

Paths for everyone

Sustrans' review of the
National Cycle Network 2018



An iconic asset for all

→ 1

The National Cycle Network is a 23-year-old network of **16,575 miles** of signed routes spanning the UK.

→ 2

It is used by walkers and people cycling, as well as joggers, wheelchair users and horse riders.

→ 7

Local businesses benefitted by an estimated **£2.5 billion** from people using the Network for leisure and tourism.

→ 3

It began with a National Lottery Grant from the Millennium Commission in **1995** and a **pioneering** vision to create high-quality, convenient routes for walking and cycling.

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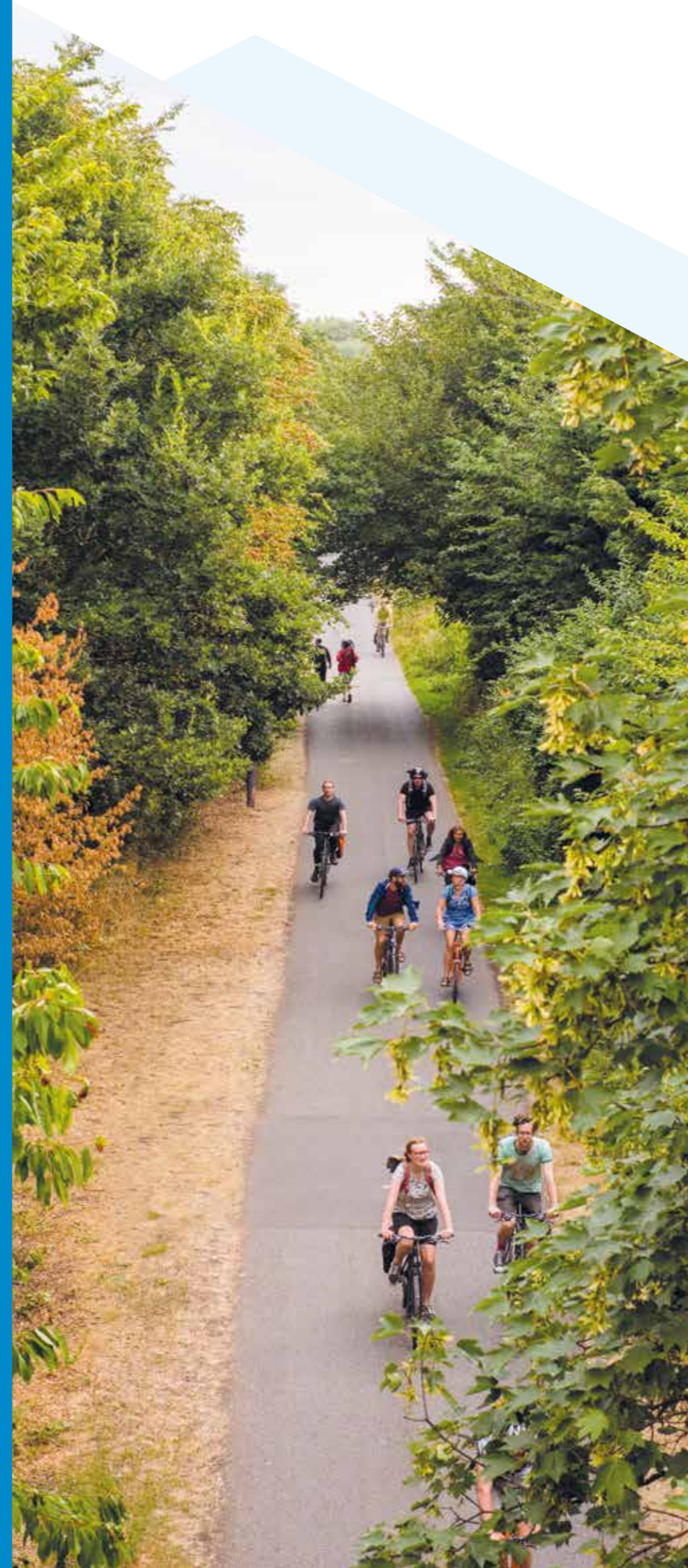
...which benefitted the UK economy by an estimated **£1.3 billion** through health, congestion and environmental benefits.

→ 5

Passing within one mile of half of the UK population, it carried an estimated **786 million** walking and cycling trips in 2017...

→ 4

Since then, we have worked with hundreds of partners to grow the Network into every corner of the UK.



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This page and cover photo: Jonathan Bewley

Introductions



Xavier Brice

The UK's sole strategic cycling infrastructure was built not by government, but by the people. The genesis of the National Cycle Network can be traced back to Sustrans' own in 1977 and the volunteers who turned a disused railway line into the 13-mile Bristol and Bath path. This inspired the creation of further routes throughout the UK, until naturally we started to dream about joining them up.

More than half of the UK population lives within a mile of the Network. The benefit to the UK economy runs to billions of pounds. But the real value of the Network for people is its contribution to their social, physical and environmental wellbeing, and the links it makes between communities.

Whilst the Network has expanded, its quality varies, resulting in an inconsistent experience for those who use it. We need to make it better.

Our review set out to create a new long-term vision for the Network, audit its condition and define a strategy for improving it. However, we cannot do this alone. We are the Network's custodian, not its owner. Sustrans owns a mere 500 miles; the rest belongs to numerous landowners, each responsible for their own stretch. They are supported in caring for it by Sustrans employees, over 3,200 volunteers, and many of the local communities the Network serves.

We have two priorities – to make the Network safer and more accessible for everyone.

We want to increase all trips on the Network. Not just by the people who use it already, but by those who want to but can't. We want to help those who face mobility challenges or are less physically active. And we will represent all users' interests to the many stakeholders whose paths and roads make up the Network.

Xavier Brice
Chief Executive, Sustrans



Lynne Berry

I love the National Cycle Network because it's used by so many different people to get around on foot, on cycles, in wheelchairs. It's a network: it connects people and places. What I don't like is that it's still not as accessible as it should be and the condition of the pathways sometimes means that getting around isn't as joyful and safe as it should be. With our partners, and building on the work of our amazing volunteers, Sustrans will change this and turn it into a network for everyone and involving everyone. Then we can all love it even more.

Lynne Berry OBE, Chair of Trustees, Sustrans



Chris Boardman

The little blue and red sign indicating a segment of the National Cycle Network is a long-recognised and trusted mark, used by cyclists and walkers alike, to navigate their way around the UK without cars. That alone should tell us just how valuable an asset it is. In times of high obesity and poor air quality, travelling actively has never been more important and the National Cycle Network is a key tool in helping address all of these problems.

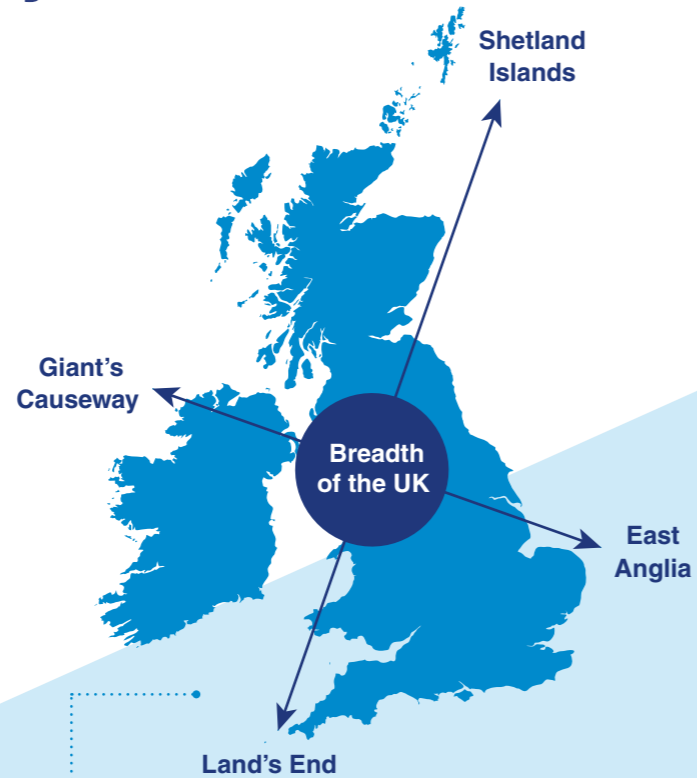
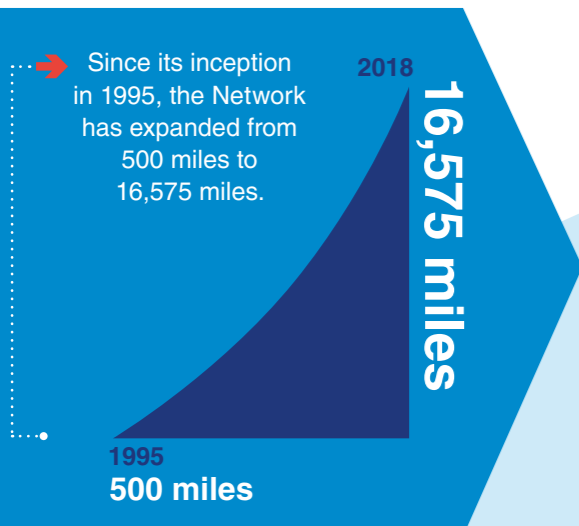
Chris Boardman MBE
Greater Manchester Cycling and Walking Commissioner and member of the National Cycle Network external advisory panel

Executive summary

The National Cycle Network is a local asset with incredible reach, connecting people and places across the UK and providing traffic-free spaces for everyone to enjoy.

A new vision for the Network:

A UK-wide network of traffic-free paths for everyone, connecting cities, towns and countryside, loved by the communities they serve.



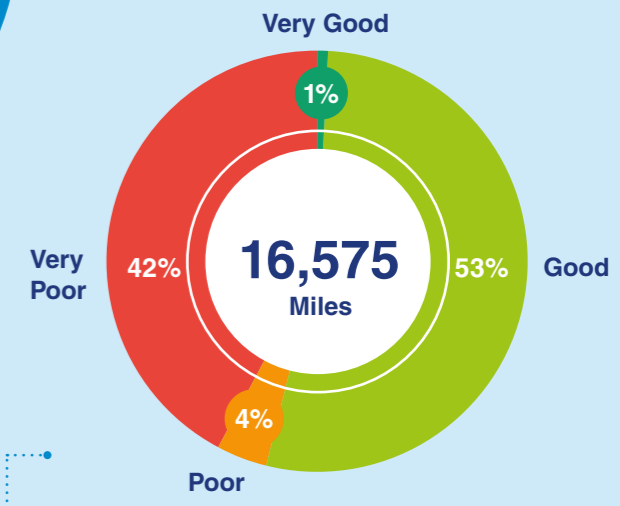
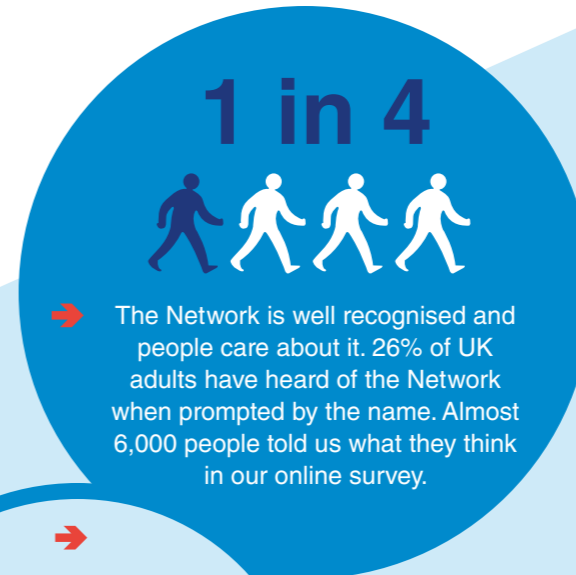
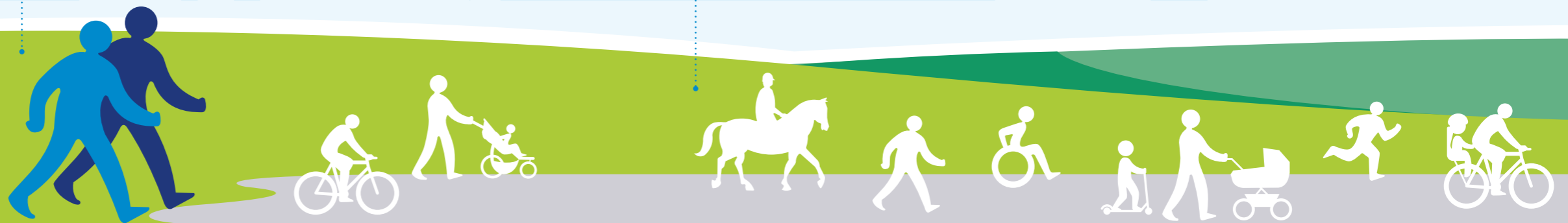
It covers the length and breadth of the UK from the Shetland Islands to Land's End and from East Anglia to the Giant's Causeway in Northern Ireland. But it is also a local resource, literally grounded in the communities it serves.

In 2017 it carried an estimated

4.4 million users
786 million journeys

The Network runs within a mile of over half of the UK population.

The vast majority (98.5%) of the Network isn't owned by Sustrans, but as custodian we have worked with our valued partners, stakeholders, supporters and volunteers. With their help, we have undertaken a review of today's Network and prepared this report that proposes an ambitious future.



The Network's routes have great potential for improvement. The character and quality varies hugely, and whilst 54% of the Network is Good or Very Good, 46% is Poor or Very Poor.

We need to support more and different people to use the Network. Only 4% of those who cycle on the Network are new or returning to cycling, yet its traffic-free routes provide the perfect place to build confidence on a bike.

The Network is used by a broad range of people – walkers (for over half of journeys) and people on cycles, as well as joggers, wheelchair users and horse riders – but there is a lot more we can do to make it safe and accessible for everyone.

To achieve the new vision for the Network, as its custodian, Sustrans will lead across five themes:

Run it We will steward the long-term vision and bring partners and users together to deliver it.

We will own a living plan that will be used to make the Network safer and more accessible for everyone, and take every mile to good or very good standard by 2040.

Fix it

We will grow quality miles by doubling the traffic-free sections from 5,000 to 10,000 miles by 2040 and getting routes off busy or fast roads.

Grow it

We will encourage, enable and inspire more and different people to share, respect and enjoy the Network and help communities and users shape and maintain their paths.

Love it

We will work to raise funds from a wide range of sources that will be needed to secure the future success of this national asset.

Fund it

For everyone

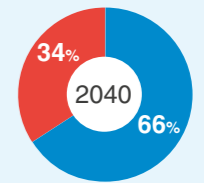
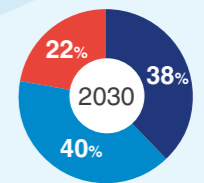
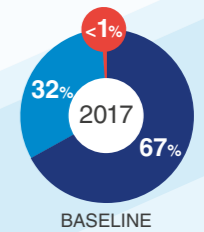
We didn't build the National Cycle Network on our own and we can't make it better on our own. We will lead on the five themes but to make them a reality we will need to work together with our partners, exactly as we have done on this review.

This review makes 15 recommendations.

Sustrans will now work in partnership with local authorities, private and charitable landowners, national governments, agencies, users, local communities and all the many organisations that make the Network possible to turn the recommendations into reality:

1. Set the tone for harmonious use of the Network by everyone.
2. Remove or redesign all 16,000 barriers on the Network to make it accessible to everyone, with no barriers in place for continuous travel.
3. Transform the Network by replacing existing on-road sections with new traffic-free paths or by creating quiet-way sections so it is safer for everyone.
4. Ensure that where the Network is on a quiet-way section the speed limit is 20mph in built-up areas and 40mph in rural areas.
5. Improve safety at crossings where the Network crosses roads or railways.
6. Adopt a new quality standard to ensure path widths and surfaces are built for everyone.
7. Improve signage so everyone can use the paths without a map or smartphone.
8. Deliver over 50 activation projects across the UK by 2023 to improve the Network and demonstrate change.
9. Introduce a process for de-designation of parts of the Network that cannot be improved – and a clear process for incorporating new routes that fill gaps or make new connections.
10. Make it easier for people using the Network to feed back on its condition – and use this insight to improve it.
11. Promote the Network to new users.
12. Encourage greater community involvement in designing, developing and maintaining the Network.
13. Provide open data on the Network.
14. Report regularly on the impact of the Network in improving everyone's lives and places.
15. Establish clear governance to bring together land managers, funders, users and others to deliver these recommendations in partnership.

Delivering on these recommendations will transform the National Cycle Network.



● on-road miles
● traffic-free miles
● quiet-way miles

Percentage of Network

➔ We hope this report inspires you to help us ensure a bright, exciting future for the Network and join with all our valued stakeholders, supporters, volunteers and community friends to turn this vision into reality.



1

VISION FOR THE NETWORK

NATIONAL CYCLE NETWORK



Our shared vision for the Network

A UK-wide network of traffic-free paths for everyone, connecting cities, towns and countryside, loved by the communities they serve.



We want to create a safe and accessible traffic-free Network. A Network that could be used by a sensible 12-year-old travelling alone. Currently only a third of the Network is traffic-free, but we know that these are the most valued routes, providing safe spaces to move and be.

The Network is for everyone, not only for those cycling – indeed, more than half of journeys are made on foot. Our shared vision for the Network speaks to all users, and in particular those who face mobility challenges and the less physically active.

Traffic-free paths designed for cycling are ideal for pushchairs, wheelchairs and mobility scooters. The unique nature of these mostly quiet spaces connecting countryside



with towns and cities makes them useful for those traveling in ways where separation from traffic is welcome, or even life-changing.

The National Cycle Network is without question the people's Network, benefitting from the investment and support of partners, stakeholders, users, volunteers and local communities to grow into every corner of the UK.

In addition to the immense contribution from local authorities, councils, statutory and government grants, philanthropy has been pivotal in realising the vision of the Network to date. To successfully create paths for everyone we need to ensure that more people are involved in and inspired by the future of the network.





Building on the successes

The National Cycle Network is a success story. As we have learnt, others have been inspired and used the Network as a blueprint for routes all over the world.

Its 16,575 miles help people get to the local park, commute or take a holiday, whether they live in Northern Ireland, Wales, Scotland or England.

Each year the Network benefits the UK economy by nearly £88m through reduced road congestion. The health benefits associated with walking and cycling on the Network in 2017 prevented 630 early deaths, and averted nearly 8,000 serious long-term health conditions, and leisure and tourist users contribute £2.5 billion to local economies.

Some of its routes are famous in their own right, like the 18-mile Camel Trail carrying tourist and locals alike between the edge of Bodmin Moor, Wadebridge and

Padstow, passing Cornish vineyards, lobster hatcheries and the occasional otter.

At the other end of the UK, the Caledonia Way winds through over 200 miles of stunning Scottish mountains, glens and moors, around Ben Nevis and along the banks of Loch Ness.

Elsewhere the Network is known for short but key stretches, connecting people physically and socially, such as the iconic Peace Bridge across the River Foyle in Derry – used by 2,500 people a day.

“It’s a network of paths for everyone, allowing all of us to breathe cleaner air and make safer, quicker journeys that benefit our health.”

16,575 miles
of Network paths

£88 million
Saved
through reduced
road congestion

£2.5 billion
Contributed to local
economies
through leisure and tourism



2

**WHAT
WE HAVE
LEARNT**

NATIONAL
CYCLE
NETWORK





What we have learnt: an extensive network, but of intermittent quality

The Network is made up of 16,575 miles covering the length and breadth of the UK from the Shetland Islands to Land's End and from East Anglia to the Giant's Causeway in Northern Ireland.

The Network comprises paths and on-road sections that pass through a wide range of terrain including urban greenways, forest tracks, quiet country lanes, canal towpaths and beach-front promenades.

Land ownership

The Network exists on land owned by a large number of parties. Approximately two-thirds is on the public highway, which is the responsibility of highway authorities. The remaining third of the Network (the off-road, traffic-free sections) belong to a wide variety of organisations and individuals, including local authorities, the Canal & River Trust, the Forestry Commission, Network Rail, the National Trust and private landowners.

Sustrans owns only 1.5% and has access rights over a further 1.5% of the Network. Land (titles or rights) is acquired on an ad hoc basis when necessary to create paths or to exploit opportunities.

Network condition reports

As is to be expected on such a diverse network, the character and quality of routes varies hugely. However, as part of the drive for a more consistent

and predictable user experience, the Network audit data is being used to generate a series of condition reports. These will help us to understand how much of the Network needs to be better, what exactly needs to change and where the improvements are to happen.

The condition reports use a carefully developed scoring and classification system that evaluates each section against the four main service measures of surface, flow, signage and traffic safety (see Appendix 1 for more detail). Based on this scoring system each section is then classified as **Very Good**, **Good**, **Poor** or **Very Poor**.

The National Cycle Network – across the UK

The condition report results for the Network are:

- 1%** Very Good
- 53%** Good
- 4%** Poor
- 42%** Very Poor

Over half of the Network, 8,979 miles, falls into the Good or Very Good category, offering users a predominantly safe, smooth, well-signed and consistent experience.

However there are still 7,596 miles that do not and it is these sections that must be addressed in order to achieve the new vision for the Network.

What we have learnt

For all the money it saves, lives it improves and miles it covers, the Network is certainly not perfect and our partners, funders, supporters, volunteers – and not least users – will be able to tell you where it's fallen short of its potential.

Our original ambition for paths on the Network was that they could be used by a sensible 12-year-old travelling alone. That is what the whole Network should be like, but in reality our review shows that many miles of it aren't and do not provide access to people using mobility scooters, wheelchairs or double buggies.

How we did it

During 2015 and 2016 a team of independent surveyors audited the Network. The audit recorded key characteristics including surface type, width, lighting, barriers and signage, as well as road classification for on-road sections.

The review not only looked at the physical condition of the Network, but also took into account the views of a wide range of stakeholders, including users, partners, volunteers and supporters.

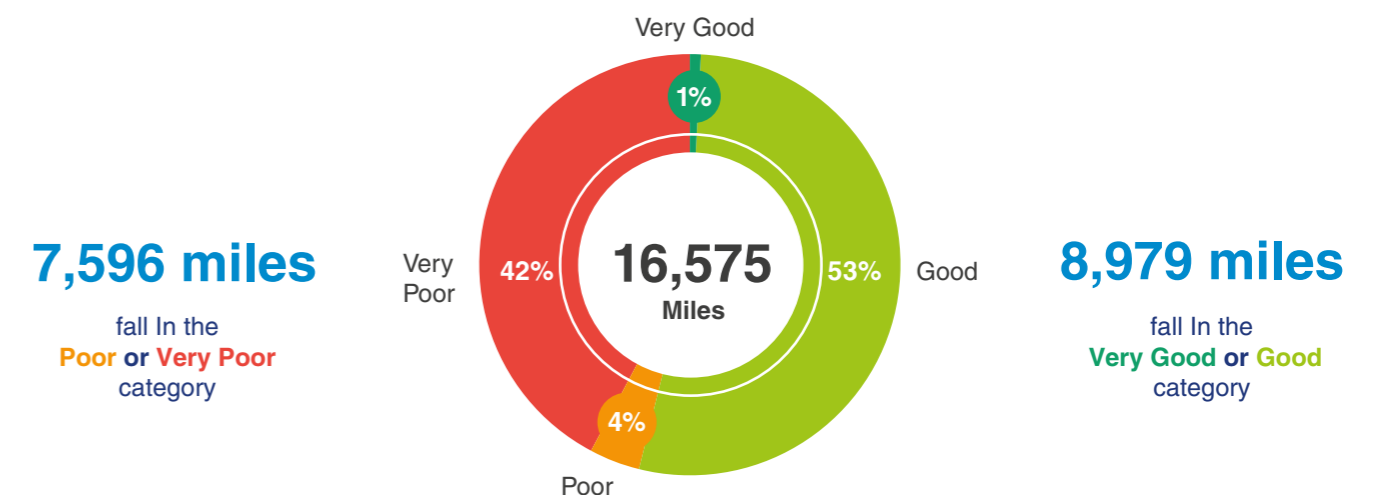
What the data told us

The audit data created a snapshot of the condition of the Network and provides a level of understanding and overview that has never been available before and will be hugely beneficial for future decision-making.

The review confirmed a lot of what we had been told, suspected or knew – some of the Network was not wide enough, the surface and access points were challenging or the signage was patchy. Some of it was simply a victim of its own success – the Bristol and Bath Path now carries so many people that it has a rush hour.

Armed with this information, we can start to make the Network better. Much better for everyone.

The condition report results for the whole of the Network in the UK



Condition of traffic-free sections

Overall, 5,273 miles (32%) of the Network are on traffic-free paths.

92% of these sections score Good or Very Good with only 8% scoring Poor and none scoring Very Poor, indicating a generally high quality and reliable traffic-free Network.

However we know that there is still significant work to do in order to improve the Poor sections and get the Good sections to Very Good.

Over half (52%) of the issues on the traffic-free sections are related to flow (barriers, pinch points and other obstructions that reduce the ability to maintain continuous travel and restrict wider accessibility generally).

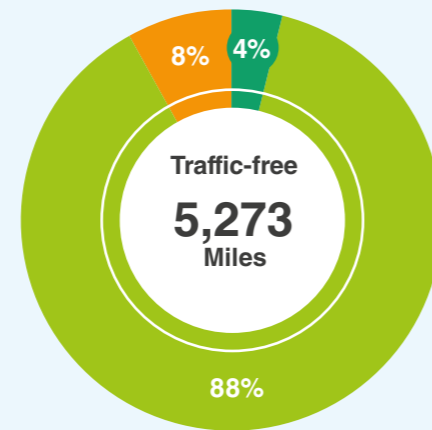
This is consistent with the fact that the audit identified 16,435 barriers or obstructions on the Network including bollards, chicanes, gates, A-frames, steps and steep ramps.

The majority of these are on traffic-free sections or at access/egress points – this is equivalent to approximately three obstructions for every mile of traffic-free route.

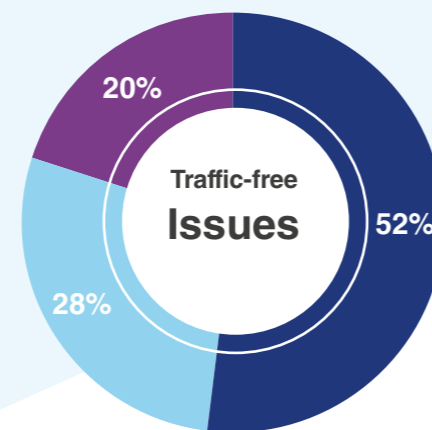
In addition there are 473 crossings and junctions that have been identified as in need of attention on the Network. 371 (78%) of these are where a traffic-free section crosses a road or section of carriageway.

Inadequate surface accounts for 28% of the issues, with 831 miles of traffic-free Network currently unsuitable for a narrow-tyred hybrid bike to pass comfortably.

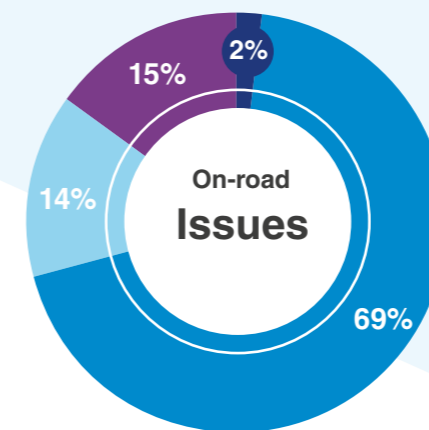
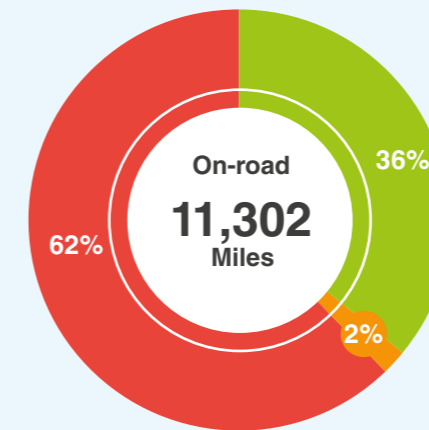
20% of the issues are related to wayfinding and signage – there are currently 15,680 incorrect, missing, obstructed, confusing and damaged signs on the Network and these have a significant detrimental impact on the user experience.



● Very Good ● Good ● Poor ● Very Poor



● Flow ● Safety ● Surface ● Signage



Condition of on-road sections

On-road sections of the Network account for 11,302 miles (68%), ranging from very quiet rural lanes, to suburban streets, city centre thoroughfares and even busy A and B roads.

It is clear that on-road sections are performing far worse than the traffic-free sections with 62% of on-road sections classified as Very Poor – a total of 6,962 miles.

We know that of these, 1,932 miles are on A and B roads.

No on-road sections are scored as Very Good but a significant 4,125 miles (36%) are scored as Good.

69% of the issues for on-road sections are related to traffic safety – these are roads where the traffic speeds and/or flows are too high to be deemed acceptable for an unaccompanied 12-year-old to cycle alone.

This traffic safety assessment has been based on a comprehensive and empirical traffic speed and flow dataset using actual vehicle numbers and speeds from commercial fleets, GPS, cell towers and mobile devices.

Thresholds for acceptable traffic speed and flow have been set for urban and rural areas based on current best practice guidelines.

It is the Very Poor on-road portion of the Network that needs the most urgent attention and we are seeking solutions that can help make it safer.

For example 24% (2,596 miles) of the on-road sections of the Network meets the required threshold for flow (they are quiet enough), but fail to meet the threshold for speed (they are too fast) and could be candidates for speed limit reduction schemes.

Signage and surface account for 15% and 14% respectively of the remaining on-road issues, followed by a small number of flow issues where cattle grids, gates and even several fords obstruct the carriageway.



What we have learnt: the importance of traffic-free paths to people

Connecting people and places

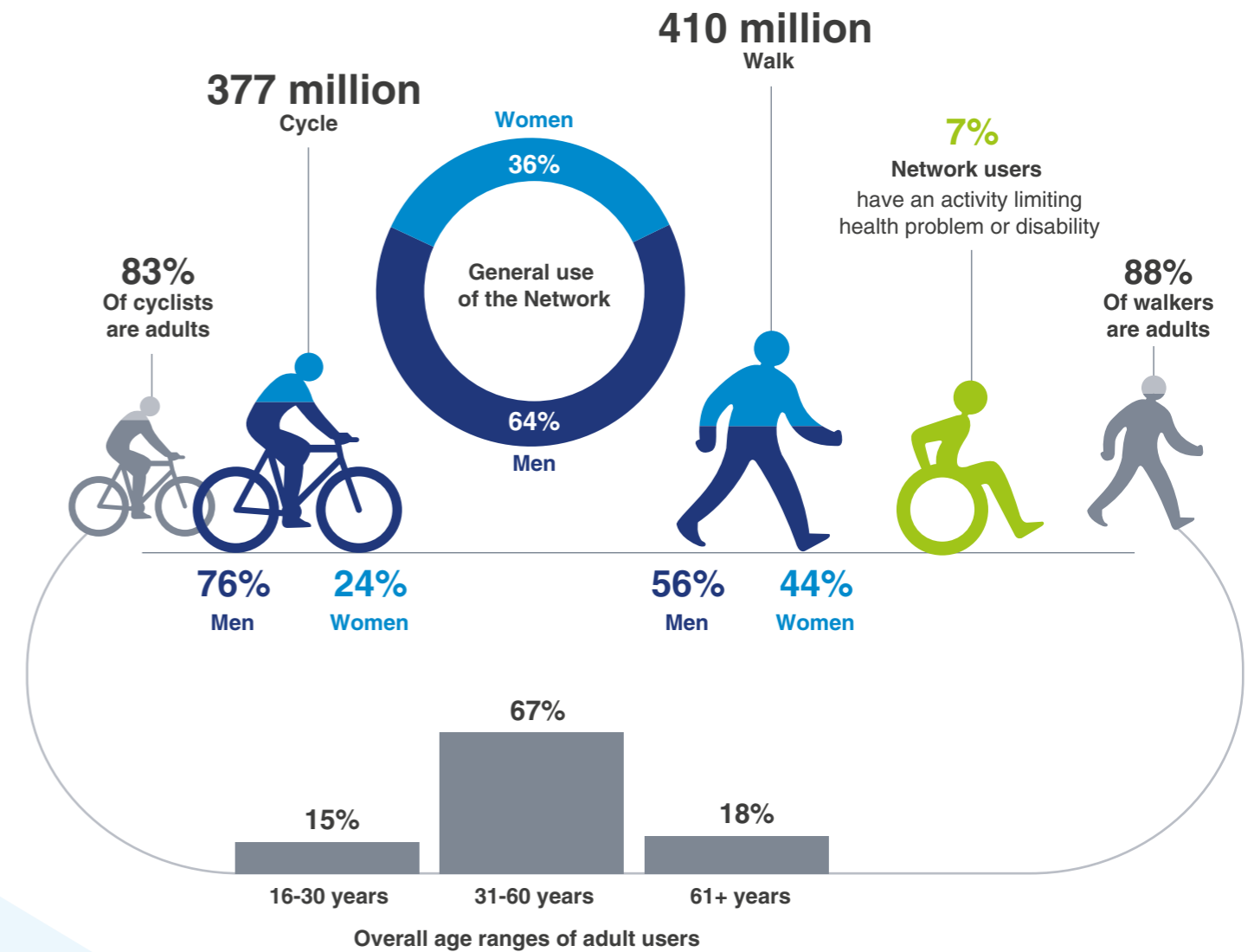
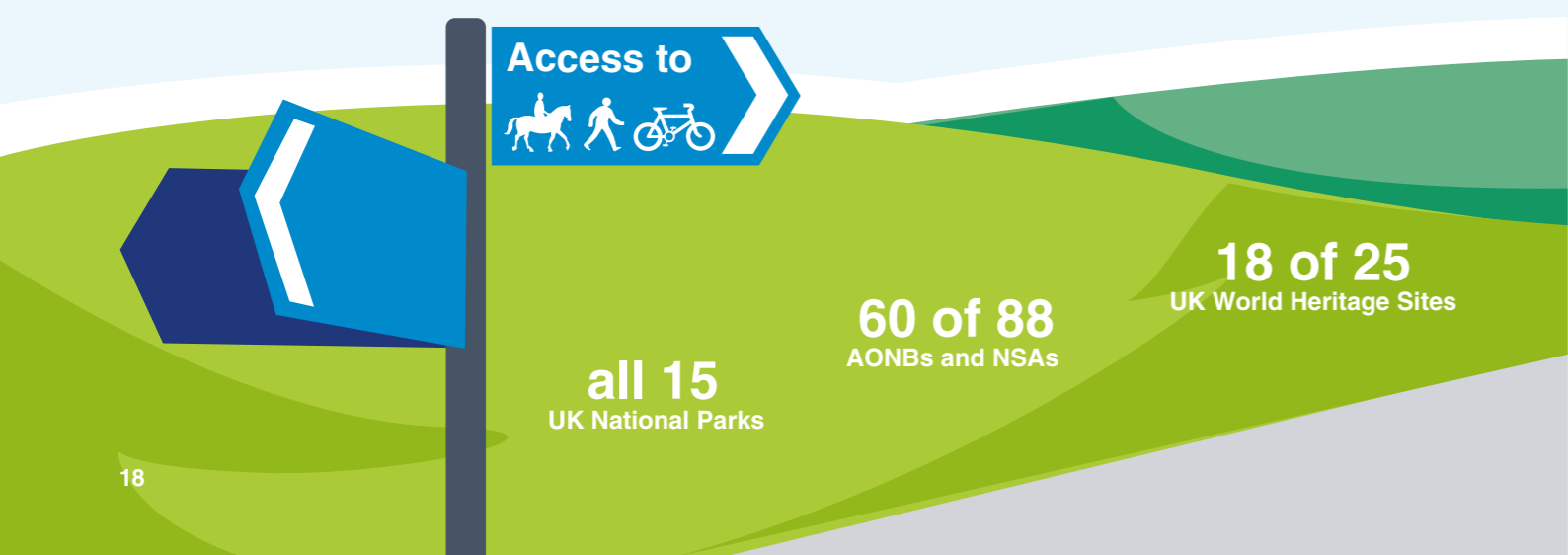
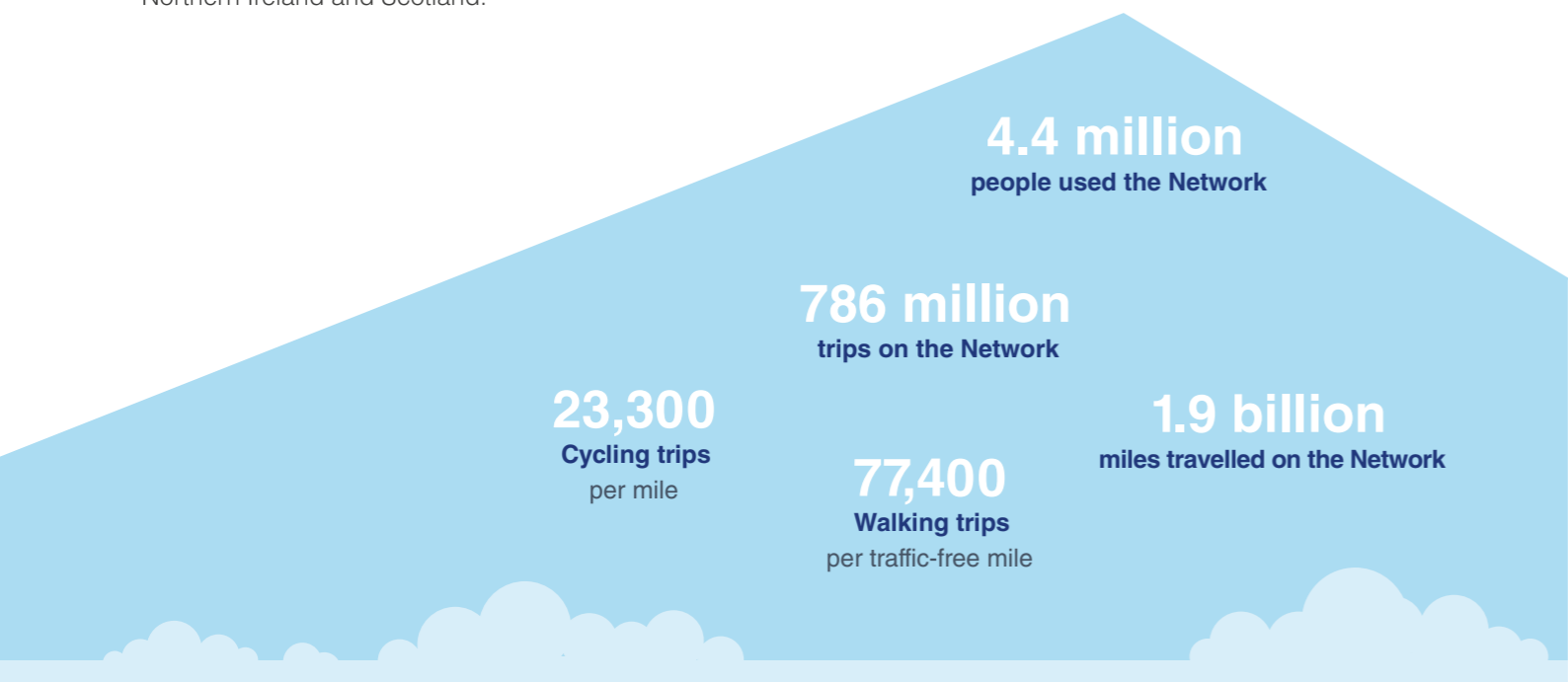
The scale of the Network means we know that it is on the doorstep of millions of people across the UK – 4.6 million people live within a two-minute walk of the Network – and it is an everyday part of many people's lives as well as a space for exploration and adventure.

The Network helps people access:

- all 15 UK National Parks, with nearly 1,500 miles passing through National Parks
- 60 of 88 Areas of Outstanding Natural beauty (AONBs) and Scottish National Scenic Areas (NSAs) in the UK
- 18 of 25 UK World Heritage Sites in England, Northern Ireland and Scotland.

Through a combination of automatic counters and surveys across the Network we are able to build a picture of the estimated number of miles and trips as well as people who used the Network in 2017:

- 4.4 million people used the Network
- they made 786 million trips
- the total distance of trips made using the Network was 1.9 billion miles
- 23,300 cycling trips were made per mile of Network
- 77,400 walking trips per traffic-free mile of the Network.



People of all ages and abilities use it for a variety of reasons

We know that there are more walking than cycling trips on the Network (410 million compared to 377 million by people who cycle) with a fairly even split between men and women using it on foot, 56% versus 44%. Of those people cycling however, 76% are men and 24% women.

- 4% of users on a bicycle are new, or returning to cycling.
- Most of the users of the Network are adults (83% of people cycling and 88% of walkers) and most of these adults are aged 31-60 (67%). 15% are aged 16-30 and 18% are over 61.

- 7% of Network users tell us that their day-to-day activities are limited because of a health problem or disability.
- The Network is used for both leisure trips and utility journeys. 56% of journeys are taken for functional reasons, such as travelling to work, taking the children to school, visiting the shops or visiting friends. The remaining 44% are taken for leisure.

People want to see a traffic-free network

A Sustrans online survey completed by just under 6,000 people in July 2018, highlights something that is often forgotten – individuals using the Network are rarely defined by just one mode of travel.

Indeed, 85% of those responding to this survey who had used the Network on foot, and 41% of those who had ridden a horse on the Network had also used it by bike. The vast majority of respondents (81%) all agreed that they'd like "More traffic-free routes where everyone feels safe to get around."

- Our survey also told us that people want greater connectivity - 62% told us they would like "A network of routes that connect me to towns, cities and countryside."
- That "Paths are accessible to everyone who wants to use them" also received strong support (38%) - particularly from non-bike users and women.

There is a great appetite to get involved

Our 3,200 volunteers play a vital role in maintenance of the Network and contribute a total of 250,000 volunteer hours per year (an average of 5.8 hours per volunteer per month).

81%

"More traffic-free routes where everyone feels safe to get around"

38%

"Paths are accessible to everyone who wants to use them"

62%

"A network of routes that connect me to towns, cities and countryside"

Over 80% of our survey respondents felt that it is important for communities and individuals to be involved in looking after the National Cycle Network. There was also support for more people to get involved, with 54% of respondents indicating that they would like to do so through small independent actions (such as litter picking), 24% getting involved on a regular, committed basis, and 24% who would like to be involved in local decision making.

If you could just change one thing?

“

Better surface. Ours is a mud bath so you can't go anywhere useful on it – like work or meetings where you have to turn up looking clean. It's leisure only on the mountain bike.

“

A lot of these routes are not tandem friendly. Having to take bags off and lift over the gates. So tend not to use them now.

“

Make it feel safer and more enjoyable to use by improving signage and segregation.

“

Allowing access with bike trailers along all cycle networks. I am planning on taking my little boy in his trailer soon and I am aware that some cycle paths do not make trailer use easy/feasible.

“

I wish there weren't steps on my local route and that it was usable all year round rather than when it was dry. It means the only alternative is the road most of the time.

“

Infrastructure improvements – removal of the many, many barriers along the route to make it accessible for all types of cycles. Good surfacing and drainage of the route are also vital.

People feel very strongly about it.



Recognition is wide, but lack of consistency means lack of trust

The National Cycle Network is well recognised across the UK. Market research shows that a quarter (26%) of UK adults have heard of the Network when prompted with the name.

The quality and type of routes varies a lot – between routes and within a single route – so users don't know what they are going to get and may be put off using the Network.



have heard of the
Network when prompted
with the name

“Staying active is really important to me. Not just for my fitness but also for my mental wellbeing. It’s a peaceful route which takes about an hour each way, so gives me plenty of time to think and reflect on the day.”



+ CASE STUDY Nicola



Nicola began cycling to work in March 2017, when her role in timetabling services with Belfast Metropolitan College was relocated to the Belfast Titanic Quarter campus. To save money on car parking and to keep fit she decided that cycling to work would be a good option for her.

“I work full-time and have a daughter who is going into her last year at primary school, so life is busy. I live really close to the Connswater Community Greenway which links to my daughter’s school and my workplace, so I can cycle safely with her to school and then on to work.”

“Cycling to and from work means I don’t have to find time to fit in exercise in the evenings. It takes me 30 minutes to get to work which is the same amount of time I would spend sitting in rush hour traffic every day and I arrive at work stress free. Parking charges at Titanic Quarter are expensive, so I save around £70 a month on parking fees alone by cycling to work. Plus, accessing the Greenway means I don’t have to journey on any of the main roads which is an added bonus.”

“It takes me 30 minutes to get to work which is the same amount of time I would spend sitting in rush hour traffic every day and I arrive at work stress free.”

+ CASE STUDY Penny Kelly

For former head teacher Penny Kelly, National Route 51 is more than just a connection from Thurston and Bury St Edmunds, it’s a way for her to stay active into her retirement whilst enjoying the great outdoors.

“It’s so handy having the traffic-free path so close to my home. It means I no longer have to rely on public transport to get around and can build exercise into my everyday routine without really thinking about it. I use the route to walk to Bury St Edmunds a couple of times a week as Thurston is a small village. Travelling on the path means I can get from A to B without having to go on any busy main roads. The route is about four miles each way so I like to walk one way and get the bus back.”

“Staying active is really important to me. Not just for my fitness but also for my mental wellbeing. It’s a peaceful route which takes about an hour each way, so gives me plenty of time to think and reflect on the day.”





What we have learnt: a strategically critical asset for partners

Through the review we've joined up with and sought the views of key partners UK-wide and at a local level. These valued partners have unanimously expressed their support for the National Cycle Network.

The Network evokes great passion amongst partners because it is strategically critical to their own work. Importantly we have learnt that it is an asset that our partners want to make the most of.

For example, the Network helps National Trust visitors travel actively to, within and between attractions:

“As Europe's largest conservation charity, the National Trust is keen to encourage more visitors to travel sustainably to the places we look after. The National Cycle Network provides an important role in enabling this, particularly in London and the South East. Participating in this review has been mutually beneficial to our organisations and a helpful catalyst to think about future potential for active travel.

Sarah Burr, Assistant Director – Consultancy, National Trust

The Network contributes to 140,000 miles of Rights of Way and connects communities with our national forests, parks and waterways:

“England's forests provide unlimited opportunities for walking, horse riding, off-road cycling and mountain biking. Many people use the National Cycle Network and its sustainable, easily recognisable paths to make the connection between their communities and forests.

Expanding the links between the National Cycle Network and our iconic national forests gives opportunities for all communities to get into the outdoors and provides a world-class cycle tourism experience that promotes the whole of the UK.

Paddy Harrop, Forest Management Director Central England, Forestry Commission England

Not only is the Network much loved, it is vital to the success of national and local government strategies to increase walking and cycling, benefitting economies, the tourism sector, communities and people's wellbeing across the UK – both now and in the future.

“A quality National Cycle Network is vital to make walking and cycling the natural choice for shorter everyday journeys and help us realise the Active Travel Vision and make Scotland an Active Nation. The review is important to ensure that the Transport Scotland contribution to funding the network delivers the Vision and promotes the benefits of people of all ages and walks of life in using and enjoying all the Network has to offer.

Roy Brannen, Chief Executive of Transport Scotland

“A well-maintained, well-used Network could make a huge contribution to solving the problems that many local authorities face. Increasing physical activity and reducing traffic will improve health and air quality.

Louise Upton, Oxford City Councillor for North Ward, Executive Board Member for a Healthy Oxford, Champion for Cycling

“Cycling UK are proud to be supporting the review of the National Cycle Network. We believe that cycling can help make happier healthier communities for all and the National Cycle Network provides a great environment for new and existing cyclists alike. Safe, signposted and traffic-light routes provide reassurance and easy navigation to discover communities by bike as well as inspiration to explore further afield.

Matt Mallinder, Director of Influence and Engagement, Cycling UK

“Transport for London values the contribution of the National Cycle Network in getting more people cycling across the UK. By providing attractive long-distance leisure routes for walking and cycling, and connecting cities to the countryside, we can enable more people to experience the benefits of active travel and support the goals of the Mayor's Transport Strategy.

Transport for London

There is plenty of scope to increase access for everyone on the Network:

“The National Cycle Network provides a wonderful network of walking and cycling routes across the UK, mostly away from traffic and therefore is perfect for older, younger, experienced, novice walkers and cyclists alike. Many disabled people use bits of the National Cycle Network, using their cycles as mobility aids and aids to fitness, leisure and transport (bikes, tandems, hand-bikes, trikes etc.). But they have often been frustrated and limited in the cycling they could do by the quality of path surfaces, the presence of inaccessible barriers, stepped bridges etc. along the network. This is why we see the National Cycle Network review as absolutely crucial and why we have been very pleased to be able to contribute to it.

Isabelle Clement, Director, Wheels for Wellbeing

“The National Cycle Network provides opportunities for people to walk and cycle every day and to enjoy the health and social benefits of physical activity in the outdoors. The Ramblers support improvements to the Network, in particular those which will improve the experience for walkers, who make up the majority of users of the Network.

Kate Conto, Senior Policy Advisor, The Ramblers

The Network's reach extends even further – beyond the UK, informing global greenway development:

“Sustrans has been a major inspiration for my career. The National Cycle Network is a model for other nations and people around the world.

Jeff Olson, Principal, Alta Planning and Design, New York, USA

“The Canal & River Trust's 2,000 miles of towpaths in England and Wales provide a network for people to enjoy for walking and cycling, as well as to support the use of the waterways themselves, and we welcome the ambitious and inclusive vision of 'Paths for Everyone'.

Parts of our towpath network are also incorporated in the current National Cycle Network and the Trust looks forward to working with Sustrans and other partners to ensure that everyone can enjoy them, respecting their historic character and other users, through the adoption of 'shared use' principles with pedestrians taking priority.

With this clear vision, both the Trust's towpaths and the National Cycle Network as a whole can change lives for the better, and promote and enhance the health and wellbeing of people and communities.

Richard Rutter, Policy, Research and Impact Team Manager, Canal & River Trust





3

WHAT
NEEDS TO
HAPPEN

NATIONAL
CYCLE
NETWORK



Realising the vision: what needs to happen

Five things that need to be done

To achieve our new vision for the Network, as its custodian and champion for the users, Sustrans needs to do five things.

Run it

Fix it

Grow it

Love it

Fund it

For everyone

But we can't do this alone

We didn't build the Network on our own and we can't make it better on our own – we need to work with our partners, volunteers, users and the communities it serves.

Run it

Governance and stakeholder liaison

Sustrans owns the National Cycle Network brand, but we only own 1.5% of the physical Network, with access rights over a further 1.5%. The rest is owned by a variety of landowners.

Landowners are not obligated to improve the Network, but during the review they have asked us to coordinate all stakeholders around a plan to protect the National Cycle Network brand and to improve the Network for all users.

We will use the structure established for the review to put in place clear governance to realise the new vision for the Network.

A plan for improvement and management

To manage the Network efficiently we need a plan. The review represents the start of this, comprising of seven physical review and action plans that set out the condition of the Network and highlight the locations and number of improvements needed in order to make it truly a network for everyone.

Maintaining the Network

Insufficient and inconsistent funding for maintenance has been a significant contributing factor to the inconsistent experience for users of the Network,

so in addition to fixing the current shortcomings, we will work with others to ensure the regular maintenance of the Network to agreed standards, and clarify who is responsible. We will work with our volunteers to support landowners, where appropriate.

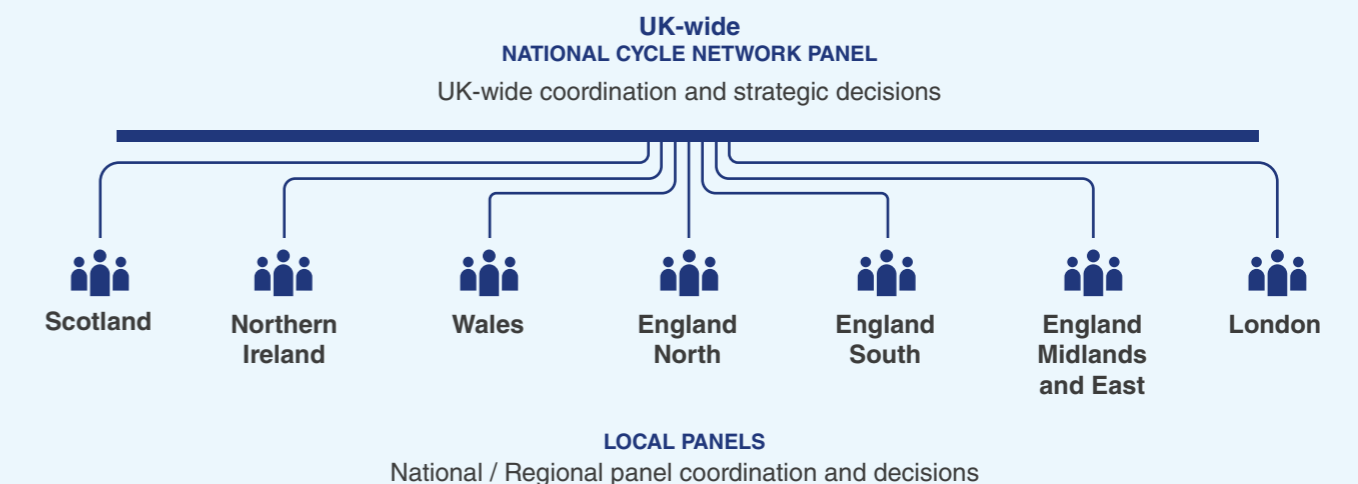
Applying the new quality standards across the Network

There has been a lack of clarity on the quality standards that should apply to the Network. This has been addressed in the review. Sustrans will now work with partners to ensure that any additions to the Network adhere to these standards and that they underpin improvements to the current Network; recognising that there may be both exceptions for critical and physically constrained parts of the network. Sustrans will also work with partners to potentially de-designate some parts of the Network.

Managing feedback on the Network

As part of our custodian role, Sustrans will explore ways to help users flag up issues on the Network and ensure that they reach the relevant stakeholder for action and response.

A new governance structure for the Network



Fix it

The physical review of all 16,575 miles has shown that we need to fix the Network, identifying what and where the issues are that need tackling. Our stakeholders have helped to define the main principles and strategic priorities that will underpin our action, and have shaped over 50 activation projects that we will start with.

The original design principle for the Network was that a sensible 12-year-old should be able to navigate the Network alone. This has underpinned simple new design principles that have been agreed to by all stakeholders taking part in the review and influenced the development of two strategic priorities.

Strategic priority 1 Make it safer for everyone

- Make more of the Network traffic-free. Traffic-free paths are what makes the Network special and, longer-term, are what we want to see everywhere.
- Where the need is urgent and a traffic-free route is simply not viable, we need to consider changing the character of minor roads to create quiet-way routes (see definition on opposite page). This includes pushing for speed limit reductions on both urban and rural sections, which is also an agreed lobbying and campaigning priority of all the non-governmental walking and cycling organisations in the UK.
- Tackle junctions and crossings that are in need of improvement.

- Review as a priority the sections that are currently on major roads. The solution will be to re-route to a new off-road section, or new segregated infrastructure, or as a last resort, de-designate from the Network.

Strategic priority 2 Make it accessible for everyone

- Widen paths where they are unsuitable for the volume and/or mix of users.
- Improve path surfaces so that they are suitable for all types of users.
- Remove barriers that prevent people using adapted bikes, wheelchairs, mobility scooters, tandems, cargo bikes or pushing a buggy from accessing the traffic-free sections.
- Improve signage and wayfinding across the Network.



5,000

Traffic-free miles created in the last 23 years

Our bold ambition is to create a further
5,000
Traffic-free miles in the next 22 years

Fix it by 2040

It has taken 23 years to build just over 5,000 miles of traffic-free Network and our bold ambition is to create a further 5,000 traffic-free miles in the next 22 years. Given that the “easy” miles have been completed, this is a significant challenge.

The preference for on-road sections will be to create alternative traffic-free routes. Where this is not viable, it may be possible to change them to create quiet-way sections. Where traffic-free or quiet-way routes cross roads the number of crossings or junctions identified as in need of attention will be reduced.

By 2040 all of the National Cycle Network will be of a Good or Very Good standard.

Sustrans’ definition of a quiet-way road is one that:

- has a speed limit of 40mph, with a daily traffic flow of less than 1,000 vehicles in rural areas, 20mph and 2,500 vehicles in built-up areas
- includes traffic signs and road markings to highlight the speed limit and that people driving a vehicle should expect to encounter people walking, cycling or riding a horse in the road and drive accordingly
- provides good visibility to enable all users to see each other.

Actual vehicle speeds should be below the speed limit and it may be necessary to implement measures to enforce the speed limit. Similarly, where the existing traffic flow exceeds the quiet-way criteria it may be possible to implement measures to reduce the traffic flow, making the road suitable to be part of the Network.



Our vision for the Network – on the ground

Whilst we cannot fix the whole Network ourselves, our review and action plans provide a platform to fix it by 2040. The plans cover Scotland, Wales, Northern Ireland, London, England South, England North and England Midlands & East. They provide structured and accessible information on the current condition of the Network and the issues that need to be addressed and have been drafted with the input of key stakeholders including local authorities, other landowners and volunteers.

Activation projects to be delivered by 2023

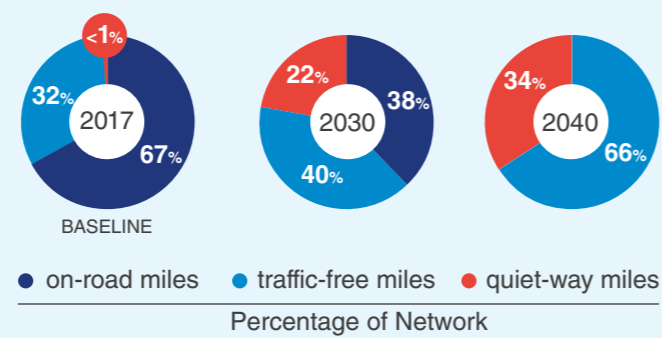
2040 is a long way off. It is important that the results of the National Cycle Network review are backed up by immediate and visible action.

We will be launching a major initiative to improve accessibility on the Network, working with subject experts, including designers and user groups.

By 2023 we will have:

- delivered over 50 activation projects across the UK. These projects have been drawn from a long list of over 150 projects, selected and prioritised with help from local stakeholders and volunteers
- improved signage and wayfinding across the Network
- developed detailed Network development plans for each region and nation that specify improvements for every section of the Network that will need to be upgraded to achieve the vision. We will work in conjunction with stakeholders, users and local communities to do this.

The vision for the Network by 2040



Delivering quiet-way miles by 2030

- We will push for speed restrictions on 1,600 miles (10% of the overall network) of roads that have low traffic volumes but average traffic speeds that are over the thresholds set by National Cycle Network quality standard.
- A further 2,100 miles (13%) of road network that currently have low enough traffic speeds and volumes will be signposted to inform users that they are part of the National Cycle Network.

The activation projects are grouped according to seven improvement categories to help structure the development of the Network.

These projects will activate and test new governance systems, the marketing strategy, funding mechanisms and approaches to volunteer, community and user involvement. They will also test new ways of capturing data from a wider range of users. Their implementation will help us to garner the profile, support and resources required to mobilise the wider improvements to the Network.

We will carefully monitor the impact of all initiatives. The Network development plans will be updated and reported on annually.

Approach to land

The transition to a traffic-free Network is certainly going to require additional land, both for re-routing of current on-road sections to traffic-free alternatives, for filling gaps in the Network and for the extension or widening of existing traffic-free sections.

Access to this land must be secure, with long-term access agreements and maintenance provision, and this will require a legally constituted body to acquire the title or rights.

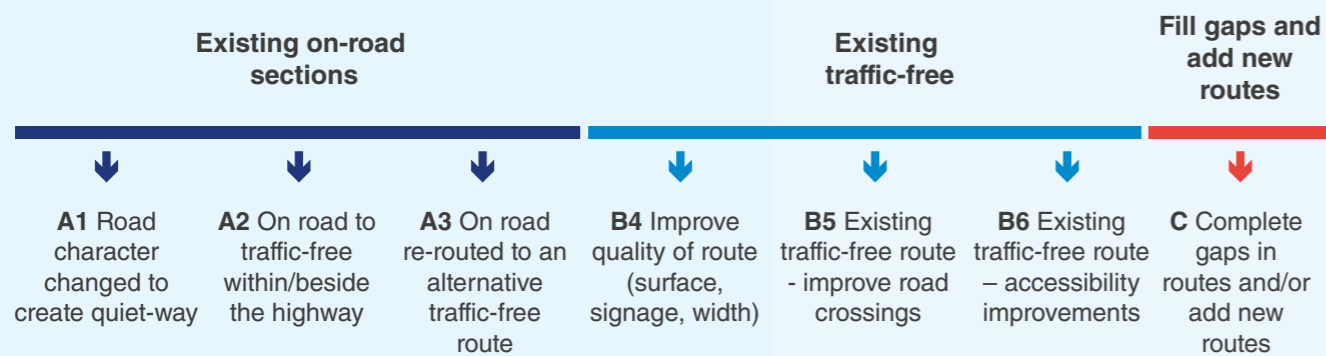
This review has recommended that Sustrans, with 40+ years of experience in both land assembly and the subsequent management of land, should continue

to be a land/rights owner where this is the only means of securing or completing a path. Sustrans will be accountable to a high-level advisory panel of partners and stakeholders as part of the new governance arrangements for the Network.

Route de-designation is an option

Quality is more important than quantity. If parts of the Network prove unfeasible to make safe or accessible then we will need a process to declassify them. The mechanics of this will be worked out in the coming year in partnership with users and landowners.

Seven improvement categories to help structure the development of the Network



Love it

Meeting the needs of all users

The traffic-free paths on the Network are a fantastic asset for people of all ages and confidence levels to get out and move more in safety.

As custodians it is our role to make sure that people know what the Network is, where it is, why it is relevant to them, how to access it and inspire them to make the most of this valuable asset.

As well as looking to grow all trips on the Network, we will work to help those who face mobility challenges and those who are less physically active, to make safe and enjoyable journeys.

We want current and potential users of the Network to have a voice and know how to get more involved if they want to. There are currently over 4.4 million users of the Network, each with a personal experience of using it. Giving users a stronger voice in how the Network is run will make sure that it meets the needs of everyone.

An experience, not a project

To engage users we will:

- listen to their views on how it should be managed
- provide accessible and diverse opportunities for people to contribute



- focus on under-represented groups to better understand their barriers and needs, through local partnerships with, and marketing the Network to organisations who represent or successfully engage with these groups
- provide all users with accurate, accessible and inspiring information.

We will approach our role as custodian from the mindset of those who use it today, and those who could use it but don't know about it yet. This is a different mindset from seeing it as purely a project to construct or maintain paths.

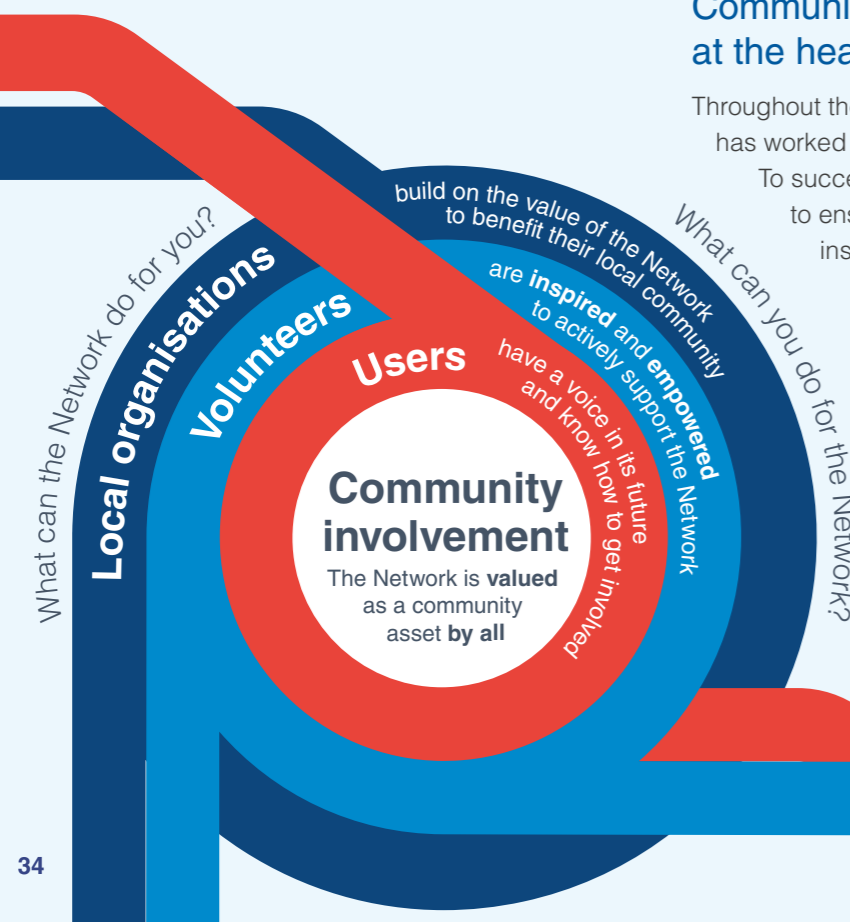
Community involvement at the heart of the Network

Throughout the development of the Network, Sustrans has worked in close partnership with communities.

To successfully create paths for everyone we need to ensure that more people are involved in and inspired by the future of the Network.

Communities who benefit from and support the Network include volunteers, local organisations, local groups, and users. Each of these communities has its own needs, values, motivations and interactions that will shape their experience of the Network.

By putting community involvement at the heart of the Network, we will ensure that it is a dynamic asset which can meet everyone's needs.



CASE STUDY Marian and George

Marian and George began volunteering with Sustrans in 1999, just a year after the volunteer programme officially launched. They look after a section of National Route 7, part of the famous Sea to Sea (C2C) route.

George recalls the opening of the C2C: "Before volunteering with Sustrans, I used to cycle along a very busy road to get to work which was very scary. Then Sustrans completed the C2C which meant I could cycle to work safely."

"We volunteer with Sustrans because we believe we can make a difference to the environment. We want to help make cycling and walking a pleasure for everyone."

"Litter picking is our main concern along the route and we try to get out at least once a week to spruce up the pathway. We cut back vegetation, give the National Cycle Network signs some TLC, and report any major problems with the route back to Sustrans."

We will continue to build and nurture our community of volunteers, whilst playing our part in supporting them – we know that the act of getting involved is mutually beneficial, providing significant health and wellbeing benefits for our volunteers.

Inspiring and empowering our community of volunteers

Our 3,200 volunteers carry out a broad range of tasks and are an integral part of how the Network is maintained and promoted. They play a vital role in maintenance of the Network and will play a major part in fixing it too.

We will build on this critical role in order to amplify our reach and impact. We will support our volunteers in playing an active role in engaging local organisations, groups and path users. And in order to reach wider communities we will diversify the ways in which people can volunteer.



Local communities enhancing and adding character to the Network

The Network passes through a diverse range of communities. Within these communities there are hundreds of local organisations, including schools, employers, local businesses and community groups. Our aspiration is for local organisations and groups to build on the value of the Network to benefit their local community.

To ensure that we connect better with communities and grow the love for the Network, we will:

- build our understanding of the motivations, barriers and needs of local organisations and groups, to foster a stronger relationship with them
- increase support and resources for local organisations and groups who are working to improve and develop the Network
- build a mutually supportive relationship between Sustrans and local organisations and groups so that they can focus on their ambitions for their local paths.



"Before volunteering with Sustrans I was in pieces. I've changed so much I hardly recognise myself! I've met so many fantastic people who have helped me regain my confidence. I now hope I can go on to inspire others." Don, volunteer

Whilst we cannot fix everything ourselves, we are in a position to help local communities improve their paths, and can act as a facilitator between users and the many different landowners whose paths and roads make up the Network.

"The Coate to Marlborough Railway Path is hugely popular, with 21,000 trips taken on the route each year by bike, foot and horseback. It's wonderful to see how much of an asset the route is to those who use it. And, by maintaining the path with the help of the local community, we can ensure that its value to the people it serves is both enhanced and protected for future generations."

Dick Millard, Sustrans Volunteer and Committee Member at Friends of the Railway Path, a community organisation supporting the maintenance of the route linking Swindon and Marlborough, while preserving and improving habitats.

Monitoring impact and learning as we go

As custodians we need to better monitor usage on the Network, in particular amongst target groups, and tell a story of the impact the Network delivers.

Understanding the Network's impact is vital – our data tells us that the Network is already a community asset with incredible reach, connecting people and places for leisure and pleasure across the UK.

In our role as custodian, Sustrans will continue and deepen our work to monitor impact and learn. The ongoing governance of the Network will maintain this commitment and lead the collection of robust data that allows the difference that the Network makes to be understood and communicated.

Understanding the impact into the future

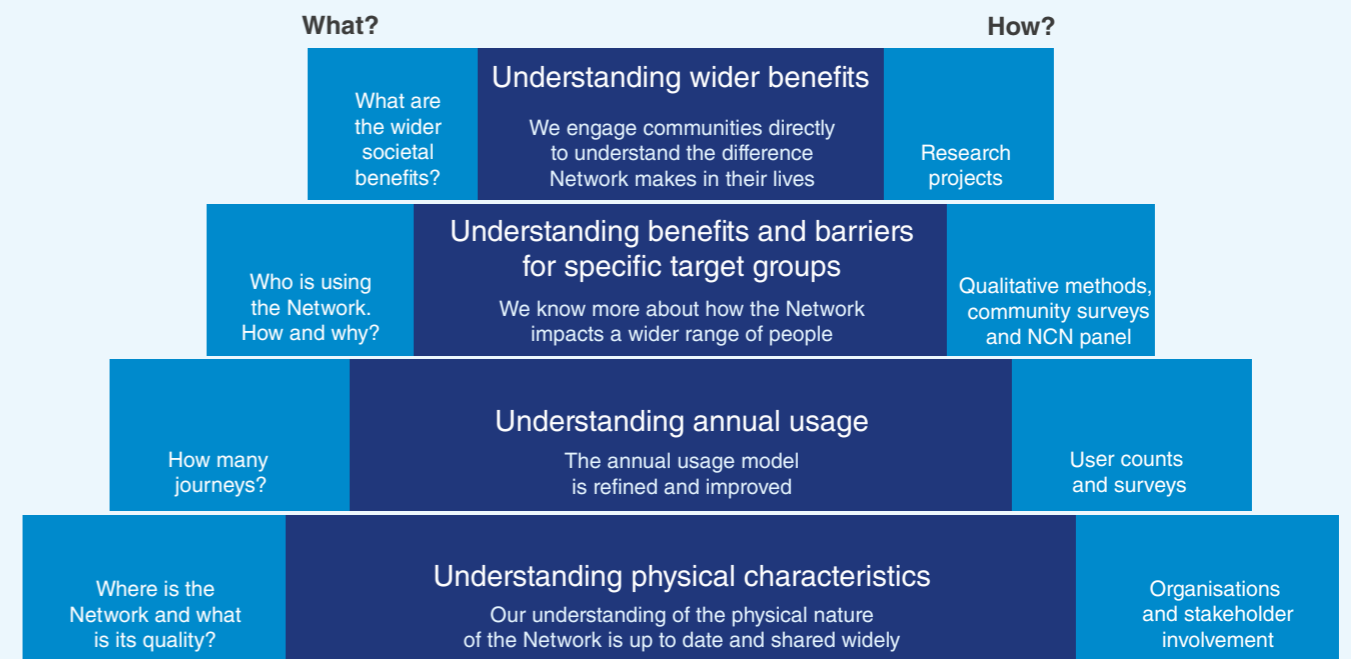
Our shared vision for the National Cycle Network relies on easy-to-use, robust, and up-to-date data that allows us to be confident of the extent of the Network that is traffic-free, accessible and safe. The same data will allow us to be clear on the connectivity provided by the Network – both in terms of its role in connecting people (cities, towns and villages) and assets (historical and cultural, forests, Areas of Outstanding Natural Beauty and National Parks).

Keeping the data on the Network's physical qualities up to date will need to involve everyone with a stake in its future – from users and communities, to volunteers and Sustrans staff, and landowners across the country.

In addition to continuing to monitor annual usage across the Network, a new evaluation framework will make clear the appropriate methods for capturing data specific to a wider range of users. This will mean more of what we are doing now and the introduction of new monitoring and evaluation methods, such as a Network panel, qualitative approaches like interviews and focus groups, and digital tools for capturing data.

There are opportunities to understand far more about the wider societal benefits of the Network. As resources for research, monitoring and evaluation are not always easy to find, partners will need to work together to co-ordinate data collection, analytical approaches and understand its impact.

Future understanding of the Network





CASE STUDY Northwich Primary school

At a primary school in Northwich, a new bridge on National Route 5 meant staff and pupils could safely walk to a local pool for swimming lessons. Whilst only a few hundred metres away, the pool was across a river, so the school previously had to hire a bus, partly paid for by parents and carers.

“The opening of the Riversdale Bridge has had a huge impact... Now that we are able to walk the short distance safely we are obviously saving on the bus expense, the children get some fresh air and exercise on the journey and I can be far more flexible with regards to which children I take as there is zero cost to parents.”

Adam Croft, Headteacher, Charles Darwin Community Primary School



Grow it

A better Network

Increasing the length of the Network is not a priority. Our focus will be on growing the number of traffic-free miles and quiet-way sections. But where there are vital missing sections, or the opportunity to deliver new traffic-free connections, we will build these into the Network Development Plans.

We will work closely with others to ensure mutual benefit from existing initiatives, including for example opportunities to invest in the Network in Scotland and to develop new paths alongside major road improvement schemes, such as the dualling of the A9 through to 2025 and the A96 to 2030.

Our activation projects feature schemes linked to HS2, Highways England investments and particularly close collaboration on Local Cycling and Walking Infrastructure Plans (LCWIP) projects in England, Active Travel Plans in Wales and the commitment to build an extensive traffic-free greenways network in Northern Ireland.

More LCWIP initiatives are anticipated in the next few years and will provide excellent opportunities for prioritising local investment on improvements and connections on the Network and local walking and cycling infrastructure in built-up areas.



57%
of the population
live within
one mile
of the Network

“Development of the National Cycle Network will also be in line with and support the Department for Transport’s Inclusive Transport Strategy which has an ambitious goal of creating a transport system offering equal access for disabled people by 2030.”

Department for Transport

We will also seek quick wins and one-off opportunities linked to new housing developments and infrastructure schemes, where these fit with the Network vision and have local community support.

Currently 57% of the population live within a mile of the Network. In the longer term, we do want to bring the Network closer to more people, including areas where it is currently absent, ensuring that everyone can make easy local journeys under their own steam. All new routes should of course be traffic-free and built according to the newly agreed design principles.



Fund it

How much will it cost to realise our vision?

We estimate £2.8 billion over the next 22 years.

This clearly represents significant long-term investment, but there is ample evidence to prove that the benefits will far outweigh the cost.

To put this figure into context, the cost of activation projects will range from £18,000 for city centre signage improvements through to £6 million for the creation of a new 30-mile greenway to complete a missing link in a strategically important route.

Our vision for the National Cycle Network of the future can only be achieved in partnership with its valued stakeholders, donors, volunteers and community friends. Realising the vision will require considerable levels of funding to carry out the proposed improvements and ongoing maintenance.

This review presents an exciting opportunity to imagine how the Network will serve the UK and contribute to our economy in the future. Our modelling has taken the estimated 4.4 million Network users and 786 million walking and cycling journeys made on the Network in 2017 as its basis, and estimates from this the number of users and journeys that could be seen by 2030 and 2040, if our vision is achieved. Journeys have been valued using industry standard economic appraisal tools.

Our journey projections have been reviewed by John Parkin, Professor of Transport Engineering at the University of the West of England, who has confirmed that the approach used to estimate and forecast Network usage is appropriate, and there is potential for future cycling levels to be even higher than forecast.

We know that our estimates are conservative. For example, we have not taken into account background factors that could compound the benefits, such as population growth, and the potential for Network connectivity to the denser urban networks that many cities and towns are developing or envisioning. Even so, the potential impact is huge – we forecast an estimated 8.4 million users and 1.6 billion journeys by 2040. The overall value of the economic contribution and wider benefits is estimated at £7.6 billion every year by then.

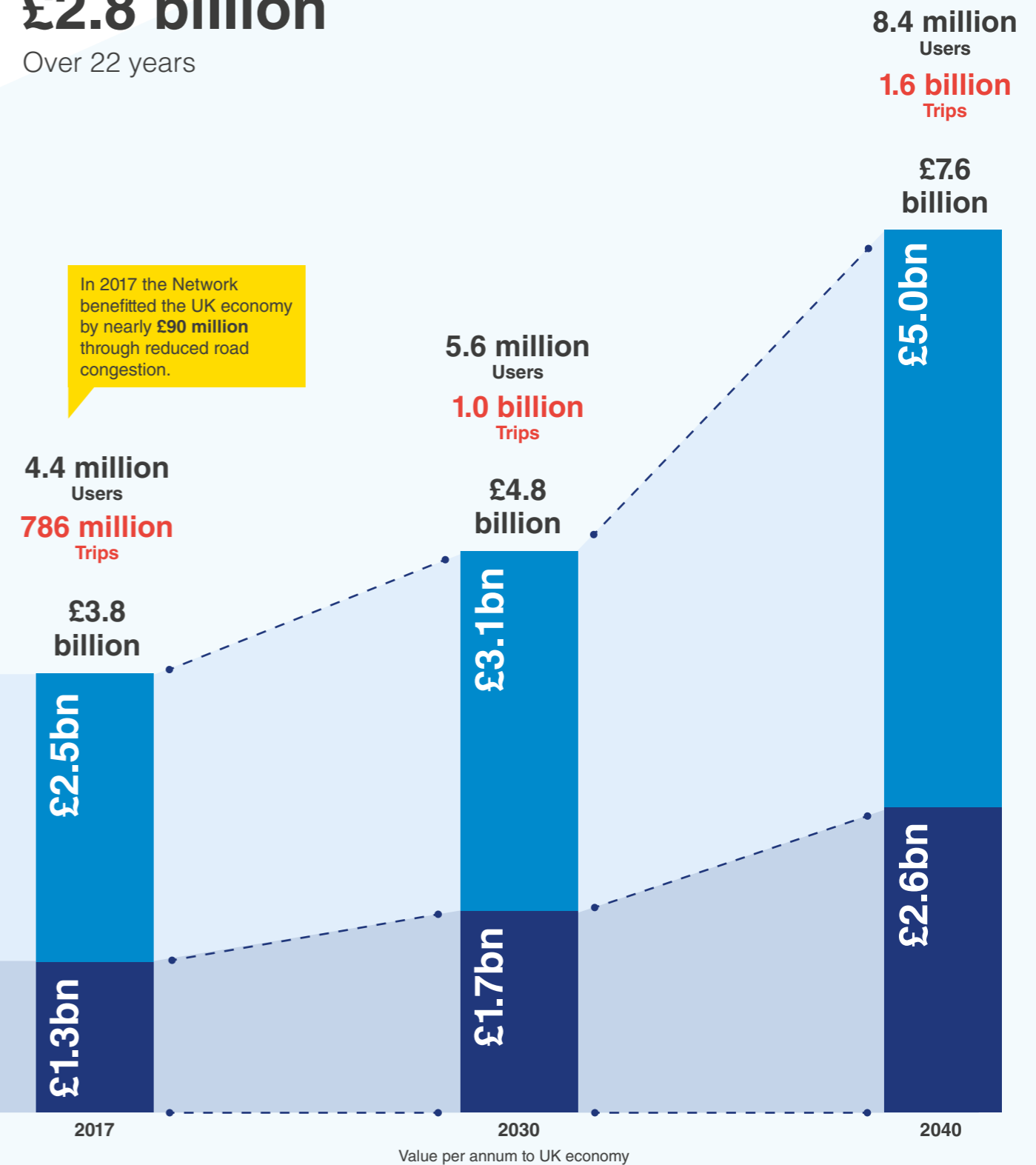
Yet the majority of people who use the Network daily, weekly or perhaps just occasionally, probably don't think about this when they make their trips. As we said at the start of this report, the true value of the Network day-to-day is the contribution it makes to people's social, physical and environmental wellbeing, and the links it makes with their shops, work, public spaces, schools, communities, friends and families.

How much would it cost to realise our vision?

£2.8 billion

Over 22 years

Increasing trips from 786 million to 1.6 billion would take the overall value of the economic contribution and wider benefits of the Network to more than **£7 billion**.



The combination of two types of economic modelling suggests the National Cycle Network was worth £3.8 billion to the UK in 2017. We estimate that this could rise to £7.6 billion by 2040.

	1.	2.	3.
Economic contribution from leisure and tourist trips made on the Network	Spend in local businesses by tourists and leisure users	Based on two models <ul style="list-style-type: none"> leisure cycling leisure walking 	Considers accommodation, transportation, food and drink costs
Economic savings from trips made on the Network each year¹	Uses DfT standard framework for appraising transport projects and incorporates World Health Organisation HEAT tool	Driven by largely by health benefits from increased exercise and avoided car trips	Includes value of reduced absenteeism, accidents, CO2, air quality, congestion and increased journey quality and physical activity

A dynamic mix of funding

Funding will need to come from a range of sources, including governments, individuals, donors, businesses, trusts and foundations.

Funding will also vary by geography and by year. For example, this year we received £7 million from the Scottish government to fund the Network in Scotland which was double the previous year, but no guaranteed regular funding from government for the Network in England – although there are ongoing conversations with regards to possible future funding.

Ongoing funding to run it

Currently this largely comes from generous donations from Sustrans supporters and it is likely that Sustrans will need to find regular funding for this from supporters and other means.

Initial investment and ongoing funding to love it

There will be a need for initial investment in technology to link how we engage users and communities with how we run the Network, and in marketing campaigns and branding – together with additional resource to co-ordinate and deliver stronger community engagement.

Fixing and growing it

The cost of delivering over 50 activation projects by 2023 is estimated at around £60 million and will require fund assembly.

To deliver on our full traffic-free and quiet-way targets will require significant fundraising. However, at a time when inactivity and obesity are a national health crisis, congestion clogs our cities, air quality is increasingly toxic, green space is being systematically eroded, and traffic-free walking and cycling is scarce, the Network is needed more than ever before. We will establish a fundraising committee in order to help raise funds to support the development of this national asset.

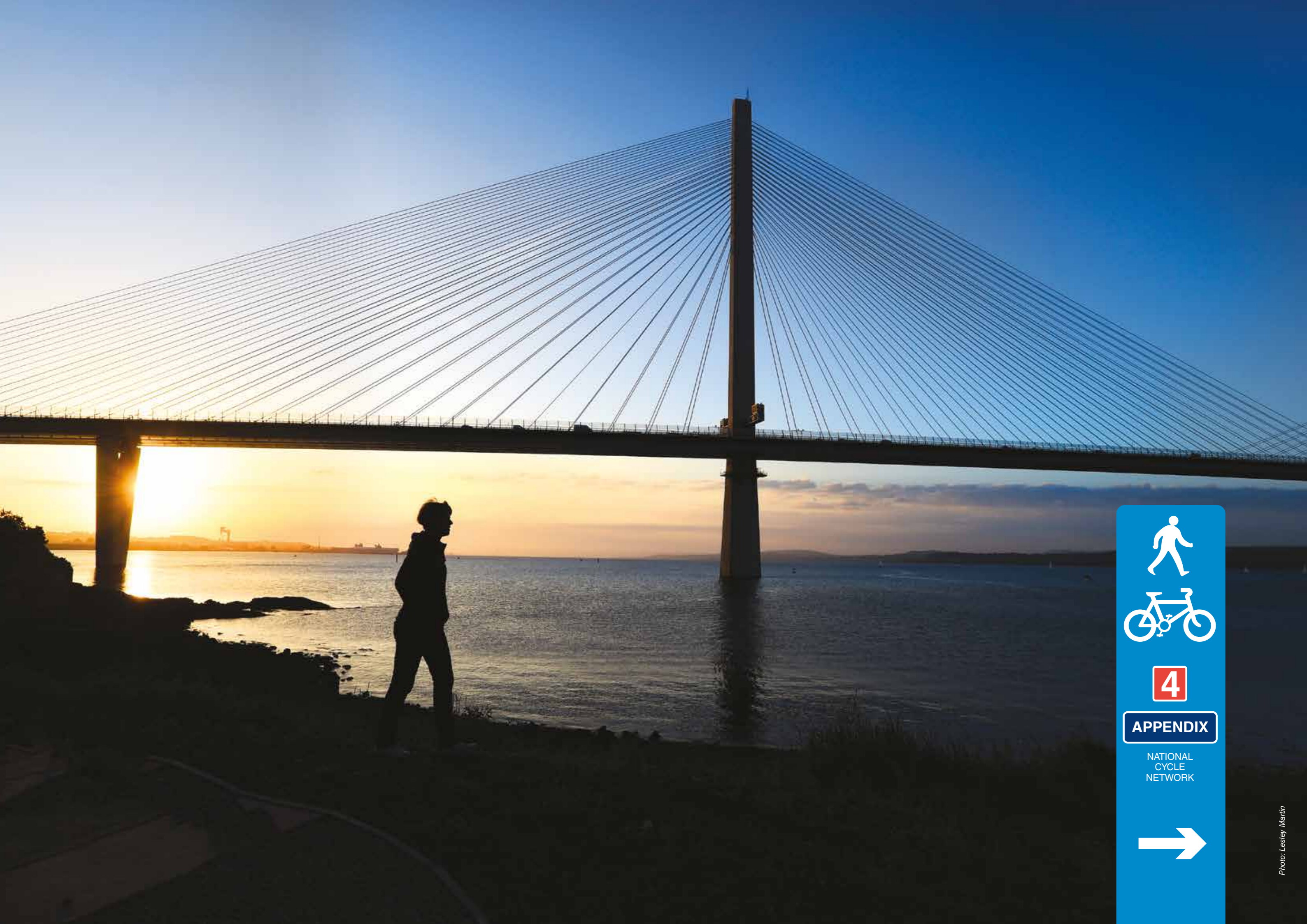
At a time when inactivity and obesity are a national health crisis, congestion clogs our cities, air quality is increasingly toxic, green space is systematically eroded, and traffic-free walking and cycling is scarce, the Network is needed more than ever.



Recommendations from the review

- 1.** Set the tone for harmonious use of the Network by everyone.
- 2.** Remove or redesign all 16,000 barriers on the Network to make it accessible to everyone, with no barriers in place for continuous travel for everyone.
- 3.** Transform the Network by replacing existing on-road sections with new traffic-free paths or by creating quiet-way sections so it is safer for everyone.
- 4.** Ensure that where the Network is on a quiet-way section the speed limit is 20mph in built-up areas and 40mph in rural areas.
- 5.** Improve safety at crossings where the Network crosses roads or railways.
- 6.** Adopt a new quality standard to ensure path widths and surfaces are built for everyone.
- 7.** Improve signage so everyone can use the paths without a map or smartphone.
- 8.** Deliver over 50 activation projects across the UK by 2023 to improve the Network and demonstrate change.
- 9.** Introduce a process for de-designation of parts of the Network that cannot be improved and a clear process for incorporating new routes that fill gaps or make new connections.
- 10.** Make it easier for people using the Network to feed back on its condition – and use this insight to improve it.
- 11.** Promote the Network to new users.
- 12.** Encourage greater community involvement in designing, developing and maintaining the Network.
- 13.** Provide open data on the Network.
- 14.** Report regularly on the impact of the Network in improving everyone's lives and places.
- 15.** Establish clear governance to bring together land managers, funders, users and others to deliver these recommendations in partnership.

As custodian of the Network, Sustrans will lead on these recommendations, working in partnership with local authorities, private and charitable landowners, national governments, agencies, users, local communities and all the many organisations that make the Network possible.



4

APPENDIX

NATIONAL
CYCLE
NETWORK



Appendix 1: a quality standard for the Network

National Cycle Network design principles

There is sufficient high-quality design guidance for walking and cycling routes already in existence to not require a further set of design guidance to be created. The National Cycle Network Design Principles set out the key factors that make the Network distinctive and that need to be considered during the design process – the premise being that a designer is already using best-practice design guidance.

Routes shall:

- be designed in accordance with current best practice design guidance
- be designed in collaboration with the local community
- provide convenient links to key destinations, connecting cities, towns and countryside
- meet the following nine design principles.



1. Be traffic-free or quiet-way



2. Be wide enough to comfortably accommodate all users



3. Be designed to minimise maintenance



4. Be signed clearly and consistently



5. Have a smooth surface that is well drained



6. Be fully accessible to all legitimate users



7. Feel like a safe place to be



8. Enable all users to cross roads safely and step-free



9. Be attractive and interesting

There is a distinction between what a designer of National Cycle Network routes needs to know compared with what a user of the Network needs to know.

Someone designing a route for the Network needs to know:

- how wide to make a route
- what surface to provide
- whether it is acceptable for the route to be on-road
- whether a road crossing should be a bridge or a toucan crossing.

Someone using the Network needs to know:

- Will I (or my 12-year-old child) be safe?
- Can get down here without a mountain bike?
- Can I follow the signs and not get lost?
- Will this be an enjoyable experience?
- Can I access all parts of this route without having to push or carry my wheelchair or trike, or take my children out of the double buggy?

To meet the dual need of a new quality standard for the Network there are two key elements:

- National Cycle Network Design Principles (for guide designers)
- National Cycle Network Level of Service Measures (to assess user experience).

National Cycle Network level of service measures

Seven level of service measures have been developed to enable the quality of the user experience to be assessed.

These measures will be assessed based on the answers to a series of criteria for each measure. This will provide information on how the condition of the Network is changing over time and inform interventions to improve the quality where required.

Seven level of service measures

Network level of service measure	Measure of:
Accessibility	Whether all users can access and travel along a path
Surface quality	Whether the surface is smooth, well maintained and well drained
Traffic-related safety	Whether on-road sections are on sufficiently quiet roads and whether busy roads can be crossed safely by all users
Way-finding and signage	Whether the route is signed clearly and consistently
Flow	Whether the path is wide enough to enable all users to travel at comfortable speeds, whether there are any barriers which would interrupt continual movement
Social safety	Whether it feels a safe place to be
Place	Whether the route is attractive and interesting

Signing and wayfinding guidelines

A set of signing and wayfinding guidelines will be developed to set out how the Network should be signed to provide a consistent user experience, providing directions to key destinations served by the Network.

These guidelines will also describe how the Network identity should be applied in conjunction with signing and wayfinding. This will enable clearer recognition of the Network on the paths themselves.

Appendix 2: a closer look at the activation projects

It is important that the results of the National Cycle Network review are backed up by immediate and visible action and, as such, we are aiming to deliver the activation projects by 2023.

These projects will activate and test new governance systems, the marketing strategy, funding mechanisms and approaches to volunteer, community and user involvement. They will also test new ways of capturing data from a wider range of users. Their implementation will help us to garner the profile, support and resources required to mobilise the wider improvements to the Network.

The activation projects have a good geographical spread from across the UK and will cover the full range of priority categories (see Fix it section, page 32).

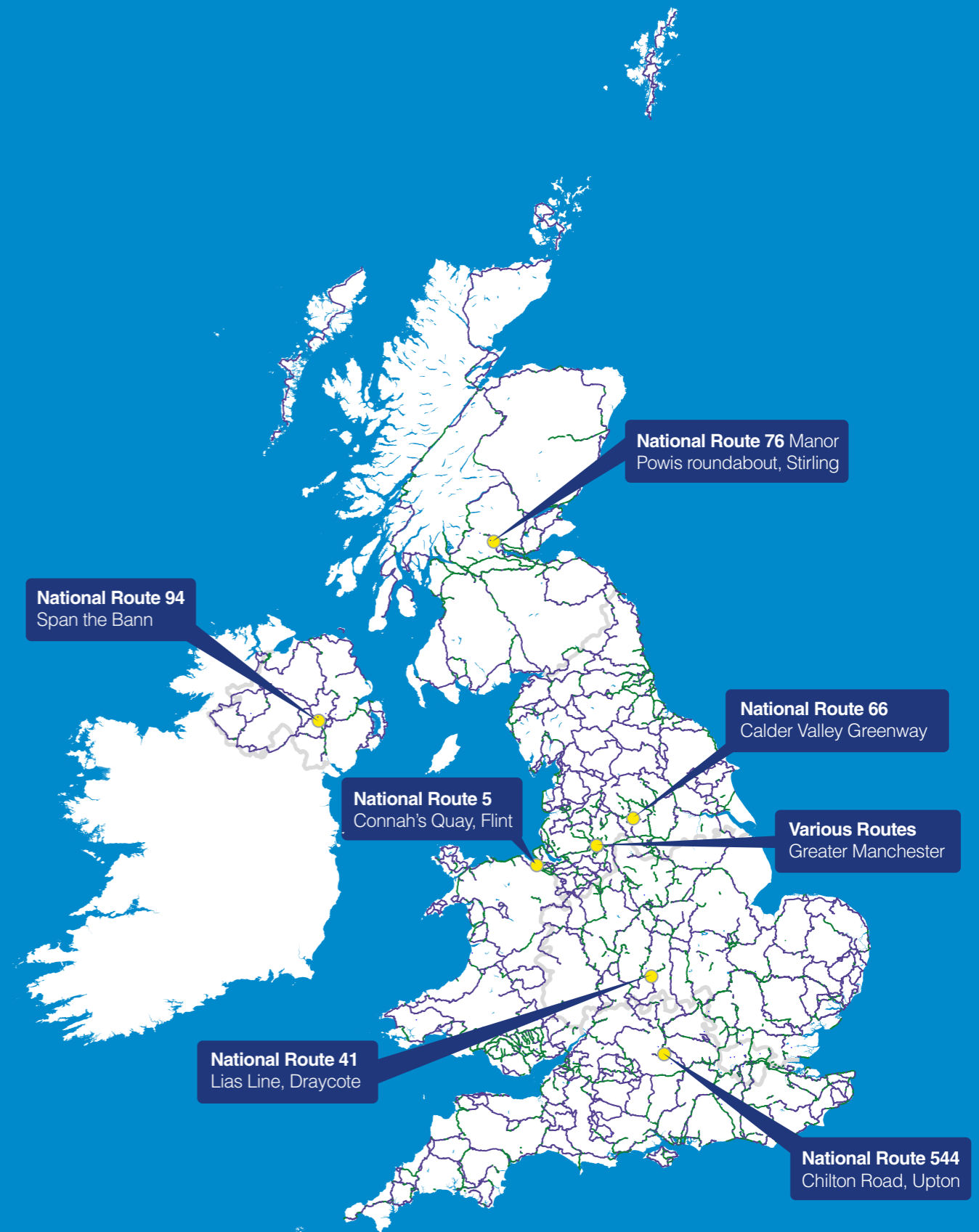
The selection process for the activation projects has included consultation with the regional and national advisory panels as well as the volunteer groups and Sustrans staff working on and using the Network.

A prioritisation checklist has been used to help with the identification and prioritisation of the projects:

- Is the project deliverable within a 2 to 3 year timeframe?
- Does the project support the strategic aims of the Network in the region?
- Does the improvement support access for all?
- Does the project support the delivery of a traffic-free Network?
- Does the project improve the safety of the section of the Network it deals with?
- Does the project improve a section of the Network that has high current usage?
- Is there good potential for increased usage in the future?
- Is there land funding available for this project?
- Is there landowner support for this project?
- Is there community support for this project?

We have estimated the total costs required to deliver these projects and several already have full or partial funding in place and some of the preparatory work completed. Opportunities for securing the remaining funds will be sought as part of our fundraising strategy.

The following projects are examples of the activation projects which will be delivered by 2023. There will be over 50 of these in total, spread throughout the nations and regions.





Category A1

Upgrading of Poor on-road sections to change the character to become quiet-way sections with reduced speed limits, better signage and road markings.

Potential project – National Route 544, Chilton Road, Upton, South Oxfordshire

Problem: This route serves a large employment site at Harwell Campus and provides access to Didcot Parkway railway station for Wantage and surrounding villages.

This short on-road section is a link between two well-used traffic-free sections but scores Very Poor due to being busy with fast moving vehicles, especially during peak hours.

The section also includes a crossing of the busy A417 London Rd.

Solution: Measures will be implemented to create a quiet-way section by reducing the volume of traffic using the road and lowering the speed of those vehicles that do pass through.

Category A2

Creating traffic-free alternatives to busy or dangerous on-road sections within, or beside the existing highway.

Potential project – National Route 66 Calder Greenway, Mirfield, West

Problem: This section follows the very busy and fast A644 through the town of Mirfield, creating a gap on the popular Calder Greenway between Dewsbury and Huddersfield

Solution: Existing on-road provision will be upgraded and extended to provide fully segregated infrastructure adjacent to the highway along the entire length of the A-road. This will create a safe and accessible link to the rest of the traffic-free route.

Category A3

Re-routing an on-road section to a traffic-free alternative away from the highway.

Potential project – National Route 5, Flint to Connaught's Quay, North Wales

Problem: Current route send users along a very narrow, busy and fast section of A-road between Flint Castle/ railway station and Connaught's Quay on the popular North Wales Coastal Route.

Solution: Provide a completely new traffic-free route following the coastline and avoiding the A-road. This will include a new bridge over the railway improving non-motorised connections to the town's iconic beach front areas.

Category B4

Improving the quality of poor, traffic-free sections by upgrading the surface, signage and width.

Potential project – improving signage on the traffic-free Network in Greater Manchester

Problem: Manchester has a high density of Network, but signage is generally poor and the multitude of routes can be very difficult to navigate.

2018-20 is a key period in Greater Manchester due to the Made to Move vision to create a comprehensive local walking and cycling network across the area – it is important that the Network features in the development of this fully joined up local network, standing out as quality infrastructure.

Solution: This project will rationalise the Network, making sense of the multitude of parallel and adjacent routes and providing new, high-quality Network signing and legibility.



KEY
— Very poor
— Poor
— Good
— Very good
- - - Proposed route realignment
● Crossing/barrier for improvement
 Scope for improvement measures



Category B5

Improving the safety of crossings where traffic-free sections cross roads.

Potential project – National Route 76 Manor Powis roundabout, Stirling, Scotland

Problem: Path users exit from a traffic-free section directly onto a very busy multi-lane roundabout on the A907, east of Stirling. The roundabout is a key barrier for users of the well-known *Round the Forth* circuit, heading to and from Clackmannanshire.

Solution: A realignment to a traffic-free route, avoiding this difficult roundabout completely, is a key priority for Sustrans, Stirling Council and Clackmannanshire Council and has strong political support.



Category B6

Making traffic-free sections accessible to all legitimate users, including users of wheelchairs, mobility scooters and non-standard cycles, by removing or amending barriers, steps, narrow sections and steep ramps.

Potential project – National Route 41 Lias line accessibility, Rugby, Warwickshire

Problem: A series of very difficult entry points prevent access to the popular traffic-free section of the Lias line. The points are steep, roughly surfaced and narrow, each with an awkward barrier, steps and/or gate to negotiate.

Solution: The project will improve seven of these inaccessible entry points, removing barriers and creating smooth, sloping, step-free access to the Lias line itself as well as to Draycote Water Country Park with its 2-mile stretch of lakeside, traffic-free path. This will benefit users from Rugby, Leamington Spa and surrounding villages as well as improving connectivity through the heart of the Midlands.



Category C

Creating new routes that fill gaps in the Network and make new connections.

Potential project – National Route 94 bridging the River Bannfoot, Northern Ireland

Problem: The 113-mile *Lap the Lough* circuit of Lough Neagh, the largest freshwater lake in Britain and Ireland, is very popular with day-trippers and touring cyclists but this unbridged river requires a very circuitous diversion away from the Lough shore down to and through Portadown.

Solution: A new 60m walking and cycling bridge crossing the River Bannfoot would avoid the 16-mile on-road detour and improve the continuity of the lake-side experience. Facilitating cycle and foot traffic in this way would maintain the peaceful atmosphere of the area whilst opening up this beautiful section of the countryside to visitors and locals in a sustainable way.



KEY
— Very poor
— Poor
— Good
— Very good
- - - Proposed route realignment
● Crossing/barrier for improvement
 Scope for improvement measures

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5

THANK YOU

STAKEHOLDERS AND PARTNERS

NATIONAL CYCLE NETWORK



Thanking our stakeholders and partners

Our stakeholders and partners include landowners, local and national governments, our supporters and volunteers, funders and other non-governmental organisations who are keen to promote walking and cycling and improved public spaces.

We have been delighted by the commitment shown by stakeholders throughout the review, not least the financial support of the four UK governments in undertaking this review.

Apart from making the review possible, this has also given a clear signal that the National Cycle Network is seen as a valuable asset at the highest level across the UK and that there is strong commitment to developing a long-term plan to secure and improve it.

Representatives of all four governments have joined many other stakeholders in our UK advisory panel, which has met regularly to consider proposals to overcome the challenges faced by the Network. This has included establishing a new vision, addressing its maintenance, design standards, accessibility, funding, marketing, development, and establishing the principle of greater community involvement and a user-focused approach.

Invariably they have provided valuable advice, expertise and feedback, all of which has allowed us to produce a vision, report and way forward that has strong and widespread support. Crucially they have been critical friends, challenging our own view of the Network to ensure we are building one that works for everyone.

This strong backing at a UK level has been just as evident in the seven national and regional advisory panels, which have also met regularly, with a particular focus on the physical network in their areas, culminating in the selection of activation projects for the action plans.



56 Photo: Jonathan Bewley

Our advisory panel



About Sustrans

Sustrans is the charity making it easier for people to walk and cycle. We are engineers and educators, experts and advocates.

We connect people and places, create liveable neighbourhoods, transform the school run and deliver a happier, healthier commute. Sustrans works in partnership, bringing people together to find the right solutions.

We make the case for walking and cycling by using robust evidence and showing what can be done. We are grounded in communities and believe that grassroots support combined with political leadership drives real change, fast.

Join us on our journey.
www.sustrans.org.uk

Contact us

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