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New Forest Local Cycling and Walking Infrastructure Plan

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Hampshire
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Forestry
England



New Forest
DISTRICT COUNCIL



NEW FOREST
NATIONAL PARK



Credit: New Forest Park Authority

Introduction

This is the Local Cycling and Walking Infrastructure Plan (LCWIP) for the New Forest and it has been prepared by Hampshire County Council in partnership with New Forest District Council (NFDC), New Forest National Park Authority (NFNPA) and Forestry England (FE).

Roles and responsibilities of all LCWIP partners

- Hampshire County Council has responsibility for developing the LCWIP because it is the Highway and Transport Authority for the public highway within New Forest District (excluding the A31 Strategic Road Network, which is the responsibility of National Highways).
- New Forest District Council is the Planning Authority for all areas of the district outside of the boundary of the National Park.
- New Forest National Park Authority is the Planning Authority for everything within the National Park boundary.
- Forestry England is the authority that manages the Crown public forest estate in the National Park, which is nearly 50% of the total area.

This LCWIP covers the whole of the National Park west of the A326 (including crossings of the A326 into the

New Forest) with the exception of an area to the north of the B3078, which is within Wiltshire. Walking and cycling infrastructure proposals developed by Wiltshire Council are shown within this document where they fall within the National Park boundary, to ensure the document provides a comprehensive overview of the walking and cycling network in the New Forest. It also covers the southern coastal area around the towns of Lymington and New Milton, the Avon Valley including Ringwood, Fordingbridge and the area around the villages of Damerham and Martin leading onto Cranborne Chase.

This LCWIP sits alongside the New Forest (Waterside) Local Cycling and Walking Infrastructure Plan¹, adopted by Hampshire County Council in 2022. The Waterside LCWIP covers the Waterside area of New Forest that generally lies to the east of A326 and includes Totton. The Waterside LCWIP was developed in advance of the rest of the New Forest area due to specific development pressures in the area and because the area is covered by a successful joint Transforming Cities Fund (TCF) bid secured in partnership with Southampton City Council.

The New Forest LCWIP network connects with route alignments in the LCWIPs that have or are being prepared in adjoining areas of Hampshire, Dorset, Wiltshire and Bournemouth, Christchurch and Poole, all of whom have been engaged during the development of this LCWIP.

Hampshire County Council, New Forest District Council (NFDC), New Forest National Park Authority (NFNPA) and Forestry England (FE) are committed to improving the roads and paths in the New Forest and share a desire to invest in sustainable transport measures, including walking and cycling infrastructure. Successful delivery of the network of routes outlined in this LCWIP will offer healthy and safe alternatives to travel by car for local short journeys to work, local services and schools as well as for leisure. In so doing, all residents and visitors in the New Forest area will experience benefits, such as: a reduction in air pollution, fewer delays, a potential decrease in the frequency of road traffic collisions including those involving forest animals, improved accessibility for people of all ages and abilities and enjoyment of the special qualities of the New Forest environment. The outcome will be healthier and friendlier communities with high levels of walking, wheeling, cycling, horse-riding and public transport across the New Forest area.

¹ [Waterside LCWIP report](#)

LCWIP Overview

What is an LCWIP?

Local Cycling and Walking Infrastructure Plans (LCWIPs), as set out in the government's Cycling and Walking Investment Strategy (CWIS), are a strategic approach to identifying cycling and walking improvements required at the local level. They enable a long-term approach to developing local cycling and walking networks, ideally over a 10-year period, and form a vital part of the government's strategy to increase the number of trips made on foot or by cycle. They comprise:

- a network plan for walking and cycling which identifies preferred routes and core zones, based on the potential for modal shift for further development;
- a prioritised programme of infrastructure improvements for future investment; and
- a report which sets out the underlying analysis carried out and provides a narrative which supports the identified improvements and network.

² The second cycling and walking investment strategy - GOV.UK (www.gov.uk)

³ Responding to climate change | Hampshire County Council (hants.gov.uk)

⁴ newforest.gov.uk/climatechange

⁵ Climate and nature emergency - New Forest National Park Authority (newforestnpa.gov.uk)

Requirements for an LCWIP

In July 2022, the government published its Second Cycling and Walking Investment Strategy (CWIS)² which has the following aim: 'To make walking and cycling the natural choices for shorter journeys, or as part of a longer journey by 2040'. The CWIS objectives to 2025 include:

- increase the percentage of short journeys in towns and cities that are walked or cycled from 41% in 2018–2019 to 46% in 2025;
- increase walking activity, where walking activity is measured as the total number of walking stages per person per year, to 365 stages per person per year in 2025;
- double cycling, where cycling activity is measured as the estimated total number of cycling stages made each year, from 0.8 billion stages in 2013 to 1.6 billion stages in 2025; and
- increase the percentage of children aged 5 to 10 who usually walk to school from 49% in 2014 to 55% in 2025.

The CWIS objectives beyond 2025 are:

- increase the percentage of short journeys in towns and cities that are walked or cycled to 50% in 2030 and to 55% in 2035; and
- deliver a world-class cycling and walking network in England by 2040.

Hampshire County Council, as the Highway and Transport Authority, to successfully secure funding from central government for walking and cycling improvements in the New Forest District, must show it has an approved LCWIP in place and will be delivering improvements that will help achieve the objectives set out in the CWIS.

The delivery of this LCWIP is supported by Hampshire County Council's own strategies including Local Transport Plan 4 and Hampshire Walking and Cycling Strategies. The aims of the respective, county-wide strategies are:

- Walking: By 2025, walking will be the travel mode of choice for short trips and the most popular and accessible means of recreation.
- Cycling: By 2025, cycling will be a convenient, safe, healthy, affordable and popular means of transportation and recreation within Hampshire.

Why do we want an LCWIP for the New Forest?

In June 2019, Hampshire County Council declared a Climate Emergency³, joining more than 70 local authorities across the country in committing to put environmental issues at the heart of everything it does. New Forest District Council published its most recent Climate Change and Nature Emergency Strategy in

summer 2023⁴, having declared a Climate and Nature Emergency in 2021. The National Park Authority declared a Nature and Climate Emergency in January 2020⁵, based on the following reasons:

- Only 7% of visitors travel to the New Forest car-free and high levels of car dependency can affect the quality of life of local communities, the quiet enjoyment of the National Park, the welfare of livestock and the integrity of the Forest's landscape and habitats.
- 40% of the New Forest's carbon emissions come from road transport.
- The New Forest National Park has one of the lowest 'easy to use' footpath network ratings compared with other National Parks and although there are over 100km of off-road cycle paths, they are not always well connected to enable round trips or active travel between destinations.
- The New Forest is closely surrounded by dense urban development with little intervening buffer area.

The National Park has an estimated 16 million day visitors per annum and planned nearby housing growth (about 130,000 dwellings are currently proposed for South Hampshire and southeast Dorset up to 2036 in the zone around the New Forest National Park) means that in the future this figure is only likely to increase. These numbers of visitors alongside the growth in residents can only be accommodated sustainably by achieving

LCWIP Overview

a shift from private car trips to active travel in the form of walking, cycling and public transport. This LCWIP document is an essential tool in enabling that shift as well as helping to address a range of rural transport issues by improving transport connectivity, health and wellbeing, and access to recreational opportunities by active travel modes.

Framework for New Forest LCWIP network

The New Forest LCWIP network has been developed to ensure it is coherent, direct, safe, comfortable and attractive. Routes have been identified that link the places people live or stay with key trip attractors, enabling them to make as many local trips as possible by cycling. As residential densities are lower in rural areas, use of rural parts of the network are likely to be lower than in urban areas, but it is still important to ensure there is a plan to improve options for people to access key services without reliance on the private car.

LCWIPs developed in Hampshire to date have generally shown a planned network divided into primary and secondary routes. For the New Forest LCWIP, a third category of leisure routes has been included. This is because there are different patterns of movement during the summer tourist season in the New Forest, with visitors making trips for leisure purposes, as well as the day-to-day journeys by residents.

The New Forest LCWIP goes beyond the identification of a utility trip network to include a leisure network

encompassing both on- and off-road routes.

A fourth category of route has been included in the Network Map called 'Additional Routes for Consideration'. These are primarily Countryside Rights of Way or the Avon Valley long-distance walking path. These routes have been included in the Network Map for the consultation stage to understand whether there is support from stakeholders for the inclusion of these routes in the LCWIP network given the ecologically sensitive nature of some of the locations.

Definition of routes and zones:

- **Primary utility** – the main corridors linking key origins/destinations within settlements (and to nearby villages which closely relate to the main settlement); providing links between larger settlements which are relatively close together within the study area; or forming strategic links between key destinations, for example as part of the National Cycle Network. These utility routes are focused on the most direct alignments linking settlements which are often main roads. Further feasibility work is required to fully determine whether primary and secondary utility routes will be deliverable. If they are assessed to be undeliverable then alternative alignments along quieter roads or parallel routes will be considered.
- **Secondary utility** – important routes feeding into the primary routes, connecting more dispersed trip attractors or smaller population centres, and increasing the density of routes to allow more choice.
- **Leisure** – key routes linking settlements or significant seasonal destinations such as campsites via the public highway, countryside rights of way (CRoW)

or Forestry England managed estate used primarily for leisure purposes and tending to be more popular on a seasonal basis. This document is not intended to capture all the leisure routes within the area and there are additional routes in existence on the gravel network that are not shown in this document.

- **Core Walking Zones (CWZs)** – These are areas with several walking trip generators located in close proximity, such as town or local centres. Walking zones set out areas for investment in pedestrian infrastructure over a larger area rather than a specific route.

Local Access Plans

A Local Access Plan is a localised strategy for improving access by sustainable transport modes in small to medium-sized settlements. It provides an opportunity to focus on a specific area and have detailed discussions with the parish or town council on transport matters in the local community.

The rural nature of the New Forest requires that the New Forest LCWIP recognises the essential role of the market towns and villages in serving the local community within each town and in the surrounding countryside as well as serving as gateways for visitors to access the National Park. Local Access Plans will be developed in partnership with the local community and focus upon the local services and facilities in each village or town centre, with walking and cycling routes linking the residential areas of each town to the surroundings rural settlements and to the National Park. Each Local Access Plan will be based upon the principles of supporting the local economy, creating Healthy Streets (see Hampshire

LTP4) and will contain proposals for walking zones as described in LCWIP Guidance.

Each will include an action plan that typically sets out a 3–5-year programme of feasibility work, detailed design and delivery of schemes (including LCWIP schemes) that have regard to the known Local Plan context and the associated Infrastructure Delivery Plans.

New Forest LCWIP network components

The New Forest LCWIP has been developed with the following network components:

- A primary and secondary utility (all-purpose) cycle route network, identifying preferred routes for further investment and development based on the potential for modal shift.
- An on-road leisure cycle route network, identifying preferred routes for leisure trips, including linking leisure trips such as from campsites and car parks to leisure attractions such as ornamental drives and themed venues.
- An off-road local or leisure walking, cycle and horse-riding route network, utilising Forestry England permitted gravel trails and designated public and permissive rights of way for cyclists.
- Additional routes for consideration – routes where we are seeking feedback from stakeholders during the consultation stage as to whether these routes should be included in the LCWIP network.
- Core Walking Zones have been developed for the

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towns and villages listed below that were deemed to meet the criteria. These will provide a starting point for the development of Local Access Plans in consultation with the representative bodies for each of the settlements:

- Brockenhurst
 - Fordingbridge
 - Lymington
 - Lyndhurst
 - New Milton
 - Ringwood
- Local Access Plans will be developed for the market towns and villages where CWZs have been developed (listed above).
 - Those settlements where CWZs or Local Access Plans are not proposed can still expect to see pedestrian and cycle infrastructure improvements associated with route development proposals.

The proposed primary and secondary utility cycle network has been assessed against the requirements of government guidance: **Cycle infrastructure design (LTN 1/20)**. The results of that assessment are set out in Section Two of this LCWIP.

The approach taken is aligned with the framework of established policies and principles for the National Park set out by Hampshire County Council, NFDC, NFNPA and FE. Whilst more detail is provided in the policy section below, essentially the approach will be to reduce impacts from motor vehicle traffic, such as safety hazards (including forest animals), tranquillity, noise, air

pollution, visual intrusion, loss of habitat and grazing land.

In practice, within the National Park, this could mean for example:

- Where appropriate and supported locally, measures to reduce traffic levels to that required for local access only (including car parks where appropriate) and removal of through-traffic.
- Reducing traffic speed where this would assist in improving safety for people walking, cycling, horse riders and forest animals, for example by reducing the speed limit where this has the support of the local community or by reducing traffic provision to single file with passing places that could release land for grazing or be utilised for better walking, cycling or horse-rider provision.
- Redressing the balance of highway provision to reflect the latest revisions of the highway code and Hampshire's Local Transport Plan to give the highest priority to the most vulnerable road users.

It is recognised that this new approach represents a significant departure from current practices (albeit, some of these approaches were originally set out in the Highway Strategy for the New Forest, published in 1989) and therefore it will be pursued only after consultation with local communities and through pilot schemes to see what works, what doesn't and to learn lessons before such measures are considered for wider application.

The proposed leisure network has not been audited at this stage due to available resources and a recognition that the unique environmental sensitivities of the National Park mean the application of LTN 1/20 standards for off-road routes will not always be appropriate. Going forward, the four partner organisations collaborating on the development of this LCWIP will work with key stakeholders, such as Natural England, to agree appropriate proposals for improving the leisure network identified in this LCWIP.

New Forest LCWIP Boundary

The black boundary line on the map opposite shows the extent of the New Forest LCWIP covered by this document with the boundary of the adopted Waterside LCWIP area shown by the grey dashed boundary line. The two LCWIP areas combined cover the New Forest District Council administrative area.

The extent of the National Forest Estate, managed by Forestry England on behalf of the Forestry Commission/ Crown Estate, is shown in the grey overlay.

The extent of the New Forest National Park is shown by the green boundary line with a green overlay. It predominately falls within the boundary of this LCWIP with the exception of an area to the north that extends into the county of Wiltshire. The Wiltshire LCWIP routes are shown in our network overview map; however, they have not been audited or considered further in this document other than to ensure cross-boundary alignment of routes.



Ecological and Environmental Designations Map

The New Forest National Park is a nationally protected landscape, which has the highest status of planning protection. It has a higher proportion of its land covered by international nature conservation designations than any other planning area in England, including all other English National Parks.

The New Forest is home to a wide variety of important and often rare wildlife, habitats and species. The importance of these means that large areas of land in the National Park and its coastline have been designated as Special Areas of Conservation (SAC), Special Protection Areas (SPA), and Ramsar sites, benefitting from a high level of protection under international nature conservation directives. The New Forest's natural environment is further protected by extensive areas designated as Sites of Special Scientific Interest (SSSI), reflecting their national nature conservation importance.

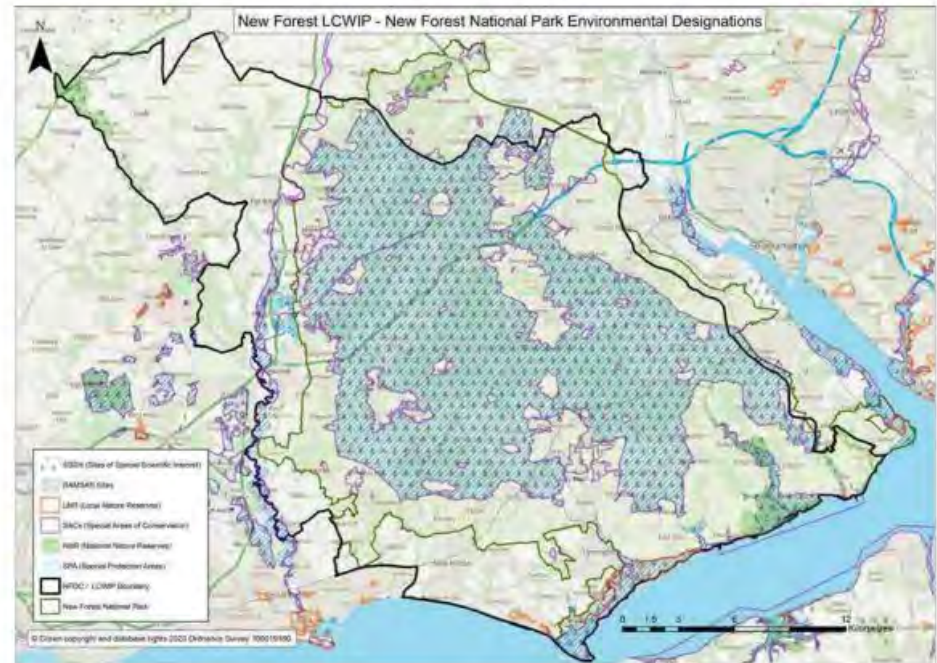
Aligned with the Conservation of Habitats and Species Regulations 2017 (as amended), these internationally designated sites enjoy the highest level of statutory and government policy protection. Specific and stringent tests within the Habitats Regulations are set to ensure that no

development will harm the integrity of these areas, other than in exceptional circumstances.

Many of the routes identified in this LCWIP pass through land that is both ecologically and environmentally very sensitive. The deliverability of some of these routes may not be feasible due to these constraints. Further feasibility work on these routes will require involvement of key stakeholders such as Natural England and the Verderers. Even routes on the public highway may be constrained as many roadside verges are covered by SSSI designation and opportunities for widening the highway to create segregated cycle tracks or footpaths may not be possible.

Designations:

- **National Nature Reserves (NNR)** – Nationally important sites for nature conservation, where conservation is the primary land use, designated under the National Parks and Access to the Countryside Act 1949.
- **Ramsar Sites** – A wetland of international importance, especially for wildlife, designated under



the Ramsar Convention on Wetland of International Importance.

- **Sites of Special Scientific Interest (SSSI)** – Nationally important sites for nature conservation, designated under the Wildlife and Countryside Act 1981.
- **Special Areas of Conservation (SACs)** – Areas designated under the EC Directive on the Conservation of Natural Habitats and of Wild Fauna

and Flora (The Habitats Directive) 1992 as being of European importance for habitats and species.

- **Special Protection Areas (SPA)** – Areas of European importance for birds, designated under the EC Directive on the Conservation of Wild Birds 1979 (the Wild Birds Directive).

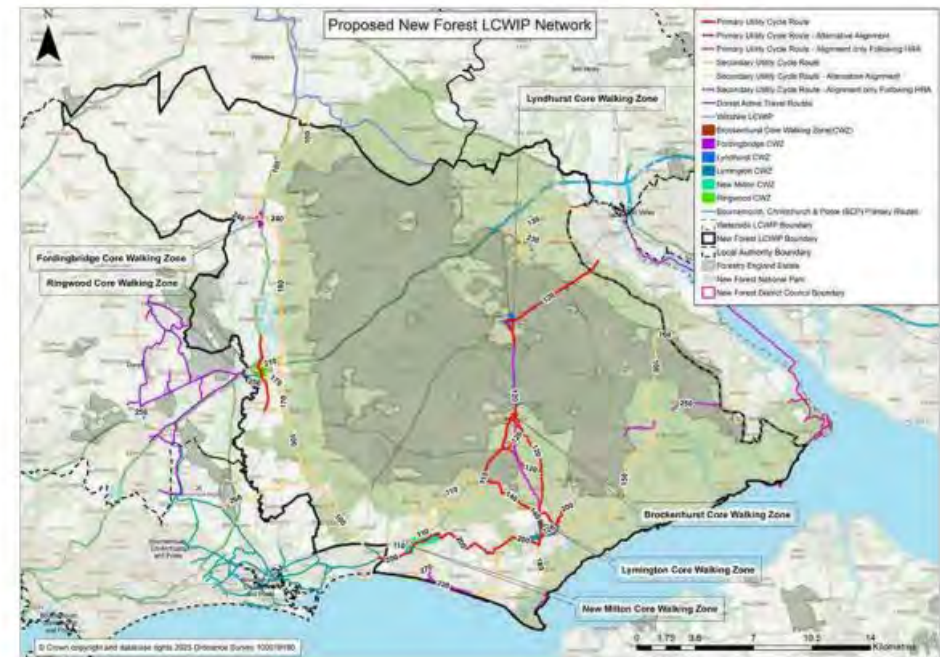
Proposed New Forest cycling network and core walking zone (CWZ) Overview

The map below shows the New Forest and the proposed cycle network and CWZs.

Each route has been assigned a three-digit reference number and divided into four categories of routes – 'primary utility', which represent busy, direct and main routes; 'secondary utility', which represent medium-usage routes through local areas; 'leisure on highway', which represent routes on HCC highways which are for leisure cycling; and 'leisure not on highway' which are routes for leisure cycling but not on HCC highways. There are also unnumbered leisure routes shown as additional routes on the plan, some of which are longer-distance routes, with others being shorter connecting links.

The Waterside LCWIP covers the eastern part of the New Forest District Council area. A key aim of this LCWIP is to improve active travel access from the Waterside area to the National Park. This will be done by reducing the severance created by the A326 through the provision of improved active travel facilities. The Waterside LCWIP routes are shown on the adjacent plan in light green. We have sought to ensure that the routes developed as part of this New Forest LCWIP connect with the Waterside LCWIP routes to create a cohesive east-west active travel network.

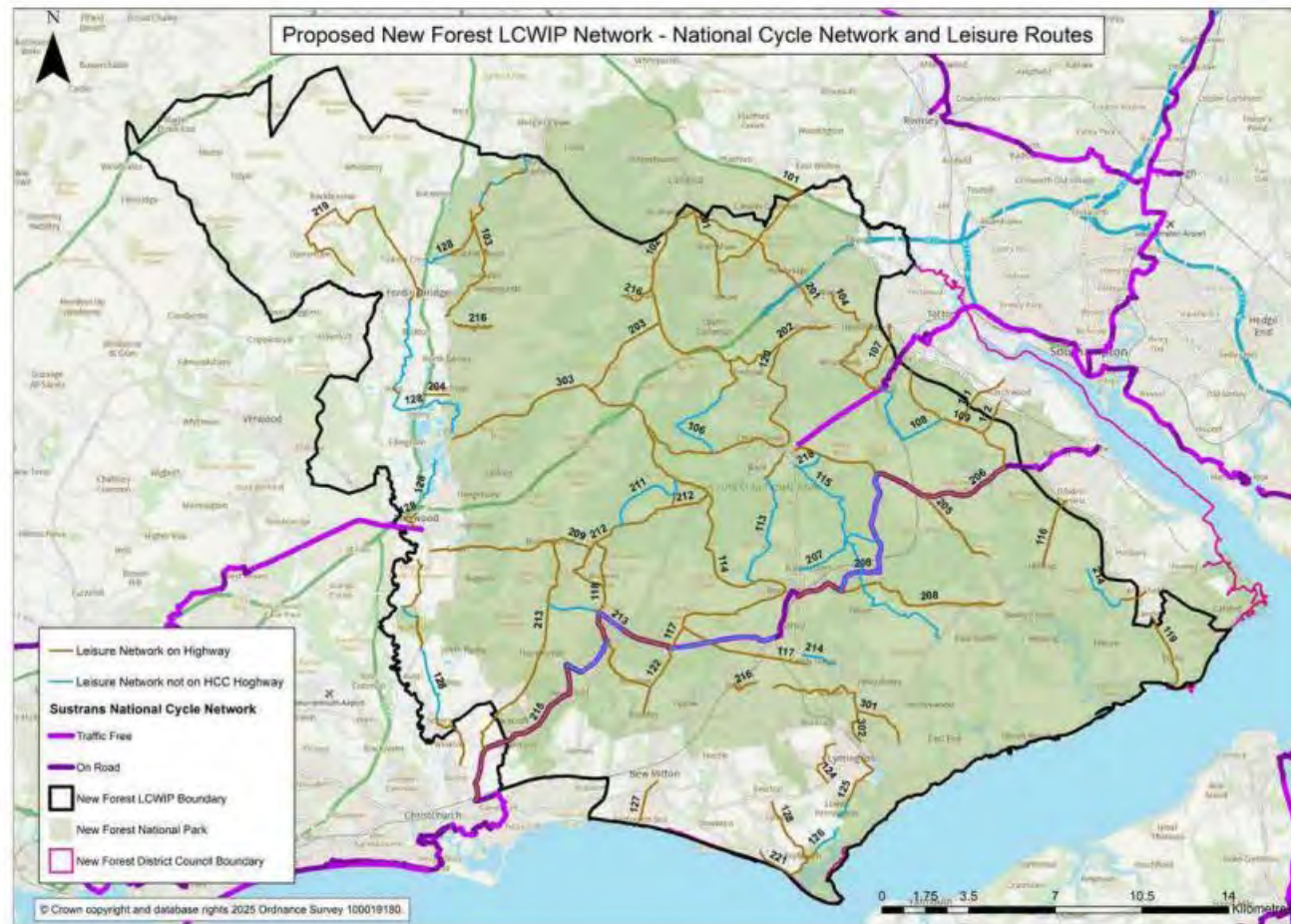
The following maps show the primary and secondary utility cycle networks, and the leisure route and National Cycle Network, in more detail.



Proposed New Forest network overview



Proposed New Forest network overview



Introduction

Section Two of this LCWIP for the New Forest has been prepared by Hampshire County Council in partnership with New Forest District Council (NFDC), New Forest National Park Authority (NFNPA) and Forestry England (FE).

Section Two provides information on how the cycling and walking networks were developed and the technical evidence that was gathered in the preparation of this LCWIP.

LCWIP methodology

Unlike other LCWIPs, the scope of the work was not limited to utility trips to work, education and shopping of up to 5km. The focus on utility trips in more urban areas acknowledges that they have the greatest potential to convert car trips to walking and cycling trips, within local areas. The inclusion of leisure trips in the network covering the New Forest District was felt to be vital given the special nature of the area and is outlined in Section 2. Any further DfT guidance specifically relating to walking and cycling on rural roads will be incorporated into future revisions of this Plan.

1. Methodology survey work was undertaken by Hampshire County Council staff during 2022/3. The approach was to look at opportunities to create walking and cycling networks. Existing facilities

and routes were considered, along with known improvement proposals. Local stakeholders helped to identify where new routes and improvements were needed. The potential routes were then surveyed on foot and by bicycle where possible, although there were very limited opportunities for the latter and many audits took place with the aid of desktop studies and site visits, sometimes by car, with a mounted camera, to obtain photos and check data.

Gathering information

Comprehensive information and data sources were provided by Hampshire County Council and New Forest District Council which were augmented by publicly available datasets from the 2011 Census (e.g. employment), DfT traffic counts, road traffic collisions, schools, public amenities and previous consultation plans exploring existing and new networks. Review and analysis of the data was undertaken using Geographic Information Software (GIS). The main trip generators were identified and an initial network mapped out to link residential areas with these locations.

A stakeholder workshop was held at an early stage of the process (March 2021) to test assumptions and to gather useful information from local stakeholder groups. They were asked to identify barriers to walking and cycling, including crossing points of the main barriers (roads, railways, rivers), which form the nodes in the network. Large blank maps were provided for people to draw

on, as well as background maps of the local transport network with information on trip generators from the Sustrans GIS database.

Mesh density

Mesh density is a term that describes how a grid of cycle networks is composed. High mesh density means that the grid of cycle routes is tighter, with more route choice, whereas low mesh density means there is less extensive route choice. A buffer analysis involves creating a 200-metre zone around each proposed route and assessing if there are any gaps in the coverage of the network. According to the LCWIP Technical Guidance (2017), in a joined-up urban cycle network, cyclists should typically not have to travel more than 400m to get between cycle routes of similar quality. However, this mesh density does not apply to small towns or rural areas, where origins and destinations are more dispersed. For the New Forest cycle network, mesh density is less relevant, and it was not considered for the network as most of the cycle routes are in rural areas.

Network planning methodology

Network planning for walking

Walking zones identification

Unlike with cycling, there are no datasets available to show where people already walk for utility trips, so

there is no detailed mapping exercise as part of the background study. The stakeholder workshop session provided the initial input, with attendees outlining areas which they considered important candidates for walking zones.

The workshop feedback was then reviewed based on the number and concentration of walking trip attractors, to reflect the shorter distances that people are likely to walk, as well as population density. Following this process, the partner organisations reviewed the candidate Core Walking Zones (CWZs) together, to agree a shortlist to be audited for this LCWIP, and a further list of towns and villages to investigate in future iterations.

The DfT's LCWIP Guidance suggests that CWZs normally consist of a number of walking trip generators that are located close together – such as a town centre or business parks. An approximate five-minute walking distance of 400m can be used as a guide to the minimum extents of CWZs. Within CWZs, all the pedestrian infrastructure should be deemed as important.

We have assumed that the trip generators for walking are the same as those for cycling, albeit that shorter distances will be involved (less than 2km as recommended by LCWIP Guidance). The proposed cycle network provides a suitable framework for walking

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trips, as a lot of improvements for cycling also improve walking conditions, such as new crossings or segregated facilities. However, it is recognised that a much finer-grained network is required for walking since most streets have pavements.

When the cycle network is designed, it will be vital to ensure that people on foot do not have a reduced level of service, for example, no existing pavements to be converted to shared use without widening. All crossings on the cycle network must accommodate people on foot and on bike.

The walking zones selected were then audited using both the DfT's Walking Route Assessment Tool (WRAT) and the Healthy Streets framework.

The six towns and villages selected for auditing in this LCWIP were:

- Fordingbridge;
- Ringwood;
- New Milton;
- Lymington;
- Lyndhurst; and
- Brockenhurst.

Walking zone audit methodology

The CWZ has been considered using the categories from the WRAT and the Healthy Streets tool. The WRAT has not been used to calculate the existing condition of the CWZ as the calculations relate to auditing a route rather than a zone; as such, the categories from that and the Healthy Streets check have been used instead, to

provide an assessment.

Network planning for cycling

There is a wealth of data to consider when planning a cycle network for the New Forest. Our approach was to work through all the datasets, layering them on top of each other within our mapping system to build up the emerging network. The proposed network coincides with much of the existing cycle network within the area. When considering the number of routes to include in this plan, we have taken the advice from paragraph 5.21 of the LCWIP Technical Guidance that 'it will take time to develop a network with a tight density, and wider mesh widths (distance between routes) of up to 1,000m would be expected within the initial phases of the network's development.'

Further routes can be added at a later stage to create a denser network, but our advice is to start with fewer routes and implement them to a high standard. From the available data and workshop sessions, a cycling network and walking zones were produced which targeted the greatest increase in walking and cycling. Auditing was mainly carried out as a desktop exercise for the primary and secondary utility cycle routes, but was checked on site and was undertaken to determine the most appropriate infrastructure improvements.

Existing transport network

The existing transport network is shown in Figure 1 below.

Origins and destinations

The identification of demand for a planned network

started by mapping the key origins and destinations across the study area. This analysis will help to identify how people move within the city; in this instance, the district. These origins and destinations include the following:

- resident population (2021 Census);
- workplace population (2011 Census). Census 2021 was not considered for this analysis as the information was gathered during the COVID-19 pandemic and therefore a lockdown which affected where people worked. The 2011 Census remains the most comprehensive data which can be drawn upon for understanding people's commutes to work; and
- transport hubs.

Further to the initial mapping exercise, the origin and destination points within close proximity to each other have been clustered to simplify the analysis.

Firstly, key trip attractors within and just outside the LCWIP boundary were identified. These were selected using the 'points of interest' and 'transport nodes' layers on the Hampshire catalogue (Arcmap); education facilities, transport interchanges, key development sites, leisure facilities and healthcare practitioners and establishments.

Trip-producing areas/zones were then identified using Census 2011 data on the population density of LSOAs within the New Forest District boundary.

A population density threshold of 10 persons per ha or over was used to limit the number of origin zones,

and whilst it is accepted that this is an arbitrary figure, amendments to the network to include less densely populated areas can be made in future reviews of the LCWIP.

An Origin Destination (OD) cost matrix was then constructed which created desire lines between origins and destinations, as well as the corresponding travel times between nodes on the road network.

Two maps were made using the desire lines under 15km and 10km respectively in order to evaluate which OD pairs were within an acceptable cycling distance of one another.

Once the key clusters were identified, direct desire lines were drawn connecting the clusters to identify the principal links to be provided by the cycle network. Desire lines are indicative links between clusters and do not link to existing roads or cycle routes at this stage. As shown in Figure 22 and Figure 23, these desire lines are clustered around New Milton, Lymington, Ringwood and Brockenhurst. There are very few east-west desire lines under 10km between Waterside and the rest of the New Forest, or between Fordingbridge and Ringwood. There is clearly a pattern of desire lines around the more built-up coastal areas, with some links to settlements to the northwest of the study area. The outputs of this exercise and details are shown below.

Local plan site allocations

The main development sites are shown on the plan (Figure 7 below) and listed in the introduction. These sites have been integrated into the walking and cycling network and contributed to the key trip attractors and generators used in the development of the proposed cycle network. There are large site allocations at Fordingbridge, Ringwood and New Milton. Future developments, including smaller sites not referenced in Local Plans, would be expected to demonstrate how they link to the LCWIP routes through the planning process.

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Propensity to Cycle Tool (PCT)

In addition to the clustering exercise, the PCT has been used to identify which routes within the study area have the greatest potential for an increase in the number of commuters cycling to work and the number of children cycling to school, as shown below. It also has been used to inform the Short Car Commuting Trips illustrated on Map 19.

Route identification

The desire lines identified by the above analysis were mapped to the existing highway network, and in some places the existing PRoW network. In this way, the network seeks to connect the key origins and destinations within the study area, including centres of population, employment locations, schools, leisure destinations and various amenities such as shops and health services.

Converting these desire lines into routes was an iterative process. In some cases, particularly in rural locations, there is a clearly preferred cycle route which is usually the most direct. However, in other cases there may be more than one potential route between origin and destination points or a reason why the most direct route would be less suitable for cycling. A multi-criteria route assessment was carried out to identify best route options considering workshop feedback, links to other LCWIPs, links to proposed routes in adjacent districts/local authorities, links to areas with high population density and links to local allocations/housing allocations.

At this stage, the network was mapped out based on the data analysis undertaken above and with reference to the Propensity to Cycle Tool (PCT) which shows which routes have the highest potential for an increase in cycling under various scenarios for change, and with reference to the outputs from the stakeholder workshops and collision data involving cyclists.

As most of the district is rural in character, the road network density is low in comparison to the built-up area of urban areas, meaning there is less choice of cycle

routes. On this basis, some of the prospective cycle routes identified do follow some of the larger, busier roads. However, where a quieter route is available which is not too indirect, this option has been selected. It should be noted that the routes within the district are not dense so, in a number of areas, the route options are limited. Measures to improve the cycling environment in line with LTN1/20 are unlikely to be deliverable on some routes, due to a lack of physical space, the unique nature of the National Park and other requirements for the route.

For previous LCWIPs, the focus was entirely on trips for 'utility' purposes (primarily commuting and school trips) and identifying routes where there was the greatest potential to shift from the private motor vehicle to cycling. The New Forest LCWIP presented a unique challenge in the network planning phase. In the summer months, large numbers of visitors travel to the study area for leisure purposes which greatly affects the number and routes of cycling trips.

The New Forest LCWIP would also have to incorporate these 'leisure' trips. Therefore, two networks were proposed; one utility and one leisure. These networks would support each other;

- a **utility network** providing the strategic links within and between key settlements; and
- a **leisure network** connecting car parks and campsites with key leisure attractions and incorporating already-popular leisure routes.

Introduction and Methodology

The utility network was constructed using the same methodology that was used for other LCWIPs; identifying key trip attractors and generators (schools, railway stations, densely populated residential areas), and overlaying cycling propensity data (i.e. routes where cycling has greatest propensity to grow). Routes were then manually constructed in cooperation with our key partners; the District Council, National Park Authority and Forestry England. Routes were divided into primary and secondary routes. Primary routes were chosen based on the potential for high prioritisation scores, as well as their length and the number of key trip attractors they served. This process resulted in three primary routes being chosen, with the remainder being classed as secondary.

The leisure network was constructed in two phases:

- Taking car parks and campsites as origins, and popular tourist attractions as destinations, routes between all origins and destinations were plotted.
- Multiple rounds of additions and revisions followed, in collaboration with our key partners, to include existing links and key routes well known to officers within those organisations.

The proposed network was visually tested against the Propensity to Cycle Tool data. Proposed routes that connect with the LCWIP measures in the Waterside area of the New Forest were prioritised as well as links to areas with high population density, links to local site allocations and the output from the stakeholder workshop. There is a high degree of correlation between the routes suggested by the PCT and the proposed cycle network.

Major employment sites and secondary schools are served by the proposed network. It also serves settlements throughout the district and links to development sites.

Auditing the cycle routes

The primary and secondary utility routes were audited based on the DfT guidance relating to coherent, direct, safe, comfortable and attractive routes, with options developed using the LTN1/20 guidance. The measures proposed in the CWZs and Cycle Route audit sections have been put forward with the ambition of achieving compliance with government guidance contained in LTN1/20; however, it should be noted that the measures put forward are aspirational in nature. Due to the unique ecological and environmental constraints within the National Park it is acknowledged that it will be difficult to provide facilities in complete compliance with LTN1/20 in many of the rural areas of the district and within the New Forest National Park.

A number of routes on the proposed leisure network have been put forward for consideration for measures (such as Quiet Lanes) to protect and prioritise people both walking and cycling. These include:

- lanes between Christchurch and the New Forest – especially Waterditch lane (in Hampshire County Council on boundary with Bournemouth, Christchurch and Poole);
- lanes in the vicinity of West Wellow to address severance issues at the A36; and
- quiet lanes around A326 (north) – especially on Staplewood Lane.

Prior to the public consultation, all utility routes (both primary and secondary) were audited. After the public consultation, new proposed route alignments were added. Auditing of these new alignments will be conducted at the feasibility study stage for individual schemes.

The leisure network was not audited ahead of the consultation and, as above, will be audited at the scheme feasibility study stage.

All four delivery partners will work together to ensure the development and improvement of the identified leisure route network.

The following maps and supporting commentary outline the data-gathering process. The maps presented build the evidence base for the identification of desire lines, which inputs directly into Stage 3, Network Planning for Cycling.

- Existing transport network;
- Major traffic routes;
- Trip attractors and generators;
- Stakeholder routes and barrier identification;
- Census 2011 Workplace and Census 2021 Population Data;
- Neighbourhood and Local Plan Allocated Sites;
- Propensity to Cycle Tool;
- Proposed New Forest Cycling Network and Core Walking Zone (CWZ) overview; and
- Core Walking Zones.