



Durham County Council

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# LOCAL CYCLING AND WALKING INFRASTRUCTURE PLAN

Chester-le-Street



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# EXECUTIVE SUMMARY

The Chester-le-Street 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

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## 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 Chester-le-Street, outlining the approach and proposals for the town, following the recommended DfT LCWIP process, as shown 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.

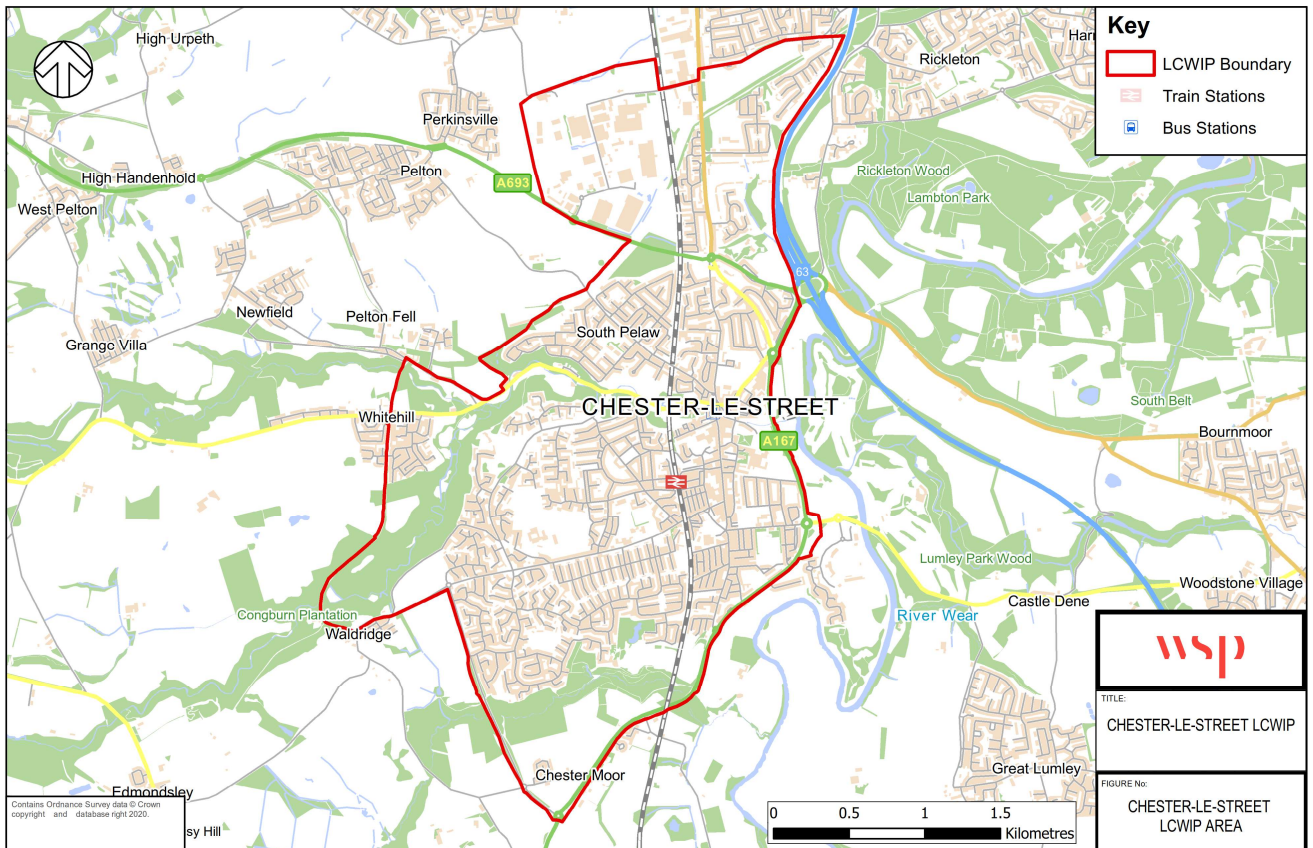
- 1.2.2. A technical report which provides detailed information about each stage of the LCWIP is available on request from DCC.



## 2 STAGE 1: DETERMINING SCOPE

2.1.1. The LCWIP for Chester-le-Street covers the continuous urban area of the town as well as the villages of Chester Moor and Pelton, 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 Chester-le-Street 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

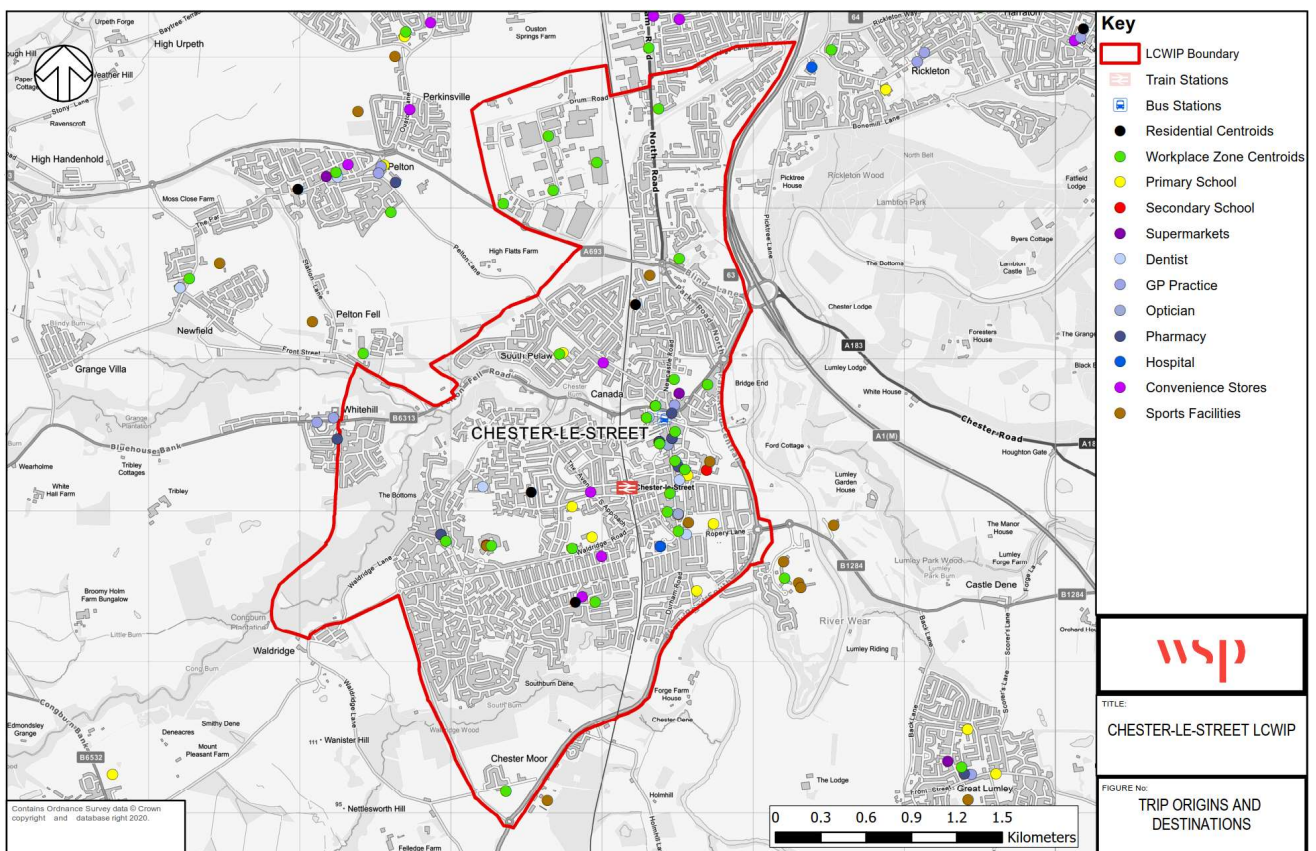
3.1.1. The LCWIP has been developed following a robust, evidence-based approach. An extensive collection of information has been analysed and reviewed to inform the development of network plans for cycling and walking in Stages 3 and 4 respectively and inform the prioritisation in Stage 5.

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 Chester-le-Street have been mapped, with input from stakeholders, to establish travel patterns within the city (see Figure 3-1).

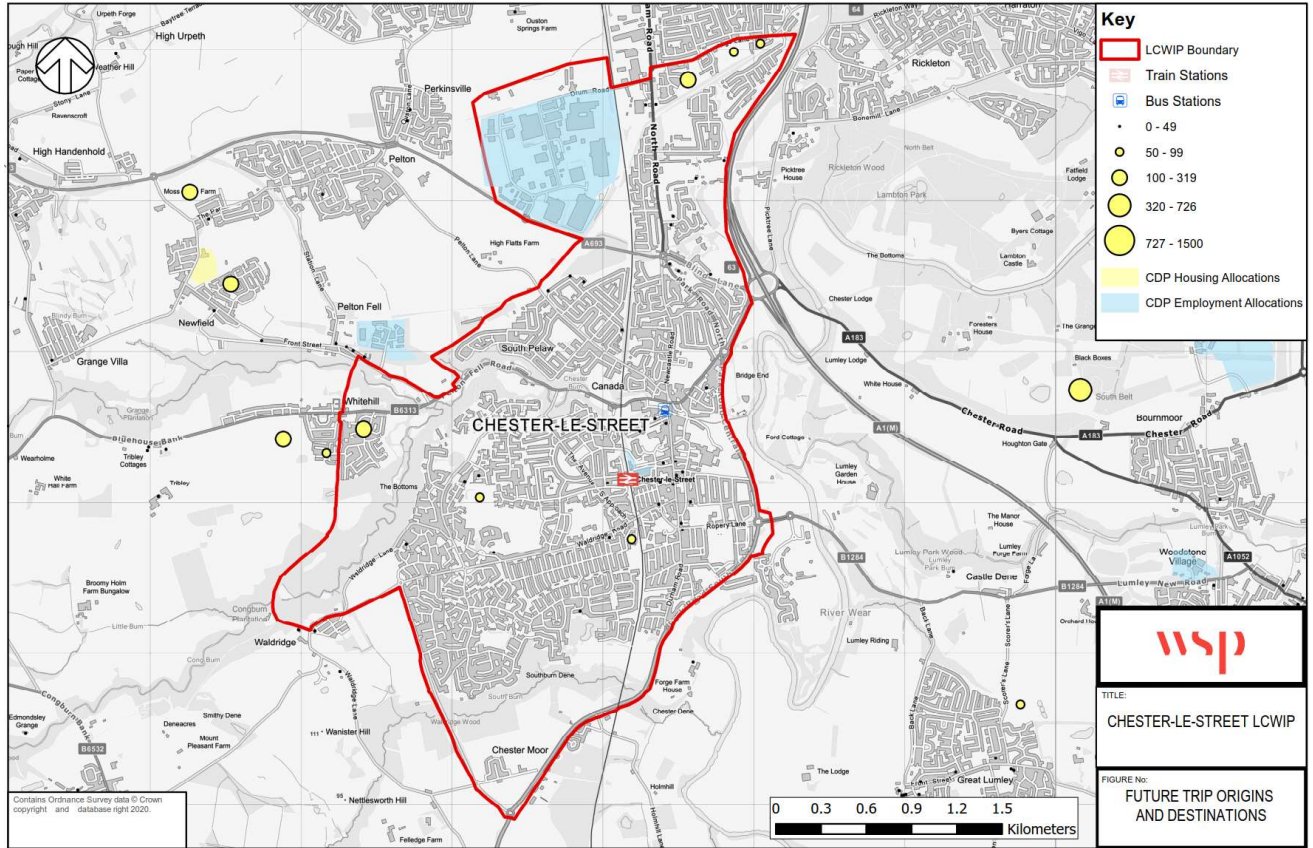
**Figure 3-1 - Existing trip origins and destinations in Chester-le-Street**



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).



**Figure 3-2 - Future trip origins and destinations in Chester-le-Street**



- 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.

## 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 Chester-le-Street and identification of required improvements to achieve the aspirational standard of infrastructure.

### 4.2 CHESTER-LE-STREET 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 Chester-le-Street 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 Chester-le-Street 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:

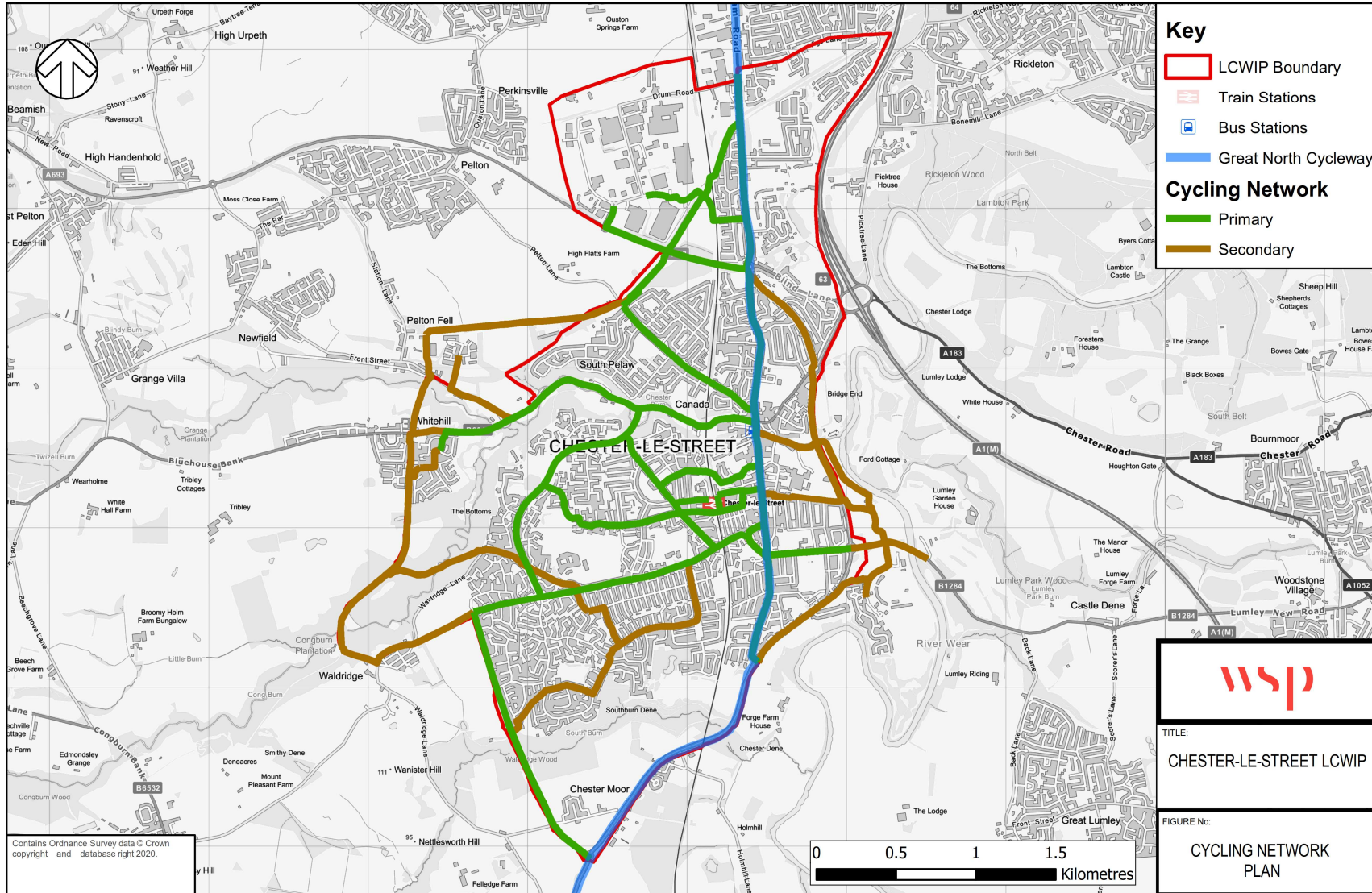
- Drum Industrial Estate to town centre;
- Railway station to town centre; and
- Waldrige Road to town centre.

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

4.3.1. 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 – Chester-le-Street Cycle Network Map



## 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*
Drum Industrial Estate to town centre	<ul style="list-style-type: none"> <li>■ Shared-use path between Drum Road and Low Flatts Lane.</li> <li>■ Speed reduction and traffic calming measures on Low Flatts Road.</li> <li>■ Segregated cycle facilities on both sides of Newcastle Road.</li> <li>■ Convert the Newcastle Road / Pelaw Bank mini roundabout to a signalised junction and link with adjacent junction.</li> <li>■ Shared-use path on the western footway of Newcastle Road between Pelaw Bank and North Burns.</li> </ul>	£££
Railway station to town centre	<ul style="list-style-type: none"> <li>■ On-road cycle provision (potential for marking advisory cycle lanes) on Station Road, including traffic calming measures.</li> <li>■ Remove centreline on Station Road and establish informal pedestrian crossing points through surfacing.</li> <li>■ Improve Station Road / Louise Terrace / Osborne Road mini roundabout through tightening geometry, installing solid islands, removing guard rail and establishing priority pedestrian crossings.</li> </ul>	£
Waldrige Road	<ul style="list-style-type: none"> <li>■ Segregated cycle tracks along Waldrige Road between Meadow Drive and Mendip Avenue.</li> <li>■ Shared-use path between Mendip Avenue and Wilfred Street on the southern side of the carriageway.</li> <li>■ Contraflow cycle track along West Lane.</li> <li>■ Measures to create a 'Quiet Mixed Traffic Street' on Front Street, including public space improvements, visual and actual carriageway narrowing.</li> </ul>	££

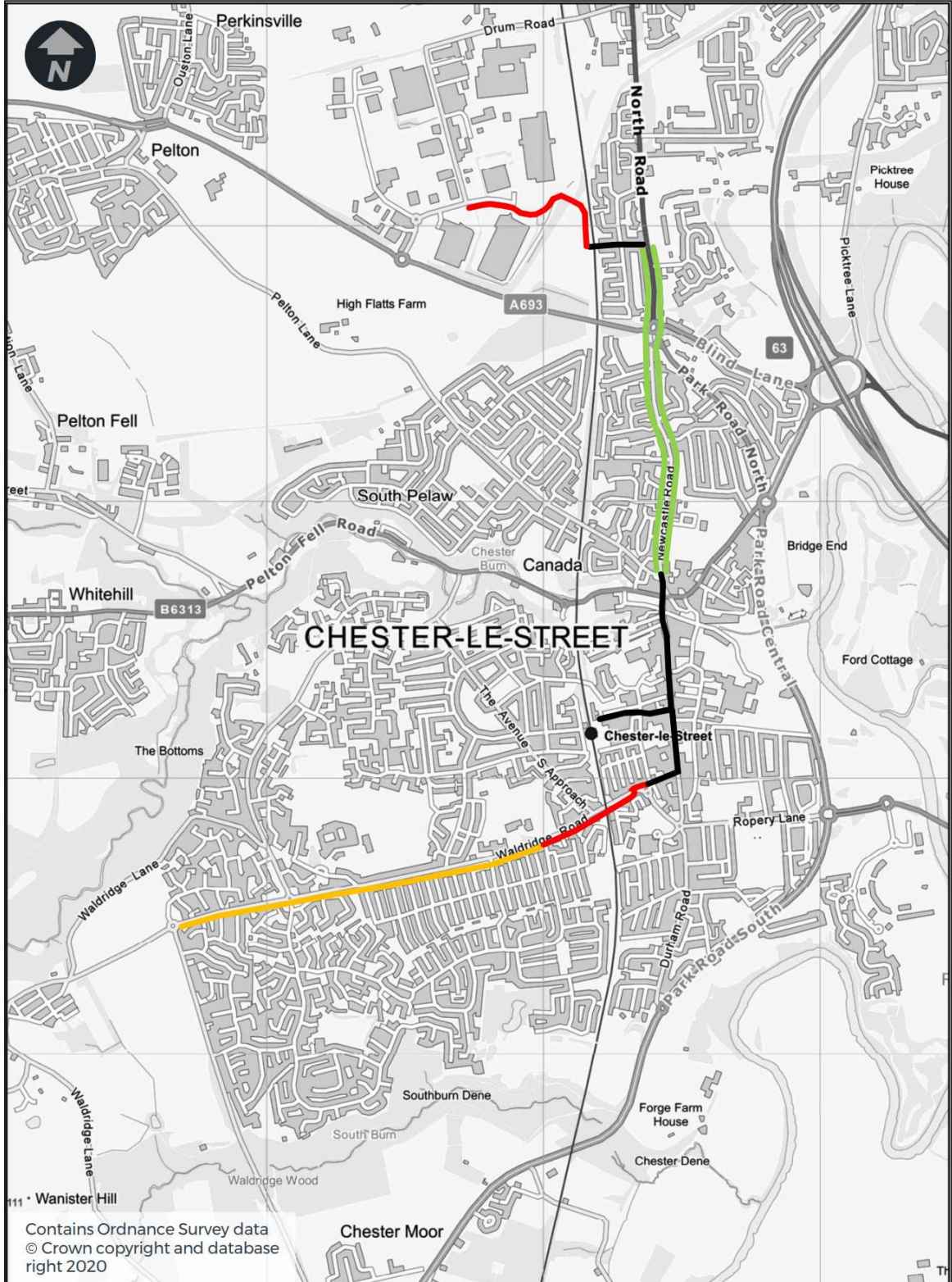
\* Where the indicative cost levels are: <£2 million (£), £2-5 million (££) and >£5 million (£££).



Figure 4-3 - Overview of scheme proposals in Chester-le-Street

**Chester-le-Street**  
LCWIP Schemes

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





## 5 STAGE 4: NETWORK PLANNING FOR WALKING

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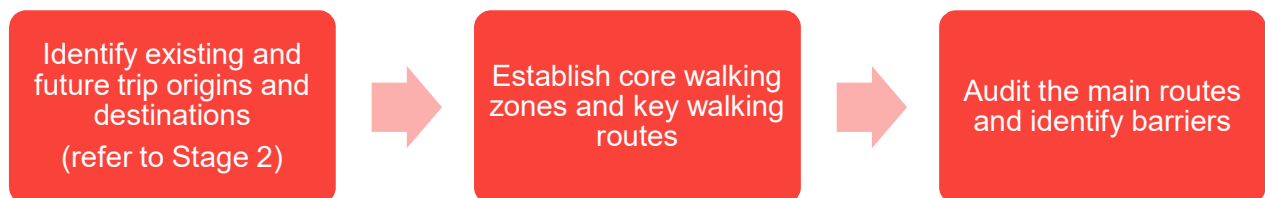
### 5.1 OVERVIEW

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

### 5.2 CHESTER-LE-STREET 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 Chester-le-Street 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 - Chester-le-Street Walking Network Map



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**

<b>Scheme</b>	<b>Description</b>	<b>Cost*</b>
Drum Industrial Estate to town centre	<ul style="list-style-type: none"> <li>■ Shared-use path between Drum Road and Low Flatts Lane.</li> <li>■ Speed reduction and traffic calming measures on Low Flatts Road.</li> <li>■ Convert the Newcastle Road / Pelaw Bank mini roundabout to a signalised junction and link with adjacent junction.</li> <li>■ Shared-use path on the western footway of Newcastle Road between Pelaw Bank and North Burns.</li> <li>■ Raised side road crossings for pedestrians.</li> </ul>	££
Railway station to town centre	<ul style="list-style-type: none"> <li>■ Remove centreline on Station Road and establish informal pedestrian crossing points through surfacing.</li> <li>■ Improve Station Road / Louise Terrace / Osborne Road mini roundabout through tightening geometry, installing solid islands, removing guard rail and establishing priority pedestrian crossings.</li> </ul>	£
Waldrige Road	<ul style="list-style-type: none"> <li>■ Shared-use path between Mendip Avenue and Wilfred Street on the southern side of the carriageway.</li> <li>■ Measures to create a 'Quiet Mixed Traffic Street' on Front Street, including public space improvements, visual and actual carriageway narrowing.</li> <li>■ Raised side road crossings for pedestrians.</li> </ul>	£

\* 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 Chester-le-Street.

### 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.

6.3.3. A summary of the scores for the three routes in Chester-le-Street and their ranking is provided in Table 6-1 below.

**Table 6-1 – LCWIP Prioritisation Table**

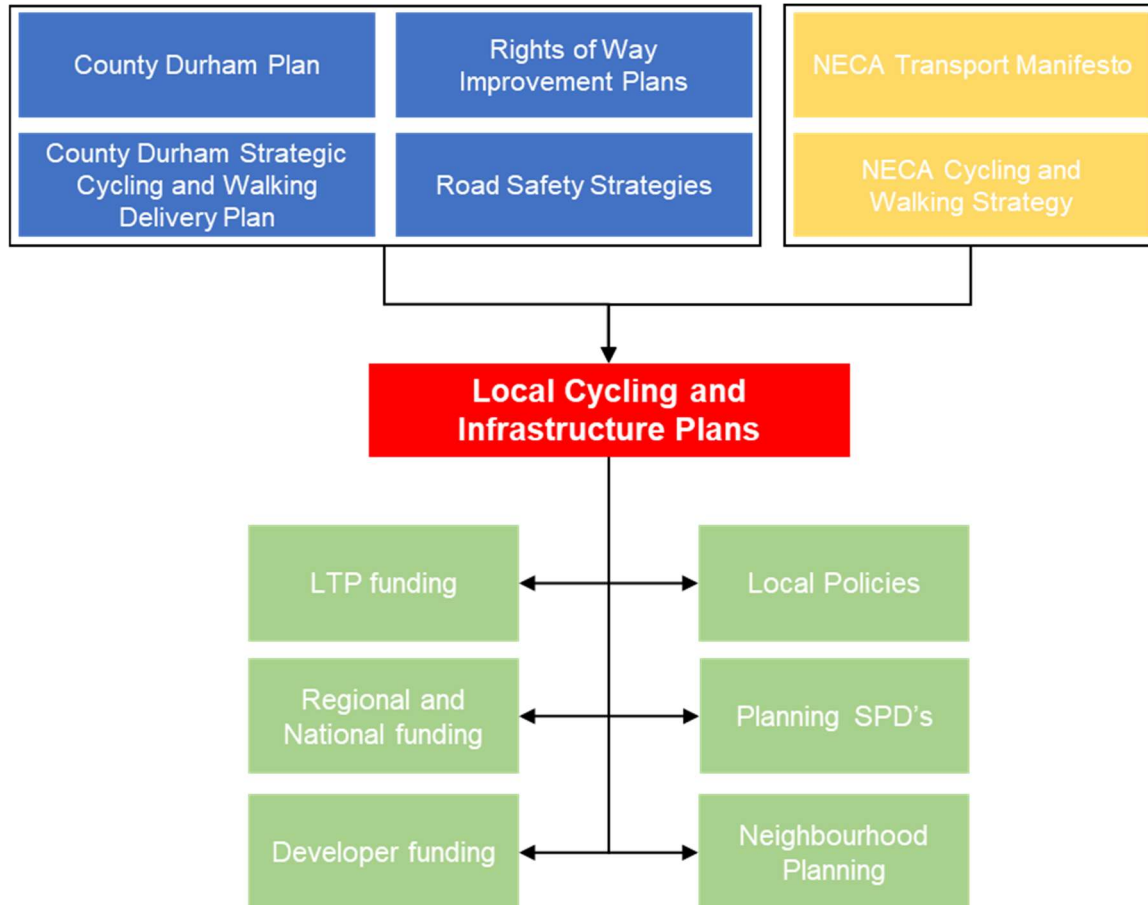
	Effectiveness	Policy alignment	Economic	Deliverability		
Routes	12.0	6.0	12.0	10.0	Total	Rank
Drum Industrial Estate to town centre	8.8	3.4	4.0	5.0	21.2	3
Railway station to town centre	4.8	4.4	12.0	7.0	28.2	1
Waldridge Road	9.8	3.8	7.0	7.0	27.6	2

## 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

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Issue/revision	First issue	Revision 1	Revision 2	Revision 3
Report number	Draft 1.0	Draft 2.0	Final	
Date	09/12/20	11/01/21	29/01/21	
Prepared by	Michael Dodds	Michael Dodds	Michael Dodds	
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Checked by	Phil Freestone	Phil Freestone	Phil Freestone	
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Authorised by				
Signature				
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