

North Yorkshire County Council

LOCAL CYCLING AND WALKING INFRASTRUCTURE PLAN

Skipton Phase 1 Report





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Skipton Phase 1 Report

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APPENDICES

APPENDIX A - FINAL NETWORK PLANS



1 INTRODUCTION

1.1 BACKGROUND

- 1.1.1. Local Cycling and Walking Infrastructure Plans (LCWIPs), as set out in the Government's Cycling and Walking Investment Strategy (CWIS), are a new, strategic approach to identifying cycling and walking improvements required at the local level. They enable a long-term approach to developing local cycling and walking networks, typically over a 10-year period, and form a vital part of the Government's strategy to increase the number of trips made on foot or by cycle.
- 1.1.2. The key outputs of LCWIPs are:
 - a network plan for walking and cycling which identifies preferred routes and core zones for further development;
 - a prioritised programme of infrastructure improvements for future investment; and
 - a report which sets out the underlying analysis carried out and provides a narrative which supports the identified improvements and network.
- 1.1.3. By taking a strategic approach to improving conditions for cycling and walking, LCWIPs will assist Local Authorities (LAs) to:
 - identify cycling and walking infrastructure improvements for future investment in the short, medium and long term;
 - ensure that consideration is given to cycling and walking within both local planning and transport policies and strategies; and
 - make the case for future funding for walking and cycling infrastructure.

1.2 LCWIP PROCESS

1.2.1. The Department for Transport (DfT) has produced guidance to develop a LCWIP; this defines 6 distinct stages in the production of an LCWIP, as outlined below.

Table 1-1 - The LCWIP Process

Stage	Name	Description
1	Determining Scope	Establish the geographical extent of the LCWIP and arrangements for governing and preparing the plan.
2	Gathering Information	Identify existing patterns of walking and cycling and potential new journeys. Review existing conditions and identify barriers to cycling and walking. Review related transport and land use policies and programmes.
3	Network Planning for Cycling	Identify origin and destination points and cycle flows. Convert flows into a network of routes and determine the type of improvements required.
4	Network Planning for Walking	Identify key trip generators, core walking zones and routes, audit existing provision and determine the type of improvements required.
5	Prioritising Improvements	Prioritise improvements to develop a phased programme for future investment.
6	Integration and Application	Integrate outputs into local planning and transport policies, strategies, and delivery plans.

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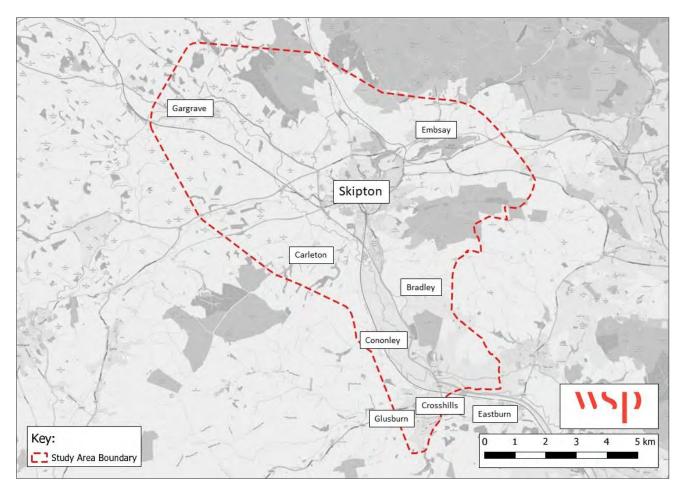
- 1.2.2. The Skipton LCWIP will be split into two distinct phases.
 - The Phase 1 project report details the evidence review and network development process, reflecting Stages 1 to 4 of the LCWIP guidance.
 - The Phase 2 project report details the development of network priorities into 'bid-ready' schemes, commensurate with Stage 5 of the LCWIP guidance.
- 1.2.3. The two project reports will be taken forward for integration and application (Stage 6 of the LCWIP guidance) within NYCC's wider policy and strategic frameworks.

1.3 DEFINING THE STUDY AREA

- 1.3.1. Skipton is the largest town within the Craven District (with a population of 14,930) and is located in the south of the district, surrounded by a number of smaller villages. The town is the economic centre for the wider area, offering a wide range of employment opportunities, goods, and services, and is considered well connected with the road network and rail network.
- 1.3.2. As well as the nearby villages to the north such as Embsay and Gargrave, there are a number of villages to the south of the town clustered around Glusburn and Cross Hills, which also benefit from close links to Eastburn, Steeton and Silsden over the administrative boundary into Bradford District. While these villages have a strong strategic tie to Skipton, the close proximity to one-another presents an opportunity to encourage movement within and between the villages by active modes for all journey purposes.
- 1.3.3. The remainder of the population of the District are spread across a wide rural area which, as one of the top ten most sparsely populated local authorities in England, includes protected areas of national significance, such as the Yorkshire Dales National Park and Forest of Bowland Area of Outstanding Natural Beauty.
- 1.3.4. The focus of the LCWIP process is to create a cohesive network for walking and cycling that will encourage those who do not currently walk or cycle for everyday purposes to do so, generally aligning with travel for commuting and utility purposes over shorter distances. Links between urban areas are often less likely to promote the desired modal shift, with greater benefits obtained through the provision of a denser urban network, connecting residential areas with a range of employment opportunities, schools, shops and facilities within a desirable walking or cycling distance.
- 1.3.5. The Skipton LCWIP will therefore focus on Skipton as the main urban area in the District, and encompasses those nearby villages considered to be within the maximum desirable cycling distance and to have a reasonable propensity to increase active travel.
- 1.3.6. The LCWIP will also consider strategic links between the study area and to outlying areas where deemed appropriate (such as cross-boundary links or to long-distance leisure routes). The agreed study is shown in Figure 1-1.



Figure 1-1 - Study Area Boundary



1.4 REPORT STRUCTURE

- 1.4.1. This project report details Phase 1 of the Skipton LCWIP and is structured as follows:
 - Section 2 Evidence Base;
 - Section 3 Best Practice Review;
 - Section 4 Cycle Network Development;
 - Section 5 Walking Network Development;
 - Section 6 Stakeholder Engagement; and
 - Section 7 Network Priorities and Recommended Next Steps.

2

EVIDENCE BASE





2 EVIDENCE BASE

2.1 INTRODUCTION

- 2.1.1. This chapter places the LCWIP within the national, regional, and local policy framework and establishes the existing geographic, demographic and active travel situation in the study area. Forecast trends in growth are also presented to understand the future situation, considering changing travel patterns and future development in the district.
- 2.1.2. The culmination of this work is an evidence base that supports and informs development of the Skipton LCWIP, helping to define network connections and emerging priorities.
- 2.1.3. A detailed desktop research exercise has been undertaken to help establish the baseline situation and understand future trends, considering available datasets, policies and strategies. However, in order to ensure that the LCWIP and the resulting network plans are founded on robust evidence, this research has been supplemented by a range of data collection and stakeholder consultation exercises, including:
 - Site Visits: Undertaken on foot and cycle to understand travelling around the study area as vulnerable road users.
 - Stakeholder Workshops: A number of stakeholder workshops took place with officers of North Yorkshire County Council, Craven District Council (CDC), local parish councils and selected community representatives in order to gain their input on the challenges and opportunities related to cycling and walking in the study area. A summary regarding the outputs of these workshops is provided in Section 6.
 - Meetings / Conference Calls: As well as the stakeholder workshop, the project team have liaised with key internal stakeholders from CDC to gain a detailed insight to the work the District has done related to walking and cycle network planning. Meeting with CDC staff (as the local planning authority) and NYCC area highway officers also provided an opportunity to understand proposed and committed developments in the study area that may impact and influence the final network.
- 2.1.4. The structure of this section is as follows:
 - Policy Context;
 - Local Geography;
 - Demographics;
 - Existing Travel Patterns;
 - Existing Transport Networks: Cycling and Walking;
 - Existing Transport Networks: Road, Rail and Public Transport;
 - Origins and Destinations; and
 - Future Situation (Developments, Infrastructure and Forecasting Growth).



2.2 POLICY CONTEXT

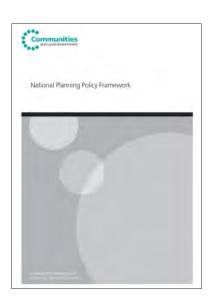
- 2.2.1. DfT guidance highlights the need to understand the local, regional and national policy framework with which the LCWIP document will align and be integrated. Several key policy documents have been identified and summarised below, highlighting synergies with the aims of LCWIPs and how LCWIPs can support the delivery of these policy objectives:
 - National Planning Policy Framework (NPPF), 2012 and updated 2018;
 - White Paper: Creating Growth, Cutting Carbon, 2011;
 - DfT Cycling and Walking Investment Strategy, 2017;
 - DfT Local Cycling and Walking Infrastructure Plan Guidance, 2017;
 - NYCC Local Transport Plan 4 (LTP4), 2016-2045;
 - York, North Yorkshire & East Riding LEP Strategic Economic Plan, 2014 and updated 2016; and
 - Craven Local Plan (2012 2032).

NATIONAL POLICY

Revised National Planning Policy Framework

- 2.2.2. The Government's revised National Planning Policy Framework (NPPF) was published on 24th July 2018 and is the first revision to the 2012 publication of the NPPF. The NPPF replaced all previous planning policy in England on its release, condensing over 1,000 pages of guidance into a single comprehensive document.
- 2.2.3. The revised NPPF implements approximately 85 reforms announced previously through the Housing White Paper, the 'planning for the right homes in the right places' consultation and the draft revised National Planning Policy Framework consultation.
- 2.2.4. Chapter 2: 'Achieving Sustainable Development' continues to place significant emphasis on sustainable development, summarising this as:

"meeting the needs of the present without compromising the ability of future generations to meet their own needs"



- 2.2.5. The document continues to state that the planning system has three interdependent and mutually supportive overarching objectives, which include:
 - an economic objective to help build a strong, responsive and competitive economy;
 - a social objective to support strong, vibrant and healthy communities; and
 - an environmental objective to contribute to protecting and enhancing our natural, built and historic environment.
- 2.2.6. Chapter 8: 'Promoting Healthy and Safe Communities' states that planning policies should aim to achieve healthy, inclusive, and safe places, which carries implications for those routes included within the LCWIP, with due regard given to these requirements.
- 2.2.7. This chapter also sets out policies in relation to open space and recreation. Paragraph 98 states that:

"Planning policies and decisions should protect and enhance public rights of way and access, including taking opportunities to provide better facilities for users"

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- 2.2.8. The Public Right of Way (PRoW) network has the potential to complement and support the LCWIP network, providing facilities for multiple trip purposes. Improvements to surfacing and designation (such as conversion to a cycletrack) may be necessary.
- 2.2.9. Chapter 9: 'Promoting Sustainable Transport' specifically addresses the promotion of sustainable transport through the planning system. The document recognises that transport issues should be considered from the earliest stages of plan-making and development proposals, including identifying and pursuing opportunities to promote walking and cycling, and ensuring that patterns of movement, streets, parking, and other transport considerations are integral to the design of schemes, and contribute to making high quality places.
- 2.2.10. Paragraph 104 references that planning policies should both:
 - identify and protect, where there is robust evidence, sites and routes which could be critical in developing infrastructure to widen transport choice and realise opportunities for large scale development; and
 - provide for high quality walking and cycling networks and supporting facilities such as cycle parking (drawing on Local Cycling and Walking Infrastructure Plans).
- 2.2.11. The emerging LCWIP can support the development of such policies, identifying a contiguous walking and cycling network within a given area and prioritising interventions to ensure the network comes forward in a cohesive manner.
- 2.2.12. The revised NPPF also addresses the role that new development can play in ensuring that walking and cycling are the natural choice for shorter journeys. Paragraph 108 states that allocated or proposed development sites should ensure that:
 - appropriate opportunities to promote sustainable transport modes can be or have been taken up, given the type of development and its location; and
 - safe and suitable access to the site can be achieved for all users.
- 2.2.13. Paragraph 110 states that development proposals should:
 - give priority first to pedestrian and cycle movements, both within the scheme and with neighbouring areas; and
 - create places that are safe, secure and attractive which minimise the scope for conflicts between pedestrians, cyclists and vehicles, avoid unnecessary street clutter, and respond to local character and design standards
- 2.2.14. Chapter 12: 'Achieving Well-designed Places' sets out how high-quality design is essential to creating genuinely sustainable development. Paragraph 125 states that:
 - "Design policies should be developed with local communities so they reflect local aspirations, and are grounded in an understanding and evaluation of each area's defining characteristics"
- 2.2.15. While the Skipton LCWIP Phase 1 is not focussed on the design of schemes, the principles of how future interventions should be designed is a key consideration when determining the proposed network.



White Paper: Creating Growth, Cutting Carbon (2011)

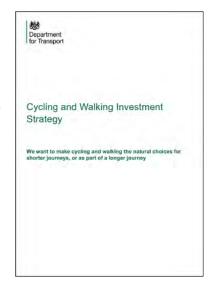
- 2.2.16. The White Paper was published in January 2011 alongside the launch of the Local Sustainable Transport Fund (LSTF), and presents an ambitious vision for sustainable and active travel, stating a vision for "a transport system that is an engine for economic growth, but one that is also greener and safer and improves quality of life in our communities."
- 2.2.17. The White Paper recognises the potential for a significant proportion of shorter local journeys made by car to instead be undertaken via sustainable and active modes: primarily walking, cycling, and public bus. To facilitate this behaviour change, the White Paper sets out the role of Localism and how Local Authorities are best placed to instigate change.

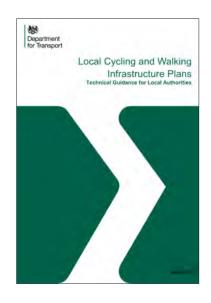
DfT Cycling and Walking Investment Strategy

- 2.2.18. The Government published its first Cycling and Walking Investment Strategy (CWIS) in 2017, setting out an ambition to make walking and cycling the natural choices for shorter journeys or as part of a longer journey. The CWIS states that the benefits to doing this would be substantial, potentially leading to cheaper travel and better health, increased productivity for business and increased footfall in shops, and lower congestion, better air quality, and vibrant, attractive places and communities for society as a whole.
- 2.2.19. The CWIS outlines a £300 million investment in cycle training and infrastructure during the current Parliament and sets out ambitious targets for the period up to 2025, including a doubling of cycling trip stages each year (from 0.8 billion in 2013 to 1.6 billion by 2025), whilst also reversing the current year-over-year decline in walking trip stages. The CWIS also identifies a need to decrease the number of cycle user fatalities and serious injuries each year.

Local Cycling and Walking Infrastructure Plans Guidance (2017)

- 2.2.20. The Local Cycling and Walking Infrastructure Plans (LCWIP) Guidance was published alongside the DfT CWIS. Local Cycling and Walking Infrastructure Plans are set out in the CWIS as a new strategic approach to identifying cycling and walking improvements required at a local level.
- 2.2.21. The LCWIP guidance sets out a recommended methodology to planning networks of walking and cycling routes that connect places that people need to get to, whether for work, education, shopping, or for other reasons. The guidance brings together national and international guidance on best practice, and explains how a range of tools, such as the Propensity to Cycle Tool (PCT), can be used to help develop robust plans and schemes.
- 2.2.22. The development of the Skipton LCWIP has been prepared in line with the approach set out in this guidance.



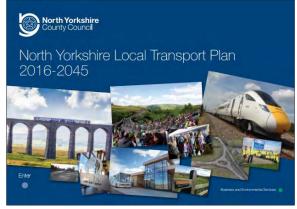




SUB-REGIONAL POLICY

North Yorkshire Local Transport Plan (LTP4) (2016-2045)

- 2.2.23. NYCC's LTP4 is a four-tier document which covers the local transport strategy, objectives, transport improvements by modes/theme, and policies adopted by the County Council.
- 2.2.24. In 2012, legislation governing Local Transport Plans changed and as a result councils / local government no longer need to be fixed to a five-year timespan. NYCC subsequently produced a 30-year plan in accordance with this change, extending until around 2045.



- 2.2.25. NYCC, through consultation with stakeholders, has identified 5 key objectives regarding transport in the county:
 - Economic Growth Contributing to economic growth by delivering reliable and efficient transport networks;
 - Road Safety Improving road and transport safety;
 - Access to Services Improving equality of opportunity by facilitating access to services;
 - Environment and Climate Change Managing the adverse impact of transport on the environment; and
 - Healthier Travel Promoting healthier travel opportunities.
- 2.2.26. The LTP4 states that the County Council will promote sustainable travel and encourage travel to work by walking, cycling, bus, rail and car sharing. It also highlights that, where possible, NYCC will provide additional infrastructure to support sustainable travel, with improvements provided through transport grants such as the LSTF fund. The County Council will also seek to ensure that provision of suitable facilities to encourage healthier travel choices is made within any new development.
- 2.2.27. The LTP identifies Skipton as a North Yorkshire 'growth town', playing a significant role in the economy of the county. NYCC state that the council will work to investigate and develop proposals to reduce urban congestion in these towns, including identifying schemes to enable future growth. Walking and cycling schemes can play a large part in reducing congestion, engendering modal shift.
- 2.2.28. The LTP also proposes improvements to the A59 with the introduction of three climbing lanes between Harrogate and Skipton. Additionally, the LTP discusses re-opening the Skipton to Colne and Railway, and notes that North Yorkshire County Council will take such proposals into consideration.
- 2.2.29. The LTP identifies that over 40% of the population of North Yorkshire live in communities with a population of over 10,000 people. As a result, many trips in these areas are relatively short in distance, making walking and cycling a viable form of transport if supported by the right infrastructure.
- 2.2.30. While the LTP recognises a recent growth in cycling for leisure purposes, the document sets out the Council's commitment to providing for and promoting walking and cycling as a mode of travel for 'utility' purposes.



2.2.31. However, the LTP also acknowledges the lack of funding available for significant additional infrastructure. This commitment to walking and cycling therefore primarily revolves around the continued maintenance of the highway network, which is considered "eminently suitable for most cycle users". Despite this, the LTP states that NYCC will continue to seek additional funding where available, and proactively plan and develop cycling infrastructure where there is a realistic chance of funding being available to deliver the improvements.

York, North Yorkshire & East Riding LEP Strategic Economic Plan

- 2.2.32. The York, North Yorkshire & East Riding Local Enterprise Partnership (LEP) Strategic Economic Plan (SEP) was released in 2014 and updated in 2016, and is a single strategy for the area that serves three identified purposes:
 - It sets out the key economic issues, opportunities and priorities for the area:
 - It is the EU Strategic and Investment Funds Strategy required for EU funding purposes (supported by the EU Strategic Investment Fund Implementation Plan); and
 - It is the Strategic Economic Plan that Central Government require for Local Growth Deal funding purposes (supported by a more detailed Local Growth Deal Implementation Plan).
- 2.2.33. Priority 5: A Well-connected Economy addresses transport in the area, stating an overarching goal to provide businesses with strong connections to their customers and markets. To achieve this aim, the SEP presents three objectives:
 - Fast, reliable journeys between key centres;
 - Transport that underpins both growth and low-carbon goals; and
 - Access to UK and international markets.
- 2.2.34. The SEP identifies a need to improve east west connections in order to promote the economic performance of Skipton (among other towns). It is regarded that improving east west links via road and rail will be crucial to boosting the economies of towns such as Skipton, and their respective surrounding areas.
- 2.2.35. The SEP was updated in 2016 to identify the focus for 2016-2021, which also included enhancing the resilience of the transport network, particularly to flooding in known high risk areas, which was highlighted by the flooding in winter 2015/2016.
- 2.2.36. While SEP does not specifically discuss Skipton in the context of cycling and walking, understanding the strategic aims of the LEP helps prioritise potential schemes and network links, connecting key employers and promoting rail / cycle integration.







LOCAL POLICY

2.2.37. Local policy typically relates to targeted transport enhancements designed to address social, health and environmental issues, as well as to benefit the economy by enhancing access to jobs, training and services. In many cases there is a focus on improving integration between land-use planning and transport, to support more sustainable patterns of travel and reinforce the case for targeted enhancements to the transport network.

Craven Local Plan (2012 – 2032)

- 2.2.38. The Craven Local Plan (CLP) was adopted on 12th November 2019, and sets out a Vision for the District to 2032; this includes sustainable growth, with an emphasis on greater equality amongst its communities in terms of housing choice, better paid local job opportunities, more opportunities for pursuing a healthy and active lifestyle and better access to services. As well as presenting several objectives to achieve this spatial vision, the document presents a development strategy, providing the context for designating areas where specific policies will apply, identifying strategic development sites and presenting a district wide framework for allocation of further sites, and presenting policies which setting out the context for more detailed policies and guidance in other Local Plan documents.
- 2.2.39. The Local Plan identifies the need for 4,600 additional dwellings (around 230 per year) and 32 hectares of employment land (for B1, B2 and B8 use) by 2032, much of which is planned for Skipton itself.
- 2.2.40. The Local Plan sets out how improved transport connectivity will be supported, through protection of the original Skipton to Colne railway line for future rail use and support for the re-opening of the former Cross Hills Railway Station, by safeguarding land at the former railway station from other forms of development.
- 2.2.41. The CLP also highlights the importance of tourism to the area, recognising its significant contribution to area's economy and quality of life. In particular, it is noted that tourism can help maintain the vitality and viability of the countryside, the quality of its landscapes and villages, and the sustainability of rural life. The CLP notes that Skipton's Grade II Listed railway station is an important Gateway to the town, but its facilities, surroundings, accessibility and relationship to the town centre could be improved. In particular, employment / commercial led mixed-use regeneration in the area around Skipton railway station is identified (under policy SP5 and site reference SK139).
- 2.2.42. The holistic nature of transportation means that many of the polices presented in the CLP could implicitly impact on the development and implementation of the Skipton LCWIP (and vice versa); however, five policies have specific links to the emerging LCWIP proposals and could dictate routes and priorities in the cycling and walking networks.

ENV5 - Green Infrastructure

- 2.2.43. Policy ENV5 makes reference to the planned improvements to the canal towpath in Skipton allowing easier, more sustainable passage from existing and planned housing to the town centre and beyond.
- 2.2.44. The CLP states that:

"Future developments can also link in and help to maintain existing pedestrian and cycle routes, thus enhancing the green infrastructure network in an area"



ENV11 - The Leeds & Liverpool Canal

2.2.45. This Policy states that any Development that would likely impact upon the character of the Leeds & Liverpool Canal is will be expected to:

"Improve access to, along and from the waterway, including for wheelchair-users, people with limited mobility and people with other disabilities and improve the environmental quality of the waterway corridor"

ENV12 - Footpaths, Bridleways, Byways and Cycle Routes

- 2.2.46. CDC recognise the value placed by residents, visitors and businesses upon Craven's footpaths, bridleways and cycle route (including the towpath of the Leeds & Liverpool Canal).
- 2.2.47. It is highlighted that through Policy ENV12, CDC will:

"work for the protection and enhancement of footpaths, bridleways, byways and cycle routes and will ensure that Craven's growth includes growth in their extent, quality and accessibility"

- 2.2.48. This Policy states that specific support will be given to proposals which:
 - Avoid obstruction, diversion or confinement of existing footpaths, bridleways, byways and cycle routes;
 - Enhance the route, usability and amenity value of existing footpaths, bridleways, byways and cycle routes;
 - Accommodate existing footpaths, bridleways, byways and cycle routes within green open space;
 - Create new footpaths, bridleways, byways and cycle routes, particularly where they would provide new links to enhance the local network;
 - Improve access by creating links between new development and the local network; and
 - Improve access for disabled people.
- 2.2.49. Specific support will also be given to:
 - The creation, enhancement and extension of National Trails.
 - The enhancement of green infrastructure corridors, at regional, sub-regional and district level, through the improvement of existing and the creation of new footpaths, bridleways, byways and cycle routes.
 - Proposals that contribute to the creation of town or village loops.
 - Proposals that include short, well-surfaced, stile-free circuits suitable for wheelchair-users and people with limited mobility.

EC4 – Tourism

- 2.2.50. The local plan aims to connect tourism development to the public transport network and to promote walking and cycling, in the interests of sustainability, health and well-being. Several key locations and the tourism development commitment have been identified as offering particular opportunities to further these aims.
- 2.2.51. This Policy states that there is a need to ensure that tourism development provides easy access to the network of public transport services, footpaths and cycle routes (including canal towpaths) in the area and, wherever possible, secures the improvement and expansion of that network. This is to ensure that Tourism grows in a sustainable way, and generates improvements to the economy, environment and quality of life.

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INF7 – Sustainable Transport and Highways

- 2.2.52. The CLP sets-out to minimise greenhouse gas emission and congestion, and to provide safe and accessible transport facilities. It aims to achieve this by maximising opportunities for sustainable modes, avoiding severe residual cumulative transport impacts from development, and through the design of safe and convenient access to transport facilities.
- 2.2.53. Policy INF7 includes the requirement for developers to fund any necessary new/upgraded infrastructure including safety measures and pedestrian and cycling connectivity. This is to mitigate the residual cumulative impact of traffic that would otherwise be generated on the highway network.

CLIMATE EMERGENCY

- 2.2.54. Craven councillors have agreed a motion to declare a 'Climate Emergency' and to aim for the District to be carbon neutral by 2030. The council agreed the following on the 6th August 2019:
 - Pledge to continue to work towards making the District of Craven carbon neutral by 2030, taking into account both production and consumption emissions;
 - Call on Westminster to provide the powers and resources to make the 2030 target possible;
 - Work with other governments (both within the UK and internationally) to determine and implement best practice methods to limit Global Warming to less than 1.5°C;
 - Work with partners in Craven and across the region to deliver this new goal through all relevant strategies and plans;
 - Within six months, present to Members a Strategic Plan setting out how a carbon neutral district can be achieved; and
 - Approve a supplementary revenue estimate of £10,000 to commission independent expert advice to help develop our strategic approach to becoming carbon neutral and to undertake a feasibility assessment into the opportunities for Anaerobic Digestion facilities.
- 2.2.55. CDC approved the Climate Emergency Strategic Plan on the 25th February 2020 and has committed to work towards becoming Carbon Neutral across the District by addressing the three largest pollutants:
 - Residential energy use;
 - Road travel and transportation; and
 - Land-based industries (particularly livestock rearing).
- 2.2.56. The strategy for achieving 'carbon neutral Craven' is based on seven key themes, including travel and transportation, which states that reducing the carbon impact of travel and transportation could be done by improving and promoting reduction in travel and take-up of zero and low carbon transport options.
- 2.2.57. Policy TRT03, part of the travel and transportation strand, aims to develop safe walking and cycling routes to ensure that the district is accessible for commuting and leisure. Policy TRT05 further specifies that Craven District is strategically planning to improve the Skipton Rail Station area to ensure a higher proportion of journeys by train, to continue to update Skipton's walking and cycling infrastructure and are considering options for park & ride schemes.
- 2.2.58. The LCWIP directly contributes towards specific aims set out by CDC, setting out a plan for infrastructure that enables active travel and engenders modal shift from private motor vehicles. It is also noted that Leeds & Liverpool canal is likely to be a key route in the walking and cycling networks in the area, so the LCWIP proposals will aim to complement and enhance the work on the route already undertaken by the council.

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SUMMARY

- 2.2.59. The policy review presented above demonstrates how the Skipton LCWIP will contribute to a range of policy objectives at local, regional and national scale.
- 2.2.60. The principles of the LCWIP are to contribute towards the Government's national level objectives of supporting sustainable development by contributing to economic growth in a way sustainable manner. The Government recently released the Cycling and Walking Investment Strategy (CWIS) and Local Cycling and Walking Infrastructure Plan (LCWIP) guidance. The LCWIP represents part of North Yorkshire's contribution to support the CWIS objectives.
- 2.2.61. The LCWIP will support and contribute toward all five objectives of the North Yorkshire Local Transport Plan due to the wide-ranging way that walking and cycling, as a mode of transport, can deliver benefits to individuals and wider society.
- 2.2.62. At a local level, the LCWIP will complement CDC's vision, contributing towards the District's aims and objectives for sustainable development, provide opportunities for walking and cycling, enhance the district's tourist offering and access to the countryside, and potentially enhance community infrastructure and spaces, while also promoting environmental, health, and social equality agendas. The LCWIP can also help tackle climate change through modal shift. If adopted as a Supplementary Planning Document (SPD), as per the DfT's LCWIP guidance, the Skipton LCWIP will provide a policy basis for development to contribute towards a cohesive walking and cycling network, and helps ensure both NYCC and Craven DC's significant growth aspirations come forward in a sustainable manner.



2.3 LOCAL GEOGRAPHY

TOPOGRAPHY

2.3.1. Figure 2-1 illustrates the topography within the LCWIP Study Area with key arterial routes shown for additional context. Topography will be more important when considering specific desire lines and potential routes, but is useful when considering the general propensity to travel by active modes between distinct locations, and how this can be affected by extreme gradients.

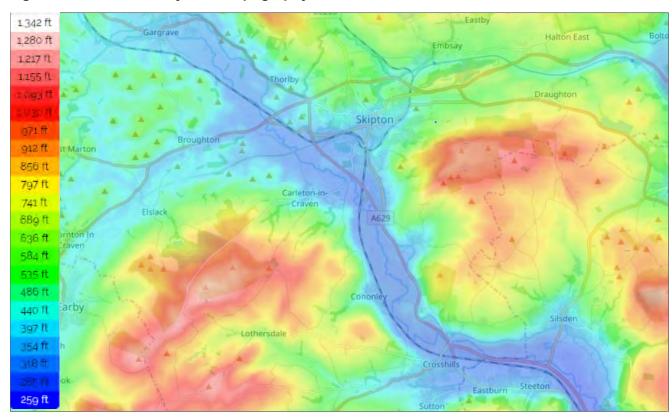


Figure 2-1 - LCWIP Study Area Topography

- 2.3.2. Hilliness is an important predictor of cycling levels in England, with the probability of cycling a trip falling steadily as the hilliness of the local area increases. Recent University of Leeds research showed that "hilliness was found to be, by far, the most significant determiner of the proportion that cycled to work in a district¹."
- 2.3.3. Furthermore, as demonstrated in Figure 2-2, overall, people in the tenth of the population of England in the flattest areas are three times more likely to cycle a trip than the tenth of people in the hilliest areas (2.8% trips cycled vs. 0.8%2). This makes the topography within the study area an important,

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¹ Estimation of the determinants of bicycle mode share for the journey to work using census data, 2007

² Centre for Diet and Activity Research, 2016



influencing factor on the cycle network development. Certain areas within the study area may be too hilly and deter potential cycle user from using those routes.

Percent trips cycled (95%CI) 0 3 5 1 (flattest 2 4 6 7 8 9 10 (hilliest tenth) tenth) Tenth of the population of England, according to how hilly their local area is

Figure 2-2 - Proportion of Trips Cycled in England (According to 'Hilliness' of Local Area)

Source: Centre for Diet and Activity Research

2.3.4. Gradient also plays a major role in the perceived 'comfort' or 'attractiveness' of pedestrian routes (footpaths and footways), and thus, the propensity to walk a route. As highlighted in DfT's 2005 'Inclusive Mobility' guidance³, and replicated more recently in the 2014 Welsh Active Travel Guidance⁴, steep gradients can have a particular impact on older people, those with physical difficulties and parents with pushchairs. The guidance recommends that as a general rule, a gradient of 5% (1 in 20) should be the desirable maximum in most situations and 8% (1 in 12.5) should be used as the absolute maximum unless justifiable. Research by Meeder et al (2017)⁵ concluded that slope (and by inference 'hilliness') has a significant influence on walking attractiveness primarily due to the effort (or energy) required to scale the slope, suggesting that for every 1% increase in incline there is a 10% reduction in walking attractiveness.

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³ Inclusive Mobility, Department for Transport, 2005

⁴ Active Travel Design Guidance, Welsh Government, 2014

⁵ 'The influence of slope on walking activity and the pedestrian modal share', Meeder M. *et al.*, 2017



2.3.5. Such evidence suggests that 'hilliness' in certain areas is likely to have a bearing on the propensity of people to walk or cycle to and from these areas, and must be taken into consideration when determining potential networks.

LCWIP Implications

Consideration should be given to implementing infrastructure in areas of limited hilliness' or inclines, depending on other factors identified during this study.

The LCWIP study area includes varying degrees of hilliness. The floodplains of the river are predominantly flat or undulating, creating terrain more suited to walking and cycling.

However, particularly to the east of the study area around Skipton and Embsay, the terrain is much hillier, creating challenging inclines less suited to active travel, particularly cycling.



BARRIERS TO MOVEMENT

2.3.6. Although the topography of the area has been identified as generally conducive to walking and cycling, there are a number of physical barriers which can impede active travel movements. Figure 2-3 displays key features that can cause high levels of severance, creating barriers to movement across many desire lines and requiring significant engineering interventions to mitigate this impact.

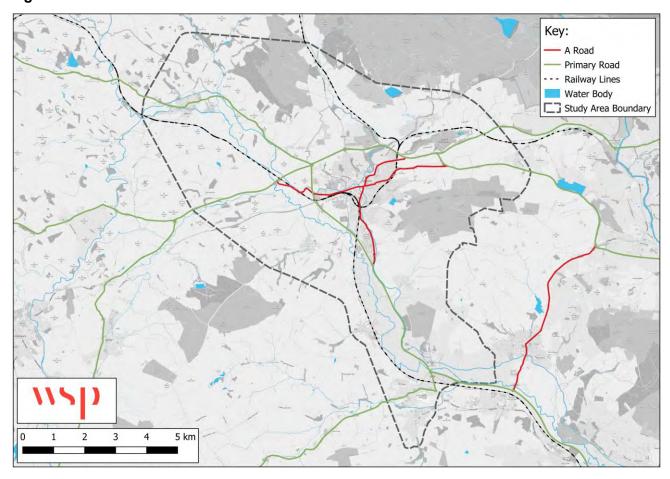


Figure 2-3 - Barriers to Movement

LCWIP Implications

The study area features significant human made barriers, with arterial roads running through key areas (such as the town centre), potentially resulting in severance and a reduced sense of place.

The A59, A65, and A629 are also likely to have significant severing impacts on many longer distance desire lines; reducing the likelihood of trips by sustainable transport from nearby villages.

The Leeds & Liverpool Canal has the potential to significantly sever a number of desire lines, bisecting the study area.

Whilst some crossing points do exist, additional crossing points may be a key requirement in order to create a cohesive active travel network, with associated financial implications.



ENVIRONMENTAL CONSIDERATIONS

- 2.3.7. Environmental considerations have the potential to form a key part of the LCWIP process. Protected areas of land can restrict the type of infrastructure that can be implemented, or even prevent a route from being adopted at all.
- 2.3.8. This section of the report presents a brief overview of environmental constraints that could impact on the overall LCWIP proposals.

Environmental Constraints and Designations

- 2.3.9. Figure 2-4 illustrates the various environmental constraints that may need to be considered as part of the emerging Skipton LCWIP.
- 2.3.10. The District includes several waterbodies with adjacent areas threatened by flooding. There have been significant flood events in recent years, with disruption and damage to homes, community facilities, business and travel. The area has recently been adversely affected by flooding, with key links damaged and communities severed. New infrastructure in these areas will need to consider resilience to flooding, and how it could potentially contribute towards mitigation of flood risk.
- 2.3.11. There have also been a number of recent flood alleviation schemes put in place recently in order to reduce the impact of heavy rainfall on the district's waterbodies. This includes a scheme to redesign culvert entrances around Skipton, install a new flood wall next to the Leeds & Liverpool Canal, and manage nearby woodland to reduce the impact of flooding on Engine Shed Lane and Ings Lane, enabling the delivery of the £5 million Skipton Employment and Housing Growth scheme awarded by the YNER LEP.
- 2.3.12. There are also a number of Sites of Special Scientific Interest (SSSIs) and scheduled monuments across the various study areas that will need to be considered. The Craven Local Plan notes that the plan area has a built environment of exceptional quality; In particular, Skipton is described as having a unique character with fine medieval buildings and a street pattern juxtaposed with its textile mills, chimneys and terraced housing and the buildings, bridges, 20 locks and other structures associated with the Leeds & Liverpool Canal and Thanet Canal.
- 2.3.13. This heritage is reflected in the number of heritage designations within the Craven Local Plan area, including 888 Listed Buildings, 31 Scheduled Monuments, including the Park Hill Earthwork (Civil War Battery in Skipton), 2 registered Parks and Gardens, including Broughton Hall, and 29 Conservation Areas.
- 2.3.14. The Local Plan area also has a number of biodiversity or geodiversity designations of European and national importance, including a small part of the South Pennine Moors Special Protection Area (SPA) and Special Area of Conservation (SAC) in the south of the plan area and 12 Sites of Special Scientific Interest (SSSI) spread across the whole plan area. There are more than eighty Sites of Importance for Nature Conservation (SINC) located across the plan area and Craven District also has extensive areas of Ancient Woodland (186 sites).
- 2.3.15. The LCWIP will need to remain cognisant of all the various designations within the study area and how the walking and cycling networks can interact with and enhance with these features. Networks could enhance access to tourist locations, or conversely redirect users away from sensitive areas. The specific design of interventions will also need to consider designations such as conservation areas.



Figure 2-4 - Environmental Constraints

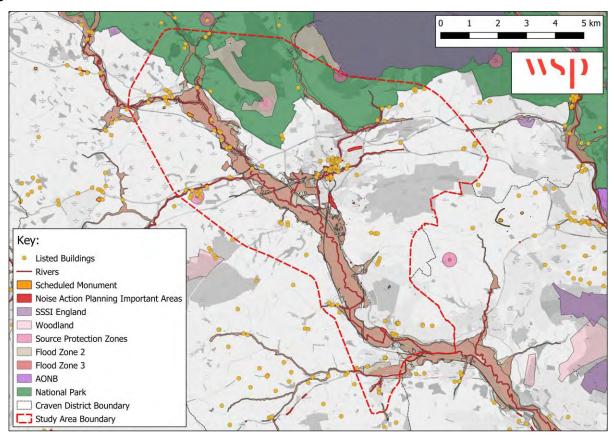
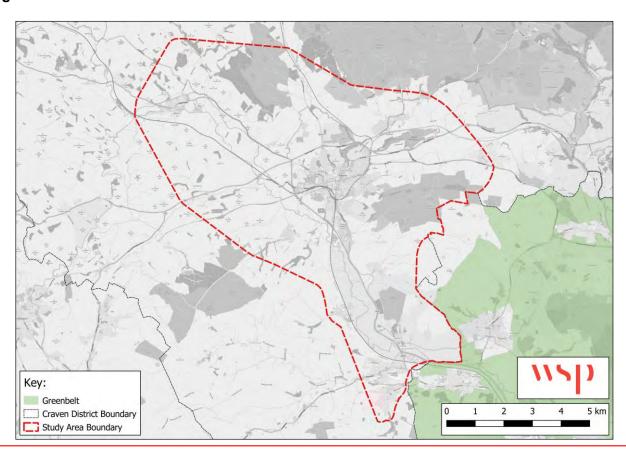


Figure 2-5 - Greenbelt Extents



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Greenbelt Land

- 2.3.16. Within the UK, the greenbelt is an area of open land around an urban area where building is restricted. The greenbelt should be taken into account when looking to increase cycling in an area as it may restrict the design of any infrastructure proposed. Hard infrastructure such as segregated routes may not be realistic proposals in a greenbelt area; however, softer alternative measures such as signed routes may be implemented. Figure 2-5 shows the extents of the greenbelt within the District and how the greenbelt land impacts on the study area.
- 2.3.17. While there is no designated greenbelt within the LCWIP study area, there is greenbelt land to the eastern extent of the study area, within Bradford District.

Air Quality Management Areas

- 2.3.18. Since 1997 all local authorities have been carrying out reviews and assessments of air quality. If this monitoring highlights areas where the national air quality objectives are unlikely to be met, under the Environment Act 1995 they are required to designate an Air Quality Management Area (AQMA).
- 2.3.19. Craven District has no AQMAs, and therefore while the LCWIP needs not align with any specific Action Plans, it still has the potential to contribute towards maintaining clean air within the District and help tackle the Climate Emergency.

LCWIP Implications

The Skipton LCWIP will need to pay particularly attention to the extents of the greenbelt along the eastern extent of the study area when considering any off road routes, although it is noted that this lies entirely within the district of Bradford and just outside the LCWIP study area.

Any proposed routes that enter flood risk zones should consider their resilience to flood damage. Furthermore, such infrastructure could be designed or placed in such a way as to mitigate severance issues during flooding events.

Routes that could potentially impact on a scheduled monument (such as any alterations) will need to consider Scheduled Monument Consent.

Any routes that could impact on a SSSI will need to consult with Natural England and any other relevant stakeholders.



2.4 **DEMOGRAPHICS**

THE LOCAL POPULATION

- The total resident population of the Craven District is approximately 57,0006; this results in an 2.4.1. average population density of 48 people per square kilometre, making it the sixth most sparsely populated district in England.
- 2.4.2. The majority of the population live in the main settlements of Skipton, Bentham, Settle, and Glusburn and Cross Hills, Ingleton and Grassington. The population of the town of Skipton itself is approximately 14,623. The nearby villages of Embsay and Gargrave are much smaller, with populations of approximately 1,879 and 1,396 people respectively.
- 2.4.3. To understand current travel behaviour and help to forecast future trends, data from the 2011 Census has been analysed to inform this report. The data shows that the population of the study area is approximately 17,898 people⁷, approximately 32% of the total population of the District of Craven.
- 2.4.4. The study area population comprises approximately 9,349 female and 8,549 male residents⁸, which equates to 52% and 48% respectively of the total population.

Age Composition

- 2.4.5. Table 2-1 displays the age breakdown for the study area and how the local statistics align with regional and national statistics.
- The economically active age range (16-64) comprises around 59% and 58% of the Skipton built up 2.4.6. area and Craven district populations respectively, which is comparable with the North Yorkshire average (59%) but lower than the regional and national averages (both 63%). In line with this, the proportion of the population aged over 65 in Skipton is 23% and 26% in Craven, higher than the regional and GB averages of 18%; this indicates a population skew towards the older age categories.
- The trend of an older population is reflected in the statistics for the LCWIP study area. Over half of 2.4.7. the population within the study area (53.4%) are over the age of 45, while approximately 23% of the study area population is over the age of 65 years. 60.4% of the population in the study area is of working age (16-64), lower than the comparative averages for Y&H and nationally. The study area is also considered to have an ageing working age population, with 47.4% of population in the 30-64 age group.
- It is also noted that the LEP Strategic Economic Plan identifies that projected growth of total 2.4.8. population in the LEP region is lowest in Craven.

⁶ Population Estimates for UK, England and Wales, Scotland and Northern Ireland: Mid-2017

⁷ Census Dataset KS101EW – Usual Resident Population (by MSOA)

⁸ Census 2011



Table 2-1 - Age Breakdown

Age Group	Study Area	% of Pop.	Yorkshire & Humber	% of Pop.	England	% of Pop.
0 – 15	9,248	16.7%	997,792	19%	10,022,836	19%
16 – 24	4,922	8.9%	665,550	13%	6,284,760	12%
25 – 44	11,676	21.1%	1,389,425	26%	14,595,152	28%
45 – 64	16,953	30.5%	1,356,395	26%	13,449,179	25%
65+	12,610	22.9%	874,571	17%	8,660,529	16%

Census, 2011

2.4.9. An older population may be characterised as having a greater desire for segregation from motor vehicles, as well as potentially being dismissive of cycling as being for younger people⁹.

Population Density

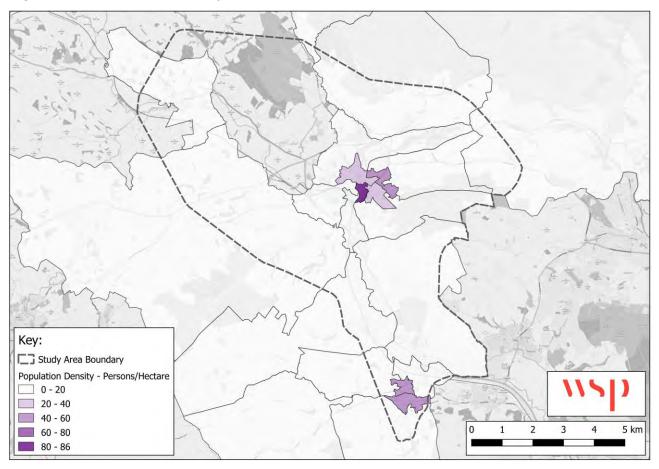
- 2.4.10. Population density is an important factor when considering an area's propensity to both walk and cycle as a mode of travel, and thus developing cycling and walking networks. Population density can help to prioritise certain routes for cycling, focussing on linking more densely populated areas as part of a primary cycle network can mean that new cycle infrastructure could positively impact a greater number of people.
- 2.4.11. Population density is also integral to the network development when considering the economic costs and benefits; infrastructure that affects the most people for the least cost is preferable. Analysing population density allows connections to be made between the most densely populated urban areas within the study area. Craven District is characterised as being predominantly rural, with a low average population density, and therefore it become more important to ensure that infrastructure proposals and network priority is commensurate with usage estimates.
- 2.4.12. Figure 2-6 illustrates which Census Lower Super Output Areas (LSOAs) within the study area are most densely populated. The most densely populated area is the urban area of Skipton just south of the town centre which has approximately 86 people per hectare (pph). The other LSOAs across the centre of Skipton and the urban areas of Cross Hills and Glusburn have 20 60 pph. The remaining LSOAs across the study area are sparsely populated rural areas, with between 0 20 people per hectare. The main town of Skipton is clearly significantly denser than the surrounding areas, indicating that this area could receive the highest number of users, with fewer potential users in the rural hinterlands.

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⁹ Aldred, Woodcock and Goodman, (2015) Does more cycling mean more diversity in cycling?



Figure 2-6 - Population Density



LCWIP Implications

The ageing population may restrict those able to access walking and cycling as forms of travel.

The urban fringes and rural sections of the study area are characterised by a lower population density, limiting the percentage of the resident population likely to benefit from interventions in these areas, particularly those aimed at commuter and utility cycle users.

Conversely to the above, the aging population may present opportunities to align the Skipton LCWIP with health and leisure benefits.

The higher population density within the Skipton urban area indicates that any potential interventions within the urban areas are more likely to impact on a higher percentage of the population.



INDICES OF MULTIPLE DEPRIVATION

- 2.4.13. Another important set of demographic indicators when promoting cycling are those related to deprivation. This section will compare the 16 Lower Super Output Areas (LSOAs) within the study area to the 32,482 LSOAs nationwide. The English Indices of Multiple Deprivation (IMD) are usually released on a three-yearly basis by the Ministry of Housing, Communities and Local Government. However, there were five years between the release in 2015 and the previous release in 2010. Their purpose is to assess the concentration and degree of deprivation and poverty within all local authorities in England. The index ranks, at a highly localised scale, the degree to which the different locations could be considered to be in relative deprivation.
- 2.4.14. The following figures classify the various indices presented as quintiles based on data across the whole of the England. Number 1 is considered the most deprived, while 32,482 is the least deprived; therefore, 1 in red is presented as within the most deprived 10%, whereas 10 in dark green is in the least deprived 10% nationwide.

Indices of Multiple Deprivation

2.4.15. Indices of Multiple Deprivation (IMD) is a composite of many types of deprivation, including Income, Employment, Education Skills and Training, Health and Disability, Crime, Barriers to Housing and Services, and Living Environment. Figure 2-7 illustrates the rankings of the LSOAS within the study area.

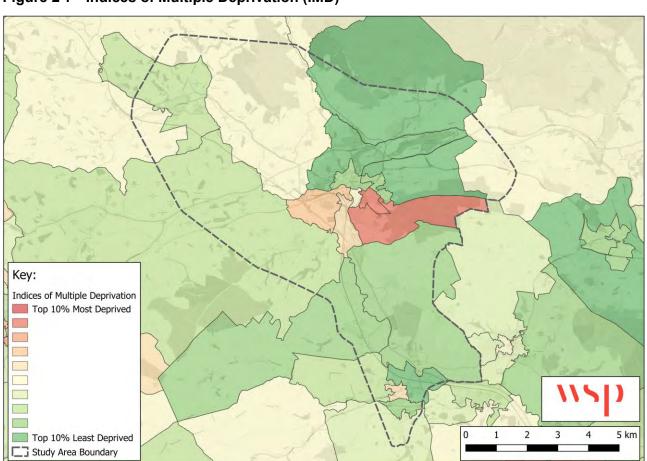


Figure 2-7 - Indices of Multiple Deprivation (IMD)

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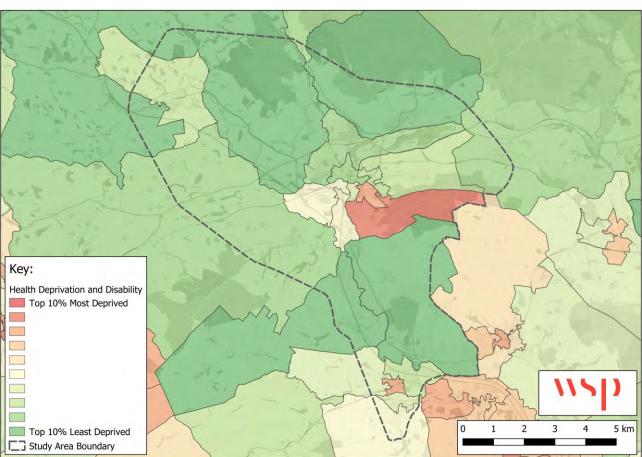


- 2.4.16. Of the 16 LSOAs within the study area, there are 2 LSOAs which rank within the twenty percent most deprived areas within the UK; these LSOAs are within the south-eastern urban areas of Skipton. However, there are 3 LSOAs in the north which are in the top ten percent of the least deprived areas in the UK, showing the disparity in the study area.
- 2.4.17. The IMD is designed to pull together different facets of deprivation, however, when carrying out small area analysis, it is often worth looking closely at what the domains, and even their subdomains, tell you about different aspects of deprivation.

Health Deprivation and Disability

2.4.18. An important indicator when promoting active transport modes is that related to the level of health deprivation and disability in the area. Health Deprivation and Disability, with regards to the IMD, analyses those living in poor physical and mental health. Figure 2-8 shows that isolating this IMD factor from the other indicators allows us to see that the levels of Health Deprivation correlate very closely with the overall IMD, with the urban areas being characterised by a lower value. It is noted that four of the LSOAs within the study area are within the top quintile.

Figure 2-8 - Health Deprivation





Barriers to Housing and Services

2.4.19. Barriers to housing and services looks at the affordability and availability of housing, and closeness of such housing to key services. The indicators fall in to two sub-domains: 'geographical barriers' and 'wider barriers'. Geographical barriers relate to the physical proximity of local services measured by road distance to a post office, primary school, supermarket and GP surgery. Wider barriers include issues relating to the access to housing including household overcrowding, homelessness and housing affordability.

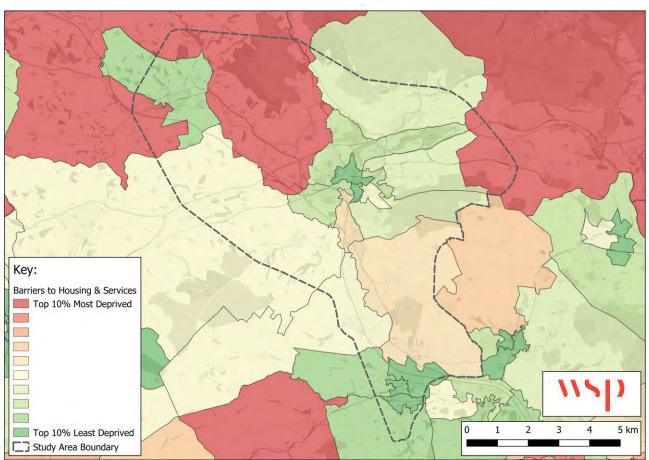


Figure 2-9 - Barriers to Housing and Services

2.4.20. Figure 2-9 indicates that, unlike other deprivation indicators, Skipton town itself is less deprived than more peripheral areas of the study area in regard to barriers to housing and services, and indicates a clear north / south divide, with two LSOAs in the north being in the bottom quintile. It is worth noting that these LSOAs predominantly lie within the Yorkshire Dales National Park.

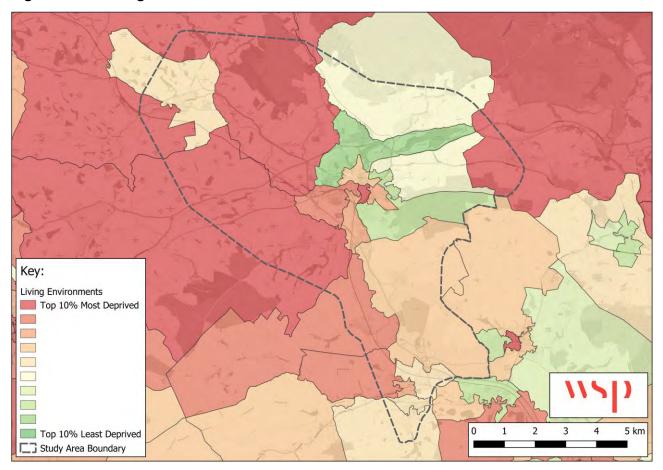
Living Environments

2.4.21. Living environment deprivation analyses the standards of people's indoor and outdoor living environment. The specific measures which contribute to this index are the quality of housing, the local air quality and number/severity of road traffic collisions in the area. The indicators fall into two sub-domains: The 'indoors' and 'outdoors' living environment. The Indoors sub-domain measures the quality of housing based on whether a house has central heating and whether or not it fails to meet the decent homes standard. The 'outdoors' sub-domain contains measures of air quality and road traffic incidents involving injury to pedestrians and cycle users.

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2.4.22. Figure 2-10 illustrates that parts of Skipton town centre rank relatively well in this domain when compared to the wider Study Area. The figure shows significant variance across the central urban area, with LSOAs across the town centre varying from the bottom quintile to the 9th quintile. Overall, the wider Craven District ranks poorly in term of this index, with the clear majority of LSOAs ranking in the top 20 percent of the least deprived areas in the UK, and many of these ranking in the top 10 percent.

Summary

- 2.4.23. There is some significant variation in the study area in terms of levels of deprivation. Some of the most deprived areas border some of the least deprived areas, with particularly notable differences between the central areas of Skipton town and the south-eastern LSOAs.
- 2.4.24. In terms of health, the deprivation levels of each location within the study area are similar to that of the overall IMD ranking. However, when looking at the more transport specific indicators barriers to housing and services and living environments there are much more varied levels of deprivation across the study area.



LCWIP Implications

The Indices of Multiple Deprivation characterise the study area as having significantly high levels of deprivation in parts of the urban area; this potentially indicates higher levels of car usage from more the peripheral areas.

The eastern and north western fringes and of the study area are characterised by a higher level of deprivation in regard to barriers to housing and services; cycling interventions in these areas could help reduce these barriers.

The centre of Skipton and eastern section of the study area are characterised by a low Living Environment Index, potentially correlating with air quality and accidents involving non motorised users. High quality walking and cycling infrastructure could help lessen the impacts of both of these, limiting the potential for collisions and reducing vehicular usage.



VEHICLE OWNERSHIP

2.4.25. Overall, 80% of households in the study area have access to a car or van, a considerably higher proportion to those figures for Yorkshire and the Humber and England, at 72.4% and 74.2%, respectively¹⁰. As detailed in Table 2-2, the study area has a higher proportion of car ownership at every level than the regional or national averages.

Table 2-2 - Vehicle Ownership (% of Population)

Car Availability	LCWIP Study Area	Yorkshire and the Humber	England
No Cars/Vans	20%	27.6%	25.8%
1 Car/Van	44.4%	42.9%	42.2%
2 Cars/Vans	27.9%	23.5%	24.7%
3 Cars/Vans	5.6%	4.6%	5.5%
4+ Cars/Vans	2%	1.5%	1.9%
Total	100%	100%	100%

Census, 2011

2.4.26. Figure 2-11 illustrates the considerable disparity in car ownership levels between the urban areas in the centre of Skipton town, and the outlying areas. For example, 41.8% and 44% of households in the LSOAs to the south-east of the centre of Skipton do not have access to a car (note that these are the most deprived areas in the District based on IMD ranking), while just north of the centre of Skipton, there are adjacent LSOAs where up to of 95.4% of households have access to at least one vehicle. Similarly, 35.5% of households within the LSOA at the centre of Glusburn and Cross Hills have no access to a vehicle, while a minimum of 83.4% of households in each of the surrounding LSOAs have access to at least one vehicle.



Car Ownership LSOA %

4.0 - 10.0

10.0 - 20.0

20.0 - 30.0

30.0 - 40.0

40.0 - 45.0

Figure 2-11 - Car Ownership - Households with no Car by LSOA

LCWIP Implications

Rural areas of Skipton and more affluent areas are more likely to have access to multiple vehicles, potentially limiting the willingness to switch modes for short journeys.

These areas are also on the periphery of the study area, potentially in a less dense area of any proposed network with fewer connections.

The urban areas of the study area are characterised by relatively low car ownership, with the area to the south east of the centre characterised by an exceedingly low car ownership. This potentially indicates a high propensity to walk or cycle.

Single car families may also be more willing to travel on foot or by bike as a second form of travel.

Those with vehicles may be able to more easily access remote leisure cycling locations, with implications for a wider network.



TOURISM AND LEISURE

- 2.4.27. As of 2012, around 4% of all overseas visits to the UK included a stay in Yorkshire and Humber, which totalled approximately 1.1 million visits. Approximately 25% of those visits were for leisure pursuits, including cycling. The average holiday taken by an overseas visitor to the region is seven nights, whilst the average spend per night of an overseas visitor is £54. Meanwhile, in 2013 the region attracted 10 million domestic tourism trips, totalling or 27.8 million nights. Of this volume of tourism-related overnight stays, 26% were made by residents of Yorkshire and Humber; 14% by residents of the North East and 13% by residents of the North West¹¹.
- 2.4.28. Skipton is a key trip attractor within the Craven area. It is noted that Skipton acts as a gateway for those visiting destinations in the wider Yorkshire Dales National Park. Private car usage is often the preferred mode of transport for trips in the wider area.
- 2.4.29. As a significant tourist destination, Skipton and its surrounding area has many specific points of interest to cater for both tourists and the local population. Table 2-3 summarises the top tourist destinations within and around Skipton, based on visitor numbers.

Table 2-3 - Top Tourist Destinations in and around Skipton (2018)¹²

Destination	Visitors Per Year (2016)	Approximate Distance from Skipton (miles)
Craven Museum and Gallery	35,296	Within Skipton
Embsay & Bolton Abbey Steam Railway	125,000	4.52
Folk Museum	8,000	7.48
Skipton Castle	92,699	Within Skipton

2.4.30. These locations are illustrated in Figure 2-12.

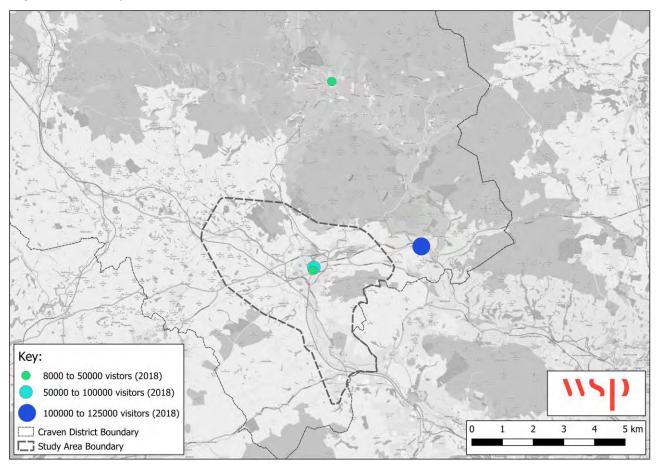
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¹¹ Leeds City Region Destination Plan (June 2016), Leeds City Region Enterprise Partnership

¹² 2018 Full Attractions Listing - https://www.visitbritain.org



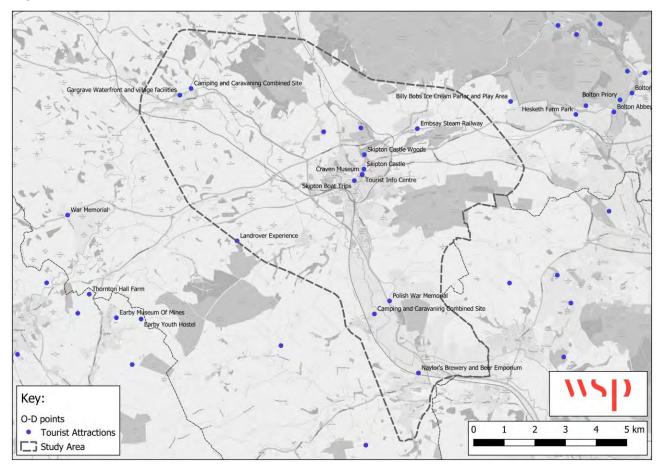
Figure 2-12 - Key Tourist Destinations: Skipton



2.4.31. There are also a number of other tourist locations that lie within the LCWIP study area and the surrounding region, which may attract longer distance tourist and leisure journeys on foot or by bike. These destinations are illustrated in Figure 2-13, and are an integral part of the determination of the network maps.



Figure 2-13 - Tourist Destinations



Strava Data

- 2.4.32. Strava is a social fitness network, primarily used to track cycling, running and swimming activity and typically uses GPS. Strava is a free service (although paid features are available) and, in 2018, the developers claimed to be adding a million new users every 45 days, with circa 8 million activities uploaded each day.
- 2.4.33. Basic Strava data is published freely online, and is available as a heatmap showing where activities are most concentrated. This free data has significant limitations when it comes to analysis, as the heatmap only shows usage in comparison with other routes, rather than actual numbers. Strava data is also be more likely to be recorded by those undertaking activities for competitive purposes, rather than casual, daily usage (such as commuting), and by certain age groups and demographic. Nevertheless, the heat maps can be useful in broadly showing where cycling (and running / swimming / walking) occurs and, specifically, where these activities take place regardless of a lack of infrastructure or legal right of way.
- 2.4.34. Figure 2-14 and Figure 2-15 show Strava cycling data of the study area around Skipton and Cross Hills / Gargrave, displayed as a heat map. Note that white denotes the 'hottest' routes, i.e. those with the highest relative usage, while dark red routes are considered 'cool', as they have the least number of relative users.



Figure 2-14 - Strava Data: Cycling in and around Skipton



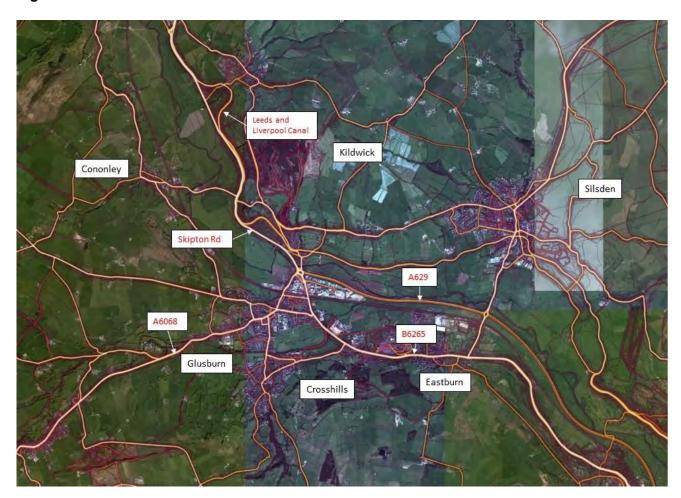
- 2.4.35. The data indicates a broad alignment with the Propensity to Cycle Tool (PCT) routes discussed in section 2.11, which predicts existing and future cycle flows based on journey to work data.
- 2.4.36. The 'white-hot' routes (indicating comparatively high usage) are concentrated on the arterial A6131, along with the B6265 and Broughton Road in the centre of Skipton.
- 2.4.37. The data shows the high level of usage of the A1631 through Skipton itself, with usage diverging at various points along Broughton Road towards Gargrave and Grassington Road to the north. To the east of Skipton, Skipton Road diverges from the A6131 and passes through Embsay, onto low Kirk Lane and Low Lane, providing a longer distance route to Bolton Abbey. Despite this route being significantly longer than the A59, the comparative demand is much higher, likely reflecting the lack of infrastructure, high vehicle flows / speeds, and relatively poor accident record on the A59.
- 2.4.38. The A6131 (Keighley Road / Skipton Road) is the main vehicular link between Skipton and Cross Hills / Glusburn. Despite the lack of infrastructure and high traffic volumes / speeds, the route records comparatively higher levels of usage than the parallel facilities on Leeds & Liverpool Canal. However, it should be noted that the canal path is relatively narrow, and the lack of natural surveillance and lighting is likely to encourage usage by casual leisure users, as opposed to commuters or Strava users concerned with fastest journey times. This route is currently being resurfaced and widened to circa 2m, which could have some impact on comparative usage.
- 2.4.39. The PCT indicates that the A6131 is likely to see the highest flows of cyclists under future growth scenarios, and this demand estimate is somewhat supported by the Strava data.



- 2.4.40. Similarly, the A65 between Skipton and Gargrave is also served by a parallel traffic free route along the canal, but actually records marginally higher comparative usage, despite note even having a footway for much of its extent. The data appears to indicate that the more circuitous route via the A59 / Church Street is preferred, potentially due to significantly lower traffic volumes along Church Street, although the ongoing resurfacing of the canal towpath my change future flows significantly.
- 2.4.41. The village of Bradley is served by the Leeds & Liverpool Canal, but Carleton and Cononley nearby have no cycling infrastructure, and are primarily served by rural roads with high vehicle speeds.

 These local routes nevertheless show relatively high levels of usage but are unlikely to appeal to casual users or fulfil the LCWIP design criteria.

Figure 2-15 - Strava Data: Cross Hills



- 2.4.42. The routes around the Cross Hills / Glusburn area generally follow the main arterial roads, although avoiding the major roads such as the A629. Of particular note is the comparatively high demand for Skipton Road / Grange Road / Crag Lane between Silsden, Kildwick, and Bradley. It should also be noted that the route of the Tour de Yorkshire extends north to south through this area, and a desire to ride the same route may contribute toward the comparative usage figures.
- 2.4.43. The overlapping routes between the PCT and the Strava data are of particular interest, as these may cater for multiple uses and offer better value for money. However, it should also be recognised that some routes may be used due to a lack of a better alternative, and that significant uplifts in users may only be possible through the implementation of new routes.



LCWIP Implications

Infrastructure in some areas may serve all purposes, strengthening the case for provision of such schemes.

However, the tourist population potentially creates additional infrastructure needs beyond that of the resident population.

Tourism specific infrastructure may not be required during the off season, potentially reducing any associated Benefit to Cost Ratio (BCR).

Many tourist attractions lie a significant distance from the urban centres, requiring longer distance routes and further lessening the likelihood of the route appealing to multiple user types.

Strava data helps identify routes with higher levels of existing cycle use. This includes high levels of comparable usage on routes considered unsuitable for cycling (arterial A class roads), which could be indicative of significant supressed demand.

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June 2020



2.5 TRAVEL PATTERNS

INTRODUCTION

- 2.5.1. This section of the report focuses on the movement patterns within the study area, looking at how people travel and where they travel to and from. The purpose of this section is to provide an understanding of the demand for movement within the study area and how walking and cycling could offer the potential for addressing some of this demand.
- 2.5.2. A range of data sources have been utilised to understand the travel patterns within the study area. such as Census and the National Travel Survey. It is understood that these sources have their limitations, such as the age of the data and the geographical disaggregation. However, it is acknowledged that there are no comparative alternatives to use without commissioning data collection for a specific purpose.

A 'VISION AND VALIDATE' APPROACH

It should also be noted that the LCWIP is not intended to continue the 'status quo' in terms of 2.5.3. existing modal split, or provide infrastructure that only caters for existing travel patterns which are predominantly based on the mobility and ubiquity of the private motor vehicle. The fundamentals of the LCWIP are based on a principle of providing active travel infrastructure for all people, for all purposes. This can be considered as a shift from the traditional 'predict and provide' models to a 'vision and validate' approach.

ECONOMIC CONTEXT

- 2.5.4. Craven's economy is considered to be typical of its rural setting, with a focus on administrative, retail and service-based businesses. However, the district's economy is also becoming increasingly diversified, with emerging strengths in areas that include health, financial and professional services and tourism.
- 2.5.5. Craven is also home to a number of high profile national and international businesses, including:
 - Skipton Building Society;
 - Dechra Pharmaceuticals:
 - JN Bentlev:
 - Cirteq;
 - Jeremy Benn Consulting;
 - Computershare; and
 - Scapa Healthcare.
- 2.5.6. There is also a large proportion of self-employed residents in Craven, accounting for approximately 20% of the economically active population - this figure is high when considered against Yorkshire and the Humber and Great Britain which are around 9% and 11%, respectively.
- Craven is predominantly a 'small business' economy, it has a higher proportion of 'micro' firms 2.5.7. employing fewer than 10 workers (89.7%) than both Yorkshire and the Humber (86.8%) and Great Britain more generally (88.3%).
- 2.5.8. Despite this strong and diverse economy, Craven also relies on its significant economic links with the Leeds-Bradford conurbation, as well as ties to the predominantly rural areas to the east and north of the district. Craven also has economic ties with East Lancashire, in particular with nearby towns in Pendle and the City of Lancaster.



- 2.5.9. ONS population projections forecast a correlating decline in the number of people of working age; for Craven, as a whole, this reduction is expected to be approximately 3,400 people, which equates to a 10% decrease between 2017 and 2035.
- 2.5.10. An ageing population, and correlating reduction in working age population, such as this, has significant implications in a number of areas including the structure of the local labour force, future household formation, demands on healthcare provision and accessibility of amenities and services. Ultimately, this pattern of growth needs to be reversed, and measures put in place to attract more young people to live and work in the local area.
- 2.5.11. The issue of an ageing population is highlighted in the Craven Local Plan (2019) which describes how, in a survey of local businesses, 33% cited the lack of availability of a local workforce as a key barrier to their future growth.
- 2.5.12. Current travel patterns reflect the need to commute outside the district for work; approximately 46% of all journeys to work are to destinations outside the district (2011 Census), and these longer distance trips are generally impracticable to be undertaken by active modes. However, the LCWIP can still encourage longer distance trips via sustainable modes through improved accessibility to rail and bus facilities. It must also be recognised that the LCWIP should consider the changing economic context in the district and growth in local businesses.

EDUCATION CONTEXT

- 2.5.13. The Sustainability Appraisal Scoping Report, prepared as part of the Craven Local Plan (2019), states that:
 - "Craven's schools consistently perform better than the national and regional averages...to record figures of GCSE A*- C 94.6%, compared to the figure for England of 84.6".
- 2.5.14. And furthermore that:
 - "The plan area contains some of the best schools in the country...based on GCSE results for summer 2012 published, Skipton Girls High School achieved the sixth best performance of any school in England".
- 2.5.15. In terms of higher education, unlike other areas in Craven and the wider County, Craven College (in Skipton) offers a range of courses that include degrees awarded by University of Bradford, York St John and University of Huddersfield.
- 2.5.16. The data set out in Table 2-4 shows significantly higher than average qualification at NVQ Levels 1 to 4 (and above) amongst Craven residents when compared to both regional and national averages.



Table 2-4 - Qualifications (Jan 2018 - Dec 2018)¹³

Metric	Craven (numbers)	Craven (%)	Yorkshire and the Humber (%)	Great Britain (%)
NVQ4 And Above	15,200	47.8	33.3	39.3
NVQ3 And Above	22,200	69.8	53.6	57.8
NVQ2 And Above	29,100	91.4	71.8	74.9
NVQ1 And Above	30,800	96.8	84.3	85.4

- 2.5.17. This level of academic performance results in issues of cross boundary trips that are prevalent within secondary and further education. This includes pupils making daily trips into Craven to attend schools and colleges in Skipton and the south of the district, while, in the north, issues of rurality mean that there are school children who travel out of the district to the schools within Lancashire and Cumbria.
- 2.5.18. Accessibility and demand for good education can affect travel patterns, and result in additional trips on the transport network, contributing to issues of congestion. The education provision available in Skipton attracts daily trips from surrounding areas; as such, good transport links are vitally important to enable pupils to have opportunities to access education, whilst not adding pressure to the transport network. Given the rural hinterland surrounding Skipton, good accessibility to Skipton station is considered intrinsic to enabling people to access the town by sustainable transport modes.

MODE SHARE

Journey to Work

2.5.19. One of the questions asked in the 2011 Census was regarding method of travel to work; the question asked: "How do you usually travel to work? Tick the box for the longest part, by distance, of your usual journey to work." Table 2-5 presents the results of the question in relation to the Study Area at an LSOA level, compared to regional and national data.

Table 2-5 - Method of Travel to Work (% of Trips)

Method of Travel	LCWIP Study Area	Craven District	Yorkshire and The Humber	England
Work Mainly at or From Home	7.34%	9.1%	8.49%	5.36%
Underground, Metro, Light Rail, Tram	0.1%	0.1%	0.1%	4.08%

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¹³ Nomis Labour Market Statistics, 2018

¹⁴ ONS, 2013 via National Archives (http://www.ons.gov.uk/ons/rel/mro/news-release/travel-to-work/census-reveals-details-of-how-we-travel-to-work-in-england-and-wales.html)



Train	4.3%	3.53%	2.01%	5.34%
Bus, Minibus or Coach	2.84%	2.21%	2.96%	7.5%
Taxi	0.31%	0.22%	0.28%	0.52%
Motorcycle, Scooter or Moped	0.42%	0.45%	0.59%	0.82%
Driving a Car or Van	60.72%	61.28%	61.85%	57.01%
Passenger in a Car or Van	5.25%	4.83%	5.28%	5.03%
Bicycle	1.25%	1.24%	2.27%	2.95%
On Foot	16.88%	16.26%	15.24%	10.74%
Other Method	0.6%	0.78%	0.92%	0.65%

Note: 'Not in Employment' statistics have been removed.

- 2.5.20. The data in the table shows that the methods of travel to work in the study area is generally consistent with the regional level and national level. The preferred method of travel in the study area is driving a car or van, which is 3.71% higher than the national level.
- 2.5.21. It should be recognised that the use of active modes varies across the district and within the study area itself. Within Skipton itself, approximately 27% of all journeys are undertaken on foot, reflecting the compact urban area and the wide variety of facilities, services and employment opportunities. Travelling to work on foot remains the second most preferred method of travel in the LCWIP study area, at 17% which is higher than both regional and national levels by 1.65% and 6.15% accordingly.
- 2.5.22. Perhaps more surprising is the fact that cycling has such a low proportional use for commuting, at 1% in both the town, the LCWIP study area, and the wider district. This may be indicative of issues relating to the attractiveness of cycling, due to existing infrastructure and facilities, and, resulting in a perception that it is not a viable commuting mode in the area.

Mode Share - Study Area Internal Trips

2.5.23. Further analysis was undertaken to isolate those trips that are internal to the LCWIP study area using Census (2011) Origin – Destination data at the MSOA level, identifying methods of commute for those trips with both an origin and destination within the study area15. The modal split for internal journeys to work is displayed in Table 2-6, while the study area and relevant analysed MSOAs are illustrated in Figure 2-16.

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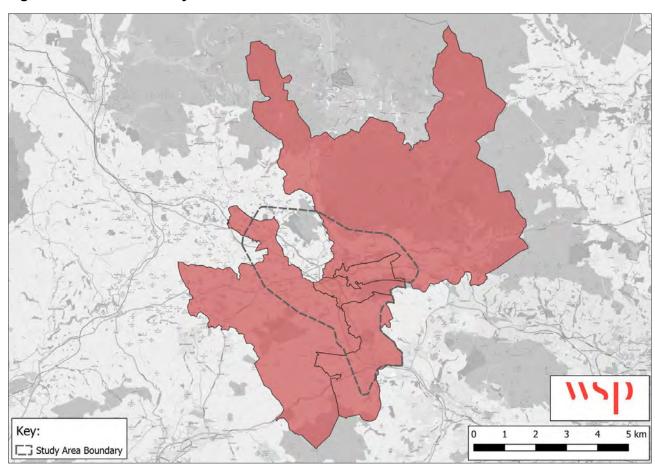
¹⁵ Census 2011 – Dataset WU03EW



Table 2-6 - Method of Travel with Origin and Destination within the Study Area

Method of Travel	Skipton LCWIP Study Area (no.)	Skipton LCWIP Study Area (%)
Train	58	0.89%
Bus, Minibus or Coach	217	3.31%
Taxi	28	0.43%
Motorcycle, Scooter or Moped	22	0.34%
Driving a Car or Van	3,598	54.96%
Passenger in a Car or Van	470	7.18%
Bicycle	118	1.8%
On Foot	2,020	30.85%
Other Method	16	0.24%
Total	6,547	100%

Figure 2-16 - LCWIP Study Area at MSOA Level



2.5.24. A total of 6,547 internal commuter trips within the study area are made per day. The most preferred method of traveling to work is driving a car or a van, which accounts for 54.96% of all trips made. The second most preferred method of commuting, as before, is on foot at 30.85%. This is a significant increase in comparison with the modal split when assessing all trips, likely reflecting the average shorter distance of internal trips, and it could be anticipated that other active modes of

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transport, such as cycling, would also be accordingly higher. Yet, the cycle commuting trips are only 1.8%, which remains less than the regional and national average levels.

2.5.25. When considering all possible destinations (internal and external), a total of 14,003 journeys to work were identified, meaning approximately 47% of journeys to work that originate in the study area are internal. The vast majority of these trips likely occur over a desirable walking or cycling distance and yet do not use these modes, indicating the potential to induce more active travel trips through the provision of high quality infrastructure.

LCWIP Implications

The census data indicates that existing levels of walking within the study area for commuting purposes are relatively comparable to regional and national averages, and significantly higher when only considering trips wholly internal to the study area. However, the proportion of cyclists remains very low, indicating the existence of significant barriers to the uptake in cycling for commuting purposes.



COMMUTING ORIGIN / DESTINATION

- 2.5.26. Census 2011 data was also used to analyse the existing patterns of movement to work within Skipton and the surrounding areas. Although the data looked at is not specifically related to walking and cycling, it is very useful in terms of understanding existing movement patterns around the LCWIP study area which has potential to be met by walking or cycling should barriers to these modes be reduced or removed.
- 2.5.27. Commuting patterns also provide information as to how people choose to travel to work and can be an indicator of more general transport accessibility issues. For example, over-reliance on the private car can indicate a lack of mode choice in a geographic area and can help identify potential issues or barriers to accessing areas by public transport or active modes.
- 2.5.28. Table 2-7 sets out commuting patterns for residents of the LCWIP study area using Census 2011 Origin Destination data at the MSOA level. Note that the level of disaggregation offered by the data does not align entirely with the study area, and is therefore not directly comparable. Where trips to a destination accounted to less than 1% of the total trips, they were combined under the category 'Other'.

Table 2-7 - Commuting Patterns for LCWIP Study Area Residents

Place of Work	Total Workers	% of all workers
Craven	7,599	54.27%
Bradford	3,456	24.68%
Leeds	875	6.25%
Pendle	470	3.36%
Harrogate	301	2.15%
Other	1,302	9.3%
Total	14,003	100%

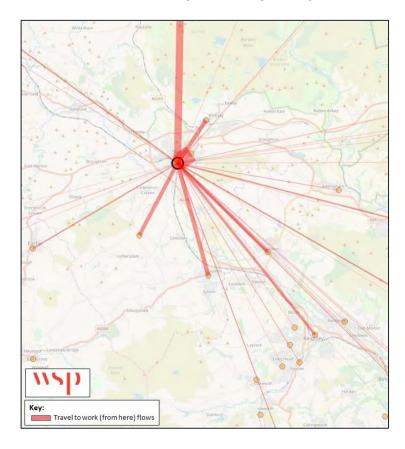
Census, 2011 - Dataset WU03EW

- 2.5.29. The data shows a total of 14,003 trips to work originating within the study area at the time of the 2011 Census. More than 54% of these remain within the Craven District for their place of work. Out of those, about 86% or 6,547 remain within the study area (at MSOA level).
- 2.5.30. Approximately a quarter of the working population in the study area travels to the neighbouring Bradford district. Additionally, 6.25% and 3.36% of trips to work are to Leeds and Pendle Districts (respectively). Almost half of the residents in the study area travel to neighbouring districts to work, which are generally beyond the maximum desirable walking and cycling distances, particularly from Skipton.



- 2.5.31. The DataShine platform¹⁶ visualises the Census 2011 travel to work flows using population-weighted MSOA centroids as vectors. The program indicates the flows of people commuting away and towards a specified location using all methods of travel to work. The red lines represent flows out from the selected location towards employment sites, while the blue lines demonstrate flows coming into the selected place, where people work.
- 2.5.32. Figure 2-17 visualises the commuting trips of the residents of Skipton using the DataShine platform. The most common employment destinations at an MSOA level are identified by the width of the red lines. The figure shows that the comparatively greatest link is to the nearest adjacent MSOA, visualising the high proportion of people commuting within Skipton itself. Note that the visualised data in this image is limited to Skipton itself, so while it represents the main urban centre in the district, it does not take into account trips originating from the whole study area.

Figure 2-17 - Key Destinations of Commuting Trips Originating in the LCWIP Study Area



2.5.33. Data has also been extracted from the Census 2011 to identify the origins of commuting trips into the study area, as shown in Table 2-8.

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¹⁶DataShine: https://commute.datashine.org.uk/#mode=allflows&direction=to&msoa=E02005747&zoom=12&lon=-2.0230&lat=53.9274



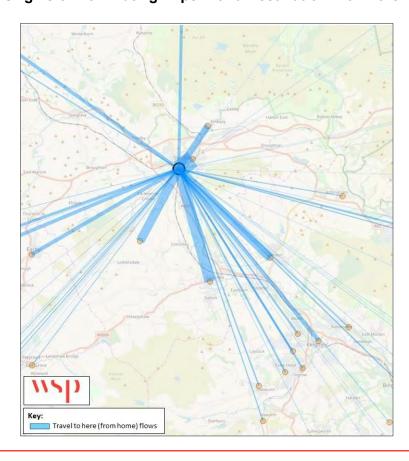
Table 2-8 - Commuting Patterns for LCWIP Study Area Workers

Place of Origin	Total Workers	% of all workers
Craven	7,464	51%
Bradford	3,820	26.1%
Pendle	1,442	9.85%
Leeds	398	2.72%
Harrogate	231	1.58%
Other	1,281	8.75%
Total	14,636	100%

Census, 2011 - Dataset WU03EW

- 2.5.34. The data identified 14,636 commuting trips into the study area. Of these, 51% originated within the Craven District, of which almost 88% are internal to the study area. This indicates that circa 44% of all people commuting into the study area for work could be within a desirable cycling distance.
- 2.5.35. More than 26% of workers coming into the study area originate from Bradford, while 9.85% and 2.72% originate from the nearby authorities of Pendle and Leeds respectively. It is likely that the vast majority of these are beyond the maximum desirable walking or cycling distance although there is some propensity for cross-boundary trips between Keighley and Cross Hills / Glusburn.
- 2.5.36. Figure 2-18 illustrates these trips using the DataShine platform, again focussing on trips into the town of Skipton specifically.

Figure 2-18 - Key Origins of Commuting Trips with a Destination within the LCWIP Study Area

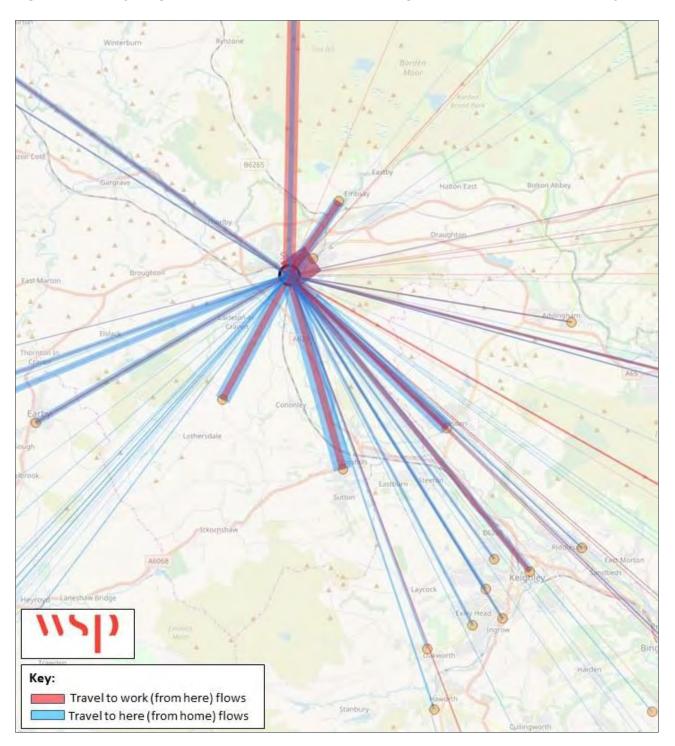


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2.5.37. Figure 2-19 illustrates both inwards and outwards commuting, allowing a comparison between trips into and from Skipton and showing the varying origins and destinations.

Figure 2-19 - Key Origins and Destinations of Commuting Trips within the LCWIP Study Area



2.5.38. Table 2-9 sets out the proportion of residents that both live and work in the same district across North Yorkshire.



Table 2-9 - Proportion of Residents Living and Working in the Same District¹⁷

Craven	Hambleton	Harrogate	Richmondshire	Ryedale	Scarborough	Selby
57%	60%	71%	66%	65%	82%	41%

2.5.39. This shows that, with the exception of Selby, Craven has the lowest proportion of residents that both live and work in the same district, indicating that comparatively large numbers of people travel across the district boundaries to and from the area for work.

LCWIP Implications

The data identifies that approximately 47% of trips to work within the study area at an MSOA level are internal. This provides opportunities and potential for modal shift to active and sustainable modes of transport as the distance is primarily within the desirable cycling distance.

While there is potential for modal shift to sustainable transport, the dense existing urban area and historic streetscape may present difficulties in altering highway provision and allocating more space to active travel modes.

The data indicates that many trips to work have an origin and destination within Skipton itself, and the compact urban nature of the area could lend itself more to a culture of walking.

There are also strong links to Glusburn / Cross Hills in the south of the study area. which is within a desirable cycling distance and served by routes that are less constrained than intra urban ones, as well as benefitting from less hilly terrain.

While longer distance routes are less likely to encourage cycling for work purposes, such routes could overlap with leisure purposes, connecting to significant tourist destinations further afield.

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¹⁷ ONS data WU03EW - Location of usual residence and place of work by method of travel to work (MSOA level)



TRIP PURPOSE

National Travel Survey

- 2.5.40. The National Travel Survey, published yearly by the DfT, is a household survey designed to monitor long-term trends in personal travel and to inform the development of policy. It is the primary source of data on personal travel patterns by residents of England within Great Britain.
- 2.5.41. While the data can be assessed at a national and regional level, as well as by different types of rural-urban residence classification, the data cannot be obtained at any further level of disaggregation and therefore the applicability of the analysis is limited. Table 2-10 compares the percentages of trip rates by trip purpose for Yorkshire and the Humber to those of England overall.

Table 2-10 - Average Proportion of Trips per Person by Trip Purpose

Trip Purpose	Yorkshire and The Humber	England
Commuting	15%	16%
Business	3%	3%
Education (including escort)	12%	12%
Shopping	19%	19%
Other escort and Personal business	19%	19%
Visit friends	15%	15%
Other leisure	17%	16%

DfT. 2016

2.5.42. From this information, we can see that the breakdown of purposes for making trips for residents of Yorkshire and the Humber is nearly identical to that of England overall. It shows that trips are being made for a wide variety of reasons, and that if the LCWIP adopts a strategy that only addresses a particular purpose (or a small number of purposes), it will only reach a relatively small portion of trips.

TRIP LENGTH

2011 Census Data

- 2.5.43. Distance Travelled to Work data obtained from the 2011 Census was analysed to determine average trip lengths and evaluate the potential for shorter trips undertaken by other modes to be converted into walking or cycling trips.
- 2.5.44. Table 2-11 below shows the percentage of usual residents in employment travelling certain distances to work under 10km, and compares the data for the study area, North Yorkshire, Yorkshire and the Humber, and England. The table also shows the average commute distance for all trips to work. Note that beyond a distance of approximately 7km, the propensity to cycle significantly reduces.

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Table 2-11 - Distance Travelled to Work (% of Workers)

Distance	LCWIP Study Area	North Yorkshire	Yorkshire & the Humber	England
Less than 2km	21.9%	21.3%	17.9%	16.6%
2km to less than 5km	9.9%	11.8%	20.8%	18.4%
5km to less than 10km	16.4%	10.5%	18.3%	17.3%
Work mainly at/from home	13.0%	15.2%	9.3%	10.3%
Other	7.7%	7.5%	7.3%	8.5%
Total Under 5km	31.9%	33.1%	38.7%	35.0%
Total under 10km	48.2%	43.7%	73.5%	71.0%
Average Distance (km)	20.1km	19.2km	14.6km	14.9km

- 2.5.45. This data shows that the study area currently has a similar proportion of people travelling less than 2km to work (the maximum desirable walking distance) as the NY average, which is considerably higher than the regional or national average.
- 2.5.46. However, the proportion travelling greater than 2km but less than 5km is much lower than the regional and national averages, as is the proportion travelling greater than 5km but less than 10km; while the proportions travelling less than 5km or 10km are comparable to the NY average, these are far less than the regional and national averages. The higher proportion of commuters travelling longer distances to work also results in a high average journey distance.
- 2.5.47. Walking is often considered the most important mode of travel at a local level; guidance on the preferred maximum walking distances to amenities is given in the Chartered Institute of Highways and Transportation [CIHT] document Providing for Journeys on Foot (2000), which states a preferred maximum walking distance for commuting of 2km. While journeys under 2km are generally recognised as those with the potential to be undertaken on foot, it stands to reason that with a conducive environment these trips could also be undertaken by bicycle.
- 2.5.48. It is widely recognised that cycling can act as a substitute for short car journeys, particularly those up to 5km in length; 3 miles (5km) is referred to in the DfT's 'Cycle Infrastructure Design' (2008) guidance as being appropriate for many utility cycle journeys. More recent guidance within 'Creating Growth & Cutting Carbon' (2011) identifies a greater 5-mile (8km) distance.
- 2.5.49. The Census data analysis has found that approximately 47% of all journeys to work with an origin in the LCWIP study area are internal i.e. remain within the study area. When considering all trips to work originating within study area, 51% remain within the Craven District boundary.
- 2.5.50. While the data is relatively comparable to the NY averages, with a higher proportion of journeys under 10km, over half of all trips to work from the study area are travelling distances far in excess of the maximum desirable cycling distance (which by default is greater than the equivalent walking distance).
- 2.5.51. The LCWIP study area is made up of two distinct urban areas in Skipton and Cross Hills / Glusburn. with various small villages surrounding these. Of those travelling under 10km, many journeys are likely to involve trips between these areas along routes lacking cycling infrastructure, with many also



lacking footways. This is likely reflected in the high proportion of trips within the study area made by car, rather than other modes.

LCWIP Implications

The significant number of commuters travelling beyond Craven and the study area boundaries limits the potential for new infrastructure to cater for journeys to work.

Additionally, the disparate and rural nature of the district and study area encourages car use for those journeys within the boundaries.

However, many of these villages and outlying areas have few opportunities to use other modes, lacking the infrastructure to make such journeys safely.

There is therefore an opportunity to ensure the various communities are connected, offering a choice in mode to undertake journeys between them.

It is also important to ensure that future travel patterns are catered for, and that these reflect not only demand, but also the aspirations and vision for the district.



2.6 EXISTING TRANSPORT NETWORKS: CYCLING AND WALKING

- 2.6.1. This section of the report provides additional context about the existing walking and cycling facilities in the LCWIP study areas, allowing identification of areas and features with high-quality infrastructure and those areas with a deficit.
- 2.6.2. Note that the section focusses more strongly on cycling and cycle users, as walking for any purpose is considerably more prevalent than cycling nationally. The needs of pedestrians have long been catered for through the provision of footways; while sometimes inadequate or substandard, the presence of a footway nevertheless facilitates some movement on foot. The needs of cycle users have been poorly understood until recently, and the lack of cycle-specific infrastructure has been identified as one of the key factors in supressing demand.
- 2.6.3. The Craven Local Plan also recognises this, drawing attention to the lack of formal cycle provision in Skipton, which is largely limited to canal side paths that are permissible for cycling. Cycle parking provision is also considered scarce, with the only stands located at the bus and rail stations notably absent from the town centre.

DEFINING CYCLE USERS

- 2.6.4. From the outset, it is important to recognise that the term 'cycle users' encompasses as a wide range of individuals who use their bikes for a variety of different reasons. These users have varying needs and expectations, not only regarding the infrastructure and facilities required, but also in terms of 'soft' measures such as information, publicity, safety and security.
- 2.6.5. Table 2-12 displays the range of cycle users that are expected to benefit from the measures proposed in the Skipton LCWIP; identification of user types helps to inform the development of the strategy in the consideration of all user types, and recognises that users can change type during the course of their lives.
- 2.6.6. It is also important to note that non-users are specifically included in this list, as this group represents an important target audience in terms of the potential for a modal shift toward cycling. Furthermore, non-users are considered to require particular attention in terms of overcoming many of the traditional barriers to taking up cycling.

Table 2-12 - Types of Cyclist

Туре	Description
Non-User	Existing walkers / drivers / public transport users including the young, elderly, infirm and disabled – those who do not cycle at present
Utility	Education / healthcare / shopping trips – using bikes as means to an end
Commuter	Fixed locations workers / hub workers / multi-modal workers – using bikes as an alternative to walking, the car or public transport for all or part of a trip – using bikes to travel to work
Leisure	Active individuals / active couples / active families / active groups – using bikes for leisure pursuits – using bikes to travel for fun
Sporty	Off-road enthusiasts / off-road informal / off-road groups & clubs / off-road commercial ventures / road enthusiasts / road groups & clubs – using bikes for sporting and/or health reasons, generally enthusiasts, participate in 'challenges' and 'sportives' – using bikes for sport / health
Competitive	Individuals / formal clubs – using bikes as part of a training regime for formal competition on and off-road ('pinning a number on') – using bikes for competition



EXISTING CYCLING AND WALKING NETWORKS

2.6.7. Figure 2-20 shows the existing cycling and walking network in the study area (excluding highway infrastructure). The image includes Public Rights of Way (PROW) and designated Sustrans routes, including some of regional and national importance. NYCC do not hold any detailed GIS data relating to cycling infrastructure provision, but CDC have shared spatial data relating to the limited existing infrastructure across the District, mainly consisting of shared use footways.

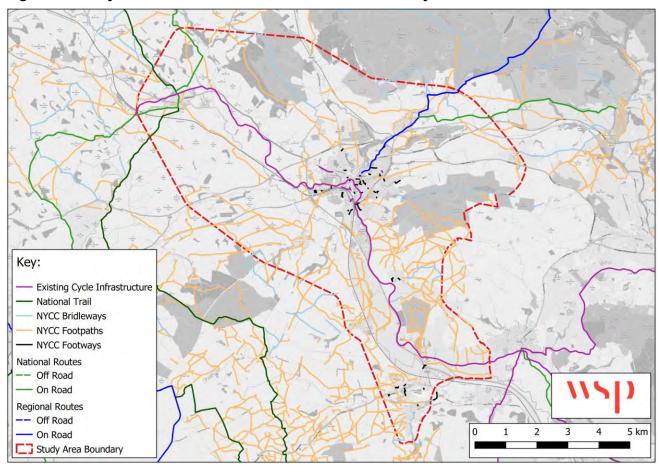


Figure 2-20 - Cycle Network & PROW within the LCWIP Study Area

- 2.6.8. The study area includes an extensive PROW network; this presents various opportunities to create more permeable walking and cycling networks away from vehicular routes, which can also enhance access to longer distance recreational routes.
- 2.6.9. As well as providing access to the Yorkshire Dales and Forest of Bowland AONB from Skipton, the study area also includes a number of cross-country routes of national importance, including the Pennine Way at Gargrave. There are good cycling opportunities in the District, with access to the National Cycle Network at Gargrave and Embsay, as well as at Giggleswick, Clapham and Ingleton outside the LCWIP study area. The Way of the Roses and the Leeds & Liverpool Canal towpath present additional potential for active recreation and leisure.
- 2.6.10. While the majority of Craven's footpaths, bridleways, byways and cycle routes are public rights of way (PROWs), the Leeds & Liverpool Canal towpath is classified as a 'permissive path'.

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Leeds & Liverpool Canal

- 2.6.11. The Leeds & Liverpool Canal is the longest canal in Britain built as a single waterway at 127 miles in length. The canal is a significant built and natural asset within Craven passing through the south of the plan area for a distance of approximately 17 miles.
- 2.6.12. The Canal provides a resource as a wildlife and habitat corridor; a recreational route for walking, canoeing, cycling and running; a route for commuters who walk or cycle along the towpath to get to work or school; and as a tourism asset for those pursuing holidays on narrow boats as well as day-trippers seeking a place for peace and reflection. The industrial heritage of the Leeds & Liverpool Canal is considered to be one of the defining elements of the area and provides a rich historic environment for current and future generations to enjoy.
- 2.6.13. A number of enhancements to the route were identified in the Leeds & Liverpool Canal Access Development Plan, discussed in Section 2.10. While the alignment offers many opportunities for active travel, the associated heritage aspects must also be considered, as well as the requirements of the Canal & Rivers Trust as the landowner.

LCWIP Implications

The study area benefits from an extensive PROW network. While many of these are footpaths and do not offer formalised provision for cycle users, their alignment offers the potential to provide new off road routes for cycling, as well as improving key routes for pedestrians.

The Leeds & Liverpool Canal towpath also offers a significant opportunity to connect many of the smaller villages to larger destinations in the area and in neighbouring Bradford.

However, the needs of all canal users and the need to preserve the heritage of the route limits the scope of any potential improvements.



PEDESTRIAN AND CYCLIST COLLISION DATA

- 2.6.14. Collisions involving pedestrians and cycle users can be seen as a barrier to taking up or continuing the activity, as they have a negative effect on both perceived and actual safety. However, existing data on collisions can only provide some additional context regarding barriers to active travel. A poor route or junction may supress demand to such an extent that the numbers of walkers or cyclists are negligible or non-existent. Furthermore, the data only records accidents that cause injury; there are no records of near-misses or damage-only accidents.
- 2.6.15. Table 2-13 shows the total number of accidents involving pedestrians or cycle users within the LCWIP study area from 2014 to 2018 (note this is no. of accidents, rather than no. of casualties), as well as the total number of casualties considered to be vulnerable road users (including OAPs, and children), the total number of road user casualties in the study areas during that time, and how vulnerable road user casualties compare to the total road user casualties annually.

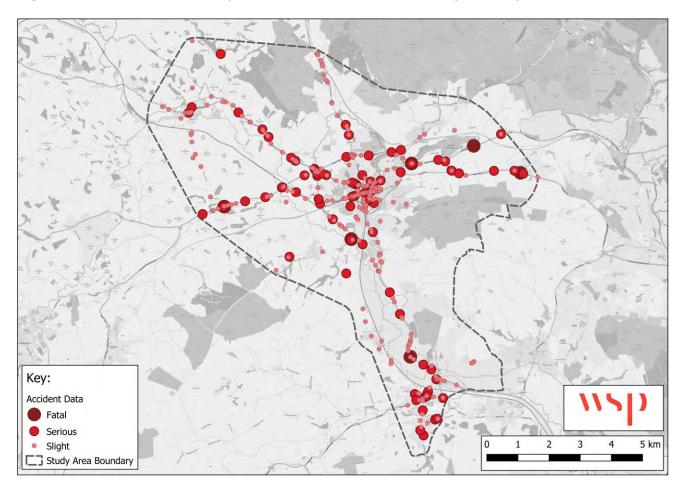
Table 2-13 - Study Areas Pedestrian & Cycle User Collisions

Severity	2014		2015		2016		2017		2018	
	Cycle	Walk	Cycle	Walk	Cycle	Walk	Cycle	Walk	Cycle	Wal k
Slight	3	10	10	6	2	18	15	14	2	4
Serious	2	4	5	4	2	2	0	4	1	3
Fatal	0	1	0	0	0	0	0	0	0	1
Total Vulnerable Users Casualties	26		27		38		41		28	
Total Casualty	78		96		118		116		124	
Vulnerable Users % of Casualties	33%		28%		32%		35%		23%	

- 2.6.16. The data in the table above shows that over the five-year period there were two fatal collisions that involved a pedestrian, with each occurring on an A-class road adjacent to villages near Skipton. The data shows that between 2014 and 2017 the number of collisions involving pedestrians and/or cyclists has increased; however, the number decreased significantly in 2018.
- 2.6.17. The number of vulnerable user casualties followed a similar trend, with the frequency increasing between 2014 and 2017, followed by a decrease in 2018 (28).
- 2.6.18. An average of the data shows that approximately a third of all road user casualties each year within the study areas involved vulnerable road users. Improving infrastructure within the study area could potentially contribute to reducing these.
- 2.6.19. The accident data has been used to produce Figure 2-21, illustrating where the accidents involving cyclists and pedestrians occurred.
- 2.6.20. The figure shows all collisions over the 5-year period between 2014 and 2018. The data shows that where accidents occur in close proximity, this is typically along arterial roads or at junctions where there is also a higher number of vulnerable road users, such as pedestrians crossing.



Figure 2-21 - Pedestrian and Cyclist Collisions Location Plot (by Severity)



- 2.6.21. Across the Study Area, the following routes or junctions are identified as potential accident spots:
 - Broughton Road;
 - Belmont Street;
 - Swadford Street;
 - High Street;
 - Gargrave Road;
 - Keighley Road;
 - Skipton Road at Draughton;
 - Main Street at Cross Hills;
 - Main Street / Station Road priority junction;
 - Broughton Road / Gargrave Road priority junction;
 - Broughton Road / A59 priority junction (at Inga Bridge);
 - A65 / The Bailey priority junction;
 - A65 / A59 / A629 roundabout; and
 - Station Road / Main Road / Skipton Road at Glusburn and Cross Hills
- 2.6.22. Any existing accident issues will be taken into account when considering any potential interventions. The need for intervention to address accident hotspots will also be considered when prioritising routes for design and investment.



WALKING AND CYCLING ISOCHRONES

- 2.6.23. Active travel isochrones have been produced encompassing the LCWIP study area, identifying what extent of the District could reasonably be accessed by walking or cycling from a central point of interest.
- 2.6.24. While Skipton and the nearby Cross Hills / Glusburn urban area are in close proximity with strong links between the two, there are few destinations between. It is therefore considered that the two areas should be assessed separately, analysing short trips within each area and longer strategic opportunities for cycle connectivity between the two.
- 2.6.25. The isochrones produced therefore use Skipton town centre (High Street) and Cross Hills centre (Main Street) as the origin points.
- 2.6.26. These focal points are considered to be the urban centres of the study area, highlighting the maximum desirable active travel distances to some of the main commercial and employment centres. While more comprehensive isochrone mapping from various strategic locations will form a key part of developing the Walking Network Map, these isochrones are used to help determine the extent of the study area for each location.
- 2.6.27. The NPPF and other established guidance documents on access to services and facilities (for example, *Guidelines for Providing for Journeys on Foot*, CIHT 2000) recognise that, beyond a certain distance, it becomes increasingly unlikely that people will walk or cycle to access services and facilities, instead using public transport or private motor vehicles. The following criteria are used in generating walking and cycling isochrones, representing the maximum desirable walking and cycling distances as identified in these documents.

Table 2-14 - Walking and Cycling Isochrone Criteria

Mode	Maximum Desirable Distance
Walk	2km
Cycle	5km

- 2.6.28. The figures also show a distance of 400m; this relates to the Core Walking Zones as specified in the DfT LCWIP guidance (as discussed in section 5.5).
- 2.6.29. Note that the isochrones show what extent of the LCWIP study area *could* be considered accessible by cycle or on foot based solely on distance (rather than the provision of infrastructure or hilliness, for example).
- 2.6.30. Figure 2-22 and Figure 2-23 present the isochrones for Skipton and Cross Hills / Glusburn respectively.



Figure 2-22 - LCWIP Study Area Active Travel Isochrone: Skipton

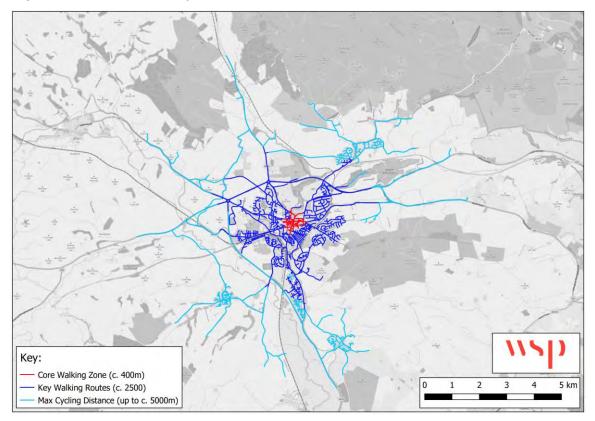
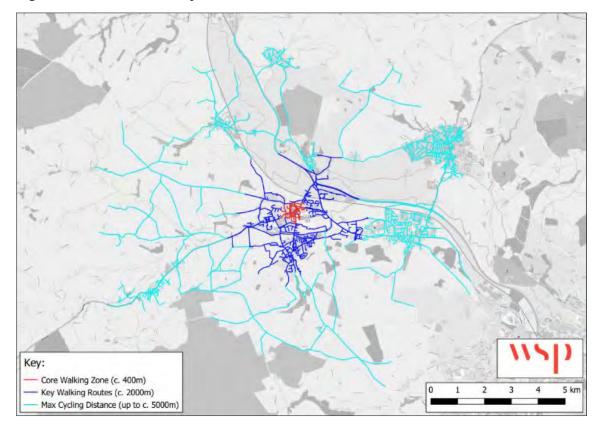


Figure 2-23 - LCWIP Study Area Active Travel Isochrone: Cross Hills / Glusburn





2.6.31. The following points are noted:

- The entire of the Skipton urban area and the villages of Carleton, Embsay and Low Snaygill are within the maximum desirable cycling distance from Skipton town centre. However, areas such as Cross Hills, Glusburn, Eastburn, Kildwick, and Gargrave, are outside the maximum desirable cycling distance;
- The majority of Skipton is within the maximum desirable walking distance from the town centre;
 and
- The Cross Hills / Glusburn are has the potential for strong active travel links to Steeton and Silsden in neighbouring Bradford District, being within the maximum desirable cycling distance.

LCWIP Implications

The isochrone analysis shows that Skipton LCWIP study area includes some ODs on or beyond the maximum desirable cycling distance that may still be of benefit to include, and the boundaries reflect this.

The potential benefit of the more strategic longer distance routes will need to be considered during the development of the emerging walking and cycling network maps and prioritised as such.

The analysis suggests a more granular approach to analysis should be taken within the Skipton and Cross Hills / Glusburn areas separately, with strategic links considered between the two and to outlying areas.

CYCLING ACTIVITIES AND INITIATIVES

Cycle Events

- 2.6.32. The Men Elite Road Race took place on Sunday 29th of September 2019 as part of the UCI (Union Cycliste Internationale) Road World Championships, covering a total distance of 285 km. The route started from Leeds, passing through Skipton just after the 30th km and finishing in Harrogate.
- 2.6.33. The Men Elite Road Race is the last race of the 8 days long UCI Road World Championships. It is considered to be one of the biggest events in the cycling calendar, with riders competing for their countries rather than for individual race teams.
- 2.6.34. The 4th year of Skipton Town Centre Cycle Races took place on Wednesday 11th July 2018. The event was a closed road circuit race part of HSBC UK | National Circuit Series, and delivered by Craven District Council, with sponsorship from Yorkshire Housing. The headline event was the Elite Men's Criterium which had the UK's best racers, but also provided opportunity for everyone, including youth riders. Unfortunately, the Skipton Cycle Races did not go ahead in 2019 because of lack of financial support and resources.
- 2.6.35. Le Petit Depart is a 100-mile cycle event that took place on Sunday 2nd June 2019, starting and ending in Skipton. The event has been occurring annually since 2014 and follows routes of much of the 2014 Tour de France, some of the Tour de Yorkshire route and the 2019 World Championship road race route. It offers four routes catering for all people's abilities, all starting from Skipton, which include a 100 mile Challenge Sportive, an 80 mile Sportive route, a 49 mile Scenic Long ride, and a 38 mile Scenic route.



Cycle Hire and Recycling Schemes

- 2.6.36. Chevin Cycles Skipton is an award-winning small local chain of shops that offer electric cycle hire, proving a great way to deal with the challenging hills around Skipton.
- 2.6.37. Dave Ferguson Cycles also give opportunities to hire a range of bikes by the day, such as road, mountain and hybrid bicycles. They also arrange drop-off and pick up of the bikes.
- 2.6.38. JD Tandems in Gargrave, just outside of Skipton, offers a free try-before-you-buy service, as well as hire. It is the largest supplier of tandems based in the UK.
- 2.6.39. Skipton Rotary Club offers a recycling scheme, where bikes of all shapes and sized are collected for the Cycle2Recycle scheme. All bikes are refurbished by the Yorkshire-based Margaret Carey Foundation and donated to people in need in the UK and overseas. If the bicycle is in an unusable state, it can be recycled in the scrap metal skip at the Skipton HWRC, just to the east of Skipton.

Recreational Cycling Opportunities

2.6.40. Craven Leisure provides various forms of indoor cycling classes, such as traditional spin, virtual spin and teen spin classes. In the Aireville Park, next to the Craven Leisure, there is a wheel park for BMX and a pump track for mountain bikes and off-road bikes that has rollers and berms to help generate speed. The Aireville Park is free for all experienced and novice riders.

Cycle Clubs

- 2.6.41. Skipton Cycling Club is the main cycling club in the town, catering for everyone, ranging from experienced racers to leisure cyclists. It was established in 2014 and provides rides suitable for people of all fitness levels. The club runs different group events to cater for different needs, offering evening or weekend rides, social rides, training rides, sportives, off-road rides, ladies only rides, racing or even meeting in the pub.
- 2.6.42. More information on Cycle Clubs in Skipton and the wider North Yorkshire County can be viewed at http://www.northyorkshirecycling.co.uk/clubs/.

Skipton Trails (Pathways to Health)

- 2.6.43. Craven District Council has produced a series of Recreational Ride guides for novice cyclists, family rides and rusty cyclists, giving information about the map of the route, way point details, local attractions, cafés and pubs on route, bike shops and any hazards to be aware off. The routes are ranging in distance from 5 to 15 miles and are graded with Easy, Moderate or Difficult. All Craven route guides are available on the Craven District's website¹⁸.
- 2.6.44. Where these routes align, the Skipton Trails could from part of the LCWIP cycling and walking networks, with improvements to these routes having additional benefits to multiple user types (e.g. commuter, utility, leisure).

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¹⁸ https://www.cravendc.gov.uk/sport-leisure/cycling-in-craven/



Bikeability Cycle Training

- 2.6.45. The Bikeability program is an initiative of the DfT to provide training to on and off-road cycle users under the age of 16, with the aim of helping them develop better and safer cycling habits. The program is available to all schools in the country and is provided in a series of three levels.
- Bikeability is delivered by North Yorkshire County Council as the Local Highway Authority. The DfT release statistics relating to topics such as funding and delivery; the latest Bikeability delivery statistics for the County are for 2006 to 2018¹⁹, released in August 2018. These show NYCC were awarded £122,960 in funding in 2018, bidding for 3,371 places. NYCC delivered 4,311 places throughout North Yorkshire during 2017/18, approximately 940 more than were bid for.

LCWIP Implications

Major events have recently raised the cycling profile within the study area, while a number of initiatives have sought to maintain this level of interest and further promote cycling.

While the LCWIP is intrinsically aligned towards the provision of infrastructure, behaviour change initiatives are likely to play a significant and important role in promoting the network and ensuring it is used.

Getting project support from existing initiatives and organisations will be essential if the LCWIP is to capitalise on this opportunity.

Although the purpose of the LCWIP is to encourage more journeys for all purposes by active modes, the phasing of infrastructure and identification of priorities should be influenced by the potential for the greatest impact. Early priorities may be more closely aligned with opportunities to enhance cycling for leisure and recreation.

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¹⁹ Bikeability Delivery statistics 2006-18 – Local Highway Authorities, https://bikeability.org.uk/publications/



2.7 EXISTING TRANSPORT NETWORKS: ROAD, RAIL AND PUBLIC TRANSPORT

SYNERGY WITH OTHER TRANSPORT MODES

- 2.7.1. The focus of the Skipton LCWIP is first and foremost on providing the necessary infrastructure to create a high-quality active travel environment. Such a network should engender modal shift, enabling journeys that were previously unattractive by walking and cycling. It is therefore important to understand and appreciate the current transport situation in the District, considering the synergies between the LCWIP and the various issues associated with other modes of travel.
- 2.7.2. Information from these documents, as well as that obtained through various other policy documents, studies, and stakeholder engagement, have been used to consider how the LCWIP could contribute to improving the wider transport issues in the District.

HIGHWAYS

- 2.7.3. Craven District is considered to benefit from good transport links to the wider area, in particular to the Leeds City Region and specifically Bradford and Leeds. The main vehicular links in the district are:
 - The A59, which provides a link to the M6 to the west and to the A1(M) and Port of Hull to the east;
 - The A65 to the northwest and southeast of Skipton, providing a trans-Pennine route that links Craven with the M6 toward Cumbria and the Lake District to the northwest, and West Yorkshire (Leeds) and the M1 to the south east; and
 - The A629 south of Skipton, providing a link south to Keighley and onwards via the A650 to Bradford. The A629 also continues southwards through Halifax, eventually connecting with the M62 (at Junction 24, Ainley Top).
- 2.7.4. Car ownership in Skipton itself is considered to be comparable to the national average; however, the wider district experiences much higher car ownership. The level of car ownership, in both the town and the district, is considered to correlate with the respective journey to work patterns; 63% of Skipton residents use the car as their primary mode of travel to work compared to 73% of residents at district level. This level of car use may be as expected given the rural nature of the district, as well as the lack of availability of alternative modes as a realistic option for travel.
- 2.7.5. Moreover, the steep gradient discourages people to travel by active modes, while the rural roads are characterised by national speed limits and a lack of provision for walking and cycling.
- 2.7.6. Skipton is the primary service centre for the district and serves a wide rural hinterland; given the high car ownership and lack of other transport options, it invariably attracts a high proportion of trips by car.
- 2.7.7. However, Skipton itself is relatively small, with most areas being no more than one mile from the town centre; the compact nature of the town, coupled with the fact that 45% of Skipton residents also work in the town, mean that alternative transport modes are significantly more feasible for commuting journeys within the town.
- 2.7.8. The historic Skipton town centre is characterised by narrow and constrained street patterns that impact upon local transport network provision, particularly cycling and walking links.

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2.7.9. Skipton town centre also has a plentiful supply of car parking, which is considered likely to contribute towards the high levels of vehicle usage in the town. District Council operated car parks provide more than 1,000 spaces in Skipton itself; there is provision for 100 vehicles at the rail station and there are a number of other privately owned and publicly available car parks across the town. Craven District Council's Car Parking Strategy notes that it is considered that the car parks provided in Skipton are appropriate for the size of the town that they service.

PUBLIC TRANSPORT

Rail Travel

- 2.7.10. Craven benefits from good connections to the rail network, via both the Leeds-Skipton-Carlisle line and the Leeds-Skipton-Lancaster-Morecambe line. Skipton station also acts as the terminus for the electrified Airedale line from West Yorkshire, enhancing levels of connectivity with the Leeds Bradford area.
- 2.7.11. Skipton station is owned by Network Rail and operated by Northern (who provide the vast majority of rail services), while also being served by occasional LNER services. Current journey times to Leeds and Bradford (Foster Square) take approximately 40 minutes. During Monday to Saturday daytime, there is direct half hourly service to both destinations above, while for peak times there are additional trains to Leeds. On Sundays, the service to Leeds and Bradford are every hour.
- 2.7.12. Rail commuting mode share across Yorkshire is relatively low, at approximately half of the national average. However, Craven and Skipton have slightly high proportions, with rail mode share at approximately 4%, double that of the wider County.
- 2.7.13. Craven is relatively well served by rail, with eleven stations within the district—Skipton station has the second highest usage levels across all North Yorkshire's rail stations, with more than 1.2 million passenger journeys in 2017/2018. This is a 6% increase from the previous time period 2016/2017 and an approximate 28% increase in usage over the last five years.
- 2.7.14. Craven also has the highest commuting rail mode share of all the North Yorkshire districts; a key factor in this is likely to be Skipton's proximity (and resulting relatively short rail journey times) to major economic centres such as Bradford and Leeds.
- 2.7.15. Passenger growth is set to continue to increase: Network Rail's Regional Urban Market Study (October 2013) set out projections that rail demand would rise by 114% over a 30-year period up to 2043 at stations, such as Skipton, that are used by people primarily commuting to Leeds. This equates to a 2.57% increase per year at those stations, although it should be noted that the latest year-on-year figures show a rise of 6% at Skipton station. A 114% increase, from ORR 2013/14 passenger trip numbers, equates to a forecast of 2,144,310 annual passenger trips at Skipton station by 2043.
- 2.7.16. Despite the relative success of rail travel in Skipton and the district, there are a number of aspirations and proposals to improve the service, facilities, and user experience many of which include walking and cycling integration.
- 2.7.17. Skipton is commonly referred to as the 'Gateway to the Dales', and Skipton Rail Station is the main Transport Gateway in the town, and wider district. A Transport Gateway represents the main point of entry to a town and, as such, should convey a strong and positive sense of arrival, providing a clear indication as to how to access the town centre, key local destinations and wider area, by a range of transport modes. In particular a Transport Gateway should encourage the use of more sustainable modes, and active travel, through clear integration of the town centre with pedestrian pathways and

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- cycle links, and through the provision of adequate facilities. A truly transformation Gateway should be an appealing environment, with high quality public spaces and strong visual amenity, providing seamless connections to onward destinations.
- 2.7.18. Skipton is a Grade II listed railway station; however, its existing facilities, surroundings, accessibility and relationship to the town centre provide a relatively poor Gateway experience. The limited facilities and poor visual amenity require improvement, to be befitting of the station's regional status, and the resulting level of usage with more than 1.2 million passenger journeys undertaken in 2017/18. CDC, in partnership with NYCC, is currently preparing a bid together with the West Yorkshire Combined Authority to the DfT's Transforming Cities Fund in order to fund a significant place-making scheme focussed on the rail station and its immediate environment.
- 2.7.19. The Lancashire and Cumbria Route Utilisation Strategy (RUS) has outlined plans for the routes north of Skipton in order to accommodate for the growth in usage. These include an increase in the number of trains to Carlisle to approximately one train every two hours, with extra services during peak times. Services on the Airedale line and to Lancaster and Morecambe would also be made more frequent.
- 2.7.20. Network Rail is also investigating means of increasing capacity, either by adding more carriages or by making services more frequent, on the Airedale Line to Leeds as part of the Yorkshire and Humber RUS. Although there are no firm commitments made, it is understood that LNER are also showing interest in introducing more direct services to London King's Cross.
- 2.7.21. There are no direct rail links between Skipton and East Lancashire, despite a track bed on the former Skipton to Colne railway line. This disused line is considered to present an opportunity to enhance accessibility and connectivity towards Preston and potentially Manchester airport. There have also been aspirations to use the route as a cycle way, encouraging active and sustainable travel for longer distance journeys.
- 2.7.22. It is understood that there are aspirations to extend the preserved Embsay and Bolton Abbey Steam Railway to Skipton in the future, although this route would obviously only cater for limited trip purposes.
- 2.7.23. Analysis was undertaken to determine the extent of the population potentially within a 20 minute travel distance from the main rail stations within the study area for all modes of travel, providing an indication of the propensity for rail/cycle or walking integration. Table 2-15 presents the results of this analysis.

Table 2-15 - Population Within a 20 Minute Journey of a Rail Station by Mode

Station	Walk	Cycle	Bus	Car
	No.	No.	No.	No.
Cononley	1,221	12,866	4,597	36,060
Gargrave	1,658	2,184	1,818	37,528
Skipton	10,134	19,406	11,893	37,501

2.7.24. The data indicates that Skipton rail station is highly accessible for a significant proportion of the population of Craven, with approximately 37,500 people theoretically able to access the station

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within a 20-minute journey by car. Considering other modes, around 10,000 people could access the station on foot within a 20-minute walking journey, while around 19,000 people live within a 20-minute cycle catchment of the station, more than the number that could access by bus.

- 2.7.25. This demonstrates significant potential for travel into the town, and specifically to the rail station, by modes other than the car. However, it should be noted that the number of cycle users that could access the station includes a catchment area beyond the Skipton urban area, and such a journey would necessitate the use of roads considered unsuitable for travel by bike.
- 2.7.1. As part of a separate study, aimed at understanding station users' perceptions of station accessibility in North Yorkshire, Station User Surveys were undertaken at ten North Yorkshire stations (including Skipton) in 2017.
- 2.7.2. The survey undertaken at Skipton station received 397 responses. The mode share of respondents is set out in Table 2-16.

Table 2-16 - Access to Skipton Rail Station Mode Share

Travel Mode	Skipton
Car/van - as driver	29%
Car/van - as passenger	15%
Car subtotal	44%
Taxi	6%
Bus	5%
Train	1%
Cycle	1%
Walked	43%

2.7.3. The data shows that the highest proportion of respondents arrived at the station by car (44%) and on foot (43%). The majority of people arriving by car did so as drivers, rather than passengers. In contrast to the high walking mode share, cycling only accounted for 1% of survey respondents' travel to Skipton station for outbound services, despite a high proportion of journeys having a local origin. This corresponds with census journey to work modal split data, which shows a similarly low level of cycling. These results suggest that there are likely to be specific issues that are contributing to the low level of cycling, which could potentially relate to the lack of cycle routes and infrastructure, cycle facilities including parking, a perception of safety issues, or topography.

Bus Travel

2.7.4. The southern part of the Craven district, and the Aire Valley in particular, is considered to be better served by public transport than the more rural areas, primarily in the north of the district. The Local Plan notes that in the more remote rural areas of the district bus services face an uncertain future, given the growth in car ownership and demographic change, highlighting the importance of improving accessibility by alternative modes.

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- 2.7.5. There are relatively frequent bus services connecting Skipton, and settlements in south Craven, to towns and cities in West Yorkshire and East Lancashire, including Leeds and Burnley. The X84 and X85 services provide hourly services that operate between Skipton and Leeds City Centre, although this has a timetabled journey time of up to two hours, likely making it a relatively unattractive option for this journey. The X43 provides a service every two hours connecting Skipton and Manchester, which has a journey time of more than two hours.
- 2.7.6. Skipton bus station is situated centrally, in the town centre, off Keighley Road (A6131) and approximately half a mile from the rail station. The bus station consists of eight bus stands and services are operated by a range of operators such as The Keighley Bus Company, First Leeds, North Yorkshire County Council and Stagecoach.
- 2.7.7. Services provide connections (typically hourly) to areas within Skipton and to smaller villages in the immediate vicinity, as well as to towns in the neighbouring Bradford district, including Keighley and Ilkley, with more frequent services of around 30 minutes. There are also bus services to larger towns and cities such as Leeds, Burnley, Manchester and Preston, which typically operate hourly. National Express services to London are also available from Skipton Bus Station.
- 2.7.8. The use of bus services for commuting demonstrates a different pattern to that of rail. The Yorkshire and Humber average (9%) is slightly higher than the national average (8%), while the North Yorkshire average is significantly lower at just 3%. Craven's bus usage for commuting is lower still, at 2%, which is likely to be reflective of the sparsely populated pattern of habitation in the district in addition to low service frequencies and coverage in the more rural areas.
- 2.7.9. While Skipton is better served than the rest of the district in terms of variety of services and frequency, bus use for commuting is still low (3%) although this may be more a result of the high number of people that both live and work in the town, meaning that bus travel is not necessarily required as journeys are shorter.
- 2.7.10. Bus / cycle integration is less common than the rail equivalent, with bus services typically accessible from more locations and bicycles generally prohibited from buses themselves. Nevertheless, it should be recognised that cycle usage has the potential to substitute bus travel where services are infrequent or non-existent, particularly given the uncertainty regarding future services and subsidies.

Public Transport Infrastructure

2.7.11. Figure 2-24 illustrates the location of the railway line through the LCWIP area, as well as the locations of the various public transport stations and bus stops. The railway itself could cause significant severance in the LCWIP network if key desire lines are located across points with no existing crossing points, while the rail stations (and bus stations to a lesser degree) represent key OD points in the network.

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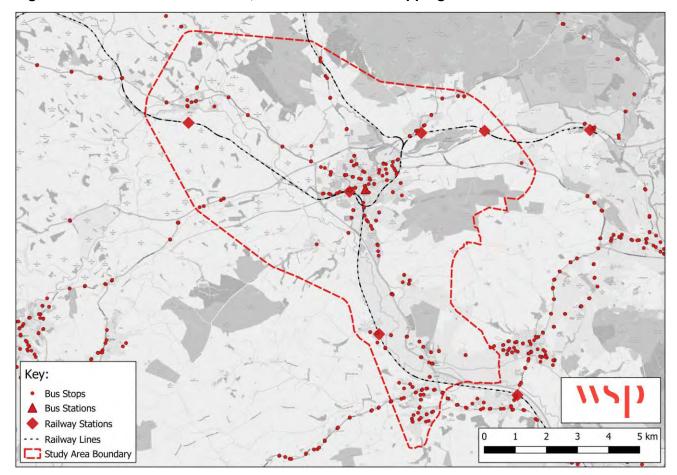


Figure 2-24 - Location of Rail Line, Stations and Bus Stopping Points

TRAFFIC FLOWS

- 2.7.12. The type of infrastructure recommended in current best practice guidance is directly impacted by the levels of traffic on a route and also the speed of the traffic. Routes which have Average Annual Daily Traffic flows (AADT) of over 5,000 vehicles will require a much higher degree of segregation to achieve modal shift. A higher degree of segregation is also required to induce mode change along routes which have a speed limit of 30 or above.
- 2.7.13. NYCC's online database²⁰ has been used to obtain data on vehicle numbers and speeds along key arterial routes. For the purpose of this analysis it was decided that only permanent count points would be used as these would provide the most robust data which could be compared over a number of years; these count points can be seen in Figure 2-25.

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²⁰ https://drakewell01.drakewell.com/



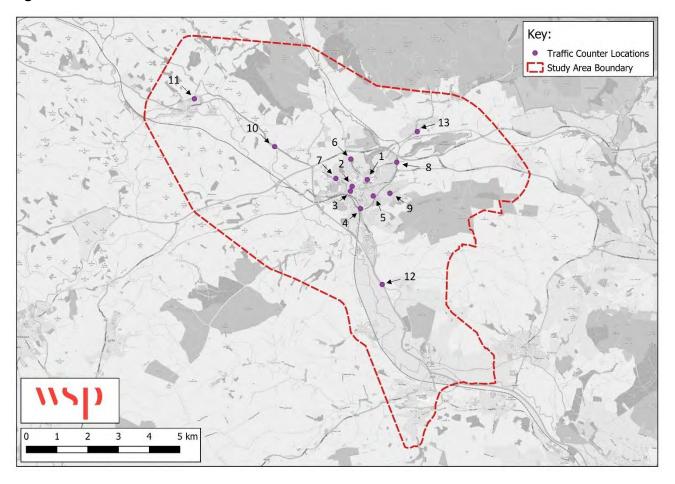
- 2.7.14. Directness of routes is also a major contributor to the design of a successful cycle network; the selected count points are along key arterial routes into the centre of each study area, which will likely form a core element of a comprehensive cycle network.
- 2.7.15. AADT flows and 85th percentile speeds are presented in the tables below.

Table 2-17 - Skipton NYCC Countpoint - AADT and 85th Percentile Speeds

Road Name	AADT	85th Percentile Speed (Mph)	Plan Reference
A6131 – High Street	7,469	30.9	1
Brook Street	711	13.5	2
A6069 – Belmont Street	11,938	26.3	3
A6131 – Keighley Road	13,572	29.6	4
Brougham Street	3,872	32.4	5
B6265 – Grassington Road	3,616	39	6
Gargrave Road	7,290	33.2	7
A6131 – The Bailey	4,019	44.5	8
Short Bank Road	3,400	31.2	9
A65 to Gargrave	12,481	57.3	10
Eshton Road	195	15.2	11
A629 to Cross Hills	24,503	70 (speed limit)	12
E Lane	2,821	28.9	13



Figure 2-25 - Traffic Counter Locations



- 2.7.16. Current best practice indicates that only roads with an AADT below 2,500 and an average speed below 20mph are likely to offer a high-quality environment for cycling in the carriageway with other vehicles (although it should be noted that fully segregated infrastructure would still provide a higher level of service in most situations).
- 2.7.17. Within Skipton, most the roads surveyed have AADTs far in excess of these values, indicating that potential cycle users are likely to either require segregated infrastructure or an alternative route of a similarly direct nature in order to realise the potential for cycling in the district. The routes within the town centre around the A6131 High Street are likely to pose particular challenges, with Skipton town centre being one of the most important destinations in the district, yet also a major through route in the town.
- 2.7.18. While traffic flows are comparatively lower in the Cross Hills / Glusburn area, the high speeds associated with rural roads are equally unconducive to cycling for everyday purposes. The higher AADTs on major roads such as the A629 between Skipton and Cross Hills also create severance between the areas, limiting the propensity to travel by active modes.
- 2.7.19. The A65 leading to Gargrave is also characterised by high AADTs and high speeds, so the road is considered equally unsuitable for cycling with mixed traffic.
- 2.7.20. The local roads surveyed within Gargrave and Embsay are representative of typical local streets, and provide an indication that many local residential streets offer conditions that are conducive to mixed-use cycling, requiring minimal interventions.



LCWIP Implications

The anticipated increases in rail services and new infrastructure through Skipton will likely increase patronage, presenting an opportunity to influence travel to and from the stations.

Access to bus stops and stations could also be enhanced through the LCWIP process, likely focussing on improvements to the walking network.

Those routes with current and potential high numbers of cycle users but high AADTs and/or vehicular speeds will need to be carefully considered against current best practice and design standards, with a potential need to provide alternative parallel routes.

Despite potential deliverability challenges, the need for such infrastructure presents an opportunity to provide genuine high quality pedestrian and cycling infrastructure that can be an exemplar for best practice across North Yorkshire and the wider country.

Relatedly, given the constrained nature and built up urban areas, it may be necessary to also consider traffic movements and wider highways schemes in conjunction with walking and cycling interventions.



2.8 EXISTING ORIGINS AND DESTINATIONS

2.8.1. The development of an LCWIP relies on a detailed understanding of the key origins and destinations (ODs) in each study area, identifying where individuals currently move to and from. A desktop study of key origins and destinations was therefore carried out in order to identify the existing locations within the LCWIP study area that are most likely to benefit from additional pedestrian and cycle access and connectivity. These OD points have been verified through an iterative process of stakeholder engagement in order to ensure the OD map is as accurate as possible.

ORIGINS

- 2.8.2. To identify significant residential (origin) areas, proxy nodes were plotted using a GIS, based on 2011 Census data available from the Office for National Statistics (ONS). Population weighted centroids for Census Output Areas (OA) were mapped, showing where the population is greatest within the OA boundaries, and thereby indicating the urban areas with the greatest potential for trips. These nodes were reviewed, using an Ordnance Survey (OS) basemap as a reference, and manually adjusted where necessary to ensure that they were located over urban areas to represent realistic trip origins. Additional points were added where required in order to ensure all urban residential areas were adequately represented.
- 2.8.3. Rail stations, bus stations, and access points to the Leeds & Liverpool Canal were also used as both origin and destination points, providing opportunities for integration between modes and access to and from locations further afield.

DESTINATIONS

- 2.8.4. Key destinations were identified across the LCWIP study area in order to determine where people are travelling to on a regular basis. These sites were identified through analysis of available spatial data, desktop and site surveys, and stakeholder engagement. Key destinations include the following location types:
 - Employment Sites;
 - Parks and Open Spaces;
 - Sport and Leisure Facilities:
 - Healthcare Facilities;
 - Grocery / Shopping Facilities;
 - Tourist Attractions and Points of Interest; and
 - Schools and Further Education Establishments.

2.9 FUTURE SITUATION

PLANNED AND ASPIRATIONAL DEVELOPMENT GROWTH

2.9.1. Planned and aspirational growth is an important consideration when implementing new cycling and walking infrastructure. New developments may become significant origins and destinations due to size, capacity or influence and therefore links to the cycle and walking networks would be necessary. This section of the report summarises the growth aspirations of the District over the Craven Local Plan period to 2032, including specific site allocations. Consideration is also given toward recent and committed development schemes in the LCWIP study areas.

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Committed and Recent Development

- 2.9.2. There are a number of extant planning permissions which have the potential to alter existing travel demands across the LCWIP study area, notably including the following housing sites:
 - Wyvern Park;
 - Airedale Avenue; and
 - Cornerfield.

Wyvern Park

- 2.9.3. Wyvern Park is a key development site in Skipton, not only providing homes and employment land, but also contributing toward the regeneration of the adjacent rail station district and providing new highway links between the west of Skipton and the A629 Skipton Bypass, potentially changing traffic flows through the town.
- 2.9.4. The site was granted outline permission on 15th March 2016. Once built out, the site will include approximately 188 dwellings, 25,000 sqm. GFA for employment uses, and the construction of a new link road.
- 2.9.5. The following were proposed as part of the Wyvern Park Transport Assessment (March 2015):
 - a cycle-footway from Carleton Road to the eastern extent of the site;
 - a financial contribution for NYCC to extend the pedestrian/cycle route to Ings Lane; and
 - the funding of any revenue shortfall to ensure that an hourly bus service is provided between the site and Skipton town centre for 5-years from first occupation.
- 2.9.6. While the proposals include walking and cycling provision within the site, along with a commitment to contribute towards the extension of any cycle route to Ings Lane, there is very little existing cycle infrastructure in Skipton to facilitate onward journeys. However, the site is in close proximity to the TCF proposals and an aspiration to produce a masterplan for the nearby area also presents an opportunity to enhance walking and cycling in the area and connecting any gaps in provision.

<u>Proposed Improvements to Engine Shed Lane / Ings Lane, Including New Link to A629 via Wyvern</u> <u>Park</u>

- 2.9.7. A Transport Assessment was developed in order to consider highways and transport matters associated with proposals to improve Engine Shed Lane / Ings Lane, which currently form the access routes to the Engine Shed Industrial Estate. The improvement scheme includes the provision of a new link road connecting the end of Ings Lane with the adjacent Wyvern Park development (ultimately connecting to the A629 Skipton bypass), implementation of traffic calming at Engine Shed Lane to reduce HGV access via Carleton New Road and improvement to visibility at the existing Engine Shed Lane / Carleton New Road junction.
- 2.9.8. The proposals include the following elements:
 - Provision of a new 7.3m industrial estate standard link road connection to the Wyvern Park development scheme, with the link road effectively forming an extension to the existing Ings Lane;
 - Provision of a new 1.2-1.5m footway along Engine Shed Lane (southern side), with carriageway widening where possible and street lighting. It is noted that Engine Shed Lane / Ings Lane would be adopted by the Local Highway Authority;



- Implementation of road narrowing at the eastern section of Engine Shed Lane to ensure HGV
 access to the industrial estate area via the new link road, also to include additional traffic calming
 to limit the speed of vehicles at Engine Shed Lane; and
- Closure of the Ings Lane link from Broughton Road to motor vehicles. It is proposed that Pedestrian / cyclist access via this link would be retained.

Airedale Avenue

- 2.9.9. A planning application for the erection of 53 residential dwellings with off street parking and associated works at land at Airedale Avenue was submitted to CDC on behalf of Craven Barnfield Regeneration Ltd on 29th April 2019.
- 2.9.10. Vehicular, walking and cycling access is proposed to the south of the application site via Airedale Avenue, an existing residential street. Footways are proposed along both sides of the proposed access and will tie in with the existing footways present on Airedale Avenue.
- 2.9.11. The proposals will provide car and cycle parking in accordance with the local standards.

Cornerfield

- 2.9.12. Full planning permission was granted to Miller Homes for 73 residential dwellings including associated works at land at Corner Field on Friday 16 Mar 2018.
- 2.9.13. This development is currently under construction, with a show home and sales office present onsite.

Growth Aspirations

- 2.9.14. Craven District Council's 'Council Plan 2020 and Beyond' sets out a corporate priority entitled 'Carbon Neutral Craven', and is focused on facilitating economic growth in the area through:
 - Improving the economic vitality of Craven's market towns and villages;
 - Enabling the development of 16 hectares of new employment land by 2030, a key delivery mechanism being the development of the South Skipton Employment Zone and improvements to the Engine Shed Lane area; and
 - Stimulating business growth through improvements to the quality and capacity of transport infrastructure. The key delivery mechanism being production of a Masterplan to inform improvements to infrastructure in and around Skipton Railway Station, increasing economic vibrancy and creating an attractive Gateway to the town.
- 2.9.15. The Craven Local Plan (2019) sets out a comprehensive strategy for the provision of jobs and housing within the Plan Period, including provision for:
 - 4,600 net additional dwellings from 2012 to 2032, equating to an average housing requirement of 230 net additional dwellings per annum, with 50% of this growth planned to occur in Skipton;
 - A minimum of 32 hectares of employment land over the plan period, with approximately 10ha to be provided in Skipton; and
 - Employment / commercial led mixed-use regeneration in the area around Skipton Rail Station.
- 2.9.16. Policy SP4 sets out housing growth targets for District. The targets for the tier 1, 2 and 3 settlements of the District are summarised in Table 2-18.



Table 2-18 - CDC Core Strategy Development Targets

Settlement	Proportion of housing growth (%) at 230 net dwellings pa	Housing Provision (Approx. number of NET dwellings)
Skipton (Principal Town Service Centre)	50%	2,300
Settle (Key Service Centre for mid sub area)	10.9%	501
Low and High Bentham (Key Service Centre for north sub area)	10.9%	501
Glusburn/Cross Hills (Local Service Centre)	3.5%	160
Ingleton (Local Service Centre)	3.5%	160
Gargrave (Local Service Centre)	3.5%	160

- 2.9.17. The sites allocated for development in Skipton are primarily located on the periphery of the built-up area; their location could potentially result in an over reliance on private vehicle usage, and ensuring the provision of high-quality active travel links will be essential in encouraging trips on foot or by bike. Although on the edge of the built-up area of Skipton, the sites are all within a reasonable (20 minute) journey time to the rail station, bus station (and town centre), and enabling connections to these locations could also help increase the numbers choosing active modes to access longer distance sustainable transport options.
- 2.9.18. Furthermore, if development is to align with priorities set out in the various policies, plans and strategies (from national to local level), the growth must be managed sustainably through the provision of attractive sustainable travel options that provide a realistic alternative to the private car. Improved walking and cycling infrastructure, and access to the rail and bus stations, will be a critical component of this and will support wider modal shift from the private car, reducing issues of car dominance and congestion in the town.
- 2.9.19. The Local Plan includes a number of sites of significant size that could generate a significant amount of trips, and could potentially have a role to play in facilitating walking and cycling in the District. Those sites with an anticipated yield of 100 dwellings or above are summarised in Table 2-19.



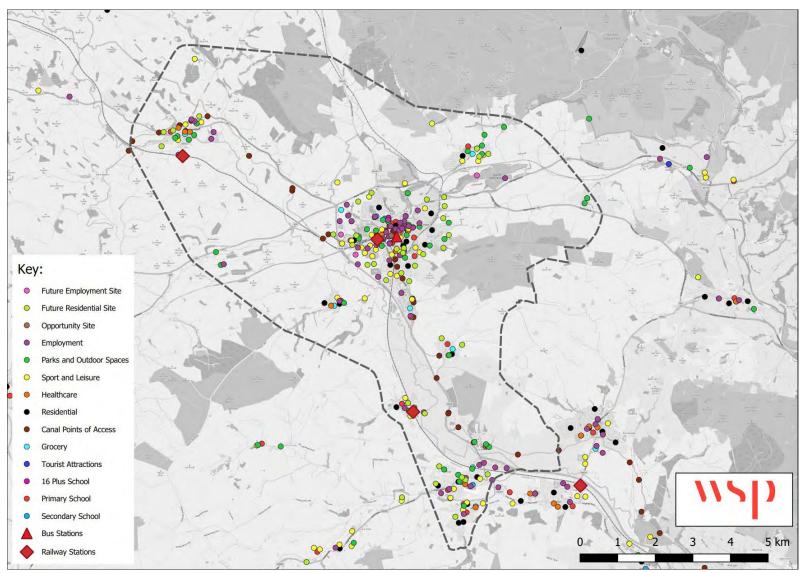
Table 2-19 - Local Plan Housing Sites

Local Plan Reference	Site Name	Yield
SK013	Land east of Aldersley Avenue and south of Moorview Way, Skipton	100
SK060	Business premises and land, west of Firth Street, Skipton	121
SK081, SK082 & SK108	Land north of Gargrave Road and west of Park Wood Drive and Stirtonber, Skipton	339
SK088	Hawbank Fields north of Otley Road and south of A6131, Skipton	143
SK089 & SK090	Land to the north of Airedale Avenue & Elsey Croft and east of railway line, Skipton	211
SK101	East of Keighley Road and south of Cawder Lane, Skipton	110
SK114 & SK124	Land to east of North Parade & Cawder Road garage site, Horse Close, Skipton	112

- 2.9.20. CDC have supplied the GIS layers which comprise the 2019 Policies Map, allowing easy identification of potential future growth sites. These have been included within the OD map as the following types:
 - Future Residential Sites;
 - Future Employment Sites; and
 - Opportunity Sites.
- 2.9.21. Figure 2-26 is the final determined OD map, following an extensive exercise of internal stakeholder engagement. This image shows the locations of both existing and future origin and destination points across the study area. Figure 2-27 to Figure 2-33 show the key locations within the study area at a smaller scale, allowing more precise identification of OD points. Where these points represent a specific place rather than a broad area (such as 'housing' or 'employment'), these are labelled to denote the destination.



Figure 2-26 - Origin-Destination Plots: LCWIP Study Area



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Figure 2-27 - Origin-Destination Plots: Skipton

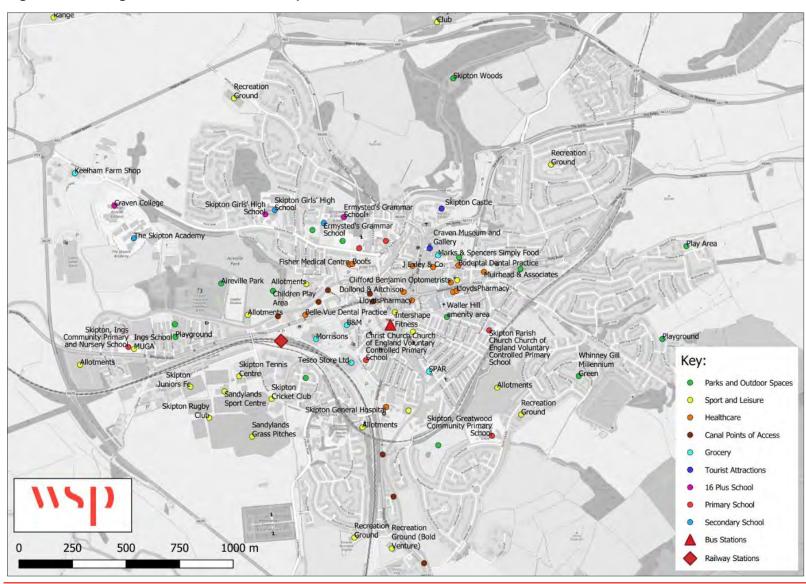




Figure 2-28 - Origin-Destination Plots: Skipton

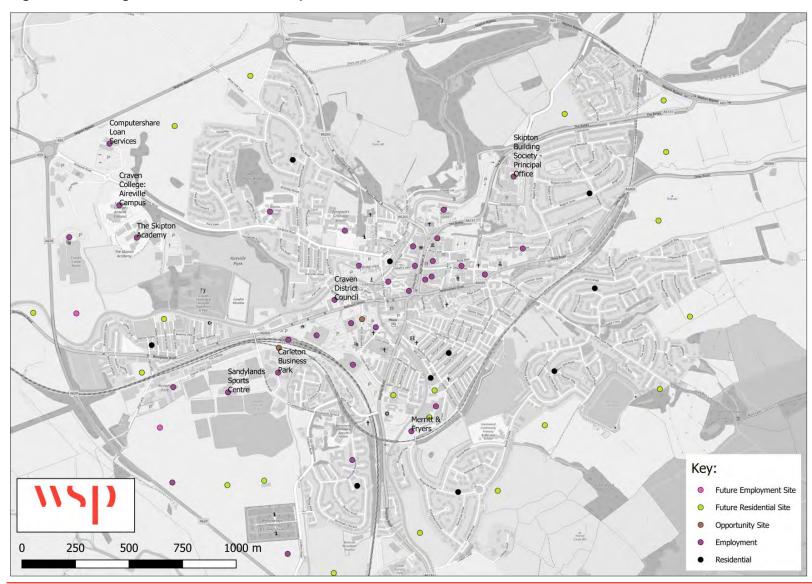




Figure 2-29 - Origin-Destination Plots: Skipton South

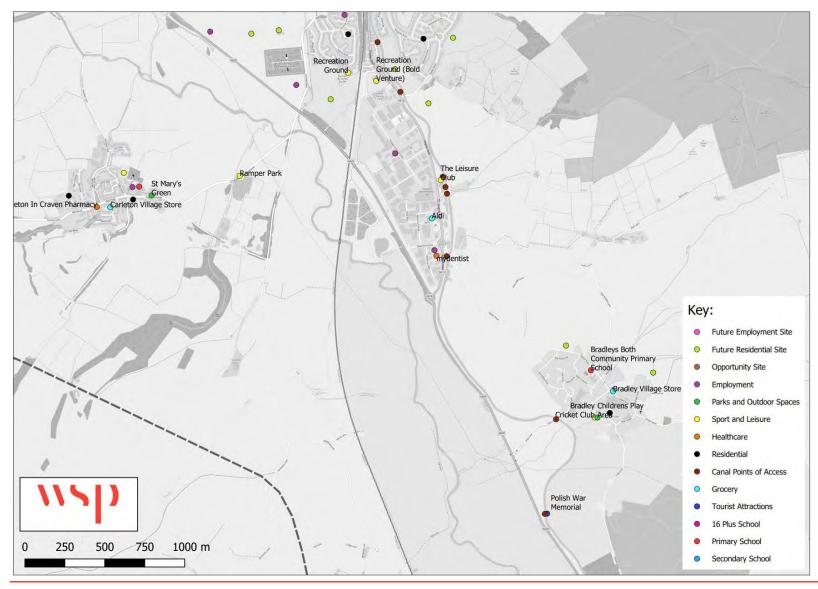




Figure 2-30 - Origin-Destination Plots: Gargrave

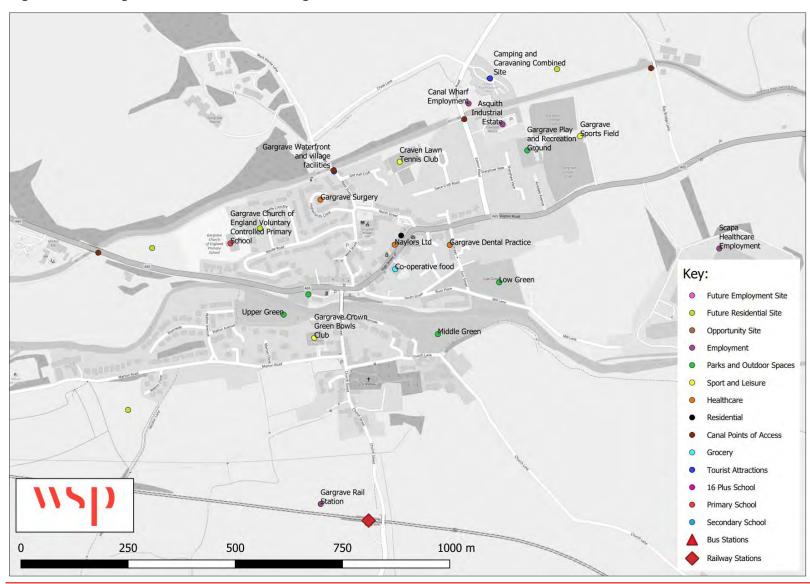




Figure 2-31 - Origin-Destination Plots: Embsay

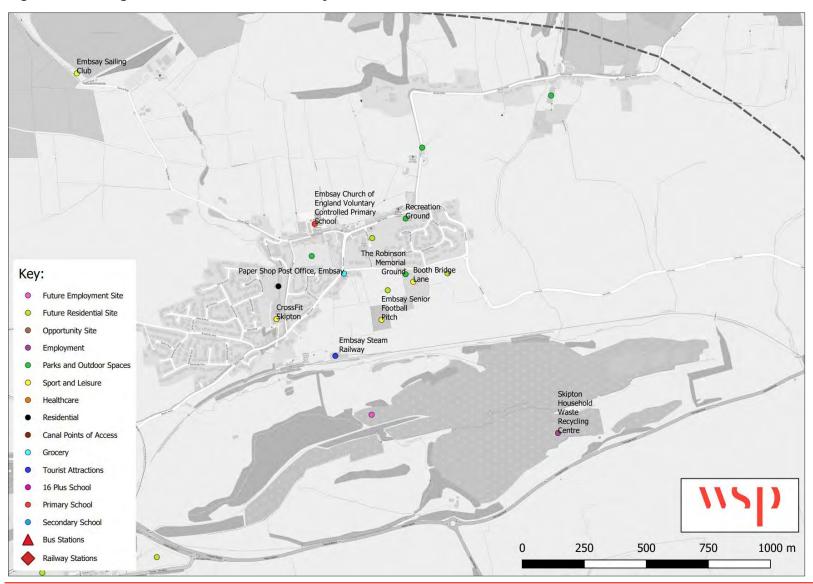




Figure 2-32 - Origin-Destination Plots: Glusburn / Cross Hills

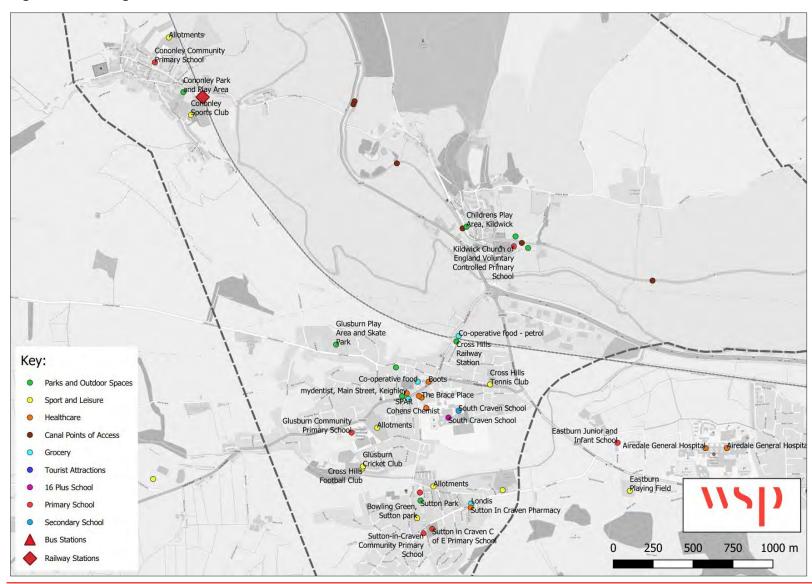
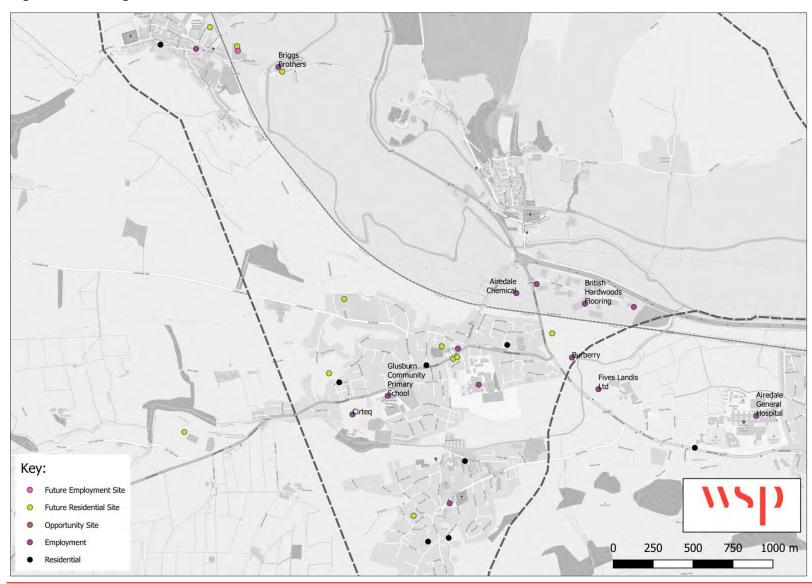




Figure 2-33 - Origin-Destination Plots: Glusburn / Cross Hills





2.10 TRANSPORT SCHEMES AND INITIATIVES

2.10.1. In addition to documented policy objectives, the Skipton LCWIP must also consider existing and aspirational transport schemes, particularly those focussed on walking, cycling, and right-of-way proposals. While there are currently no significant committed infrastructure schemes scheduled, there are a number of schemes and initiatives of note within the District - which are either programmed or are currently being investigated and option tested - that could have implications on the development of the LCWIP. This section of the report presents an overview of a number of relevant proposals within the study area.

LEEDS & LIVERPOOL CANAL TOWPATH - ACCESS DEVELOPMENT PLAN

- 2.10.2. The Leeds & Liverpool Canal is the longest canal in Britain built as a single waterway, and is considered to be a significant part of the built and natural environment in the District, with circa 17 miles of the route passing through Craven. Much of this is within the LCWIP study area, and the canal towpath has considerable potential as an off-road walking and cycling route much of this realised though a number of recent improvement schemes. Sustrans have produced an Access Development Plan (ADP) in relation to the canal on behalf of CDC, and the LCWIP should pay due cognisance to the schemes and aspirations set out in this document.
- 2.10.3. The ADP was released in 2015 and assesses the infrastructure opportunities available to address a broad desire to increase levels of walking and cycling in the District. CDC also set out aspirations to capitalise on the opportunities offered by the Leeds & Liverpool canal corridor within the Local Plan. Furthermore, the Yorkshire Dales National Park Authority has formulated several policies in their Management Plan (2013-18) that directly link to the access development plan.
- 2.10.4. The ADP includes a number of proposals to not only enhance the canal towpath itself, but also various connecting routes that facilitate access to the route. The proposals include Glusburn, Cross Hills, and Kildwick to the south of the study area, Cononley and Low Bradley just south of Skipton, Skipton itself, and the villages of Gargrave and Embsay to the north of the study area, as well as encompassing Broughton. The schemes therefore have the potential to impact on travel across the entire study area.
- 2.10.5. However, to date only a limited number have been implemented. The Cycle City Ambition Grant awarded to Leeds and Bradford in 2013 saw the Aire Valley Towpath between Leeds and Shipley upgraded to a high-quality surface throughout. More recently, a £2 million scheme to resurface circa 7 miles of towpath between Kildwick, Skipton and Gargrave commenced in August 2019, and is due to complete in 2020.

TRANSFORMING CITIES FUND

- 2.10.6. The aim of the Transforming Cities Fund (TCF) is to drive up productivity and spread prosperity, through investment in public and sustainable transport in some of the country's largest City Regions. The fund focuses specifically on intra-city connectivity and will provide significant investment in packages of projects that improve key intra-urban corridors, improving access to jobs and enabling people to move around more guickly and easily.
- 2.10.7. The West Yorkshire Combined Authority (WYCA) has prioritised nine 'Gateways' for improvements as part of the TCF bid, which includes Skipton.

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- 2.10.8. The overarching aims of the proposals that form part of WYCA's TCF submission, and are applicable to improvements at the Skipton Gateway include:
 - Making Skipton town centre more attractive for people to both live and invest in, by removing the dominance of dated highway infrastructure and making cycling and walking the obvious choice to access transport hubs;
 - Transforming access to new employment opportunities and new college places;
 - Making the sustainable transport offer from new housing sites attractive for new residents; and
 - Spreading the benefits of the 'Connecting Leeds' programme, beyond the Leeds District border, to make travelling by public transport an attractive and more reliable offer for commuters.
- 2.10.9. The Skipton Transport Gateway package comprises the following components:

1. Skipton Station Plaza

- Station facility improvements:
- Supporting sustainable travel infrastructure;
- Station frontage improvements;
- Station Gateway public realm;
- Station Car Park Reconfiguration; and
- Broughton Road / Carleton New Road junction reconfiguration and associated pedestrian crossing facility.

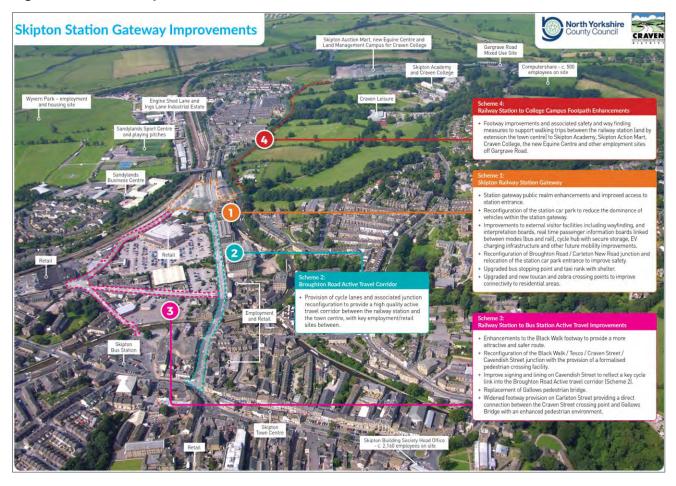
2. Rail Station to Bus Station Active Travel Improvements

- Enhancements to Black Walk for pedestrians;
- Craven Street crossing facilities;
- Cavendish Street Cycle Corridor;
- Gas Street / Carleton Street / Cross St 'Informal Streets' Scheme; and
- Gallows Bridge Replacement.
- 3. Rail Station to Skipton Academy Canal Tow Path Enhancements
- 2.10.10. The extent of these schemes is shown in Figure 2-34.

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Figure 2-34 -TCF Skipton



TCF - NORTH YORKSHIRE SMALL GATEWAYS

2.10.11. CDC proposed two schemes as part of the initial tranche of funding, focussing on smaller gateways into the LCR. While the schemes no longer form part of the TCF award, these small schemes still potentially offer significant benefits and are of relevance in achieving the overall LCWIP objectives.

Cononley

- 2.10.12. This £1 million project aims to connect Cononley with the canal towpath and create a continuous high quality green route between Skipton and the Aire valley. The project will provide the opportunity for commuters from neighbouring villages such as Bradley, Farnhill and Kildwick to use alternative, more sustainable ways of travelling to the station and alleviate on street parking.
- 2.10.13. The project aims to connect two other scheduled towpath improvement schemes to provide a continuous green route between Skipton and Keighley, Bingley, Shipley as well as the city centres of Bradford and Leeds. The first scheme, funded through the Cycle City Ambition 2 grant, upgraded the section of towpath through Airedale to Silsden town centre. The second scheme, scheduled to commence this financial year, will upgrade 16km stretch of towpath from Kildwick to Bank Newton to the south west of Gargrave near the border with Lancashire. The proposed Small Gateways scheme would fill the 'missing link' between these two.

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Gargrave

- 2.10.14. This £200,000 project aims to improve pedestrian access to Gargrave railway station by constructing a new section of footway.
- 2.10.15. The railway station is located on the outskirts of the village of Gargrave, with access via the 'C' class road between Gargrave and the A59 at Broughton. The existing footway that runs on the eastern side of the road from the village currently terminates approximately 150 metres from the Station, necessitating pedestrians to walk in the carriageway, with associated safety issues. The carriageway is also poorly lit, compounding safety concerns. The project includes the provision of a new section of footway that will link the existing footway with the Station and provide a safer link between the northbound and southbound platforms.
- 2.10.16. Despite the compact nature of the village, Gargrave is the base for Scapa Healthcare, a global company in wound care the site accommodates a workforce of 355 people travelling in from West Yorkshire and Lancashire.

THE CYCLE DEVELOPMENT PLAN FOR THE YORKSHIRE DALES (2015 TO 2020)

- 2.10.17. The CDP for the Yorkshire Dales was released in 2015 in the wake of the Tour de France 2014, with an intention to bring together the ambitions of various organisations with interests in the Yorkshire Dales, capitalising on established businesses and opportunities.
- 2.10.18. The plan also covers the Forest of Bowland AONB and Nidderdale AONB, as well as various outlying villages. While these areas are outside of the LCWIP study area and are predominantly leisure focussed, the aspirations of the District as the 'Gateway to the Yorkshire Dales' and travel characteristics mean that connections to these routes could still form a vital part of the LCWIP networks and priorities. Any proposed Infrastructure in urban areas could additionally benefit by also accommodating for longer distance routes.
- 2.10.19. The CDP sets out a vision that includes the development of new routes, thriving high quality businesses, great promotion and inspiring events. It describes a number of key achievements spanning the previous decade, which include a number of routes relevant to tourism in Craven:
 - The Yorkshire Dales Cycleway. The route has been re-signed and now has its own website and promotional materials;
 - The Pennine Bridleway National Trail through the Yorkshire Dales has been completed with 8 miles of new bridleway and a major new crossing of the River Ribble;
 - The introduction of a new coast to coast cycle ride, the Way of the Roses, which is now considered to be one of the most popular touring routes in the country;
 - The report references the upgrading of the Leeds & Liverpool canal towpath between Crossflatts and Skipton, which is now complete;
 - Opening of the Harrogate to Ripley cycle route in 2013;
 - A short family friendly cycle ride around Malham Tarn was developed in 2014 in partnership with the National Trust; and
 - Work to improve cycle facilities at accommodation providers and attractions has taken place. This complements the previous work to install cycle stands at over 100 locations.
- 2.10.20. The CDP presents a number of aims which the Skipton LCWIP should pay cognisance towards. These include:



- Aim 1 to develop key corridor routes into the National Park and AONBs; taking people from larger towns through the market town and then on to the Dales; and
- Aim 2 increase the Yorkshire Dales offer for occasional cyclists by identifying and developing new opportunities that take the hills out the Dales.
- 2.10.21. In particular, Aim 1 references the Airedale Corridor project, which seeks to connect Skipton to Gargrave via an improved canal towpath, completing an off-road route to the national park from Leeds and Bradford. It should be noted that this work is currently (as of the time of writing) underway.
- 2.10.22. Aim 2 includes a number of projects to make the Dales more accessible via E-bikes, as well as developing cycle hubs and repair stations across the area. E-bikes and repair stations could also play a big part in encouraging cycling around the more challenging terrain in the LCWIP study area, and any aspiration to introduce such facilities into Skipton and the surrounding area should consider the possibility of use of such equipment to access the Dales.

SCHEME IDEAS FOR A59 IMPROVEMENT

- 2.10.23. CDC developed a package of proposals for the improvement of the A59 to the west of Skipton in response to a request from NYCC for implementation as and when funding might become available, such as through the National Productivity Investment Fund or Local Growth Fund.
- 2.10.24. With the purpose of addressing capacity on Local Plan junctions the scheme also included a series of schemes to improve flow on the A59 including the proposal for a separate, dedicated cycleway.
- 2.10.25. Many of the improvements that were proposed by CDC have the potential to encourage cycling and walking such as:
 - the provision of bus infrastructure;
 - the creation of a cycleway adjacent to the A59;
 - improvements to existing access; and
 - new footpaths and cycle/pedestrian footway infrastructure.

SKIPTON SERVICE CENTRE TRANSPORTATION STRATEGY (JACOBS, 2010)

- 2.10.26. In 2009, NYCC commissioned the Skipton Service Centre Transportation Strategy.
- 2.10.27. Service Centre Transportation Strategies (SCTS) involve the identification of transportation improvement schemes and initiatives aimed at helping to build sustainable communities, through contributing to the objectives of the North Yorkshire County Council (NYCC) second Local Transport Plan (LTP2).
- 2.10.28. The Final Implementation Plan sets-out the prioritised improvement schemes recommended for delivery as part of the Skipton SCTS. These are listed below:
 - A: Footway improvements on Broughton Road, Skipton adjacent to Ings Community Primary & Nursery School
 - B: Provision of a safety barrier scheme at Niffany Bends, Skipton, in order to improve motorist safety
 - C: Provision of a missing section of footway on the access road to Aireville School and Craven College in order to improve pedestrian safety for students and those accessing the swimming pool



MODELLING HIGHWAY IMPACTS OF LOCAL PLAN DEVELOPMENTS IN SKIPTON

- 2.10.29. There are ambitious plans for growth in Craven district, particularly in Skipton itself, which will add to the number of trips on the local transport network.
- 2.10.30. Traffic modelling, undertaken as part of the evidence base for the draft Local Plan, forecasts that the combination of already committed and Local Plan allocated sites in Skipton (as the focus for development in the District) will result in approximately 1,700 additional car-based trips in the PM peak (the period of greatest increase). Without improvement, four junctions in Skipton (of eleven assessed) are considered to operate over capacity as a result of the planned growth set out in the Local Plan. These junctions are:
 - A65 / Gargrave Road / A629 / A59;
 - A6069 / Cavendish St;
 - A6131/A65; and
 - Broughton Road / Carleton New Road.
- 2.10.31. It was also identified that specific arms of a number of these junctions (A65 / Gargrave Road / A629 / A59 junction, A6069 / Cavendish Street junction and the junction of Broughton Road / Carleton New Road) are currently operating over capacity, suggesting that issues of congestion are already evident in the town during peak periods. As the planned growth is considered likely to exacerbate these issues, indicative mitigation measures have been identified so that the traffic generated by Local Plan developments can be accommodated, and maintain satisfactory operation of the junctions within the town. The indicative measures include:
 - A65 / Gargrave Road / A629 / A59 junction widen both Gargrave Road (to two lanes) and A629 entry lanes to increase operational capacity
 - A6131 / A65 widen the A6131 on the approach to the junction from two vehicles to four vehicles which will add sufficient capacity to allow the junction to operate within capacity in the Local Plan Scenario.
 - Water Street / Raikes Road changed priority so that Raikes Road becomes the minor arm with Water Street and Mill Bridge having priority - to add capacity and improve the flow of traffic.
 - Craven Street / Keighley Road adjustment of signal timings to increase capacity
- 2.10.32. While these improvements have been planned in regard to providing additional vehicular capacity, these junctions could form key parts of the emerging walking and cycling LCWIP networks, and could represent an opportunity to also improve active travel in the vicinity.

OPEN SKIPTON

- 2.10.33. Open North Yorkshire is NYCC's Access Fund programme, which seeks to bring about an increase in cycling and walking trips in key growth centres across the County. The programme is funded through DfT's Access Fund and, for 2018-19, focuses on Skipton.
- 2.10.34. The principal objectives of Open North Yorkshire are to:
 - Achieve substantial mode shift, in order to help reduce congestion, by increasing the number of walking trips and doubling the number of cycle trips made by the target audience;
 - Facilitate access to bicycles and improve the confidence of new cyclists, through innovative training and route information;
 - Reduce the number of cyclist casualties, by implementing a safe systems approach;



- Target travel and journey planning linked to economic growth, at employment & housing sites.
- 2.10.35. Open Skipton is a transport behaviour change project, aimed at encouraging individuals to consider more sustainable travel options, with a particular focus on walking and cycling. The project aims to reduce congestion in key locations and support economic growth, whilst helping residents and workers in Skipton save time and money as well as improving public health through encouraging more active journeys.
- 2.10.36. The project involves engagement with schools, businesses and key residential areas, to deliver one-to-one support in the form of tailored travel information, personalised journey planning and free public transport taster tickets, alongside targeted marketing campaigns.

FUTURE RAIL IMPROVEMENTS

- 2.10.37. North Yorkshire County Council sets out in its Strategic Transport Prospectus how it will to work with the Government, Transport for the North and the Northern City Regions to ensure that improved transport connections allow England's largest County to both contribute to and share in the economic benefits of the Northern Powerhouse. To this end, three strategic priorities have been identified:
 - Improving east-west connectivity (including trans-Pennine links);
 - Improving access to High Speed and conventional rail; and
 - Improving long distance connectivity to the North and South.
- 2.10.38. There are several planned and potential rail upgrades and enhancements proposed that could impact on rail stations throughout the district, including
 - Improved rail service to Lancaster on the Bentham Line;
 - Timetable improvements;
 - Skipton to Colne Railway line re-opening;
 - New Railway Station at Cross Hills;
 - Introduction of a regular service on Hellifield and Clitheroe Railway; and
 - Station improvements across Craven District.

LCWIP Implications

Most of the studies referenced commenced before the inception of the LCWIP, and do not consider the implications on the emerging walking and cycling networks. However, many of the studies do consider active travel links, and understand the need to connect people to places via the most desirable route. Where appropriate, the findings of these studies and the key routes identified have influenced the development of the LCWIP.

Conversely, where these studies are ongoing, there is an opportunity to identify how any resulting proposals can contribute towards the creation of the walking and cycling networks. This could be as innocuous as considering access to a specific site from the network, or could be how a significant scheme could reroute traffic and reallocate highway space for cycle users.

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2.11 FORECASTING GROWTH IN CYCLE TRIPS

PROPENSITY TO CYCLE TOOL (PCT)

- 2.11.1. The Propensity to Cycle Tool (PCT) is a web-based tool that can assist with understanding potential demand for cycling across a study area, under a variety of forecast scenarios. The tool can aid in the identification of the most promising routes with regard to potential cycle growth, and inform network development and areas for investment.
- 2.11.2. The PCT project was primarily funded by the Department for Transport (DfT), with the Welsh government funding an extension to Wales. It was developed by an academic-led team involving the universities of Cambridge, Leeds and Westminster. The PCT helps to provide an evidence base for planning for cycling, and can be used to explore cycling potential at different geographical scales from a county to a potential route corridor.
- 2.11.3. For research into cycling potential (and the resulting models) to be useful for local transport planners, their spatial scale must coincide with those over which the planning process has some control. For this reason, practitioners and researchers focus on scale as the primary way of categorising research into cycling potential.
- 2.11.4. At the route-based scale, the design of interventions uses origin-destination data which can be used to create 'desire lines' and (using route allocation) estimates of existing and potential demand at each point on the road network.

How the PCT Works

Baseline Data

- 2.11.5. Central to the PCT approach is origin-destination (OD) data recording the travel flow between administrative zones. Combined with geographical data identifying the population-weighted centroid of each zones, these OD pairs can be represented as straight 'desire lines' or as routes allocated to the transport network.
- 2.11.6. The OD pairs are derived from 2011 census data using data obtained from the following questions:
 - 'What is the address of your main workplace'? and
 - 'How do you usually travel to work'?
- 2.11.7. This is enhanced through gender composition data for each OD pair, data on background mortality at an area level, and OD pair level data on route distance and hilliness.

Forecasting Growth in Cycling

- 2.11.8. Four scenarios were developed to present a range of potential cycling future scenarios. These scenarios consider the removal of different infrastructural, cultural and technological barriers that currently prevent cycling being the natural mode of choice for trips of short to medium distances. The PTC guidance stresses that these are not predictions of the future, but snapshots indicating how the spatial distribution of cycling may shift as cycling grows based on current travel patterns.
- 2.11.9. The four scenarios are:
 - Government Target: a doubling of cycle trip stages by 2025. Note that this is not uniform, with a greater increase in areas with many existing short, flat trips but a low current level of cycling.



- Gender Equality: this scenario assumes female cycle user numbers increase to equal levels of male cycle users, with the greatest impact where cycling is most gender unequal.
- Go Dutch: this scenario considers the increase in cycle users if England had the same infrastructure and cycling culture as the Netherlands, but retained the hilliness and commuter distance patterns. It applies 'Dutch scaling factors' calculated through analysis of British and Dutch National Travel surveys. These include one fixed 'main effect' parameter, plus a distance based factor, as the Dutch effect is greater on shorter trips. Note this does not use current levels of cycling, rather considering the distance and hilliness of existing OD pairs.
- Ebikes: this scenario is an extension of the Dutch scenario; The Ebike scaling factors were generated through analysis of the English, Dutch and Swiss National Travel Surveys, which estimated how much more likely it was that a given commute trip would be cycled by Ebike owners versus cyclists in general.

PCT Outputs

- 2.11.10. The basic PCT interface displays the existing levels of cycling to work, based on 2011 census data.
- 2.11.11. Figure 2-35 illustrates this scenario at the LSOA level.

Committee

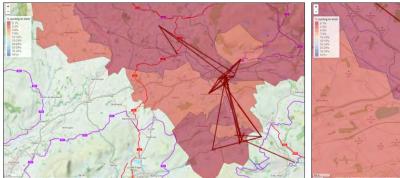
Figure 2-35 - PCT Output: % of Population Cycling to Work, by LSOA (2011 Census)

2.11.12. The outputs show that existing levels of cycling between LSOA OD pairs are relatively high in the urban areas of Skipton, with up to 7% - 9% of journeys to work undertaken by bike in some areas.

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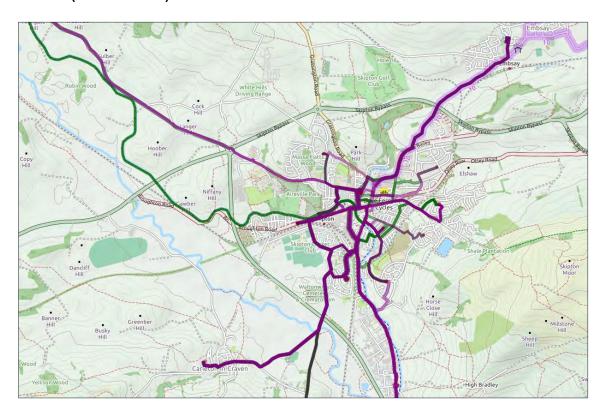
Figure 2-36 - PCT Output: Top 30 Cycle Flows between OD Pairs (2011 Census)





- 2.11.13. However, when considering the top 30 OD pairs, the majority of the existing travel to work by cycle occurs in the urban area of Skipton itself, with moderate existing levels of cycling from the outlying Local Service Centres; there are four connections from Carleton-in-Craven, three connections from Embsay, five connections from the south (Cross Hills / Glusburn area), and two connections from Gargrave in the top 30 OD pairs.
- 2.11.14. Figure 2-37 demonstrates how OD pair movements are assigned to the most likely routes: the purple lines represent the fastest routes, while those in green show quieter routes with less vehicular traffic. These routes are generated by CycleStreets.net, so do not necessarily represent the paths that cyclists actually take, rather the route choice models are based on GPS data developed specifically for this purpose.

Figure 2-37 - PCT Output: Top 30 Cycle Flows between OD Pairs, Mapped to Fast and Quiet Routes (2011 Census)



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- 2.11.15. These routes indicate significant overlap between the fastest and quietest routes, likely due to limited route choice - particularly along Broughton Road through the town centre, as well as along High Street / The Bailey. The route of the canal tow path also forms a key link from the south and north-east of Skipton.
- 2.11.16. The map also identifies two clear routes between Skipton and Gargrave, split between the A65 and the canal towpath.
- 2.11.17. It is also important to note that the tool only considers journey to work data, so excludes all other journey purposes, such as recreational cycling, tourist demand, and movements to school.
- 2.11.18. Figure 2-38 allocates these routes with the Route Network layer, aggregating the 'fastest route' flows together in order to consider the likely most cycled existing routes on the network.

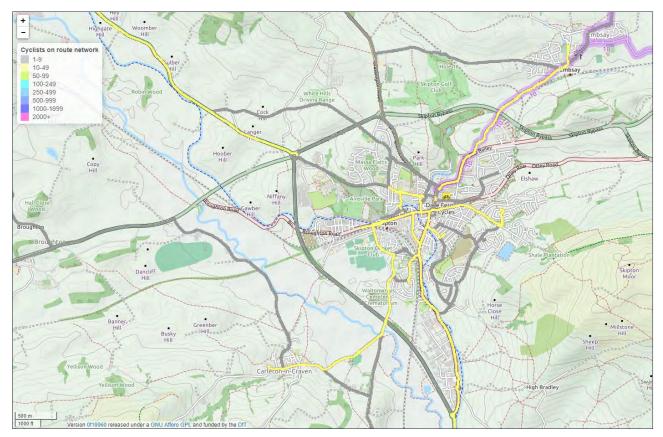


Figure 2-38 - PCT Output: Total Cyclists on Route Network (2011 Census)

2.11.19. Notwithstanding the limitations of the software, the map of existing conditions shows very few cyclists, with even the central area around Skipton town centre and the rail station registering less than 50 cyclists per day under existing conditions.

Future Scenarios – Government Target

- 2.11.20. The PCT also allows the identification of key routes under the various future scenarios, as described above.
- 2.11.21. Figure 2-39 shows the potential route network under the government target scenario. These figures show an increase in cycling around the urban centre of Skipton, as well as higher cycle flows

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towards the south via the canal tow path. The importance of Broughton Road and High Street through the town centre, Craven Street / Cavendish Street, Carleton Road / Burnside Avenue, and the Canal tow path from Skipton town Centre towards are highlighted, with these routes potentially accommodating 250-499 cyclists per day as part of a commute. These routes are likely to represent the convergence points for journeys from the outlying residential areas, as well as potentially rail / cycle multi-modal journeys.

O'velists on route network

Interview of the state of the

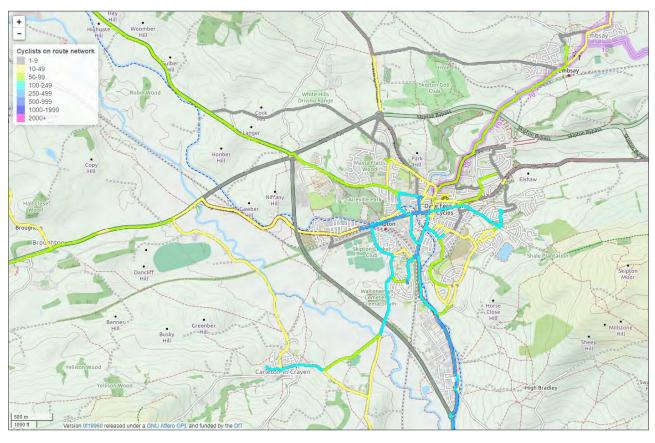
Figure 2-39 - PCT Output: Forecast Cycle Flows Mapped to Route Network, Based on Government Target Scenario

Future Scenarios - Go Dutch

- 2.11.22. The 'Go Dutch' scenario is considered more aspirational than the government target, presenting a potential scenario of cycling demand in the future if 'Dutch style' infrastructure was available, as well as a similar attitude toward cycling. Figure 2-40 shows the results of this scenario on the potential cycling network, highlighting areas of significant additional demand.
- 2.11.23. The figure shows increased demand through residential areas as more people switch modes, as well as the potential for cycle journeys from further afield, such as towards Gargrave, Embsay, and Carleton-in-Craven. Broughton Road, High Street and sections of the canal tow path towards Cononley could potentially accommodate 250-449 cyclists per day as part of a commute.



Figure 2-40 - PCT Output: Forecast Cycle Flows Mapped to Route Network, Based on Go Dutch Scenario



Applying the PCT

- 2.11.24. It is important to understand the limitations of the PCT. The tool allows for an indicative understanding of the probable key existing cycle routes, as well as those under various future scenarios. However, these routes do not take into account journeys for any other purposes than commuting to work, and do not consider future growth in the area.
- 2.11.25. The PCT outputs should therefore only be considered as a starting point, with the network further refined through the subsequent stages in the LCWIP process.



LCWIP Implications

The outputs of the PCT identifies a significant challenge with regards to providing sufficient infrastructure to accommodate the predicted levels of growth in cycle use in the town of Skipton, particularly where increased flows are predicted to occur on arterial vehicular routes.

Additionally, the outputs of the PCT tool highlight the importance of the canal towpath, which currently operates as a key north south linkage across the study area, particularly for leisure users.

This route could be particularly important given the potential growth in demand between Skipton and the Cross Hills / Glusburn area.

Conversely, the tool is less aspirational regarding the propensity to cycle in Local Service Centres, with Gargrave, Embsay, and Carleton in Craven indicating relatively low future levels to other areas of usage even under the Go Dutch' scenario.

However, it should be noted that the tool cannot consider the additional potential growth in cycling levels due to the significant committed and anticipated development in the District.

Without the provision of high quality infrastructure, growth is likely to remain suppressed across the study area, with travel by cycle for all purposes remaining at its existing low level.

3

BEST PRACTICE REVIEW





3 BEST PRACTICE REVIEW

3.1 OVERVIEW

- 3.1.1. Streets need to manage a wide range of road users and their competing demands by providing clear but flexible spaces, with consistent and legible features that acknowledge where, when and how users should interact.
- 3.1.2. Continuous improvement of the street environment and of public places is critical to meet the changing demand and expectations as urban areas grow and diversify. This will rely on best practice, creativity and innovation to develop places that cater for the current and future users
- 3.1.3. Priorities should be applied to best provide for efficient and safe movement of people, goods and services, while reflecting and enhancing the character of the place. Balancing user priorities, especially the needs of pedestrians and cyclists, is often challenging in busy urban contexts. There is a need to carefully consider configurations, phasing and infrastructure to respond to the most challenging junctions and increase permeability.
- 3.1.4. This high-level review of best practice highlights the salient points from a range of industry-leading documents, discussing how each document could shape the emerging cycling and walking networks in the study area. These documents include:
 - London Cycle Design Standards (TfL, 2014);
 - Greater Manchester Cycling Design Guidance (TfGM, 2014);
 - City Connect Cycle Superhighway Design Guidance (CCDG)
 - Interim Advice Note 195/16: Cycle Traffic and the Strategic Road Network (Highways England, 2016);
 - Designing for Cycle Traffic: International principles and practice (DCT) (John Parkin, ICE, 2018);
 - Design Manual for Bicycle Traffic (CROW, 2007);
 - Cycling Infrastructure Design LTN 2/08 (DfT, 2008);
 - Local Transport Note 1/12: Shared Use Routes for Pedestrians and Cyclists (Department for Transport, 2012);
 - Creating Better Streets: Inclusive and Accessible Places Review of Shared Space (CIHT, 2018)
 - Streetscape Guidance (Transport for London, 2016);
 - Planning for Walking (CIHT, 2015);
 - Designing for Walking (CIHT, 2015);
 - Design Guidance: Active Travel (Wales) Act 2013 (Welsh Government, 2014);
 - Manual for Streets 2 (CIHT, 2010); and
 - Providing for Journeys on Foot (CIHT, 2000)

3.2 CYCLING GUIDANCE AND BEST PRACTICE

London Cycle Design Standards (LCDS) (TfL, 2014)

3.2.1. The London Cycling Design Standards (LCDS) document sets out the requirements and provides advice for cycle network planning in London (although the guidance is equally applicable in many other areas).

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- 3.2.2. The document is split up into eight separate sections, each covering different aspects of cycling design. The introductory chapters explore general design requirements and techniques for planning and delivering high quality infrastructure. Several design outcomes are listed which are envisaged to help shape the design of cycling infrastructure in London:
 - Safety
 - Directness
 - Comfort
 - Coherence
 - Attractiveness
 - Adaptability
- 3.2.3. The LCDS explores user needs, and provides guidance and principles that different places should adopt in order for them to become places for everyone.
- 3.2.4. The LCDS presents a framework of nine street types that have been designated in accordance with their 'movement' and 'place' function, allowing a route to be classified depending on how its purpose relates to either the 'movement' of people or a 'place' to be in. Figure 3-1 is taken from the LCDS and shows these nine street types and how they relate to their place and movement function.
- 3.2.5. Street types classify the function of a location on the highway and the implementation of suitable measures can improve a streets performance so that it can better meet its functional requirement. Where a location is determined to have a high place function, a scheme may have an objective to bring people into the space and remain there for a period of time, potentially through calming or reducing vehicular traffic. Where through movement is the primary function, a scheme may focus more on objectives such as capacity, cycle priority and avoidance of delay.



Figure 3-1 - LCDS Street Type Matrix



3.2.6. The LCDS also provides broad guidance on the types of intervention for cycling that may be most suitable depending on the determined street type, discussing the level of segregation that between cyclists and motor vehicles that is most likely to be required. This relationship between place, movement, and segregation has been considered throughout the LCWIP process.

Indicative range of cycling Medium place interventions by RTF street type Degree of separation City street High street place ocal stre (between cyclists and Town motorised vehicles) High I City City A. Full separation on links (eg cycle track, segregated lane) B. Dedicated on-carriageway lanes (eg mandatory or light segregated lanes) C. Shared on-carriageway lanes (eg advisory lanes, bus/cycle lanes) D. Integration with other vehicles

Figure 3-2 - Street Type and Associated Interventions

3.2.7. The remaining chapters of the document consist of detailed design guidance covering cycle lanes and tracks, junctions and crossings, signs and markings, construction, surfacing and cycle parking.

Greater Manchester Cycling Design Guidance (TfGM, 2014)

- 3.2.8. The Greater Manchester Cycling Design Guidance document aims to promote consistency in the provision of cycling infrastructure across Greater Manchester in support of Transport for Greater Manchester's (TfGM) aspirations to achieve a target of a 300% increase in the levels of cycling across the city region.
- 3.2.9. The document describes the different types of links that exist across Greater Manchester, including cycle tracks; cycle lanes; shared use footways/cycleways; quiet streets; and cycle paths. The guidance identifies key design criteria which are used to determine a framework for designing effective and appropriate cycle infrastructure in a similar manner to the LCDS, including:
 - Safety cycling infrastructure must cater for all age groups (ages 8-80) and the full range of cycling abilities. To achieve this 'Family Network', the Vélocity aspiration is therefore to provide largely segregated cycle facilities whereby cyclists are separated from other road users.
 - Coherence the cycle route must be easy to find and intuitive to navigate; be consistent in quality; and offer route continuity and completeness.
 - Directness the cycle facilities must be direct in terms of both distance and time. Cycle routes need to serve key desire lines, connecting origins to destinations end-to-end without significant detour or delay.
 - Attractiveness the cycling environment along a route should be pleasant and interesting to encourage the full range of cyclists including beginners, recreational cyclists and commuter cyclists. Furthermore, there should be good levels of natural surveillance and, where appropriate, street lighting in order to promote personal safety.
 - Comfort cycling infrastructure should be designed, built and maintained for ease of use and for comfort. This means application of high quality surface treatment and seeking to minimise the number of times it is necessary to stop or conflict with other road users.
- 3.2.10. The guidance also promotes a Quality of Service rating; this rating is a measurement of the degree to which the needs of the cyclists are considered to have been met, assessed against the five key



- design criteria. This approach is similar to the Cycling Level of Service (CLoS) assessment promoted by Transport for London.
- 3.2.11. The guidance is divided into chapters covering distinct elements of cycle infrastructure design, including link facilities and route features; junctions and crossings; signs and markings; and general construction guidance (including surfacing). In each of the chapters, parameters are defined to assist designers in developing appropriate infrastructure for a wide range of scenarios, taking into account constraints that may be present, such as cost, acceptability, and deliverability.
- 3.2.12. A range of standards, look up tables and related guidance, such as cycle parking, is included in the appendices of the document.

City Connect Cycle Superhighway Design Guidance (CCDG)

- 3.2.13. Developed by West Yorkshire Combined Authority, City Connect's Superhighway Design Guidance describes different measures that have been implemented along the Cycle Superhighway between Leeds and Bradford.
- 3.2.14. The document explains how users should navigate these different spaces and which transport mode has priority. Design features covered in the document include side roads and non-signalised junctions, bus stops, bi-directional sections of track, shared spaces and diagonal crossings. Guidance on ancillary design features is also included.
 - Design Manual for Roads and Bridges (DMRB) Interim Advice Note 195/16: Cycle Traffic and the Strategic Road Network (Highways England, 2016)
- 3.2.15. IAN 195/16 provides guidance and technical specifications for the provision of cycle infrastructure along the Strategic Road Network (SRN). The SRN is typically concerned with provision for longer distance journeys between urban areas, generally at higher speeds, and non-motorised traffic is prohibited from travel on any motorways; the guidance therefore focusses predominantly on segregated provision away from the carriageway. Through adoption of the design principles laid out in the document, convenient and safe movement of cycle traffic crossing or travelling along the SRN should be made possible.
- 3.2.16. Different aspects of implementing infrastructure on the SRN are covered, including links, junctions, crossings and roundabouts, as well as signage, construction and maintenance. For each design feature, different factors are taken into consideration (e.g. traffic volumes, speed, road dimensions) allowing the designer to make a more informed decision about the most suitable infrastructure element used.

Designing for Cycle Traffic: International principles and practice (DCT) (John Parkin, ICE, 2018)

- 3.2.17. This book describes and analyses best practise design principles from the UK, Holland, Denmark, and the US. It covers different elements of cycling design, including on and off-carriageway routes, junctions, and crossings design. A major theme running through the document is that only distinct and separate cycling provision can ensure attractive and comfortable cycling infrastructure.
- 3.2.18. The document also explains related topics, including the planning processes involved when designing for cycling, legal and policy requirements, and the monitoring and evaluation of cycling infrastructure.

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3.2.19. The concluding chapters explore different ways of modelling and auditing cycling infrastructure and recent innovations in cycling design.

Design Manual for Bicycle Traffic (CROW, 2007)

- 3.2.20. The Dutch Design Manual for Bicycle Traffic commonly referred to as the 'CROW' explains the engineering and design principles that have been deployed in the Netherlands which have helped to create and maintain the current high level of cycling in the country.
- 3.2.21. Detailed guidance on cycle user types, their needs, and cycle infrastructure design to meet those needs is provided; ensuring infrastructure is planned to reflect cycle users' characteristics is a key theme throughout the document. The guidance also considers how infrastructure can best meet four core design criteria, ensuring routes are perceived to be safe, direct, comfortable and attractive. The document discusses the overarching principles in designing a cycling network, before setting out more detailed network components including road sections and junctions, and details of cycle path maintenance, furnishings, lighting, and signing.
- 3.2.22. The final chapter presents methodologies for evaluating cycling projects and how to ensure the long-term maintenance of roads.

Cycling Infrastructure Design LTN 2/08 (DfT, 2008)

- 3.2.23. This Local Transport Note (LTN) provides guidance on improving safety and reducing unnecessary delays and diversions for cyclists and pedestrians through the design of cycle infrastructure.
- 3.2.24. A hierarchy of safety measures is suggested, with measures that aim to reduce traffic volume and traffic speed recommended be considered first, and conversion of footways/footpaths to shared use for pedestrians and cyclists be considered last.
- 3.2.25. Design recommendations are included in the document covering a variety of different cycling infrastructure components: signage, cycle lanes, off-road cycle routes and junctions, as well as ancillary cycling aspects such as cycle parking and integration with public transport.
- 3.2.26. It is noted that, while still current, the guidance contained in LTN 2/08 is no longer considered to reflect best practice, and it is anticipated that a new version will be published in 2020 The updated LTN will replace the original guidance note, and recognise and promote recent innovations in cycling infrastructure, taking on board the views and opinions of a number of prominent cycling groups and stakeholders.

WALKING GUIDANCE AND BEST PRACTICE

Local Transport Note 1/12: Shared Use Routes for Pedestrians and Cyclists (Department for Transport, 2012)

- 3.2.27. This Local Transport Note focuses specifically on routes within built-up areas where pedestrian and cycle use is likely to be frequent. The document uses a hierarchy of provision, developed in LTN 2/08, to encourage practitioners to develop on-carriageway solutions first, in order to prevent designers from resorting too readily to 'shared use' interventions.
- 3.2.28. An overview of the scheme development process is provided, using a flow chart to explain how different traffic characteristics may influence design considerations and whether the adoption of shared use schemes or on-carriageway improvements may be more appropriate.

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- 3.2.29. If a shared use intervention is considered to be the most appropriate design element, a key decision that needs to be made by practitioners is whether segregate the route or not, ensuring that whatever interventions are proposed reflect the core design principles of being convenient, accessible, safe, comfortable and attractive. The document weights up the advantages and drawback of these different design elements.
- 3.2.30. Pedestrian design considerations are examined, ensuring that the conversion of footways into shared use routes does result in the displacement of existing users and that the perception of reduced safety does not deter elderly people or disabled people from using the route. The document therefore recommends that pedestrians have sufficient width after conversion and that their particular concerns are discovered early on in the route's design.
- 3.2.31. Other design recommendations include ensuring the shared use route is clear from street clutter and aligning the cycle track so that it is placed on the carriageway side of a segregated shared-use route, improving pedestrian safety.
- 3.2.32. Related aspects of the scheme development process are also covered including how to hold effective stakeholder engagement and manging the route post-implementation.
- 3.2.33. Shared space has recently been the subject of debate regarding inclusive mobility and accessibility in shared space, with the lack of a defined kerb and formal crossing points have a particularly negative impact on certain user groups.
- 3.2.34. Following the publication of the "Inclusive Transport Strategy: Achieving Equal Access for Disabled People" (DfT, 2018) and the Ministry for Housing, Communities and Local Government's National Planning Policy Framework refresh, the DfT have called for a pause on the introduction of new shared space schemes as they update LTN 1/12 to address these issues. The pause relates to those shared space schemes that feature a level surface in areas with relatively large amounts of pedestrian and vehicular movement, such as high streets and town centres (outside of pedestrian zones). The pause does not apply to streets within new residential areas or the redesign of existing residential streets with very low levels of vehicular traffic, such as appropriately designed mews or cul-de-sacs.

Creating Better Streets: Inclusive and Accessible Places – Review of Shared Space (CIHT, 2018)

- 3.2.35. This CIHT document examines the current debate regarding the effectiveness and safety of shared space initiatives in the UK through a review of several case studies, as well as an exploration of the relevant legislation.
- 3.2.36. The report recommends that future projects be scored against several objectives:
 - whether a scheme represents an inclusive environment or not;
 - ease of movement for all users; and
 - quality of place and economic benefit.
- 3.2.37. The report recognises the difficulty that defining 'shared space' schemes has had in hampering any meaningful discussion about them. Three types of shared space schemes were identified through a review of case studies, each with different characteristics:
 - pedestrian prioritised streets;
 - informal streets; and



- enhanced streets.
- 3.2.38. The report intends that using these distinctions will provide greater clarity for designers, decision makers, stakeholders and users and calls for these (or similar) 'shared space' street typologies to be adopted by government. It also suggests that these criteria be used to determine the effectiveness of a scheme post-implementation.
- 3.2.39. The document also recommends that local authorities set clearer outcomes during the design stage of a shared space scheme and that government emphasises the importance of stakeholder engagement. Calls were also made for the government to review several different specific elements of shared space initiatives.

Streetscape Guidance (Transport for London, 2016)

- 3.2.40. TfL's Streetscape Guidance document is guided by three major functions:
 - to encourage designers of streetscapes to use robust design methods;
 - to highlight the level of ambition that is required to develop high-quality levels of service; and
 - to highlight best practise design principles.
- 3.2.41. The document's design considerations take examples from case studies all over London where the successful redesign of streets has taken place and, where practical and appropriate, encourages the trialling and testing of new transport schemes and initiatives in order to stimulate future street improvements.
- 3.2.42. Different street types are recognised as supporting different functions which must balance the sometimes-competing functions of movement and place. Technical guidance on different design principles complements these considerations, with detailed information on different street components.

Planning for Walking (CIHT, 2015)

- 3.2.43. CIHT's Planning for Walking document describes the early stages of how best to implement walking strategies. The document begins by exploring current walking trends and characteristics, before explaining the benefits of walking and the problems and barriers pedestrians face.
- 3.2.44. The legal and regulatory context of walking is examined, setting the scene for how effective strategies can be envisaged and planned, describing how walking catchments, desire lines, pedestrian safety and other aspects of the pedestrian environment can contribute towards planning for walking.
- 3.2.45. Examples of ways in which local authorities have encouraged greater levels of walking for all purposes are described, such as through the implementation of travel plans or promotional campaigns, before considering potential trends, opportunities, and challenges which could affect levels of walking in the future.

Designing for Walking (CIHT, 2015)

- 3.2.46. Designing for Walking follows on from CIHT's Planning for Walking (see above), with this document explaining how facilities for walking should be designed.
- 3.2.47. Design considerations that affect the quality of the walking environment are considered, as are other factors including the assessment of options for crossing streets, assessment of pedestrian routes,



the necessity of pedestrian guard railing, the use of tactile paving, way finding, journey end facilities/interchanges, and the use or impact of street features and furniture.

Design Guidance: Active Travel (Wales) Act 2013 (Welsh Government, 2014)

- 3.2.48. This statutory guidance document provides details on the planning, design, construction and maintenance of active travel networks and infrastructure in Wales, addressing both walking and cycling provision.
- 3.2.49. The document presents a summary of the legal and policy framework enshrining the Active Travel Act, and describes how the Act mandates local authorities to develop active travel network maps in order to show existing infrastructure provision and to demonstrate where new active travel routes will be developed.
- 3.2.50. The guidance explains the processes of creating new and improving existing walking and cycling infrastructure, as well as setting out how to successfully engage with stakeholders and members of the public when considering active travel improvements.
- 3.2.51. The document sets out five essential design criteria for new cycling and walking infrastructure, which are: coherent, direct, safe, attractive and comfortable. The guidance presents different design elements to achieve these criteria in a range of different conditions.
- 3.2.52. Within the appendices of the document, detailed guidance is provided to assist designers in developing appropriate infrastructure for a wide range of scenarios taking into account constraints that may be present, such as cost, acceptability and deliverability. Each element is given a rating as to whether the infrastructure is well understood and widely used or whether the element has been largely untested in Wales, but has been adopted elsewhere.
- 3.2.53. Further guidance is also given on the assessment of walking routes, with a scoring system used to determine whether a route provides good quality provision for pedestrians or not, using the five core design criteria.

Manual for Streets 2 (CIHT, 2010)

- 3.2.54. Manual for Streets 2 (MfS2) builds on the guidance contained in MfS1, exploring in more detail how and where to apply its key principles, ensuring streets are designed with pedestrians considered first, promoting collaboration and engagement between different parties, setting a clear vision and objectives, and developing innovative approaches to street design.
- 3.2.55. The characteristics of different street types are explored, emphasising how town centre and city centre streets often have to serve multiple different functions and support multiple different users. Possible interventions to consider in these environments include vehicle access restrictions and adoption of an area-wide public realm strategy and streetscape manual.
- 3.2.56. The latter part of the document explores the detailed design of several streetscape elements. Regarding pedestrian provision, the document advises that:
 - The propensity to walk is influenced not only by distance, but also by the quality of the walking experience;
 - Good sightlines and visibility towards destinations and intermediate points are important for wayfinding and personal security;
 - Pedestrian routes need to be direct and match desire lines as closely as possible, including across junctions, unless site-specific reasons preclude it;



- Pedestrian networks need to be connected. Where routes are separated by heavily-trafficked roads, appropriate surface-level crossings should be provided where practicable;
- Pedestrians should generally be accommodated on multifunctional streets rather than on routes segregated from motor traffic. In situations where it is appropriate to provide traffic-free routes they should be short, well-overlooked and relatively wide;
- Obstructions on the footway should be minimised. Street furniture on footways can be a hazard for vulnerable people; and
- There is no maximum width for footways—widths should take account of pedestrian volumes and composition.
- 3.2.57. Regarding footway provision, recommendations include providing footways along both sides of the highway, ensuring footways are of a sufficient width to cater for peak demand without causing crowding or potentially risking people getting pushed into the carriageway, taking space away from the carriageway in order to create a better-balanced street and rationalising street furniture.
- 3.2.58. The document's appendices include several case studies, explaining the design elements used and evaluating whether the interventions were successful or not.

Providing for Journeys on Foot (CIHT, 2000)

- 3.2.59. Providing for Journeys on Foot is one of the earliest publications exploring ways in which local authorities should plan and provide for pedestrians, maintain walking infrastructure and promote walking, and while almost 20 years old, the principles it promotes are still highly relevant.
- 3.2.60. The document sets out 'The Five Cs' as being the most important considerations when assessing the overall quality of the existing environment and when designing new infrastructure, which are: connected, comfortable, convenient, convivial and conspicuous.
- 3.2.61. Urban design principles are also endorsed, taking into consideration the importance of multidisciplinary working. Different aspects of the walking environment are examined in more detail, taking into consideration how pedestrian environments vary, basing design recommendations on these findings.
- 3.2.62. Post-construction aspects of walking provision are also examined, including footway maintenance, promoting walking, and the appraisal and monitoring of pedestrian infrastructure schemes. The document concludes with example checklists and frameworks used to assess existing walking environments and assess possible investment options.

4

CYCLE NETWORK DEVELOPMENT





4 CYCLE NETWORK DEVELOPMENT

4.1 OVERVIEW

- 4.1.1. One of the key outputs of Phase 1 of the Skipton LCWIP process is the determination of the Cycling Network Map (CNM), which sets out a cohesive potential network for cycling. This network is then considered against the baseline evidence in order to identify preferred routes for further development.
- 4.1.2. The development of the Cycling Network follows the LCWIP Technical Guidance for Local Authorities document (DfT, 2017), and is founded on the principle of connecting people to places, ensuring that the proposed networks correspond to both the routes people currently take and those people are likely to want to take, both now and in the future. This method also helps to identify the long-term vision for the networks while ensuring investment is focused on the key routes and the needs of cycle users. The resulting outputs are networks that are evidence-based and facilitate strategic development.

4.2 METHODOLOGY

- 4.2.1. The development of the Cycle Network Map can be divided up into a 10-step process. These are as follows:
 - Step 1 Define and Understand the Study Area
 - Step 2 Identify Key Origins and Destinations
 - Step 3 Identify Key Future Developments and Infrastructure
 - Step 4 Clustering of Origins and Destinations
 - Step 5 Schematic Connections Between Origins and Destinations
 - Step 6 Identify Routes Serving the Schematic Network
 - Step 7 Consider a Route Hierarchy
 - Step 8 Produce Draft Cycle Network
 - Step 9 Validation and Review
 - Step 10 Produce Final Network
- 4.2.2. The following sub-sections describe the process undertaken in developing the CNM for the Skipton LCWIP study area.

4.3 STEP 1 – DEFINING THE STUDY AREA

- 4.3.1. The first step in developing the network map is to define the extents of the study area.
- 4.3.2. In order to determine these extents, a process of 'baselining' was undertaken to understand travel movements and demographic variations in the District, including a review of various data sources in order to understand the existing transport-related issues, physical constraints and topography. Isochrone mapping was undertaken in order to understand the likely extents of active travel distances, while the DfT's Propensity to Cycle Tool (PCT) was used to identify existing and potential future cycle travel patterns.
- 4.3.3. A number of site visits have also been undertaken at various stages of the process; these site visits have helped understand existing and future travel demands, identify key corridors, and consider constraints on the network.

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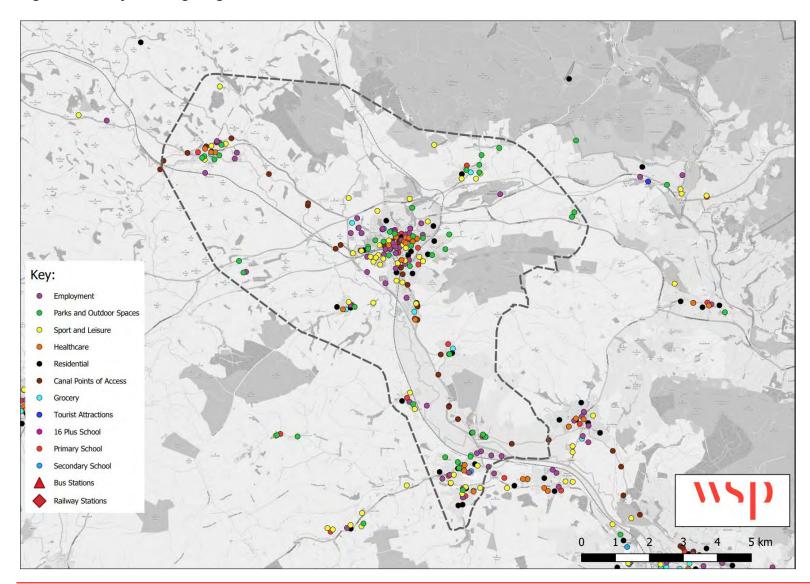
- 4.3.4. Stakeholder engagement has also been key in understanding the priorities of the District and the implications and alignment with other workstreams.
- 4.3.5. Following an analysis of this evidence base, it was determined that the Skipton LCWIP will focus on Skipton as the main urban area in the District, and encompasses those nearby villages considered to be within the maximum desirable cycling distance and to have a reasonable propensity to increase active travel.
- 4.3.6. The LCWIP also considers strategic links to outlying areas where deemed appropriate (such as cross-boundary links or to long distance leisure routes). The agreed study area is shown in Figure 1-1.

4.4 STEP 2 – IDENTIFY KEY ORIGINS AND DESTINATIONS

- 4.4.1. Key origins and destinations were plotted using data collected through the baseline exercise, site audits, stakeholder engagement, and through local knowledge. These ODs included the following key origin points:
 - Residential areas Lower Super Output Area (LSOA) population-weighted centroids were used as proxy locations for residential areas;
 - Public transport interchanges these are both origins in terms of people arriving in the study area and destinations people use to travel to wider locations.
- 4.4.2. Key destinations included:
 - Public transport interchanges (as above);
 - Principal retail areas;
 - Employment concentrations;
 - Large grocery shops;
 - Hospitals:
 - Tourist attractions: and
 - Educational institutions.
- 4.4.3. Figure 4-1 shows these key ODs in relation to the Skipton LCWIP study area. Further detail regarding OD identification is available in Section 2.7, including more detailed OD plots.



Figure 4-1 - Key Existing Origins and Destinations





4.5 STEP 3 – IDENTIFY KEY FUTURE DEVELOPMENTS AND INFRASTRUCTURE

- 4.5.1. Identifying potential developments and infrastructure is important in terms of understanding where future origins and destinations may be located, as well as the potential for new desire lines.

 Understanding the location of and proposals for such development allows the network to be developed in a way that links these sites and makes the most of planned infrastructure.
- 4.5.2. Figure 4-2 identifies the key future committed and allocated development sites in the Skipton LCWIP study area, which are based on the commitments and allocations of the recently adopted CLP. Figure 4-3 presents these alongside the existing ODs, as determined in Step 2 this map therefore comprises the final OD map to be taken forward to Step 4.



Figure 4-2 - Key Future Origins and Destinations

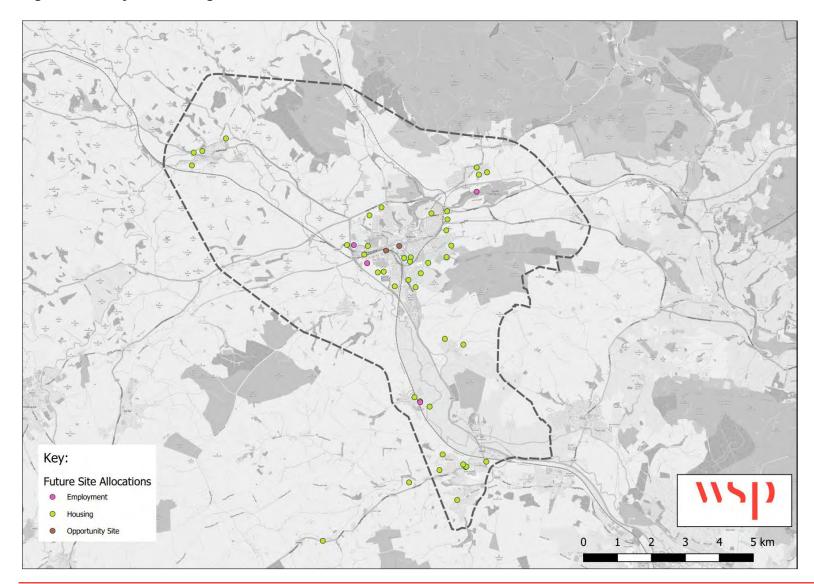
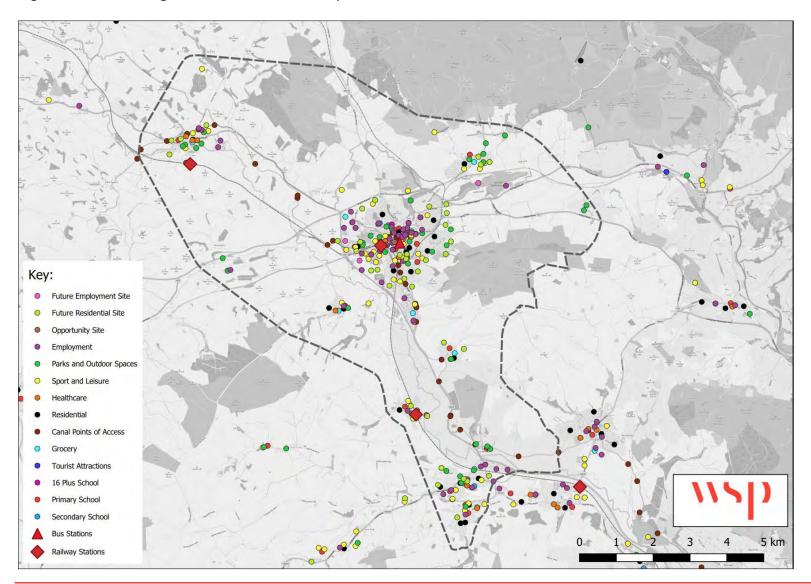




Figure 4-3 - Final Origins and Destinations Map





4.6 STEP 4 – CLUSTERING OF ORIGINS AND DESTINATIONS

4.6.1. In Step 4, trip generators in close proximity to one another have been clustered together as key destination areas. This process simplifies the analysis of desire lines, agglomerating multiple OD points into a single location. Figure 4-4 illustrates these clusters. Note the number displayed on each cluster signifies the number of OD points each cluster represents, and is used as a proxy weighting for the desire to travel to and from each location.

4.7 STEP 5 – SCHEMATIC CONNECTIONS BETWEEN ORIGINS AND DESTINATIONS

- 4.7.1. Step 5 maps desire lines between the clusters. Straight lines were drawn between each of the cluster points in order to create a schematic web network. These represent the most direct paths for cycle users between points (i.e. 'desire lines') and are, at this stage, irrespective of existing transport networks or constraints. Figure 4-5 illustrates this step, displaying more than 900 desire lines derived by simply connecting the clusters together.
- 4.7.2. In order to rationalise the number of desire lines, the lines were scored based on the sum of the cluster weighting each line connected. The top 10% (approx. 90 desire lines) were then extracted, showing those desire lines that potentially indicated the greatest propensity for travel between clusters. Figure 4-6 illustrates this step.

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Figure 4-4 - LCWIP Study Area: OD Clustering

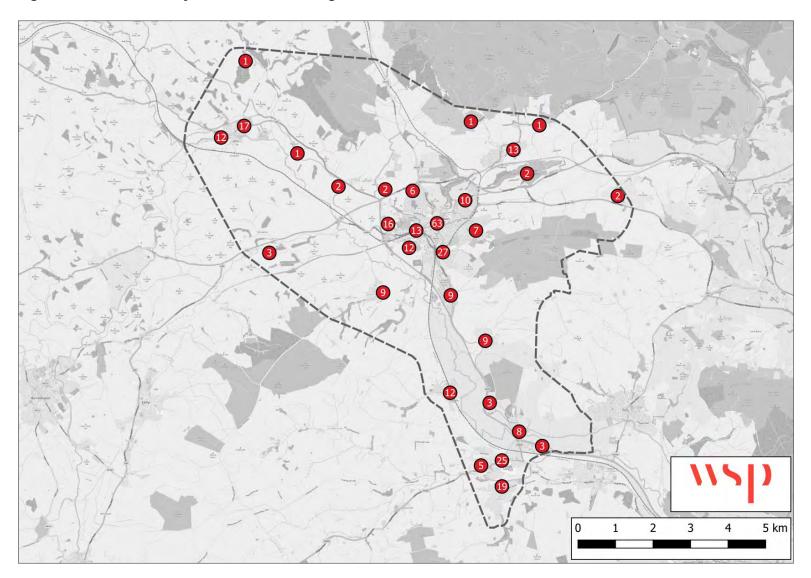




Figure 4-5 - LCWIP Study Area: Desire Lines

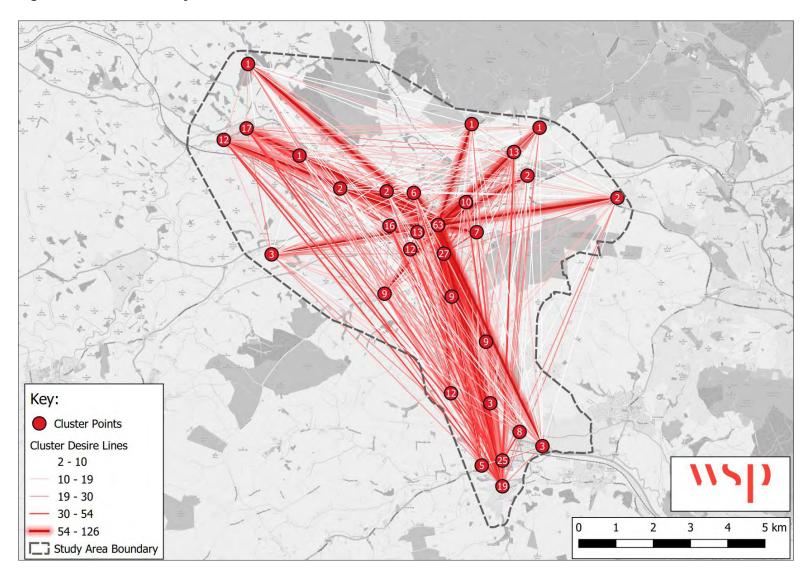
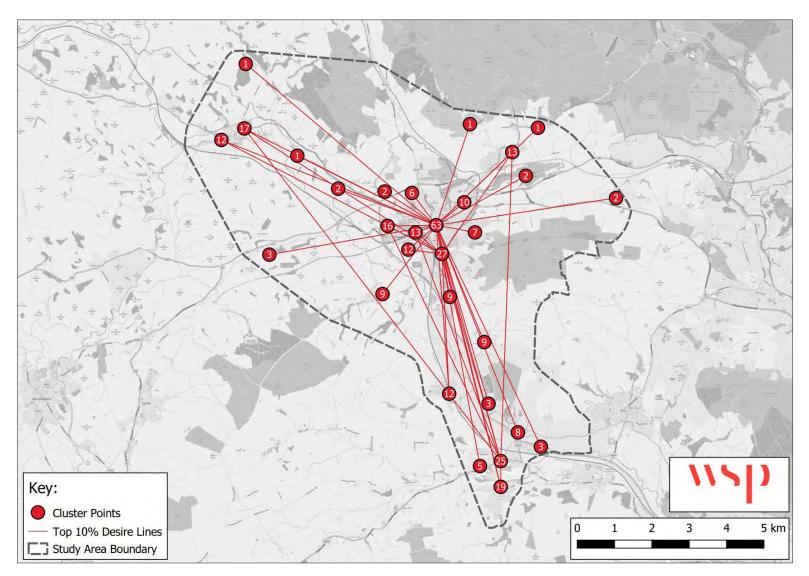




Figure 4-6 - LCWIP Study Area: Top 10% Desire Lines



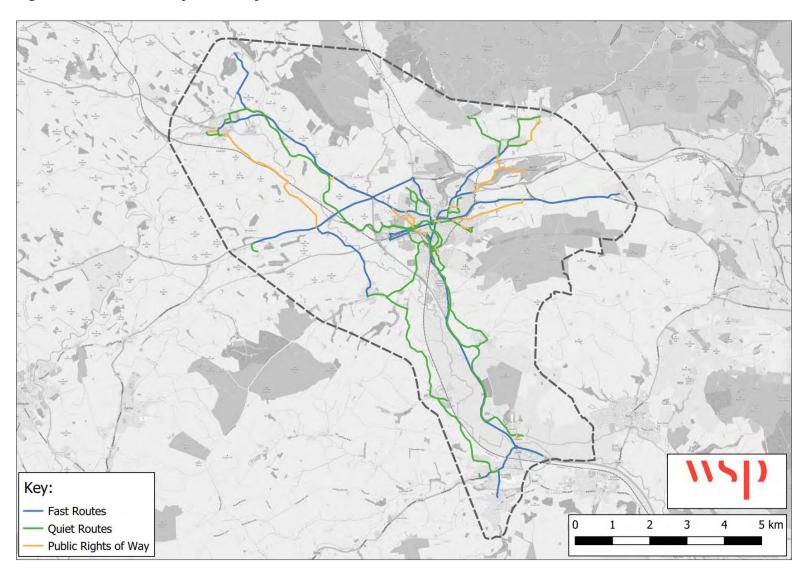


4.8 STEP 6 – IDENTIFY ROUTES SERVING THE SCHEMATIC NETWORK

- 4.8.1. Potential route alignments were then plotted, following the schematic connections identified in Step 5 as closely as possible. The routes selected take into account existing roads, paths and structures but do not consider current constraints, such as carriageway width or traffic management restrictions such as one-way orders. Figure 4-7 illustrates this process, displaying the key routes selected to best represent the network.
- 4.8.2. Following this process, the key routes map was presented to external stakeholders for initial comments and feedback. Section 6 summarises the results of this exercise. This feedback was then utilised in Steps 7 and 8 in order to refine the clusters, desire lines, and key routes and produce a draft Cycling Network Map.



Figure 4-7 - LCWIP Study Area: Key Connections





4.9 STEP 7 – IDENTIFY A ROUTE HIERARCHY

4.9.1. From reviewing best practice and through knowledge and experience of established cycle networks it was recognised that a cycle network hierarchy would be appropriate. Within this hierarchy the type of infrastructure provided would vary both depending on the links' position in the network hierarchy, and on the type of link, where it connects to, and how it will be used. As a result, the network has been categorised in accordance with the criteria presented in Table 4-1. This network hierarchy has been applied across the NYCC LCWIPs to ensure a consistent approach.

Table 4-1 - Draft Network Hierarchy

Network Element	Characteristics
Primary	 High number of cycle users; Creates arterial routes that support a wider network; Links large residential areas to main clusters such as town centre locations; Through, internal, and inbound-outbound cycle traffic; Direct, following the shortest possible route; Low gradients (where possible).
Secondary	 Lower number of cycle users; Caters for shorter local trips; Increases density of network; Ensure local access to origins and destinations from the primary network; Provides quieter routes for less confident cycle users (while primary network is being developed).
Town Centre Cores	High levels of permeability and priority for cycle users and pedestrians.

- 4.9.2. This hierarchy has been applied to the identified cycle corridors, respective to their location in the study area and perceived role in the network, with discussion provided in Step 8.
- 4.9.3. A core network of primary routes underpins the proposed network, taking into account the main destination clusters, origin points, and any isolated major destinations. The primary routes are supported by a network of secondary and local links, which are discussed below in relation to the study area.

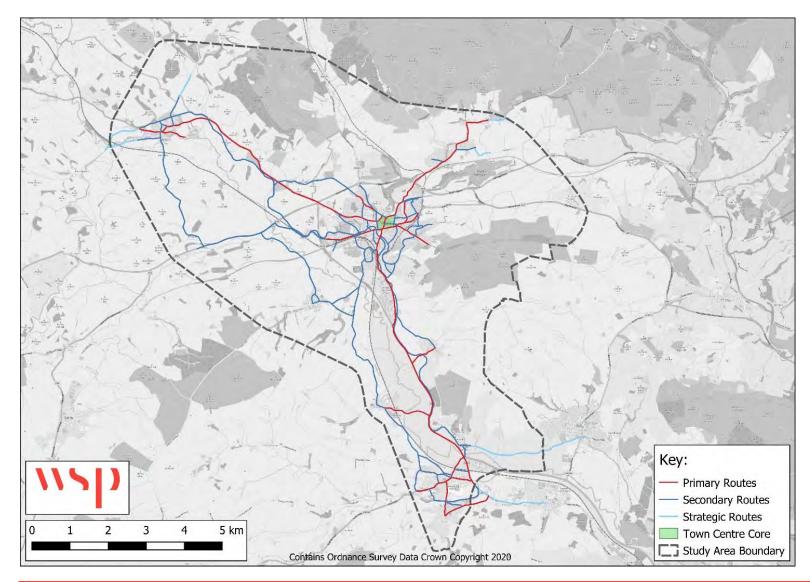


4.10 STEP 8 - PRODUCE DRAFT CYCLE NETWORK

- 4.10.1. Step 8 is the culmination of the previous steps, bring all the data together to formalise a draft network ready for Step 9 validation and review. Figure 4-8 presents the overall draft cycle network map for the study area, while the subsequent subsections present more detail regarding the following discrete geographical locations within the study area:
 - Skipton & Embsay;
 - Gargrave; and
 - Cross Hills & Glusburn.
- 4.10.2. Each sub-section identifies the key routes across the study area, providing an overview of the main features of the network.



Figure 4-8 - Draft Cycle Network Map



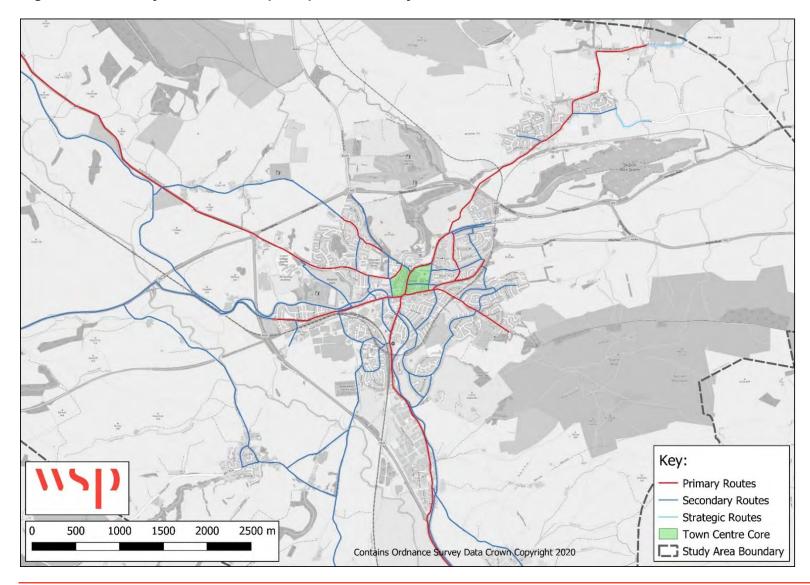


Skipton

- 4.10.3. Figure 4-9 presents the draft cycle network map for Skipton and the smaller villages in the vicinity.
- 4.10.4. The following primary routes have been identified:
 - A north south spine connection running from Embsay in the north-east to Cross Hills / Glusburn in the south. This route passes directly through Skipton High Street, the main retail centre of the district, as well as the Snaygill industrial estate, and includes connections to the rail station and other key residential areas. Spurs off this route also provide vital connections to the smaller villages of Cononley and Bradley.
 - An east west corridor along Otley Road and Broughton Road, connecting residential estates and the town centre directly to the rail station and Wyvern Park, as well as onward connections to Broughton Hall, Craven College, and key employment sites including Computershare (amongst other destinations). This corridor encompasses the core TCF scheme.
 - A north western route that extends to Gargrave along the A59, serving the suppressed demand for an overlooked and safe cycle route between Skipton and Gargrave, and providing access to key employment and educational sites.
- 4.10.5. The figure shows a number of shorter distance primary routes that complement the longer distance routes listed above. Despite the comparatively shorter length, these routes link key origins and destinations and are anticipated to accommodate the highest numbers of cycle users in the area.
- 4.10.6. The Primary routes are complemented by a comprehensive network of secondary routes, linking the key ODs and ensuring access to the primary network from all locations (known as 'mesh density')
- 4.10.7. These routes include:
 - The Leeds & Liverpool Canal this is a key leisure destination and a vital parallel route to the busy arterial roads; however, design constraints prevent it from meeting modern standards for an active travel route fit for all trip purposes.
 - Limehouse Lane / Carleton Rd Key link between the nearby village of Carleton-in-Craven and Skipton, although the expected usage is still likely to be comparatively low.
 - Broughton Road / A59 A missing link to Broughton Hall business park, a key employer in the area with no provision for active travel and few available travel options other than private car.
 - Skipton Road / Ings Lane these routes provide connectivity for the village of Bradley; while Skipton Rd is the most direct route to Skipton, Ings Lane would broadly serve desire lines to various destinations and is highlighted as the primary route for the village
- 4.10.8. The network map also includes a 'town centre core' surrounding the key retail centre of the town; 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.



Figure 4-9 - Draft Cycle Network Map: Skipton & Embsay



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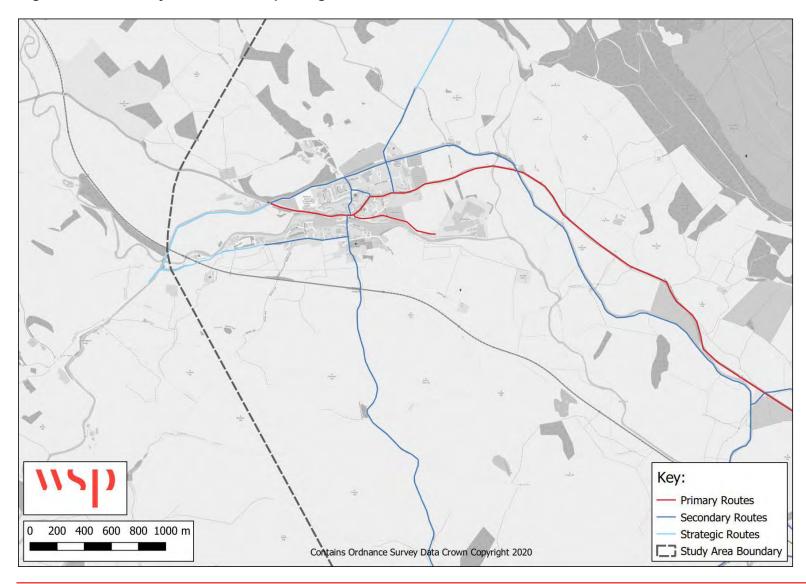
Gargrave

- 4.10.9. Figure 4-10 presents the draft cycle network map for Gargrave.
- 4.10.10. The following primary routes have been identified:
 - A direct route through the village along the High Street and connecting the village to Skipton, the main employment and retail centre for the district and broadly within a desirable cycling distance (circa 6km). This route has the potential to attract high numbers of cycle users for various purposes, but is currently unsuitable for cycling according to modern standards.
 - A spur to Scapa Healthcare, one of a number of key employers in the district which could attract local workers, commuters by bicycle from Skipton, and from further afield via the rail station.
- 4.10.11. The primary routes are complemented by a number of secondary routes, which include:
 - The Liverpool & Leeds Canal this is a key leisure destination and a vital parallel route to the busy arterial roads; however, design constraints prevent it from meeting modern standards for an active travel route fit for all trip purposes.
 - Pennine Way / Church St Key link between the village High Street and the rail station, which is poorly served and difficult to access by active modes.
- 4.10.12. The network map also includes a number of Strategic Routes; in Gargrave, these include the extent of the Leeds & Liverpool Canal to the west, and the Pennine Cycleway (NCN Route 68) to the north and west. These routes are unlikely to provide for a wide range of trip purposes, but are very important in the wider context of cycling across the district.

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Figure 4-10 - Draft Cycle Network Map: Gargrave



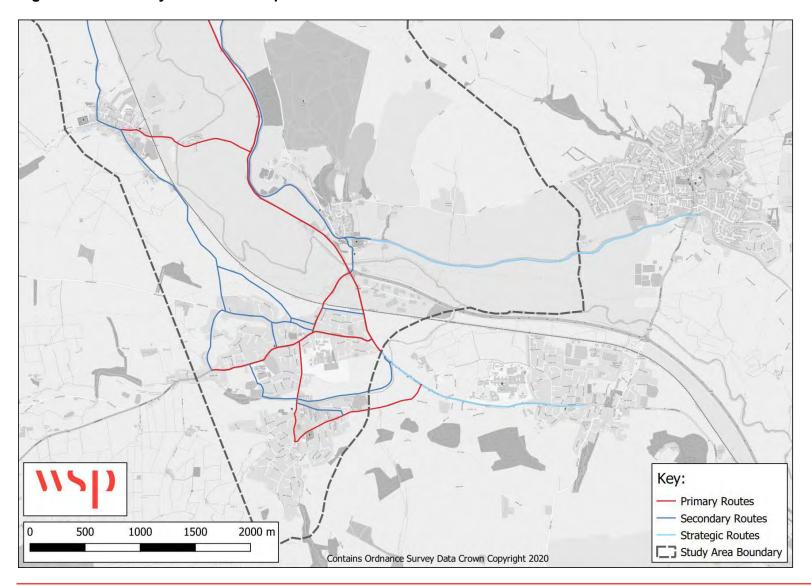


Cross Hills / Glusburn Area

- 4.10.13. Figure 4-11 presents the draft cycle network map for the Cross Hills / Glusburn area.
- 4.10.14. The primary routes include:
 - A north south route from the A629 / Skipton Road roundabout to Sutton-in-Craven via Holme Lane and Station Road. This route passes the main retail and employment sites in the villages, as well as providing key onward connections to Skipton.
 - Skipton Road and Keighley Road, both of which provide access to some of the main employment sites around the villages.
 - Cononley Lane. This route is a key link between the village of Cononley and both the A629 and Leeds & Liverpool Canal, which provide invaluable connectivity to opportunities in Skipton and Cross Hills / Glusburn.
- 4.10.15. It is noted that many of the primary routes in this part of the study area are significantly constrained, and in the short-term connections between the villages may rely on the more circuitous secondary route network, including greenways and local quiet streets.
- 4.10.16. These routes include:
 - Existing PROWs between Sutton-in-Craven, Glusburn, and Cross Hills (as well as Eastburn).
 - Glusburn to Cononley via Cononley Rd.
 - Kildwick to the A629 / Skipton Road roundabout, providing a direct link to the Leeds & Liverpool Canal as well as between Cross Hills and Kildwick.
- 4.10.17. The network map also includes three potential 'strategic routes' in the vicinity of Cross Hills / Glusburn:
 - Skipton Rd (B6265). The primary routes of Sutton Lane, Skipton Rd, and Keighley Road converge on this route towards Eastburn and Steeton.
 - (Kildwick to Silsden). This is a heavily constrained rural road linking Kildwick (and the Cross Hills / Glusburn area) to the nearby town of Silsden.
 - Leeds & Liverpool Canal to Silsden. Following the existing canal path and providing an off-road greenway type route particularly suited toward leisure cycling.
- 4.10.18. Although these areas are within a desirable cycling distance of the LCWIP study area and including a number of key ODs, they are outside of the Craven District and North Yorkshire administrative boundary and are therefore featured as 'strategic routes' which would require cooperation with Bradford District in order to bring forward. It should also be noted that all three routes present significant constraints in regard to the potential for interventions that would meet the objectives of the LCWIP, and would need to be considered in detail.



Figure 4-11 - Draft Cycle Network Map: Cross Hills / Glusburn Area





4.11 STEP 9 - VALIDATION AND REVIEW

4.11.1. The validation and review of the draft networks was informed by the baseline evidence, site visits, local knowledge, stakeholder engagement and a review of connectivity between key origins and destinations. The PCT outputs (Government Target scenario) were also used to validate the network in terms of existing and future demand.

4.12 STEP 10 - PRODUCE FINAL NETWORK

4.12.1. The final step is the production of the final Cycling Network Map, which is presented in Section 7.2.

5

WALKING NETWORK DEVELOPMENT



5 WALKING NETWORK DEVELOPMENT

5.1 OVERVIEW

- 5.1.1. One of the key outputs of Phase 1 of the Skipton LCWIP process is the determination of the Walking Network Map (WNM), which sets out a cohesive potential network for walking. This network is then considered against the baseline evidence in order to identify preferred routes for further development.
- 5.1.2. The development of the walking network follows the LCWIP Technical Guidance for Local Authorities document (DfT, 2017), and is founded on the principle of connecting people to places, ensuring that the proposed networks correspond to both the routes people currently take and those people are likely to want to take, both now and in the future. This method also helps to identify the long-term vision for the networks while ensuring investment is focused on the key routes and the needs of pedestrians. The resulting outputs are networks that are evidence-based and facilitate strategic development.

5.2 METHODOLOGY

- 5.2.1. The development of the walking network map can be divided up into an 8-step process. These are as follows:
 - Step 1 Define and Understand the Study Area;
 - Step 2 Mapping Walking Trip Generators;
 - Step 3 Identifying Core Walking Zones;
 - Step 4 Identifying Key Walking Routes;
 - Step 5 Consider a Route Hierarchy;
 - Step 6 Produce a Draft Walking Network;
 - Step 7 Validation and Review; and
 - Step 8 Produce Final Network.
- 5.2.2. The following sub-sections describe the process undertaken in developing the LCWIP.

5.3 STEP 1 – DEFINING THE STUDY AREA

- 5.3.1. The first step in developing the network map is to define the extents of the study area.
- 5.3.2. The study areas used in the determination of the Walking Network Map were agreed to focus on the same study area as the Cycling Network Map, as shown in Figure 1-1.

5.4 STEP 2 – MAPPING WALKING TRIP GENERATORS

- 5.4.1. The key origin and destination data used in the derivation of cycling origin and destination points in Section 4.4 were again utilised to understand the key ODs in relation to walking. It is considered that, while cycling is likely to enable longer distance journeys and connect OD pairs further afield, the trips generators and attractors remain the same.
- 5.4.2. These ODs included the following key origin points:
 - Residential areas Lower Super Output Area (LSOA) population-weighted centroids were used as proxy locations for residential areas; and

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 Public transport interchanges – these are both origins in terms of people arriving in the study area and destinations people use to travel to wider locations.

5.4.3. Key destinations included:

- Public transport interchanges (as above);
- Principal retail areas;
- Employment concentrations;
- Large grocery shops;
- Hospitals;
- Tourist attractions; and
- Educational institutions.
- 5.4.4. Figure 4-1 shows these key ODs in relation to the LCWIP study area.
- 5.4.5. Future ODs are also considered in the development of the WNM, with the same assumptions applied in the development of both the CNM and the WNM. Section 4.5 details the process of identifying future ODs, while Figure 4-2 to Figure 4-3 illustrate the location of these sites in relation to the study area.

5.5 STEP 3 – IDENTIFYING CORE WALKING ZONES

- 5.5.1. Following the identification of walking trip generators Core Walking Zones (CWZs) can be defined.
- 5.5.2. CWZs are areas that consist of a number of walking trip ODs located in close proximity (e.g. town centre, business park, university campus, etc). These CWZs are most likely to attract trips for utility / commuting purposes.
- 5.5.3. While CWZs may include points of interest (POIs), these locations are considered to predominantly attract trips for leisure and recreational purposes—although it is recognised that these destinations are also likely to accommodate some measure of employment.
- 5.5.4. The CWZs identified within the LCWIP study area are listed in Table 5-1.

Table 5-1 - Core Walking Zones

Core Walking Zone	Area	Purpose
Skipton Town Centre (local centre proxy)	Skipton Town Centre	Commuting/Utilities/Retail
Skipton Building Society	Skipton	Commuting/Utilities
Computershare	Skipton	Commuting/Utilities
Snaygill Industrial Estate	Skipton	Commuting/Utilities
Gargrave	Gargrave	Commuting/Utilities/Retail/Residential
Cross Hills	Cross Hills	Commuting/Utilities/Retail/Residential

5.5.5. Two CWZs have been identified respectively in relation to Gargrave and Cross Hills / Glusburn area, since the areas are relatively compact. The urban areas of both Gargrave and Cross Hills are entirely within the maximum desirable walking distance (approximately 2km), highlighting the

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importance of walking across the areas of interest. However, the CWZs do not extend to Skipton due to the extended distance, indicating a much lower propensity to walk to Skipton from Gargrave or Cross Hills / Glusburn.

- 5.5.6. The Skipton Town Centre 2km isochrone extends to Embsay, which highlights the potential accessibility between Skipton and Embsay for active modes.
- 5.5.7. As per LCWIP guidance, an approximate five-minute walking distance of 400m can be used as a guide to the minimum extents of CWZs. Each identified CWZ has therefore been plotted using a proxy central point, with a GIS-based isochrone tool and the local highway network used to map the CWZ five-minute extents.

5.6 STEP 4 – IDENTIFYING KEY WALKING ROUTES

- 5.6.1. Following the identification of the CWZs, key walking routes to each zone should then be identified by mapping a 2km isochrone from the central point, considered to be the maximum desirable walking distance from the CWZs²¹. The proportion of journeys made on foot typically decreases significantly beyond this distance.
- 5.6.2. While each 2km isochrone allows the identification of key walking routes in relation to each individual CWZ, the analysis of overlapping isochrones shows where key walking routes are likely to serve multiple CWZs, and therefore potentially have higher levels of demand.
- 5.6.3. A GIS-based isochrone tool was used to identify potential walking routes of 2km (approximately a 25-minute journey) for each of the CWZs listed in Step 2.
- 5.6.4. It should be recognised that there are some limitations to this method; centroids are used as proxies for each OD, and pedestrian movement is unconstrained by infrastructure provision in the same way as vehicles (although the propensity to travel on foot can be heavily
 - supressed by poor quality infrastructure). The isochrone analysis is therefore used to identify movement corridors, within which a combination of stakeholder engagement and site visits are used to identify specific routes for improvement.
- 5.6.5. Figure 5-1 and Figure 5-2 show the CWZs and respective 2km isochrones identified as part of the LCWIP process.
- 5.6.6. The CWZs are highlighted in red (representing a 400m or 5 min walk), whilst all walking routes accessible within a 2km radius (approx. 25 min walk) are highlighted in blue.

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North Yorkshire County Council

ore Walking

²¹ Providing for Journeys on Foot, CIHT, 2000



Figure 5-1 - Core Walking Zones and Key Walking Routes

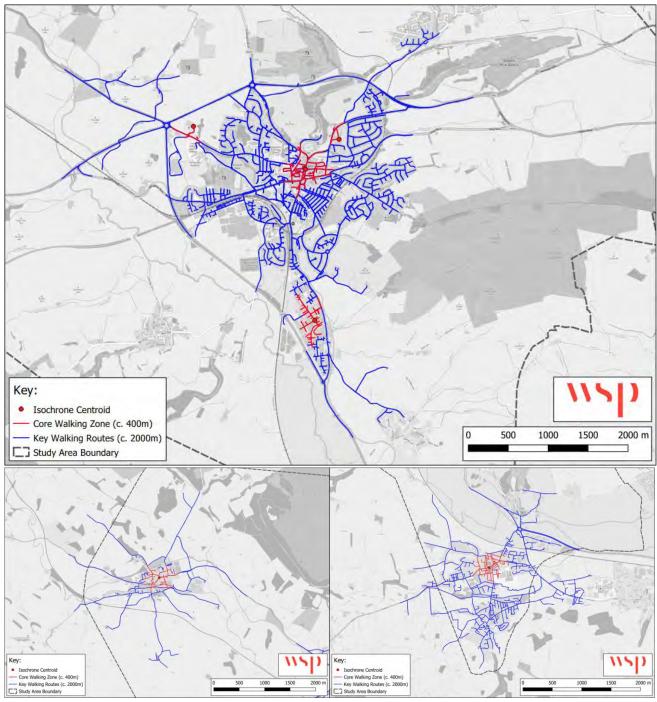
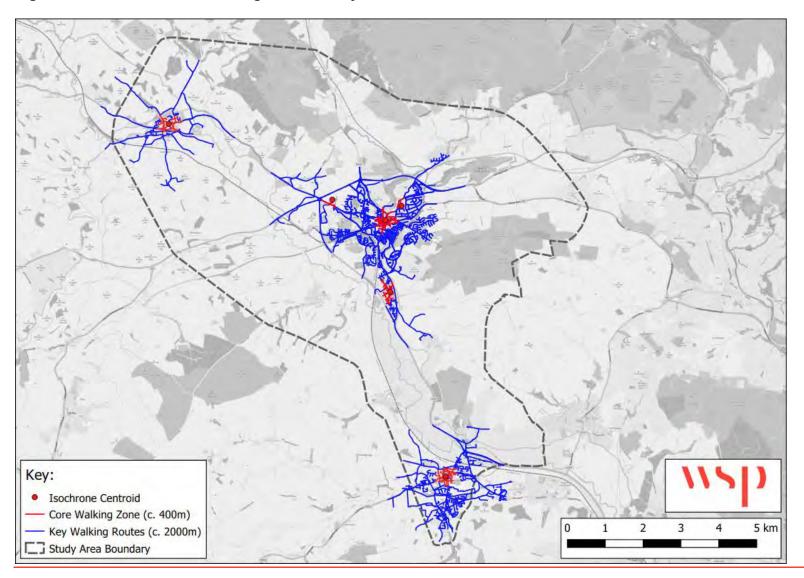




Figure 5-2 - Identified Core Walking Zones: Study Area



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5.7 STEP 5 – CONSIDER A ROUTE HIERARCHY

- 5.7.1. Following the identification of key walking routes for each CWZ, each has been prioritised using the definitions provided in the RLG Footway Maintenance Classification²² as replicated in Table 5-2. Whilst definitions can be tailored to local circumstances, the DfT's LCWIP technical guidance recommends that a defined classification of footways is used as a basis for establishing where to focus improvements to walking infrastructure.
- 5.7.2. Within this hierarchy the type of infrastructure provided would vary both depending on the link's position in the network hierarchy, and on the type of link, where it connects to, and how it will be used.

Table 5-2 - Footway Hierarchy in 'Well-Maintained Highways'

Category	Name	Description
1(a)	Prestige Walking Zones	Very busy areas of towns and cities, with high public space and street scene contribution.
1	Primary Walking Routes	Busy urban shopping and business areas, and main pedestrian routes.
2	Secondary Walking Routes	Medium usage routes through local areas feeding into primary routes, local shopping centres, etc.
3	Link Footways	Linking local access footways through urban areas and busy rural footways.
4	Local Access Footways	Footways associated with low usage, short estate roads to the main roads and cul-de-sacs.

- 5.7.3. Prestige, Primary, Secondary and Link Footways have been identified and mapped as these are expected to have the highest demand for walking trips and are the busiest local routes, based on the definitions above. It is therefore considered that these routes would be the focus for improvements.
- 5.7.4. It should be noted that that these assignments should be considered indicative in the initial stages, and alternative or complementary routes within the corridors may come forward through stakeholder engagement, detailed assessment and design.
- 5.7.5. Further discussion on the identification of routes for each footway hierarchy category are provided below, respective to their location in the study area.

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²² Well-maintained Highways: Code of Practice for Highway Management 2005 Edition, updated September 2013, Roads Liaison Group-London: TSO



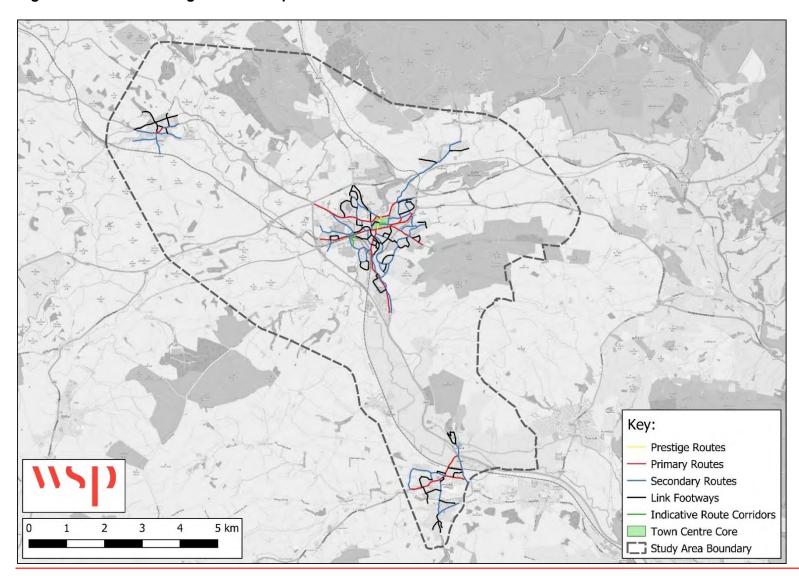
5.8 STEP 6 – PRODUCE A DRAFT WALKING NETWORK

- 5.8.1. Following the methodology described in Steps 1-4, a draft Walking Network Map has been developed across the study area, with links categorised based on the network hierarchy established in Step 4.
- 5.8.2. Figure 5-3 presents the overall draft Walking Network Map for the study area. The determination of the Core Walking Zones and associated walking routes clearly identifies that the study area far exceeds the maximum desirable walking distance, and that there is likely to only be minimal travel between the urban areas on foot, particularly when compared to the potential for travel by bicycle. The Walking Network Map is therefore divided into three distinct locations based on the propensity to travel on foot:
 - Skipton & Embsay;
 - Gargrave; and
 - Cross Hills & Glusburn.
- 5.8.3. Each of the subsequent sub-sections identifies the key routes in each area, providing an overview of the main features of the network.

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Figure 5-3 - Draft Walking Network Map



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Skipton

5.8.4. Figure 5-4 presents the draft Walking Network Map for Skipton. The key corridors include:

Prestige / Primary Walking Routes

- High Street from the roundabout with Newmarket Street and Keighley Road to Skipton Castle. This prestige town centre route facilities connectivity to a large number of key services and local amenities. It also provides a connection to a number of key primary routes and into main employers, such as the Skipton Building Society;
- The Bailey from Skipton Castle to Skipton Road. This route would facilitate connectivity between Embsay and Skipton, as well as key trip destination points, such as Skipton Castle, Skipton Building Society and Skipton Town Hall. There are further connections to secondary links on either side of the corridor, enhancing permeability along key routes into residential sites in Embsay and north-eastern Skipton;
- Mill Bridge from the roundabout with High Street to Water Street. This route facilitates connectivity to West Street, another primary route, providing permeability towards services and further connections to Gargrave;
- Water Street / Back of the Beck / Gargrave Road to the A59 / A629 / A65 Roundabout. This route provides a westward connection from Skipton town centre towards Gargrave, and facilitates connectivity to Craven College, Skipton Girls' High School, Ermysted's Grammar School, Computershare and the Aireville Park. There are further connections to secondary links and link routes, which enhance permeability into residential estates in the northwest part of Skipton;
- Swadford Street / Belmont Street / Broughton Road (to Broughton Crescent)— this radial route to the west extends from the High Street to the west, and facilitates connections with the Skipton railway station, the Craven District Council, large employment sites and other key services. It links with other secondary routes and link footways, providing additional accessibility with the Sandylands Sports Centre, residential sites and educational facilities; and
- A6131 Keighley Road –Millennium Road roundabout. The route facilitates connectivity to Snaygill, where there are multiple large employment sites, and further connections to Cross Hills to the south. The route provides opportunities to link with secondary and link footway networks to improve connectivity in the southern parts of Skipton and Snaygill.
- 5.8.5. The primary routes are complemented by a comprehensive network of secondary routes footways, enabling walking trips between the main ODs in the area. These routes include:

Secondary Walking Routes

- Raikes Road / Raikeswood Road / Salisbury Street facilitating trips from residential areas northwest of the town centre to primary route networks within the town centre area;
- Coach Street this route facilitates trips within the town centre area, connecting primary routes across the Leeds & Liverpool Canal;
- Brook Street / Brewery Lane a connection to primary routes, providing connectivity across the Leeds & Liverpool Canal;
- Path through Aireville Park facilitates connection between the Craven College through the Aireville Park and south of the Leeds & Liverpool Canal;
- Towpath on the north side of the Leeds & Liverpool Canal, connecting to Craven Cattle Marts this link connects to the Craven Cattle Marts and is part of the TCF scheme;

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- Ings Lane provides accessibility to the Industrial Estate south of the railway line in proximity to the Sandylands Sports Centre;
- Carleton New Road facilitates trips to the Sandylands Sports Centre and provides connectivity to the residential sites in south-western Skipton;
- Skipton Old Road / Carleton Road / Burnside Avenue is a circular loop of the residential estates
 in south-western Skipton; this will also support aspirational developments in the area;
- Craven Street / Cavendish Street serves as a 'cut-through' between the high traffic Belmont Street and Keighley Road and provides access to employment sites and key services; and
- Towpath of the Leeds & Liverpool Canal from south of freight railway line intersection to the roundabout of Millennium Road and A6131 Keighley Road – providing a quieter alternative of Keighley Road to Snayqill industrial estate, where there are multiple employment sites.

Link Footways

5.8.6. The potential routes identified above create a dense network of Primary and Secondary Walking Routes, considered to represent a framework of key routes across the study area. The routes are complemented by a number of Link Footways to increase this density and ensure accessibility on foot across the area.

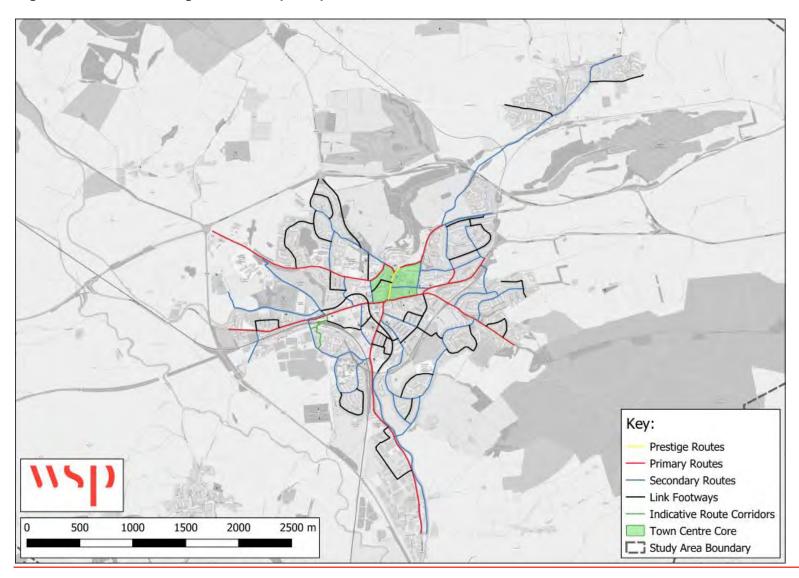
Indicative Routes

- 5.8.7. The map includes a potential route which does not currently exist. The broad alignment shown indicates a potential route along the desire line that could provide a high level of benefit, although this should be determined through detailed appraisal:
 - A route following a broad alignment from Carleton New Road to the existing but disused southern
 access point to Skipton rail station. This route could potentially utilise Sandylands Business Park,
 or be delivered in parallel with proposed and aspirational development in the vicinity
- 5.8.8. The network map also includes a 'town centre core' surrounding the key retail centre of the town; 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. This concept of ease of mobility is even more applicable to the walking network map, as cycle users are more likely to park their bikes within the town centre and then walk, as opposed to cycle between nearby destinations.

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Figure 5-4 - Draft Walking Network Map: Skipton



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Gargrave

5.8.9. Figure 5-5 presents the draft Walking Network Map for Gargrave. The key corridors identified are summarised as:

Prestige / Primary Walking Routes

A single primary walking route is identified on the High Street, spanning from North Street to Church Street. The route is the main shopping area in the village and encompasses the Core Walking Zone in the Gargrave area, so it is likely to contain the highest concentration of walking trips for all purposes. This route links to multiple secondary routes and link footways, providing further access to residential and employment sites.

Secondary Walking Routes

- The A65 Skipton Road is an extension of the High Street in both the eastern and western direction, connecting key services and local amenities. It further provides eastward connectivity toward Skipton;
- South Street / River Place / Mill Lane provides connectivity from the town centre to Scapa Healthcare;
- Church Street extends from the primary walking route and facilitates connectivity to the Gargrave railway station; and
- Marton Road extends around the western periphery of the village, providing a quieter route into the western residential estates and the Milton park Lodges.

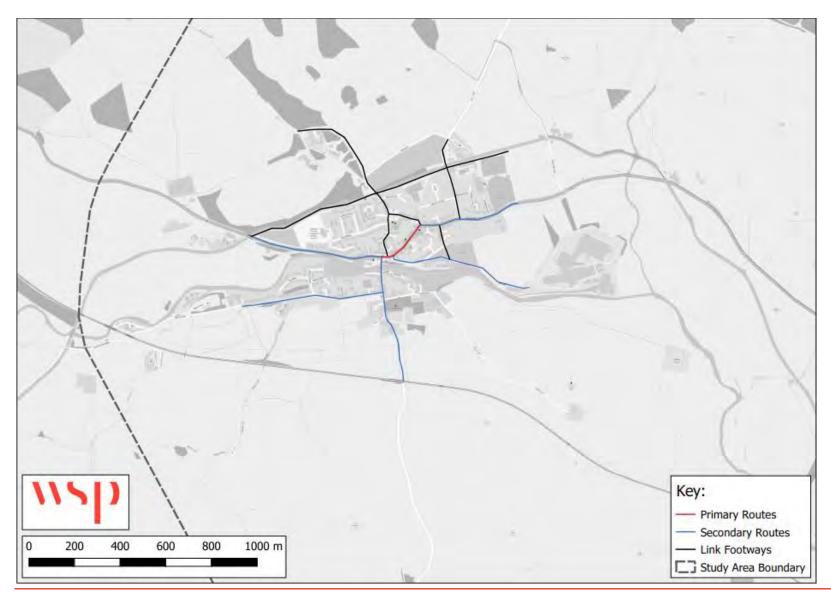
Link Footways

- 5.8.10. The potential routes identified above create a dense network of Primary and Secondary Walking Routes, considered to represent a framework of key routes across the study area. A number of complementary link footways could increase this density, including:
 - East Street, providing a 'cut-through' between Skipton Road and Mill Lane, leading to Scapa Healthcare:
 - Key routes within the various residential estates, such as North Street, West Street and Eshton Road; and
 - The towpath along the Leeds & Liverpool canal, which could adopt an important supporting role in the walking network as a parallel or alternative route.

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Figure 5-5 - Draft Walking Route Hierarchy: Gargrave



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Cross Hills / Glusburn

5.8.11. Figure 5-6 presents the draft Walking Network Map in the Cross Hills / Glusburn urban area. These corridors are summarised as:

Primary / Prestige Walking Routes

- B6172 Station Road provides access into the built-up area when from the A629 / A6068 junction, encompassing some significant employment sites;
- Main Street/ Colne Road passes through the village centre, providing connections to the main shopping areas in the village and educational institutions. It links to multiple secondary routes and link footways, leading to key residential areas, and is likely to be a confluence for many journeys on foot; and
- Keighley Road is an extension of the Main Street, which connects to Skipton Road, providing access to residential and large employment sites, such as Airedale General Hospital (within Bradford District).

Secondary Walking Routes

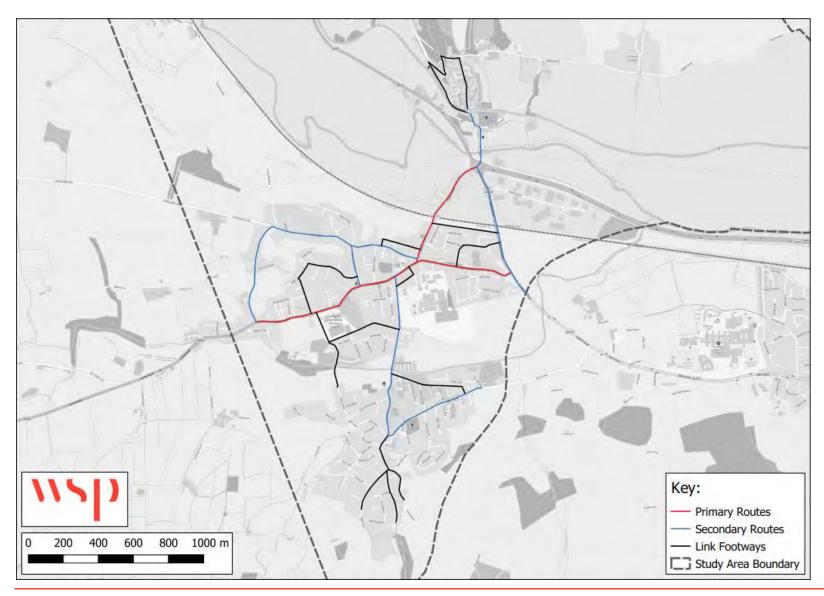
- A number of radial routes extend from the town centre providing connectivity to residential areas, such as Park Road, Wheatlands Lane and Green Lane to the west;
- To the south, Holme Lane provides a connectivity to South Craven School and residential areas further in Sutton;
- In Sutton, the Main Street facilitates the connectivity to key services and residential sites in the area;
- Skipton Road, from the roundabout with the A629 and Station Road towards the study area boundary to the south, is a radial route to the east with connections to key employment sites. It leads further south to the Airedale General Hospital in Eastburn; and
- To the north, the Main road / Kirk Gate provide connectivity between Cross Hills and Farnhill.

Link Footways

- 5.8.12. The potential routes identified above create a dense network of Primary and Secondary Walking Routes, considered to represent a framework of key routes across the study area. A number of complementary Link Footways could increase this density, including:
 - Winston Avenue, providing an alternative connection between Skipton Road and Keighley Road;
 - The parallel route to the Airedale rail track, providing a 'cut-through' between Station Road and Skipton Road, away from high volumes of traffic;
 - Albert Road, avoiding the busy Holme Lane / Main Street junction;
 - Greenway / Black Abbey Lane / Ryecroft Way through the western residential areas;
 - The PRoW west of Glusburn Community Primary School provides a connecting route between Colne Road in Glusburn to Hazel Grove in Sutton;
 - The PRoW south of Glusburn Community Primary School provide connectivity to Boundary Avenue: and
 - The circular route Newby Road / Main Road / The Arbour / Grange Road / Starkey Lane in Farnhill, passing through residential estates.



Figure 5-6 - Draft Walking Route Hierarchy: Cross Hills





5.9 STEP 7 – VALIDATION AND REVIEW

5.9.1. The validation and review of the draft networks was informed by the baseline evidence, site visits, local knowledge, stakeholder engagement and a review of connectivity between key origins and destinations. The emerging WNM should also be reviewed against the existing Skipton Footway Maintenance log to assess the prioritisation of links, and suggest potential amendments where required.

5.10 STEP 8 – PRODUCE FINAL NETWORK

5.10.1. The final step is the production of the final Walking Network Map, which is presented in Section 7.2.

6

STAKEHOLDER ENGAGEMENT





6 STAKEHOLDER ENGAGEMENT

6.1 OVERVIEW

- 6.1.1. The DfT's LCWIP guidance highlights the importance of stakeholder engagement throughout the development of the LCWIP.
- 6.1.2. Initial stakeholder engagement for the Skipton LCWIP took place during the baseline review stage through an internal workshop held on Thursday 5th November 2019, where the project team engaged with key stakeholders (such as NYCC and CDC officers) to gain a detailed insight in terms of challenges and opportunities for developing the respective networks within the study area.
- 6.1.3. Following the development of the draft key route network, an external workshop was held at CDC offices on Tuesday 21th January 2020 with the following objectives:
 - To gain stakeholder input on the emerging networks; and
 - To identify short term priorities for intervention.
- 6.1.4. The workshop format provided an opportunity for stakeholders to review and validate the draft networks developed by the project team, aiding the refinement of the networks through contribution of local knowledge and expertise.
- 6.1.5. The attendees to the external workshop included staff from NYCC and CDC who were involved during the baseline engagement, and the invitation was opened up to external stakeholders who were identified by NYCC and CDC as being important to the development and delivery of the cycle and walking network. A full list of invitees and attendees is presented in Table 6-1.
- 6.1.6. The workshop was split into two distinct sections, with the first focusing on cycle network development and the second focusing on walking network development. Both sessions followed the same format and structure.

Table 6-1 - Skipton LCWIP External Workshop Attendees

Name	Role
Howard Kinneavy	WSP
Andy Binder	WSP
Kalina Petrova	WSP
David Smurthwaite	CDC
Sharon Sunter	CDC
Roy Banks	CDC
Rob Atkins	CDC
Andrew Laycock	CDC
Rachel Briggs	Yorkshire Dales National Park Authority
Kerry Wheelwright	Skipton Town Council
Dan Timbers	Cononley Parish Council
Ian Gibson	Glusburn and Cross Hills Parish Council

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Name	Role	
Jane Thomson	Canal & River Trust	
Stacey Stothard	Skipton Building Society	
Nick Garbutt	South Craven School	
Rebecca Gibson	NYCC	
Paul Roberts	NYCC	
James Malcolm	NYCC	
Mark Kibblewhite	NYCC	
Jonathan Green	Sustrans	
Apologies		
Richard Dowson	Raising Aspirations Empowering Change Ltd.	
Ruth Everson	NYCC	
David Kirkpatrick	NYCC	
Brian Mullins	NYCC	
Rupert Douglas	Sustrans	
Jamie Bannister	NYCC	
George Partridge	JN Bentley	
Jon Fox	Scapa (Gargrave)	
Roger Tempest	Roger Tempest	
David Hinchliffe	Nilorn UK Ltd	
Joanne Sherrington	Craven College	
Bruce Dinsmore	Craven District Council	



6.2 DRAFT KEY ROUTE NETWORK VALIDATION AND REVIEW

6.2.1. One of the primary aims of the external workshop was to review the work WSP had already undertaken in terms of draft network development and identify priorities for further developments. To do this, the first group activity was a validation exercise of both the clusters and desire lines of the network development.

CYCLE NETWORK DESIRE LINES

- 6.2.2. The desire lines identified from connecting the clusters at Step 4 of the network development process were presented to stakeholders for their consideration.
- 6.2.3. It was noted that these desire lines are consistent with identifying the most important connections within the study area. Several desire lines were excluded as being less significant, corresponding to the local characteristics of the area. The consensus agreed with this comment with no further suggestions were put forward.

NETWORK COMMENTS & AMENDMENTS

6.2.4. Stakeholders were then asked to review the draft key route network and record any comments, additions or amendments directly on to the network plans. Amendments could include changing the status of a link in terms of its level on the hierarchy, adding to the route or removing links from the network.

CYCLE NETWORK PRIORITIES

- 6.2.5. For the third task, stakeholders were asked how they would prioritise sections of the draft key route network, should funding become available in the short-term (i.e. 1-3 years). Attendees were asked to annotate and label directly onto the plans and discuss their insights.
- 6.2.6. The outputs of the exercise indicated a wide variety of spatial priorities across the urban area, including interventions on the existing highway network, upgrades to and new off-road routes, and within aspirational development sites. Following on from the workshop, stakeholders were given a period of circa 2 weeks to further evaluate the materials presented in the workshop and submit any comments. Table 6-2 summarises the comments received.

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Table 6-2 - Draft Cycle Network Maps: Amendments and Priorities

Ref.	Comment	Theme	Rationale	Include in Final Draft Network plan	
	Skipton Draft Cycle Network Map Comments				
CN1	Add link from White Hills Lane to Thorlby and across A65 Canal	Network Extent	Added link. A65 provides more direct link with stronger desire line, and both routes are likely to be difficult to provide infrastructure along, requiring third party land.	Y	
CN2	Add link from Tesco through Morrisons to Broughton Road (minor extension of Black Walk and TCF)	Network Extent	Likely an important walking route to maximise permeability	N	
CN3	Add link from Newmarket Street to High Street	Network Extent	Agreed. Could form main route from west of town with supporting network of local streets.	Y	
CN4	Add route via Cawder Road / North Parade / Greatwood Avenue to Shortbank Road	Network Extent	Agreed. Important link.	Y	
CN5	Beamsley Lane going to Ilkley has potential to be quiet route, part of the Wharfedale Greenway	Network Extent	This route is beyond the LCWIP study area, and is unlikely to attract multiple trip purposes	N	
CN6	Potential to extend route to Bolton Abbey by adding Quiet Lane (Low Lane) from Embsay to Bolton Abbey as a quiet route	Network Extent	This route is beyond the Skipton study area and is unlikely to attract multiple trip purposes.	N	
CN7	Remove PROW and Kirk Lane route to Eastby	Network Extent	PROW removed. Kirk Lane retained as part of NCN and within walking distance of Embsay / cycling distance of Skipton. Note low priority and unlikely to come forward in LCWIP period	Y/N	
CN8	Remove fast route off Sheep Street onto High Street	Network Extent	This route is pedestrianised	Y	
CN9	Remove A59 fast route between the two roundabouts north of Skipton	Network Extent	This route has higher than desirable speed and traffic flow; providing safer alternatives may be more feasible than looking to accommodate all users within the highway	Y	
CN10	Remove route from Specsavers on Swadford Street to Albert Terrace	Network Extent	Link is not possible	Y	

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Ref.	Comment	Theme	Rationale	Include in Final Draft Network plan
C11	Ensure connectivity through Cavendish Street and Gas Street (as per TCF)	Priority Scheme	Yes. TCF scheme should be priority in the event of funding shortfall.	N/A
CN12	Ensure connectivity to the development works at the southwest of Skipton	Priority Scheme	Access to new developments is considered; however, the LCWIP is strategic in nature and does not consider all possible routes, or replace the assessment process associated with new development.	N/A
CN13	Ensure connectivity along Ings Lane into Wyvern Park and Carleton-in-Craven	Priority Scheme	Access to new developments is considered; however, the LCWIP is strategic in nature and does not consider all possible routes, or replace the assessment process associated with new development. Noted that TA for Ings Lane / Engine Shed Lane includes ped access, but sub-standard	N
			provision. Likely not the priority route - desire line likely to be along route to Carleton New Road.	
CN14	Ensure no cars parked on the Gargrave Road cycle lane	Opportunity	Will inform the emerging priorities. Could be a minor scheme.	N/A
CN15	Provision of secure bicycle parking in Skipton town centre	Opportunity	Will inform the emerging priorities. Could be a minor scheme. Note cycle parking not typically part of an LCWIP (route focussed)	N/A
CN16	Provision of secure bicycle parking at Skipton railway station	Opportunity	Will inform the emerging priorities. Could be a minor scheme. Note cycle parking not typically part of an LCWIP (route focussed)	N/A
CN17	Provision of facilities (lockers, bike storage, etc) at the Broughton Hall Business Park	Opportunity	Will inform the emerging priories. Could be discussed with site management.	N/A
	G	argrave Draft Cycle Netwo	rk Map Comments	
CN18	Add link from A65 to Canal at Mark House Lane	Network Extent	Agreed.	Υ
CN19	Add the Leeds Liverpool Canal route from Eshton Road towards the Anchor Inn to road connection at boundary of the LCWIP study area	Network Extent	Added canal within urban area as core LCWIP link. Added route beyond as wider opportunity route – Note purpose of LCWIP is not to replicate other studies	Y
CN20	Add Marton Road under railway bridge providing connection to the Caravan Parks and to the Canal	Network Extent	Added as a wider opportunity route – route is very constrained and limited in trip purpose. Connects to Canal and NCN.	Y



Ref.	Comment	Theme	Rationale	Include in Final Draft Network plan
CN21	Add Riverside Link off Marton Road	Network Extent	Added as a wider opportunity route – route is very constrained and limited in trip purpose. Connects to Canal and NCN.	Y/N
CN22	Ensure connectivity between Gargrave and Broughton Hall Business Park via Church Street	Network Extent	Added, and route extends to Glusburn. Note very constrained by highway boundary. Segregated infrastructure would be potentially costly to implement.	Y
CN23	Remove the PRoW footpath 05.20/12/1 as a partial link between Gargrave and Skipton	Network Extent	This footpath leads to a route featuring higher than desirable speed and traffic flow; provision of safer alternatives is needed	Y
CN24	Remove A65 as fast route from Gargrave to Skipton	Network Extent	This route is included as an aspiration – the correct infrastructure would be a positive link between the two, but likely to require third party land. Canal route is more feasible, but is not a	N
			desirable year-round route for all purposes.	
CN25	Remove connection to Spinning Jenny via Eshton Road	Network Extent	twork Extent Flashby is not considered to be a significant OD in its own right.	
CN26	Prioritise route from Railway Station to A65	Priority Scheme	Will inform the emerging priorities	Y
CN27	Ensure connectivity through Chew Lane and Eshton Road towards Flasby	Priority Scheme	This route is beyond the LCWIP study area, and is unlikely to attract multiple trip purposes. Part of NCN and should be improved via the appropriate strategies	N
CN28	Promote the Pennine Way and the National Cycle Route throughout the village as routes into the Dales	Priority Scheme	These routes are included within the urban areas, but long distance tourist routes are not typically part of the LCWIP. Promotion is also not part of the LCWIP (but critical to its success).	NA
	Cononley	/ Bradley / Carleton Cycle	Network Map Comments	
CN29	Ensure connectivity between Cononley and Crosshills via Cononley Road to Park Road; Cononley Rd is narrow with no pavement and has a steep hill at the southern end towards Park Rd	Network Extent	Important link between village and amenities a Crosshills / Glusburn. Likely to require significant third party land acquisition	
CN30	Ensure connectivity between Cononley and Crosshills via Cononley Road to footpath 05.22/33/2; the footpath reduces	Network Extent	Route offers potential for quite greenway, but requires agreement from landowners and some engineering works at access points. Less desirable for year round access for all purposes than main road.	Y



Ref.	Comment	Theme	Rationale	Include in Final Draft Network plan
	the distance on Cononley Rd and cuts of the steep part before Park Rd, however, has multiple surfacing along it			
CN31	Ensure connectivity between Cononley and Crosshills via Crosshills Road/Windle Lane to Park Road via footpath 05.13/17/2; Windle Lane is very steep and footpath is currently unsuitable for cycling	Network Extent	Route constrained by land ownership and properties at Crag View, as well as gradient. Difficult to promote as cycling route and unlikely to meet LCWIP objectives.	N
CN32	Ensure connectivity between Cononley and Skipton via Cononley Lane to A629 to the junction with A6131	Network Extent	Important link between village and existing asset (canal) and proposed (A629 cycle track). Likely to require significant third party land and difficult crossing of A629.	Y
CN33	Ensure connectivity between Cononley and Skipton via Cononley Lane to the Canal path	Network Extent	Important link between village and existing asset (canal) and proposed (A629 cycle track). Likely to require significant third party land and difficult crossing of A629.	Y
CN34	Ensure connectivity between Cononley and Skipton via Skipton Road / Woodside Lane / Pale Lane / Carleton Road	Network Extent	Important secondary link to Skipton and popular recreational route, but likely to require significant third party land.	Y
CN35	Ensure connectivity between Cononley and the Airedale Hospital via Cononley Lane / A629 / B6265, which is popular route among leisure cyclists	Network Extent	Route along A629 between Skipton and Crosshills could be a high-quality LCWIP scheme. Connectivity to villages such as Cononley should be a priority. B6265 route is outside NYCC boundary. Steeton is predominantly urban and route is very constraint by built environment.	Y
CN36	Ensure connectivity between Cononley and Broughton Hall Business Park via Skipton Road / Woodside Lane to Carleton / Heslaker Lane to A59	Network Extent	Important link and well used for recreational cycling (based on Strava data). Likely to require third party land.	Y
CN37	Provide an 'eastern arc' of the Carleton- in-Craven triangle through Pale Lane	Network Extent	Important secondary link to Skipton and popular recreational route, but likely to require significant third party land	Y



Ref.	Comment	Theme	Rationale	Include in Final Draft Network plan
CN38	Remove the quiet route from Bradley to Snaygill roundabout	Network Extent	Route is an important direct link to Skipton, and forms part of a network. However, it is noted that the proposed route is constrained in terms of highway network and land ownership.	Υ
CN39	Add an additional link in Carleton-in-Craven village centre through Swan Street and Church Street	Network Extent	Agreed – promotes access to wider routes.	Y
CN40	Ensure connectivity from Cononley Railway Station to the A629 as an access point to the Leeds Liverpool Canal through Cononley Lane	Network Extent / Priority Scheme	Important link between village and existing asset (canal) and proposed (A629 cycle track). Likely to require significant third party land and difficult crossing of A629.	Y
CN41	Ensure connectivity between Cononley and the Airedale Hospital via Cononley Road / Park Road / A6068 (in Crosshills) / B6265	Network Extent / Priority Route	Route along A629 between Skipton and Crosshills could be a high-quality LCWIP scheme. Connectivity to villages such as Cononley should be a priority. B6265 route is outside NYCC boundary. Steeton is predominantly urban and route is very constraint by built environment.	Y
	Sout	th Craven Draft Cycle Netw	ork Map Comments	
CN42	Add more connections between Crosshills to Glusburn	Network Extent	Main Street is highly constrained in terms of bringing forward infrastructure to meet LCWIP objectives. Network of greenway routes focussing on existing off-road links) is likely more feasible.	Y
CN43	Add the underpass under A629 roundabout to connect Kildwick to Station Road	Network Extent	Yes – a quick win and short term priority. A629 to Skipton scheme and links to Crosshills, Steeton and Kildwick would make improvements to this roundabout a priority however.	Y
CN44	Add Leeds Liverpool Canal path to east towards Silsden	Network Extent	Important link, but outside NYCC boundaries. Will be highlighted as 'wider opportunity'	Υ
CN45	Prioritise route from Main Street onto Hall Street, then onto Albert Road, and then onto Holme Lane, avoiding the junction of Main Street and Holme Lane	Network Extent	Alternative routes to main ones should be encouraged where conditions cannot be made to meet LCWIp objectives. However, main routes should be the focus of the network map, with alternatives identified though Route Selection process. Junction of Hall St and Main St is still constrained for cyclists. Albert road appears unadopted.	N
CN46	Add the link between Station Road and Skipton Road via the road along the train track through the housing estate	Network Extent	Yes – parallel route to main road and enhances connectivity.	Y



Ref.	Comment	Theme	Rationale	Include in Final Draft Network plan
CN47	Add link of footpath 05.22/20/1 next to Glusburn Community Primary School / footpath 05.39/3/3 / footpath 05.39/3/1 / Hazel Grove / Bent Lane / North Road	Network Extent	Network of greenway routes focussing on existing off-road links) is likely more feasible.	Y
CN48	Add link of The Hawthorns / footpath 05.39/58/1 / footpath 05.39/53/1 between Glusburn Community Primary School and Holme Lane	Network Extent	Network of greenway routes focussing on existing off-road links) is likely more feasible.	Y
CN49	Add link of footpath 05.39/24/1 / bridleway 05.29/1/2 between Holme Lane and A629	Network Extent	Network of greenway routes focussing on existing off-road links) is likely more feasible.	Y
CN50	Add link between Hazel Grove and Holme Lane via Hazel Grove Road	Network Extent	Network of greenway routes focussing on existing off-road links) is likely more feasible.	Y
CN51	Remove the A629 as a link between Skipton and South Craven, despite being preferred connection and the existing kerb that offers some segregation from motorised traffic	Network Extent	A629 has higher than desirable speed and traffic flow. Would require fully segregated route to meet LCWIP objectives. Canal provides quick win, but greenway infrastructure still struggles to meet objectives and provide year round route for all users and purposes.	N
CN52	Remove Aire Valley Trunk Road parallel to the A629 after the roundabout as a route	Network Extent	Route is not considered to provide connections to significant ODs. However, it should be noted that parallel routes to Silsden and Steeton are constrained by highway boundaries and built up urban area. Route choice should be determined in conjunction with Bradford District Council as cross-boundary.	TBC
CN53	Remove short leg of quiet route adjacent to Glusburn Institute	Network Extent	Note routes adjacent to the institute is expanded around Glusburn to provide secondary links parallel to Main Street / Colne Road	Y
CN54	Remove desire lines between South Craven and Embsay and Glusburn	Network Extent	Desire lines may exist but not considered to be priorities. Desire likely to be minimal. Routes can be accommodated through Skipton.	N/A
CN55	Public toilets in Crosshills are refurnished, could include cycle parking	Priority Scheme	Will inform the emerging priorities. Could be a minor scheme. Note cycle parking not typically part of an LCWIP (route focussed)	N/A



Ref.	Comment	Theme	Rationale	Include in Final Draft Network plan
CN56	Introduce traffic management at the junction of Station Road and Main Street in Crosshills to provide safety for cyclists	Opportunity	This junction has higher than desirable speed and traffic flow. Traffic management could help provide more desirable conditions for cyclists. Note that this route is very constrained and infrastructure unlikely to meet LCWIP objectives.	N/A



6.3 WALKING NETWORK COMMENTS

- 6.3.1. Although a draft walking network was not presented at the workshop, the process of determining the walking network map was discussed with stakeholders, and a number of comments received related directly to walking as opposed to cycling. Table 6-3 presents these comments.
- 6.3.2. The table indicates whether the comments were taken forward for inclusion within the draft walking network map or consideration as a priority and if not, the rationale for why.

Table 6-3 - Draft Walking Network Maps: Amendments and Priorities

Ref.	Comment	Include in Final Draft Network plan	Rationale	Include in Final Draft Network plan
	Skiptor	n Walking Netwo	ork Map Comments	
WN1	Add pedestrian route over Middletown Recreation Ground from Upper Sackville Street to Greatwood School	Network Extent	Will inform the emerging priority routes	Y
WN2	Remove public rights of way route into Middletown Recreation Ground	Network Extent	Will inform the emerging priority routes	Y
WN3	Improve routes around the train station	Priority Routes	The broad alignment will inform the emerging priority routes	Y
WN4	Safe routes to schools, preferably PRoWs, should be promoted	Priorities	Will inform the emerging priority routes	Y
WN5	Consider making traffic free, even at certain times, the High Street between the lower roundabout (with Keighley Road) and the turning for the High Street car park	Opportunities	Will inform the emerging priority routes	N
WN6	Broughton Road features high traffic, which restricts pedestrian connections to the train station in Skipton	Issues	Will inform the emerging priority routes	Y
	Gargrav			
WN7	Provision of surfacing / pavement to the	Priority Scheme	Will inform the emerging priority routes	Υ



Ref.	Comment	Include in Final Draft Network plan	Rationale	Include in Final Draft Network plan
	Gargrave station from the village			
WN8	Provision of crossing points along the A65	Priority Scheme	Will inform the emerging priority routes	Y
WN9	Introduction of 20mph limit throughout the village	Priority Scheme	The broad alignment will inform the emerging priority routes	Y/N
	Cononley / Bradle	y / Carleton Wa	Iking Network Map Comments	
WN10	Provision of pavement along Crosshils Road	Priority Scheme	Will inform the emerging priority routes	Υ
WN11	Improvement of pavement on Meadow Lane; narrow road and parking on pavements	Priority Scheme	Will inform the emerging priority routes	Υ
WN12	Footpath 05.13/16/1 from Crosshills Road to Main Street past the Cononley Village Park and Playground could be upgraded to allow all types of nonmotorised users	Priority Scheme	Will inform the emerging priority routes	Y/N
WN13	A629 at the end of Cononley Lane (access to the Canal) difficult to cross	Issues	Will inform the emerging priority routes	Y
South Craven Walking Network Map Comments				
WN14	Introduce traffic management at the junction of Station Road and Main Street in Crosshills to provide safety for pedestrians	Priority Scheme	This junction has higher than desirable speed and traffic flow; traffic management is required	Y/N



EMERGING PRIORITY ROUTES

6.3.3. The outputs of the exercise indicated a wide variety of spatial priorities across the urban area, including interventions on the existing highway network, upgrades to and new off-road routes, and new routes associated with aspirational development sites. Table 6-4 summarises those priorities that could be relatively small in scale, while Table 6-5 presents those schemes likely to be significantly more complex in terms of scale, cost, and deliverability.

Table 6-4 - Draft Network Map: Emerging Intervention Priorities (Short-Term)

Scheme Description						
Skipton Emerging Priorities						
Include the Leeds & Liverpool Canal as a formal part of the walking and cycling network, while prioritising improvements. The Leeds & Liverpool Canal is currently primarily a leisure based route, with infrastructure that reflects this use. The route offers a quiet parallel alternative to the A629 and a direct connection between Gargrave, Skipton, Snaygill, Bradley, and Kildwick. It could offer significantly higher utility amenity with commensurate infrastructure; however, currently the infrastructure and lighting are of a lower standarthan ideal. It should be noted that the Canal path between Kildwick and Skipton is quarrow, providing limited capacity for improvement, while the section between Gargrand Skipton is wide enough for provision of safe cycling routes along it.						
Look to connect Skipton to Embsay via The Bailey as most direct route.	The route between Skipton and Embsay is an requires consideration regarding the narrow hill from the High Street to the Bailey. The route features higher than desirable speed and traffic flows, so suitable cycling infrastructure is necessary for the fast stretch of road between the Corner Fields new development and Embsay, along Cross Bank. The Skipton to Embsay link forms part of the route to the Dales Way, which is a desirable destination point for leisure purposes.					
Prioritise connectivity from Skipton Railway Station to Broughton Hall Business Park. Cycling provision for a safer access to the Broughton Hall Business Park is required, since the A59 route features higher than desirable speed and traffic flows.						
	Gargrave Emerging Priorities					
Look to connect Gargrave rail station to the centre of the village and Broughton Hall Business Park Bad connectivity of the village centre to the rail station is a barrier for people to activel travel to the rail station and further to the Broughton Hall Business Park. Cycling provision of safer access to the Business Park is required for commuting purposes.						
Connect Gargrave Station route (Pennine Way) to canal though village centre	Ensure onward connectivity.					
	Villages Emerging Priorities					
Connect each village to A629 and Leeds & Liverpool Canal (other than Carleton-in-Craven)	Significant scheme, likely with third party land requirements and changes to junction with A629.					
Connect Carleton-in Craven to Skipton	Limehouse Lane / Carleton Road					
South Craven Emerging Priorities						
Connectivity within and across the LCWIP boundary in South Craven to be included. The administrative boundary between North and West Yorkshire creates an artificial boundary for walking and cycling journeys, particularly in the south of the LCWIP study area. Cluster of points in the town of Silsden, Eastburn and Steeton, particularly the OD						

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	points at Airedale General Hospital and Steeton & Silsden Railway Station, are likely to have an impact on connectivity in the South Craven area.
Prioritise safe routes from South Craven School to the Leeds & Liverpool Canal	South Craven College organised an internal meeting following the Skipton LCWIP external workshop in order to give opportunity to students to provide their feedback. Only 3% of students surveyed to be currently cycling to school; however, 28% of students said that provision of better cycle routes would make them more likely to cycle to school and 48% said that infrastructure provision would make them more likely to leisure cycle. Formalising a safe and convenient route would have significant benefit for these users and other trip purposes.
Greenway network / quietways between villages, e.g. Cross Hills, Glusburn, Eastburn, Sutton.	The existing highway network within and between these villages is significantly constrained, and short-term interventions in accordance with the latest guidance are likely unfeasible. An alternative network of quiet streets and off-road routes would provide a desirable alternative for local trips.

Table 6-5 - Draft Cycle Network Maps: Emerging Intervention Priorities (Major Schemes)

Scheme	Description					
Skipton LCWIP Major Schemes						
Connect Skipton / Glusburn via A629	Significant scheme that connects (or offers connectivity) to various smaller villages and could offer year-round provision for all user types (as well as reducing conflict on the canal through appropriate use). Could include levels of provision, from shared use footway to full segregation. Likely to require junction improvements and connections to canal and onward destinations. Could require third party land.					
Connect Skipton / Gargrave via A65	Significant scheme that connects (or offers connectivity) to various smaller villages and could offer year-round provision for all user types (as well as reducing conflict on the canal through appropriate use). Could include levels of provision, from shared use footway to full segregation. Likely to require junction improvements and connections to canal and onward destinations. Will require third party land and may be unfeasible based on acquisition costs.					
Skipton High Street – masterplan including new ped / cycle routes. Map out place / movement hierarchy.	Major piece of work that would likely require testing in a model. Masterplan or cycle / walking schemes could be developed prior to test with agreement from Local Authorities.					
A6131 from A629 roundabout to Carleton Rd	Link to A629 scheme into Skipton. A629 scheme would be diminished without this link into Skipton town centre. Provides connectivity to Snaygill industrial estate.					

6.4 SUMMARY

6.4.1. These emerging priorities will be discussed with NYCC and key project partners alongside the evidence review and draft network plans to identify initial locations/corridors for further development as part of Phase 2 of the Skipton LCWIP.

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7

NETWORK PRIORITIES & RECOMMENDED NEXT STEPS





7 NETWORK PRIORITIES & RECOMMENDED NEXT STEPS

7.1 INTRODUCTION

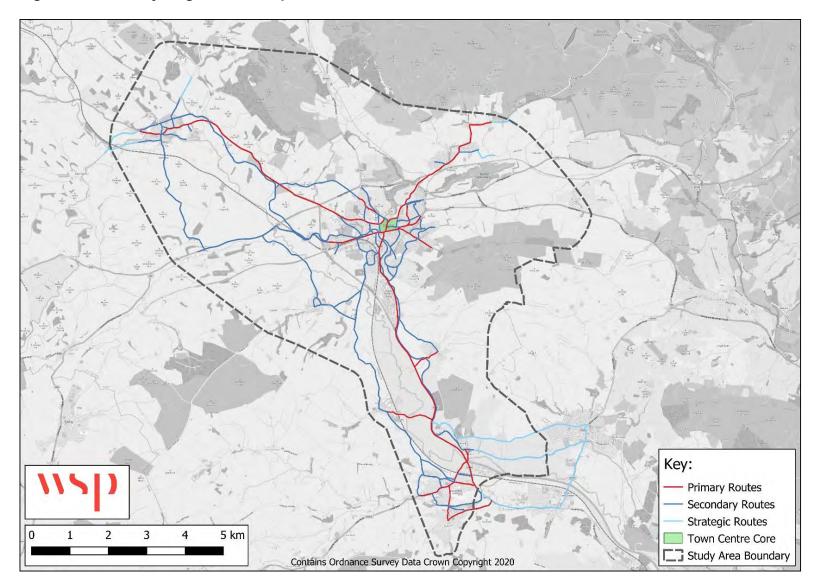
- 7.1.1. The preceding sections of the report have detailed the development and refinement of the draft cycling and walking networks. This section of the report presents the final recommended Cycle and Walking Network Plans and initial priorities to take forward for further development in Phase 2 of the Skipton LCWIP.
- 7.1.2. Consideration is also given to the types of intervention appropriate for each for each network in the context of the study area.
- 7.1.3. At this stage of the process these network plans are considered aspirational, and a blueprint for cohesive walking and cycling networks that could occur over the next 10 years (and beyond). In order to bring them forward, the phasing of the networks will require a coordinated approach to identify short, mid, and long-term priorities, and an understanding of complementary opportunities. This prioritisation is likely to need regular revaluation as different funding becomes available.

7.2 CYCLING AND WALKING NETWORK MAPS

7.2.1. The final Cycling and Walking Network Maps for the Skipton LCWIP Study Area are presented in Figure 7-1 and Figure 7-2, while a high-resolution versions are presented in Appendix A.



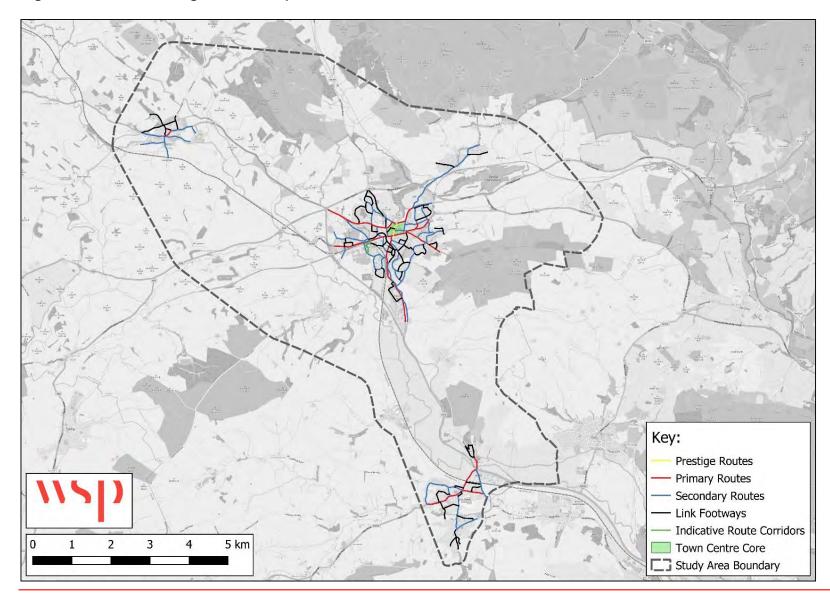
Figure 7-1 - Final Cycling Network Map



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Figure 7-2 - Final Walking Network Map



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7.3 NETWORK HIERARCHIES

7.3.1. Draft network hierarchies consistent with those utilised in other North Yorkshire LCWIPs were presented to stakeholders for consideration as part of the external workshop. It was agreed with stakeholders that these remain consistent with no need to amend to reflect local priorities. The final definitions are therefore shown in Table 7-1 and Table 7-2 below.

Table 7-1 - Final Network Hierarchy Definitions - Cycling

Network Element	Characteristics
Primary	 Different cycle users, based on confidence level, experience, age, demographics, trip purpose; Different types of bikes, including standard, recumbent, trailers, cargo bikes, disabled user cycles; High flow of cycle users; Creates arterial routes; Links large residential areas to main clusters such as town centre locations; Through, internal, and inbound-outbound traffic; Cater for existing non-cycle users; Cater for people aged '8-80' to be able to cycle safely; Direct, following the shortest possible route; Low gradients where possible.
Secondary	 Lower volumes of cycle users; Further increases density of network; Ensure local access to origins and destinations from the primary / secondary network; Provide quieter routes for less confident cycle users (while primary network is being developed).
Town Centre Cores	 High levels of permeability and priority for cycle users and pedestrians; High levels of cycle parking availability.

Table 7-2 - Final Network Hierarchy Definitions - Walking

Name	Description
Prestige Walking Zones	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.



7.4 DIFFERENT TYPES OF INTERVENTION

- 7.4.1. To achieve the cycling and walking networks based on the respective hierarchies detailed in the previous section, it is necessary to reference how different types of intervention will be required that take into account opportunities and constraints in different parts of the network.
- 7.4.2. For example, the primary networks cover a range of different types of highway and pedestrian environments from arterial A-roads to town streets. Reflecting this, it is clear that the type of intervention required to achieve the characteristics of what the primary network should be will vary.
- 7.4.3. The best practice review in Section 3 brought together a range of techniques from the UK and beyond for developing cycling and walking networks. This good practice has informed the types of intervention recommended.
- 7.4.4. Table 7-3 and Table 7-4 present various types of intervention that are based around the level of segregation of cycle and pedestrian users respectively from other modes, including both vehicle and non-vehicle traffic. The details of what could be included under each type of intervention is also presented for each.

Table 7-3 - Types of Intervention - Cycling

Ref	Type of Intervention	Details
Α	Full segregation	Cycle track with continuous physical segregation from carriageway and footway
В	Hybrid segregation	Cycle track vertically segregated from the carriageway and footway
С	Dedicated lanes and light segregation	Mandatory or advisory cycle lanes; Intermittent physical segregation Reduced general traffic speeds; Centreline removal; Parking removal; Buffer lane at parking locations
D	Sharing with other modes	Reduced general traffic speeds Filtered permeability to restrict general traffic movements Cycle symbols Contraflow cycling permissions

Table 7-4 - Types of Intervention - Walking

	71	G
Ref	Type of Intervention	Details
Α	Full Pedestrianisation	Exclusion or temporal limit on other vehicle access. High quality pedestrian environment with significant place function.
В	Pedestrian enhanced streets / shared space / home zones	Reduction in formal traffic controls; Reduced general traffic speeds; Restricted interaction with other modes; Typically, less differentiation between footway and carriageway.
С	Footway / footpath enhancements	Improved surfacing; Increased footway widths; Adequate crossing facilities proportionate to function of link; De-cluttering of route; Minimal gradients for duration of link; Direct routes; Dropped kerbs and tactile paving.
D	Shared use pedestrian / cycle routes	Improved at-level surface conditioning; Improved signage; Segregated or unsegregated; Potential widening of route.



7.4.5. Table 7-5 applies the type of interventions presented in Table 7-3 to the primary, secondary and town centre core parts of the network. At the same time, the different types of environment are referenced with the type of intervention relating to whether the environment has more of a place or movement function.

Table 7-5 - Cycle Network Interventions

	Place							Movement
	Town square	Town street	High street	Local street	Rural road	Off-highway path	Connector	Arterial road
Primary	D	C, D	B, C, D	C, D	-	-	B, C, D	A, B
Secondary	D	C, D	B, C, D	C, D	C, D	C, D	B, C, D	
Town Centre Cores	D	D	D	-	-	-	-	-

7.4.6. Table 7-6 below conducts the same exercise, but this time applying the walking interventions listed in Table 7-4 to the prestige, primary, secondary walking routes and local footways within the network. Again, the different types of intervention are referenced relative to whether the environment has more of a place or movement function, as well as level of footfall.

Table 7-6 - Walking Network Interventions

	Place Movement								
	Town square	Town	High street	Local	Rural road	Off- highway path	Connector	Arterial road	
Prestige Walking Zones	A, B, C	A, B, C	A, B, C	-	-	-	-		
Primary Walking Routes	В	B, C	B, C, D	-	-	C, D			
Secondary Walking Routes	-	-	-	C, D	C, D	C, D	C, D	C, D	
Link Footways	-	-	-	C, D	С	C, D	C, D		

- 7.4.7. The output of the tables above reflects the desirable level of intervention for the respective parts of network based on their assignment in the respective cycling and walking network hierarchies.
- 7.4.8. The network hierarchies and the types of intervention presented above will be used where possible to inform the development of ongoing or future schemes by NYCC or CDC.



7.5 DRAFT PRIORITIES

- 7.5.1. The following parts of the network were proposed as draft priorities for taking forward to feasibility assessment to feed into any bidding opportunities. The draft priorities were presented to NYCC and CDC for comment and discussion. The priorities are presented as 'active travel corridors', with schemes developed which improved conditions for both cycle users and pedestrians.
- 7.5.2. The following sub-section details each of the draft priority corridors, along with a rationale for each priority, linking to the evidence base presented in this report.
- 7.5.3. The recommended priorities for the Skipton LCWIP consist various spatial features, including a number of specific points, 8 corridors between significant OD clusters (noting the routes along these are not yet defined), and two broad areas of high permeability. These are summarised as:

Points:

 These are centred on the railway stations in the district, which currently lack high-quality active travel facilities.

Routes:

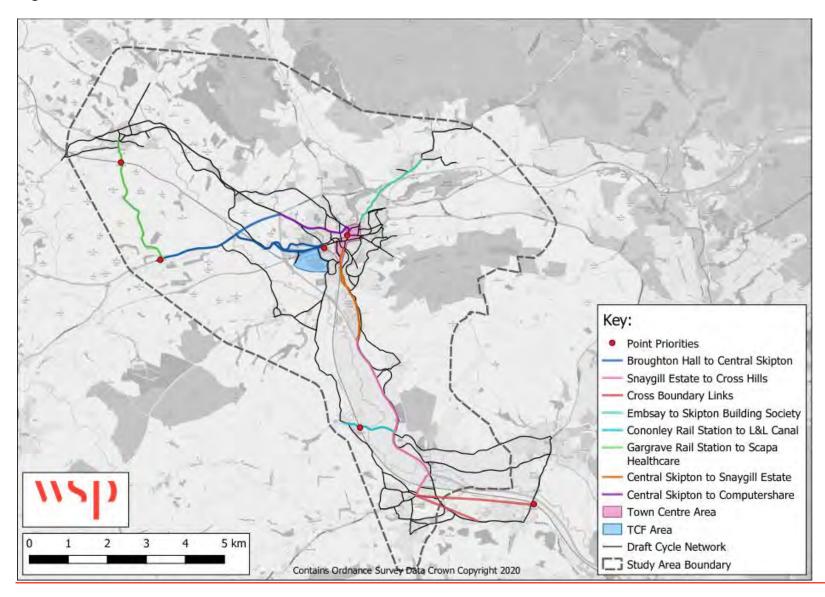
- Broughton Hall to Central Skipton;
- Snaygill Estate to Cross Hills;
- Cross Boundary Links (into Bradford District);
- Embsay to Skipton Building Society / Town Centre;
- Cononley Rail Station to Leeds & Liverpool Canal;
- Gargrave Rail Station to Scapa Healthcare (and Broughton Hall);
- Central Skipton to Snaygill Estate; and
- Skipton Town Centre to Computershare.

Areas:

- Town Centre Core maximising permeability and accessibility for active modes within the town centre core; and
- Rail station District focussing on regenerating the areas around the rail station through enhanced active travel and placemaking schemes.
- 7.5.4. These routes are illustrated in Figure 7-3, and discussed in more detail in Table 7-7 to Table 7-17.



Figure 7-3 - Recommended Priorities



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Table 7-7 - Recommended Point Priorities

Points Description	Rationale
Enhance active travel provision at each of the rail stations and key locations in the study area (and wider district. This priority includes the following key features:	 Stakeholder input; Contributes to use of the network; Enhances rail / cycle integration; Increases confidence in cycle parking facilities.
 A cohesive scheme to provide facilities across the district, with similar styles of cycle storage, signage, and general provision to standardise the approach; Scale of scheme dependent on location and demand forecasting; Include proposals for enhanced access points where necessary; Could align with aspirations to enhance station facilities, car parking, and sustainable transport options; Locations TBC, but likely to include key destinations and OD clusters, such as rail stations, town centres, and large employers. 	

Table 7-8 - Recommended Corridor Priorities: Broughton Hall to Central Skipton

Corridor Description	Rationale
A new direct route between Skipton and Broughton Hall, creating a viable active travel option. This corridor includes the following key features:	 Stakeholder input; Connectivity between a key employment site and the main residential areas in Skipton; Long-term aspiration given lack of mode choice.
 Likely to include a new alignment across third-part land, potentially with parts of the route on existing highway where space allows; Could be built to greenway standard, providing some leisure opportunities; Depending on route choice, could align with the TCF proposals along Broughton Road or with connectivity from Skipton town centre to Computershare / Skipton College; Maximise permeability into the town centre through onward connections; and Could align with the Rail Station District aspirations. 	



Table 7-9 - Recommended Corridor Priorities: Snaygill to Cross Hills

Corridor Description

A fully segregated cycle route between Snaygill Industrial Estate and the Cross Hills / Glusburn urban area.

This corridor would likely include the following key features:

- Enhanced permeability into the Snaygill industrial estate;
- Better links with the Leeds & Liverpool Canal to enhance movements between the two;
- Serves a desire line which sees current usage despite the lack of infrastructure;
- Could be enhanced by connectivity to local villages along the corridor, such as Cononley.

Rationale

- Stakeholder input;
- Provides connectivity to various significant employment sites and residential areas, connecting people to jobs;
- PCT outputs identified elements of this corridor as potentially being some of the highest trafficked cycle routes in Skipton;
- Strava data indicates that this route is currently well used, despite the parallel canal route;
- Likely a high level of suppressed demand given the current lack of infrastructure and associated potential safety concerns;
- This route encompasses a Primary cycling route;
- Would provide more desirable infrastructure than the canal route for all trip purposes, with greater natural surveillance.

Table 7-10 - Recommended Corridor Priorities: Cross Boundary Links

Corridor Description

A currently undefined route between the Cross Hills / Glusburn urban area and the nearby urban areas in the Bradford District.

This corridor includes the following key features:

- The route would be dependent on the determination of the most practicable and desirable route between the two areas;
- Opportunities for connectivity to various ODs such as Airedale Hospital, Steeton & Silsden rail station, and Silsden itself.
- Ideally consist of segregated facilities.

Rationale

- Stakeholder input;
- A route could overcome some of the significant anecdotal issues in travelling between the two urban areas by active modes;
- Connections to Steeton & Silsden rail station could enhance cycle / rail integration;
- Enhances connectivity to significant employment opportunities in Steeton, including Airedale Hospital, a key employer.
- Certain route choices could provide for multiple destinations in Bradford District.

Table 7-11 - Recommended Corridor Priorities: Embsay to Skipton

Corridor Description

A direct route between the centre of Skipton and Embsay.

This corridor includes the following key features:

- A new direct route for cycle users, likely in alignment with the existing highway and segregated from the carriageway;
- Would include enhanced pedestrian facilities, maximising comfort and natural surveillance.
- Coherent connections to the village of Embsay and to Skipton Building Society as a key employer in the district;
- Direct links to the High Street, identified as an Area Priority for further development.

Rationale

- Stakeholder input;
- Poorly served by existing infrastructure despite proximity;
- Strava data indicates comparatively high usage despite lack of infrastructure, likely indicating some suppressed demand:
- Enhances part of NCN and longer distance routes;
- The varied trip purposes the route could serve unlocks a variety of funding sources;
- Any adjacent development could contribute towards any associated improvements;
- Provides onward connectivity to many key destinations, including retail, employment and educational ODs.

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Table 7-12 - Recommended Corridor Priorities: Cononley Rail Station to Leeds & Liverpool Canal

Corridor Description	Rationale
An enhanced route between Cononley and the Leeds & Liverpool Canal, including connectivity to Cononley rail station and the A629. This corridor would likely include the following key features: A more comfortable and safer footway between the various locations; A new segregated cycle route, providing safe access to the A629 and Leeds & Liverpool Canal; Connectivity to A629, identified as a priority for improvement; Enhanced cycle parking and facilities at the rail station, identified as a priority for improvement; New crossing over the A629.	 Stakeholder input; Addresses significant severance of Cononley from the surrounding towns / villages by active modes; Aligns with recent work to enhance the Leeds & Liverpool Canal, Provides onward connectivity to many key destinations in both Skipton and Cross Hills / Glusburn; PCT outputs identified the A629 corridor as potentially being some of the highest trafficked cycle routes in Skipton, partially as a result of trips generated by the adjacent villages.

Table 7-13 - Recommended Corridor Priorities: Gargrave Rail Station to Scapa Healthcare

Corridor Description	Rationale
An enhanced route between Gargrave Rail Station to Scapa Healthcare. This route could also be extended through connectivity to Broughton Hall in the south. This corridor would likely include the following key features: A more comfortable and safer footway between the various locations; Potential options for enhanced cycling, which could involve enhanced on-street facilities or a new route; Connectivity to A629, identified as a priority for improvement; Enhanced cycle parking and facilities at the rail station, identified as a priority for improvement.	 Stakeholder input; Addresses the severance of the village from the rail station by active modes and poor perceptions of safety; Provides enhanced connectivity between the rail station and a key employer in the district, increasing the potential for sustainable travel and rail / cycle integration.

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Table 7-14 - Recommended Corridor Priorities: Central Skipton to Snaygill Industrial Estate

Corridor Description	Rationale
An enhanced route between central Skipton (i.e. Skipton High Street) and Snaygill Industrial Estate to the south. This corridor would likely include the following key features: Enhanced access points to the Leeds & Liverpool Canal to promote permeability; Segregated cycle facilities and improved on-road cycling provision; New and improved crossing points and junctions and across links; Increased permeability to Snaygill industrial estate; Linkages to the TCF proposals;	Stakeholder input; Provides enhanced connectivity to key employment sites, Skipton town centre, and various residential estates; Aligns with recent improvement work to enhance the Leeds & Liverpool Canal, PCT outputs identified the Keighley Road corridor as potentially being one of the highest trafficked cycle routes in Skipton.
 Connectivity to the A629, identified as a priority for improvement and providing onward connections to Cross Hills / Glusburn. 	

Table 7-15 - Recommended Corridor Priorities: Central Skipton to Computershare

Corridor Description	Rationale
An enhanced route between central Skipton (i.e. Skipton High Street) and key employment sites and educational establishments to the north west of the town. This corridor would likely include the following key features: A more comfortable and safer footway between the various locations; Potential options for enhanced cycling, which could involve enhanced on-street facilities or a new route; Connectivity to Skipton town centre area, identified as a priority for improvement; Could include enhanced cycle storage facilities at key destinations.	 Stakeholder input; Provides enhanced connectivity to key employment sites and to educational establishments; Strava data indicates this route (as part of onward connections to Gargrave via A65) sees comparatively high usage despite the lack of infrastructure and safety concerns; PCT data indicates some of this route could be part of the busiest cycle routes in Skipton; Opportunities for linkages to Skipton rail station (Inc. TCF proposals) and enhanced mixed traffic cycling on nearby residential streets.

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Table 7-16 - Recommended Area Priorities: Skipton Town Centre

Area Description	Rationale
A significant and extensive scheme to enhance accessibility and permeability of Skipton town centre by active modes, including key linkages into and across the area. This scheme would likely include the following key features: Significant alterations to a number of junctions to enhance access and reduce severance for active modes; Reallocation and redistribution of car parking to define vehicular routes and ped / cycle routes; New pedestrianised areas; New high-quality cycle storage at strategic locations; Connectivity to the TCF proposals and Leeds & Liverpool Canal. Proposals would be enhanced through stakeholder consultation, including the general public and retail / business;	 Stakeholder input; Central location is the confluence of most radial routes; Active travel around and through the town centre is stymied by the volume of vehicles; Crossing facilities, particularly for the mobility impaired, are infrequent; TCF proposals would be enhanced by greater connectivity within the town centre and from other associated radial routes; Could be part of a wider masterplan.

Table 7-17 - Recommended Area Priorities: Skipton Railway Station District

Should be led by placemaking objectives.

Area Description	Rationale
A significant and extensive scheme to enhance accessibility and permeability around Skipton rail station district, including the Sandylands business park, Engine Shed Lane and associated uses, and Wyvern Park. This scheme would likely include the following key features: Alterations to a number of junctions to enhance access and reduce severance for active modes; Improvements to various links to address issues of pedestrian comfort and safety; Reallocation and redistribution of car parking to define vehicular routes and ped / cycle routes; New high-quality cycle storage at strategic locations; Connectivity to the TCF proposals and Leeds & Liverpool Canal. Proposals would be enhanced through stakeholder consultation, including the general public and retail / business; Should be led by placemaking objectives.	 Stakeholder input; Location includes brownfield regeneration sites that would benefit from enhanced permeability and connectivity; Access from areas to the south of the railway line is poor due to limited route choice and quality of existing routes; TCF proposals would be enhanced by greater connectivity to this area; Wyvern Park development would benefit from enhanced accessibility to town centre via rail station district; Could be part of a wider masterplan.

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7.6 IDENTIFYING PRIORITY CORRIDORS FOR DEVELOPMENT

- 7.6.1. Whilst the long-term shared aspiration of NYCC and CDC is to deliver the proposed cycling and walking networks that have been identified through this project in their entirety, the authorities recognise that in the short-term this will not be financially viable.
- 7.6.2. Following the development of the network maps and identification of draft priority 'active travel' corridors, CDC and NYCC have collaboratively selected a number of priority routes to be taken forward for feasibility assessment, with the intention of these being delivered when funding is made available.
- 7.6.3. The choice of the routes has been influenced primarily by four key factors. The first key factor is a consideration of whether the routes address connections where a greater propensity for cycling and walking have been identified. Related to this is a consideration of whether the routes would improve connectivity through the study area and support strategic employment and development sites. The data and evidence presented in Section 2 of this report underpin the identification of routes for prioritisation.
- 7.6.4. The second key factor has considered the alignment of the routes with other schemes and related work streams (whether ongoing, completed, or aspirational); ensuring that any proposals support the wider aims and agendas of the district and county will strength the case for any intervention and help promote the network through multiple avenues.
- 7.6.5. The third factor has considered engineering constraints and the likelihood of any intervention being able to be delivered in its own right, independent of any significant wider works, such as a major redirection of traffic. While this might mean that the proposed schemes may avoid some of the most constrained existing areas of the network, it is understood that these will be considered through wider transport related studies, and the inclusion of these routes in the cycling and walking network maps should ensure due cognisance is paid to these routes when determining any associated intervention.
- 7.6.6. The fourth key factor considers the likelihood of the corridor to receive funding (including both government funding and developer funding). Most recent government funding for active travel infrastructure has been for schemes that target modal shift towards cycling and walking in busy urban areas by improving access to employment and education opportunities.
- 7.6.7. The routes selected for further development in Phase 2 of the LCWIP are considered to strongly align to these four factors.

7.7 FINAL PRIORITIES AND NEXT STEPS

Final Priorities

- 7.7.1. Four distinct priorities have emerged in relation to the Skipton LCWIP study area, encompassing one Area and three Route priorities. These are:
 - Skipton Town Centre;
 - Central Skipton to Snaygill Industrial Estate;
 - Gargrave Rail Station to Scapa Healthcare; and
 - Snavgill to Cross Hills.



7.7.2. The routes are illustrated in Figure 7-4. A number of these routes have been amended somewhat in order to reflect the outcomes of identification process, as described below.

Skipton Town Centre

7.7.3. The boundaries of this route have been amended to align with the existing TCF proposals, and the forthcoming Skipton Station Triangle Masterplan. This area scheme will focus on walking priorities and balancing the competing demands of place and movement on the highway.

Central Skipton to Snaygill Industrial Estate

7.7.4. This corridor remains essentially as proposed, connecting the Skipton town centre with one of the main employment areas in the south. To the north, the proposals will pay cognisance to the TCF proposals and Skipton Station Triangle Masterplan.

Gargrave Rail Station to Scapa Healthcare

7.7.5. This route was originally envisaged to potentially stretch to Broughton Hall in the south, encompassing a number of strategic elements and desires across one route, encouraging trips for various purposes. However, when considering engineering constraints and likelihood of funding through the corridor identification process, it has been determined to reduce the scale of this route, focussing primarily on Gargrave rail station while addressing any significant issues regarding the walking route to Scapa Healthcare and connections into the village centre.

Snaygill to Cross Hills

7.7.6. This route will look to connect to adjacent urban areas that currently lack desirable cycling infrastructure conducive to all trip purposes, as defined in the latest guidance and best practice. The route will also consider access to the village of Cononley, which lies broadly equidistant between the two areas.

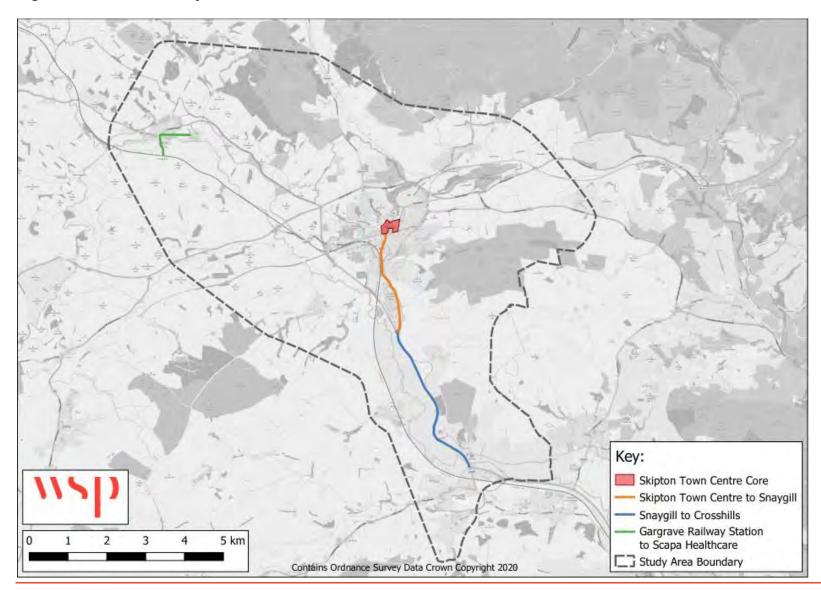
Next Steps

- 7.7.7. Where applicable, a range of route options will be considered as part of the feasibility assessment. As a high-level consideration of engineering constraints has been undertaken when determining these routes, there is not anticipated to be any significant deviation from those routes identified.
- 7.7.8. Where appropriate, the DfT Route Selection Tool will be utilised to assist in determining the most suitable cycle route within these corridors and inform the identification of any potential intervention. Following identification of the preferred cycling route corridor, a gap analysis of the pedestrian walking infrastructure within this corridor will be undertaken using the DfT Walking Route Audit Tool to assess the level and quality of walking infrastructure provision. This approach will maximise the opportunities for complementary improvements in order to provide a cohesive active travel corridor. Identifying synergies between cycling and walking improvements will maximise potential scheme benefits.
- 7.7.9. The feasibility assessment will also use the network principles and interventions types presented in this report along with the stakeholder feedback collated during the network development phase.

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Figure 7-4 - LCWIP Priority Corridors

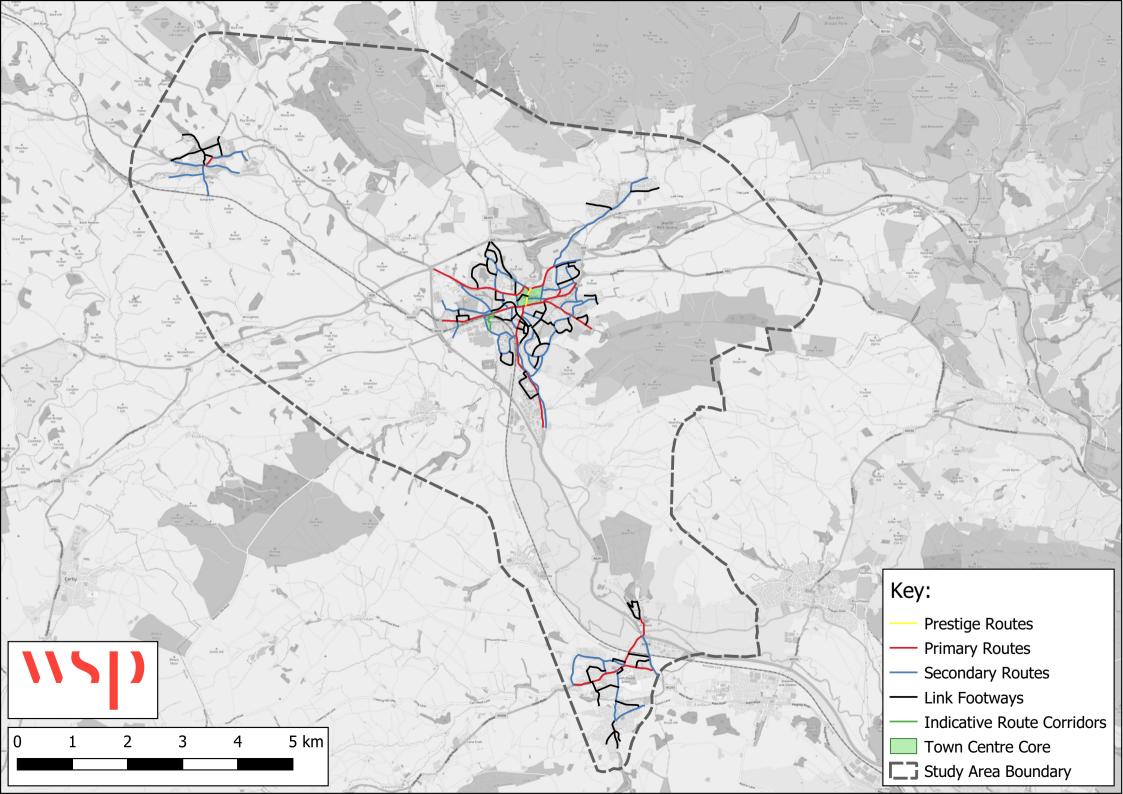


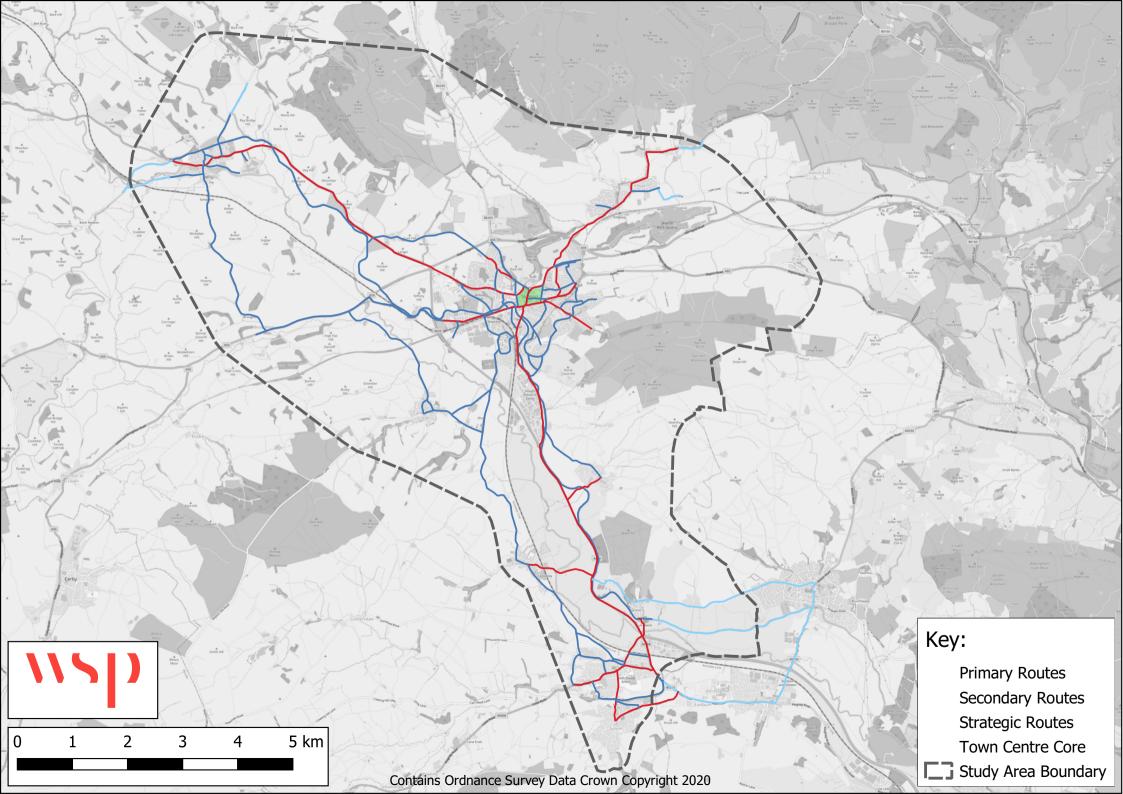
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Appendix A

FINAL NETWORK PLANS









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