



Durham County Council

LOCAL CYCLING AND WALKING INFRASTRUCTURE PLAN

Newton Aycliffe



CONTENTS

EXECUTIVE SUMMARY

1	INTRODUCTION	1
2	STAGE 1: DETERMINING SCOPE	2
3	STAGE 2: INFORMATION GATHERING	3
4	STAGE 3: NETWORK PLANNING FOR CYCLING	5
5	STAGE 4: NETWORK PLANNING FOR WALKING	9
6	STAGE 5: PRIORITISING IMPROVEMENTS	12
7	STAGE 6: INTEGRATION AND APPLICATION	13

TABLES

Table 1-1 - The LCWIP Process	1
Table 4-1 – Overview of cycling interventions and indicative cost estimates	7
Table 5-1 – Overview of walking interventions and indicative cost estimates	11
Table 6-1 – LCWIP Prioritisation Table	12

FIGURES

Figure 2-1 – Geographic scope of the Newton Aycliffe LCWIP	2
Figure 3-1 - Existing origins and destinations	4
Figure 3-2 - Future origins and destinations	4
Figure 4-1 - Network Planning for Cycling	5
Figure 4-2 – Newton Aycliffe Cycle Network Plan	6
Figure 4-3 - Overview of scheme proposals in Newton Aycliffe	8
Figure 5-1 - Network Planning for Walking	9
Figure 5-2 - Newton Aycliffe Walking Network Plan	10
Figure 7-1 - Integration of the County Durham LCWIPs in strategy and policy	13



EXECUTIVE SUMMARY

The Newton Aycliffe Local Cycling and Walking Infrastructure Plan (LCWIP) is an evidence-based strategic approach to identifying cycling and walking improvements required in the town to facilitate increased active travel for everyday journeys. It is one of twelve LCWIPs to be produced for each of the main settlements in County Durham, as identified in the County Council's Strategic Cycling and Walking Delivery Plan (SCWDP).

The LCWIPs are being developed in support of the Government's Cycling and Walking Investment Strategy (2017) which aims to achieve the following targets by 2025:

- Double cycling from 0.8 billion to 1.6 billion stages;
- Increase walking to 300 stages per person per year;
- Reduce the number of cyclists killed or injured each year; and
- Increase the percentage of school children (5-10 years) that walk to school from 49% to 55%.

The LCWIP has been developed in accordance with the six-stage process outlined by the Department for Transport (DfT) in their Technical Guidance. The key outputs of the LCWIP include local walking and cycling network plans; a prioritised programme of improvements and underpinning technical report.

The LCWIP represents a robust approach for prioritising investment in walking and cycling infrastructure in the short, medium and long term, and it will support the County Council with making the case for future funding. The LCWIP will be embedded across the County Council's departments supporting transport, environment, health, leisure and planning agendas.

1 INTRODUCTION

1.1 BACKGROUND

- 1.1.1. Durham County Council (DCC) are committed to developing Local Cycling and Walking Infrastructure Plans (LCWIPs) for the twelve main towns in the county, as set out in their Strategic Cycling and Walking Delivery Plan (SCWDP 2019-2029).
- 1.1.2. LCWIPs are identified in the Government’s Cycling and Walking Investment Strategy (CWIS) as a strategic approach to identifying cycling and walking improvements required at the local level. They enable a long-term approach to developing high-quality local cycling and walking networks and form a vital part of the Government’s strategy to increase the number of trips made on foot or by cycle.
- 1.1.3. The key outputs of LCWIPs are:
 - Network plans for walking and cycling which identify key routes and core zones for 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.

1.2 DOCUMENT OVERVIEW

- 1.2.1. This is a summary of the LCWIP for Newton Aycliffe, outlining the approach and proposals for the town, following the recommended DfT LCWIP process, as outlined in Table 1-1.

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.

- 1.2.2. A technical report which provides detailed information about each stage of the LCWIP is available on request from DCC.

2 STAGE 1: DETERMINING SCOPE

2.1.1. The LCWIP for Newton Aycliffe covers the entire town as well as Aycliffe Village and Aycliffe Business Park, as mapped in Figure 2-1. Consideration has also been given to existing and potential inter-urban connections in developing the networks to ensure a cohesive county-wide active travel network.

Figure 2-1 – Geographic scope of the Newton Aycliffe LCWIP



2.1.2. Further information about the other aspects of Stage 1 is covered within the accompanying County Durham LCWIP Programme Report.

3 STAGE 2: INFORMATION GATHERING

- 3.1.1. The LCWIP has been developed following a robust, evidence-based approach. An extensive collection of information has been analysed and reviewed to inform the development of network plans for cycling and walking in Stages 3 and 4 respectively and inform the prioritisation in Stage 5.
- 3.1.2. Key datasets that have been used include:
- Rights of Way information and maps existing cycle routes;
 - Existing trip origins and destinations as well as allocated development sites;
 - Regional and local policies, plans and strategies;
 - Census Journey to Work data;
 - Local pedestrian and cycle counts;
 - Propensity to Cycle Tool;
 - Collision data for cyclists and pedestrians;
 - Air Quality Management areas; and
 - Index of Multiple Deprivation.
- 3.1.3. The existing trip origins and destinations in Newton Aycliffe have been mapped, with input from stakeholders, to establish travel patterns within the city (see Figure 3-1 overleaf).
- 3.1.4. Developments completed between 2011 and 2020 and planned developments were also mapped in collaboration with stakeholders to identify potential new journeys (see Figure 3-2 overleaf).
- 3.1.5. The origin and destination plans show the locations people travel between and therefore need to be connected by the walking and cycling networks.
- 3.1.6. Additional information and analysis of the datasets is provided in Section 2 of the LCWIP Technical Report which is available on request from DCC.

Figure 3-1 - Existing origins and destinations

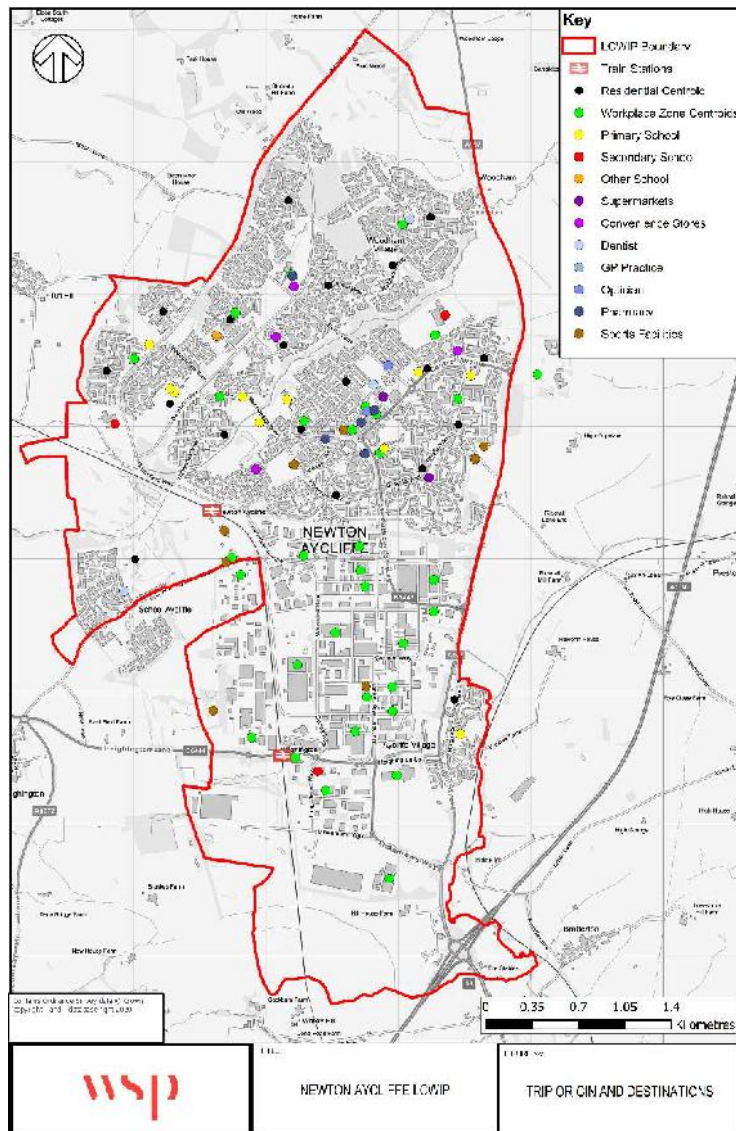
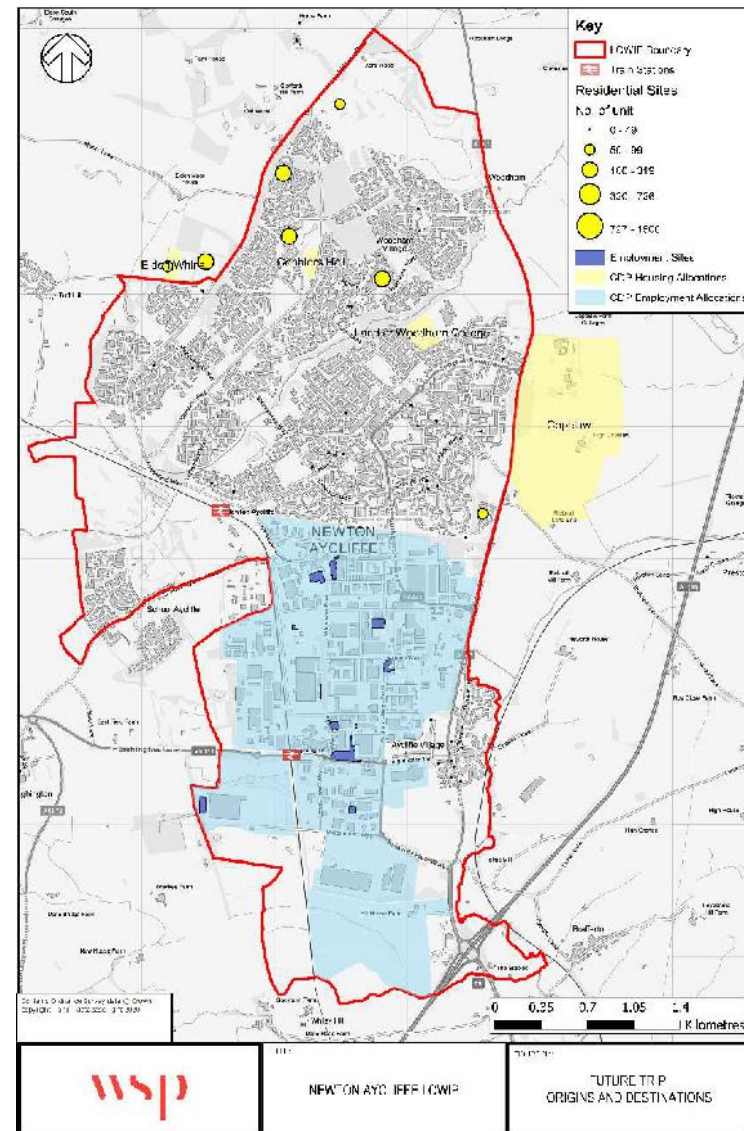


Figure 3-2 - Future origins and destinations



4 STAGE 3: NETWORK PLANNING FOR CYCLING

4.1 OVERVIEW

4.1.1. Stage 3 of the LCWIP process entails the production of a cycle network map for Newton Aycliffe and identification of required improvements to achieve the aspirational standard of infrastructure.

4.2 NEWTON AYCLIFFE CYCLE NETWORK MAP

4.2.1. The network map was produced following the steps below as per the LCWIP Technical Guidance.

Figure 4-1 - Network Planning for Cycling



4.2.2. Through this process a network of cycling routes was created for Newton Aycliffe and reviewed with key stakeholders to gain wider input and insights from local knowledge. The feedback and contributions provided by the stakeholders were used to refine and validate the network.

4.2.3. The aspirational cycle network map for Newton Aycliffe is shown in Figure 4-2 overleaf.

4.3 IDENTIFYING PRIORITY ROUTES

4.3.1. Whilst DCC's long-term aspiration is to deliver the cycling network in its entirety, the authority recognises that in the short-term this will not be financially viable.

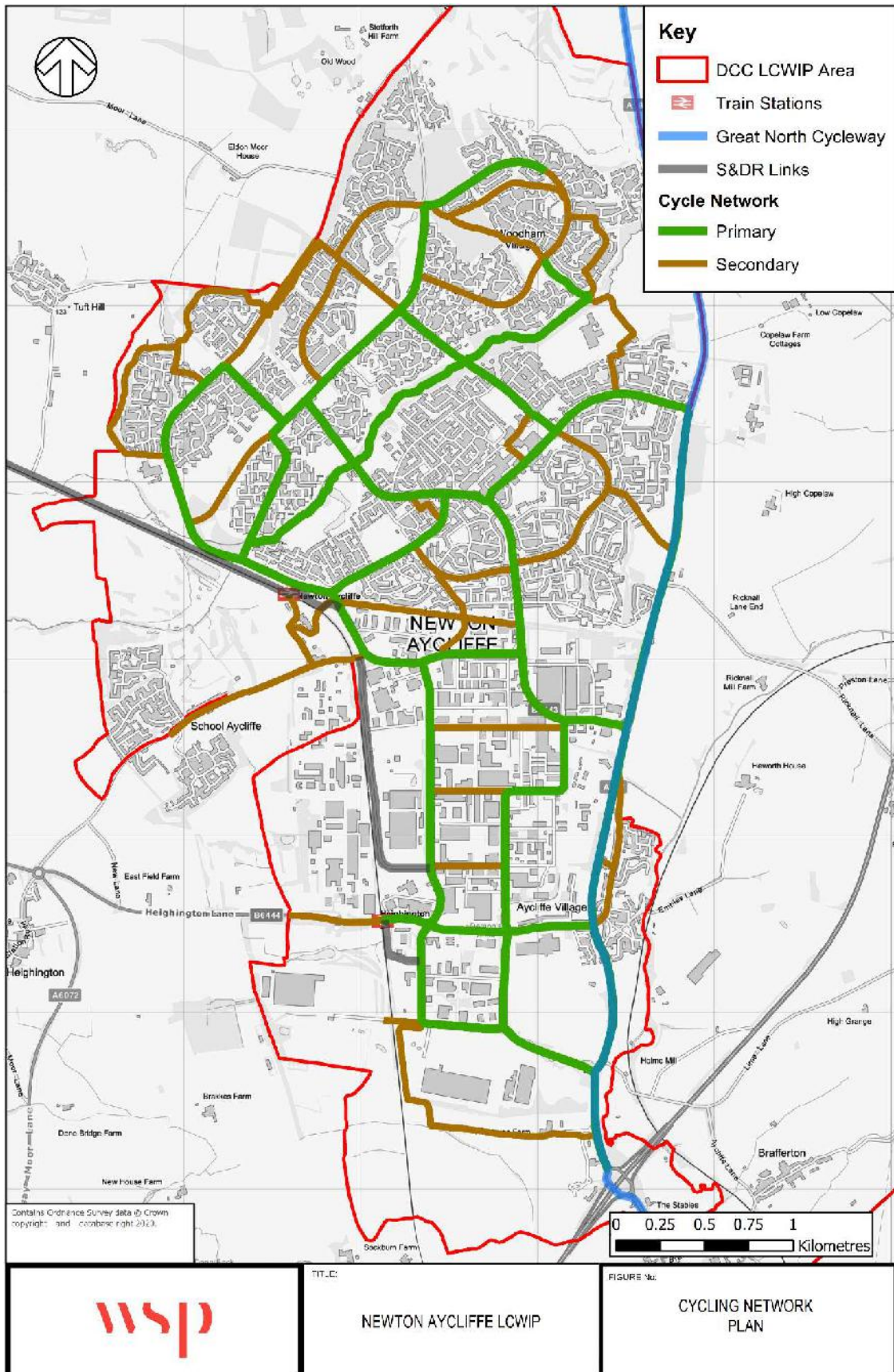
4.3.2. A stakeholder engagement exercise was undertaken to review the evidence and identify which areas of the network should be prioritised for improvement. These were then shortlisted by scoring them against a range of prioritisation criteria and three corridors were selected as initial priorities to be taken forward for feasibility assessment and further development:

- Cobblers Hall to Newton Aycliffe Railway Station;
- Stephenson Way; and
- Town centre to Aycliffe Business Park.

4.3.3. These three corridors have been identified as the first phase of the Newton Aycliffe LCWIP to be delivered as soon as funding is available. The other corridors identified in the Newton Aycliffe Cycle Network Map will be developed and delivered as part of a phased programme.

4.3.4. At this stage, the DfT's Route Selection Tool was used to assess the existing condition of the route and its potential for improvement against core design criteria to identify a preferred route option. The detailed analysis is provided in Section 3.6 of the LCWIP Technical Report which is available on request from DCC.

Figure 4-2 – Newton Aycliffe Cycle Network Plan



4.4 ESTABLISHING INTERVENTIONS

- 4.4.1. DCC's aspiration for the LCWIP cycle network is for transformational change and therefore ambitious cycling infrastructure proposals were developed for the three prioritised routes to address issues identified through condition audits. The schemes were specified following the latest design standards, including Local Transport Note 1/20 Cycle Infrastructure Design.
- 4.4.2. A description of the proposals for each route and an indicative level of cost is presented in Table 4-1. The schemes are mapped in Figure 4-3 and concept plans with more detailed information about the identified proposals are provided in an appendix to the LCWIP Technical Report which is available on request from DCC.

Table 4-1 – Overview of cycling interventions and indicative cost estimates

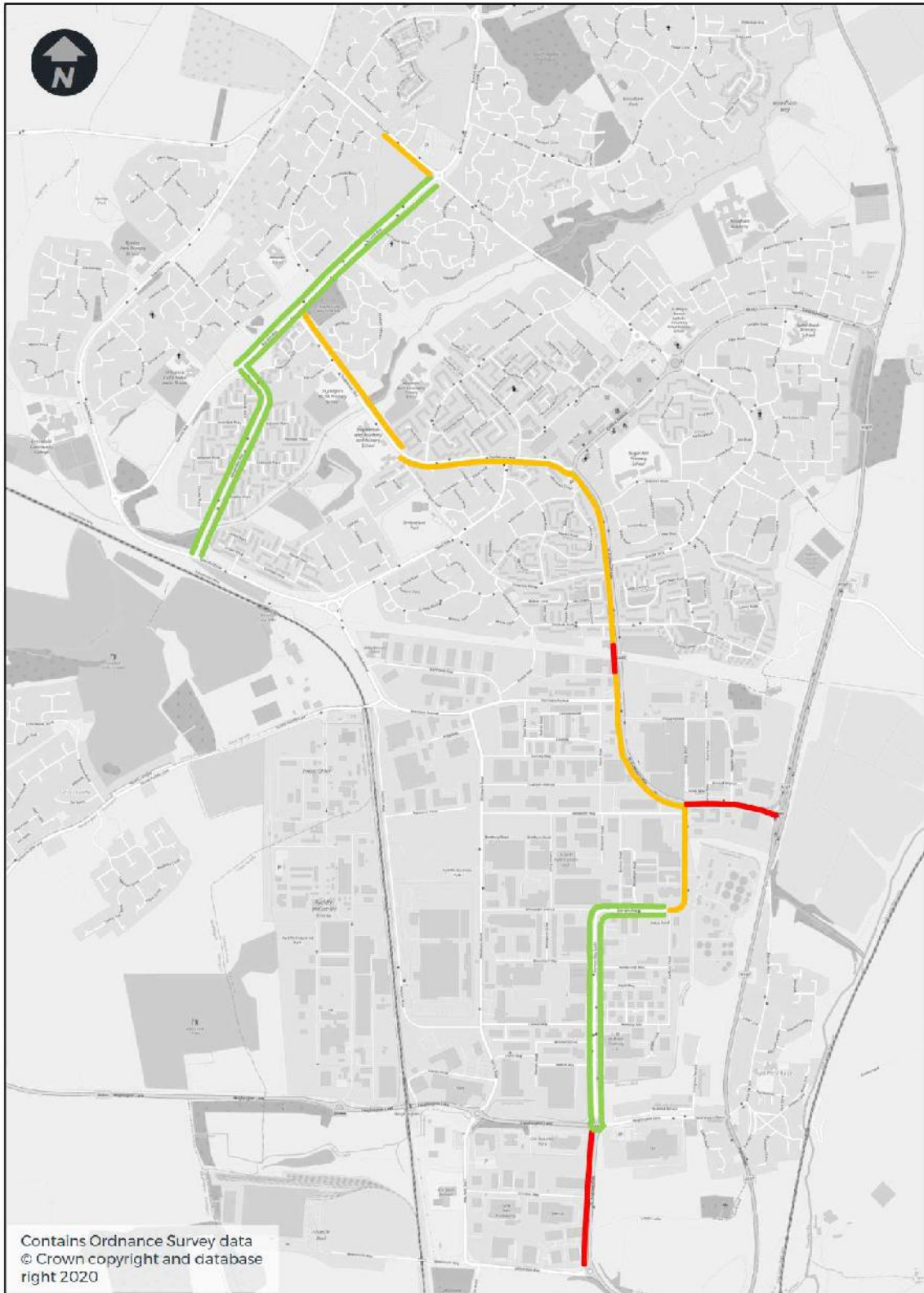
Scheme	Description	Cost*
Cobblers Hall to Newton Aycliffe Railway Station	<ul style="list-style-type: none"> ■ Segregated cycle tracks on both sides of Burnhill Way and Willamfield Way. ■ Shared use path from Williamfield Way to the railway station. ■ Crossing improvements on Greenfield Way and Burnhill Way. 	££
Stephenson Way	<ul style="list-style-type: none"> ■ Two-way segregated cycle track on the northern verge between Burnhill Way and Barrington Road. The provision swaps to the other side of the carriageway from the east of Barrington Road, with a controlled crossing. 	£
Town Centre to Aycliffe Business Park	<ul style="list-style-type: none"> ■ Two-way segregated cycle track on the western side of St Cuthbert's Way between Stephenson Way and Durham Way North. ■ Installation of three controlled crossing points on St Cuthbert's Way. ■ Continuation of the two-way segregated cycle track on the western side of Durham Way North. ■ Segregated cycle tracks on both sides of Durham Way South. ■ Crossings set back on all arms of Durham Way South / Heighington Lane / St. Andrews Way roundabout with uncontrolled, wider refuges. ■ Shared use path on the western side of St Andrews Way. 	££

* Where the indicative cost levels are: <£2 million (£), £2-5 million (££) and >£5 million (£££)

Figure 4-3 - Overview of scheme proposals in Newton Aycliffe

Newton Aycliffe
LCWIP Schemes

- Key:
- One-way cycle track
 - Two-way cycle track
 - Shared use path
 - Cyclists on road



5 STAGE 4: NETWORK PLANNING FOR WALKING

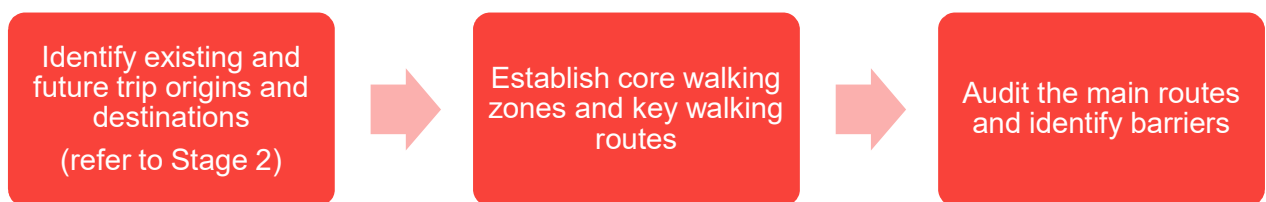
5.1 OVERVIEW

5.1.1. Stage 4 of the LCWIP process involves the production of a walking network map for Newton Aycliffe and the identification of required improvements to achieve the aspirational standard of infrastructure.

5.2 NEWTON AYCLIFFE WALKING NETWORK MAP

5.2.1. The walking network map was developed in accordance with the LCWIP Technical Guidance and included the steps outlined in Figure 5-1.

Figure 5-1 - Network Planning for Walking



5.2.2. The walking network map was reviewed by key stakeholders and this engagement was crucial in the validation and review of the network as well as identification of priorities for intervention.

5.2.3. The walking network map for Newton Aycliffe is shown in Figure 5-2 overleaf.

5.3 IDENTIFYING PRIORITY ROUTES

5.3.1. Whilst DCC's long-term aspiration is to deliver improvements to entire walking network, the authority recognises that in the short-term this will not be financially viable.

5.3.2. A stakeholder engagement exercise was undertaken to review the evidence and identify which areas of the network should be prioritised for improvement. It was decided that the three shortlisted routes identified in Section 4.3 would also be taken forward as priority walking routes for this initial phase of feasibility assessment and further development.

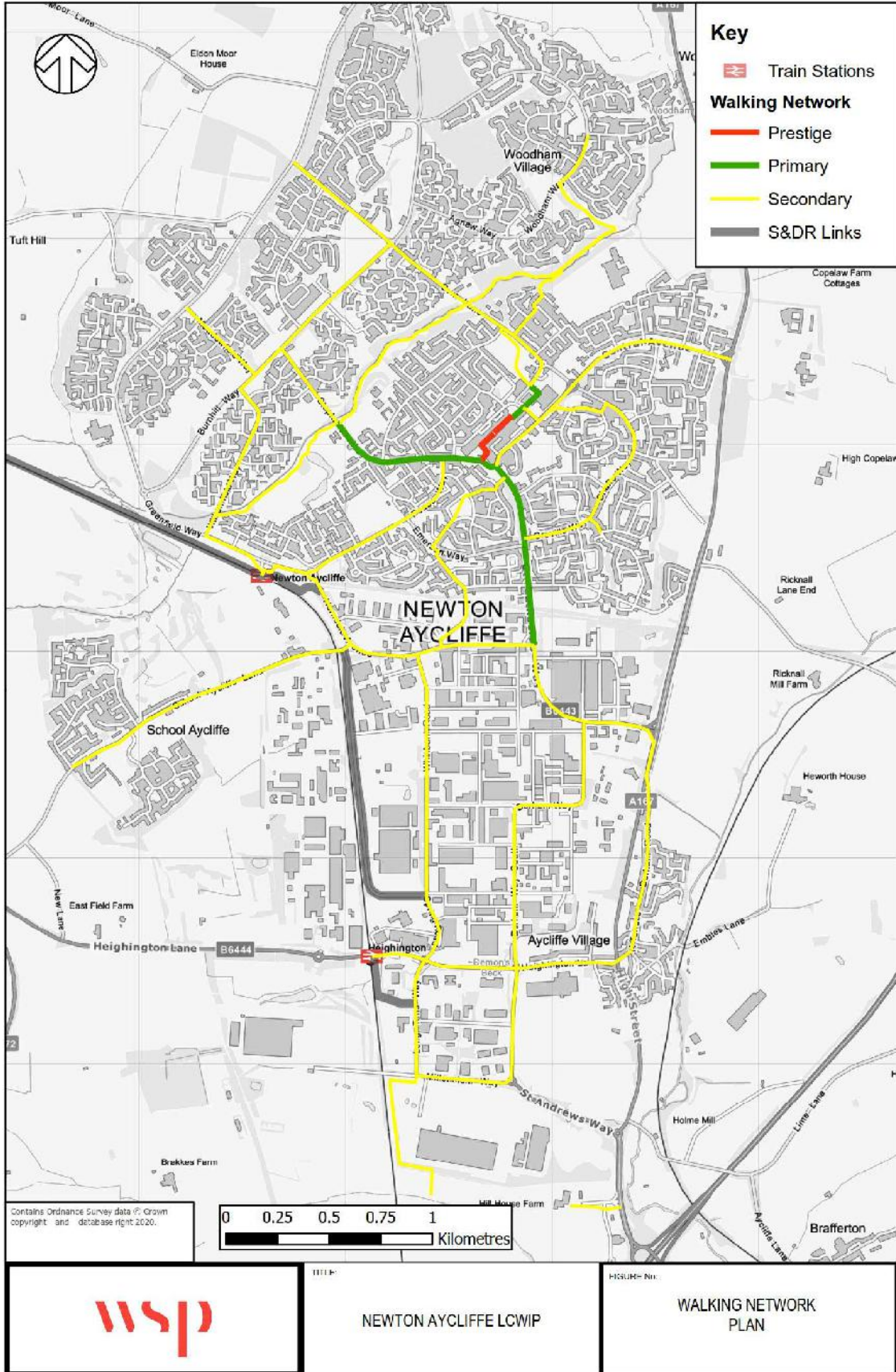
5.4 ESTABLISHING INTERVENTIONS

5.4.1. DCC's aspiration for the LCWIP routes is for transformational change and therefore the highest quality walking infrastructure is to be provided.

5.4.2. A route audit was carried out on each of the priority routes using the DfT's Walking Route Audit Tool (WRAT) to assess the level and quality of walking infrastructure provision. The needs of all users, including disabled and vulnerable groups, were considered when undertaking the audits. The completed route audits are provided in an appendix of the LCWIP Technical Report which is available on request from DCC.

5.4.3. Through the audit, issues with the existing pedestrian infrastructure and barriers to its use were recorded. Based on findings, improvements to the walking infrastructure were identified and are presented in the concept plans provided in an appendix of the LCWIP Technical Report.

Figure 5-2 - Newton Aycliffe Walking Network Plan



5.4.4. A description of the proposals for each route and an indicative level of cost is presented in Table 5-1 below.

Table 5-1 – Overview of walking interventions and indicative cost estimates

Scheme	Description	Cost*
Cobblers Hall to Newton Aycliffe Railway Station	<ul style="list-style-type: none"> ■ Shared use path from Williamfield Way to the railway station. ■ Crossing improvements on Greenfield Way and Burnhill Way. 	£
Stephenson Way	<ul style="list-style-type: none"> ■ Raised side road crossings for pedestrians. 	£
Town Centre to Aycliffe Business Park	<ul style="list-style-type: none"> ■ Installation of three controlled crossing points on St Cuthbert's Way. ■ Crossings set back on all arms of Durham Way South / Heighington Lane / St. Andrews Way roundabout with uncontrolled, wider refuges. ■ Shared use path on the western side of St Andrews Way. ■ Raised side road crossings for pedestrians. 	££

* Where the indicative cost levels are: <£2 million (£), £2-5 million (££) and >£5 million (£££)

6 STAGE 5: PRIORITISING IMPROVEMENTS

6.1 OVERVIEW

6.1.1. Stage 5 of the LCWIP involves prioritisation of improvements in order to create a programme of cycling and walking interventions for Newton Aycliffe.

6.2 TIMESCALES

6.2.1. To produce a prioritised programme of infrastructure improvements for the LCWIP period, the timescales for scheme delivery are categorised as:

- Short term (typically <3 years) – improvements which can be implemented quickly or are under development;
- Medium term (typically <5 years) – improvements where there is a clear intention to act, but delivery is dependent on further funding availability or other issues; and
- Long term (typically >5 years) – more aspirational improvements or those awaiting a defined solution.

6.3 PRIORITISATION

6.3.1. The schemes were prioritised using a scoring mechanism based on the following key drivers:

- Effectiveness, based on the potential number of walking or cycling trips that might use the route.
- Alignment with policy objectives, in particular the SCWDP.
- Economic factors, including as scheme cost, value for money and likelihood of attracting funding.
- Deliverability issues, including engineering constraints, land ownerships and level of stakeholder support.

6.3.2. Definitions of the prioritisation criteria and the appraisal of scheme value for money are provided in the appendices of the LCWIP Technical Report which is available on request from DCC.

6.3.1. A summary of the scores for the three routes in Newton Aycliffe and their ranking is provided in Table 6-1 below.

Table 6-1 – LCWIP Prioritisation Table

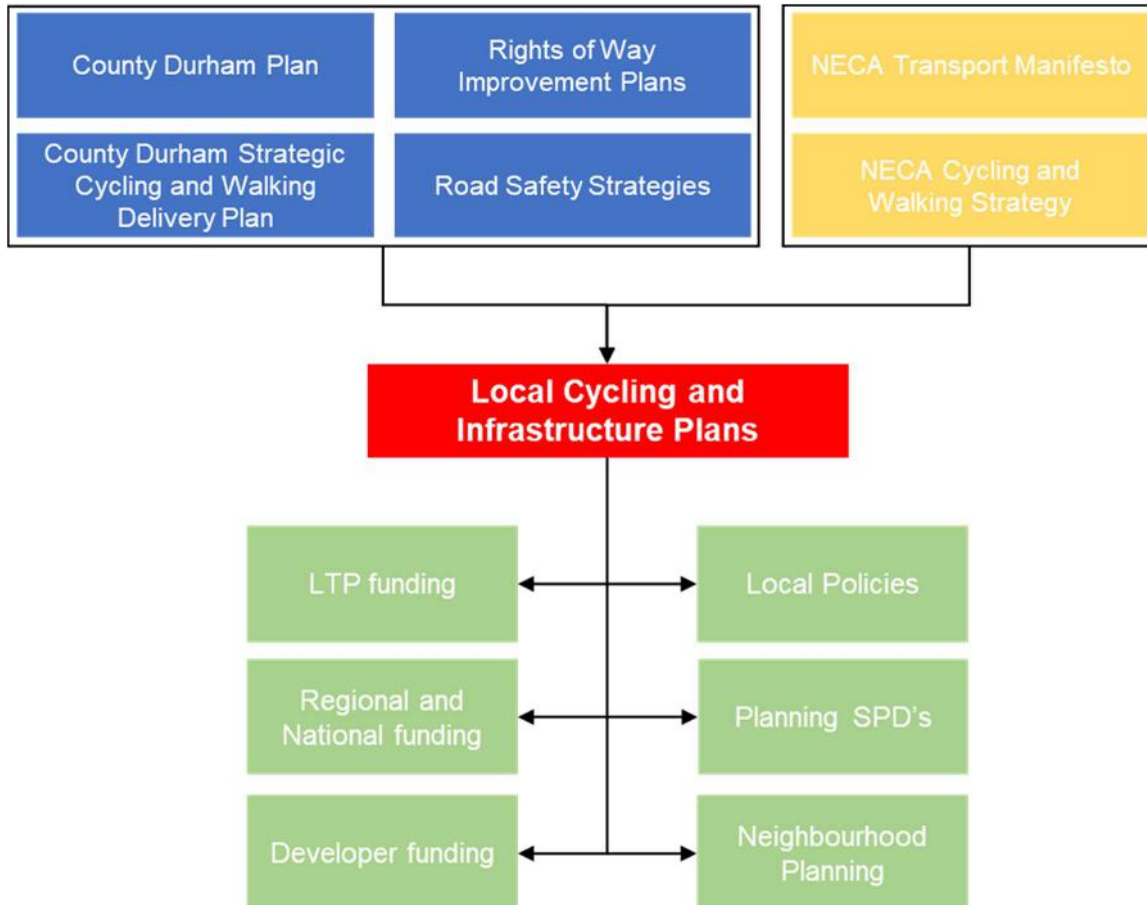
	Effectiveness	Policy alignment	Economic	Deliverability		
Routes	12.0	6.0	12.0	10.0	Total	Rank
Cobblers Hall to Newton Aycliffe Railway Station	7.4	3.8	7.0	9.0	27.2	2
Stephenson Way	9.8	4.0	7.0	7.0	25.6	3
Town Centre to Aycliffe Business Park	8.4	3.2	10.0	9.0	32.8	1

7 STAGE 6: INTEGRATION AND APPLICATION

7.1 INTEGRATION OF THE LCWIP

7.1.1. Local and regional policy provides a firm strategic framework for the development and intended application of the LCWIPs. This is outlined in Figure 7-1 below.

Figure 7-1 - Integration of the County Durham LCWIPs in strategy and policy









7.1.2. Further information about the integration and application of the LCWIP is provided in the accompanying County Durham LCWIP Programme Report.

7.2 NEXT STEPS

7.2.1. An action plan should be produced covering the timeframe of the LCWIP for the development and delivery of improvements to the walking and cycling networks. This should also identify a wider package of supporting interventions, such as installation of secure cycle parking, awareness-raising campaigns and behaviour change programmes.



QUALITY CONTROL

Issue/revision	First issue	Revision 1	Revision 2	Revision 3
Report number	Draft 1.0	Draft 2.0	Final	
Date	03/12/20	11/01/21	29/01/21	
Prepared by	Michael Dodds	Michael Dodds	Michael Dodds	
Signature				
Checked by	Phil Freestone	Phil Freestone	Phil Freestone	
Signature				
Authorised by				
Signature				
Project number	70061699	70061699	70061699	



Amber Court
William Armstrong Drive
Newcastle upon Tyne
NE4 7YQ

wsp.com

CONFIDENTIAL