

March 2024



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#### **Revision History**

Revision	Revision date	Details	Name	Position
01		First Issue (Draft)	Ross Paradise	Principal Consultant
02		Second Issue	Lucy Sykes	Senior Active Travel Consultant

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# **1. Introduction**

### **1. Introduction**

As part of its wider commitment to achieving Net Zero, Derbyshire County Council is investing in its pedestrian and cycle networks. This work will contribute to Derbyshire's ambition to be the most connected and integrated county for cycling in England<sup>1</sup>, and the Government's target that 50% of all trips in towns should be walked or cycled by 2030<sup>2</sup>.

1 Derbyshire Cycling Plan 2016-2030

2 Cycling and Walking Investment Strategy, 2022

Derbyshire County Council has already adopted a Local Cycling and Walking Infrastructure Plan, which was developed in collaboration with the neighbouring authorities of Derby, Nottingham, and Nottinghamshire (who together are forming a Combined Authority in 2024). Derbyshire County Council is now further developing its approach to walking and cycling through the development of town-specific Active Travel Masterplans.

This document forms the Active Travel Masterplan for Belper. It offers a comprehensive strategy to encourage and support active and sustainable modes such as walking, wheeling, and cycling. The Active Travel Masterplan sets out the basis on which a significant increase in walking, wheeling, and cycling could be facilitated within the town through ambitious infrastructure investment, supported by a programme of travel behaviour change.

The aim of this Active Travel Masterplan is to make active travel safer, more convenient, and more appealing to a wider range of people. In doing so, it considers how Belper can be made more accessible for all, supporting the needs of local residents and local businesses, whilst contributing to the cross-cutting Net Zero and public health agendas of Derbyshire County Council. Each of the proposals contained in this Active Travel Masterplan has been tailored to the specific opportunities and challenges identified within Belper. This draft document has been prepared following discussion with local elected representatives and community groups, ahead of wider consultation scheduled for early 2024.

The development of the Active Travel Masterplan has been funded by Active Travel England via the Capability and Ambition Fund. It is intended that schemes identified within the Belper Masterplan would be submitted to Active Travel England as part of further (and separate) Active Travel Fund tranches. Notwithstanding this, this Active Travel Masterplan has been developed to be flexible such that its components could be taken forward individually if alternative funding becomes available either at local, regional, or national level.

N elpe Figure 1: Belper Study Area Boundary

Throughout this report, the term 'pedestrian' is taken to mean all people travelling on foot, people using mobility aids, and people with mobility, visual, sensory or cognitive impairments. It also includes people travelling with small children, those with buggies, or those carrying luggage and shopping. It is also noted that walking and wheeling trips will include those who may arrive in the town centre by private car (including taxi), bus and rail. All these pedestrians are to be considered in the design of an inclusive street environment.

#### The town of Belper

Belper has a rich industrial past and lies at the heart of the Derwent Valley Mills World Heritage Site. The town has a strategic position on the A6 between Derby and Manchester, with direct access to Matlock and Buxton en-route. Belper has a population of approximately 22,350 (Source: NOMIS).

The study area for the Belper Active Travel Masterplan is shown in Figure 1.

#### Methodology

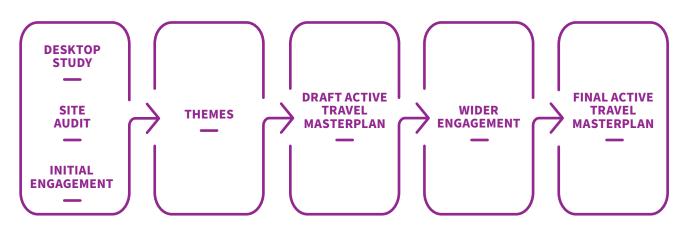
The methodology used to develop the Active Travel Masterplan combines:

- desktop study work;
- site audits of the existing walking, wheeling and cycling networks; and
- engagement with local elected representatives and community groups.

Engagement has been undertaken in two stages: the first stage has been to speak with elected representatives and community organisations interested in active travel. A second round of engagement will then be undertaken on the draft Active Travel Masterplan to test the ideas with a wider audience and to identify priorities.

A series of potential active travel network maps have been developed to enable scheme concept design.

The work has also made use of a series of design tests (as recommended by Active Travel England) to objectively measure the quality of active travel networks. These tests are described later in this report, and show the level of improvement that could be secured.



This report is arranged such that:

- Section 2 examines the specific Belper context to identify barriers and opportunities for active travel at a strategic level.
- Section 3 provides a summary of the areawide site audit which has been undertaken, the findings of which have informed the development of this Active Travel Masterplan.
- Section 4 articulates the engagement strategy and the engagement that has been undertaken to date. It also charts a way forward if the project is taken forward.
- Section 5 identifies a series of strategic themes which have been developed to address the problems and challenges within Belper, and which build on the potential of the town.
- Section 6 develops the key themes in more detail and shows indicative design solutions.
   (A separate Components Guide has also been developed).
- Section 7 identifies a potential active travel network and details the design tests that have been undertaken including porosity, mesh density, permeability and 'rat run'.

- Section 8 provides a supporting Behavioural Change strategy that could be adopted to maximise the use of any infrastructure investment.
- Section 9 provides a framework monitoring and evaluation strategy for the project, consistent with that already agreed for the D2N2 Local Cycling and Walking Infrastructure Plan.
- Section 10 sets out an action plan for the Active Travel Masterplan.
- Appendix A Policy Review
- Appendix B Equality Impact Assessment
- Appendix C Site Audit Methodology
- Appendix D Belper Site Audit Notes

#### The Belper Active Travel Masterplan:

- Develops the D2N2 Local Cycling and Walking Infrastructure Plan
- Builds on the Derbyshire Key Cycle Network and Local Cycle Network
- Supports Government's Net Zero ambition that 50% of all trips in towns should be walked or cycled by 2030.
- Supports Derbyshire County Council's Net Zero strategy and Amber Valley Borough Council's declared climate emergencies.
- Supports both the Derbyshire Local Transport Plan and Amber Valley Borough Council Local Plan objectives;
- Feeds into the forthcoming East Midlands Combined Authority Transport Plan;
- Supports the Derbyshire Health and Wellbeing Strategy's ambition to create healthy and sustainable places.

A full review of policy alignment is included in Appendix A.



# 2. The Belper Context

### 2. The Belper Context

This section provides an overview of the existing context of Belper and identifies some of the influences on how people travel. This baseline information has been gathered through a desktop survey. Section 3 then summarises the results of a detailed walking, wheeling, and cycling audit conducted within the town as part of this study.

#### **Equalities Impact Assessment**

An initial Equality Impact Assessment is provided as Appendix B. This will be developed further and made specific to Belper within the finalised Active Travel Masterplan (following consultation on the draft in 2024). Key headlines from the initial Equality Impact Assessment are that:

- The population of Derbyshire has a higher proportion of residents over the age of 65 (22.1%) than the national figure (18.4%). In Belper, 22.8% of the population are over the age of 65. Older people are at greater risk of developing health conditions. It is therefore important that active travel such as cycling is encouraged amongst older people as this would improve both mental and physical health (Sustrans, 2019-A) and infrastructure related to the ATMs is designed with the need for accessibility in mind.
- In Belper, 7% of the population had a disability that limited daily activities 'a lot', and 11.4% had a disability that limited daily activities 'a little', meaning 18.4% of the population have a disability. This means that a higher proportion of the Belper population has a disability (20.1%) than England as a whole (17.3%). A 2020 report from the Department for Transport found that only 55% of disabled adults had a full driving license compared to 83% of the non-disabled population. In addition, 39% of disabled population. In addition, This highlights the importance for alternative travel options for disabled popule.

- According to the Indices of deprivation, in 2019, Belper was in the top 50% most deprived neighbourhoods in England and in the top 30% of most deprived neighbourhoods for health and disability deprivation. People in more deprived areas are more likely to be impacted by air pollution, traffic collisions, and cost barriers associated with travel.
- A 2021 survey into perceptions of safety and experiences of harassment found that one in two women felt unsafe walking alone after dark in a quiet street near their home in comparison to one in seven men (ONS, 2021-B). Safety concerns when walking can result in women using public transport and relying on more expensive and less sustainable methods of transport such as taxis. As women make up 50.9% of the Derbyshire population, making active travel safer for women could result in an uptake of sustainable active transport modes.

It is important to recognise that older people and people with a disability won't simply be benefited by improvements to walking and wheeling. According to recent research by Transport for London (TfL), 78% of disabled people are able to cycle, while 15% sometimes use a bike to get around. Two out of three disabled cyclists, riding a bike is easier than walking; easing joint strain, aiding balance and relieving breathing difficulties<sup>1</sup>.

<sup>1 &</sup>lt;u>https://www.theguardian.com/cities/2018/jan/02/cambridge-disabled-people-cycling-rolling-walking-stick</u>

#### **Current Travel Patterns**

The existing travel choices of those living in Belper can be examined through the Census. In both 2011 and 2021, those living in Belper were asked their usual mode of travel to work (a useful proxy for total trip patterns, though recognising that the Census dataset doesn't include trips associated with education, shopping, leisure etc).

The 2021 census occurred during the third national Covid19 lockdown. This means that many jobs were furloughed (e.g. hospitality, leisure, retail) and others switched to home working (e.g. office staff). The proportion of people working at home in Belper at the time of the 2011 census was 4.7% and this rose to 30.7% at the time of the 2021 census.

Usage of public transport was also discouraged by the Government during the pandemic.

Figures 2 show the travel to work mode choices in both 2011 and 2021 of those who didn't work from home and demonstrate approximately 11% of Belper residents' trips are by active modes.

#### **History**

Belper is located at the centre of the Amber Valley, approximately 13km north of Derby, 19km west of Nottingham and 16km south east of Matlock. It is famous for its role in the industrial revolution and is within the Derwent Valley Mills World Heritage Site.





2021 Census (Source: TS061)

Figure 2: Travel to work mode choices in 2011 and 2021

#### **Settlement Structure**

The town grew from its traditional core into a gridded street network for mill workers (which still remains in part). This original urban fabric is interrupted by the A6 which is a key spine road through the town. One roundabout exists at the southern end of the high street area of the A6, from which radial routes spread into the neighbourhoods of White Moor and Openwoodgate, to the east. These residential areas present a combination of street types, from traditional terraced streets to cul-de-sac development parcels.

From the junction of the A6 and Bridge Foot, the A517 connects west to rural settlements and the neighbourhood of Mount Pleasant. This residential area contains a mix of traditional housing, and council housing parcels.

Belper railway station is located close to the centre of the town. It is linked to the town centre via a series of footways from King Street, Albert Street and Field Lane. There is also vehicular access via Field Lane Car park and restricted vehicular access via Wellington Court (which effectively acts as an additional alley). Some accesses to the station are stepped and all approaches are uninviting and narrow. The River Derwent runs along the western side of the settlement, serving it from the Mount Pleasant residential area. Along with the railway line, these features create a hard border to the settlement. In addition, there are steep areas in Belper which restrict movement. All of these features create severance in the town, whereby movements are restricted or limited.



Figure 3: Traditional housing within Belper

#### **Key Destinations**

The purpose of this Active Travel Masterplan is to facilitate more walking, wheeling, and cycling for everyday journeys within Belper. As such, key locations within the town have been mapped so that they can be compared with the existing pedestrian and cycling infrastructure, and to understand origin and destination points.

#### Services & Facilities:

There is a concentration of trip attractors along King Street and Bridge Street/Chapel Street (A6). This includes town centre shopping, Babington Hospital, a retail park, various shops, cafes and restaurants.

#### **Employment:**

Light industrial and warehousing is located along the A6 corridor. The Valiant employment site is located off Nottingham Road.

#### **Education:**

Schools are distributed around the town and most are in proximity to the primary route network. The Belper School and Sixth Form is the town's only secondary / further education school.

- Belper School and Sixth Form
- St Johns CofE Primary School and Nursery
- Pottery Primary School
- Holbrook Centre for Autism 14-19 Provision
- Herbert Strutt Primary
- Belper Long Row Primary
- St Elizabeth's Catholic Voluntary Academy

#### Leisure:

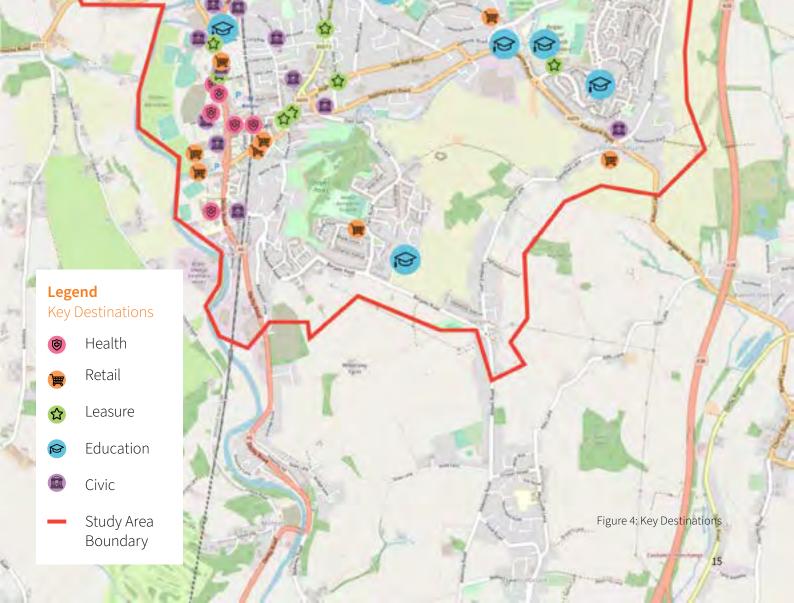
Leisure sites within the study area include:

- Derwent Valley Mills (visitor)
- Belper Meadows is one of the largest Local Green Spaces and is located to the west of the town area, along the River Derwent. It is the location of the Belper Meadows Cricket Club, Football Club, and Belper Rugby Club.
- Belper River Gardens
- Belper Leisure Centre
- Belper Park Local Nature Reserve
- The Park Recreation Ground

The Derwent Valley provides a valuable wildlife corridor which connects Derby and the River Trent to the countryside of Derbyshire and the Peak District. The valley has a chain of wildlife sites, nature reserves and designated sites on each side of the valley. Land around the town is designated as Green Belt land.

#### **Planned Developments**

Amber Valley Borough Council are in the process of agreeing a new Local Plan. Draft policies in relation to a plan covering 2022 to 2039) indicates that "growth will take place in the following locations: within and surrounding the four urban areas of Alfreton, Belper, Heanor and Ripley."



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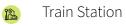
#### **Transport Infrastructure:**

The station is located centrally within Belper, in proximity to the main shopping area. There are two points of access, the main one being from Albert Street but also a pedestrian access from Field Lane. It is served by hourly train services direct to Derby, Nottingham and Matlock.

Most of the residential areas can be accessed from the station, with bridges over the railway line enabling the retention of the street network.

Bus services also provides good coverage for the town's residential areas.

#### **Legend** Key Destinations



- 😭 🛛 Bus Stops
- Bus Routes
- Study Area Boundary

Figure 5: Transport Infrastructure

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#### Existing Walking, Wheeling, and Cycling Infrastructure

#### Walking & Wheeling:

In the town centre, the central section of King Street is pedestrianised between 10am and 5.30pm Monday to Saturday. Buses are allowed access across this area one-way, effectively making the area a shared space.

Pedestrian passageways (jitties) between residential streets are present in the area but not all are accessible, with many being narrow, stepped or having uneven surfaces.

The pedestrian environment has been identified in the Belper Neighbourhood Plan as having some barriers. Issues identified in the Belper Neighbourhood Plan include:

- Poor pedestrian movement between King Street and the Market Square.
- Poor pedestrian safety when crossing roads at key points within the town.
- Ensuring access and safe movement to services and amenities around the town centre for those with disabilities.
- Some passageways exist between residential streets, although these are less prevalent in the more recently built neighbourhoods.
- In the town centre, passageways and PRoW help to provide permeability.
- The surrounding landscape provides a good network of PRoW and permeability to the open countryside.
- Within the town centre, traffic and street parking can create problems for pedestrian (and cyclist) accessibility. This is particularly the case on narrow streets such as Days Lane and Brook Street.

Footpaths run along the River Derwent corridor but are prone to flooding and currently do not connect well to the town centre.

As already noted, the A6 and river form a notable barrier to pedestrian movements.



Figure 6: Pedestrian walkway within the town

#### Cycling:

There are no existing cycle routes (Derbyshire Key Cycle Network or Local Cycle Network) within Belper.

The cycling environment has been identified in the Belper Neighbourhood Plan as having some barriers. Issues identified include:

- There is currently no Derbyshire Key Cycle Network or DCC Local Cycle Network present within the town.
- As highlighted in the Belper Neighbourhood Plan, the Belper HCA identified parts of the town where cycling opportunities are limited These are as follows:

a) LCA 02 Belper Town Centre, Mills and Riverside

b) LCA 03a/03b Mount Pleasant and Belper Residential west, Belper Parks and Residential East

- c) LCA 04 Belper Western Industrial Fringe
- d) LCA 05 Milford and Makeney.

The quality of existing roads in the town with regards to cycling is detailed the 'Belper Cycling Quality Tube Map', which is part of the Neighbourhood Plan. This shows that much of the town has been judged to be poor or needing improvement.



Figure 7: The Belper Cycle Quality Tube Map

#### Topography

Located within the Derwent Valley, the town is located amongst and on valley sides. This is shown in Figure 8.

The town centre occupies a low point in this landscape, with the land rising up steeply to Market Place and then higher to the west and north. The lands also rises steeply from the A6 / river level to Bargate and the north of Mount Peasant.

Coppice Brook has steep sides which has limited the development of the town by creating topographical challenges.

Figure 8: Topography within the town



#### Legend

flevation
50 - 60
50 - 70
- 70 - 68
110 120
120 - 130
- 160 - 230
Study Area Boundary

#### **Collision Data**

Personal Injury Collision data was obtained from Derbyshire County Council for the period 1st January 2017 to 25th June 2023.

The data shows that:

- There is a concentration of pedestrian collisions in the town centre, notably along the A6 and King Street. Serious collisions tend to be related to the primary road network, including the A609 and Chesterfield Road.
- Most cycle collisions occur on the A6 and A609.

#### **Existing Community Initiatives**

Belper has a number of existing initiatives focused on promoting active travel including: Belper Bicycle Club, Belper Walks, Derwent Valley Trust, Transition Belper, Accessible Belper (Figure 8). It is also recognised that its position means that there is strong interest in the town from further afield, such as Cycle Derby.

#### Planned Walking, Wheeling and Cycling Infrastructure

The production of this Active Travel Masterplan is not being undertaken independently of existing or ongoing initiatives.

Derbyshire County Council has already considered potential improvements to walking and cycling at a strategic level across the county through the Local Cycling and Walking Infrastructure Plan proposals.

Within the Neighbourhood Plan there is a proposal to create improved walking routes across Belper Meadow, as shown in Figure 9.

Proposals for the cycling network would see major changes to the area with a Key Cycle Network to the west of the town, known as the Derwent Valley Cycle Route creating a route from Derby to Matlock (and beyond). This new route will run alongside the River Derwent, providing a strategic connection along the Derwent Valley.

The Derwent Valley Trust are promoting the Derwent Valley Cycleway as part of its aims to develop the Derwent Valley Heritage Way and developing an *'integrated network of facilities to assist the public in understanding the valley'*.

The Neighbourhood Plan states that: "The Derwent Valley Trust has over 900 supporters and it seeks to create a Derwent Valley Cycle way linking the Silk Mill, Darley Abbey Mill, Belper Mill and Cromford Mill as a single visitor destination".

The Proposed Local Cycle Network improvements would provide improvements to connectivity across the town (see Figure 9) with the following new routes proposed:

- From the DVCR to the town centre via the industrial estate, A6, New Road and Campbell Street.
- King Street to the Butts (A609) via the Market Place.
- The Butts to Far Laund
- Town Centre to Openwoodgate via Strutt Street, Days Lane, Queen Street, The Park, Mill Lane, Kirk's Lane and Sandbed Lane.

A final Route is proposed on Crich Lane but does not connect to the Town Centre.

The proposals for Belper are noted as being 'long-term' aspirations, with each route subject to further design work and availability of funding.

There are no known or forthcoming Town Deal, Levelling Up or Shared Prosperity schemes in Belper.



The Belper Neighbourhood Plan identifies that "the compact size of Belper and Milford means that most journeys are under a mile, which is ideally suited for cycling, but the lack of convenient routes that feel safe discourages people...".

The Neighbourhood Plan policies related to walking and cycling are reproduced below in Figure 10.

NPP 16 Increasing Cycling and Walking

- 1. Where feasible, development should provide links to safe walking and continuous, safe, cycling routes to:
- a) the Town Centre, facilitating access to schools, the surrounding countryside and public transport hubs - minimising the need for car use: and
- along the Derwent Valley including along the west bank of the River on Wyver Lane, as part of a wider tourism initiative to link up the Mills from the Silk Mill to Cromford.
- The layout of development should minimise the loss of cycleway and lootpaths and, where possible, include provision to extend footpaths and cycleway.
- Where feasible, new development should be built round the idea of a walkable Town with integrated adequate pathways and cycleways directly connecting to the centre of the Town.
- Where feasible, major development should enable access to the public walking/cycling routes that access the riverside.

Figure 10: Extract taken from the Neighbourhood Plan

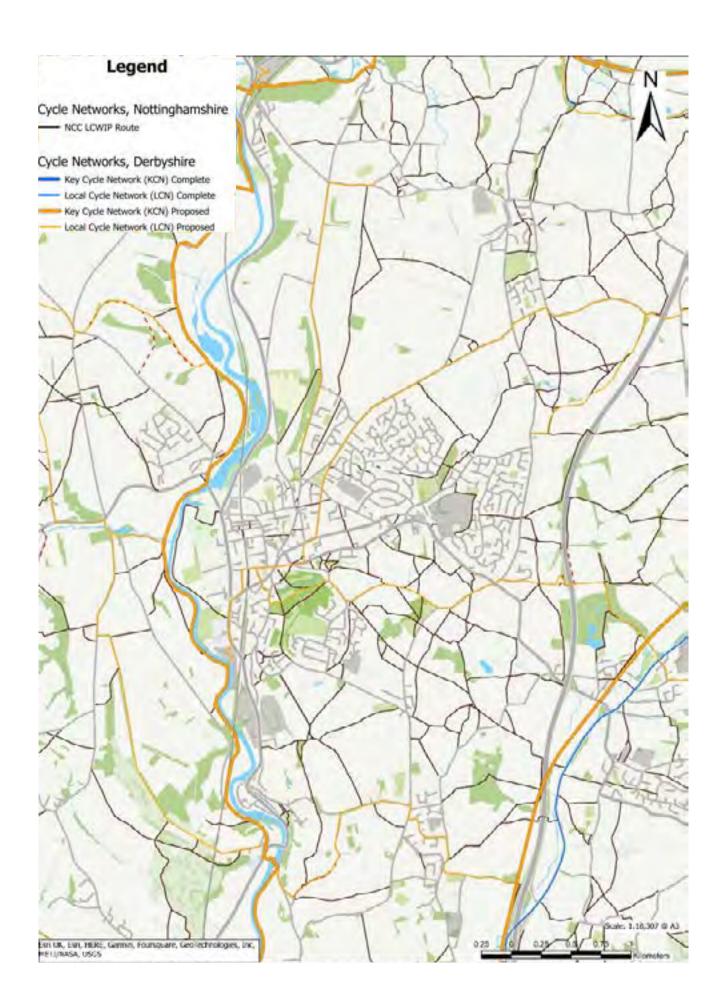


Figure 11: Proposed Cycling Networks

# 3. Site Audit

### 3. Site Audit

Following the desktop work described in Section 2, detailed site audits were conducted to determine the quality of the existing walking, wheeling, and cycling networks. These site audits also provided the opportunity to start to think about potential improvements prior to engagement with stakeholders.

#### Methodology

A detailed methodology statement for the work is provided in Appendix B. The audit team always included at least one cyclist, and one member focused on the pedestrian environment. A team of mixed ages and genders also helped to capture a broad experience of users.

The site audits were based on the best practice audit tools developed for the Local Cycling and Walking Infrastructure Plan programme. The audits also drew on experience of conducting audits for Derbyshire County Council within the development of the Key Cycle Network. Various parameters were considered including: Specific attention was given within the audit to the needs of vulnerable pedestrians (e.g. school pupils, persons with mobility needs) in keeping within guidance expressed in the Transport Research Laboratory's Street Audit handbook: "In general terms, the reviewer should be considering the extent to which the environment under consideration provides easy, convenient and pleasant conditions for all users, with more vulnerable pedestrians needs acting as the benchmark of acceptability" and "the review procedure aims to place the needs of mobility impaired or vulnerable pedestrians at a level of equal importance to all other pedestrians".

- Route characteristics;
- Permeability;
- Crossings and Gateways;
- Directness and Connectivity;
- Safety and Security;
- Signage; and
- Quality of the environment.

#### **Headline Observations**

A diagram showing the full audit observations is included in Appendix C.

The headline observations noted by the audit team, include:

- The major road network (A6) has a high traffic volume and, in combination with the River Derwent, act as the main points of severance within the town. There is currently only very limited cycle infrastructure along this route.
- The A517, A609 and B6013 also create severance with each road also having some steep gradients. There is currently no cycle infrastructure along these routes.
- Topography is a limiting factor within the town as gradients will limit movement for some users, reducing accessibility.
- The 'lower' and upper parts of the town have different characteristics with the lower part having more traditional streets and narrower widths. Traditional streets tend to be terraced with a high reliance on on-street parking. The upper parts see more modern residential developments and wider geometrical street arrangements.

- There are only limited crossings of the River Derwent, with one being open to traffic on the A517.
- Accessibility to / from the railway station is limited. The railway line cuts through the town and has a number of crossing points. However, some of the footways on these are narrow or there are no specific footways.
- There are good opportunities to improve accessibility around school sites.
- There is a lack of cycle parking across the town, and notably within the town centre.

#### **Audit Conclusions**

Following the site audit, the following barriers to pedestrian and cyclist connectivity have been identified:

#### **Strategic Barriers**

- A6 and associated junction, with high traffic volumes and vehicle speeds.
- Railway Line, with narrow footways on streets with high levels of traffic.
- River, although an important recreational asset, accessibility is sometimes limited.
- Topography from the river valley to nearby hilltops can be steep.
- Lack of adequate cycle infrastructure and public cycle parking provision.

#### **Local Barriers**

- Poor visibility at some junctions.
- A lack of pedestrian crossing facilities and dropped kerbs.
- A general lack of appropriate cycling infrastructure and crossing provision, especially along the major road network.
- On-street parking along terraced streets creating conflict for space

#### **Key Opportunities:**

• To enhance the B6013 and the A609 as an active travel corridors. This is particularly the case in the White Moor area where connection to residential areas and key facilities is possible.

- To promote cycle tourism which supports the Derwent Valley Mills World Heritage Site
- To enhance connections to the Belper School and Sixth from Centre and the adjacent leisure centre.
- To enhance connections to existing assets including White Moor recreation ground, the river Derwent and riverside gardens, Belper Meadows, Babington Hospital and the Strutts centre.
- To improve access and arrival to schools within the various neighbourhood areas.
- To improve connections to commercial and industrial areas.
- To reallocate road space at generous residential junction mouths and to adopt continuous crossings over side roads.
- To provide public cycle parking at key trip attractor sites.
- To enhance existing pedestrian connections between residential streets, upgrading these to include enhanced lighting or cycle provision.
- To address some of the severance caused by the major road network and provide safer pedestrian and cyclist provision, included new and upgraded crossing points.
- Improve the access to the railway station and potentially create additional access points.

# 4. Engagement

Early and ongoing engagement is a crucial part of delivering walking and cycling schemes. An effective engagement strategy was therefore considered integral to the development of the Belper Active Travel Masterplan and was developed alongside officers of Derbyshire County Council.

This Section sets out the engagement strategy and establishes the principals which we have adopted as part of our approach. It concludes by setting out a forward engagement plan, should the Belper Active Travel Masterplan attract funding for implementation.

#### Methodology

Those interested in the Belper Active Travel Masterplans will come from a wider variety of backgrounds and have differing interests and priorities. Residents, for instance, will often more likely have an interest in what is taking place at street level or on a wider neighbourhood level, whereas councillors, businesses and / or local transport providers could have an interest at both street level and wider town level (strategic). Prior to commencing the work, an initial engagement plan was agreed with Derbyshire County Council. This initial engagement plan focused on first liaising with elected representatives, and community groups (with an interest in active travel). It is envisaged that Wider Engagement (including with the public) would take place on the draft Active Travel Masterplan prior to its finalisation.

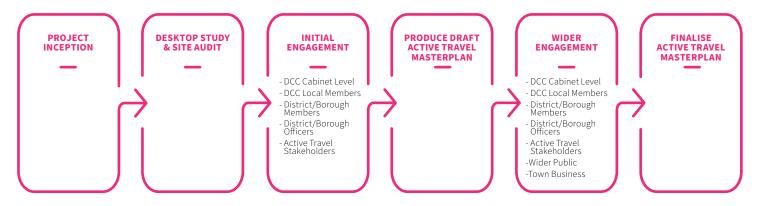


Table 1: Engagement Matrix

#### Engagement (Autumn 2023)

Following a briefing to the Derbyshire County Council Cabinet Member (Infrastructure and Environment), Cllr Renwick, on the project (inc. Belper, Glossop and Ilkeston), the following engagement was undertaken:

- Briefing for Derbyshire County Council Local Members.
- Workshop session for elected representatives of Amber Valley Borough Council / Belper Town council.
- Workshop session for Amber Valley Borough Council officers & interested community groups.
- Follow-up call with Sustrans officer.
- Follow-up meeting with officers of Amber Valley Borough Council.
- Meeting with Officers of Derbyshire County Council, with an interest in the area.

In addition to the town-specific groups, approaches were made to Accessible Derbyshire, Living Well Derbyshire and Sight Support Derbyshire.

#### Derbyshire County Council Elected Members

A briefing was held for Derbyshire County Council Elected Members (Cllr Nelson, Kinsella) on 18th October 2023. Cllr Renwick (Infrastructure and Environment) was also in attendance.

Key issues and opportunities discussed included:

- Investigate further potential to pedestrianise King Street.
- The A6 is particularly unattractive with high heavy traffic and footways that are, or feel, narrow.
- Derwent Valley Cycle Route recognised as a useful link, and has potential for greater integration with the town.
- Speed of vehicles past schools is an ongoing issue, and active travel routes to schools are seen as important.

#### Amber Valley Borough Council / Belper Town Council Elected Members

A workshop session was arranged at Belper Community Hall on 23rd October 2023, to which all Belper Members of Amber Valley Borough Council and Belper Parish Council were invited. Following a presentation which introduced the scheme, participants were invited to discuss active travel using maps of the town to help identify barriers and opportunities.

The following attended: Cllrs Hill, Kinsella and Porter (both Amber Valley Borough Council), and Cllrs Harlow & Wells (Belper Town Council). (Cllr Nelson of Derbyshire County Council also attended and it is noted that Cllr Kinsella and Hill represent more than one elected body).

Key issues and opportunities discussed included:

- Key barriers are seen as topography and the A6.
- Small scale problems include poor dropped kerbs, footway camber and footway quality (including narrow widths and pavement parking).
- Cyclist and pedestrian safety are seen as a concern.
- Cycle parking is poor and not sheltered. This is notable at the railway station and bus station.
- Some routes for vehicular traffic are perceived fast and could be improved, particularly to the secondary school.
- Lack of signage / wayfinding. The town has installed two digital totems.

#### Figure 12: Image taken from the workshop session



#### Wider Stakeholders

A session was arranged at Belper Community Hall on 23rd October 2023. Following a presentation which introduced the scheme, participants were invited to discuss active travel using maps of the town to help identify barriers and opportunities. Representatives of the following attended: Sustrans, Derwent Valley, Derby Cycling Group, Transition Belper, Active Derbyshire, Belper Walks, Amber Valley Access, Belper U3a and officers of Amber Valley Borough Council. (Notes: (1) The representative of the Derby Cycling Group had drafted the Belper Cycling Tube Map in the Neighbourhood Plan (2) The Belper Bicycle Club were also invited).

Key issues and opportunities discussed included:

- Belper Neighbourhood Plan and Transition Belper contain many scheme ideas, to be considered in the Active Travel Masterplan.
- Rest points and handrails needed for those with mobility impairments on steep slopes, near Memorial Garden for instance.
- Difficult areas to walk include Church Lane / Green Lane & Bottom of Field Lane
- Jitties provide an opportunity for improvement if perceptions of safety can be improved, and accessibility issues overcome.
- Public transport seen as a solution (walk down into town, use bus for return journey).
- Area around Morrisons poorly served.
- Many people in Belper commute to the employment opportunities in Derby. Integrating transport better may help people make this journey.
- On street car parking / pavement parking is a

major problem on some streets.

• Perception of poor lighting and signage across the town.

Detailed notes of the above engagement have been used to develop the Belper Active Travel Masterplan.

#### Wider Engagement (Early 2024)

Wider engagement will be conducted prior to the finalisation of the draft Active Travel Masterplan. It is anticipated that this engagement will occur in Spring 2024. Once findings of this engagement have been determined, they will be added to this section as part of the final Active Travel Masterplan document.

It is important to note that, whilst their initial views were gathered as part of the engagement described above, none of those groups or individuals listed in the preceding section have seen an early version of the draft Active Travel Masterplan, nor have they endorsed it. Views of elected representatives and stakeholder groups will be an important part of the early 2024 engagement.

#### **Scheme-specific Consultation (Future)**

Once the Active Travel Masterplan is finalised, it is expected that funding to further develop and deliver any identified schemes will be required. It is recommended that progression of any individual elements should be undertaken alongside a further programme of public and community engagement to include co-design workshops, wide scale engagement and pop-up events to help capture local input and refine the approach for investment.

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# **5. Key Themes**

### **5. Key Themes**

In the previous Sections, we have considered the existing context in Belper through a desktop analysis, a site audit, and initial stakeholder engagement. This has provided us with an overview of the common issues and opportunities for active travel within the town, which are summarised in the table below.

Table 2: Summary of Key Issues and Opportunities

Issues		Opportunities	
•	Access to schools is poor. Access to the town centre is limited.	•	Improve walking, wheeling and cycling routes including crossings and footway widths.
•	There are a number of poor quality alleyways. On-street parking occurs in constrained streets. No existing cycle infrastructure (including cycle parking) within the town & poor quality	•	Improve surfacing and lighting in alleyways. Rationalise on-street car parking. Overcome difficult hill climbs with rest points and handrails. Provide cycle parking at key locations and
	of on-road cycle route. Lack of north-south connections as an alternative to the A6.	•	destinations across the town. Develop the Derwent Valley Cycle Route and tie it into the town centre.
.  .	Lack of east-west connections as an alternative to the A609 and other local roads. Topography can be challenging for walking,	<ul> <li>Improve access across key severance points</li> <li>Improve access points and connections to the station.</li> </ul>	
.	wheeling and cycling. Severance caused by the river, railway and busy roads.	•	Improve wayfinding across the town and promote awareness of the available amenities.
•	Access to the railway station is limited. Poor wayfinding across the town for all amenities.		

A series of themes have been developed which capture the proposals of the Belper Active Travel Masterplan. Each of these themes will contribute to unlocking the town network in different ways and combine to form the full masterplan. This section provides an overview of the themes, before Section 6 (Masterplan Proposals) describes each in more detail.

## Supporting Local Business

#### Build Back Better: High Streets, the

government's long-term plan to support the evolution and regeneration of high streets and a key part of the overall Levelling Up agenda, was launched in July 2021. This recognises the role of walking and cycling to enable sustainable place making linked to regeneration, with a vision for half of all journeys in towns and cities to be cycled or walked by 2030.

According to the indices of deprivation, in 2019, Belper was in the top 50% of most deprived neighbourhoods in England. Belper has a locational advantage, however, of being home to the Derwent Mills World Heritage Site. Increased active travel (and links to the Derwent Valley Trail) has the potential to bring increased tourist spending into the town and reduce congestion on the A6, thereby benefiting local business. Investment in walking and cycling therefore has real potential of supporting the visitor economy and facilitating leisure trips will remain important. Belper also has a number of employment sites within and on its periphery, and improved accessibility to and from employment sites will also enable more local people to access local jobs<sup>1</sup>.

## Strategic Routes

Strategic Routes refer to the primary active travel corridors which support movements within the town and connections to other places. Whilst important movement corridors for all people, these routes are typically dominated by high vehicle volumes with poor quality provision for pedestrians and cyclists. There is an opportunity to enhance these routes to create an improved environment for those walking, wheeling, and cycling.

Within Belper, these strategic routes are the A6 and A609, where there are narrow footways, limited crossing opportunities and poor provision for cyclists. In addition, the current shape of the highway and pedestrian network is focused on north-south movements, with fewer opportunities to travel east-west.

<sup>1</sup> A separate parking study may be needed for each Active Travel Masterplan, to ensure appropriate levels of parking are maintained. It is noted that parking controls can be used proactively to increase parking turnover and thereby increase the overall quantum of space that is available through the day, with healthy turnover of parked cars being especially important to support local businesses.



Local Routes provide access between and within neighbourhoods. There is an opportunity for local connections to unlock the network to people walking, wheeling and cycling. This theme captures opportunities for addressing localised barriers to movement, route upgrades or route additions which can form part of the larger network.

Within the town centre, several roads provide access to residential property and these are generally of a historic character with narrower carriageways and footways. Some routes act as rat-runs between the A6 and Chesterfield Road or the A609.

### Access to Schools

Schools are crucial community facilities and are key trip attractors within any town. According to the National Travel Survey, 14% of trips on a weekday are associated with education (Source: NTS0504b) and encouraging active travel would have a positive impact on the mental and physical health of young people. Safety is a key issue for many when using transport, with children and young adults particularly vulnerable (Source: WHO. 2018). There is therefore a need for these sites to be well-connected to their local communities and catchment areas. In many cases, access to schools can be compromised through poor crossing facilities or obstructive pavement parking. Such measures can also help to build confidence in people walking, wheeling and cycling as they get older, and help to support behaviour change to more sustainable modes over the longer term.

Access to schools by active modes in Belper is poor, with limited provision for pedestrians and cyclists. Several school locations also have poor provision for drop-off / pick-up by car, with potential increases in active modes representing a potential solution to school-related congestion.

# Wider Linkages

Beyond the town, there are a range of leisure routes and recreational linkages which provide wider connections to surrounding settlements and countryside. There is an opportunity to improve the accessibility, quality, and provision of these wider linkages, helping to connect the local network with a wider area.

Belper sits in a rural location with a network of footpaths and bridleways that tie into the town. There is currently no nearby leisure route that is easily accessible, although there are plans to create the Derwent Valley Cycle route (with link to the town) and a connection to the Little Eaton Greenway from Openwoodgate.



In addition to the route-based enhancements, there are areas within the town which could benefit from more focussed attention within the active travel masterplan. These areas could be made more accessible to those walking, wheeling, and cycling, which could include the provision of additional infrastructure as well as public realm and placemaking enhancements.

There are three areas in Belper with relatively similar heights that could form the basis of natural active travel neighbourhoods, with topographical challenges between these areas limiting the potential for trips by active modes.

# Cycle Parking

A crucial part of people journeys is the transition between transport modes and the availability of parking. A lack of cycle parking can be considered a key barrier to people cycling. Indeed, Investing in Cycling & Walking: Rapid Evidence Assessment (Source: DfT, 2016) states that "the provision of bicycle parking has been found to increase levels of cycling, mainly in the context of commuting and public transport access trips."

There are limited opportunities to park bicycles across the whole of Belper. Cycle parking in the town centre and railway station is of poor quality. Proposals will explore how additional cycle parking could be adopted across the town and help to remove the final 'end-point' barrier by ensuring people have secure places to leave their cycles whilst accessing employment, services and facilities.



Figure 13: Areas of similar height in Belper



Wayfinding is an important tool in communicating routes to and from local destinations. It helps to promote active travel by signposting facilities and can be used to encourage people to take nonvehicular modes. It can also be used as a platform to promote local history and character and celebrate the identity of the town. Proposals will discuss the opportunities to improve wayfinding features, especially at key sites. These proposals also include other features to aid wayfinding, such as benches and handrails.

Within Belper there is limited signage to guide people to the town, to wider destinations, and for journeys within the town. Recent improvements include wayfinding totems and signage associated with the Derwent Mills World Heritage Site. Most footpaths are signed but do not have destination information, distances or walking times on them. Signage to and from the railway station and bus station is also limited, rather than being obvious to users.

### Railway Station Access

Belper railway station is located close to the centre of the town. It is linked to the town centre via a series of footways from King Street, Albert Street and Field Lane. There is also vehicular access via Field Lane Car park and restricted vehicular access via Wellington Court (which effectively acts as an additional alley). Some accesses to the station are stepped, and all approaches are uninviting and narrow.

The station is therefore difficult to access and is not visible from the King Street which creates a feeling of isolation. Improved routes and signage to the railway station are needed to improve journeys to in a from it, for both commuter and visitor use.

### Derwent Valley Cycle Route

Implementation of the Derwent Valley Cycle Route would create a route from Derby to Matlock (and beyond). This new route will run alongside the River Derwent, providing a strategic connection along the Derwent Valley.

The Neighbourhood Plan states that: "The Derwent Valley Trust ... seeks to create a Derwent Valley Cycle way linking the Silk Mill, Darley Abbey Mill, Belper Mill and Cromford Mill as a single visitor destination".

The Belper Active Travel Masterplan should therefore maximise the potential of this new route via local linkages such that it is of use to those living in the town, but also draws tourists from the route into town.

### King Street

King Street is the main shopping street within Belper and forms the retail heart of the town. A number of adjacent streets also have a strong commercial presence including the A6 (Bridge Street), Strutt Street and Campbell Street.

King Street is part pedestrianised with traffic restricted during the day (with only buses allowed to use the route). The rest of the street has a one-way system in place and traffic flows area relatively low.

There is potential to enhance the pedestrian realm and make the area more attractive for walking, wheeling, and cycling. Options to pedestrianise the street have been suggested by local stakeholder and has been assessed as part of the masterplan proposals.

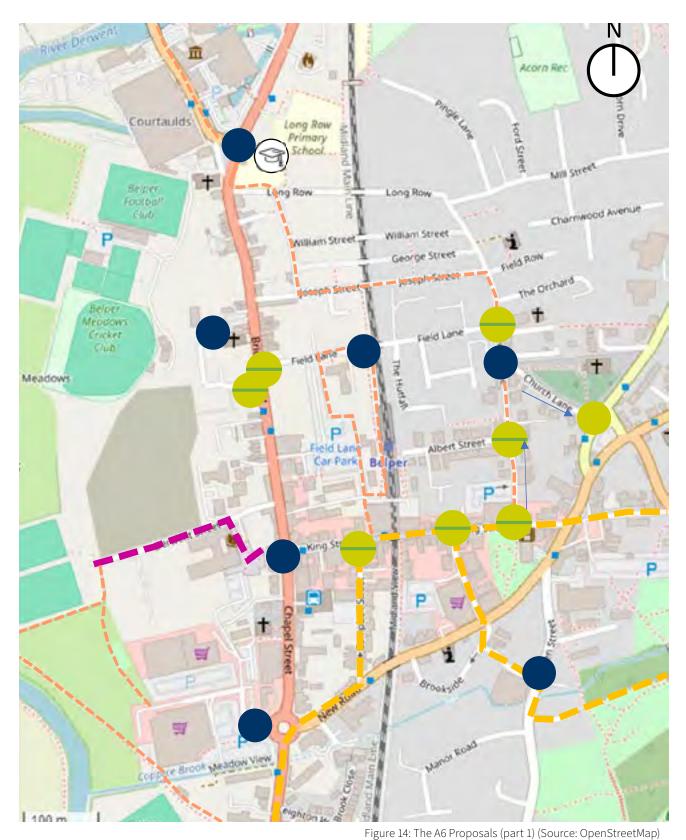
# 6. Masterplan Proposals

### 6. Masterplan Proposals

This section describes in detail the proposals for each of the identified themes. It builds on the overview of the interventions set out in Section 5 and shows how these combine to form the full active travel masterplan network.

This section includes a number of concept-level sketch options. If the Active Travel Masterplan receives funding, then further detailed design work and appraisal, public engagement (consultation and co-design), and political approval (Derbyshire CC Cabinet-level) will be required.

Key Themes	
A_B	Strategic Routes
	Local Routes
	Access to Schools
<b>م</b>	Wider Linkages
20	Area Treatments
₫ ZZO	Cycle Parking
7	Wayfinding
	Railway Station Access
<u>600</u>	Derwent Valley Cycle Route
<b>.</b>	King Street



#### Existing

- -- Cycle Network (Existing LCWIP)
- -- Cycle Network (Proposed LCWIP)

#### Masterplan Proposals

- -- Segregated Cycle Lane
- -- Shared Carriageway, On-Road Cycle Route
- -- Off-Road Shared Pedestrian and Cycle Route
- -- Bi-Directional Cycle Route
- -- Contraflow Cycle Routes

- Widen Footway
- Pedestrian Route
- Proposed crossing / crossings upgrade / new signalised crossing
- Proposed side road crossing / continuous crossing
- Proposed pedestrian area
- Proposed School Street



#### The A6

The A6 is the key north-south route through Belper. It provides onward travel to Matlock and Derby, is a key access route to local settlements, and is important for trips between western, northern and southern areas of Belper. Babington Hospital is located along it, as is Belper bus station, high street shops, supermarkets, employment land and the Derwent Mills World Heritage Site. Housing of various types is also located along its length through Belper.

The corridor has a 30mph speed limit and supports high volumes of vehicle traffic, particularly during peak hours. The carriageway is relatively narrow, so that pedestrians on the footway can feel in close proximity to road traffic – especially if two HGVs are passing. Collision data shows there are multiple instances of collisions (all types) along this route. Bus routes also run along the A6.

Proposals along this corridor include:

- 1. Providing alternative routes for those walking, wheeling and cycling.
- 2. Improving crossing facilities across the A6.
- 3. Improving side road crossings, where needed.
- Consideration of reducing the speed limit through the most constrained sections of the carriage way (e.g. on the A6 and Green Lane) to reduce noise and air pollution, and to improve safety.

### Providing alternative routes for users wishing to bypass the A6

In order to create an alternative route to the A6 through Belper, a number of active travel 'bypass' options have been investigated.

The first option is to make use of the Derwent Valley Cycle Route which is described in more detail below. This would be to the west of the town centre, connecting the south of the town with the Mount Pleasant and historic mill area at Bridge Foot.

The second option is to make use of the proposed Local Cycle Network along the A6 and Campbell Street, upgrading existing crossings where necessary.

On King Street, the route would make use of any proposed Local Cycle Network upgrades, as well as railway station access improvements and wider King Street upgrades (see below). From King Street there are two main options to move northward, parallel with the A6. These are:

- 1. A connection between King Street and Long Row via the railway station.
- 2. A connection between King Street and Long Row via Green Lane.

Route Option 1. The railway station option would seek to improve the alleyway environment directly adjacent to what is currently Poundland, off King Street. Here, the building line and trees narrow the area, making it difficult to pass. This area could be widened but only through land acquisition or tree removal. The route could then progress alongside the western rail line embankment (with some widening) or across the existing car park (with some widening and route creation). Both options would connect to Field Lane. From Field Lane, a new bridge structure or cantilevered footway/cycleway would be needed to connect with Joseph Street. This would be the most direct route but would be across Network Rail land and may be difficult to achieve.

**Route Option 2.** The second option would use the proposed Local Cycle Network on King Street to connect to Green Lane. This would require adding streets to the existing one-way system, and would include Church Lane (north east bound traffic only) and Green Lane (northbound traffic only) from King Street to Church Lane. This would allow more space for people using Green Lane and connect to Joseph Street, and across to Long Row. Along this route, side-road crossings would be required.

Due to the lack of space on Green Lane, the one-way system could be supplemented with a 20mph speed limit and designationed as a quiet street (as per section 7.3.3 of LTN 1/20), allowing for contraflow cycle journeys.

For either option, some improvement may be needed on Joseph Street and Long Row, to make them quiet lanes and allow improved access. The surfacing of Joseph Street would need to be improved. The surfacing of Long Row is cobbled within a conservation area and would need to be treated sensitively where it is crossed. The existing footway is asphalt and could be improved to tie in with the wider aesthetics of the street.

#### Improving crossing facilities across the A6

North of Long Row, a segregated or shared footway/cycleway on the A6 would be required as well as an improved crossing over the A6 close to Belper Mills. This would provide connection toward the mills, River Gardens and Derwent Valley Cycle Route.

To tie the town centre (at King Street) into the newly developed library area and the Derwent Valley Cycle Route at Belper Meadows, an upgraded crossing to the immediate south of King Street would be beneficial. This would connect the new development to Derwent Street (where footways could be widened) and link to the Belper Meadows / Derwent Valley Cycle Route.

#### Improving side road crossings

All side road crossing junctions with the A6 within the town should be continuous to improve walking and wheeling and, where needed, cycle access.

Consideration should be given to reducing the speed limit through the most constrained section of carriageway to reduce noise and air pollution, and to improve safety.

From King Street to Long Row, the A6 could be designated as 20mph. This would reduce stress on the most constrained section of Bridge Street. Alternatively, carriageway treatments to help reduce speed without a 20mph designation could be considered.

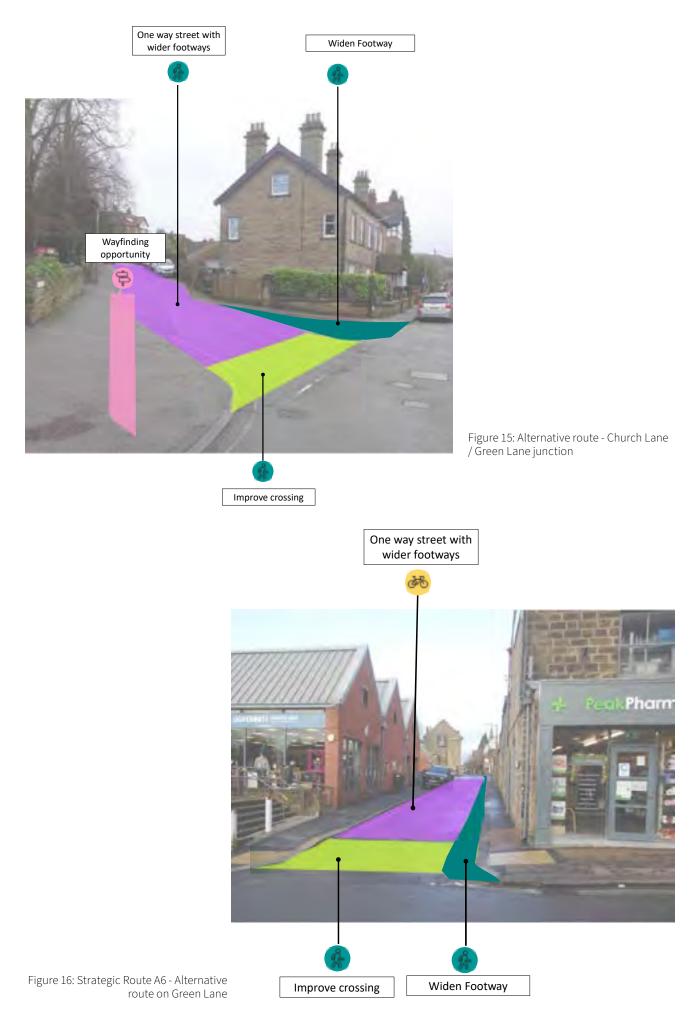




Figure 17: The A609 Proposals (part 1) (Source: OpenStreetMap)



#### Existing

- -- Cycle Network (Existing LCWIP)
- -- Cycle Network (Proposed LCWIP)
- **Masterplan Proposals**
- -- Segregated Cycle Lane
- -- Shared Carriageway, On-Road Cycle Route
- -- Off-Road Shared Pedestrian and Cycle Route
- -- Bi-Directional Cycle Route
- -- Contraflow Cycle Routes

- Figure 18: The A609 Proposals (part 2) (Source: OpenStreetMap)
- Widen Footway
- Pedestrian Route
- Proposed crossing / crossings upgrade / new signalised crossing
- Proposed side road crossing / continuous crossing
- Proposed pedestrian area
- Proposed School Street



#### The A609

The A609 is key east-west route through Belper. It provides onwards travel towards several settlements to the east as well as the A38, which is part of the trunk road network. The majority of the route has residential frontages but there are also education, retail, employment and leisure uses along its length. Two mini-roundabouts are located at the central point of this area, and a bus route runs along this corridor.

The corridor has a 30mph speed limit and supports high volumes of vehicle traffic, particularly during peak hours. The carriageway is relatively narrow in places, so that pedestrians on the footway can come into close proximity to road traffic – especially in a historic and steep section close to the town centre and the old marketplace.

A one-way system was implemented in the 1990s so that the A609 has an eastbound-only movement from Lander Lane to Windmill Lane (High Street) and a westbound-only movement from Coppice Brook to the Butts (along Nottingham Road). Some areas of formal on-street parking exist, whilst there is also evidence of pavement parking. With narrow pavements, and a gradient difference between carriageway and footway (through the terraced house section) there is more limited scope for improved cycle provision. However, there is an opportunity to improve this corridor for those walking and wheeling.

Collision data shows there are multiple instances of collisions (of all types) along this route and that there is cluster of accidents near to the primary school (including one child-involved fatality). Proposals along this corridor include:

- 1. Providing improved widths for walking, wheeling, and cycling.
- Improving crossing facilities across the A609 corridor. In particular, creating better crossings in the vicinity of the primary school and The Butts.
- 3. Implementing the Local Cycle Network proposals.
- 4. Improving side road crossings, where needed.
- 5. Consideration of reducing the speed limit through the most constrained section of carriageway on Nottingham Road to reduce noise and air pollution, and to improve safety.

# Seeking to provide improved widths for walking wheeling and cycling

Where possible, widths should be increased for those walking, wheeling, and cycling. This this would tie in with the Local Cycle Network proposals (see below). Specific locations are detailed in the diagrams below and include a segregated cycle route (at the eastern end), and shared facilities alongside the A609 from St John's Road towards Short Street.

#### Improving crossing facilities across the A609 corridor and creating better crossings in the vicinity of the primary school.

Three signalised crossings exist between the A6 and Chesterfield Road. These should be upgraded to facilitate the proposed Local Cycle Network.

At the junction with The Butts, the existing crossing should be upgraded. A zebra crossing (or parallel crossing to also accommodate cyclists) would be appropriate at this location.

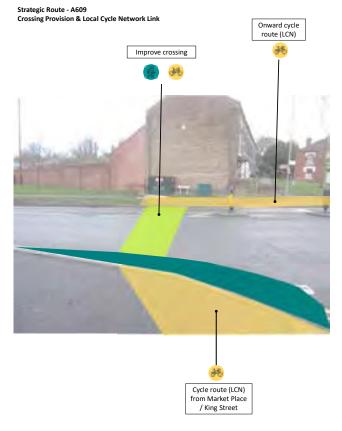


Figure 19: A609 crossing provision and local cycle network link.

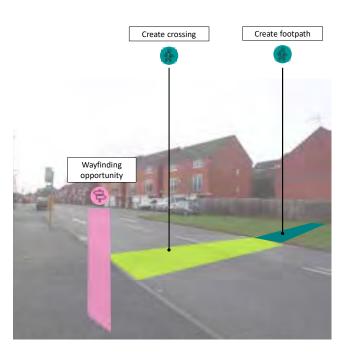


Figure 20: Additional A609 crossing provision.

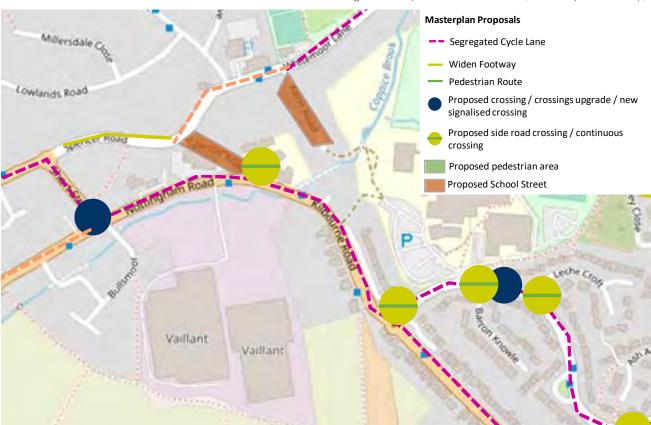
At the A609 / Short Street junction, crossings should be created to aid users. Zebra crossings may be appropriate at this location.

At the primary school, a school street should be considered along Kilbourne Road or, as a minimum, more space should be given to pedestrians and the surfacing of crossings improved. Additionally, the use of Alton Road as a school access should be considered within any future proposals, as should the potential for Alton Road to adopt a school street.

From Short Street to Whitemoor Lane, Spencer Road could be made one-way (eastbound) so that the footway can be widened and a shared cycle facility installed. This would connect to the suggested school street and the wider connections toward Marsh Lane.



Figure 21: Additional A609 crossing provision.



#### Figure 22: Proposals around schools (Source: OpenStreetMap).

# Developing the Local Cycle Network proposals

Ensure that the climb from King Street to The Butts has enough width and is well marked. As part of this, the crossing of the A609 at the Market Place and at The Butts should be upgraded. Other proposals include:

- Make St Johns Road one-way (south) with a one-way contra flow cycle lane north.
- Create a one-way cycle lane to assist with climbing from St Johns Road to Windmill Lane.
- Create a crossing at the junction of the A609 and Windmill Lane.

### Improving side road crossings, where needed

Side road treatments should comprise continuous crossings.

#### Consideration of reducing the speed limit through the most constrained section of carriageway on Nottingham Road to reduce noise and air pollution and improve safety.

 Widen<br/>footway
 Install speed<br/>table and<br/>create crossing
 Widen<br/>footway

Figure 23: Supporting a crossing facility.

Reduced speed limits could apply between the Butts and Rothwell Lane.



#### Chesterfield Road / B6013

Chesterfield Road is a B-Road and plays a strategic function by connecting residential areas and wider destinations. This road has narrow footways on certain sections and has limited crossing provision.

The road rises with the topography of the land from the town centre towards Heage. The corridor has a 30mph speed limit and supports relatively high volumes of vehicle traffic, particularly during peak hours. A bus route also runs along this corridor.

This is a constrained route from Marsh Lane to the A609, especially where older housing is located, and along other sections where there is on-street parking. In this constrained section, there may be limited scope for improved cycle provision. However, there is an opportunity to improve this corridor for walking, wheeling, and cycling where the carriageway widens out (northeast of Marsh Lane).

Collision data shows there are multiple instances of collisions along this route and that there is a cluster of accidents close to the town centre.

Proposals for this intervention include:

- 1. Improved and upgraded crossing provision.
- 2. Side road crossings across adjoining streets.
- 3. Pavement widening where possible.
- 4. Developing the Local Cycle Network proposals.



Figure 24: Proposals for Chesterfield Road (Source: OpenStreetMap)

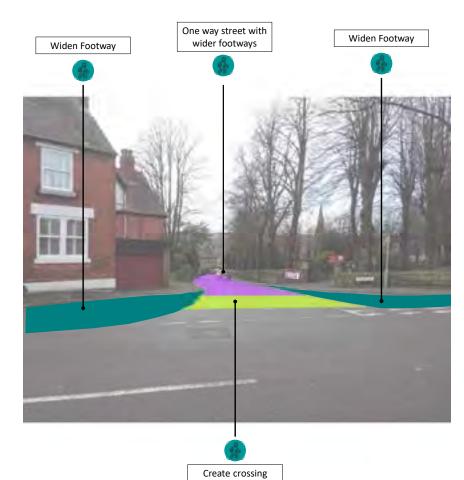


Figure 25: Chesterfield Road / Church Lane

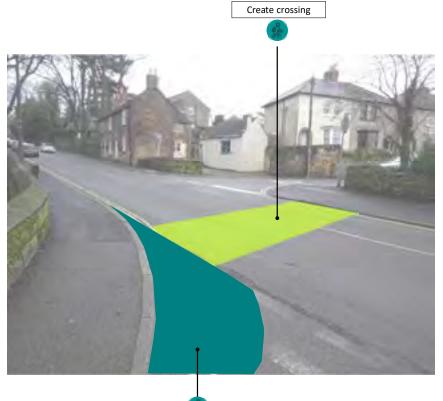


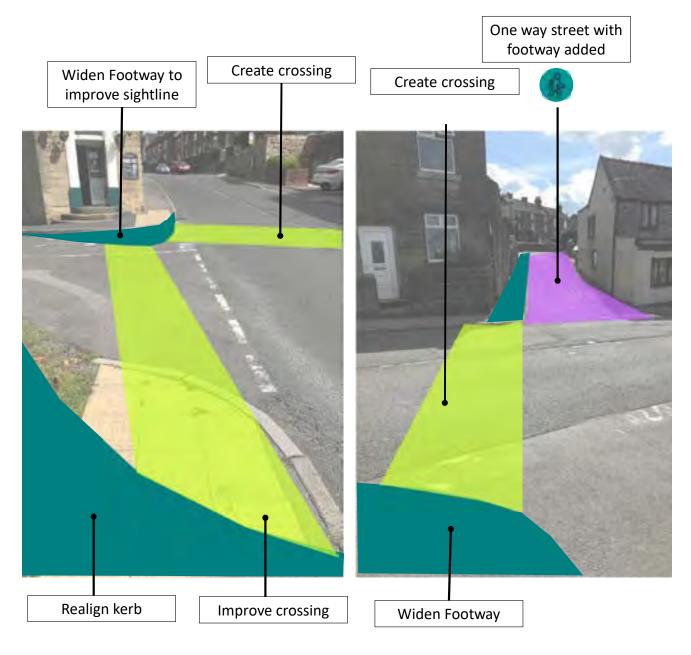
Figure 26: Chesterfield Road crossing.



# Improved and upgraded crossing provision.

Improved crossings should be provided at the junction of Church Lane / Chesterfield Road. This may be developed in conjunction with a one-way system, as noted above. The proposals would include reducing the width of the junction mouth with a new pedestrian crossing adjacent over Chesterfield Road.

Figure 27: Chesterfield Road / Swinney Lane Junction



At the junction of Swinney Lane and Chesterfield Road, improved crossing facilities should be provided. This would include realignment of the carriageway to improve sightlines and the crossing area on the western section of Swinney Lane. This would be subject to land-take and the repositioning of a lighting column.

A crossing over Chesterfield Road would also be useful to connect to the eastern part of Swinney Lane and Penn Street. This may include making this short section of street one-way (westbound) to allow for footway to be installed.

A new crossing to the north of Penn Street would help to link pedestrian footpaths. This should be an at-grade facility with a speed table.



Figure 29: Proposed crossings (Source: OpenStreetMap).

The junction of Crich Lane / B6013 should be improved to create a suitable pedestrian crossing. This may include narrowing the carriageway and providing a one-way system (northbound) on Crich Lane, with south-bound traffic routing via Marsh Lane.

Improved / new crossings should be provided at the junction of Marsh Lane / B6013 to aid the movement of users in this area.

The junction of Laund Nook / B6013 should be rationalised to create a single junction for users, replacing the existing entry/exit arrangements. This would also aid the development of the Local Cycle Network.



Figure 28: Proposed crossings (Source: OpenStreetMap).

# Side road crossings across adjoining streets

Side road treatments should comprise continuous crossings.

#### Pavement widening where possible.

From the town centre to Laund Nook, the B6013 has narrow widths and should be widened, where possible.

# Developing the Local Cycle Network proposals.

The proposed Local Cycle Network joins the B6013 at Laund Nook. From here to the edge of the town a segregated walking / cycle route should be provided.



Figure 31: Proposals (Source: OpenStreetMap)

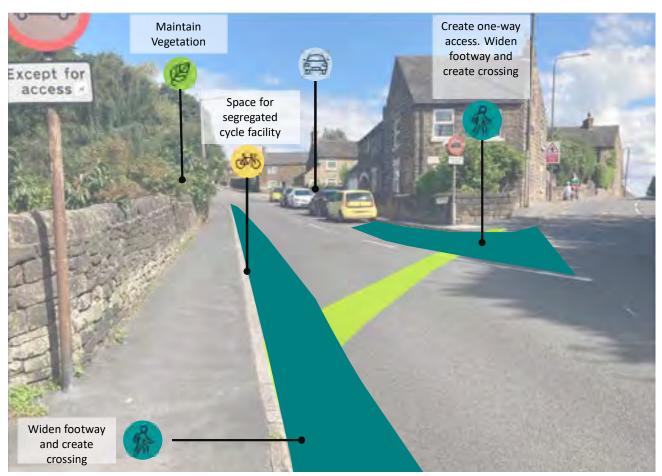


Figure 30: Chesterfield Road / Crich Lane Junction

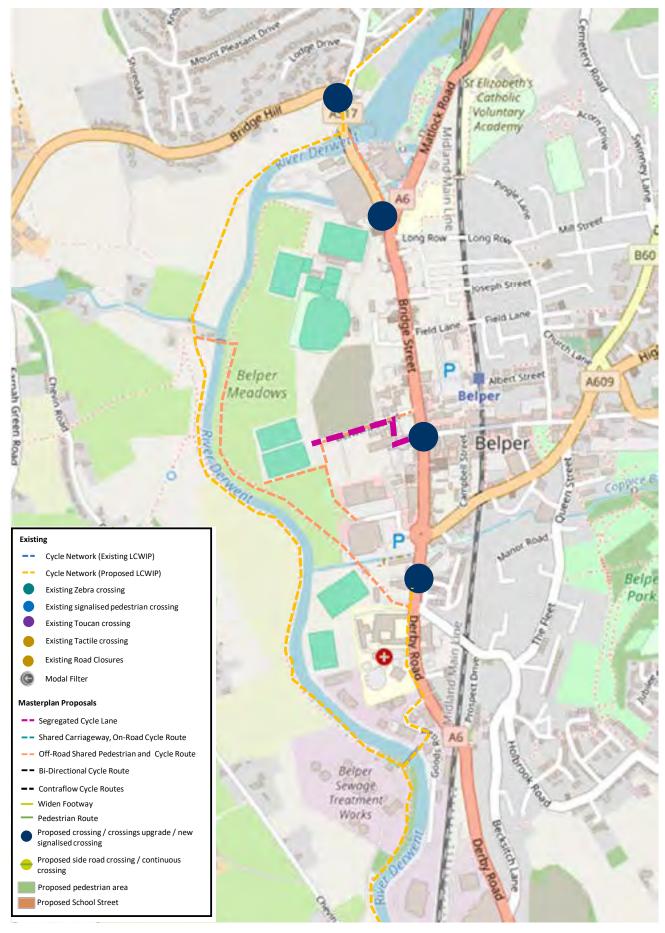


Figure 32: Derwent Valley Cycle Route Proposals (Source: OpenStreetMap).



#### **Derwent Valley Cycle Route**

The Derwent Valley Cycle Route would create a route from Derby to Hathersage with connections beyond. This route will add a major link into Derbyshire's Key Cycle Network. This new route would run alongside the River Derwent, providing a strategic connection along the Derwent Valley, and acting as an alternative route to the A6.

The route would link several tourist destinations and settlements with the Derwent Valley Mills World Heritage Site and acts as a 'third way' for people to connect to these sites in addition to existing road and rail links. Indeed, the route would penetrate further into Derbyshire than the existing rail links.

In the vicinity of Belper, the route would be on the western bank of the River Derwent and would need to tie into Belper so that it can be easily accessed by residents and allow visitors into the town.

Proposals along this route include:

1. Create the Derwent Valley Cycle Route from Matlock to Derby (note the route would extend further but existing connections are available from Matlock and Derby).

- 2. Create accesses to the Derwent Valley Cycle Route at:
  - a. Bridge Foot (A517) with connection toward the A6
  - b. Belper Meadows with access across the land in line with the Neighbourhood Plan
  - c. At the existing bridge to tie in with Goods Road and the proposed Local Cycle Network towards the town centre.
- Create routes to the Derwent Valley Cycle Route from the Belper area, including crossings, as needed – suggested links to/from the town are proposed above.



#### Walking, Wheeling and Cycling

There are opportunities to develop the Local Cycle Network routes as meaningful connections across the town. They would link a range of residential, retail and employment sites.

In addition to the Local Cycle Network, site visits have identified a network of additional routes that would complement the Local Cycle Network and give additional access opportunities. These allow access to schools, residential areas and leisure facilities.

In some places, a fully segregated cycle network may not be possible owing to a lack of available width. At these locations, shared facilities may be possible or, alternatively, they can be developed as high-quality walking and wheeling routes.

Proposals for this intervention include:

- 1. Checking the alignment of the Local Cycle Network routes.
- 2. Seeking to implement the Local Cycle Network routes.
- 3. Creating local links to the Local Cycle Network.
- 4. Improving the network for all users, including improved crossing facilities and improved widths.

The Local Cycle Network should be developed alongside additional routes identified in site visits.

#### Accessible routes

Where footways exist, they may not be suitable for all. It is therefore crucial to develop key routes that can be used by all. Within the town centre, this would include creating a route from key arrival points, such as car parks, bus stops and the railway station.

Proposals for this intervention include:

- 1. Creating a route that links main car parks, bus stops and the railway to King Street and the surrounding retail offers.
- 2. Ensuring that routes are level, well drained, and of suitable widths and materials.

These proposals ties directly into other proposals in this section including proposed Local Cycle Network upgrades, King Street upgrades, and railway station access.

It is also worth noting that in a number of locations, drainage gullies are located on the footway which makes walking and wheeling difficult. Examples are on footways on King Street, the A6 and the A609 (Nottingham Road Section). An improved drainage solution should be implemented to overcome these obstacles.

### Local Routes

#### White Moor area – John O'Gaunts Way, Whitemoor Lane & Gregory's Way

White Moor is one of the larger residential estates within Belper, accessed from the A690 and Chesterfield Road. Within the area John O'Gaunts Way, Whitemoor Lane and Gregory's Way provide key access road through the residential area and also to shops. All these roads have a 30mph speed limit and accommodate bus services. The neighbourhood experiences mainly local traffic, and there is generally good permeability with pedestrian cut-throughs between streets and across the green spaces.

There is an opportunity to improve the pedestrian and cycling facilities within the neighbourhood and enhance existing connections to the Belper School and the Leisure Centre, Pottery Primary School, Holbrook School for Autism, the Valiant employment site, shops, and areas of green space. Proposals for this intervention include:

- 1. Adding cycle routes along John O'Gaunts Way, Whitemoor Lane and Gregory's Way (at the northern end of Gregory's way, the gradient rises more steeply for a short section).
- 2. Improving the link between Whitemoor Lane and Gregory's Way via Coppice Brook.
- 3. Improving crossings.
- 4. Enhancing the lighting and quality of the routes, including off road footpaths.
- 5. Providing connection to existing facilities.
- 6. Connecting the routes to wider proposals.



#### Figure 33: White Moor Area Proposals (Source: OpenStreetMap).

#### Masterplan Proposals

- Segregated Cycle Lane
- Shared Carriageway, On-Road Cycle Route
- —— Off-Road Shared Pedestrian and Cycle Route
- Proposed crossing / crossings upgrade / new signalised crossing
- Proposed side road crossing / continuous crossing
- Proposed pedestrian area
- Proposed School Street



#### White Moor, Marsh Lane and & Crich Lane

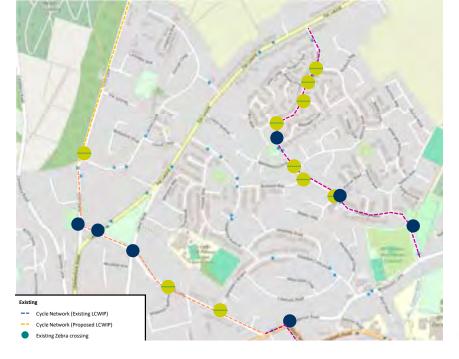
As noted previously, there is an absence of cycle provision linking neighbourhoods within Belper. To provide an additional east-west link from White Moor (see above) to Crich Lane, a cycle lane has been investigated.

A route could connect to that proposed on Whitemoor Lane and move along the A609 and Marsh Lane, linking to the proposed Local Cycle Network on Laund Nook / Windmill Lane and the proposed Local Cycle Network on Crich Lane. An additional route through the residential areas could help to unlock these residential areas and provide quiet routes.

Proposals for this intervention include:

1. Providing a crossing on Whitemoor Lane / A609.

- 2. Widening the footpath to form a cycle route on the A609 from Whitemoor Lane to Marsh Lane. An addition to the one-way system from Kilbourne Road to Short Street would allow the footway to be widened.
- 3. Providing a crossing on Marsh Lane / A609.
- Widening footpath connections to form a cycle route on Marsh Lane (whole length).
   Part of this route is steep, levelling off toward Marsh Lane.
- 5. Improving the junction of Marsh Lane / Laund Nook / Windmill Lane.
- 6. Improving the junction of Marsh Lane / B6013.
- 7. Creating a section of route on Crich Lane to tie into the proposed Local Cycle Network, including any crossing facilities. It should be noted that the gradient is steep on this road.

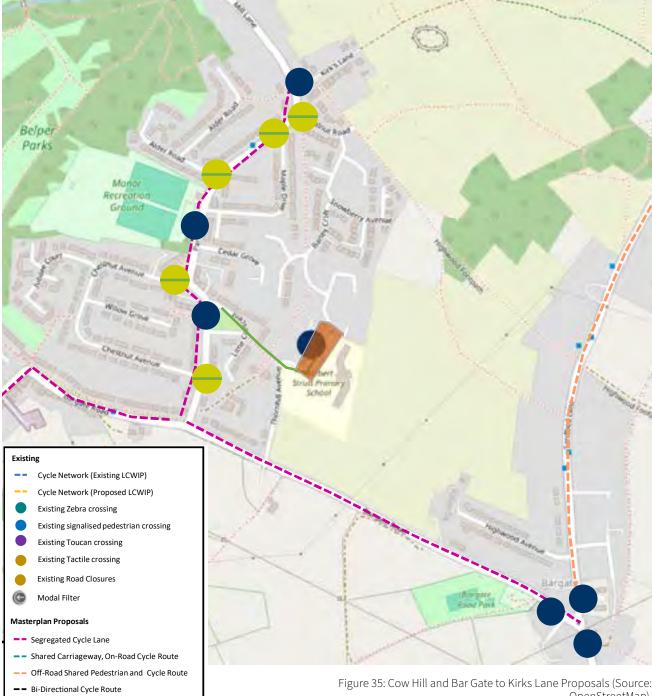


#### Masterplan Proposals

- Segregated Cycle Lane
- Shared Carriageway, On-Road Cycle Route
- Off-Road Shared Pedestrian and Cycle Route
- Proposed crossing / crossings upgrade / new signalised crossing
- Proposed side road crossing / continuous crossing
- Proposed pedestrian area
- Proposed School Street

Figure 34: White Moor, Marsh Lane and Crich Lane Proposals (Source: OpenStreetMap).

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-- Contraflow Cycle Routes Widen Footway Pedestrian Route

signalised crossing

Proposed pedestrian area Proposed School Street

Proposed crossing / crossings upgrade / new

Proposed side road crossing / continuous crossing

Figure 35: Cow Hill and Bar Gate to Kirks Lane Proposals (Source: OpenStreetMap).



#### Cow Hill & Bargate to Kirks Lane

Within the residential area between Bargate Road and Kirk's Lane, there is potential to improve pedestrian facilities and install cycling infrastructure.

A route could connect to the Local Cycle Network proposed on Kirks Lane and run along Park Road to Bargate Road. Bargate Road would also receive cycling infrastructure through to Sandbed Lane and then back to Kirks Lane via Sandbed Lane. An upgraded link would also be created between Park Lane and Herbet Strutt Primary School.

The above would also provide improved access to The Park Recreation Ground.

Proposals for this intervention include:

1. Widening the footpath connection to form a cycle route on Park Road, from Kirk's Lane to Bargate Road.

- 2. Providing crossings over Park Road at Kirk's Lane and near Maple Drive (for the recreation ground).
- 3. Widening footpath connections to provide a cycle route on Bargate Road (whole length).
- 4. Improving crossings on Park Road at Bargate Road.
- 5. Improving the route and crossing to Park Road from Herbert Strutt Primary School.
- 6. Improving the junction / crossings of Bargate Road / Sandbed Lane.
- 7. Widening footpath connections to form a cycle route on Sandbed Lane to connect to Kirk's Lane.

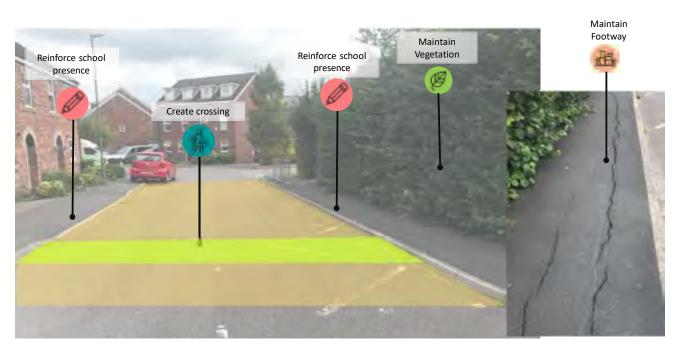
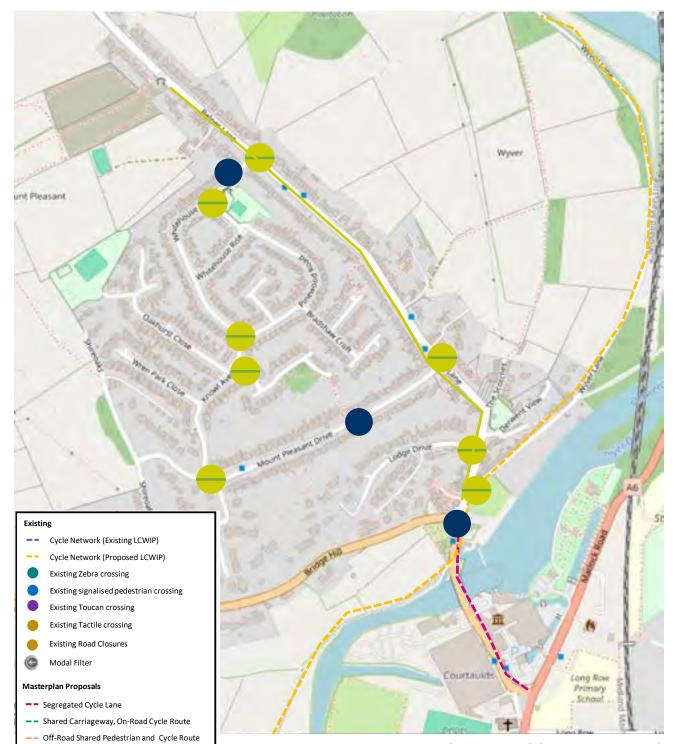


Figure 36: 5. Improving the route and crossing to Park Road from Herbert Strutt Primary School



Bi-Directional Cycle Route
 Contraflow Cycle Routes
 Widen Footway
 Pedestrian Route

Proposed pedestrian area Proposed School Street

crossing

Proposed crossing / crossings upgrade / new signalised crossing Proposed side road crossing / continuous

Figure 37: Mount Pleasant Proposals (Source: OpenStreetMap).



#### **Mount Pleasant and A517**

This area is the only residential area found to the west of the River Derwent within the study area. Close to the river, and along Wyver Lane, the topography is relatively flat. To the north west, the land rises steeply along Belper Lane and into the housing areas.

To improve pedestrian facilities in the area, crossing points should be upgraded and footway widths widened where possible.

It is essential that this area is well tied to the Derwent Valley Cycle Route and town centre, with upgraded crossings and footways.

Proposals for this intervention include:

- 1. Provide additional cycle infrastructure along Bridge Foot, as well as providing a crossing over the A517.
- 2. Consider widening the existing pedestrian bridge on the south side of the bridge or create a bespoke cycle bridge.

- 3. Improve crossings within the housing area.
- 4. Widening the footway on Belper Lane.
- 5. Belper Lane has width and visibility constraints that means a continuous cycle 'climbing lane' would not be feasible. A climbing lane along Belper Lane as far as Mount Pleasant Drive would be possible. This could then follow a route via Knowl Avenue and Whitehouse Drive. These roads would have sufficient space to include some shared use facilities. A cycle 'climbing lane' would then be possible on Belper Lane from Whitehouse Drive, which would also tie into new housing development. Then it would terminate on where the existing footway stops on the western side of Belper Lane. This would far exceed the allowable gradients in LTN1/20 but would not be deemed a 'critical failure'.

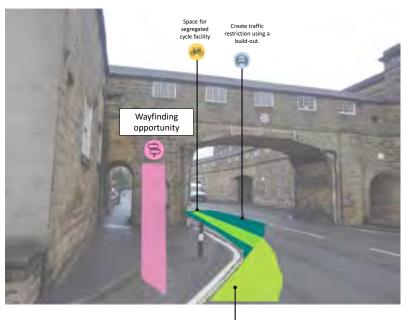


Figure 38: 1. Provide additional cycle infrastructure along Bridge Foot, as well as providing a crossing over the A517

the A6



#### Proposed Local Cycle Network Connections

The proposed Local Cycle Network routes offer useful connection across the town and have been assessed as part of a wider access audit focusing on the bus and railway stations conducted on behalf of Derbyshire County Council in 2022.

The alignment of most routes is considered suitable with a few exceptions noted below. The proposed Local Cycle Network also offers the opportunity to upgrade junctions and connect to the wider schemes noted in this section.

Proposals for this intervention include:

### From Derwent Valley Cycle Route to Town Centre:

- Create the link from the Derwent Valley Cycle Route along the A6 and Campbell Street, upgrading existing crossings where necessary. Also, two alternative connections to the DVCR have been discussed above, and could be added to the Local Cycle Network.
- 2. Create the route on King Street (see High Street section below).

#### From Town Centre to Far Laund:

- Ensure that the climb from King Street to The Butts has enough width and is well marked. As part of this, the crossing of the A609 at the Market Place and at The Butts should be upgraded.
- 4. Make St Johns Road one-way (south) with a contra-flow cycle lane north.
- 5. Create a cycle lane from St Johns Road to Windmill Lane. Gradients will need to be

assessed here.

- 6. Create a crossing at the junction of the A609 and Windmill Lane.
- 7. Widen footpath connection to form a cycle route on Windmill Lane (whole length).
- 8. Improve the junction of Marsh Lane / Laund Nook / Windmill Lane.
- 9. Widen footpath connections to form a cycle route on Laund Nook (whole length).
- 10. Improve crossings to the recreation ground on Laund Nook.
- 11. Improve the junction of B6013 / Laund Nook.
- 12. Widen footpath connections to form a cycle route on B6013 (whole length).

#### **Crich Lane:**

13. Widen footpath connection to form a cycle route on Crich Lane (whole length). Gradients will need to be assessed here.

#### From Town Centre to Kirks Lane

- 14. Widen footpath connection to form a cycle route on Strutt Street (whole length).
- 15. Upgrade crossings on A609.
- 16. Make Brook Side and Days Lane quiet lanes (they are already one-way streets).
- 17. Widen footpath connections to form a cycle route on Queen Street (whole length) and provide a crossing to the onward route.
- 18. Create a route across Belper Parks, selecting the most appropriate gradient. This is

proposed to connect to Mill Lane and then head south on a steep gradient to Kirk's Lane. It is acknowledged, however, that this may be too difficult for some users to ascend and there is limited width to provide a cycle link. Two alternatives are proposed:

- When the proposed Local Cycle Network emerges on Mill Lane, connect to Damside Lane Recreation Ground and then upgrade the footpath alongside Coppice Brook to Kirks Lane – this would require livestock control and landowner permission.
- Create a suitably graded path within the park to connect to the Park Recreation ground and Park Road (to tie in with the proposed neighbourhood route above).
- 19. Create a crossing to Kirk's Lane.
- 20. Upgrade Kirk's Lane with a suitable surface.

#### Sandbed Lane and Openwood Road:

- 21. Create a cycle route along Sandbed Lane. This will need to take into consideration some tighter road widths.
- 22. Improve the crossing of Sandbed Lane/A609/ Over Lane.
- 23. Designate Openwood Road as a quiet lane to tie in with the bridleway.

### Local Routes

#### **Town Centre Connections**

Whilst the proposed Key Cycle Network and Local Cycle Network routes would offer good connections, there is an absence of cycle provision linking the neighbourhoods with the town centre. As it is difficult to accommodate provision along the A6 (Bridge Street), an additional route through the residential areas could help to provide quiet routes into town. These could also form a basis of routes which could connect to schools.

An opportunity exists to enhance existing footways to better accommodate pedestrians and cycles and strengthen connections with crossing upgrades. There is potential to create a link from King Street to Long Row. The is also potential to provide links to the proposed Derwent Valley Cycle Route via Belper Meadows and Bridge Foot.

During the site visit, rat-running was observed from the A6 to Chesterfield Road via Field Lane, Green Lane and Church Lane. A one-way system may alleviate this problem and create more space for walking, wheeling, and cycling.

Proposals for this intervention have been discussed in the above sections as well as in the following sections.



The interventions identified above provide routes that pass or go close to schools.

In addition to the above, the following interventions are proposed:

- 1. Create a school street on Laund Nook for St John's C of E Primary School.
- 2. Improve the access to Pottery Primary School from Whitemoor Lane.
- 3. Upgrade the offroad footways for Belper School.
- 4. Widen footpath connections to form a cycle route on John O'Gaunts Way. This would benefit Belper School (and the Leisure Centre) and Holbrook School for Autism 14-19 Provision.
- 5. Improve crossings in the vicinity of Belper School.
- 6. Create a school street on Thornhill Avenue for Herbert Strutt Primary School.
- 7. Consider a sensitive treatment on Long Row and historic streets to ensure a safe route to Long Row Primary school.

# Cycle Parking

There are limited opportunities to park bicycles across the whole of Belper. As part of the Active Travel Masterplan, it is recommended that additional public provision is delivered across the town, especially at key destination sites and public spaces. Existing cycle parking for public use is located at:

- Belper Railway Station & Field Lane Car Park

   a series of Sheffield stands on platform or
   a secure cycle parking facility within the car
   park.
- King Street one Sheffield stand.
- Aldi & Morrisons Sheffield Stands.

As part of the Active Travel Masterplan, it is recommended that additional public provision be delivered across the town. This could take various forms, as identified below:

### 1. Short stay parking – Shops, cafes and amenities

- Users most concerned with convenience of access while having a safe place to secure their cycle.
- Cycle parking located close to shop fronts will generally provide good passive surveillance.
- Cycle parking should be located close to shop entrances so that it is clearly visible and convenient for potential users.
- Cycle parking at regular intervals on the high street should be provided. If required, car parking spaces should be reallocated to provide cycle parking without negatively impacting footway widths.

- 2. Longer stay parking Residential, work, education and the railway station
  - Security is the primary concern at these sites, and many users will be willing to trade some convenience for additional security such as CCTV.
  - Longer stay parking should be covered to provide protection to cycles from the weather.
  - Secure and visible cycle parking should be provided at all schools to encourage pupils to cycle to school.
- Improved / covered cycle parking at Belper Railway Station and Field Lane Car Park, and should be provided with clear signage to alert users to its location.
- Consider providing on-street toolkits and pumps to support cycle parking and infrastructure.
- Secure cycle parking should be provided as part of the emerging development sites, such as Belper Mills and the adjacent river gardens leisure area.



Figure 39: Cycle Parking Location Proposals (Source: OpenStreetMap).



To encourage more people to walk around Belper it is recommended that a wayfinding strategy is developed for the town so that people are provided with clear, direct routes between areas and key destinations. There is a tendency to misunderstand just how easily something can be accessed by walking. Giving this information in an easily understandable format makes people more likely to leave the car in one location and walk from one place of interest to another. These routes can utilise the various cut-throughs around the town to provide routes away from the highly trafficked roads and create a more attractive walking experience. Providing signs which highlight the time it would take to walk to a location rather than the distance has also been shown to encourage walking.

These signage improvements should also be accompanied by rest points and mobility aids so that the suggested routes are accessible for all users. For example, benches along the routes will aid users to make journeys without being exhausted and handrails on sloped sections will benefit persons with physical conditions that need additional support. Handrails can also be useful in icy conditions. Given the older age profile of Belper, such additions are vital to aid mobility.



A full pedestrianisation of King Street has been suggested during stakeholder engagement. Full pedestrianisation has been investigated and would be difficult to achieve owing to the complexities of re-routing bus services out of the town centre.

A range of alternative options is therefore suggested and would include the following:

#### Surface upgrades:

Currently the type and quality of surfaces along King Street is variable. A consistent urban realm scheme to improve the area would be beneficial. An example is shown in Figure 40.

Figure 40: An example of a high-quality public realm scheme.



#### Extended shared space area and use:

Buses and pedestrians currently mix in a short section of King Street. A consistent style could be adopted along the whole of King Street so that in the area, pedestrians have priority. Derbyshire County Council have also proposed Local Cycle Network connections to and along King Street and this Active Travel Masterplan has identified a potential additional connection to the Derwent Valley Cycle Route.

There is also a wider desire for King Stret to be accessible for cyclists, with quality cycle parking as a result. Whilst LTN1/20 recommendations segregation in relation to the design of new infrastructure, a research report (Source: PR15 Cycling in Pedestrian Areas, 1993) by the Transport Research Laboratory (TRL) concluded that there were "no real factors that justify exclusion of cyclists from pedestrian areas" and that "cycling can be more widely permitted without detriment to pedestrians." It was noted in the report that the key factor was pedestrian density, with cyclists tending to slow-down / dismount as pedestrian densities increased. This is similar to how those running or jogging respond to pedestrian densities. Alternatively, choice of surfacing materials could be used to allow sensitive segregation.

It is also noted that prohibiting cycling in pedestrian zones particularly disadvantages disabled cyclists using adapted cycles, who may not be able to walk long distances. (See Section 2 for statistics on the number of disabled persons who are able to cycle).

The street could therefore be upgraded to accommodate a wider mix of user types. An example design scheme is shown in Figure 41.

This uses planters to avoid a straight line road for vehicles passing through, thereby limiting vehicle speeds. Such an approach is likely to emphasise that this is an area for pedestrians, and reduce the impact of public transport vehicles routeing through the street.





Figure 41: Examples of how the street could be redesigned.

### **Station Access Improvements**

Improving access to the station would require addressing the identified barriers to current access. This includes narrow approaches, stepped routes and conflict with other users. Many of the issues have been discussed above in the section dealing with alternative routes to the A6 and town centre upgrades.

Of specific benefit would be:

- Removing stepped access from Albert Street and forming a ramped access.
- Removing stepped access from the footway linking to Field Lane.
- Creating an improved connection between platforms. This could potentially be a new overbridge with lift access. It may also be possible to link this to Albert Street directly and the footpath to Field Lane, effectively designing out the current stepped access. It is understood that this is being investigated separately to this study.
- Improving the access to King Street. As mentioned above, the access is currently of poor quality. This could be overcome but would require land acquisition or tree removal.

To improve the aesthetics of the station area, improvements could include:

- A high-quality lighting scheme for all routes to the station to improve the visibility of the routes and the perceptions of safety in the area.
- High-quality surfacing to ensure it is accessible. It should also complement wider designs such as King Street upgrades.
- Clear wayfinding so access to and from the station is clearly marked. This will help for people wishing to use the station and onward journeys.

# 7. Network Development

# 7. Network Development

As part of finalising the active travel masterplan, a series of tests will be undertaken (as recommended by Active Travel England) which benchmark existing active travel provision and assess potential improvements.

These tests will include the following:

To apply the above tests, it is first necessary to map locations of severance / barriers to active travel so that existing 'neighbourhood' areas can be identified (which are defined by the boundaries of these barriers). 'Gateways' are then identified as routes between these neighbourhood areas.

#### Table 3: Summary of Tests which have been undertaken

Test*	Description
Porosity	Involves testing the connections between neighbourhoods, recognising that the perimeters of neighbourhoods (often busy roads) can act as barriers to local walking and cycling trips.
Mesh Density	Considers the coverage of existing (and planned) cycle routes in order to help identify where there are gaps. It is a simple analysis of the length of cycle route within each kilometre square.
Permeability	Considers how many clear routes run through each neighbourhood. These routes need to connect to gateways across perimeter routes.
Rat Run	Considers the potential for the encouragement of through-traffic on inappropriate routes.

### Severance

All features of severance within the study area have been identified. These include natural barriers, as well as infrastructure such as roads which have no cycle infrastructure or which are difficult or hazardous to cross by active travel due to the speed and / or volumes of traffic.

These have been identified through the site audits and with information from the various engagement sessions.

## **Identifying Neighbourhood Areas**

Using the severance barriers, potential neighbourhood areas have been developed (for the purposes of the tests only). These area blocks vary

in size, and are largely bound by the main routes through the study area. Each neighbourhood has a different character and a different propensity to connectivity and permeability, based on its location and street structure.

### Gateways

'Gateways' have been identified where there is a formal crossing point which allows pedestrians and cyclists to move from the street of one neighbourhood area to the street of another neighbourhood area. These gateways help to connect local streets both within neighbourhoods to other local streets in adjoining neighbourhoods across the lines of severance identified; they help to support flow of pedestrian and cyclist movement.

# Testing

### **Porosity Test**

A porosity test has been applied to the existing neighbourhood areas. This seeks to highlight how 'open' a neighbourhood is in terms of its connections to other neighbourhood areas.

To understand porosity, the maps have been separated to show both pedestrian porosity and cyclist porosity. This helps to identify the differences in crossing type and links, for example cyclist gateways exclude crossings which lead onto pedestrian only footpaths, or which are pedestrian-only crossings.

The Porosity Test will be completed as part of the Final Active Travel Masterplan.

# **Mesh Density Test**

The mesh density test helps to show whether the grid of cycle routes is tighter (with more route choice) or looser (less extensive) using a simple analysis of the length of cycle route within each neighbourhood area. The neighbourhood areas are shaded based on the length of cycle infrastructure in each area. The following criteria has been used to determine the density of each area. This measures the length of cycle way per m<sup>2</sup>.

To consider improvements made to the network, a mesh density analysis was carried out which examined the following.

- 1. Existing cycle facilities in the area
- 2. Proposed Key Cycle Network and Local Cycle Network routes
- 3. Proposed Active Travel Masterplan 'local routes'
- 4. Proposed Active Travel Masterplan 'strategic routes'

Any routes which run within or alongside the perimeter of the neighbourhood area included within the calculation for each neighbourhood.

If all the proposals are included there is an improvement in coverage for many of the Neighbourhood areas. In terms of developing the cycle network, this analysis illustrates the potential unlocking which could be delivered if the Active Travel Masterplan schemes are delivered complementary to the LCWIP routes.

The Mesh Density Test will be completed as part of the Final Active Travel Masterplan.

## **Permeability Test**

Existing Permeability shows the existing routes and gateway crossing points, where they provide onward pedestrian and cyclist movement. Proposed permeability shows how the proposed route network connects to the gateways, providing onward movement for users.

The Permeability Test will be completed as part of the Final Active Travel Masterplan.

## **Rat-Run Test**

The Rat-Run Test will be completed as part of the Final Active Travel Masterplan.

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8. Behaviour Change Strategy

# 8. Behaviour Change Strategy

The Belper Active Travel Masterplan proposals will provide opportunities for those living and working in Belper to choose active modes for short distance trips. However, travel choices are not calculated equations but rather influenced by a range of social factors. This means that, unlike cars, people can be motivated and willing to change their mind.

The main challenge, however, is that people's daily lives are full of choices, and therefore travel habits tend to gravitate towards social norms that are currently biased towards using the car for short distance trips.

A behaviour change strategy will therefore be needed to support the proposed infrastructure investment and maximise the uptake of walking, wheeling, and cycling within Belper. This strategy will seek to improve the community's understanding of their travel choices, motivate change, and disrupt engrained habits. This 're-framing of the normal' will be achieved by focusing on the key motivational buttons of personal wealth, personal health, and the climate emergency.

# **Scale of Ambition**

As noted in Section 2, data from the 2011 Census showed pedestrian trips accounting for circa 10% of trips to work in Belper, with cycling constituting 1%<sup>1</sup> of trips to work. The figures for across the East Midlands are approximately 12% and 3%, meaning there are fewer active travel trips in Belper than across the East Midlands.

The Government has an ambition for half of all trips within England's towns and cities to be made by active modes by 2030. This essentially means the number of trips for commuting, education, shopping and personal business (i.e. trip purposes most likely to be contained within a town) need to more than double (over the England average) to achieve this ambition.

# Potential for Community Champions

The initial engagement identified several Belperfocused community groups with a strong interest in active travel, such as Transition Belper and Belper Walks. Involvement of these organisations will be important to test ideas locally and develop an overall communication strategy.

If funding is secured, the town will also benefit from a flagship new walking and cycling route in the form of the Derwent Valley Cycle Route. Both the presence of existing groups and prominent new infrastructure will provide a solid foundation to any behaviour change strategy. This could be complemented through partnering with Derbyshire and Borough-wide organisations such Walk Derbyshire and Sustrans.

<sup>1</sup> Excluding work from home.

# Perceptual Barriers to Active Travel

The preceding sections of this Active Travel Masterplan have considered physical barriers to increasing levels of walking, wheeling and cycling in Belper. Prior to selecting the methods of promoting any new walking and cycling, it's important to consider some of the barriers that may exist to utilising any new infrastructure.

It is widely understood that the factors influencing an individual's propensity to walk (and particularly) cycle is a complex and multifaceted interaction of individual, attitudinal, built environment and trip characteristics.

Safety concerns have been identified as a key challenge during our engagement to date. In total 66% of adults surveyed as part of the National Travel Attitudes Survey (2019) stated that *"it is too dangerous for me to cycle on the roads"*. This barrier varies by age and gender, with 71% of women agreeing with this statement compared to 61% of men.

Another key barrier commonly cited is trip distance and topography, with longer (and hillier) trips more attractive by car / public transport owing to the longer travel times and physical exertion associated with walking or cycling the same trip. Distance and topography will be addressed to a certain extent by the proposals within this Active Travel Masterplan – in that a more coherent network will be easier to navigate. However, this could be further tackled through a pro-active programme of led walks, cycle training and the promotion of e-bikes (that are able to go longer distances, be used by a greater range of people, and are good at assisting with topographical challenges). Lastly, the concept of Personal Travel Planning is built around the concepts of providing people with better information, challenging preconceptions and travel habits, and motivating them to try new modes. This tallies with evidence that Personal Travel Planning is most effective in areas that have recently developed new sustainable transport infrastructure.

# **Strategy Components**

There are several methods of promoting new walking and cycling infrastructure to maximise potential usage following installation. Many of these methods are complementary, such that a scaled approach can be tailored both to the location but also the potential budget available (or, for instance, in the case that implementation funding is not achieved and components are delivered as and when other funding allows).

The following tables provides a range of suggested behavioural change promotional models, with examples of delivery methods broken down into bronze, silver, and gold level categories.

- Bronze level represents the minimum approach which relies on the infrastructure to advertise its presence within the area along with consultations, social media advertisements and public notices.
- At the **Silver level**, specific groups who would use the infrastructure are targeted.
- **Gold level** requires specific households to be targeted with personal travel plans and incentives to encourage people to actively travel.

Figure 43: Bikeability Training run by DCC in Bolsover



# Creating a cycle-friendly workplace

Guidance for employers



# Need some help getting to work, education or training?

If you're receiving Jobseeker's Allowance and live in Chesterfield, Staveley or Shirebrook, we can give you free travel advice and assistance.

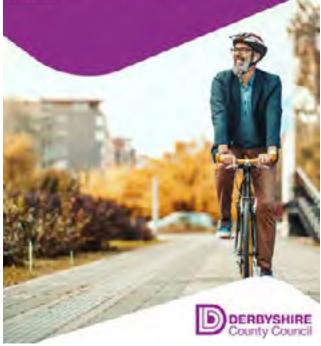




Figure 42: Dr Bike Session run by DCC at Chesterfield Market

#### Bronze: Level 1 (No Specific Audience)



Route Signage

Scheme Consultation

#### Site Work notices

The minimum approach relies on the infrastructure itself to advertise its presence, i.e. people will see the infrastructure and also be alerted via any consultation / public notices surrounding the scheme prior to its delivery. This is essentially the 'build it and they will come' philosophy. The weakness is that there is only a very minimum relationship formed between the infrastructure and people's perceptions of their day-to-day needs. The relevance of the infrastructure to an individual may therefore be missed. Off-road infrastructure may also not be seen by those using other modes (e.g. car) therefore missing out on potential behaviour change benefits.

This is the standard approach for pedestrian and cycle infrastructure improvements.

#### Bronze: Level 2 (No Specific Audience)



Builds on Bronze Level 1

Traditional Media Press Release

#### Social Media Posts

This approach seeks to promote the scheme via association with positive messages around both why the scheme has been implemented and its potential benefits to residents. Media messages will not be targeted to specific groups of households (though could be area based), however, and are likely to be seen by those far from the scheme which reduces relevance. This would also include engagement with community organisations to promote the scheme.

#### Bronze: Level 3 (No Specific Audience)



Builds on Bronze Level 1 / 2

#### Launch Events

This approach seeks to add to any traditional / social media strategy through specific activities associated with the infrastructure to draw the attention of potential users. Such events could include photo opportunities with the press, "Dr Bike" cycle maintenance sessions, e-bike demonstrations, cycle security sessions with the police, and support via local cycle groups. Larger schemes may justify cycle 'fun' days with displays by BMX and other cycle-organisations.

This sort of activity would be the minimum recommended for launching a new flagship piece of infrastructure, such as the Derwent Valley Cycle Route Trail.



Figure 44: Dr Bike Session run by Derbyshire County Council at Chesterfield Market

#### Silver: Residential Audience



Builds on Bronze Levels 1 / 2 / 3

Active Travel Packs

This approach specifically targets those for which it is hoped the infrastructure would be of most benefit and seeks to overcome barriers through the provision of information. This is most commonly done via preparation of Active Travel information packs to include information to encourage new cyclists to start cycling, including the latest area cycle map.

Travel packs could be distributed digitally, with the residential contact being reduced to a letter with a QR code. This would enable links to online cycle mapping (if available). Some form of printed material would be needed for those without access to the internet.

This is the recommended approach if Strategic Route improvements are delivered in isolation.

#### Silver: Employer Organisation Audience



Complimentary to Bronze Levels

#### Management Engagement

This approach seeks to target those businesses (and other organisations) for which it is hoped the infrastructure would be of most benefit to employees (and visitors). The strategy would be to engage with business organisations at a management level, who could be sent Active Travel information packs to be sent onto employees. This could also include a locally tailored guide on how to make businesses cycle friendly and provision of site specific advice, and advice on sustainable travel grants (if available).

Creating a cycle-friendly workplace



#### Silver: School Audience



Complimentary to Bronze Levels

#### School Engagement

This approach recognises that school trips are an important component of cycling, and those cycling younger are more likely to continue cycling as an adult. Those schools near to the infrastructure could be approached to determine which have taken up Bikeability / Road Safety education training, and if this could be targeted around the opening of proposed infrastructure. This can be supplemented by site audits and provision of assemblies and other activities such as a banner competition for the school gate. This approach also has the benefit of raising awareness with adults around the opening of the scheme. Care needs to be taken, however, that schools have appropriate scooter / cycle parking available (see Gold: School Audience).

This can be supported with existing Derbyshire ModeShift initiatives for schools.



Figure 45: Bikeability Training run by Derbyshire County Council in Bolsover

#### Gold: Residential Audience



Builds on Bronze and Silver Level 1

Travel Advisors (motivational dialogue with residents)

Those households for which it is hoped the infrastructure would be of most benefit could be targeted via a programme of traditional Personal Travel Planning (PTP). PTP seeks to encourage mode shift via visits to households by trained travel advisors to ask how people travel and to encourage greater use of walking, cycling, public transport and car share. Although PTP can be used to promote specific infrastructure, it is generally on the basis of all-modes advice. The scale of the scheme would determine viability, with schemes less than 4,000 households generally costing more due to efficiencies of scale issues (although remain deliverable, particularly if smaller schemes can be packaged).

This can be delivered with or without the incentives package below.

The added value of this approach is that, whilst on the doorstep, the travel advisors can also promote local bus services and Derbyshire's Kinto Car Share scheme.

#### Gold: Residential Audience (Incentives)

Builds on Gold (Residential Audience)



Bicycle and E-bike loans

In addition to providing travel information and the motivational dialogue of travel advisers, residents could be offered high-quality incentives to promote active travel. This approach was trialled by NCC during the COVID-pandemic as an alternative to traditional PTP. The incentives could include Activity Trackers (such as FitBits), and 3-month pedal and ebike loans (with options for post-loan purchase or return) and / or discounted bicycle / ebike purchase. This would need to be accompanied by adult cycle training courses.

Gold Residential + Incentives is the recommended approach if the Derbyshire Active Travel Masterplan for Belper secures a large infrastructure grant.

#### **Gold: Employer Organisation Audience**



Builds on Silver (Employer Organisation Audience)

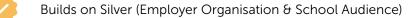


Employee Engagement

This approach builds on engagement with organisations at a management level, with more intensive work with employees via the arrangement of travel clinics and / or arrangement of Dr Bike, cycle maintenance training and adult cycle training at business / organisation venues. This can be delivered with or without the incentives package below. This approach could also be linked with initiatives at local Job Centre Plus venues (as per previous pilot project in Derbyshire).



#### Gold Level 4 (Employer Organisation & School Audience, Incentives)



Builds on Gold (Employer Organisation)

This approach builds on business and school engagement via the provision of grant funding to enable organisations to purchase cycle shelters, bike maintenance kits, and other active travel enabling infrastructure.

Gold Level 4 (Residential & Employer Organisation, Cycle Training)



Builds on Residential Audience & Employer Organisation projects

Cycle training sessions could be provided (adult cycle training, maintenance training and Dr Bike sessions) within Belper to support the residential and employer organisation initiatives. (It is assumed that child cycle training would not be required, since this would be covered by separate Bikeability budgets).

# 9. Evaluation Framework

# 9. Evaluation Framework

A pillar of the Levelling Up white paper was to "transform its approach to data and evaluation to improve local decision-making." It is therefore important to consider, prior to construction, what constitutes successful delivery of the Belper Active Travel Masterplan, and the monitoring and evaluation of the scheme's performance after construction.

As noted in Section 1, this Active Travel Masterplan has been developed on a foundation of existing analysis, including the D2N2 Local Cycling and Walking Infrastructure Plan. This D2N2-wide strategic document included the following Logic Map, showing how investment in wheeling, walking and cycling is anticipated to create a range of positive outcomes.

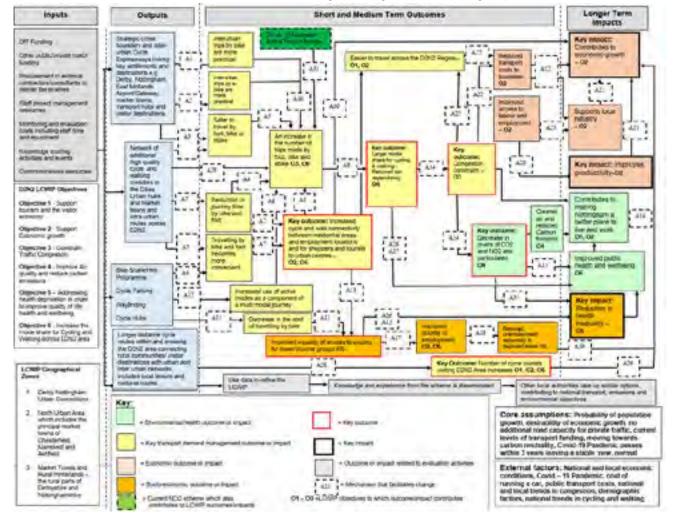


Figure 46: Logic Map summarising the positive outcomes of investment

# **Pedestrian and Cycle Counts**

It will be important to identify the baseline usage of key routes within Belper, such that the impact of the Active Travel Masterplan proposals can be measured. The Value for Money Guidance for the Active Travel Fund Tranche 4 recommended use of post-pandemic counts to support business case submissions.

Counts of cyclists would need to include cyclists using the footways, which are sometimes missed in standard traffic count specifications.

# **User Satisfaction**

The Government recognised in its Active Travel Fund guidance that some schemes "may provoke a strong reaction amongst local road users." It therefore published public opinion survey guidance recommending that a representative sample of the population can be asked their opinion on the impact and perception of schemes. In addition, the Levelling Up Fund evaluation framework included important metrics relating to the 'health' of town centres, such as perceptions of safety and levels of social interaction within town centres. As such, and given that active travel improvements are also expected to contribute to overall wellbeing (physical and mental health), it is anticipated that a robust evaluation methodology would include representative polling in addition to the survey planned for the 2024 consultation on the draft Active Travel Masterplan.

## Approach to Participants of Behavioural Change Programmes & Events

The behavioural change programme would be designed to maximise the usage of any new infrastructure. As such, the methodology for its evaluation will need to carefully disaggregate between impacts of the infrastructure itself and the uplift associated with the promotion of new travel choices.

The DfT has developed and published guidance on the data it seeks local authorities to gather in respect of behaviour change programmes and projects (Monitoring and Evaluation Guidance, Capability and Ambition Fund). As such, any behaviour change programme would be monitored in accordance with this guidance (though noting that the final form of the programme would need to be finalised prior to the evaluation plan being agreed).

Measure	Stage	Data Collection Stage	Collection and Review Method	Aspects to Agree with Scheme Funders
Scheme build	Input (Project Management of build and risks)	During Delivery	Project Control Board Minutes	
Completed scheme	Output – delivered product; changes in scope	Post Opening	Project Control Board Minutes	
Costs	Input – financial analysis	During delivery and post-opening	Project Control Board Minutes	
ATE Tests (Porosity, Mesh Density, Permeability)	Outcome – compare before and after.	Pre and Post opening	ATE Test Methodology	
Pedestrian and Cyclist Numbers	Outcome – compare before flows to out-turn flows	Pre and Post opening	Numerical counts of pedestrians and cyclists	Location of count locations
Proportion of children arriving at school on foot, scooter or cycle.	Outcome – compare before flows to out-turn flows	Pre and Post opening	School Travel Surveys	
Collisions (Pedestrians)	Outcome – compare before collisions to out-turn collisions	Pre and Post opening	STATS19 data	
Collisions (Cyclists)	Outcome – compare before collisions to out-turn collisions	Pre and Post opening	STATS19 data	
Representative Town Population Polling	Impact – compare before and out-turn user satisfaction	Pre and Post opening	Surveys of representative population.	Format of surveys and target demographics.
Business Opinion Polling	Impact – compare before and out-turn user satisfaction	Pre and Post opening	Surveys of business.	Format of business surveys.
Active Travel User Satisfaction	Impact – compare before and out-turn user satisfaction	Pre and Post opening	Surveys of pedestrians and cyclists.	Format of user surveys.
Behaviour Change Participants	Number engaged through the supporting behaviour change programmes	Post Opening	Number of participants	
Behavioural Change Participant Travel Behaviour – Mode Shift	Outcome – compare before mode choice to out-turn mode choice	Pre and Post Behaviour Change Initiative Delivery	Travel Surveys	Format of user surveys
Value for Money	Outcome – compare FBC BCR and out-turn BCR	Pre and Post opening	Calculated from AMAT workbooks.	Model forecasts, approach to post- opening modelling
Emissions	Modelled changes in NO <sub>2</sub> , PM2.5 and CO <sub>2</sub>	Pre and Post opening	Calculated from AMAT workbooks.	Model forecasts, approach to post- opening modelling

# **10. Action Plan**

# **10. Action Plan**

This section of the Belper Active Travel Masterplan will be completed following the consultation on the draft document. This will allow the community and key stakeholders to prioritise interventions and feed into the overall Action Plan. It will also allow any additional interventions to be identified through the consultation prior to the action plan being developed.

## Funding

It is unlikely that sufficient funding will be made available from a single source to deliver all the components described in this Active Travel Masterplan. Funding would therefore need to be harnessed from a variety of sources, such has been done in other locations across the United Kingdom through the combined use of Active Travel Fund, Levelling Up fund, Town Deal / Fund, Air Quality funds, and Shared Prosperity Funding<sup>1</sup>, as well as S106 contributions linked to land-use developments.

A segmented approach to developing the Action Plan would mean that elements of the Active Travel Masterplan could be delivered earlier than other elements, as funding opportunities emerge.

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Figure 47: <u>r</u>

# **Action Plan**

TO BE COMPLETED FOLLOWING CONSULTATION IN SPRING 2024.

<sup>1</sup> Each of these funds are unlikely to continue in their current form, and so Derbyshire County Council would need to monitor opportunities to secure funding from potential successor funds.