for a gate or other access control. In such cases, the Equality Act must be borne in mind, as unreasonable restrictions on access by people with a disability may be unlawful (section 3.12). This poses difficulties, as any barrier which is effective in restricting motorcycles or vehicles, including step-over horse stiles, may impede access by families with prams, cyclists on recumbent bikes, tandems, etc., carriage drivers, and users of wheelchairs or other mobility devices.

British Standard 5709:2006 - Gaps, gates and stiles recognises that no single type of structure is satisfactory in all situations and suggests that, if some restriction is necessary, then, following the principle of least restrictive access, the order of preference should be:

- a gap (e.g. gap in a wall, or between bollards) – with a minimum width of 1200 mm and preferred maximum width of 1525 mm, to enable access by walkers, cyclists and riders, while restricting vehicles. Such a gap will not prevent motorcycle access
- a gate – where a gap is inappropriate, or impractical. Gates should be easy to operate by all legitimate users
- a kissing gate – where an ordinary gate is unsuitable.

Where stock control is required, cattle grids with a width of at least 1.2 metres may be used, but an alternative means of passage should be available for horses and other users.

Detailed advice on access structures and controls is available in:

- The Fieldfare Trust's Countryside for All Good Practice Guide (section on 'Least Restrictive Access Guidelines')
- Sustrans' advice on Access Controls
- SNH's design sheets for selected access structures.

Examples of good design are displayed at Paths for All's National Path Demonstration Sites.

Many path managers recognise that the control of unauthorised users of paths, such as motorcyclists, may be achieved more effectively through awareness-raising, education, peer-pressure and law enforcement, and the provision of alternative facilities (e.g. motorcycle scramble tracks). However, where new paths are being developed in potential trouble-spots, the initial installation of access controls along with effective law enforcement may provide a sufficient deterrent to unlawful use; thereby, enabling subsequent removal of these controls, as legitimate use of the path rises and self-policing develops. This approach has proved successful in various situations, including Durham County Council's 90 km railway path network. In North Lanarkshire, Strathclyde Police adopts a 'zero tolerance' approach to motorcycling on the Greenlink (section 5; Case Study A).

3.11 Speed controls

Means of reducing the speeds of cyclists, horse riders and others may be required, where it is not possible or desirable to widen a path or improve sightlines, and on approaches to 'pinch points', road crossings or other potential hazards. These may comprise rumble surfaces, humps or chicanes (i.e. staggered barriers), with or without warning signs (e.g. 'SLOW' marking on a tarmac cycle path).

Cycling by Design suggests that chicane layouts should provide gaps of at least 3 metres between barriers and walls to permit access by users of tandems, tricycles and cycles with child trailers. This minimum width will satisfy most disabled users.

3.12 Path provision and design for people with disabilities

One-in-five of the UK population is estimated as having a physical or mental impairment and more have temporary limitations (e.g. illness, injuries). It is important, therefore, that:

- wherever practical, paths are fully accessible, or provide least restrictive access
- path providers keep the accessibility of paths under review and work to improve accessibility throughout path networks
- information on paths and path networks is accessible.

Typical issues affecting the use and enjoyment of paths by people with a disability or impairment are shown below.

Figure 10. Accessibility issues for path users with disabilities

Disability/impairment	**Potential accessibility issues or concerns** (examples)
Mobility, balance, strength and stamina issues − users on foot, cycle, horse, wheelchairs or mobility scooters	▪ lack of accessible parking and access points ▪ difficulties in passing on narrow paths ▪ concerns over cyclists, horses and others coming too close ▪ problems due to gradients, ramps, steps, stiles, lying water, etc. ▪ difficulties with heavy, self-closing and difficult gates and latches ▪ problems with loose/irregular/uneven surfaces and open drains ▪ lack of resting places
Dexterity and reaching difficulties	▪ problems operating heavy, self-closing and difficult gates and latches ▪ difficulties in using stiles ▪ difficulties in holding or reaching hand rails (e.g. on bridges or ramps)
Visual impairments	▪ hazards from overhanging braches, signs, etc. ▪ hazards from barriers or obstacles (e.g. chicanes, bollards, posts) ▪ difficulties or fears of passing/being passed ▪ difficulties in using stiles, gates, etc. ▪ tripping hazards on irregular/uneven surfaces, open cross drains, etc. ▪ non-accessible signs and information
Hearing impairments	▪ inability/difficulties in hearing and concerns about cyclists and others approaching from the rear, especially at speed
Learning difficulties	▪ fear of other path users, especially cyclists at speed and horses ▪ difficulties in understanding some information

Section 3. Getting Paths Right!

Ensuring that paths and associated facilities are fully accessible, or providing the least restrictive access that is practical, will help path providers and managers to comply with the obligations of the Equality Act 2010. This Act has brought together the previous disability discrimination and equalities legislation and requires that service providers, such as path managers, ensure equalities of opportunity and avoid discrimination on account of people's social and economic circumstances (e.g. age, race, income) or disabilities.

Service providers are required to anticipate the needs of people with a disability, or other protected characteristic, and to make appropriate and reasonable adjustments to satisfy these. Key considerations as to whether an adjustment (e.g. path improvement) is 'reasonable' will depend on specific circumstances, including the effectiveness of the proposed action, practical factors such as topography, environmental and heritage considerations, costs and available resources. Where the highest accessibility standards cannot be achieved, the justification should be explicit and recorded.

SNH's design sheets for selected access structures (e.g. gates, stiles, ramps) outline the potential effects of different types of structure for people with various disabilities, provide design advice and pose questions to assist assessments as to whether installing a particular structures is justifiable or reasonable:

- Is the structure absolutely necessary (e.g. needed to control livestock)?
- Is it the least restrictive option?
- What is the likelihood that it will cause some restriction to users?
- What is the extent of any restriction created and what types of user will it affect?
- What effort or cost is needed to remove the restriction, or to enable people to avoid it?

The Fieldfare Trust Countryside for All Good Practice Guide provides extensive guidance on the planning, provision and design of paths and associated facilities, including guidelines for:

- networking with disability groups
- planning accessible countryside path networks
- accessibility surveys and access audits
- accessibility standards and least restrictive access
- path information and interpretation.

It should be noted, however, that the Countryside for All Accessibility Standards are minimum standards for paths for use by persons with a disability (e.g. recommended minimum path widths of 1.2 metres in urban/formal landscapes) and may not provide for shared use with cyclists and other non-pedestrian users. Figure 11 is based on several of the recommended dimensions outlined in Sustrans' Information Sheet: Making the National Cycle Network more accessible, which is more directly applicable to shared use paths.

Figure 11. Suggested accessibility standards for shared use paths

Design feature	Recommendations
Path surface	hard/firm surface, with few loose stones (none bigger than 5mm)
Surface width	2m minimum; 1.2m at isolated restrictions or obstructions
Camber/slope/ crossfall	1:35 maximum. Camber is preferable to crossfall on paths used by people in wheelchairs or mobility devices
Surface gaps (e.g. cross drains)	gap no wider than 12mm and at right angles to direction of travel, Preferably with stone cover or metal grid over ditch
Tunnel	clear tunnel, with any vegetation and obstacles at least 2.4m above path surface and 1.2m lateral distance (1.5m on longer/busier sections)
Barriers	path should be barrier free (no stiles, gates, etc.). Where chicanes or staggers are required for safety (e.g. before road crossings), barriers should be 1.2m high, contrast against surroundings (e.g. luminance), and have a minimum offset of 1.2m
Street furniture and signage	these should be set back at least 1.2m from the side of path and have rounded edges. Post colour should contrast with surroundings. Overhead structures should be at least 2.4m above ground. Bollards, bins, etc. should be at least 1m high, with rounded edges, not linked together and with contrasting bands (150mm deep) in addition to contrasting top.
Dropped kerbs/ crossings	maximum gradient of 1:12; minimum width of flush area 1.2m.
Ramps and landings	maximum ramp gradient of 1:12 (8.3%). Landings at least 1.2m wide and 1.5m long should be provided every 9m along 1:12 ramps and for every 750mm of height rise on ramps of 1:20 or more. Handrails should be provided on ramps of 1:20 or more. The addition of steps may assist some ambulant users. Exposed edges of ramps should be defined by a kerb or low rail.
Rest places	ideally every 100m, with minimum of 300m for a fully accessible path. Should have a seat/perch on level ground, set back from path in a manoeuvring area at least 1.2m wide and 1.5m long. Benches or seats should be 500-600mm high.
Passing/turning places	if path is under recommended width, then a manoeuvring area of at least 2m x 1.5m should be provided every 100m to enable wheelchairs to turn.

3.13 Creating quiet roads and converting footways for shared use

In many parts of Scotland, especially rural areas, roads may provide the principal or only opportunities for walking, cycling, riding or other travel between settlements and for leisure. The character, design and safety of roads and associated footways can be made modified to increase and enhance their use for recreation and active travel, by:

a. changing the character of, and priority uses on, roads and streets

Increasingly, recognition is being given to the potential for minor rural roads to accommodate walking, cycling and riding. Transport Scotland's Cycling by Design 2010 advocates that '… Rural roads with two-way traffic flows less than 1,000 vehicles per day should be used to form an integral part of the leisure or local access cycle network, including the National Cycle Network'. Also, such roads may form key sections of, or links in, core path networks.

Renfrewshire Council's Leisure Lanes pilot project (in abeyance) and Greenways and Quiet Lanes projects in England have adopted road and landscape design and safety measures to:

- make the allocation of road space between motorised and other users more equitable
- enhance the safety of vulnerable road users (e.g. walkers, cyclists, disabled people)

- change the 'mind-sets' of drivers' (i.e. to cut their speeds) and other users (i.e. to think of quiet roads as safe routes for travel)
- enhance the landscape character of the road corridor and reduce signage 'clutter'.

Means of implementing quiet roads schemes may include:

- advisory and mandatory speed limits
- traffic calming – including physical, perceptual or natural calming measures, such as narrowing roads, installing speed cushions, removing white lines and planting trees alongside the road
- erecting 'gateways' – to alert drivers and others that they are entering a special area
- changing traffic priorities – so that drivers have to give way to non-motorised users
- modifying signage – such as signing roads for 'local traffic only' and replacing direction signs with fingerposts
- leaflets explaining the intentions of quiet roads projects and promoting considerate use of these by drivers, cyclists and other users.

The Road Traffic Regulation Act 1984 provides for the making of a Traffic Regulation Order (TRO) to prohibit, restrict or regulate the use of all/part of a road – for example, to create a quiet road, restrict use to specified types of users (e.g. pedestrians, cyclists), or introduce or amend speed limits, traffic signs, etc.. TRO procedures are explained in Cycling by Design 2010.

The Scottish Government's Designing Streets policies focus on urban and residential areas, but include design principles of wider relevance. These show how street design can put the needs and safety of pedestrians and people with disabilities first and private vehicles last. This approach underpins the designation of home zones in residential areas, where road space is designed to be shared by drivers, walkers and cyclists, including people of all ages and abilities and children at play. The appearance and perceptions of streets may be changed by providing a uniform surface, removing kerbs and signs, modifying junctions, and introducing bends, 'pinch-points' and planters to reduce traffic speeds.

Living Streets Scotland's Creating Healthy Environments Toolkit provides tools for auditing and designing streets for 'walkability'.

b. converting footways or footpaths for shared use

Footways and footpaths, especially in rural areas, often have low levels of use and can offer safe links for a variety of users between communities and as part of core path networks. Concerns over potential hazards to walkers from cyclists' use of these paths often relate to issues of design and maintenance and the need to promote path etiquette, rather than justifying the need for less experienced and leisure cyclists to remain on roads, which may pose traffic or other hazards (e.g. potholed verges).

Other than where access rights apply to a footway or footpath, which has been adopted as a core path, the provisions of the Roads (Scotland) Act 1984 will require to be used to convert its status to a cycle track and enable shared use by walkers and cyclists. Alternatively, the provisions of the Town and Country Planning (Scotland) Act 1997 may be used to stop-up a road or footway and, thereafter, grant planning permission for a new cycle track, bridleway, or other shared use path.

3.14 Enhancing personal security and minimising anti-social activity

Concerns for personal security, whether real or perceived, can be a significant deterrent to path use, especially in areas with high levels of crime and anti-social behaviour and poor environmental quality. Such concerns may be highest amongst women and the elderly and infirm and may deter parents from allowing children to walk or cycle to school.

Perceptions of personal security can be enhanced and threats to path users minimised by:

- designing path corridors to facilitate natural surveillance – with good sightlines, visibility of the path from adjacent properties and roads, spacious path corridors and removal of possible hiding places. Potential of being seen will often deter crime and anti-social behaviour
- maintaining paths to a high standard – removing broken glass, fly-tipping, graffiti and other signs of anti-social or criminal activity and maintaining high quality path corridors can change people's perception of paths and their behaviour on them
- encouraging path use − to provide elements of informal surveillance and self-policing
- patrols by community police, rangers/voluntary rangers (e.g. Sustrans' rangers) on foot or bicycles, and signs advising path users to report suspicious or illegal activity.

Lighting will not usually be necessary, or appropriate, on off-road paths, but may be provided:

- on paths used for commuting or school trips
- at road junctions, tunnels or under-passes
- where there are issues of personal security or anti-social behaviour.

Where lighting is proposed, issues of light 'pollution', light 'spillage' onto adjacent properties, and effects on environmental quality and wildlife should be considered.

Advice on designing for personal security and safety is available in PAN77: designing safer places and the Secured by Design website.

4. Monitoring and Maintaining Shared Use Paths

4.1 Monitoring programmes

Monitoring will provide essential information for path managers, as outlined below. It should be undertaken at a scale proportionate to the characteristics of the path or path network and will comprise two distinct elements:

- user monitoring
- path condition monitoring.

a. user monitoring

Monitoring of path users will help path managers and others to:

- understand levels of path use and profiles of users – for example, their origins, activities, frequency of path use and socio-economic profile
- assess the effectiveness of, and users' satisfaction, with path infrastructure, amenities, signs and other information
- identify means of improving the path and user experience
- evaluate users' expenditures in the local and economy
- evaluate paths against objectives and performance measures and justify investment.

Path user monitoring will require:

- a planned approach, based on agreed objectives
- resources for surveys, analysis and reporting
- follow-up surveys at regular intervals to assess change.

It may comprise:

- interviews – such as face-to face interviews, household surveys, self-completion questionnaires, and post-visit face-to face or telephone interviews
- manual user counts and observational surveys
- automatic 'people counters' − activated by pressure pads, infra-red or radio beams, gate switches, or other devices.

Advice on people monitoring is provided in SNH's Visitor Monitoring Manual and Management for People manual and Paths for All's Monitoring Path Use factsheet.

b. path condition monitoring

Condition surveys should be undertaken at a scale proportionate to the characteristics of the path or path network and its use. These will be essential to:

- provide baseline information and regular assessments of the path surface and other infrastructure and to identify, prioritise and specify maintenance or other requirements
- identify safety hazards, barriers or obstructions, damage or deterioration of surfaces and furniture, and other issues which may deter use or detract from users' enjoyment
- comply with Health and Safety and Occupiers' Liability obligations.

Software is available to assist data capture during field surveys, including the logging of information and photographs on a GIS-based database (e.g. Countryside Access Management System software). Such information will be essential to the development of maintenance schedules and subsequent recording of work undertaken.

4.2 Maintaining shared use paths

Effective maintenance regimes are vital to:

- sustain the integrity of the path and ensure that it is fit for purpose and meets users' needs and aspirations
- ensure users' safety, fulfil statutory obligations and avoid liability claims
- safeguard the asset and past investment and minimise further deterioration and costs
- protect and enhance the environmental qualities of the paths – for example, by preventing soil erosion, habitat damage or landscape impacts.

Maintenance tasks will vary in frequency and extent depending on characteristics of the path (e.g. quiet road, NCN route, grass trod) and its use. These may include:

- repairing and maintaining path surfaces and infrastructure (e.g. bridges, signs).
- clearing drains and ensuring no waterlogging of path surfaces
- removing any litter, broken glass, fly-tipped debris or graffiti
- mowing verges and clearing encroaching or overhanging vegetation.

Maintenance should be a primary consideration from the outset of any path development or improvements programme. In particular:

- initial capital investments should provide robust and sustainable path infrastructure, which requires minimum longer-term maintenance, especially as funding for capital works is often more readily available than revenue funding for routine maintenance
- whole-life costs of paths, including future maintenance costs, should be assessed and funding commitments secured from the outset of path projects.

Central to any maintenance regime will be a well-defined maintenance strategy and programme, which:

- is based on a GIS-based data base of all elements of path infrastructure
- identifies monitoring and maintenance responsibilities, timing of condition surveys and priorities, frequency, location and types of maintenance works to be undertaken
- records maintenance activity, including time taken, materials used and costs
- enables users to report problems (e.g. path 'hotline') and ensures a speedy response
- identifies funding requirements and sources and monitors expenditures
- includes contingency provisions for emergency works.

Effective maintenance will:

- be undertaken regularly and routinely – rather than responding solely to complaints
- be pre-emptive – resolving problems before serious damage or deterioration occurs
- be sustainable – sufficient to maintain the path to desired standards, rather than allowing it to deteriorate and require major capital works
- conform to agreed standards – based on expected path use and quality criteria
- be undertaken by skilled path workers, other staff (e.g. estates staff), or volunteers.

'Adopt-a-path' schemes, green-gyms, club workdays and other initiatives involving trained volunteers with good supervision can assist in routine maintenance tasks.

The Lowland Paths guide and Upland Path Management manual provide advice on path monitoring and maintenance and the latter provides guidance on safety planning and training and risk assessment.

5. Good Practice Case Studies

The following case studies include:

i. initiatives to promote awareness of paths, responsible shared use and/or community and volunteer involvement

- A. Greenlink, North Lanarkshire: paths and community engagement
- B. North Ayrshire: responsible access educational programmes
- C. Bike Polite campaigns
- C. Phototrails and Walking on Wheels Trust's websites: accessible paths websites
- D. Peak District Interpretation Partnership: innovative use of communications technology
- E. Pentland Hills Regional Park: promoting responsible use of paths
- F. Sustrans' National Cycle Network (NCN) volunteers

ii. projects concerned with path development and management

- H. Devon Way, Clackmannanshire: shared use path demonstration project
- I. Loch Leven Heritage Trail, Kinross: shared use path linking communities and attractions
- J. Little Assynt Estate, Sutherland: all-abilities path
- K. Balliefurth Farm, Cairngorms: managing paths through farmland
- L. Scottish Borders: improving drove roads for shared use.

These examples represent only a small proportion of initiatives by path management organisations, voluntary bodies and individuals throughout Scotland. The assistance of organisations and individuals who provided information on these case studies is acknowledged with gratitude (see section 6.3).

G. Greenlink, North Lanarkshire: paths and community engagement

Greenlink comprises a 7 km, lit and tarmac surfaced cycle path and associated paths, between Strathclyde Country Park and Motherwell Town Centre. Surrounding communities have high levels of social disadvantage, poor health, crime and anti-social behaviour.

As well as providing a strategic, multi-use path and spine for local paths, Greenlink is a focus for a wide ranging community engagement and development project.

The Greenlink Project is managed by the Central Scotland Forest Trust, in partnership with North Lanarkshire Council, Forestry Commission Scotland, Paths for All, SNH, the Robertson Trust and other public and voluntary organisations.

The Greenlink Project Team provides leadership, management and support, secures funding and coordinates the activities of community-based groups, including:

- Greenlink Community Development Group – which has been restoring and managing woodland, working with schools on a 'From Seeds to Greenlink' project, removing fly-tipped debris and hosting community health, fitness and environmental events
- Greenlink Allotment Group – which intends to create an allotment, play area and wildlife garden
- Greenlink Mountain Bike Club – for children of 8+ years and adults, with weekly cycle rides and training in bike maintenance, first aid and map reading.

Programmes led or coordinated by the Project Team include:

- Health Walks and Health Walks leaders training
- weekly conservation projects to plant trees and wild flowers, remove graffiti and fire sites, and enhance the appearance and biodiversity of the Greenlink corridor
- schools' projects, including wild flower growing and a poster competition, as part of an anti-fly tipping and vandalism campaign.

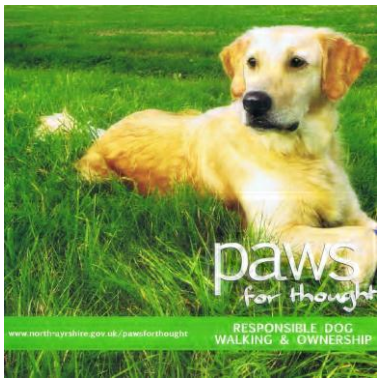
The community policing team support the project, deal with reports of anti-social behaviour and operate a zero tolerance approach to illegal motorbike activity.

In addition to the Greenlink path, the Project has achieved a range of community benefits, including greater awareness of recreational opportunities, increased exercise, play and volunteering activity, health, fitness and social-interaction benefits, training in leadership, practical and social skills, environmental improvements and reduction in anti-social behaviour. A Social Return on Investment (SROI) Analysis of the Greenlink by Greenspace Scotland shows an SROI of £7.63 for every £1 invested in the Project.

H. North Ayrshire: responsible access educational programmes

North Ayrshire Council's access projects have included campaigns to promote responsible access amongst school children, dog and horse owners and other path users, including:

- **Paws for Thought campaign** − to promote responsible dog ownership and respond to issues of dog fouling and uncontrolled dogs on paths used by the community and, in particular, school children, through:
  - Paws for Thought leaflets – distributed through libraries, community centres, ranger services and vets' practices
  - responsible dog owner incentive bags – including a Paws for Thought leaflet, reflective dog collar tag and dog tidy bags
  - Paws for Thought survey and competition – involving children at primary schools in Ardrossan surveying dog owners' behaviour (e.g. picking up dog dirt, dog walking areas) and designing and distributing fliers, posters and entry forms for a competition to find the most responsible dog owner. Prizes were donated by a dog food supplier.



- **From the Horse's Mouth campaign** – to promote responsible horse ownership and access and tackle issues of inconsiderate riding on beaches and owners cleaning out horse boxes in car parks, through the distribution of From the Horse's Mouth leaflets and incentive bags with leaflets, reflective tags and horse muesli bars (donated by feed manufacturers). These were distributed through vets' practices, feed merchants' shops and mailing lists, livery stables and riding clubs' newsletters. The leaflet was designed by the Council in partnership with the British Horse Society.
- **Get On – Get Out There! project** – which provides fun and informative primary schools' leaflets and secondary schools' leaflets to promote walking and cycling to school, highlight health and quality of life benefits, and encourage responsible access. Banners are provided for use in schools and at events and a schools' grant scheme supports projects to promote sustainable travel and responsible access.

I. Bike Polite campaigns

Spokes – the Lothians Cycling Campaign – launched its Bike Polite educational campaign in 2007, in response to a few irresponsible cyclists giving the cycling community a bad reputation, by going through traffic lights at red and cycling on footways.

The campaign focuses on the topics and messages illustrated below. These are promoted through posters, Spokes' publicity, networks and events, and the distribution of 10,000 weather-proof and reflective slap bands, which can be used on cyclists' wrists or ankles.

The Glasgow Polite Cycling Campaign is following the approach in the Lothians and is led by a partnership of Spokes, Glasgow City Council and Strathclyde Partnership for Transport. The River Kelvin Way is an example of a shared use path, where Bike Polite is intended to encourage good relationships between cyclists and other users.

J. Phototrails and Walking on Wheels Trust's websites: accessible paths websites

The Phototrails website is being developed by the Fieldfare Trust to provide a guide to the accessibility of countryside sites and trails throughout the UK. Paths in various parts of Scotland are shown and can be located using a search box or interactive map.

The site provides valuable pre-visit information on path features and site amenities and describes the distance, gradients, widths, surfaces and grades of each path. Information includes a Google map and satellite photograph of each path, with pictograms identifying key features on the route, which match with a strip of photographs which can be scrolled through alongside the map and illustrate the path surface, potential barriers (e.g. gradients, kissing gates), amenities (e.g. seats, picnic benches, disabled toilets), etc..

Paths are given accessibility ratings in accordance with the physical accessibility standards endorsed by Fieldfare and the Countryside for All partners. These range from:

- Grade 1: paths with good surfaces, ample resting places and no barriers or steep gradients; to
- Grade 5: paths with many features which may reduce accessibility, such as steep gradients, steps or barriers. This grade includes paths still to be surveyed.

The Loch An Eilean phototrail (above) illustrates a Phototrails' webpage

The Walking on Wheels Trust is developing information on accessible walks on its website, which will complement the wheelchair/mobility scooter 'walks' described in the Trust's 'Walking on Wheels' guidebook (out-of-print). The walks are 2-12 miles long and each has been assessed by a wheelchair or mobility scooter user. Information includes a short description of each path, its attractions and landscape character, sources of further information, the OS map, and availability of disabled parking, toilets and refreshments.

K. Peak District Interpretation Partnership: innovative use of communications technology

The Peak District Interpretation Partnership's websites illustrate how websites can be used:

- to promote paths and interpret the area's wildlife, history and culture and interact with visitors, through PCs, a Download Centre and mobile devices
- build a community of interest and platform for sharing information on the Peak District.

The Peak Experience website provides:

- path leaflets, public transport and other visitor information, themed guides, maps and children's activity sheets in PDF format and wildlife and landscape podcasts − which can be downloaded onto remote computers and mobile devices and at a Download Centre at Castleton Visitor Centre
- mp3 audio trails – for copying to iPods, mp3 players and some mobile phones
- mobile phone guides – such as an interpretive tour of Carsington Reservoir and the Nature Bytes Bluetooth guide to the Derbyshire Dales National Nature Reserve.

www.mypeakexperience.org.uk is home to a virtual community, where members can share photos and video audio clips and opinions on favourite places in the Peak District.

L. Pentland Hills Regional Park: promoting responsible use of paths

The leaflets Cycling in the Pentland Hills Regional Park and Horse Riding in the Pentland Hills Regional Park provide maps showing suggested paths for cycling and riding in the Pentland Hills Regional Park and advice on respecting the interests of other users and land managers and caring for the environment. Decisions on the use of paths and when and where cycling and riding can be undertaken responsibly are left to users.

The cycling leaflet was produced following concerns over increasing levels of mountain biking in the Park and potential conflicts with walkers, damage to the ground and disturbance of stock. The map shows:

- surfaced paths or tracks, suitable for careful cycling
- unsurfaced paths, which may be steep, rough or boggy. Alternative routes are shown, which should be used when the ground is wet.

The map does not show hilltop paths and the leaflet indicates that these are not recommended for cycling, due to their vulnerability to erosion and the time taken to re-establish vegetation. The text advises that cyclists:

- travel at a safe speed, give advance warning to other visitors and give way to them on narrow paths
- do not alarm farm animals, horses or wildlife and keep dogs under control
- avoid cycling on wet, boggy and soft ground and churning up the surface
- do not lock their back wheel on descents and avoid muddy paths when wet
- follow land management signs and remove their litter.

Users are encouraged to 'Know the Code' (i.e. Outdoor Access Code) and advice is given on safe cycling and equipment which should be taken when cycling in the Regional Park.

The riding leaflet provides similar advice, including maps of suggested riding routes, which include quieter roads, good paths and tracks, and variable quality paths – which may be boggy. It was prepared in conjunction with the British Horse Society.

Along with publicising these leaflets on the Regional Park's website, at visitor centres, by rangers, and via bike shops/hirers, liveries and clubs, the Regional Park's staff have:

- improved the recommended paths and replaced stiles with all-abilities gates
- organised guided cycle and horse rides and events
- erected guideposts at the start of suitable cycling and riding paths.

Future initiatives may include more ranger patrols on mountain bikes and using newer forms of communications (e.g. blogs, YouTube) to encourage visits to, and responsible use of, the Regional Park.

Perceived outcomes of these initiatives include more responsible use of the Pentland Hills, with most users having more confidence in where they can go, using the suggested paths and avoiding damage to fragile hill slopes and other areas, few reported conflicts between users, landowners being more tolerant of cyclists and others, and an enhanced network of shared use paths.

M. Sustrans' National Cycle Network (NCN) volunteers

Sustrans has around 400 volunteers in 22 groups around Scotland, who act as 'eyes and ears' for Sustrans and its partners.

Sustrans Volunteer Rangers:

- regularly patrol an allocated section of the National Cycle Network (NCN) cycle path
- undertake minor maintenance – including clearing litter and overgrowing vegetation, replacing missing or damaged signs with adhesive signs, and painting path furniture
- report more substantial maintenance issues to Sustrans or other path managers
- provide information and advice to cycle path users
- liaise with community police officers and report anti-social behaviour
- assist at events promoting the NCN and active travel.

Sustrans coordinates and supports its volunteers through its Volunteer Coordinator, Volunteer Outreach Officer and other staff, and through:

- vetting applicants and providing recruits with a volunteer pack, including guidance on key tasks, notes on expectations and a high visibility vest
- regular liaison with volunteers on the ground and through a monthly newsletter
- training, advisory and technical support
- loans of tools and payment of incidental expenses.

Renfrewshire Volunteer Rangers Thursday Squad is a long established group of volunteers operating in the urban fringe around Paisley and throughout Renfrewshire. It was set up and supported by a member of Sustrans staff, but is now self-organising. In 2010, it provided 321 volunteer days of work and was assisted by adults with learning difficulties. Activities include:

- clearing broken glass, litter, supermarket trollies, traffic cones, etc.
- cutting back brambles and other vegetation
- installing permanent signs and temporary signs
- painting private level crossing gates, bridge numbers and chicane structures
- assisting with Renfrewshire Access Festival
- advising on new routes
- Group cycle rides and social events.

The Group's strength has resulted from sustained initial leadership and on-going support from Sustrans and a keen core of retired volunteers.

Sustrans has emphasised that volunteer involvement not only provides an essential resource for monitoring and maintaining NCN routes, but benefits the volunteers and the wider public, who see an occasional presence of volunteers and enjoy well-signed and managed routes.

H. Devon Way, Clackmannanshire: shared use path demonstration project

The Devon Way was developed in the 1990s as a shared use path along the former railway line between Alloa and Dollar. It links several settlements along the route and provides access to/from Alloa Railway Station, Gartmorn Dam Country Park, other sites of interest, a local health centre and several equestrian centres. It has been adopted as a core path.

The route has been selected as a national demonstration project and training venue, with the intention of enhancing opportunities for recreation and active travel, completing a missing link in the National Cycle Network and promoting best practice and skills in the design, construction and management of shared use routes amongst access professionals. It is being developed by a partnership of Cycle Scotland, Paths for All, Sustrans and Clackmannanshire Council, with funding from the Scottish Rural Development Programme, Forth Valley and Lomond Leader, Sustrans and the Central Scotland Green Network.

Key elements of the project include:

- encouraging active travel, especially by the local community − through signing, leaflets, led cycle rides and related promotional events
- demonstrating good path design and construction − including surfaces, crossings, conflict resolution, access controls, cycle parking, interpretation and monitoring of the path
- providing a training venue and courses for practitioners in planning and assessing the installation of shared use and active travel infrastructure. This will include the production of technical information sheets and e-mailing of progress up-dates.

The project will include the trial and assessment of alternative surfaces, including:

- 2.5 metre wide, 150mm sub-base and whindust
- 2.5 metre wide, tar spray with recycled tyre chips
- 2.5 metre wide, machine-laid Toptrec surface (Tarmac product comprising recycled road waste materials bound with asphalt)
- 2.5 metre wide, bound surface with parallel 2.5 metre sub-base and whindust equestrian path.

N. Loch Leven Heritage Trail, Kinross: shared use path linking communities and attractions

The Loch Leven Heritage Trail is intended to enable and encourage local communities and visitors to view, enjoy and appreciate the natural and cultural heritage of Loch Leven and its surroundings. The northern section from Kinross to Vane Farm is complete and the 13.5 km Trail will eventually enable walking, cycling, disabled and some riding access around Loch Leven, with links to Kinross, Milnathort, other communities and 24 heritage sites, including the RSPB's Vane Farm Reserve.

The Trail is being developed as part of the Loch Leven Heritage Project, by TRACKS (The Rural Access Committee for Kinross-shire) with support from SNH, Perth & Kinross Countryside Trust, Perth & Kinross Quality of Life Trust, the Heritage Lottery Fund and other funders, local communities and local landowners. The Trail respects the natural heritage values of the Loch Leven National Nature Reserve and provides bird watching opportunities and interpretation of the area's wildlife and historical features.

Surveys in 2006 and 2009 show that the Trail attracted around 100,-120,000 visits/year, including local users (59%), day visitors (32%) and tourists (8%). Most users were on foot (79%); others were cyclists and around 4% had a disability. Trail users are estimated to have spent over £0.5m in 2009 and creation of the Trail has encouraged the development of several farm shops and cafés. The high quality of the Trail, Trail leaflet, other interpretation and visitor facilities is reflected in under 1% of interviewees expressing any dissatisfaction with the Trial and its high levels of repeat visits.

The Trail is largely barrier-free and relatively flat, which with the availability of toilets at cafés along the route, provision of seats and free mobility scooter hire at three locations, makes it attractive for use by less able and disabled users.

The northern section from Kinross to Vane Farm has cost over £1.8m, including £0.4m spent on high quality interpretive boards, markers, artworks and publications. The final section is currently being negotiated with landowners.

Most of the Trail is a minimum width of 1.8 metre, within a 3-5 metre corridor which enables users to pass. It has a whindust surface on a Type 1 sub-base. Construction has cost under £30/metre for simpler sections and up to £60/metre for boardwalks and other raised sections over wet ground. The surface has few problems of rutting by cycles and is maintained by occasional applications of whindust and rolling. Perth and Kinross Council has adopted the path and taken over responsibilities for future maintenance.

Current path management issues are relatively limited in scale, but are of relevance to other paths:

- cyclists not warning walkers of their approach and use of the path by cycling clubs on fast training rides
- horse riders avoiding the path, due to high levels of walking and cycling
- dog fouling and uncontrolled dogs annoying walkers and posing hazards to cyclists
- the restricted width of bridges (1.5 metre) is limiting access for maintenance machinery.

O. Little Assynt Estate, Sutherland: all-abilities path

Culag Community Woodland Trust purchased the Little Assynt Estate (1200 ha) in the North West Highlands, on behalf of the local community, in 2000. One of the Trust's objectives is to provide '… an unobtrusive path network which gives access, for families and those who are less able, to rugged landscapes and protected heritage sites'.

In 2005, the Trust completed an 1.5 km, all-abilities path, from the Leiter Easaidh all-abilities car park, near Loch Assynt Lodge, to two lochs and a loch and mountain viewpoint. This path is suitable for wheelchair and mobility scooter users and others with limited mobility, as it has a firm aggregate surface, with no gradients over 1:12 (except on the final section to the viewpoint) and frequent resting places with seats.

At each loch, there is a picnic area, composting toilet (powered by wind generator) and a heather-thatched shelter. The path provides access to angling boats, adapted for use by disabled anglers.

A longer loop path links to the all-abilities path, but is not fully accessible. Information and maps for the paths are provided in the Trust's booklet 'Little Assynt Estate: Connecting People to the Land'.

P. Balliefurth Farm, Cairngorms: managing paths through farmland

The Speyside Way runs through Balliefurth Farm, which is a 250ha livestock farm near Grantown on Spey, and a local walks leaflet encourages the use of paths through the farm. Walkers, cyclists and horse riders were wishing to use the Speyside Way due to its suitability for multi-use access and its natural and cultural heritage values, but kissing gates, stiles and locked gates were restricting use. Following the Land Reform Act, it was decided to replace these restrictions with bridle-gates, which have self-closing mechanisms to prevent them being left open and livestock straying onto crops or other farms.

A former railway line, which forms part of the Speyside Way, has always provided the main route for moving livestock on the farm and this potentially conflicted with increasing public use of the Way. The farmer has created simple, but effective, temporary signs on his computer, which are posted on gates at either end of the section of path used for livestock movements. These signs politely ask people to wait while stock are being moved, explain the reasons and are appreciated by path users who understand what is happening. Elsewhere, clearly signed, alternative paths have been provided to address issues of safety and privacy, where the main farm track passes through the steading.

Note: This information is from Case Studies Demonstrating Positive Equestrian Access Provision (SRPBA& BHS Scotland), which presents examples of good practice in provision for horse riding.

Q. Scottish Borders: improving drove roads for shared use

Cross Border Drove Road – this former drove road between West Linton and Peebles was identified during community path consultations as a priority for resolving access issues.

It is mostly a grassy track, which is ideal for shared use, but some key sections − particularly through Cloich Forest and between Cloich and Peebles − had become impassable, due to fallen trees, drainage problems, and several locked gates towards West Linton.

Following capital works to remedy these issues, through the South of Scotland Countryside Trails programme, this is now a popular route with local and visiting walkers, cyclists and riders of all ages and abilities, including people walking from John O'Groats to Lands End, or on circular or longer distance mountain bike or horse rides.

Gypsy Glen – this route follows the former drove road south from Peebles towards St. Mary's Loch. Over the years, it had become impassable due to scrub invasion and drainage problems on some sections and locked or difficult gates on others. Community consultations focused on paths immediately around Peebles and the Gypsy Glen route was adopted as a 'strategic route' on the South of Scotland Countryside Trails network.

Capital works were funded by the Heritage Lottery Fund, European Rural Development Fund (ERDF) and SNH. Gates were replaced with self-closing bridle-gates, access either side of a footbridge and adjacent ford was improved, scrub was cut back and drainage issues were resolved. A horse-stile/motorcycle trap, with adjacent kissing gate, was installed at the Peebles end to prevent illegal motorcycle use. Links to other paths were created and waymarked.

Gypsy Glen is now one of the most popular paths around Peebles for local and visiting walkers, cyclists and riders. Having resolved the drainage issues, the grass and beaten earth surface is ideal for sustaining shared use. Regular use maintains an open path through the heather on the hill sections and scrub on lower sections, avoiding any need for mowing or cutting. Most of the path offers good visibility and ample space for users to pass, avoiding any inter-user conflicts.

6. Further Information

6.1 Organisations with interests in paths

Principal organisations with interests in the use, provision, management or promotion of Scotland's paths are listed below. Contact information can be obtained from the websites.

Access Officers (all)	www.outdooraccess-scotland.com
Activity Scotland	www.activity-scotland.org.uk
British Horse Society Scotland	www.bhsscotland.com
British Waterways Scotland	www.britishwaterways.co.uk/scotland
Cairngorms National Park Authority	www.cairngorms.co.uk
Central Scotland Forest Trust	www.csft.org.uk
Central Scotland Green Network	www.centralscotlandgreennetwork.org
Cyclists' Touring Club Scotland	www.ctcscotland.org.uk
Cycling Scotland	www.cyclingscotland.org
Dog Sport Scotland	www.dogsportscotland.co.uk
Fieldfare Trust	www.fieldfare.org.uk
Forestry Commission Scotland	www.forestry.gov.uk/scotland
Forth & Tay Disabled Ramblers	www.ftdr.com
Glasgow and Clyde Valley Green Network	www.gcvgreennetwork.gov.uk
Greenspace Scotland	www.greenspace.org.uk
Health & Safety Executive Scotland	www.hse.gov.uk/scotland
Highland Disabled Ramblers	www.highland-disabled-ramblers.org
Highlands & Islands Enterprise	www.hie.co.uk
International Mountain Biking Assoc. UK	www.imba.org.uk
Living Streets Scotland	www.livingstreets.org.uk/scotland
Loch Lomond & The Trossachs National Park Authority	www.lochlomond-trossachs.org
Lothians & Fife Green Network Partnership	www.elfhnp.org.uk
Mountaineering Council of Scotland	www.mountaineering-scotland.org.uk
National Trust for Scotland	www.nts.org.uk
National Farmers Union Scotland	www.nfus.org.uk
NHS Health Scotland	www.healthscotland.com
Paths for All	www.pathsforall.org.uk
Ramblers Association Scotland	www.ramblers.org.uk/scotland
Scottish Carriage Driving Association	www.scda.co.uk
Scottish Countryside Access Network	www.scottishcountrynet.org
Scottish Countryside Rangers Association	www.scra-online.co.uk
Scottish Cycling	www.scuonline.org
Scottish Disability Equality Forum	www.sdef.org.uk
Scottish Disability Sport	www.scottishdisabilitysport.com
Scottish Enterprise	www.scottish-enterprise.com
Scottish Government	www.scotland.gov.uk
Scottish Kennel Club	www.scottishkennelclub.org
Scottish Natural Heritage	www.snh.gov.uk
Scottish Rights of Way & Access Society	www.scotways.com
Scottish Rural Property & Business Assoc.	www.srpba.com
Spokes (Lothian Cycle Campaign)	www.spokes.org.uk
sportscotland	www.sportscotland.org.uk
Sustrans	www.sustrans.org.uk
Transport Scotland	www.transportscotland.gov.uk
Trekking and Riding Society Scotland	www.ridinginscotland.com
VisitScotland	www.visitscotland.org
Walking on Wheels Trust	www.walkingonwheels.org

6.2 References

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H. Cycling Scotland/Transport Planning & Engineering Scotland
I. Loch Leven Heritage Trail Project
J. Culag Community Woodland Trust
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pages 22, 38, 42. Sustrans
pages 26, 27. Walking on Wheels Trust
pages 29, 35. North Ayrshire Council
page 34. Greenlink Project Team, Central Scotland Forest Trust
page 37. Peter Scott Planning Services
page 41. Culag Community Woodland Trust
pages 41, 42. Vyv Wood-Gee, Countryside Management Consultant

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