



**Cumbria County Council**

# **LOCAL CYCLING AND WALKING INFRASTRUCTURE PLAN TECHNICAL REPORT**

Penrith





Cumbria County Council

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Penrith

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# 1 STAGE 1: DETERMINING SCOPE

## 1.1 BACKGROUND

- 1.1.1. It is the ambition of Cumbria County Council to get more people cycling and walking in Cumbria and that cycling and walking should be the natural choice for everyday short journeys. Cycling and walking more often is good for our health and wellbeing, the environment and the local economy.
- 1.1.2. During the height of the Covid-19 pandemic, less traffic on our roads resulted in cleaner air and quieter streets, transforming the environment in our towns and cities. Because of this, lots of people discovered, or rediscovered, cycling and walking as a means for exercise and travel. We now have an opportunity to help maintain this interest and ensure people have the choice to take short journeys on foot or by bike, rather than use their cars. The proven way of encouraging more of us to walk and cycle is by providing routes that are coherent, direct, safe, comfortable, and attractive.
- 1.1.3. To encourage active travel, the County Council has established a Cycling and Walking programme to identify, develop and secure funding to deliver infrastructure improvements. A key component of this programme is the development of Local Cycling and Walking Infrastructure Plans (LCWIPs) which will identify and prioritise future improvements to the local cycling and walking network over the next fifteen years. LCWIPs are being developed in Barrow-in-Furness, Carlisle, Kendal, Workington, Whitehaven, and Penrith. The Council has complementary workstreams looking at cycling and walking in five strategic corridors around the County aligned to the National Cycle Network. These corridors look to connect places and people and provide longer distance routes to support the cycling and walking sectors of the Cumbrian Tourism economy.

## 1.2 LCWIP PROCESS

- 1.2.1. LCWIPs offer a strategic method of identifying cycling and walking improvements required at a local level. They enable a long-term approach to developing networks and routes and form a vital part of the Government's strategy to increase the number of trips made on foot or by cycle. LCWIPs will be instrumental in leveraging funding from national and local streams.

### THE LCWIP PROVIDES:

- Plans of the proposed priority networks showing the most important routes and zones for further development, targeting short journeys (to school, work etc).
- A prioritised programme of infrastructure improvements for future development.
- This LCWIP report, setting out the evidence and work completed to support the development of the Plan.
- A basis for securing government funding or developer contributions.

### THE LCWIP DOES NOT PROVIDE:

- Exact details of the improvements on each route (these details will be developed as funding comes forward and will be subject to further consultation).
- Specific timeframes for when routes will be delivered.
- Guaranteed funding for delivery, although it will put us in the best possible position to secure funding.
- Network planning for long distance routes.

- 1.2.2. For Penrith, this process and the resulting outputs will represent an evidence-based approach to focus future investment where the most benefit can be realised, over a 15 year period to 2037.
- 1.2.3. The geographical extent of this LCWIP focuses on the urban area of Penrith where there is the greatest potential to get more people cycling and walking for short journeys. The LCWIP also includes longer distance connections into Penrith from outlying settlements including the villages of Plumpton to the north, Pooley Bridge to the southwest, Eamont Bridge to the south, Stainton to the west and eastwards to Centre Parcs, Temple Sowerby, and Warcop. The Penrith LCWIP will focus on everyday journeys to work and school, as well as unlocking the potential of more people visiting the area for recreational cycling and walking.
- 1.2.4. The government has published guidance on the preparation of LCWIPs, setting out the following six stage process:
  - **Stage 1: Determine the scope** – establish the geographical context and arrangements for governing and preparing the plan.
  - **Stage 2: Gathering information** – identify existing walking and cycling patterns and potential new journeys. Review

existing conditions and identify barriers to walking and cycling. Review related transport and land use policies and programme.

- **Stage 3: Network planning for cycling** – identify origin and destination points and cycle flows. Convert flows into a network of routes and determine the improvements required.
- **Stage 4: Network planning for walking** – identify key trip generators, core walking zones and routes, audit existing provision and determine the improvements required.
- **Stage 5: Prioritising improvements** – prioritise improvements to develop a phased programme for future investment.
- **Stage 6: Integration and application** – integrate outputs into local planning and transport policies, strategies, and delivery plans.

- 1.2.5. The remainder of this document details how the LCWIP has been developed and sets out a prioritised programme for its delivery.



## 2 STAGE 2: GATHERING EVIDENCE

### 2.1 ACTIVE TRAVEL CONTEXT

#### THE CASE FOR WALKING AND CYCLING

- 2.1.1. The Department for Transport announced their Cycling and Walking Investment Strategy (CWIS) in April 2017, outlining the Government's ambition to make walking and cycling the natural choice for shorter journeys or as part of a longer journey, including the aim to double cycling activity by 2025. The benefits of achieving this outcome would be substantial, supporting public health and wellbeing, more vibrant towns and public spaces, and low carbon travel patterns becoming commonplace.
- 2.1.2. In order to help local bodies that are interested in increasing cycling and walking in their local areas, the DfT published guidance on the preparation of Local Cycling and Walking Infrastructure Plans (LCWIPs) in April 2017.
- 2.1.3. In early 2020 the Government launched Gear Change: A Bold Vision for Cycling and Walking, announcing a £2bn plan to make England a great walking and cycling nation. The document identified four key themes central to achieving this:
- Better streets for cycling and people;
  - Putting cycling and walking at the heart of decision making (transport, place-making, and health policy);
  - Empowering and encouraging Local Authorities - £2bn of dedicated new investment funding only schemes that meet the new standards; and
  - Enabling people to cycle and protecting them when they do through changes to the highway code.
- 2.1.4. This was supported by New Design Guidance - Cycle Infrastructure Design (Local Transport Note 1/20) (July 2020) which set out the framework for cycling to play a far bigger part in our transport system with the quality of cycle infrastructure to sharply improve to be consistent with national guidance. Routes should be:
- Coherent - part of a wider strategic network that provide access to key destinations;
  - Direct - reach their destination as directly as possible;
  - Safe - of a high quality and designed to standards that meet safety requirements;
  - Comfortable - accessible and attractive for all abilities; and

- Attractive - contribute to good urban design by integrating with and complementing their surroundings.

- 2.1.5. The Government has an ambitious plan to accelerate the decarbonisation of transport. The Transport Decarbonisation Plan (TDP) sets out what government, business and society will need to do to deliver the significant emissions reduction needed across all modes of transport, putting us on a pathway to achieving carbon budgets and net zero emissions across every single mode of transport.
- 2.1.6. In 2017 Cumbria County Council, together with Cumbria's district councils, national parks, cycling bodies and highways partners endorsed the Cumbria Cycling Strategy. The Strategy sets the context for the development of cycling in Cumbria in the 5 year period to 2022. A key objective is to improve the county's infrastructure and Cumbria County Council is committed to taking the lead on this aspect.
- 2.1.7. The Cumbria Transport Infrastructure Plan (CTIP), developed by County Council and Cumbria Local Enterprise Partnership (CLEP), supersedes the Cumbria Cycling Strategy and updates the local strategy context for cycling and walking in Cumbria for the period 2022-2037, The CTIP supports the need for greater levels of walking and cycling in Cumbria, and affirms the County's commitment and ambition in relation to active travel. Increased levels of active travel are particularly recognised as being an essential requirement in order to meet the CTIP Objective of Clean & Healthy Cumbria.
- 2.1.8. Within Penrith, there are clear opportunities to better connect people and places with targeted investment in active travel infrastructure. The council shares the CWIS ambition to provide more direct, convenient, safe and attractive options for more local journeys, as demonstrated in the Cumbria Cycling Strategy.

#### CREATING ATTRACTIVE PLACES TO LIVE AND WORK

- 2.1.9. The CLEP's Industrial Strategy recognises the potential of active travel to enhance not only the tourist economy but also in creating attractive places to live and work. The Strategy sets out a priority to secure the walking, cycling, local highway and public transport improvements that help people better access jobs, training, services, and visitor destinations.
- 2.1.10. Eden has an estimated population of 53,754 (2020 estimate, Cumbria Observatory.org.uk) and there are around 26,651 people within the LCWIP study area. Approximately 24,600 (aged 16-64) are employed in Eden, and there are 2,505 businesses located throughout the district. The stock of businesses per head of population is above average reflecting the predominance of small businesses in the area and long-standing spirit of entrepreneurship. Eden accounts for 12% of all employment in Cumbria and is a key part of the Cumbrian economy. A significant proportion of Eden's employment is concentrated in the LCWIP study area, primarily within Penrith itself.
- 2.1.11. The historic market town of Penrith is the retail, commercial and social centre of Eden. Its professional community has a strong commitment to business development, joining together to form Penrith Business Improvement District (BID) in 2013. Following the success of this, Penrith Industrial BID was formed in 2018, covering businesses in all the Penrith business parks. Support and networking is also promoted through the Penrith Chamber of Trade and Commerce and Penrith Rural Women in Business Network.
- 2.1.12. Investment in the streets where people live and work could enable more attractive places for people to work and live in, reducing traffic and emissions and increasing health and wellbeing.



## SUPPORTING HEALTH, WELLBEING AND ACCESS FOR ALL

- 2.1.13. Active travel can play a crucial role in supporting public health and wellbeing. It is one of the simplest and most effective ways to enable adults and children to meet recommended levels of physical activity. A lack of physical activity is the cause of one in six deaths in the UK and costs the country an estimated £7.4bn per year.
- 2.1.14. Active Cumbria (2022) reported that 16.1% of people (aged 16+) in Eden are inactive, while just 0.6% of adults cycle and 10.9% walk for travel at least 3 days per week – below the national averages of 2.3% and 15.1% respectively. Inactivity is calculated to cost Eden £1m per year. Cumbria County Council are encouraging more people to be active as well as using sport and physical activity to help address health inequalities, contribute positively to the economy, and raise the profile of the area.
- 2.1.15. The connection between health and wellbeing and travel is a core component of the Cumbria Joint Public Health Strategy. This highlights how transport is critical to enable people to access goods and services that are important for health and wellbeing, to encourage physical activity through promoting regular walking and/or cycling and to tackle climate change and improve air quality.
- 2.1.16. Focussing on inclusive design and ensuring Cumbria's active travel networks are accessible for all will be important when developing and delivering schemes through the LCWIP process.
- 2.1.17. The LCWIP also has a vital role to play in creating longer term behaviour change well beyond its 15-year delivery plan. European countries such as the Netherlands have only been able to facilitate mass cycling (27% of all trips are undertaken by bike) though long term investment (The Dutch 'cycling revolution' can be traced back to a targeted political response in the 1970s). This has engendered generational change to the point where the bicycle is the clear mode of choice for journeys between 2km to 7km.
- 2.1.18. The Penrith LCWIP, supported by local and national policy, guidance, and funding, presents an opportunity to start the process of creating real change for generations to come.

## RESPONDING TO THE CLIMATE CRISIS

- 2.1.19. The Zero Carbon Cumbria Partnership was established in January 2021 and aims for a carbon neutral Cumbria by 2037. Decarbonising the impact of transport is key to achieving this and more cycling and walking will form part of the approach.
- 2.1.20. Cycling and walking has a much lower carbon footprint compared to other forms of transport. Transport is the largest emitting sector of greenhouse gases, producing 27% of the UK's total emissions in 2019 – 61% of this from cars and taxis. The Zero Carbon Partnership recognises the need for a holistic approach to reducing the County's carbon emissions and that everyone in the County needs to work together and do their part in order to achieve neutrality. Embedding generational behaviour change through incremental shift to active modes is likely to be a key part of this and is essential in order to enable future generations to live sustainably.
- 2.1.21. The Penrith LCWIP will help to address local air quality issues by improving infrastructure for non-motorised users. Every year Eden District Council carries out a review and assessment of air quality against national objectives set by the UK Government. At present there are no Air Quality Management Areas (AQMA) within the district as the objectives have consistently been achieved. If the target values were exceeded, then there would be a requirement to declare an AQMA and produce an associated Local Air Quality Action Plan.

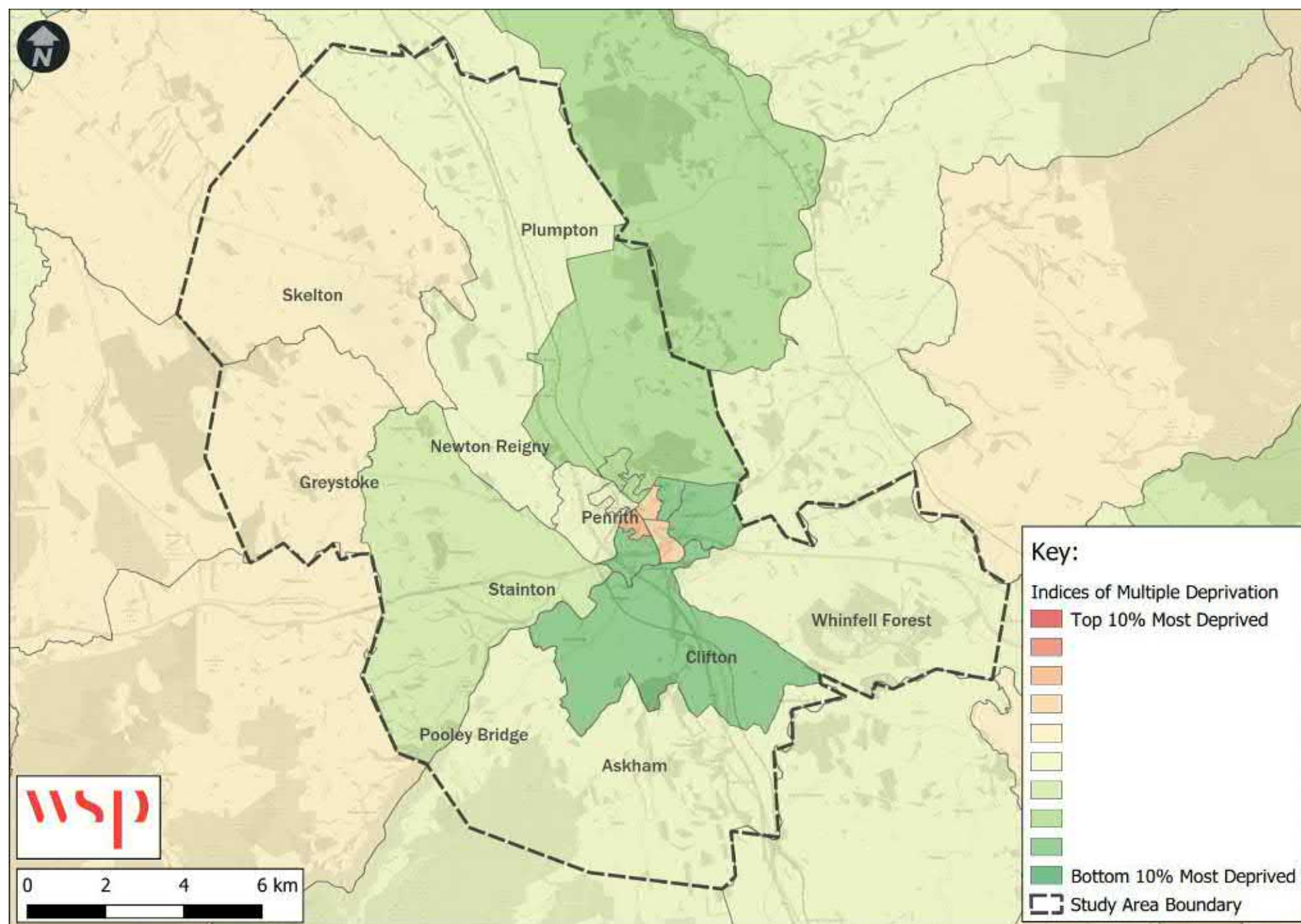
## IMPROVING THE TOURISM OFFER

- 2.1.22. Tourism plays a key role in Cumbria's economy, with visitors contributing £3.1bn in 2019, supporting 65,000 jobs, equivalent to 26% of Cumbria's working age population (Cumbria Tourism Strategy 2020-2025).
- 2.1.23. Cycling and walking investment can play a key role in enhancing the tourism offer. It can increase the number of visitors for travel around the District and improved connections to existing networks can provide enhanced cycling and walking experiences.
- 2.1.24. Penrith is ideally located close to the Lake District and the rolling countryside of the Eden Valley and Pennines, acting as a tourist destination in its own right and a gateway for travel into the wider region. Penrith is particularly noted as the 'Gateway to Ullswater', with links by rail, bus, and road to popular tourist destinations.
- 2.1.25. For those looking to remain within the town, Penrith has a wealth of specialist shops and a farmers' market every third Tuesday from March to December. The town boasts numerous heritage attractions, such as the castle and St Andrew's Church (grade 1 listed), as well as modern attractions such as gyms, pool, a climbing wall, cinema and various spas and salons.
- 2.1.26. Centre Parc's Whinell Forest site lies on the south eastern edge of the town along the A66, and brings additional visitors to the town and area as well as providing local employment opportunities.
- 2.1.27. The Penrith LCWIP Priority Cycling Network and Priority Walking Networks present an opportunity to join many of these attractions together, facilitating walking and cycling trips across the town. The connectivity to the National Cycle Network and opportunities presented by the 'See More Lakes' project further capitalises on the strong tourist attraction of the town, allowing visitors and residents to move safely and seamlessly from urban to rural areas and enjoy the natural assets of the area.

## IMPROVING ACCESSIBILITY AND SOCIAL INCLUSION

- 2.1.28. Out of the eighteen Lower Super Output Areas (LSOAs) within the Penrith LCWIP study area, there is one which ranks within the top 30% most deprived in the UK. This LSOA is located close to the town centre of Penrith. In contrast, there are seven LSOAs which fall into the category of the top 30% least deprived. They are predominantly located to the south of Penrith and encompass the areas around Sockbridge, Yanwath and Clifton (as shown in Figure 2.1).
- 2.1.29. 18% of households in the Penrith LCWIP study area are without access to a car or van (Census 2011). Residents can suffer from social exclusion and transport poverty, struggling to access employment and education opportunities, key services, and facilities, as well as being isolated from support networks.
- 2.1.30. Cycling, and walking in particular, are generally affordable and natural modes of transport that can be made accessible to the vast majority of people. Enabling a greater number of people to walk and cycle to the locations they need to travel to can have significant benefits not just in regard to health, wellbeing, and for the environment, but also in enabling social inclusion, helping connect people to jobs, education, and each other when other modes of transport aren't feasible options. There are very clear and strong opportunities to promote social inclusivity through improved active travel connections.
- 2.1.31. For those with a car, this can become the default mode of travel for all journeys, resulting in congestion and health issues that could be avoided by using another mode. A high quality network maximising the opportunities offered by the town could also help encourage reduced reliance on the car as mode of travel and a shift to walking and cycling for shorter journeys.

Figure 2.1. Indices of Multiple Deprivation (IMD)





## 2.2 NATIONAL AND LOCAL POLICY CONTEXT

2.2.1. There are clear opportunities to support environmental, health, social, economic, and sustainable mobility goals that better connect people and places with targeted investment in active travel infrastructure. This is evident in both national and local policy that has guided and shaped the Penrith LCWIP process. A summary overview is provided below.

### NATIONAL CONTEXT

#### **Gear Change: A bold vision for cycling and walking (DfT 2020)**

2.2.2. Sets out Government’s vision for delivery of far higher quality cycling infrastructure, focusing on segregated cycle routes with local authorities being expected to deliver a step change in the Level of Service for cycling and walking. It establishes “Active Travel England” that will assess local authorities’ performance on active travel, with findings influencing the funding authorities receive across all transport modes. The accompanying Local Transport Note 1/20 Cycle Infrastructure Design sets out new ambitious cycle design standards.

#### **Cycling and Walking Investment Strategy (DfT 2017)**

2.2.3. Aims to make active modes a natural choice by 2040. Locally targeted investment via LCWIPs assist to connect people with places – creating vibrant, healthier, and productive places and communities.

#### **Future of Mobility: Urban Strategy (DfT 2019)**

2.2.4. Nine principles to address the challenge of transforming towns and cities to meet current and future transport demands. Includes the principle that ‘walking, cycling and active travel must remain the best option for short urban journeys’.

#### **UK Net Zero Target 2020**

2.2.5. This national target, set by the Government in 2019, will require the UK to bring all greenhouse gas emissions to net zero by 2050, compared with the previous target of at least 80% reduction from 1990 levels.

#### **Everybody Active, Every Day (Public Health England 2014)**

2.2.6. Indicates how the built and natural environment impact on the travel choices people make and highlights the necessity for effective urban design and transport systems which create ‘active environments’ to promote walking, cycling and more liveable communities.

#### **Clean Air Strategy (DEFRA 2018)**

2.2.7. Outlines how achieving modal shift is key to delivering emissions reduction. LCWIPs have a part to play in tackling the climate emergency by reducing emissions through the delivery of walking and cycling options for journeys.

#### **Inclusive Transport Strategy (DfT 2019)**

2.2.8. An inclusive transport system must provide inclusive infrastructure, with streetscapes designed to accommodate the needs of all travellers. LCWIPs identify improvements to build active travel networks and key routes fit for all users.

### LOCAL CONTEXT

2.2.9. Local policy relating to walking and cycling is contained in a range of documents, outlined below. These policy documents show a strong level of support for cycling and walking. Several documents are currently being developed and/or reviewed, making this an ideal time to bring forward and integrate further cycling and walking proposals.

2.2.10. Key local policy documents include:

- Cumbria Transport Infrastructure Plan (2022-2037)
- Cumbria Local Industrial Strategy (2019)
- Cumbria Cycling Strategy (2017-2022)
- Eden Local Plan (2014-2032)
- Penrith Parking and Movement Study (2020)
- Penrith Transport Improvements Study (2015)
- Inspiring Eden Economic Prospectus
- Economic Recovery Plan, 2020
- Destination Borderlands and the Borderlands Growth Deal, 2021-2031
- Cumbria Rural and Visitor Economy Growth Plan, 2017

2.2.11. Key relevant themes emerging from local policy are set out on the following pages.

#### **Policy support for cycling and walking**

2.2.12. To support the development of the Eden Local Plan (2014-2032), the County Council used the Penrith Transport Model to understand what impact the proposed level of development would have on the highway network.

2.2.13. The Penrith Transport Improvements Study (updated in 2017 to confirm the deliverability of schemes and prepare concept designs) identified highways and sustainable transport (including walking and cycling) schemes to mitigate the impact of the development. These schemes form part of Eden Local

Plan Infrastructure Delivery Plan (IDP) and were identified as necessary infrastructure need to help facilitate the delivery of the level of growth proposed for up to 2032.

2.2.14. Further work was undertaken in the Penrith Parking and Movement Study (PPMS) (September 2020), jointly funded by Cumbria County Council, Eden District Council and Penrith Town Council. The overarching aims of the PPMS were to understand the how the existing parking provision in Penrith could be improved whilst seeking to enhance walking and cycling connectivity between car parking areas and the town centre, key employment sites and the bus and railway station.

2.2.15. Eight improvement packages were developed. Package 7: Cycling and Walking Improvements sets out improvements to walking and cycling with the town. Several of the improvements are derived from the Eden Local Plan Infrastructure Delivery Plan, and their inclusion in the PPMS evidences the need for investment.

2.2.16. The Cumbria Transport Infrastructure Plan (CTIP) recognises the role the active travel schemes can play in supporting the local economy, improving health, and access to education, employment and services. The Plan positions active travel centrally in the aim to develop a clean and healthy Cumbria, highlighting the key role it can play in transport decarbonisation and promoting physical and mental health.

2.2.17. Additionally, Inspiring Eden, the district council’s plan for economic recovery and prosperity, identifies connectivity and decarbonisation as key priorities for the future of Eden and to this end includes a specific work stream on Connectivity to ensure the associated opportunities and challenges are firmly grasped.

#### **Growth areas and local plan designations**

2.2.18. The Eden Local Plan 2014- 2031 (adopted October 2018) allocates land for various uses, including housing and employment development across the District and sets a strategic vision for growth.

2.2.19. Locational Policy (LS1) states that Penrith will benefit from sustained development appropriate to that of a larger town. There will be improved town centre facilities and public realm; development of strategic employment sites around the town; provision of large scale new housing development to the east and north; and an improved strategic road network and public transport system.



2.2.20. Policy PEN1 - A Town Plan for Penrith allocates land upon which a minimum of 2,178 additional new homes could be built within the plan period will be provided in the town. The main locations for housing are at Carleton to the east, and Salkeld Road, White Ox Farm and Raiselands to the north. Additional land has been identified as potential locations for future growth and may be released if land supply comes forward below expectations.

2.2.21. An additional 11.91 hectares of employment land is allocated as an extension to Gilwilly Business Park and a further 3.29 hectares at Skirsgill. A longer-term strategic growth opportunity is identified at Newton Rigg College.

2.2.22. Ensuring new development is well connected to the LCWIP network will be essential in order to ensure that people can get to and from new areas of the town by active modes of transport.

**Transport, placemaking, and infrastructure schemes**

2.2.23. A large volume of activity is currently underway around Penrith aimed at bolstering the town’s offer as a place to live, work, study, visit and invest.

2.2.24. Across these projects, there is significant investment in improving connectivity, specifically via sustainable and active modes. These proposals will be central to the development of the Penrith LCWIP, as it seeks to create an integrated and connected network across the town and wider district.

2.2.25. A summary of the key projects being led by Cumbria County Council and partners is provided below.

**A66 Northern Trans-Pennine Project**

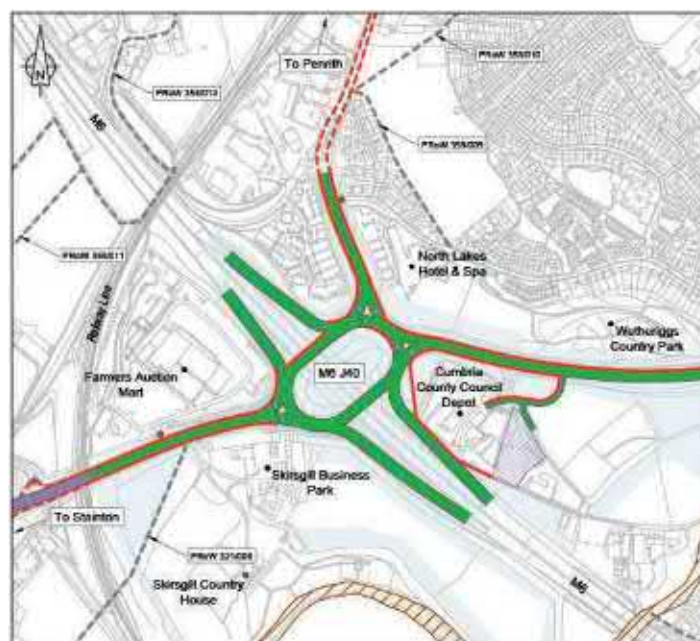
2.2.26. National Highways are improving the A66 between the M6 at Penrith and the A1 at Scotch Corner. It is classed as a Nationally Significant Infrastructure Project and permission to develop it will need to be obtained via an application to the Planning Inspectorate for a Development Consent Order. This is scheduled to take place in the spring of 2022.

2.2.27. The statutory consultation brochure, published in autumn 2021, lists eight individual schemes of which two are of particular relevance to the Penrith LCWIP:

**M6 J40 to Kemplay Bank (Figures 2.2 and 2.3)**

- Signalise and widen the approach roads to M6 J40 to provide additional lanes and a dedicated left turn;
- Widen the dual carriageway to provide three lanes in each direction;

- Construct a new dual carriageway underpass below the Kemplay Bank roundabout and create new slip roads to the A6 and A686;
- Re-route cycleways and footways around the Kemplay Bank roundabout;
- Reduce the speed limit to 50mph; and
- Install and upgrade the traffic signals at M6 J40 and Kemplay Bank to create safer crossing points for pedestrians and cyclists.



**Figure 2.2. M6 J40**

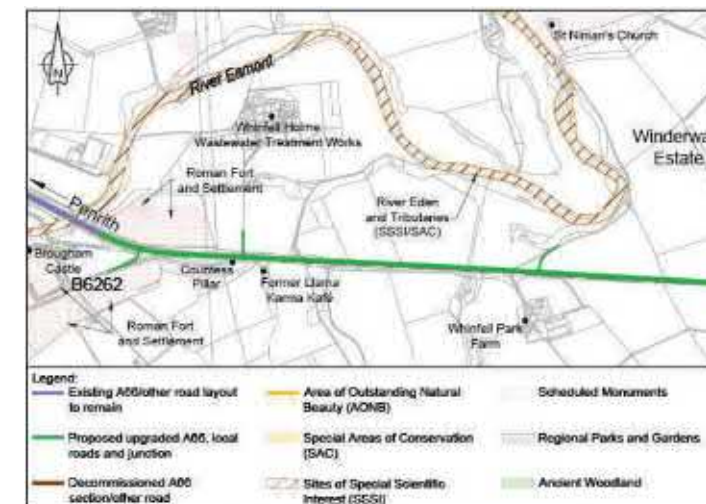


**Figure 2.3. Kemplay Bank Roundabout**

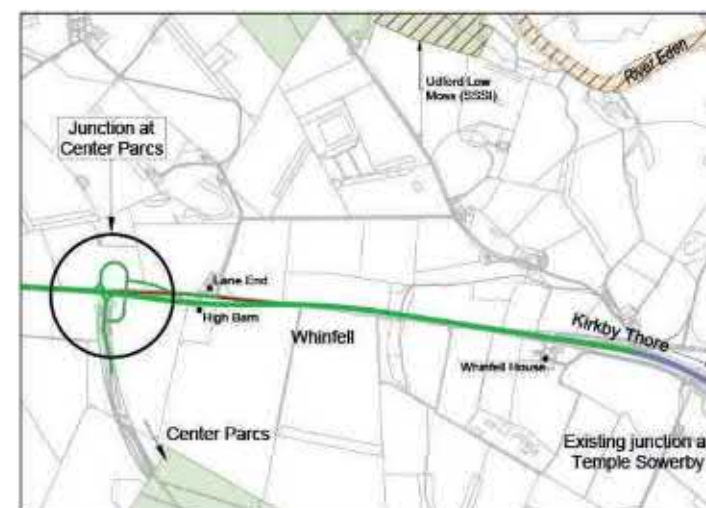
**Penrith to Temple Sowerby (Figures 2.4 and 2.5)**

- Widen the route to dual carriageway;

- Provide a new all-movement junction to connect the new A66 route with Center Parcs;
- Improve access to St Ninian’s Church on the Winderwath estate with a new left-in, left-out junction and relocation of the existing car park; and
- Provide access to the local road network with the introduction of a new left-in, left-out junction at the B6262.



**Figure 2.4. Penrith to Winderwath Estate**



**Figure 2.5. Center Parcs to Temple Sowerby**



## 2.3 EXISTING CYCLING AND WALKING TRAVEL PATTERNS

- 2.3.1. The levels of walking and cycling in Penrith increased during the COVID-19 lockdown in Spring/Summer 2020. This was in part because roads were less busy and quieter, offering more desirable conditions for cycling. This reduction in traffic emissions also led to improvements in air quality.
- 2.3.2. Whilst levels of cycling and walking have since fallen back to pre-covid levels, this demonstrates that the potential for cycling and walking exists if the right conditions are put in place. The improvements to active travel infrastructure proposed in the Penrith LCWIP could therefore help increase cycling and walking back to the levels observed during March/April 2020.
- 2.3.3. Pre-Covid Census Journey to Work data (2011) shows that approximately 69% of residents work within the Penrith LCWIP area itself (7,039 workers), demonstrating high levels of containment. Only 31% of workers travel outside of the study area for employment.
- 2.3.4. Penrith also attracts a number of employment trips from outside the district, with ~4,000 additional trips per day into the area; the majority of these arriving from Carlisle district.
- 2.3.5. 2.2% of employees in Penrith cycle to work (2011 Census), which is slightly higher than the national rate. As most of the population of the study area also work within the study area, there is high potential to encourage greater levels of commuting by bicycle. The town is also near to the Eden Valley, the Pennines, and the Lake District – where other proposals are in place for leisure-based cycling schemes.
- 2.3.6. 40% of people in the Penrith area travel less than 5km to work (on average 20mins on a bike), compared with the national average of 35%, demonstrating a high potential for active mode travel choices. This is further demonstrated in that 30.5% of workers live less than 2km from their place of work (on average 25mins on foot), compared to the national average of 17% highlighting that walking in particular could be a more viable and attractive mode for residents.

- 2.3.7. Despite these short commuting journeys, 67.7% of residents travel to work by car, whilst 26.3% walk and 2.2% cycle (2011 Census).
- 2.3.8. Penrith town centre is the primary destination for employment, attracting the greatest volumes of trips from the LCWIP study area.
- 2.3.9. Census output data shows that existing levels of cycling are greatest in the urban areas of Penrith, Stainton, Greystoke and Plumpton, with up to 4% of journeys to work undertaken by bike in some areas. Results are similar for walking, with the largest concentration of walking trips converging on the town centre area.
- 2.3.10. Elsewhere in the Penrith LCWIP study area, commuting by bike is lower, estimated to be only 0-2%.
- 2.3.11. Furthermore, 33% of children in the Eden District walk to school, whilst 1% cycle, compared to the County average of 27% and 2% respectively<sup>1</sup>.
- 2.3.12. Topography in Penrith is generally flat in the areas of greatest population, and there remains clear potential to build upon current levels of active travel to make cycling and walking more viable and attractive modes in the area for everyday journeys.
- 2.3.13. This is reflected in local policy and strategy, recognising the need to provide high quality safe active travel infrastructure to encourage a shift to healthy and greener modes, and to also ensure that future developments are sustainable and connected to these networks.

Figure 2.6. Residents that cycle to work (2011 census)

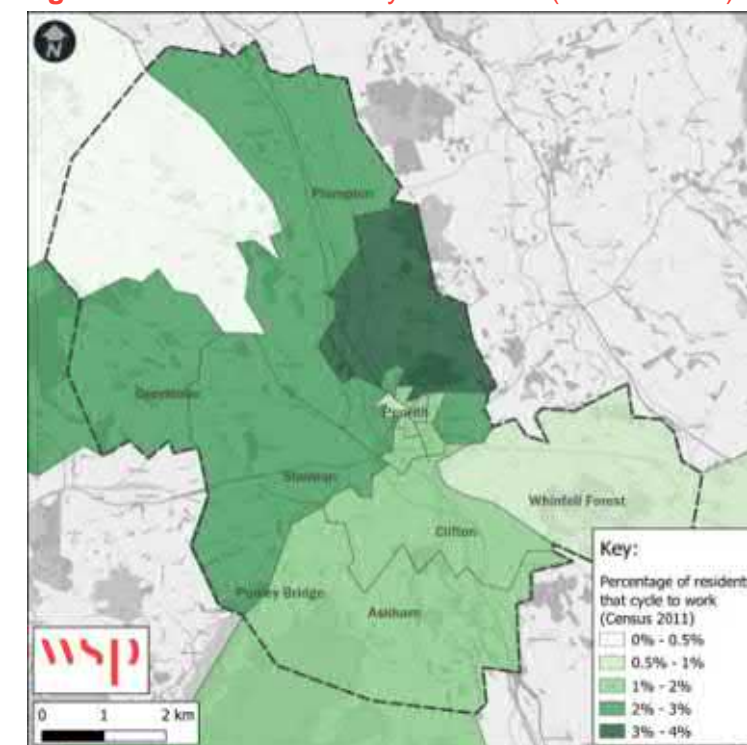
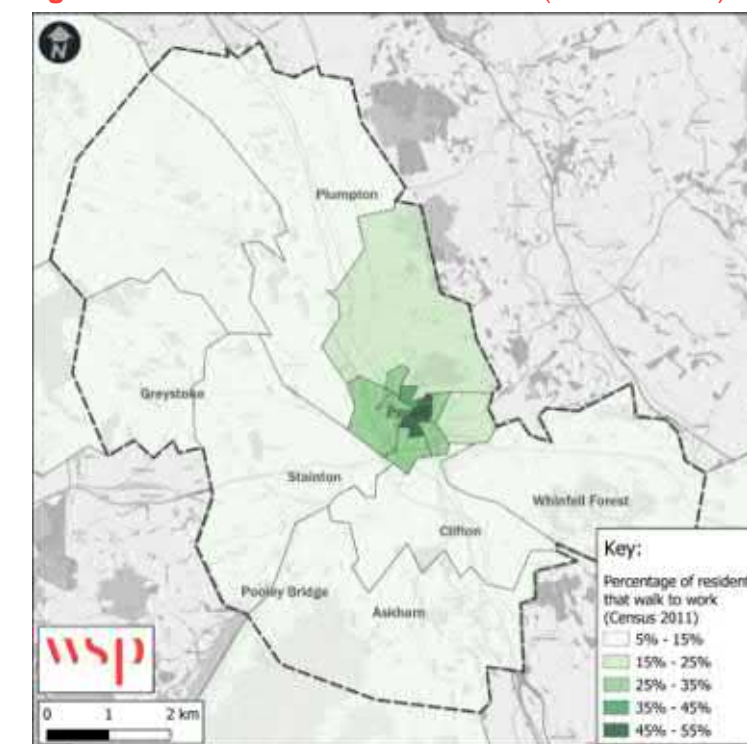
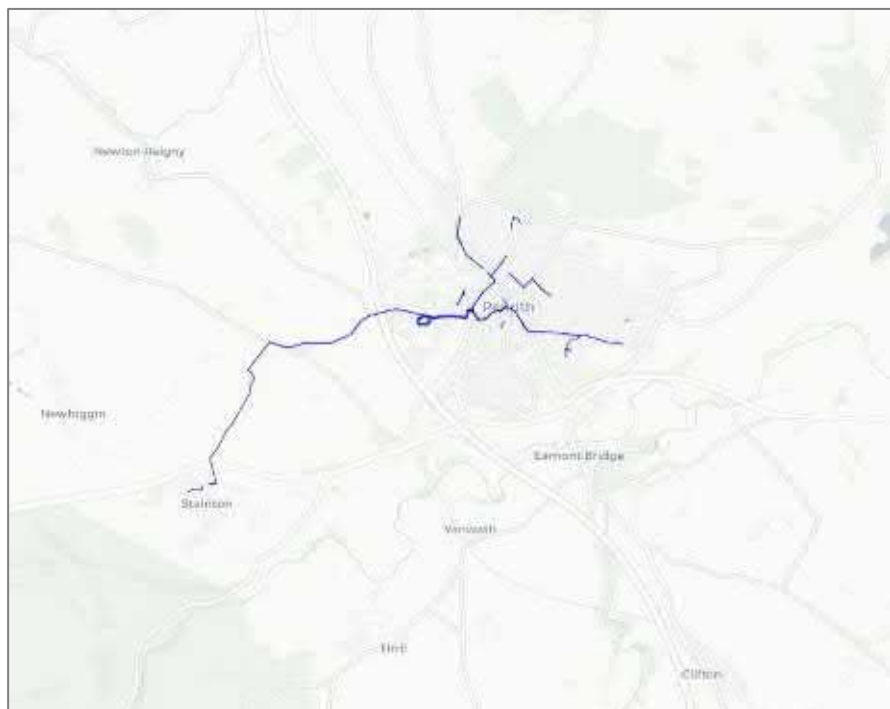


Figure 2.7. Residents that walk to work (2011 census)

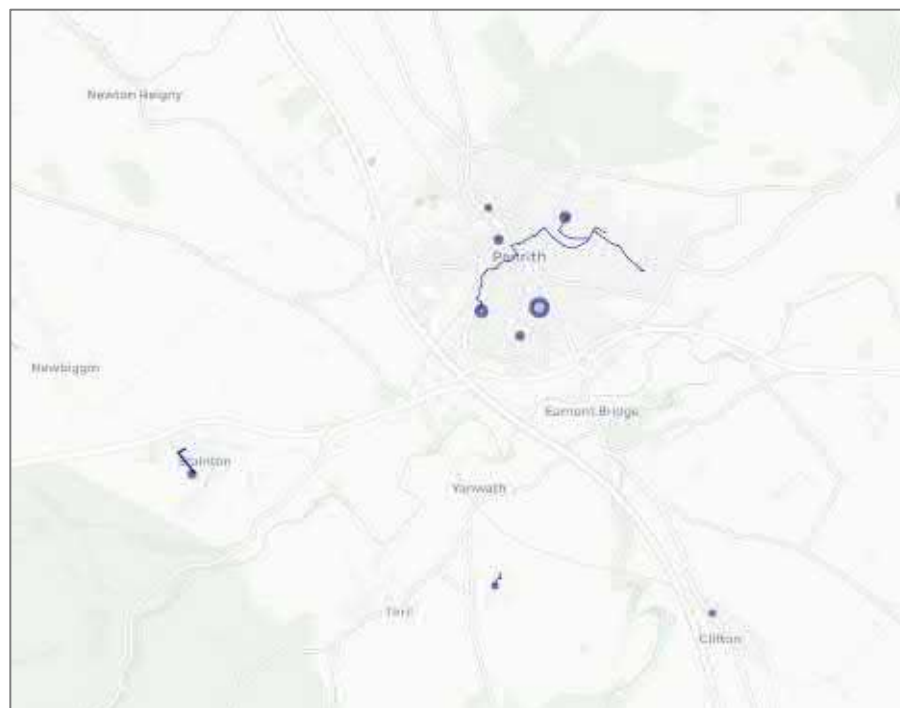


<sup>1</sup> Data taken from School Travel Demand Surveys 2021





**Figure 2.8.** 2011 Commuter cycle flows. Increased width = higher usage (Source: Propensity to Cycle Tool)



**Figure 2.9.** School cycle flows. Increased width = higher usage (Source: Propensity to Cycle Tool)



**Figure 2.10.** Strava cycle flows. Brighter colours = higher usage (Source: Strava)

- 2.3.14. Figure 2.8 shows the estimated routes taken by people cycling to work in Penrith in 2011, for the top 30% most cycled routes. As clearly shown, the top 30% most used routes are primarily located in the main built up area of Penrith itself.
- 2.3.15. The B5288, A592 and A6 converging on the town centre are the most popular routes in all current and future scenarios in the Propensity to Cycle Tool (PCT) (see [www.pct.bike](http://www.pct.bike) for further information on the PCT). These routes record more than 100 cyclists per day based on the 'Go Dutch' scenario, reflecting the potential growth for cycling within Penrith.

- 2.3.16. While commuting trips are important, they do not represent all cycle trips. Figure 2.9 shows estimated cycle to school trips based on the 2011 school census data. Whilst the reported cycling levels are lower than the national average, the presence of several educational establishments (Ullswater Community College, North Lakes School, Queen Elizabeth Grammar School, Brunswick School, St Catherine's School, Beaconside CE Primary School and Hunter Hall School) demonstrates the importance of connecting routes in Penrith.

- 2.3.17. Finally, outputs from the Strava global heatmap ([www.strava.com/heatmap](http://www.strava.com/heatmap)), show anonymised data collected from people cycling using the Strava mobile app. While the results are typically skewed towards more confident sports/leisure cyclists, the results again highlight the importance of the key radial routes such as the A6, A686 and B5288.

- 2.3.18. Perceived and actual safety can be a barrier to taking up or continuing cycling and walking.
- 2.3.19. Figure 2.11 shows road traffic accidents which included pedestrian and cycle casualties (whether a vehicle was involved or not) across the Penrith LCWIP area, for the period 2017-2020. For every injury shown on the map, there will be additional injuries and near misses not reported. Table 2.1 presents this data numerically.

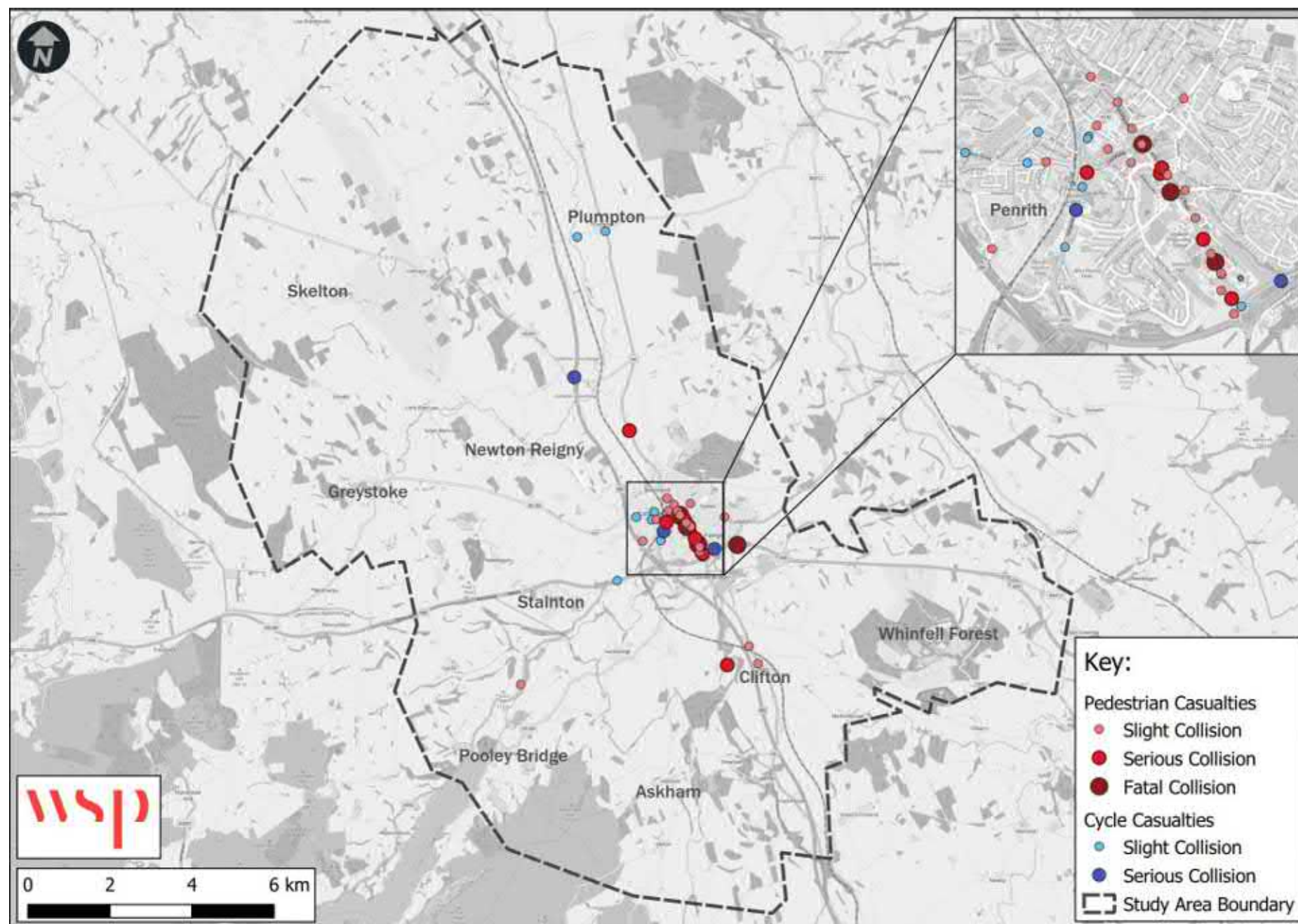
**Table 2.1. Pedestrian and cyclist accidents by severity: 2017 to 2020**

Severity	2017		2018		2019		2020	
	Cycle	Walk	Cycle	Walk	Cycle	Walk	Cycle	Walk
Slight	4	12	4	4	4	5	1	5
Serious	0	0	1	4	0	2	2	1
Fatal	0	0	0	2	0	2	0	0
Total	4	12	5	10	4	9	3	6

- 2.3.20. The data shows that over the four-year period there were four fatal and seven serious collisions involving pedestrians in the area. Three serious collisions involving cyclists were reported between 2017 and 2020.
- 2.3.21. Plotting the location of collisions can help to identify 'hotspots', where several incidents have been recorded in a small geographic area. Those areas of the network where safety may need to be improved for pedestrians and cyclists can then be identified.
- 2.3.22. As can be seen from the figures, 'hotspots' or 'clusters' of collisions are typically located along arterial roads or at junctions where there is a higher number of pedestrians and cyclists, namely:

- Market Square;
- Southend Road;
- Bridge Lane near Penrith Hospital;
- the A66 near Carleton Hall;
- Kemplay Bank roundabout;
- Old London Road junction;
- Norfolk Road;
- Ullswater Road near Penrith Castle; and
- Brunswick Road near Booths.

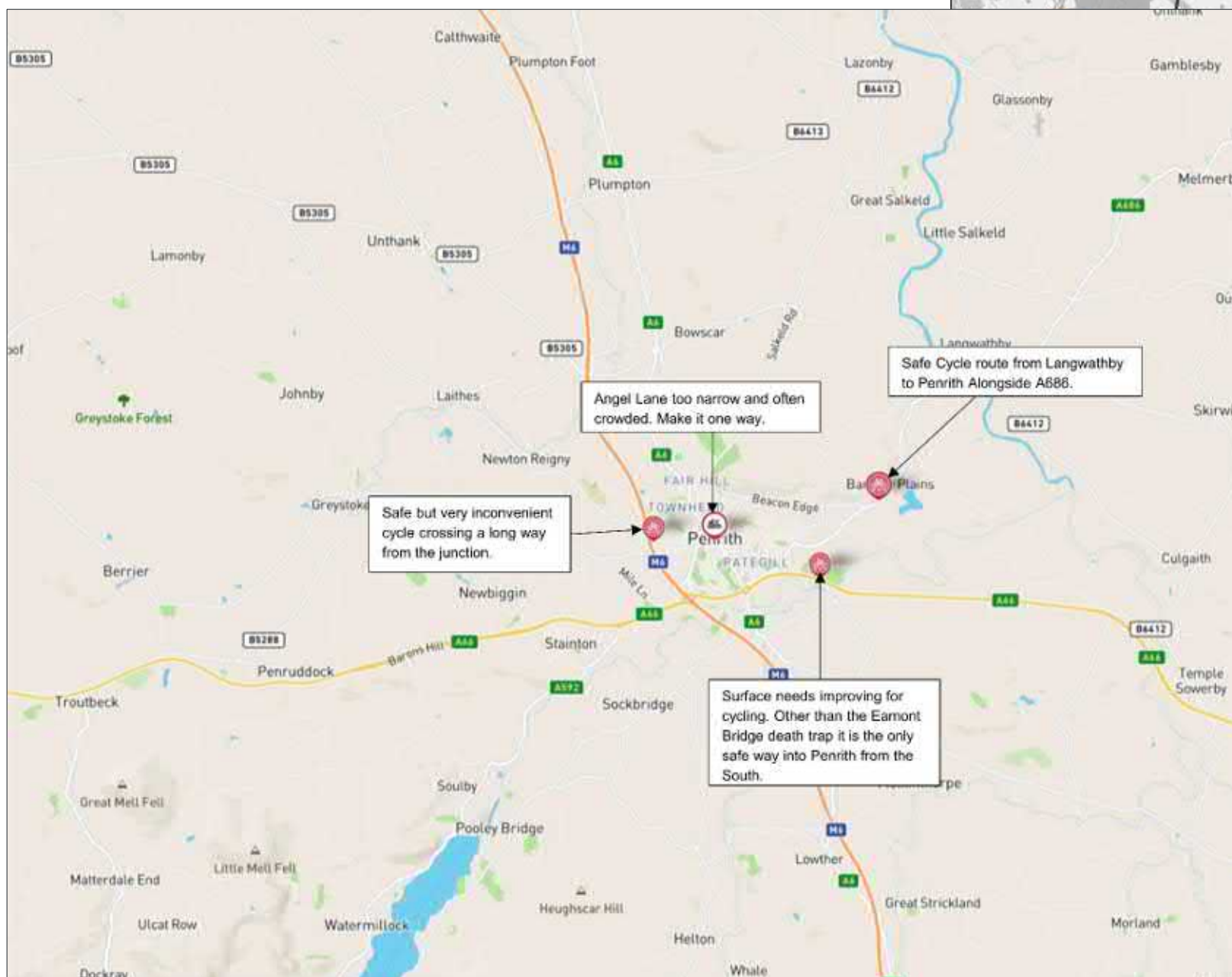
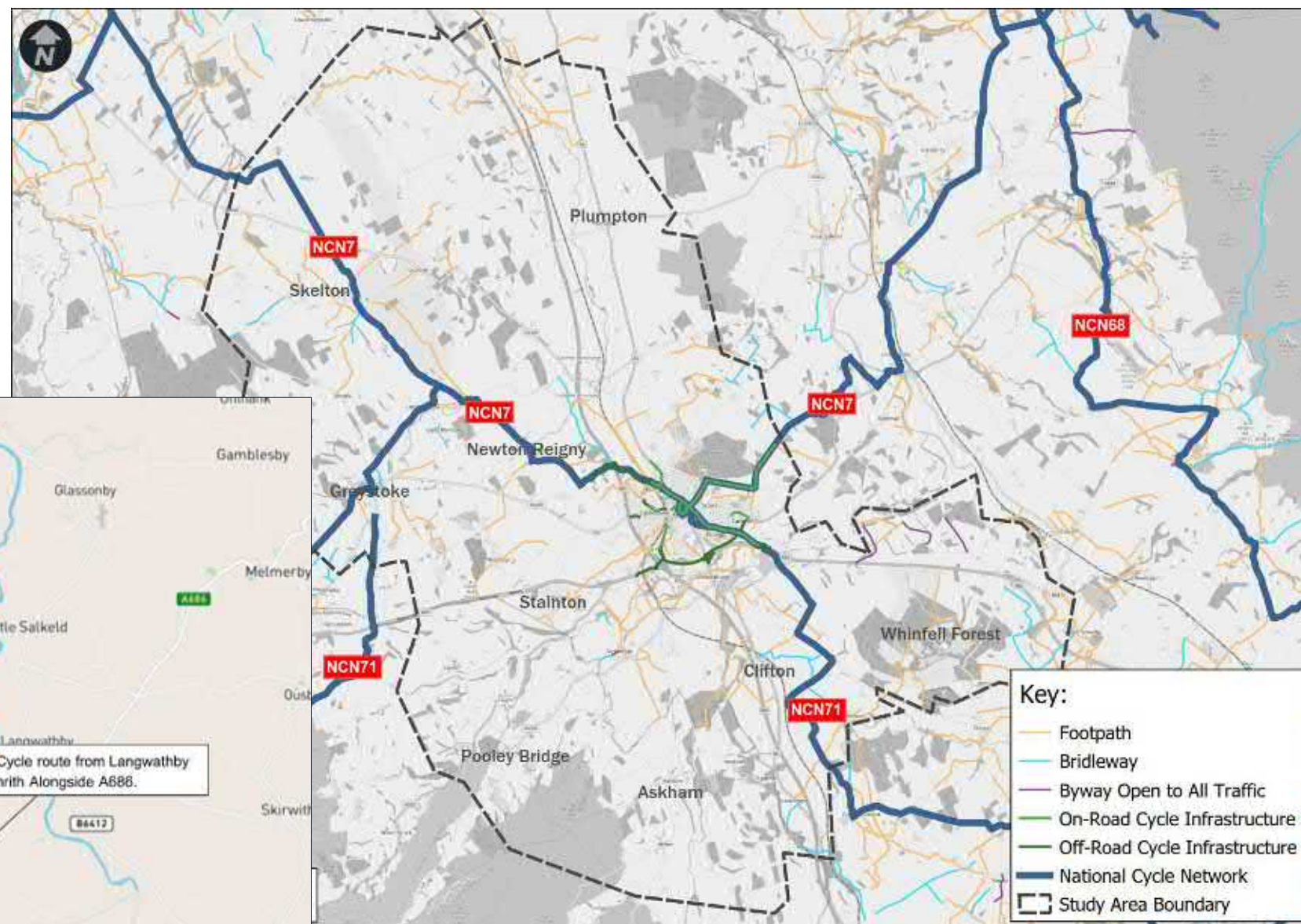
- 2.3.23. Improving infrastructure for cycling and walking within the study area could further reduce collisions in future and improve both perceived and actual safety of the route.



**Figure 2.11. Pedestrian & cyclist traffic casualties: 2017-20**



- 2.3.24. Figure 2.12 shows existing active travel provision in the Penrith LCWIP area. The map shows the fragmented nature of the cycle network in Penrith.
- 2.3.25. Penrith benefits from two strategic cycle links – namely NCN 7 connecting Penrith with Newton Reigny and Skelton to the northwest and Langwathby to the northeast, and NCN 71 connecting Penrith with Great Strickland and routing onwards to Appleby.



**Figure 2.12. Existing and proposed cycle infrastructure**

**Figure 2.13. Suggestions for Improvement**

- 2.3.26. Despite this, there is very limited existing off-road or fully segregated provision meaning that sections of these routes fall below the level of provision recommended in latest national guidance.
- 2.3.27. Figure 2.13 shows suggestions for improvements collated on the widenmypath.com website. Whilst the level of engagement is limited, the requests are for a safe cycle route between Langwathby and Penrith alongside the A686; surface improvements along the A66 in the vicinity of Penrith Football Club; widened pavements along the A6 in the town centre; Angel Lane to be made one-way; and the convenient positioning of crossings with specific reference to Haweswater Road / B5288.



### 3 STAGE 3: NETWORK PLANNING FOR CYCLING

#### 3.1 CURRENT & FUTURE ORIGINS & DESTINATIONS

- 3.1.1. The LCWIP Technical Guidance for Local Authorities (DfT, 2017) notes that identifying demand for a planned cycle network should start by mapping the main trip origin and destination points (ODs).
- 3.1.2. In line with the guidance, census output areas were chosen to represent journey origins from existing residential areas. Additional origins and destinations were identified as shown in Figure 5.1, including:
- Future housing and employment sites adopted in the Eden Local Plan;
  - Public transport interchanges (as above);
  - Principal retail areas;
  - Employment concentrations;
  - Large grocery shops;
  - Hospitals;
  - Tourist attractions; and
  - Educational institutions.
- 3.1.3. The resultant OD Map is shown in Figure 3.1 opposite.

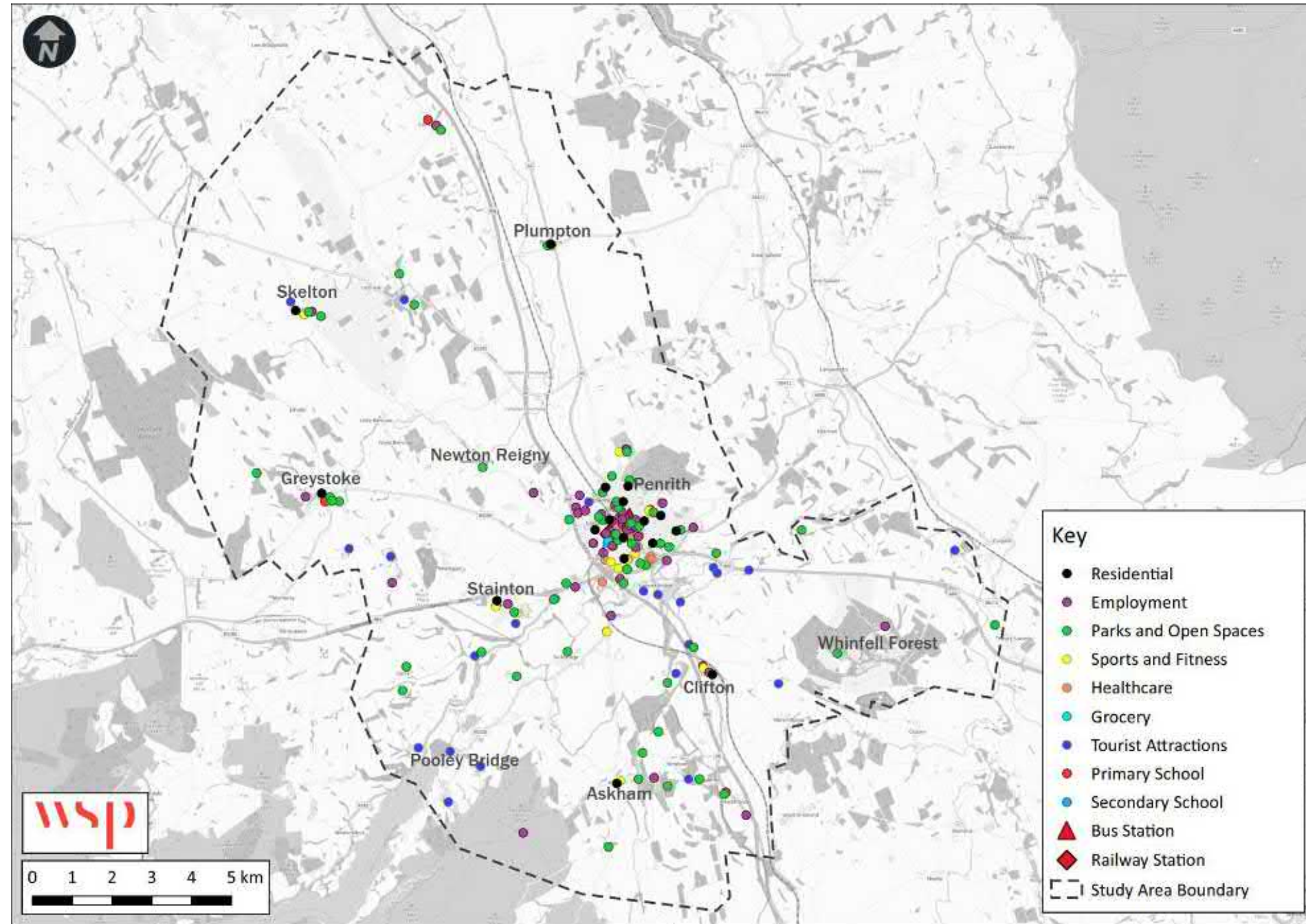


Figure 3.1. Penrith OD Map



### 3.2 CLUSTERING & DESIRE LINES

- 3.2.1. The guidance recommends that trip ODs in close proximity to each other are clustered together, providing an indication of significant OD areas which will be the focus for many trips.
- 3.2.2. Once OD clusters were determined, desire lines between every LSOA or allocated housing site and identified cluster were mapped; the lines represent the most direct route between these points, irrespective of the existing network and barriers.
- 3.2.3. For ease of interpretation, desire lines were aggregated to present the top 10% desire lines. These are used as the basis to inform a schematic network, referred to as the ‘Suggested Cycle Network’.
- 3.2.4. The OD clusters and top 10% desire lines are shown in Figure 3.2.

### 3.3 VALIDATION OF DESIRE LINES

- 3.3.1. The desire lines were validated through the use of existing data, such as the PCT and Strava, as well as through engagement with key stakeholders.

#### PCT: GO DUTCH SCENARIO

- 3.3.2. The desire lines were compared against the PCT Go Dutch scenario outputs, which presents a potential scenario of cycling demand in the future if ‘Dutch style’ infrastructure was available, as well as a similar attitude toward cycling. The top ten PCT outputs support the identified desire lines within the urban area of Penrith, while longer distance desire lines to Plumpton, Skelton, Greystoke, Stainton, Askham and Clifton are more closely aligned to leisure trips and the National Cycle Network.

- 3.3.3. The PCT outputs are illustrated in Figure 2.8.

#### STAKEHOLDER FEEDBACK

- 3.3.4. Two stakeholder workshops were undertaken to review and discuss the identified desire lines. The stakeholder feedback was in support of the desire lines identified, and agreed that the desire lines represented demand for travel by active modes for all trip purposes across the study area.
- 3.3.5. The 13 desire lines were ultimately agreed upon to represent the most important connections between people and places are illustrated in Figure 3.3.

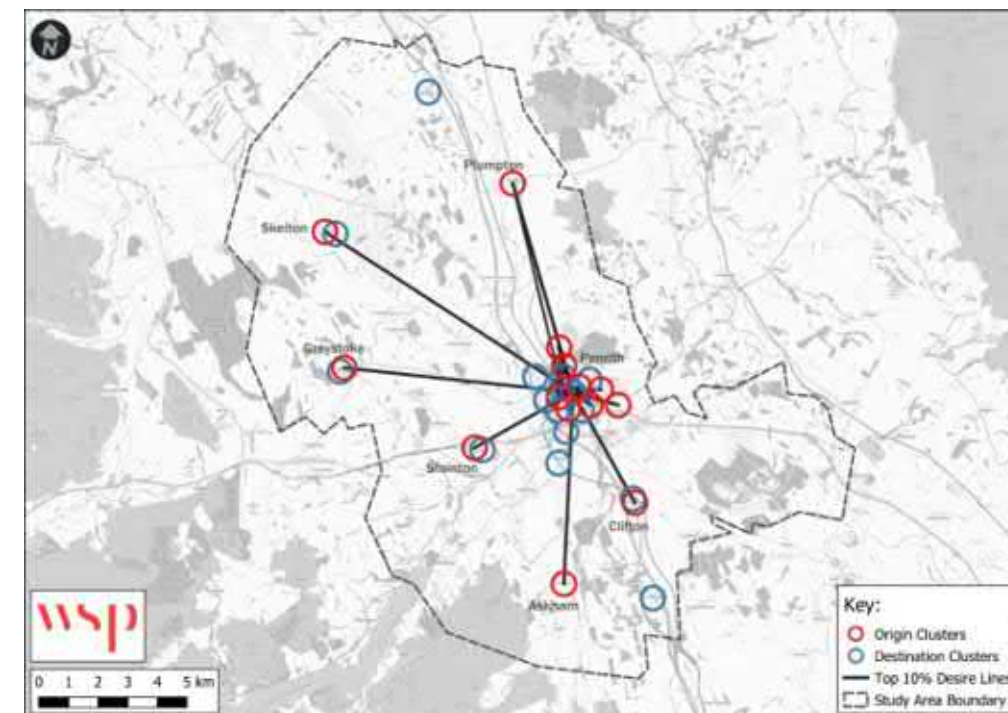


Figure 3.2. OD Clusters and Top Desire Lines

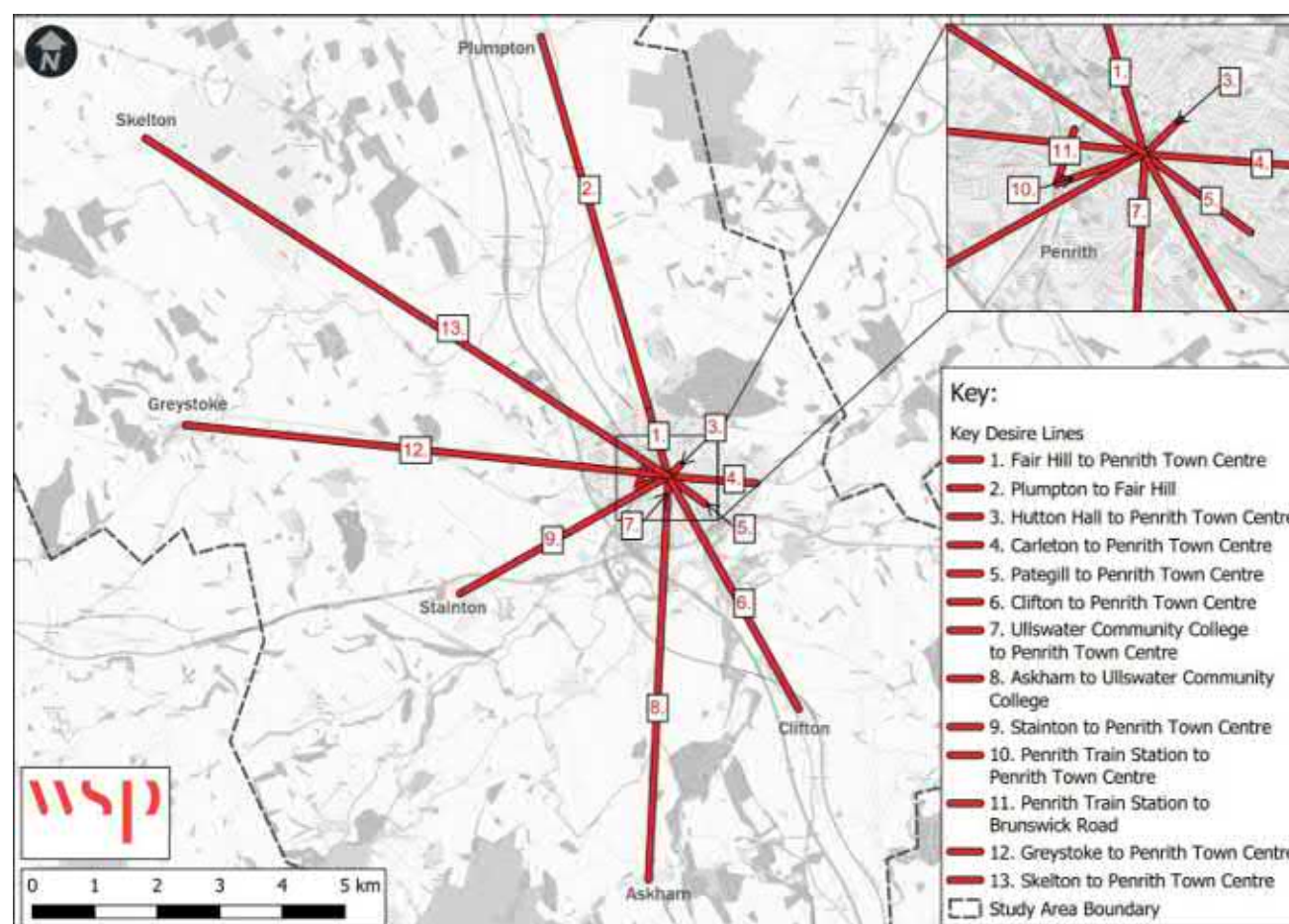


Figure 3.3: Agreed Desire Lines



### 3.4 ROUTE DEVELOPMENT PROCESS

3.4.1. Having determined the desire lines, the next stage of the process is to identify real world routes that can accommodate these desire lines. This could be through appropriate schemes to upgrade existing roads or paths to the latest standards, or identifying opportunities to create new routes.

#### PRODUCING THE SUGGESTED CYCLE NETWORK

3.4.2. The first step in the process is to identify the potential routes that might support the cycling desire lines. Potential route alignments were plotted, following the desire lines as closely as possible. The routes selected take into account existing roads, paths and structures where these are available, but do not consider the type of infrastructure that might be required to bring these up to the required standard, nor the existing constraints that might preclude this.

3.4.3. Additional links were identified using the information gathered during the Stakeholder Workshop. Stakeholders identified the town centre, transport interchanges, future developments and industrial estates as some of the most important destinations which should be included within the cycle network. The draft network was refined and then agreed with the Project Delivery Group (additional details regarding the PDG can be found in Section 6).

3.4.4. The importance of each link and route needs to be understood in terms of their overall significance in the network – this will largely relate to the numbers of cyclists that each will cater for in the future. The following hierarchy was therefore applied to the links in the network:

- **Primary:** The primary routes are generally those which align with the agreed desire lines, and are therefore most likely to attract the highest number of cyclists. These are supplemented by forecast flows from the PCT and Strava, as well as local knowledge;
- **Secondary:** Secondary routes are those with lower expected flows of cyclists, generally those links that connect to specific attractors such as schools, colleges and employment sites, or which add to the ‘mesh density’ of the overall network;
- **Leisure:** these are routes that do not align specifically with specific destinations, but are important routes in their own right for leisure purposes, which is a vital part of the Cumbrian economy.

3.4.5. This network is referred to as the ‘Suggested Cycle Network’, and is the basis of any further route identification work – both that presented here and any carried out as the LCWIP evolves. The routes displayed in the Suggested Cycle Network are those that cyclists would likely wish to use if the right infrastructure for the conditions could be provided, and should always be considered as the first option for any route alignment, with other options identified using the DfT’s Route Selection Tool (RST) or similar.

3.4.6. The resultant Suggested Cycle Network is shown in Figure 3.4, with a high resolution image included in Appendix A.

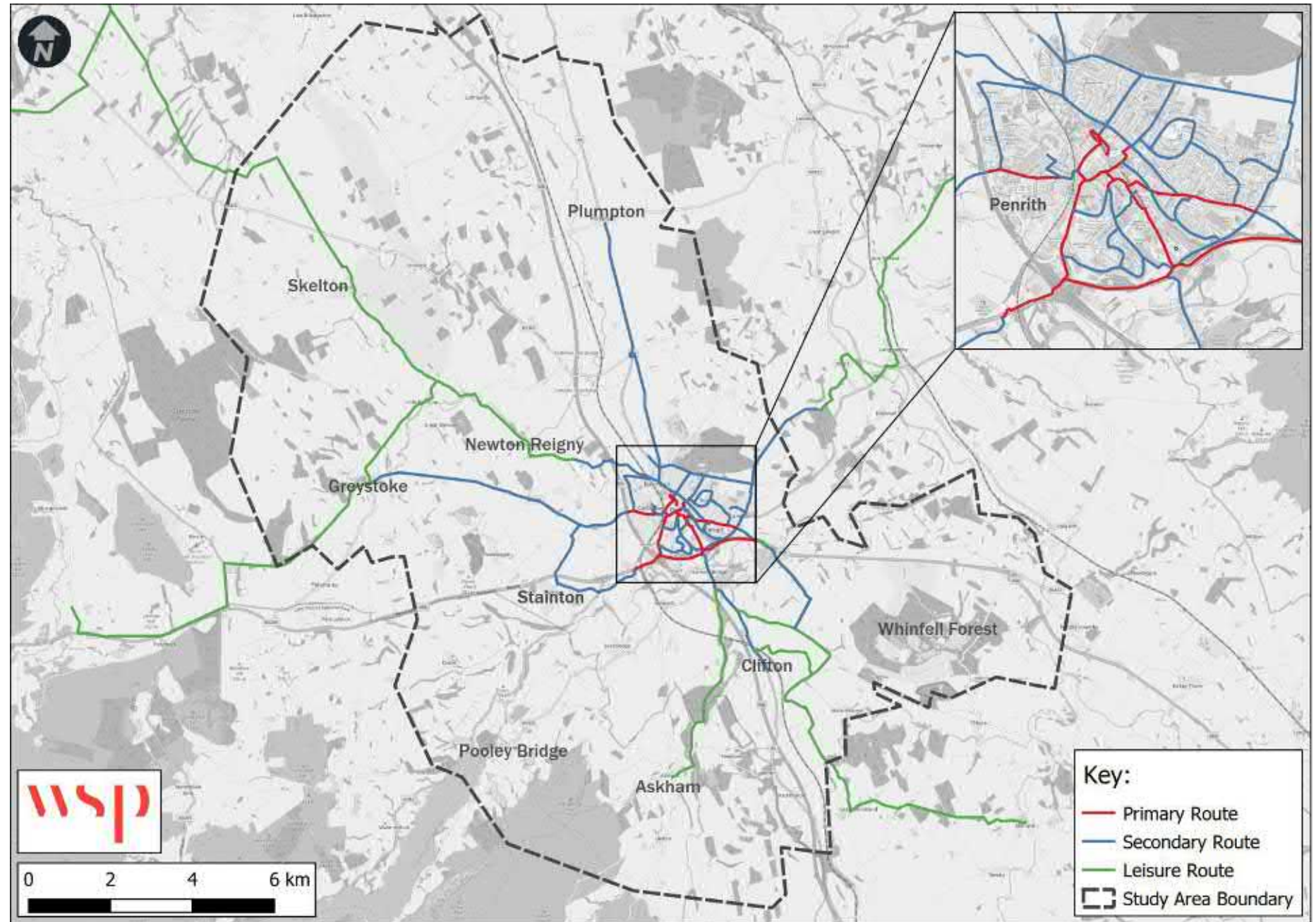


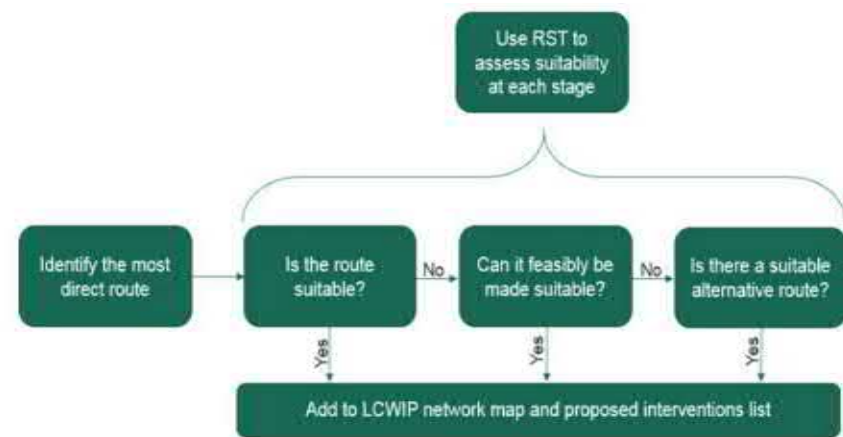
Figure 3.4. Penrith Suggested Cycle Network Map



### 3.5 PRODUCING THE PRIORITY CYCLE NETWORK

3.5.1. Whilst the Suggested Cycle Network presents the basis for a network were money and acceptability of the associated proposals required no object, there is no surety that any of the routes can be delivered without additional consideration of the feasibility of each route.

3.5.2. The LCWIP guidance sets out the process that should be followed in order to determine whether a route can feasibly be made suitable for cycling (i.e. complies with the latest design standards) and therefore should be included in the final cycling network plan and prioritised programme of infrastructure improvements for future investment. This process is illustrated in Figure 3.5.



**Figure 3.5. Route Selection Process**

3.5.3. Ideally, the DfT’s Route Selection Tool (RST) should be used to assess the suitability of each route, identify the potential interventions required to make the route suitable, and consider alternative route choices where the route cannot be made suitable. However, this is a time consuming process, and to undertake this process fully for each route identified in the Penrith suggested cycle network is not considered feasible.

3.5.4. Alternatively, CCC have initially engaged with key internal and external stakeholders in various forums, including officers and elected members, in order to agree a consensus on which routes may or may not be feasible. This engagement has broadly taken the approach outlined in the DfT’s Early Assessment and Sifting Tool (EAST), considering factors such as:

- Identified problems and objectives of the option;
- Degree of consensus over outcomes;

- Expected Value for Money (VfM) Category;
- Implementation timetable;
- Public acceptability;
- Practical feasibility;
- Affordability; and
- Where is funding coming from?

3.5.5. Each targeted stakeholder engagement session also considered whether a route could adequately meet the five core design principles: Coherent; Direct; Safe; Comfortable and Attractive. This high-level consideration is based on the criteria for each core design principle given in the RST, which include:

- Directness compared to likely alternative;
- Gradient of the route;
- Traffic volume and speed and the need to segregate;
- Connectivity of the route;
- The potential of the route to support high quality infrastructure; and
- The number of changes required to junctions along a route.

3.5.6. This initial sifting process resulted in the production of the Penrith Priority Cycling Network, which was subsequently presented to the public as part of the first round of public engagement.

### 3.6 ENGAGEMENT & CONSULTATION: CYCLING

3.6.1. Public consultation has played a key part of the development of the Penrith LCWIP with the presentation of draft priority networks and improvements to seek feedback to inform the development of the LCWIP and ensure the plan has public support.

3.6.2. Public consultation took place in two distinct stages. These were:

- Stage 1: 14<sup>th</sup> July to 6<sup>th</sup> August 2021; and
- Stage 2: 4<sup>th</sup> February to 25<sup>th</sup> February 2022.

3.6.3. The consultation reports following the respective consultation phases can be found at <https://cumbria.gov.uk/planning-environment/cyclingandwalking>

3.6.4. Stakeholder engagement has been undertaken throughout the development of the LCWIP with key stakeholders, primarily through the LCWIP Project Delivery Group (PDG) forum. Members of the PDG are detailed in Stage 6.

#### STAGE 1 CONSULTATION

3.6.5. The Stage 1 consultation included a survey to obtain feedback on the developing LCWIP and to understand where people would like to see improvements. This included the presentation of a 'Draft Priority Cycling Network' and a request for where improvements to walking should be made.

3.6.6. The questionnaire was split into the following sections:

- About the respondent and their links to the area.
- Current travel behaviour (cycling and walking journeys and why these are undertaken).
- Public opinion on the current active travel infrastructure provision in Penrith.
- Any barriers on active travel routes that may prevent cycling and walking.
- Finding out what would encourage modal shift to cycling or walking for short journeys.
- Open questions to provide insights on improving cycling and walking in Penrith.

3.6.7. A total of **209 responses** were received to the Penrith LCWIP questionnaire during the consultation period.

3.6.8. These results were considered by CCC and key stakeholders in the ongoing process of refining the Priority Cycling Network map. Not only were new routes considered as a result of this, but feedback was spatially mapped and analysed where this

related to a specific place, and used as a criteria in the subsequent prioritisation of schemes (presented in Section 5 of this document).

3.6.9. Note that analysis relating specifically to walking is described in Section 4.

3.6.10. The analysis of the consultation results found that:

- More respondents walk than cycle currently (20% do not cycle, 6% do not walk).
- Respondents feel that the existing walking routes and cycling routes connect with the places they wish to go to (more so for walking routes (53% answering 'yes') than cycling (9% stating 'yes')). Meanwhile 49% answered 'no' for cycling vs 16% for walking.
- Three-quarters of respondents consider that the draft priority cycling network plan either partially or fully connect with the places that people wish to cycle to.
- Respondents were overwhelmingly supportive about the idea of more money being spent on cycling and walking in Penrith (91% would like to see this, while 4% would not).
- The main obstacles to cycling in Penrith were busy roads (92 respondents), quality of routes (53) and difficult junctions to cross (45). Encouragingly, terrain and geography were not considered to be a major barrier to cycling (four people mentioned this).
- 87% of respondents currently make journeys by car to places that are within walking or cycling distance (either fully or partially) – most of these being for shopping trips (90 respondents).
- Cycle routes separated from other modes of travel were seen as the most common measure that would encourage more cycling in Penrith, being mentioned by 78 respondents.
- There was some indication in the responses, that 'carrot' type measures which incentivise sustainable travel were more likely to encourage sustainable behaviour than 'stick' type measures which seek to de-incentivise alternatives (raising costs for public transport and motoring were not mentioned by many respondents as a means of encouraging walking and cycling). Higher public transport costs received no mentions at all as a measure to encourage cycling and were only mentioned by one respondent in regard to encouraging walking more.
- Improvements to cycling and walking routes would encourage respondents to walk and/or cycle more often than they do currently in Penrith (all but eight of the

respondents stating they would either start walking or cycling or do so more often).

3.6.11. A 'You Said, We Did' summary of the consultation results was also produced, and published as part of the leaflet that accompanied Stage 2 of the consultation. This summarised the most common themes, and explained how these have been addressed in the development of the priority cycle network map between Stage 1 and Stage 2 of consultation.





## STAGE 2 CONSULTATION

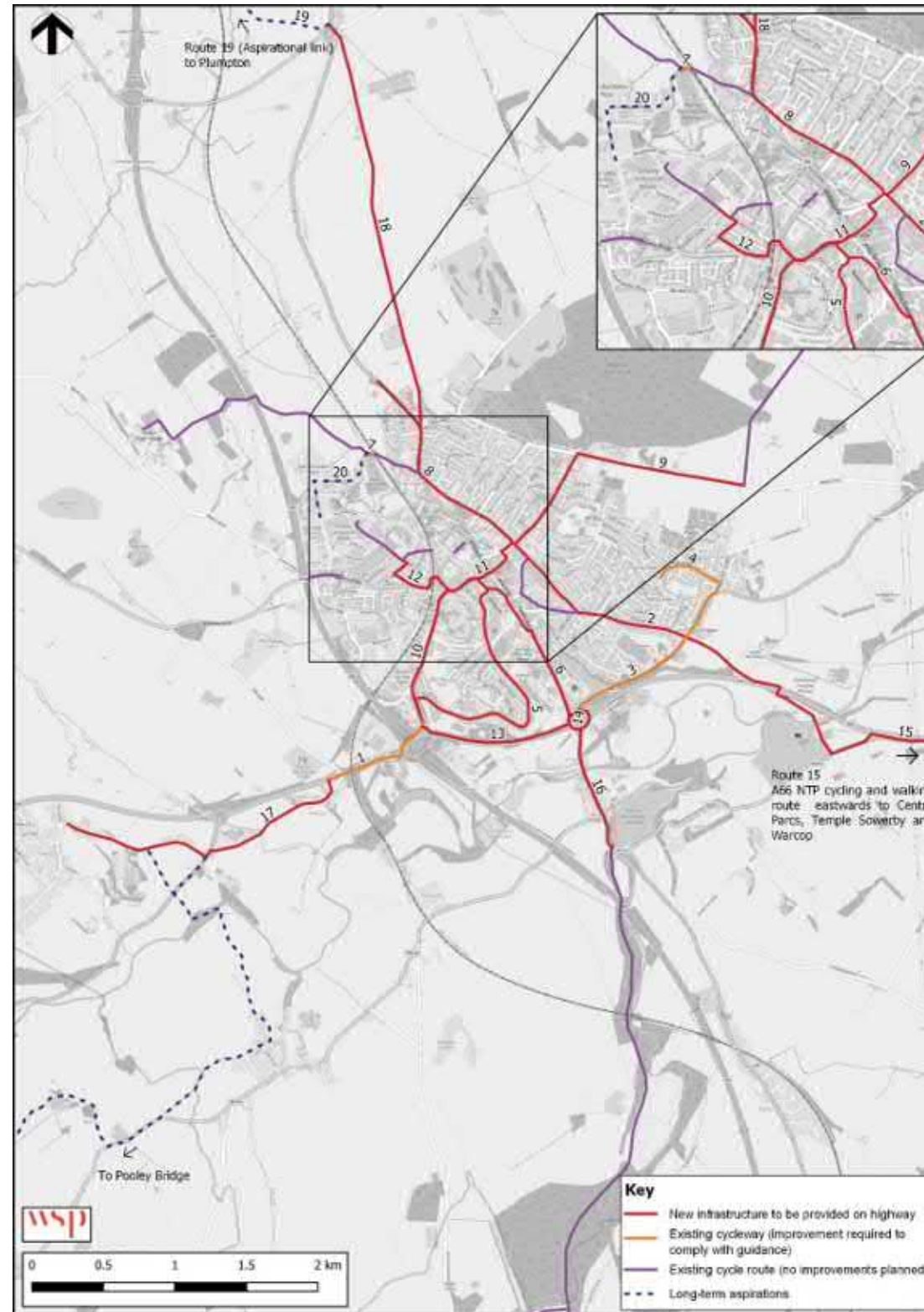
- 3.6.12. The Stage 2 consultation was a follow up to the Stage 1 consultation and offered a final opportunity to feedback on the proposals prior to finalising the Penrith LCWIP.
- 3.6.13. The questionnaire asked questions targeted around specific themes, including:
- Gauging level of support for the Priority Network Plans (cycling and walking);
  - Whether the network and interventions proposed would encourage the respondent to use active modes more often;
  - Whether the respondent would support reduced space for cars to prioritise active modes; and
  - Inviting general comments on specific parts of the network.
- 3.6.14. A total of 58 responses were received to the Penrith LCWIP Stage 2 consultation.
- 3.6.15. The analysis of the consultation results found that:
- 63% of respondents strongly agreed or agreed with the Priority Cycling Network Plan;
  - 53% of respondents felt that the Priority Cycling Network would encourage them to cycle more often;
  - 69% of respondents strongly agreed or agreed with the Walking Network Plan;
  - 81% of respondents said that they would support walking and cycling improvements even when this could mean less space for other road traffic.
- 3.6.16. A 'You Said, We Did' summary of the Stage 2 consultation results was also produced. The key themes responded to included:
- Connectivity;
  - Safety & Traffic;
  - Cycle Parking;
  - Well Designed Routes;
  - A66 and M6 being Barriers to Movement; and
  - Concerns over Reallocation of Road Space.
- 3.6.17. No significant changes were made to the Priority Cycling Network Map as a result of the Stage 2 consultation

### 3.7 FINAL PRIORITY CYCLING NETWORK PLAN

- 3.7.1. Following the two stages of public engagement and consultation, a **Priority Cycling Network Plan** was agreed and approved by the Penrith LCWIP Project Delivery Group. This plan is presented in Figure 3.6, with a high resolution image included in Appendix A.
- 3.7.2. The **Priority Cycling Network** provides connectivity to Penrith town centre and station. From there a number of radial routes extend out of the town providing connectivity to outlying Eden Valley towns and villages of Newton Reigny, Stainton, Eamont Bridge, Brougham' Langwathby. The option to choose walking or cycling for everyday trips should be promoted in rural areas, such as the Eden Valley, with many of the services relied upon by rural communities being within easy cycling distances. The proposed A66 Northern Trans Pennine (A66 NTP) project will make connectivity to the south of Penrith more challenging particularly to Eamont Bridge, Stainton and to Centre Parcs. It will be important that the A66 is not a barrier to active travel in and around Penrith.
- 3.7.3. With Penrith being the hub of the transport network in the Eden Valley, the LCWIP also has an important role in supporting the visitor economy. The main radial routes out of Penrith include the Coast to Coast route (NC71) and the A66 corridor also plays an important role for connectivity east and west of Penrith.
- 3.7.4. The A66 NTP should provide those links eastward into Penrith's rural hinterland but could lead to severance of the local active travel networks, particularly where new alignments cut off or restrict movements discouraging walking and cycling. The LCWIP should be linked to a proposed route corridor to support east-west cycling and walking links that will benefit Penrith, Centre Parcs, Temple Sowerby, Kirkby Thore, Crackenthorpe, Appleby-in-Westmoreland, Warcop and Brough.
- 3.7.5. The combination of new cycling routes and improvements to existing routes will provide coherent, direct, safe, comfortable and attractive cycle network for the town, while recognising the unique historic market town nature of the Penrith.
- 3.7.6. The routes have been developed following the updated guidance from the Department for Transport on Cycle Infrastructure Design. The new standards of design are much higher than in the past and look to include cycle provision that

is physically protected from traffic, as well as the separation of pedestrians and cyclists were possible.

**Figure 3.6. Priority Cycling Network Plan**





## 3.8 CYCLING IMPROVEMENTS

3.8.1. The Priority Network Plan has been subdivided into a list of 20 routes. While it is the intention of the LCWIP to deliver the entirety of the network, this will be subject to the availability of suitable funding opportunities. This may result in phasing or combining the delivery of improvements where necessary.

3.8.2. Table 3.1 lists each of the priority improvements identified, detailing:

- Route description – explanation of the proposal;
- Route type – infrastructure type proposed; and
- Total Cost – estimated costs within a range.

### IMPROVEMENT TYPES

3.8.3. It should be noted that the improvement descriptions and type provide an indication of the type of improvement that it may be possible to deliver on each route based on the opportunities and constraints present.

3.8.4. While broad agreement has been reached over the type of infrastructure that is likely to be required to deliver the Priority Cycle Network, the network is considered to be in the earliest stages of concept design and it is acknowledged that significantly more design, assessment, and engagement work is likely to be required to bring forward any of the proposed schemes.

3.8.5. The continuation of the design process will also include refinement of the associated costs, giving a much greater and detailed understanding of the overall cost of delivery of the network, as well as the likely future operational and maintenance costs.

3.8.6. The implementation of improvements are also subject to the securing of sufficient funding.

### IMPROVEMENT COSTS

3.8.7. The cost estimates presented here are in the following ranges:

- £0-£1m;
- £1m-£3m;
- £3m-£5m; and
- £5m+

3.8.8. The ranges selected can give an indication of the method of funding that may be required in order to deliver an improvement in its entirety.

### Total improvement costs

3.8.9. The overall cost of the delivery of the Priority Cycling Network for Penrith is currently estimated at **£49 million** to deliver circa **28km of high quality cycle routes**. It should also be noted that active travel improvements are expected to be incorporated within schemes related to Skirsgill to Kemplay Bank (ID13) and Kemplay Bank to Moor Lane (ID14), which are part of the National Highway's A66 Northern Trans-Pennine Project.

**Table 3.1. Cycling Improvements**

ID	Improvement Name	Improvement Description	Improvement Type	Cost Range
1	<b>Redhills Business Park to Skirsgill Interchange</b>	Redesign of Junction 40 on the M6 forms part of the A66 upgrade. The upgrade will include shared use cycle/footway facilities. The Council would like to see a more direct cycle and walking link provided. This could be achieved through a pedestrian and cycle flyover. Cumbria County Council will make the case for such an improvement through representations to National Highways during the development of the A66 NTP.	New on-road segregated cycleway (permanent)	£1m - £3m
2	<b>Benson Row, Folly Lane and Carleton Road</b>	Creation of an on-road cycleway with the possible use of light segregation with the existing highway. This would replace the current advisory cycle lane, the markings for which, have largely disappeared over time.	Traffic calming (e.g. lane closures, reducing speed limits)	£1m - £3m
3	<b>A686 Carleton Ave</b>	Existing shared use cycle/footway to be enhanced with changes to key junctions giving priority for users of the shared use cycle/footway.	Upgrades to existing facilities (e.g. surfacing, signage, signals)	£0 - £1m
4	<b>Carleton</b>	Existing shared use cycle/footway to be enhanced with changes to key junctions, where possible extending the width of the shared use sections to allow 2-way movements.	Upgrades to existing facilities (e.g. surfacing, signage, signals)	£1m - £3m
5	<b>Clifford and Castle Hill Roads</b>	Signed cycle route on existing traffic calmed streets, with consideration to additional calming features and 20mph speed limits. Clifford Rd/Ullswater Rd junction would also require upgrades to allow connectivity with other routes.	Traffic calming (e.g. lane closures, reducing speed limits)	£1m - £3m
6	<b>Town Centre to Kemplay Bank Roundabout</b>	Significant scheme encompassing a segregated cycleway with upgraded junctions between Victoria Road and Southend Road.	New on-road segregated cycleway (permanent)	£5m+
7	<b>Town Head to Newton Rigg</b>	Possible surfacing of a section of the existing Coast-to-Coast cycleway at Thacka Beck bridge and ford.	New off-road cycleway (e.g. greenway, canal towpath)	£3m - £5m
8	<b>Bus Station to North Fair Hill</b>	Enhance the existing cycle infrastructure along this route considering the use of a lightly segregated cycleway on Scotland Road/A6.	New on-road segregated cycleway (permanent)	£5m+
9	<b>Bus Station to Stagstones Road</b>	A quiet street with traffic calming could be created along Fell Lane. Shared use path along Beacon Edge as a proposed upgrade to current footway.	New on-road segregated cycleway (permanent)	£1m - £3m
10	<b>Railway Station to Skirsgill Interchange</b>	Investigate integrating cycle infrastructure onto Ullswater Road and link provision south to Junction 40.	New on-road segregated cycleway (permanent)	£3m - £5m
11	<b>Castle Park to Bus Station</b>	Two way segregated cycleway, where possible. The feasibility of implementing changes to reduce the flow of traffic and enable these improvements will be investigated.	New on-road segregated cycleway (permanent)	£1m - £3m
12	<b>Castle Park to Gilwilly Lane</b>	Two way segregated cycleway, where possible. The feasibility of implementing changes to reduce the flow of traffic and enable these improvements will be investigated.	New on-road segregated cycleway (permanent)	£3m - £5m
13	<b>Skirsgill to Kemplay Bank</b>	Improvements to the current shared use cycle/footway to remove pinch points.	Upgrades to existing facilities (e.g. surfacing, signage, signals)	£5m+



14	<b>Kemplay Bank Roundabout Improvements</b>	Redesign of the Kemplay Bank Roundabout as part of the A66 upgrade. The upgrade will include shared use cycle / footway facilities. The council would like to see a direct cycle and walking link between Penrith and Eamont Bridge. This could be achieved through a pedestrian and cycle flyover. Cumbria County Council will make the case for such an improvement through representations to National Highways during the development of the A66 NTP.	New on-road segregated cycleway (permanent)	£5m+
15	<b>Frenchfield Eastwards to Centre Parcs and the Eden Valley</b>	Segregated and quiet lane route eastwards from Penrith using the Frenchfield underpass to connect Centre Parcs and Eden Valley.	Traffic calming (e.g. lane closures, reducing speed limits)	£3m - £5m
16	<b>A6/Kemplay Bank to River Lowther</b>	Lightly segregated cycleway where possible. Further feasibility study required.	New on-road segregated cycleway (permanent)	£1m - £3m
17	<b>Stainton to Redhills</b>	Creation of an on-road cycleway with the possible use of light segregation.	New on-road segregated cycleway (permanent)	£3m - £5m
18	<b>Inglewood Road</b>	Creation of an on-road cycleway with the possible use of light segregation with the existing highway. A shared use cycle/footway should also be considered.	New on-road segregated cycleway (permanent)	£3m - £5m
19	<b>A6/Stoneybeck Inn to Plumpton</b>	An aspirational route to link Inglewood Road scheme to Plumpton Junction using quiet lanes to the west of the A6.	Traffic calming (e.g. lane closures, reducing speed limits)	£3m - £5m
20	<b>Thacka Lane to Gillwilly</b>	Resurfacing of the existing paths through Thacka Beck Nature Reserve (including desire line routes) to provide east-west connectivity and overcome the severance of the railway line. Connects with Scheme 7.	New off-road cycleway (e.g. greenway, canal towpath)	£0 - £1m

### 3.9 ESTABLISHING CYCLING INFRASTRUCTURE IMPROVEMENT

- 3.9.1. The Priority Cycle Network broadly identifies the types of improvements that could be implemented. These have been considered in accordance with Local Transport Note (LTN) 1/20: Cycle Infrastructure Design, which represents a significant national shift in how cyclists are perceived and provided for.
- 3.9.2. LTN 1/20 is based around five overarching design principles and 22 summary principles that encompass the essential requirements to achieve more people travelling by foot or cycle for more of their trips.
- 3.9.3. The five core design principles are that cycle routes and networks must be:
  - Coherent;
  - Direct;
  - Safe;
  - Comfortable; and
  - Attractive.
- 3.9.4. The principles are based on international and UK best practice and address the factors that determine whether people choose to cycle for a range of trip purposes.
- 3.9.5. LTN 1/20 sets out an overarching preference for segregation for cyclists from other users, recognising that bicycles have very different requirements from both motor vehicles and pedestrians. The determination of how this segregation is achieved considers factors such as traffic volume and speed, as well as the character of the street.
- 3.9.6. The improvements included within the LCWIP could include:

#### NEW ON-HIGHWAY SEGREGATED CYCLEWAY

##### Segregated Cycleway

- 3.9.7. A fully segregated cycle track usually runs at carriageway level, with a buffer between the track and the carriageway as well as the footway. The route may be next to, or sometimes completely away from the carriageway. A fully segregated track will generally offer the greatest level of service for cyclists, although they are also the most expensive option and can require significant changes to the highway to incorporate.

**Figure 3.7. Segregated cycleway (carriageway height)**



##### Stepped Cycle Track

- 3.9.8. Stepped cycle tracks run at an intermediate height between the carriageway and the footway, directly adjacent to the carriageway. Although more space efficient than a fully segregated cycleway, a stepped cycle track does not offer the same level of safety and are therefore unsuitable for high speed roads.

**Figure 3.8. Stepped cycle track (intermediate height)**



#### NEW OFF-ROAD CYCLEWAY (GREENWAYS, RURAL ROUTES)

##### Shared use path

- 3.9.9. A footway converted to legally permit cycling. Can also refer to other places where cyclists and pedestrians are unsegregated, such as a bridleway or Vehicle Restricted Area. Shared use paths are generally unsuitable except where pedestrian flows are very low, as they can result in actual and perceived safety issues for both users. They are therefore most suitable for greenways, PROWs which permit cycling, or rural connections with few people on foot.

**Figure 3.9. Greenway (segregated cycle / pedestrian facilities)**





## UPGRADES TO EXISTING FACILITIES

### Light segregation

- 3.9.10. Vertical infrastructure that can be placed within existing traffic lanes (including cycle lanes) to convert them to protected space. They are easy to install and comparatively cheap, and can be used to trial a new cycle path. Cyclists can leave the path easily but vehicles are prevented from entering. However, light segregation provides only limited protection from motor traffic, with other solutions providing a greater feeling of safety.

### Contraflow cycle route

- 3.9.11. Contraflow cycle lanes are an easy and low-cost way of increasing an area's permeability to cycles, by permitting cycling on one-way streets. Contraflow lanes can take the form of physical segregation such as stepped cycle tracks, wands, planters or parking protected, or can be unsegregated.

### Modal filter / Low Traffic Neighbourhood

- 3.9.12. Removing through traffic can enable cycling in mixed traffic streets by lowering traffic volumes. Encouraging traffic to use main roads can provide benefits for pedestrians and residents as well as enabling cycling. A modal filter typically consists of a bollard, planter, or other barrier that allows pedestrians, cyclists, and occasionally public transport to pass, but not other motor traffic. Low traffic neighbourhoods (LTNs) often deploy modal filters to reduce the volume of motor traffic through an area.

**Figure 3.10. Modal filter / LTN**



### 20mph limits/zones and traffic calming

- 3.9.13. Traffic calming includes features that physically or psychologically slow traffic. 20mph limits refers to 20mph

areas enforced by signs only. 20mph zones refers to 20mph enforced by signs and traffic calming.

## NEW ROAD CROSSINGS

### Continuous footway/cycleway crossing

- 3.9.14. A method of giving people walking and cycling priority over motor vehicle movements at side junctions. The footway and / or cycleway material continues across the junction, giving a strong visual priority. There are a number of different ways to achieve this depending on the characteristics of the location.

### Parallel / Tiger crossing

- 3.9.15. A parallel crossing is similar to a traditional zebra crossing, but with a cycle crossing provided alongside. Drivers must give way to cyclists and pedestrians using the crossing. As with traditional zebra crossings, parallel crossings can be divided into two parts with a central refuge to improve the ease of use.

**Figure 3.11. Parallel 'Tiger' crossing**



### Signalised Parallel / Toucan Crossing

- 3.9.16. Signal controlled cycle facilities hold the flow of general traffic to allow cyclists to cross the carriageway. These are usually appropriate where vehicle flows, and speeds are higher. Toucan crossings should be avoided and only used where it is necessary to provide a shared facility. Instead dedicated cycle crossings should be used, and a pedestrian crossing used alongside if necessary

## NEW JUNCTIONS

- 3.9.17. Providing separation between conflicting streams of traffic (including pedestrians and cyclists) is essential to improve road safety as junctions are where most conflicts occur. Junctions are often the most hazardous and intimidating parts of a journey for cyclists, and a junction that does not provide safe facilities may be the reason people will not use the remainder of the route.

### Cyclops Junction

- 3.9.18. The best UK example of segregated junctions are Manchester's CYCLOPS junctions (Cycle Optimised Protected Signals). CYCLOPS junctions are equipped with cycle tracks on each arm of the junction, with signalised pedestrian crossings provided inside the cycle track.

**Figure 3.12. CYCLOPS signalised junction**



### 'Dutch' Roundabout

- 3.9.19. Segregated roundabouts use parallel crossings on each arm of the roundabout to separate pedestrians, cyclists, and vehicles. On entering the roundabout vehicles must give way to pedestrians and cyclists circulating the roundabout. These roundabouts can take on two forms: 'Dutch style' roundabouts with a tight junction geometry lowering vehicle entry/exit speeds and improving their line of sight, and parallel crossing points on traditional roundabouts.

**Figure 3.13. ‘Dutch’ Roundabout (Cambridge)**



**PROVISION OF SECURE CYCLE PARKING FACILITIES**

**Cycle Stands and Hubs**

Cycle parking should be carefully considered against the type of expected user, the duration of their stay, and the need for enhanced security. While Sheffield stands can be sufficient for short stay parking needs, such as local shops or in the town centre, it will seldom meet the needs of longer stay commuters, who will require facilities that are at least covered and well overlooked, if not fully secure lockable facilities. High quality cycle hubs should be considered at strategic locations, such as schools or transport interchanges.

**Figure 3.14. Secure cycle hub (Manchester)**





## 4 STAGE 4: NETWORK PLANNING FOR WALKING

### 4.1 INTRODUCTION

4.1.1. Most roads in the Penrith LCWIP study area have footways for people walking, with minimum footway provision having been a core part of design guidance and scheme delivery for many decades. However, there is still a need to continuously improve conditions for walking, including footway provision where it does not currently exist, helping to unlock increased walking rates within Penrith and surrounding settlements.

4.1.2. As set out in this section, key improvements for walking have been identified within the core town centre areas, which are recognised to be in need of investment and regeneration.

### 4.2 CURRENT & FUTURE ORIGINS AND DESTINATIONS

4.2.1. The LCWIP Technical Guidance notes that identifying demand for a planned walking network should start by mapping the main origin and destination points. Origins and destinations were identified, as shown in Figure 4.1.

### 4.3 IDENTIFYING CORE WALKING ZONES

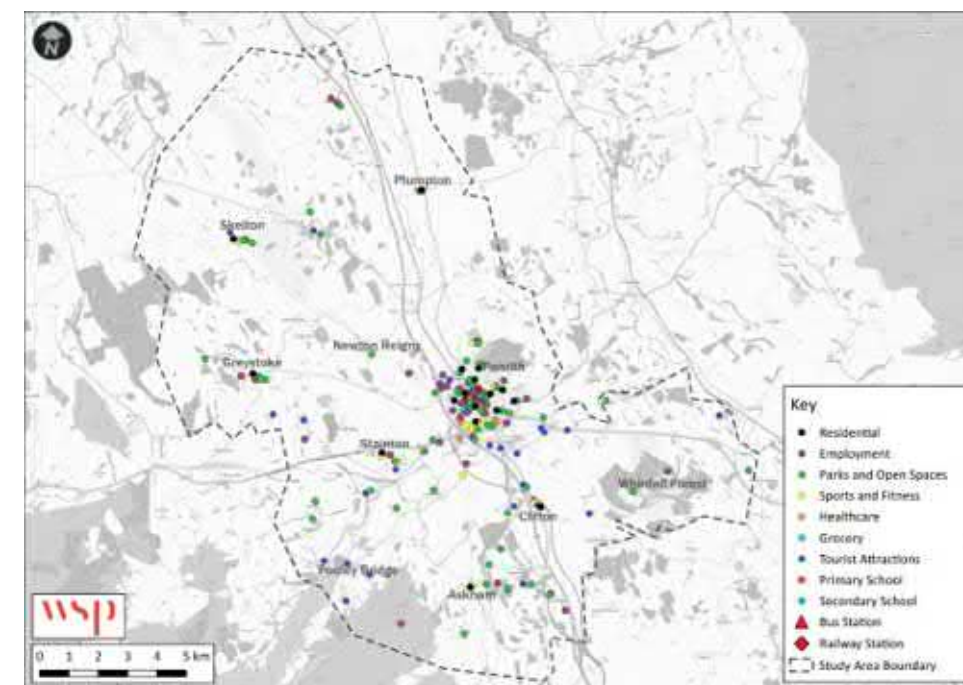
4.3.1. The next stage of the LCWIP process is to identify Core Walking Zones (CWZs), normally consisting of walking trip generators that are located close together – such as town centres or business parks. An approximate five minute walking distance of 400m is used as a guide to the minimum extents of the Core Walking Zones.

**Table 4.1. Penrith CWZs**

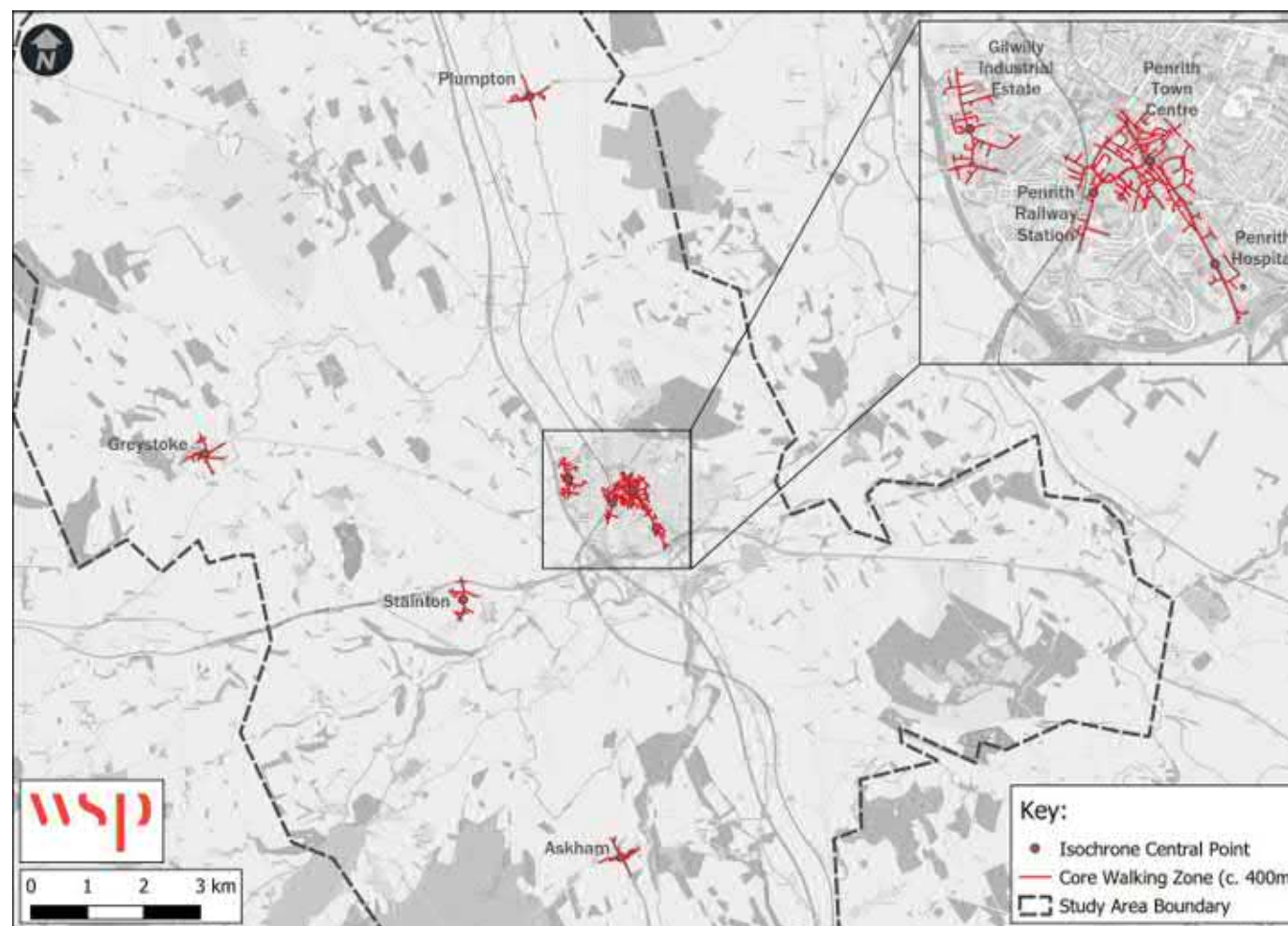
ID	Name
1	Penrith Town Centre
2	Penrith Railway Station
3	Gilwilly Industrial Estate
4	Penrith Hospital
5	Stainton
6	Greystoke
7	Plumpton
8	Askham

4.3.2. Eight CWZs were identified in Penrith through a process of GIS analysis and stakeholder engagement. These are shown in Table 4.1, and displayed spatially in Figure 4.2.

4.3.3. Following the identification of the CWZs, key walking routes to each zone were then identified by mapping a 2km isochrone from the centroid of each CWZ, considered to be the maximum desirable walking distance from the CWZs



**Figure 4.1. Penrith OD Map**



**Figure 4.2. Penrith CWZ Map**



## 4.4 PRODUCING THE DRAFT WALKING NETWORK

- 4.4.1. The routes that could serve the CWZs, as identified by the 2km walking isochrones, must then be rationalised to produce a walking network map.
- 4.4.2. The first step to doing so is to map out the main walking routes, which are those routes identified by the 2km isochrones that most closely follow the desire lines identified through the development of the cycling network, as presented in Section 3. These routes often overlap as a single street can serve multiple CWZs, creating longer corridors used for multiple trip purposes.
- 4.4.3. The next step is to identify those additional routes that can support the main routes and provide a comprehensive network. Given the subtle choices that lead to people determining where to walk and the freedom offered to pedestrians in comparison with vehicles, the determination of these lesser-used routes is done in conjunction with stakeholders and supplemented by local knowledge.
- 4.4.4. Additional links were therefore identified using the information gathered during the Stakeholder Workshop. Stakeholders identified the town centre, transport interchanges, future developments and industrial estates as some of the most important destinations which should be included within the walking network. The **Draft Walking Network** was refined and then agreed with the Project Delivery Group.
- 4.4.5. The importance of each link and route needs to be understood in terms of their overall significance in the network – this will largely relate to the numbers of pedestrians that each will cater for in the future. The following hierarchy was therefore applied to the links in the network:
- Prestige Walking Routes: Very busy areas of towns and cities, with high public space and street scene contribution;
  - Primary Walking Routes: Busy urban shopping and business areas, and main pedestrian routes;
  - Secondary Walking Routes: Medium usage routes through local areas feeding into primary routes, local shopping centres, etc;
  - Link Footways: Linking local access footways through urban areas and busy rural footways.
- 4.4.6. Additionally, a ‘town centre core is identified’; this is defined as a broad area where the number of existing and aspirational

ODs indicate a requirement for such a level of permeability that identifying a single route is not practicable.

- 4.4.7. The resultant draft Walking Network Map is shown in Figure 4.3, with a high resolution image included in Appendix A.

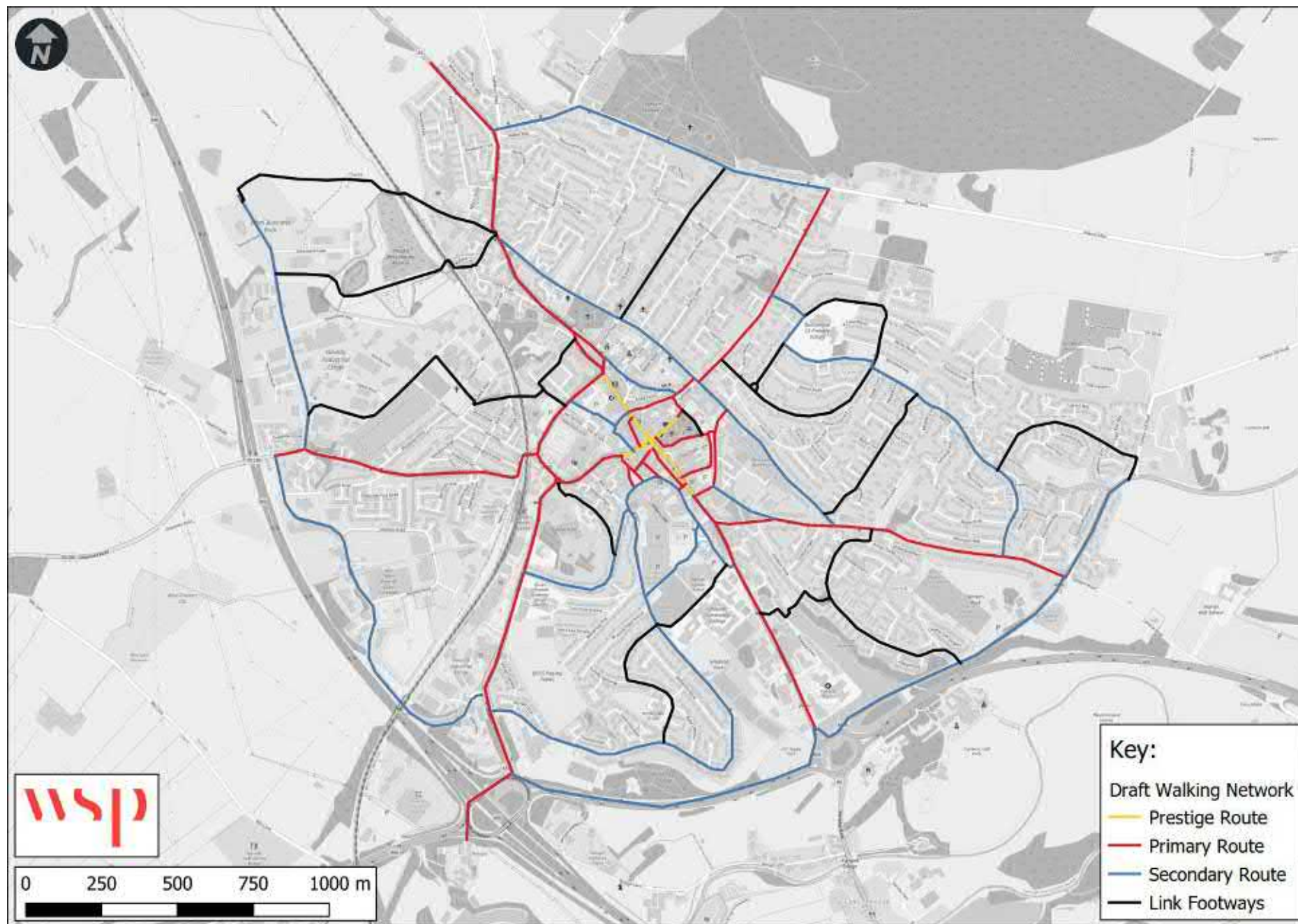


Figure 4.3. Draft Walking Network Map



## 4.5 IDENTIFYING WALKING PRIORITIES

4.5.1. The entirety of the draft Walking Network Map should ideally be audited to identify where improvements might be required in order to enable more people to walk to where they want to go. However, given the size and complexity of the draft network, this would be a significant undertaking and therefore priority routes need to be identified in the first instance.

4.5.2. Initially, a prioritisation exercise has been undertaken in order to identify which routes should be immediately considered for potential improvements. The eight CWZs were assessed against a number of criteria, under the headings of:

- Effectiveness;
- Policy;
- Economic; and
- Deliverability.

4.5.3. The CWZs were ranked as:

- 1: Penrith Town Centre CWZ
- 2: Penrith Railway Station CWZ
- 3: Penrith Hospital CWZ
- 4: Gilwilly Industrial Estate CWZ
- 5=: Stainton CWZ
- 5=: Plumpton CWZ
- 7: Greystoke CWZ
- 8: Askham CWZ

4.5.4. The Primary Walking Routes leading to Penrith Town Centre CWZ were then identified from the Draft Walking Network Map. These routes are identified as:

Ref	Corridor
1	Scotland Road
2	Fell Lane
3	Carleton Road
4	A6 / Bridge Lane
5	Ullswater Road
6	Norfolk Road

4.5.5. The **Penrith Priority Walking Network Map** therefore consists of the Penrith Town Centre CWZ and the six Primary Walking Routes identified above; this is illustrated in Figure 4.4, with a high resolution image included in Appendix A.

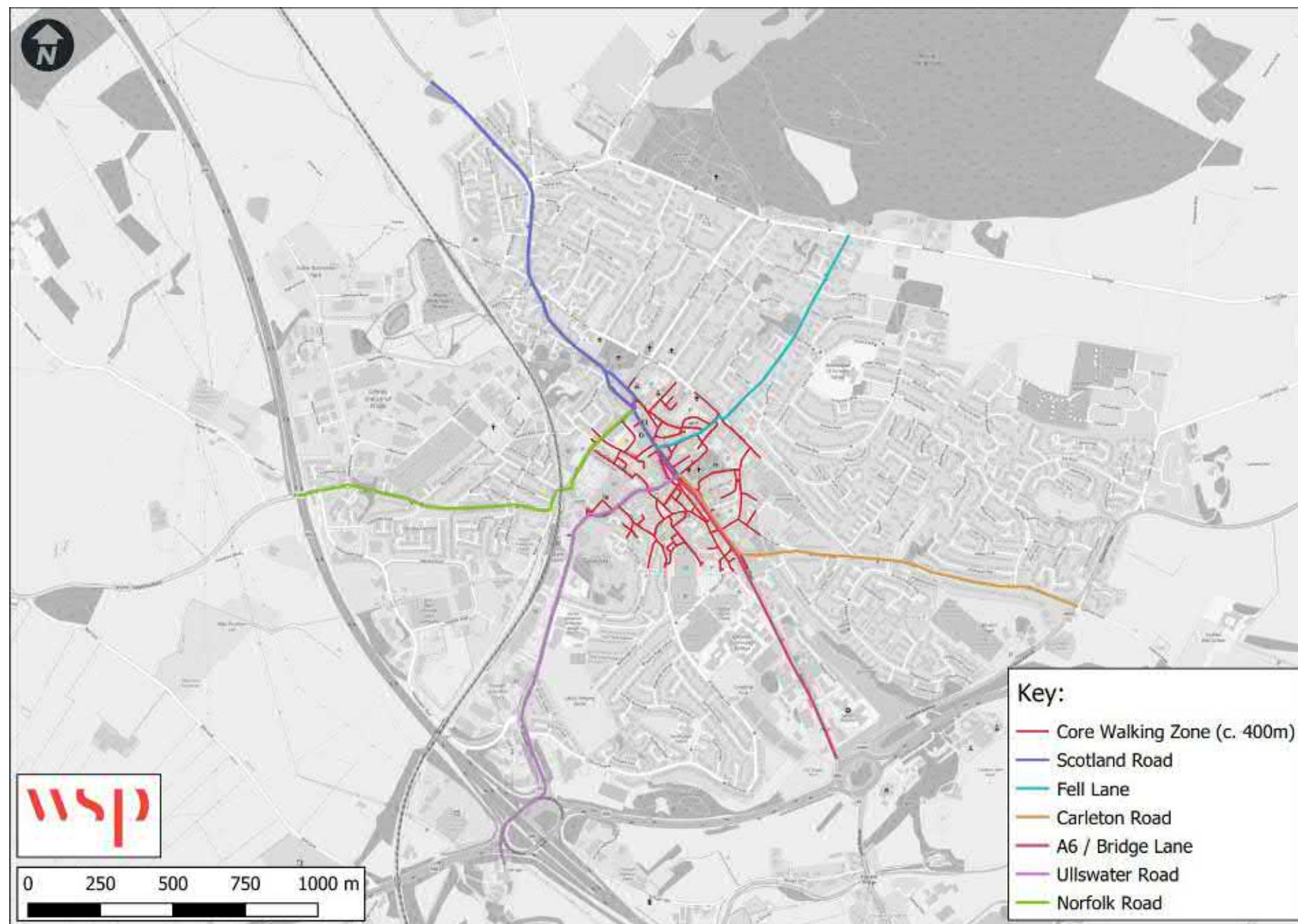


Figure 4.4. Penrith Priority Walking Map

## 4.6 AUDITING KEY WALKING ROUTES AND CORE WALKING ZONES

4.6.1. The next step in the process is to audit the existing walking infrastructure to determine where improvements are needed. Route audits were carried out using the principles of the DfT Walking Route Audit Tool (WRAT). The auditing methodology focuses on five core design outcomes for walking infrastructure:

- Attractiveness;
- Comfort;
- Directness;
- Safety; and
- Coherence.

4.6.2. The assessment particularly considers the needs of vulnerable users who may be elderly, visually impaired, mobility impaired, hearing impaired, with learning difficulties, buggy users, or children in order to ensure that any proposed schemes comply with the Equality Act 2010.

4.6.3. The audit process assigned a 'Red, Amber, Green' (RAG) rating to each of the five core design outcomes, identifying where issues were present, and therefore what intervention might be required to overcome these.

4.6.4. At this early stage in the design process, the proposals identified sit within a package of 13 typical improvements. Where necessary, some bespoke additions have been made, particularly where audited routes fall within other committed or aspirational schemes (e.g. the A66 Northern Trans-Pennine Project).

4.6.5. These typical interventions are:

- Attractiveness:
  - Maintenance;
  - Increase surveillance; and
  - Place-based interventions (greening, streetscape, seating etc).
- Comfort
  - Footway widening; and
  - Parking controls.
- Directness
  - New crossing point on desire line;

- Improve Junction (widen refuge, improved timings, fewer refuges); and
- New access point to buildings / car parks.

- Safety
  - Speed reduction scheme.
- Coherence
  - Drop kerb;
  - Reduced radii;
  - Blended footway; and
  - Wayfinding.

4.6.6. The results of the audits have been mapped out on a route by route basis (including the Core Walking Zone). A summary of the overall package of interventions (the 'scheme') for each route is provided for the purpose of engagement with key stakeholders and the general public.

4.6.7. It should be noted that at this stage in the design process (early Concept), these are very high level recommendations which require significantly more detail in order to determine the feasibility of the various discreet elements.

## 4.7 AUDITING OF ADDITIONAL ROUTES

4.7.1. At this stage in the LCWIP process the Priority Walking Network is considerably reduced in comparison with the draft Walking Network. Going forward, a more comprehensive long term audit process is anticipated to occur in conjunction with additional stakeholder input which will cover significantly more of the wider draft Walking Network Map.

4.7.2. Figure 4.5 illustrates the proposed process that will be followed in order to cover the entirety of the Walking Network. The stages highlighted in red are those presented in this LCWIP document, covering the Primary Walking Routes associated with the highest priority Core Walking Zone. The stages highlighted in blue are those that will need to be undertaken throughout the lifetime of the LCWIP, auditing and determining appropriate improvements for the remainder of the routes identified in the Walking Network Map.

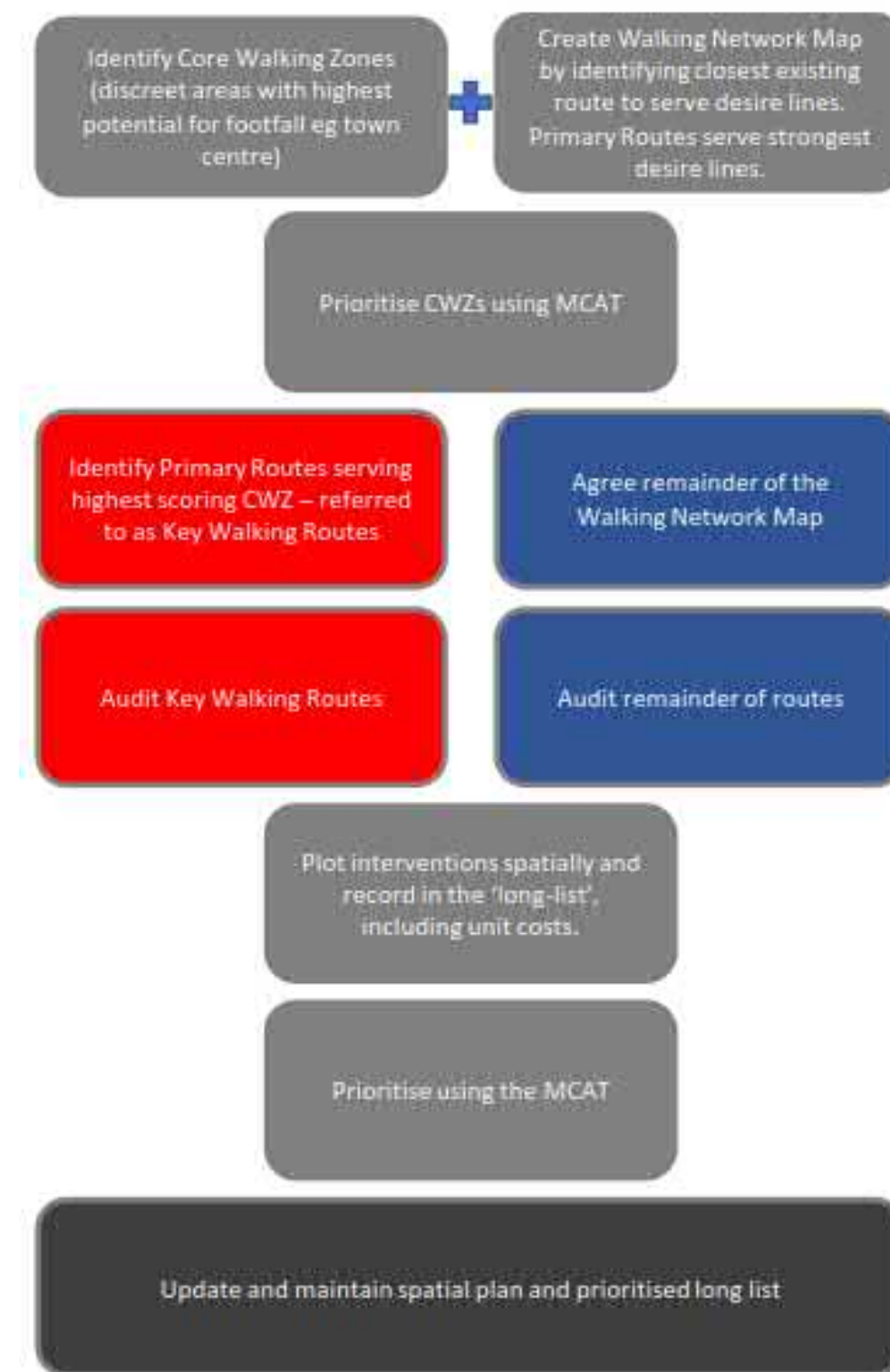


Figure 4.5. Walking Network Map audit process



## 4.8 ENGAGEMENT & CONSULTATION: WALKING

4.8.1. Public consultation has played a key part of the development of the Penrith LCWIP with the presentation of draft priority networks and improvements to seek feedback to inform the development of the LCWIP and ensure the plan has public support..

4.8.2. Public consultation took place in two distinct stages. These were:

- Stage 1: 14th July to 6<sup>th</sup> August 2021; and
- Stage 2: 4<sup>th</sup> February to 25<sup>th</sup> February 2022

4.8.3. The consultation reports following the respective consultation phases can be found at <https://cumbria.gov.uk/planning-environment/cyclingandwalking>

4.8.4. Stakeholder engagement has been undertaken throughout the development of the LCWIP with key stakeholders, primarily through the LCWIP Project Delivery Group (PDG) forum. Members of the PDG are detailed in Stage 6.

### STAGE 1 CONSULTATION

4.8.5. The Stage 1 consultation included a survey aimed at getting feedback on the developing LCWIP and to understand where people want to see improvements.

4.8.6. A total of **209 responses** were received to the Penrith LCWIP questionnaire during the consultation period.

4.8.7. These results were considered by CCC and key stakeholders in the ongoing process of developing the **Priority Walking Network Map**. Feedback was spatially mapped and analysed where this related to a specific place, and used as a criteria in the prioritisation of the CWZs (as described in Section 4.5), as well as in the prioritisation of schemes (presented in Section 5 of this document).

4.8.8. The analysis of the consultation results found that:

- Respondents were overwhelmingly supportive about the idea of more money being spent on cycling and walking in Penrith (91% would like to see this, while 4% would not).
- The main obstacles to walking were busy roads (71 respondents) and difficult junctions to cross (50). Terrain and geography were mentioned as a barrier to walking by five people, the smallest issue raised in terms of number of respondents.

- Better maintained pavements and footways were seen as the most common measure that would encourage more walking in Penrith (56 respondents).

4.8.9. A 'You Said, We Did' summary of the consultation results was also produced, and published as part of the leaflet that accompanied Stage 2 of the consultation. This summarised the most common themes, and explained how these have been addressed in the development of the **Priority Walking Network Map** between Stage 1 and Stage 2 of consultation.

### STAGE 2 CONSULTATION

4.8.10. The Stage 2 consultation was a follow up to the Stage 1 consultation and offered a final opportunity to feedback on the proposals prior to finalising the LCWIP.

4.8.11. The questionnaire asked questions targeted around specific themes, including:

- Gauging level of support for the Priority Network Plans (cycling and walking);
- Whether the network and interventions proposed would encourage the respondent to use active modes more often;
- Whether the respondent would support reduced space for cars to prioritise active modes; and
- Inviting general comments on specific parts of the network.

4.8.12. A total of 58 responses were received to the Penrith LCWIP Stage 2 consultation.

4.8.13. The analysis of the consultation results found that:

- 69% of respondents strongly agreed or agreed with the Priority Walking Map;
- 62% of respondents felt that the Priority Walking Map would encourage them to cycle more often;
- 81% of respondents said that they would support walking and cycling improvements even when this could mean less space for other road traffic.

4.8.14. A 'You Said, We Did' summary of the consultation results was also produced in regards to Stage 2.

- The Stage 2 consultation confirmed support for the networks presented and therefore, no significant changes were made to the Priority Walking Map as a result of the Stage 2 consultation.

## 4.9 LIST OF IMPROVEMENTS: WALKING

- 4.9.1. Following the audits of the priority Core Walking Zone and Primary Walking Routes, high level summaries of the scheme packages proposed for each zone / route were prepared for stage 2 of the public consultation. The outputs of Stage 2 have then refined these scheme packages.
- 4.9.2. The summary of improvements determined for each Primary Walking Route and for the Core Walking Zone is presented in Table 4.1. The table also includes the associated RAG rating determined through the audit process which has led to the identification of the improvements, as well as estimated costs (including indirect costs).

### SCHEME DESCRIPTION

- 4.9.3. It should be noted that the scheme descriptions provide an indication of the type of improvement that it may be possible to deliver on each route based on the opportunities and constraints present. However, this is subject to further design work, engagement, and consultation to determine the best improvement that can be delivered in each location.
- 4.9.4. The implementation of improvements are also subject to the securing of sufficient funding.

### IMPROVEMENT COSTS

- 4.9.5. The cost estimates presented here are in the following ranges:
- £0-£1m;
  - £1m-£3m;
  - £3m-£5m; and
  - £5m+
- 4.9.6. The ranges selected can give an indication of the method of funding that may be required in order to deliver an improvement in its entirety.

### Total improvement costs

- 4.9.7. The overall cost of the delivery of the Priority Walking Network for Penrith is currently estimated at approximately £10 million to improve circa 9km of high quality walking routes.



**Table 4.1. Walking Improvements**

ID	Route Assessment (RAG Rating)					Scheme Description	Cost Range
	Attractiveness	Comfort	Directness	Safety	Coherence		
<b>WR1</b> Scotland Road	Yellow	Red	Red	Yellow	Yellow	<p>Investigate opportunities for blended crossings or continuous footways at side streets reinforcing pedestrian priority.</p> <p>Explore options to improve crossing provision at Duke Street/Middlegate/Courney Square/Brunswick Road and Duke Street/Wilson Row/Stricklandate, potentially considering narrowing the carriageway in places and implementing new public realm / greening to allow ease of access for those with mobility impairments and reduce the vehicle dominance of the street.</p> <p>Consider options for improving the Scotland Road/ Salkeld Road/Inglewood Road junctions, which may require new footway provision and potential signalisation to provide better pedestrian facilities.</p> <p>Extend the existing eastern footway to the new developments on Scotland Road for contiguous provision.</p>	£1m - £3m
<b>WR2</b> Fell Lane	Yellow	Red	Yellow	Green	Green	<p>Investigate opportunities for blended crossings or continuous footways at side streets, reinforcing pedestrian priority.</p> <p>Explore options to convert Fell Lane into a one-way street. This would provide opportunity for on-road parking to be formalised, along with the existing footway to be widened.</p> <p>Explore opportunities to install new lighting and improve active and natural surveillance potentially through use of CCTV and improved sightlines, particularly along the section of the route between Beacon Square and Sand Croft.</p>	£1m - £3m
<b>WR3</b> Carleton Road	Yellow	Red	Yellow	Yellow	Yellow	<p>Investigate opportunities for blended crossings or continuous footways at side streets, reinforcing pedestrian priority.</p> <p>Improve the streetscape through minor public realm, planting / greening and installing additional benches along the route.</p> <p>Provision of traffic calming measures, where appropriate, in order to enhance the route for active modes.</p>	£0 - £1m
<b>WR4</b> A6 / Bridge Lane	Yellow	Yellow	Red	Yellow	Yellow	<p>Investigate opportunities for blended crossings or continuous footways at side streets, reinforcing pedestrian priority.</p> <p>Improve Victoria Road/Bridge Lane/Southend Road junction. Study to be undertaken to understand what pedestrian improvements can be made. These could include changing signal timings to reduce pedestrian wait time.</p> <p>Improve pavement evenness and reduce potential trip hazards by resurfacing or replacing cracked paving slabs.</p> <p>Where possible, widen pavements at narrow sections. This would likely be done alongside cycle infrastructure provision where width was available.</p>	£1m - £3m

ID	Route Assessment (RAG Rating)					Scheme Description	Cost Range
	Attractiveness	Comfort	Directness	Safety	Coherence		
<b>WR5</b> Ullswater Road						Improve wayfinding and signage provision to/from key origins and destinations, such as Penrith Train Station. Deliver a significant placemaking/landscaping scheme along Castlegate to enhance the main route between the town centre and the rail station, such as planting / greening, provision of seating and new bins. Explore opportunities to install new lighting and potentially CCTV to improve the feeling of safety and surveillance along Castlegate. Implement new crossing provision at Cromwell Road/Ullswater Road mini roundabout. Where possible, consider narrowing the carriageway and reducing the impact of this large junction on the streetscape. Provide more regular crossing points between the east and the west side along Ullswater Road to facilitate access to multiple trip destinations. Consider additional crossing points on the Haweswater Road / A592 roundabout to better cater for pedestrian desire lines and incorporate safe crossing for cyclists.	£1m - £3m
<b>WR6</b> Norfolk Road						Investigate opportunities for blended crossings or continuous footways at side streets, reinforcing pedestrian priority. Where possible, widen pavements at narrow sections on Norfolk Road to increase pedestrian comfort. Deliver minor placemaking/landscaping elements such as planting/greening and local street art along Norfolk Road between Howard Street and Norfolk Road/Brunswick Road/Cromwell Road roundabout. Explore opportunities to install new lighting to improve the feeling of safety and surveillance along Norfolk Road between Howard Street and Norfolk Road/Brunswick Road/Cromwell Road roundabout. Explore options to improve crossing provision and design of Norfolk Road/Brunswick Road/Cromwell Road roundabout. Investigate a new access point to Morrisons adjacent to the existing crossing point and desire line between the key destinations.	£1m - £3m
<b>CWZ1</b> Penrith Town Centre						Enhance the local streets and routes immediately into the town centre through consistent provision of placemaking/landscaping elements such as local art installations, planting/greening, and provision of seating. Investigate the possibility of traffic flow restrictions during footstreet hours between Middlegate/Devonshire Street, King Street/Crown Square, and Castlegate/Great Dockray to increase footfall in the town centre. Particularly focus placemaking interventions and complementary traffic calming measures along Princes Street and Great Dockray. Provide additional crossing points at various points, for example at Princes Street and Bowling Green Lane. Undertake an in-depth review of existing pedestrian wayfinding and signage provision and identify opportunities to improve across the town centre. Look to rationalise car parking where the location might encourage high levels of traffic on town centre routes and be detrimental to the enjoyment of the streets.	£1m - £3m



## 4.10 TYPES OF IMPROVEMENTS

4.10.1. Improvements were developed according to the latest design standards, with key improvement types shown below.

### MAINTENANCE

4.10.2. Where this is highlighted as an issue, the route likely requires immediate maintenance to bring it to standard, and it may be that a longer term programme of maintenance needs to be developed in order to ensure that this route is maintained to a standard commensurate with its importance in the active travel network.

### INCREASE SURVEILLANCE

4.10.3. Increased surveillance can increase both the perception of and actual level of safety for users. This can be through technology, such as CCTV or 'help' points, or natural surveillance such as that afforded by good sightlines (which could be linked to maintenance), higher levels of activity, additional access points and permeability, or police patrols where deemed necessary.

### PLACE-BASED INTERVENTIONS (GREENING, STREETSCAPE, SEATING ETC)

4.10.4. These are measures that enhance the look and feel of an area, including tree planting, street art, paving, seating, and other features to make public spaces more attractive. This is likely to be very bespoke to each area where required, but can be as simple as planting, such as trees or rain gardens (perhaps as part of Sustainable Urban Drainage Systems), or could be significant changes involving use of materials, sculpture, art installations, or water features.

Figure 4.6. Public Realm



### FOOTWAY WIDENING

4.10.5. While minimum footway width guidance has changed over the decades, Transport for London's Pedestrian Comfort Guidance is based on the level of comfort that width provides to users, rather than generic recommendations. However, widening the footway can be problematic, particularly where superfluous carriageway doesn't exist. Where this is recommended, it may be most feasible where undertaken alongside cycle schemes which also require significant changes to the highway.

### PARKING CONTROLS

4.10.6. Where indiscriminate parking creates an issue for pedestrians, this could be due to various issues and a bespoke solution is likely to be required. This could be through provision of dedicated bays on carriageway, appropriate parking permit schemes, or perhaps greater enforcement of existing restrictions.

Figure 4.7. Buildouts with SUDs



### NEW CROSSING POINT ON DESIRE LINE

4.10.7. Where across a major road, this is likely to be a new dedicated crossing point. A more detailed study would be required to determine the exact type and what additional changes may be required in order to implement it.

### IMPROVE SIGNALS (WIDEN REFUGE, IMPROVED TIMINGS, FEWER REFUGES)

4.10.8. This category also includes changes to other junction types, such as roundabouts, that may not offer facilities for other road users at all. Altering any junction is likely to incur significant costs, and additional feasibility work including a traffic impact assessment is likely to be required.

Figure 4.8. Improved signalised junction (Enfield)





### NEW ACCESS POINT TO BUILDINGS / CAR PARKS

4.10.9. This is likely to include new access points on desire lines where these have not been provided as part of the development. These may require third party agreement.

### SPEED REDUCTION SCHEME

4.10.10. Any speed reduction scheme needs to be self-enforcing, and the methods employed to do so effectively will be bespoke to the specific location. This could be through enforcement cameras (including average speed limit zones), or through physical traffic calming measures, but could also be through a wider scheme which changes the fundamental purpose and feel of a street, including public realm, parking controls, and reduced kerb radii.

**Figure 4.9. Raised table junction**



### DROP KERB / TACTILE PAVING

4.10.11. Dropped kerbs provide level access for pedestrians between the footway and carriageway. They are essential for the majority of wheelchair users to provide them with an accessible means of crossing a road safely and coherently. Tactile paving helps people with sight impairments understand the street and crossing points.

4.10.12. It is very important for visually impaired people that tactile paving is present, correct and adheres to standards as it can communicate to visually impaired pedestrians' information about the environment that they are in.

4.10.13. These should now be provided as standard, but many locations still lack them where these need to be retro-fitted.

### REDUCED RADII

4.10.14. Manual for the Streets highlights the importance of kerb radii in inducing vehicle speeds and affecting pedestrians' ability to cross minor roads on their desire line. Where it is safe to do so, a reduced kerb radii can be carried out in conjunction with other interventions (such as a speed reduction scheme or blended footway) to create a low speed environment where pedestrians are afforded priority over vehicles.

### BLENDED FOOTWAY

4.10.15. 'Blended footways' describe a footway which continues over the minor arm of a priority junction, enforcing the highway code (rule 170) through good design. These can be implemented through various techniques, including at carriageway level, raised tables (footway level), use of materials, and the positioning of road markings. The appropriate design solution will need to be determined in each instance.

**Figure 4.10. Blended Footway**



### WAYFINDING

4.10.16. This intervention encompasses all of the ways in which people orient themselves and navigate from place to place. Wayfinding improvements could be as simple as directional and distance signage at key junctions, but could also be larger maps or even interactive screens where appropriate (such as a town centre).

**Figure 4.11. Information and wayfinding (Sheffield)**





## 5 STAGE 5: PRIORITISATION

### 5.1 OVERVIEW

- 5.1.1. Stage 5 of the LCWIP process involves prioritisation of improvements to create a programme of cycling and walking schemes and provide high level costings.
- 5.1.2. The guidance states that priority should be given to improvements that are most likely to have the greatest impact on increasing the number of people who choose to walk and cycle, and therefore the greatest return on investment. Other factors may also influence the prioritisation of improvements such as the deliverability of the proposed works or opportunities to link with other schemes.

### 5.2 PRIORITISING SCHEMES

- 5.2.1. A prioritisation framework has been produced to ensure consistency when prioritising walking and cycling infrastructure improvements. The framework includes the following criteria:
- **Effectiveness** - based on the potential number of walking or cycling trips that might use the route.
  - **Alignment with policy objectives** – considering the Cumbria Transport Infrastructure Plan, local priorities and alignment with ongoing workstreams
  - **Economic factors** - including scheme cost, value for money and likelihood of attracting funding.
  - **Deliverability issues** - including engineering constraints, land ownerships and level of stakeholder support.
- 5.2.2. The full assessment criteria and scoring methodology applied is provided in Table 5.1.

### 5.3 PRIORITISED LIST OF CYCLING INTERVENTIONS

- 5.3.1. The results of the prioritisation exercise for Cycling schemes are summarised in Table 5.2.

#### DELIVERY TIMESCALES

- 5.3.2. The improvements have been organised into four distinct categories. These are:
- **Funded:** These improvements are already funded;
  - **Priority 1:** These improvements are targeted for delivery within 3 years (2022/23 to 2024/25) subject to funding;

- **Priority 2:** These improvements are targeted for delivery within 4 to 10 years (by 2025/26 to 2031/32) subject to funding; and
- **Priority 3:** These improvements are targeted for delivery post 2032/33 to 2036/37 subject to funding.

- 5.3.3. The improvements have been assigned to the delivery categories as follows:

#### Funded

- 5.3.4. These are improvements that form an integral part of the LCWIP network and have already secured funding. At this point in the study, no schemes have committed funding.

#### Priority 1

- 5.3.5. These are improvements which have already seen funding bids submitted as early opportunities have become available, including Kemplay Bank Roundabout Improvements.

#### Priority 2

- 5.3.6. These are improvements which constitute the core of the LCWIP network. These are located along the most feasible and deliverable sections of the Priority Network and build upon the improvements delivered through the Priority 1 phase. These include Town Head to Newton Rigg, and A6/Kemplay Bank to River Lowther corridors.

#### Priority 3

- 5.3.7. These are improvements that extend the network further along more complex or expensive sections that are likely to take longer to come forward. These include sections such as the Bus Station to Stagstones Road.
- 5.3.8. It is recognised that the delivery timescales do not all align with the prioritisation framework scoring also undertaken. The delivery timescales have been determined based on key factors affecting deliverability, as well as geographical proximity to one another, ensuring that the overall network comes forward in a planned coherent way. The prioritisation framework scoring can help inform the strategic rationale for a section when appropriate funding opportunities are identified.

## 5.4 WALKING IMPROVEMENTS

- 5.4.1. While the walking improvements could be delivered in isolation, where these overlap with the Priority Cycle Network it is expected that the improvements would be delivered together (assuming funding is available), with any scheme delivering high quality active travel routes.
- 5.4.2. In Penrith, most of the Primary Walking Routes overlap with a Priority Cycle Network improvement. Table 5.2 clearly indicates which priority cycle routes overlap with which priority walking routes. While some of the Priority Cycle Network improvements overlap with the Core Walking Zone, the routes in the CWZ are more extensive and there is a greater focus on placemaking and public realm, limiting the potential for synergy between the two modes.
- 5.4.3. Where routes do not align with priority cycle improvements (such as parts of the Scotland Road and Norfolk Road Primary Walking Routes), these could be delivered on an entirely separate basis, potentially on a street or area basis or through small localised improvements depending on complexity and funding availability. For this reason, those routes that do not align with a priority cycle improvement have not been prioritised. It is expected that these will be delivered on an ad-hoc basis as funding becomes available.

**Table 5.1. LCWIP Prioritisation criteria and scoring**

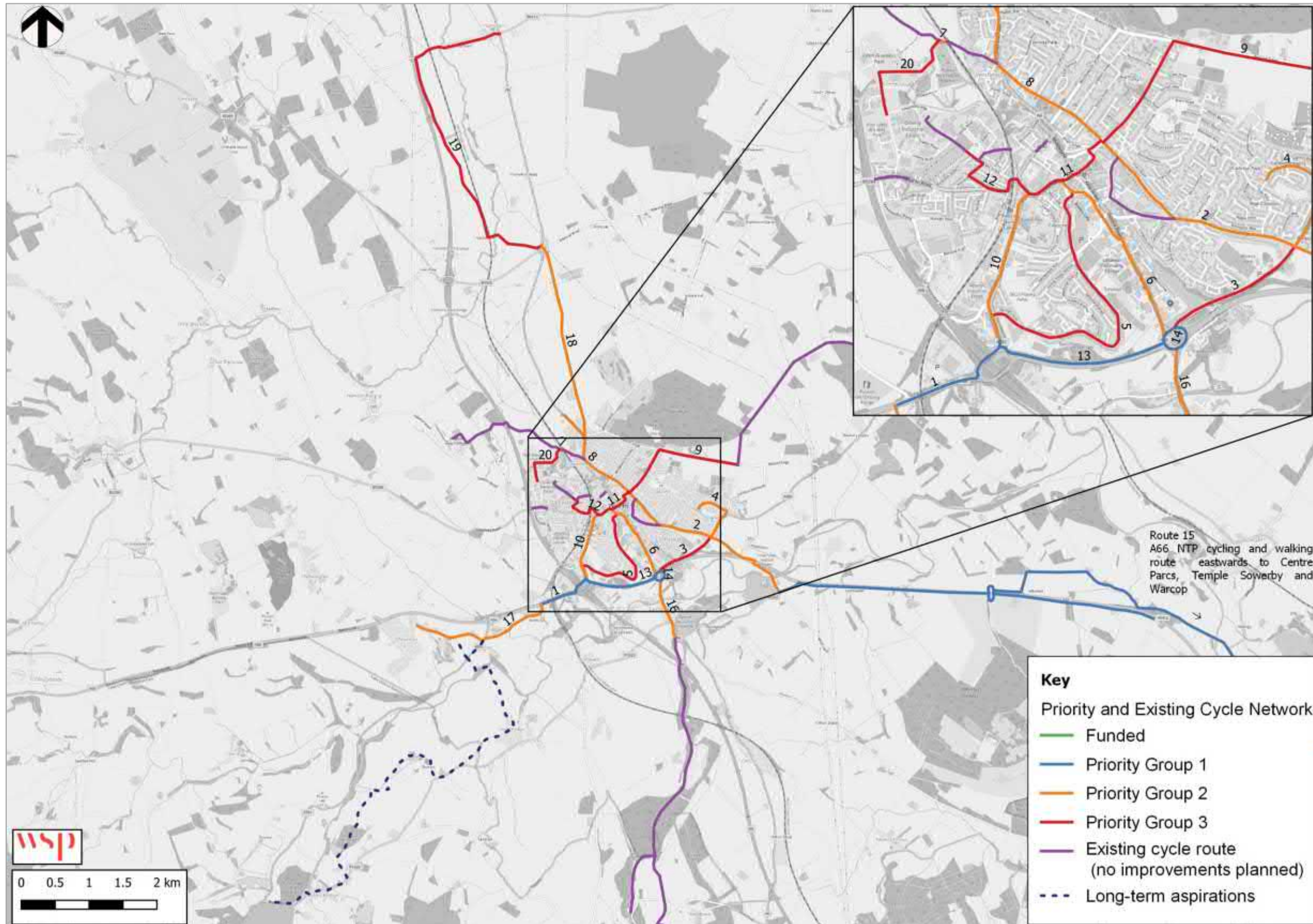
Ref	Category	Criteria	Definition	Source	Low (0)	Intermediate (1)	High (2)
1	Effectiveness	Catchment population	Population within the corridor or CWZ	Experian Mosaic	< 4,000 people	4,000 - 8,000 people	> 8,000+ people
2	Effectiveness	Propensity to Cycle	Forecast number of journeys to work using the corridor in the Government Target Near Market scenario (LSOA)	PCT (2011 Census)	< 50 cyclists	50 - 100 cyclists	> 100 cyclists
3	Effectiveness	Walking as a method of travel to work	Method of travel to work (Datashine) LQ is the Location Quotient and describes how far from the national average (LQ =1) the measure is.	Datashine (2011 Census)	LQ <1	LQ 2-3	LQ 4 +
4	Effectiveness	Existing employment	Number of workplace zone centroids within the corridor or CWZ	WSP OD mapping	< 5 Workplace Zone Centroids	5 - 10 Workplace Zone Centroids	> 10 Workplace Zone Centroids
5	Effectiveness	Attractor score	Attractors within the corridor or CWZ (excluding airports / train stations, hospitals, industrial estates, education establishments)	WSP OD mapping	< 10 attractors	10 - 19 attractors	> 19 attractors
6	Effectiveness	Education	Number of schools / colleges / universities within the corridor (a 500m radius)	WSP OD mapping	No schools	1 - 4 schools	5 or more schools
7	Effectiveness	Transport interchanges	Proximity to a transport interchange (train stations, bus stations or park and ride sites)	WSP OD mapping	> 1km from a transport interchange	500m - 1km from a transport interchange	< 500m from a transport interchange
8	Effectiveness	Development sites	Number of future housing / employment sites within the corridor or CWZ (500m radius)	WSP OD mapping	No sites	1-3 sites	> 3 sites
9	Effectiveness	Leisure and Tourism	Access to green and blue space (Parks, Coasts, Local tourist destination sites)	WSP OD mapping	No sites within 500m radius	1-3 sites within 500m radius	> 3 within 500m radius
10	Policy	Alignment with ongoing workstreams	Does the corridor or CWZ align with other schemes or other planned transport improvement?	CCC	No	----- ----	Yes
11	Policy	Safety	Number of hotspots involving pedestrians or cyclists in the previous 5 years within the corridor (500m radius)	DfT (STATS19)	< 5 hotspots	5 - 10 hotspots	> 10 hotspots
12	Policy	Car ownership	Percentage of households with no car / van	2011 Census	< 25% of households	25% - 40% of households	> 40% of households
13	Policy	Health	Lowest Health Deprivation and Disability criteria in the IMD (i.e. most deprived LSOA) within the corridor or CWZ	IMD	>= 6 deciles of health deprivation and disability in the IMD	3< >6 deciles of health deprivation and disability score in the IMD	<= 3 deciles of health deprivation and disability in the IMD
14	Policy	Air Quality	Does the route travel through an Air Quality Management Area?	CCC	No (or no route option will travel through the AQMA)	----- ----	Yes
15	Economic	Scheme Cost	Total scheme cost estimates for package of interventions	Cost estimates	> £5 million	£2 - 5 million	< £2 million
16	Economic	Value for Money	Assessment of scheme benefits vs costs	Based on current/future demand and costs	Low demand relative to high cost	Medium demand relative to medium costs	High demand relative to low costs
17	Deliverability	Scheme Feasibility	Known land ownership issues or scheme dependencies	CCC	Land ownership, environmental or other issue unlikely to be overcome	Dependent on another scheme or third party land, or environmental constraints, likely to be overcome	No issues, scheme feasible to be undertaken
18	Deliverability	Public Acceptability	Likelihood of support or opposition for the scheme	CCC	Likely to be opposition	Neutral / unknown	Likely to be supported
19	Deliverability	Political Acceptability	Likelihood of support or opposition for the scheme	CCC	Likely to be opposition	Neutral / unknown	Likely to be supported
20	Deliverability	Timescales	Timescales for delivery	CCC	Long (deliverable in 8+ years)	Medium-term (deliverable within 8 years, where there is a clear intention to act, but delivery is dependent on identifying funding or other issues)	Short-term (deliverable within 5 years and funding identified)



Table 5.2. LCWIP Priorities: Cycling

Rank	ID	Name	Effectiveness	Policy	Economic	Deliverability	Cost	Delivery Timescales	Associated Walking Routes
14	14	Kemplay Bank Roundabout Improvements	1	4	0	5	£5m+	Priority Group 1	
19	15	Frenchfield Eastwards to Centre Parcs and the Eden Valley	3	0	2	4	£3m - £5m	Priority Group 1	WR1 / WR6 / CWZ1
12	1	Redhills Business Park to Skirsgill Interchange	4	2	3	5	£1m - £3m	Priority Group 1	
11	13	Skirsgill to Kemplay Bank	5	5	0	5	£5m+	Priority Group 1	
14	4	Carleton	2	2	1	5	£1m - £3m	Priority Group 2	
13	7	Town Head to Newton Rigg	6	0	1	4	£3m - £5m	Priority Group 2	
2	2	Benson Row, Folly Lane and Carleton Road	10	4	3	7	£1m - £3m	Priority Group 2	WR3
6	6	Town Centre to Kemplay Bank Roundabout	12	4	0	5	£5m+	Priority Group 2	WR 4
14	16	A6/Kemplay Bank to River Lowther	3	0	4	3	£1m - £3m	Priority Group 2	
14	17	Stainton to Redhills	3	0	2	5	£3m - £5m	Priority Group 2	
14	18	Inglewood Road	4	0	2	4	£3m - £5m	Priority Group 2	
8	8	Bus Station to North Fair Hill	11	2	1	5	£5m+	Priority Group 2	WR1 / CWZ1
2	10	Railway Station to Skirsgill Interchange	11	6	1	6	£3m - £5m	Priority Group 2	WR5
9	20	Thacka Lane to Gillwilly	6	1	4	5	£0 - £1m	Priority Group 3	
1	11	Castle Park to Bus Station	13	5	2	5	£1m - £3m	Priority Group 3	CWZ1
9	3	A686 Carleton Ave	3	4	3	6	£0 - £1m	Priority Group 3	
7	9	Bus Station to Stagstones Road	9	2	3	6	£1m - £3m	Priority Group 3	WR2
2	12	Castle Park to Gilwilly Lane	13	3	3	5	£3m - £5m	Priority Group 3	WR6
5	5	Clifford and Castle Hill Roads	12	3	1	7	£1m - £3m	Priority Group 3	
20	19	A6/Stoneybeck Inn to Plumpton	3	0	2	2	£3m - £5m	Priority Group 3	

Figure 5.1. Penrith Priority Cycling Network – Prioritised Delivery Plan





## 6 STAGE 6: INTEGRATION & APPLICATION

### 6.1 INTEGRATING THE LCWIP

6.1.1. The final stage of the LCWIP process considers how the LCWIP should be integrated into local policy, strategies and plans, as well as practical applications of the outputs of the LCWIPs.

#### GOVERNANCE

6.1.2. An LCWIP Project Team has been established to produce the LCWIPs, consisting of officers from Cumbria County Council's Infrastructure Planning team. Technical assistance was provided by WSP in the development of the first phase of the Penrith LCWIP between 2020 and 2022.

6.1.3. The LCWIP Project Team report to the Cycling and Walking Programme Delivery Group (PDG). Individual PDGs have been set up for each LCWIP study area. The PDGs maintain an overview of the project and provide support and technical direction during the delivery of the programme to ensure that the objectives and key milestones are met. The group includes a range of internal and external stakeholders to ensure a coordinated approach that will maximise success.

6.1.4. Members of the Penrith LCWIP PDG include representatives from the following:

- Cumbria County Council
  - Cycling and Walking Team
  - Eden Area Manager & Community Development Officer
  - Highways & Transport Traffic Management Team
  - Highways & Transport Eden Network Manager;
- Eden District Council;
- Penrith Town Council.

6.1.5. The Penrith Cycling and Walking Project Delivery Group reports to the Directorate Management Team of the Economy and Infrastructure Directorate.

6.1.6. The governance structure for the Cumbria LCWIP programme is presented in Figure 6.1.

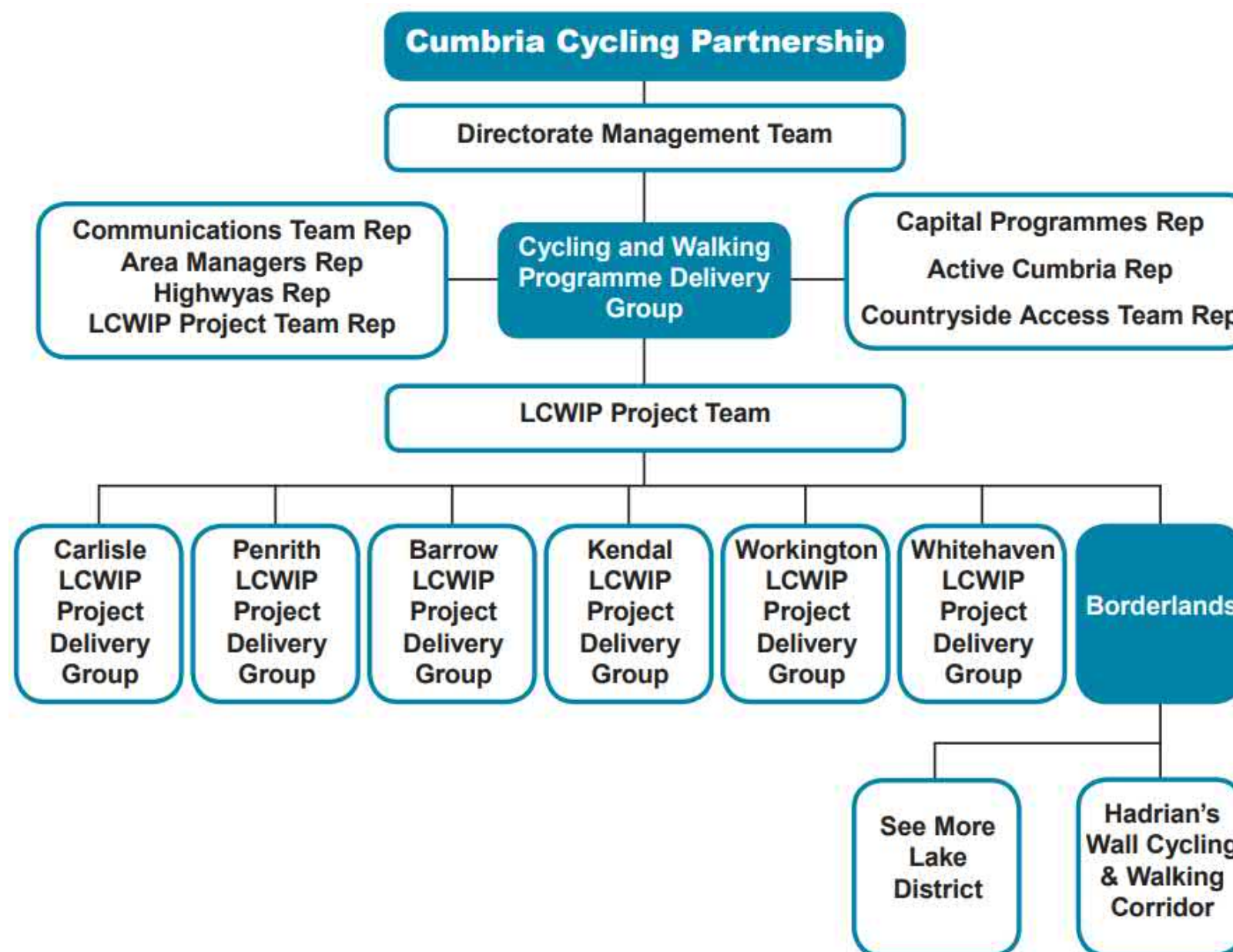


Figure 6.1. Cumbria LCWIP Governance Structure

## STAKEHOLDER ENGAGEMENT & PUBLIC CONSULTATION

- 6.1.7. Effective engagement with stakeholders is integral throughout the development and delivery of an LCWIP to provide the opportunity for local people to express their views and input to the proposals. It is also imperative to engage with more vulnerable user groups, in particular those with protected characteristics as defined in the Equalities Act 2010. This will ensure that all relevant issues are considered when identifying interventions and it should increase support for the LCWIPs.
- 6.1.8. Key consultees include:
- County Councillors;
  - County Council Officers;
  - City / district and Borough Councils;
  - Town Councils;
  - Parish Councils;
  - Local businesses
  - Education providers;
  - Police;
  - Cycle and walking clubs and organisations; and
  - Disability groups.
- 6.1.9. Two rounds of public consultations have been undertaken to date on the Penrith LCWIP:
- Jul-Aug 2021: Consultation on draft networks;
  - Feb 2022: Consultation on updated draft networks ahead of their finalisation.
- 6.1.10. Further consultation will be undertaken as priority schemes are developed following identification of appropriate funding opportunities. Community input will be central to the development of LCWIP proposals.

## INTEGRATION

- 6.1.11. The PDG will be responsible for the integration of the LCWIP outputs in to local policy. This will help ensure that emphasis is given to cycling and walking within both local planning and transport policies, strategies and delivery plans. Reflecting the LCWIP in local policy will also help to make the case for central government funding

## 6.2 SECURING FUNDING & SCHEME DELIVERY

- 6.2.1. The LCWIP sets out the case for future funding for cycling and walking infrastructure. As set out in the section above there

are a number of compelling reasons for central government to invest in active travel infrastructure in Penrith.

- 6.2.2. The PDG will seek to identify appropriate funding sources to deliver the aspirations of the Penrith LCWIP. This will include local contributions, developer contributions, central government funding opportunities and other innovative funding mechanisms as appropriate to the scale of improvements.

## 6.3 MONITORING AND EVALUATION

- 6.3.1. Monitoring and evaluating the benefits of investment in delivering the LCWIP schemes will be critical, and will enable us to make the case for future investment in our streets. Monitoring and Evaluation will be undertaken in accordance with the methodology outlined in the CTIP and will be cognisant with the specific requirements from any emerging funding stream.

## 6.4 REVIEWING & UPDATING THE LCWIP

- 6.4.1. It is anticipated that LCWIPs will be reviewed every 3 to 5 years to reflect progress made. LCWIPs may also be updated if there are significant changes in local circumstances, such as the publication of new policies or strategies, major new development sites, or new sources of funding.

## 6.5 PROMOTION AND BRANDING

- 6.5.1. The Cumbria LCWIP programme will be supported by a package of marketing and promotional activities to maximise awareness and usage of our active travel networks.

## 6.6 DELIVERY OF PRIORITY SCHEMES

- 6.6.1. The schemes outlined in this document represent almost £59m investment in 28km of high quality cycling and walking routes.
- 6.6.2. This equates to almost £55 per person per year over a 20-year time period, based on the resident population. It would bring active travel spending up to levels seen in leading countries such as the Netherlands, and leading cities in the UK.
- 6.6.3. This demonstrates a step-change in the focus on active travel in Penrith, and will be highly dependent on successful funding bids to central government. There are a number of factors which strengthen the likelihood of increased central government funding for active travel in Penrith, including:

- Increased overall funding for active travel, with £2bn for cycling announced and further spending announcements likely over the lifetime of this LCWIP
- Recognition of the need for increased funding and regeneration outside London and core cities to “level up” the country, especially to regenerate town centres and seaside towns
- The need for a green recovery from the Coronavirus crisis and the need to tackle the climate crisis.

- 6.6.4. The priority improvements identified will deliver a range of benefits to public health, local economy and tourism, land value uplift, decongestion, road safety and carbon savings – all of which are expected to be significant. Most walking and cycling schemes represent very good value for money, providing greater benefit to society than the cost of the scheme.

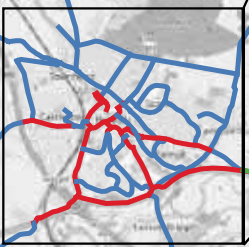
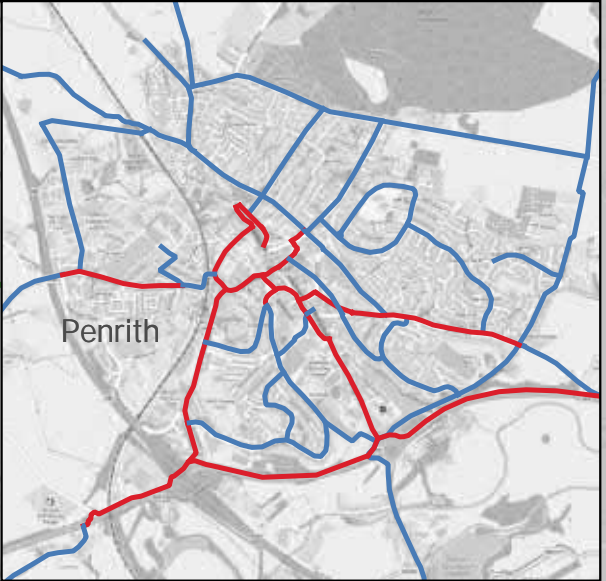
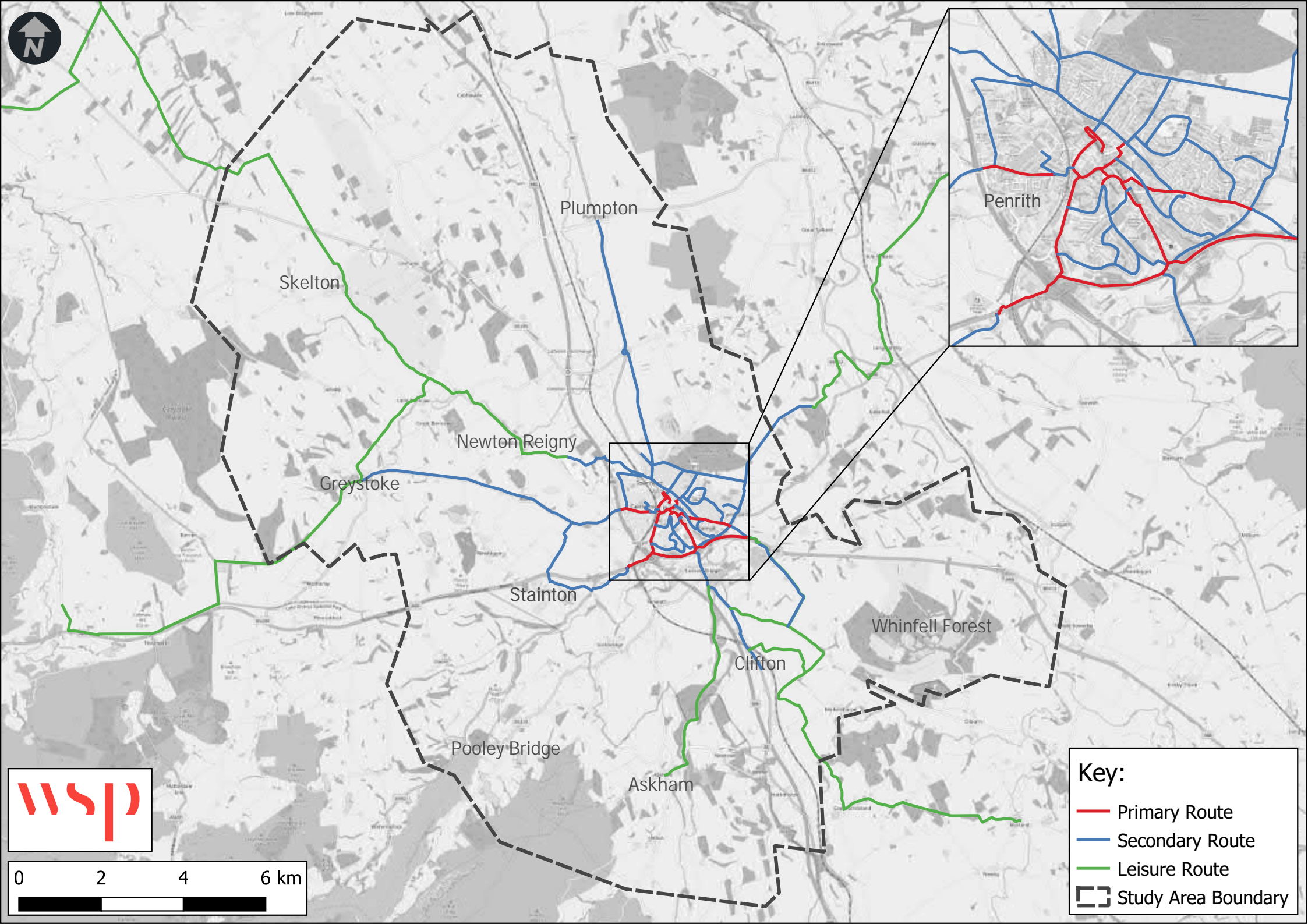
- 6.6.5. This LCWIP has identified priority walking and cycling networks to be delivered across Penrith, and has selected the priority schemes to be delivered within the first fifteen years of the programme.

- 6.6.6. These schemes will help to deliver significant local benefit, and align with wider investment in strategic routes across the county.



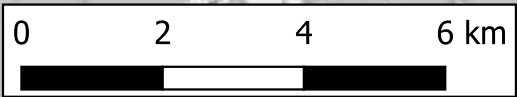
# Appendix A

## LCWIP NETWORK PLANS



**Key:**

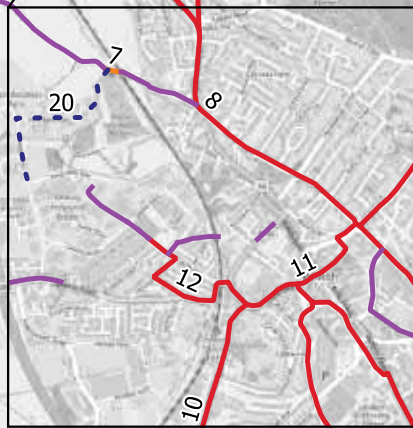
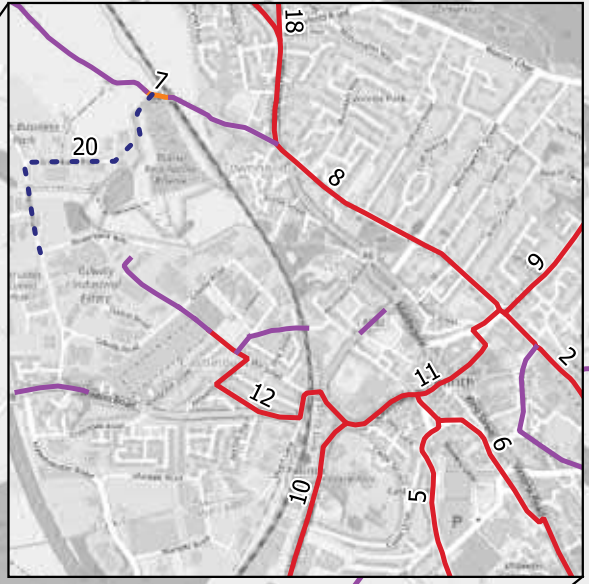
- Primary Route
- Secondary Route
- Leisure Route
- Study Area Boundary





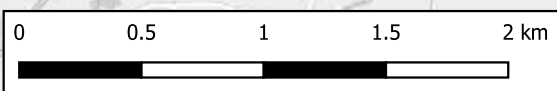


Route 19 (Aspirational link)  
to Plumpton



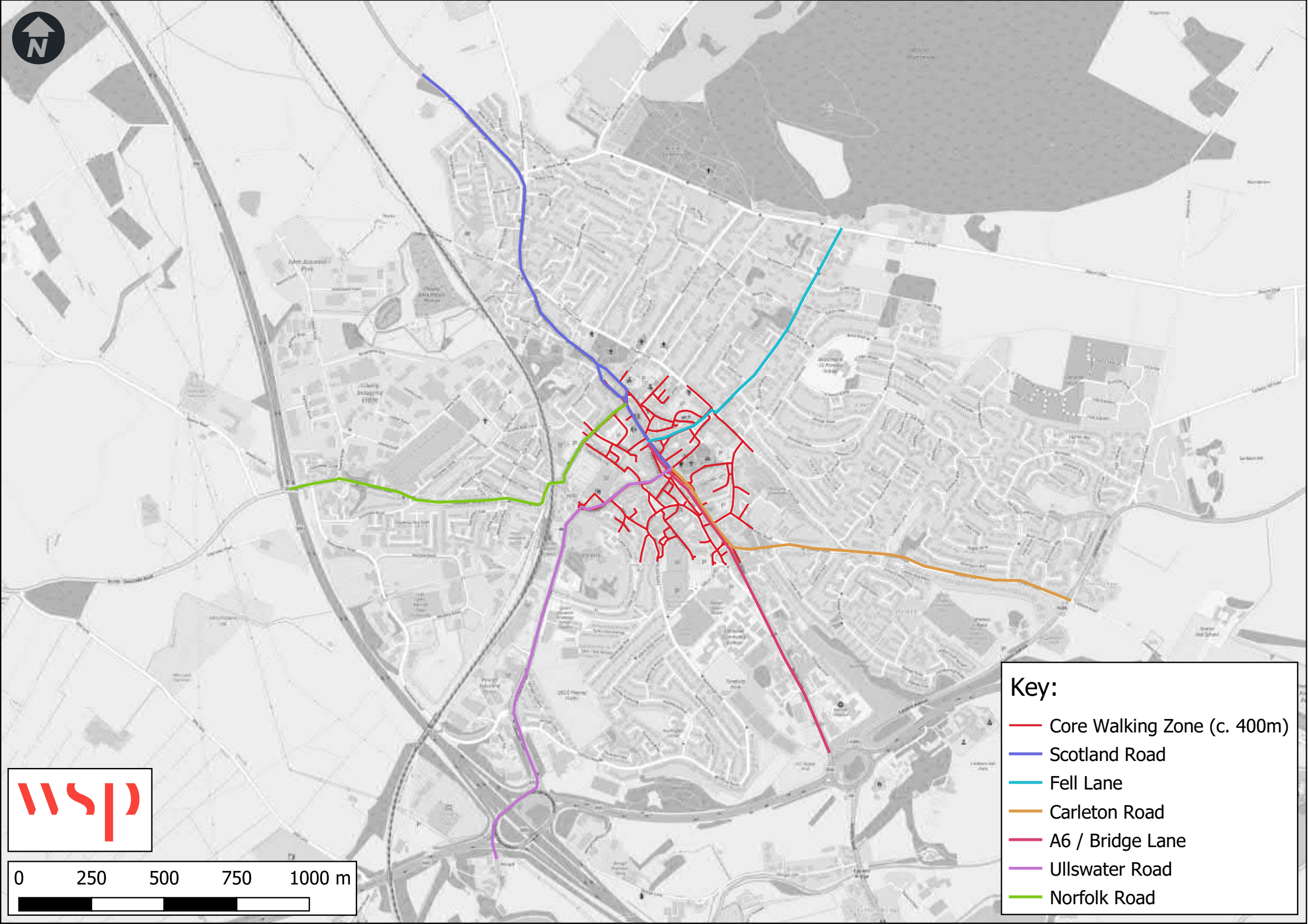
Route 15  
A66 NTP cycling and walking  
route eastwards to Centre  
Parcs, Temple Sowerby and  
Warcop

To Pooley Bridge



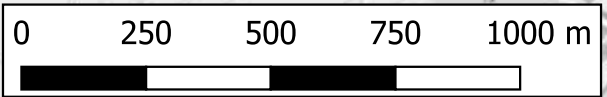
**Key**

- New infrastructure to be provided on highway
- Existing cycleway (improvement required to comply with guidance)
- Existing cycle route (no improvements planned)
- - - Long-term aspirations



**Key:**

- Core Walking Zone (c. 400m)
- Scotland Road
- Fell Lane
- Carleton Road
- A6 / Bridge Lane
- Ullswater Road
- Norfolk Road

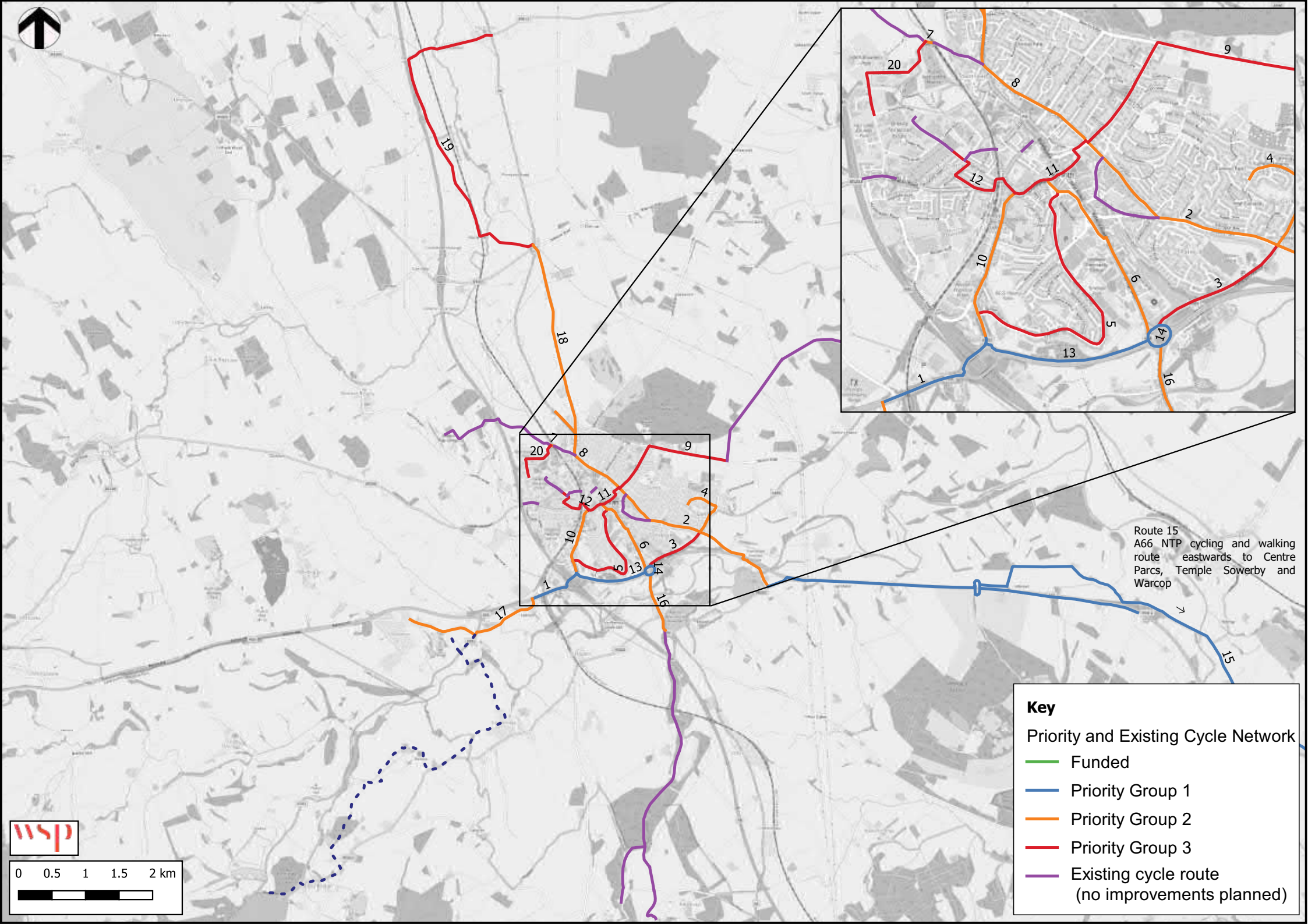




# Appendix B

## **PRIORITISED NETWORK PLANS**

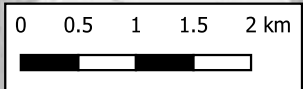




Route 15  
A66 NTP cycling and walking  
route eastwards to Centre  
Parcs, Temple Sowerby and  
Warcop

**Key**

- Priority and Existing Cycle Network
- Funded
- Priority Group 1
- Priority Group 2
- Priority Group 3
- Existing cycle route  
(no improvements planned)







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