



Durham County Council

LOCAL CYCLING AND WALKING INFRASTRUCTURE PLAN

Durham City



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EXECUTIVE SUMMARY

The Durham Local Cycling and Walking Infrastructure Plan (LCWIP) is an evidence-based strategic approach to identifying cycling and walking improvements required in the city 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 Durham LCWIP, outlining the approach and proposals for the city, following the recommended DfT LCWIP process as outlined in Table 1-1.

Table 1-1 - The LCWIP Process

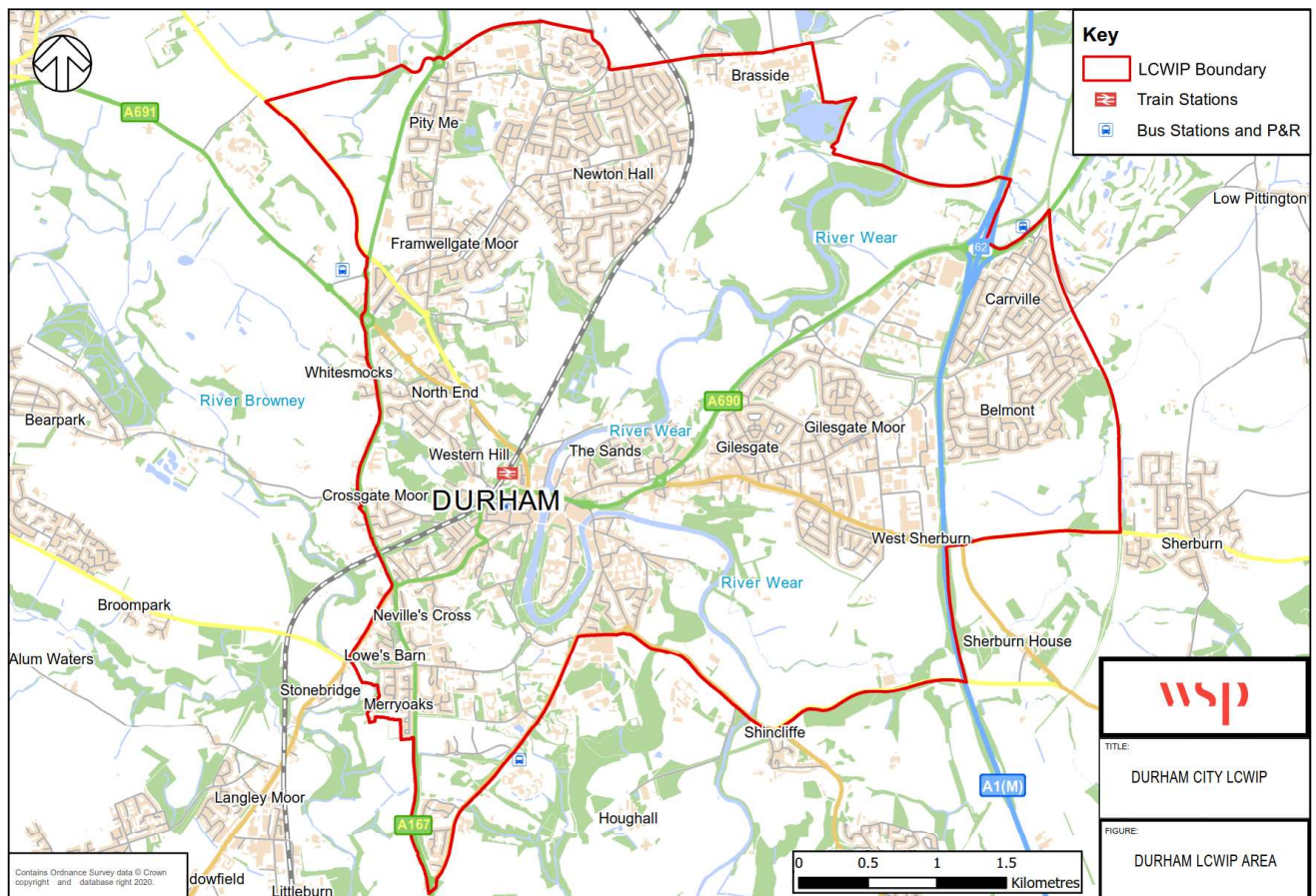
Stage	Name	Description
1	Determining Scope	Establish the geographical extent of the LCWIP, and arrangements for governing and preparing the plan.
2	Gathering Information	Identify existing patterns of walking and cycling and potential new journeys. Review existing conditions and identify barriers to cycling 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 the development of the LCWIP is available on request from DCC.

2 STAGE 1: DETERMINING SCOPE

- 2.1.1. The LCWIP for Durham includes the continuous urban area around the historic city and corresponds with the coverage of the Durham City Sustainable Transport Delivery Plan (2019 – 2035). Consideration has been given to existing and potential inter-urban connections in developing the networks to ensure a cohesive county-wide active travel network.
- 2.1.2. The area covered by the Durham LCWIP is shown in Figure 2-1 below.

Figure 2-1 – Geographic scope of the Durham LCWIP

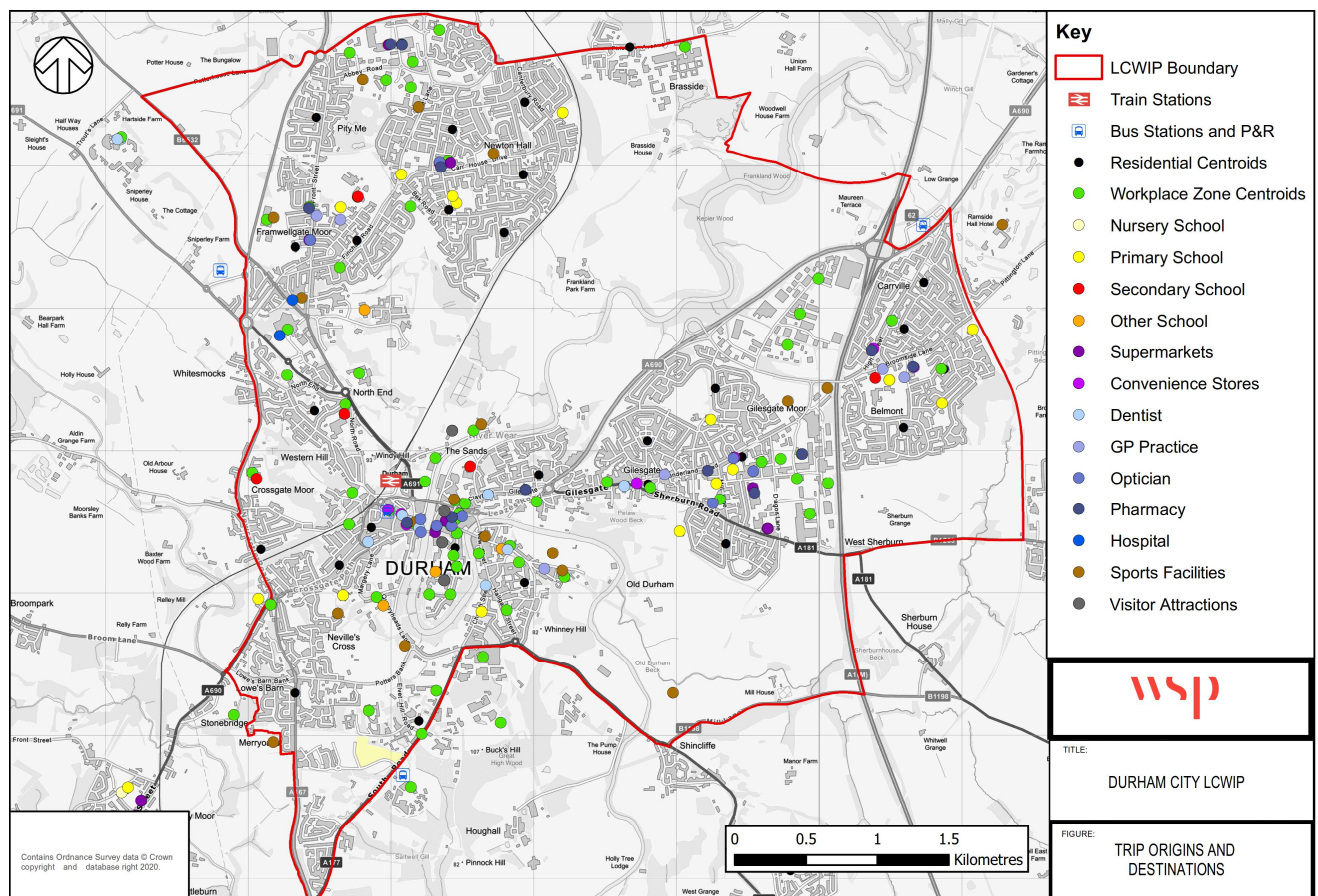


- 2.1.3. Further information about the other aspects of Stage 1 is covered within the accompanying County Durham LCWIP Programme Report.

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 Durham 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 Durham



Key

- LCWIP Boundary
- Train Stations
- Bus Stations and P&R

Residential Sites

No. of units

- 0 - 49
- 50 - 99
- 100 - 199
- 200 - 499
- 500 - 1500

Employment Sites

CDP Housing Allocations

CDP Employment Allocations

DURHAM CITY LCWIP

FUTURE TRIP ORIGINS AND DESTINATIONS

0 0.5 1 1.5 Kilometres

Contains Ordnance Survey data © Crown copyright and database right 2020.

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 Durham and identification of required improvements to achieve the aspirational standard of infrastructure.

4.2 DURHAM 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 Durham 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 Durham is shown in Figure 4-2 overleaf.

4.3 IDENTIFYING PRIORITY ROUTES

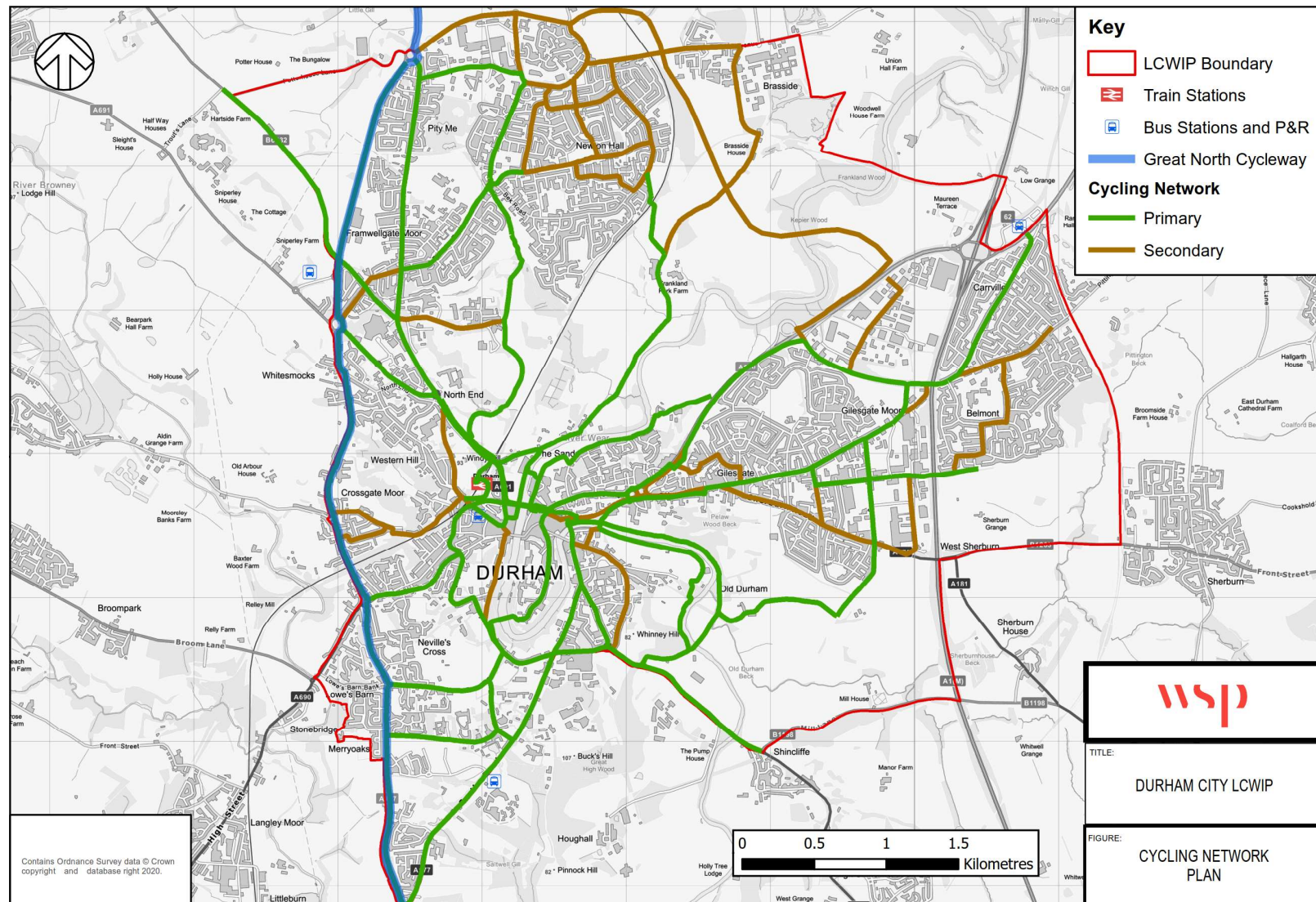
- 4.3.1. Whilst DCC's long-term aspiration is to deliver the cycling network in its entirety, the authority recognises that in the short-term this will not be financially viable.
- 4.3.2. A stakeholder engagement exercise was undertaken to review the evidence and identify which areas of the network should 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:

- Belmont / Carville to City Centre;
- Cock o' the North to City Centre; and
- Gilesgate to Durham University Mountjoy campuses.

- 4.3.3. These three corridors have been identified as the first phase of the Durham LCWIP to be delivered as soon as funding is available. The other corridors identified in the Durham 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 - Durham City Cycle Network Map



4.4 ESTABLISHING INTERVENTIONS

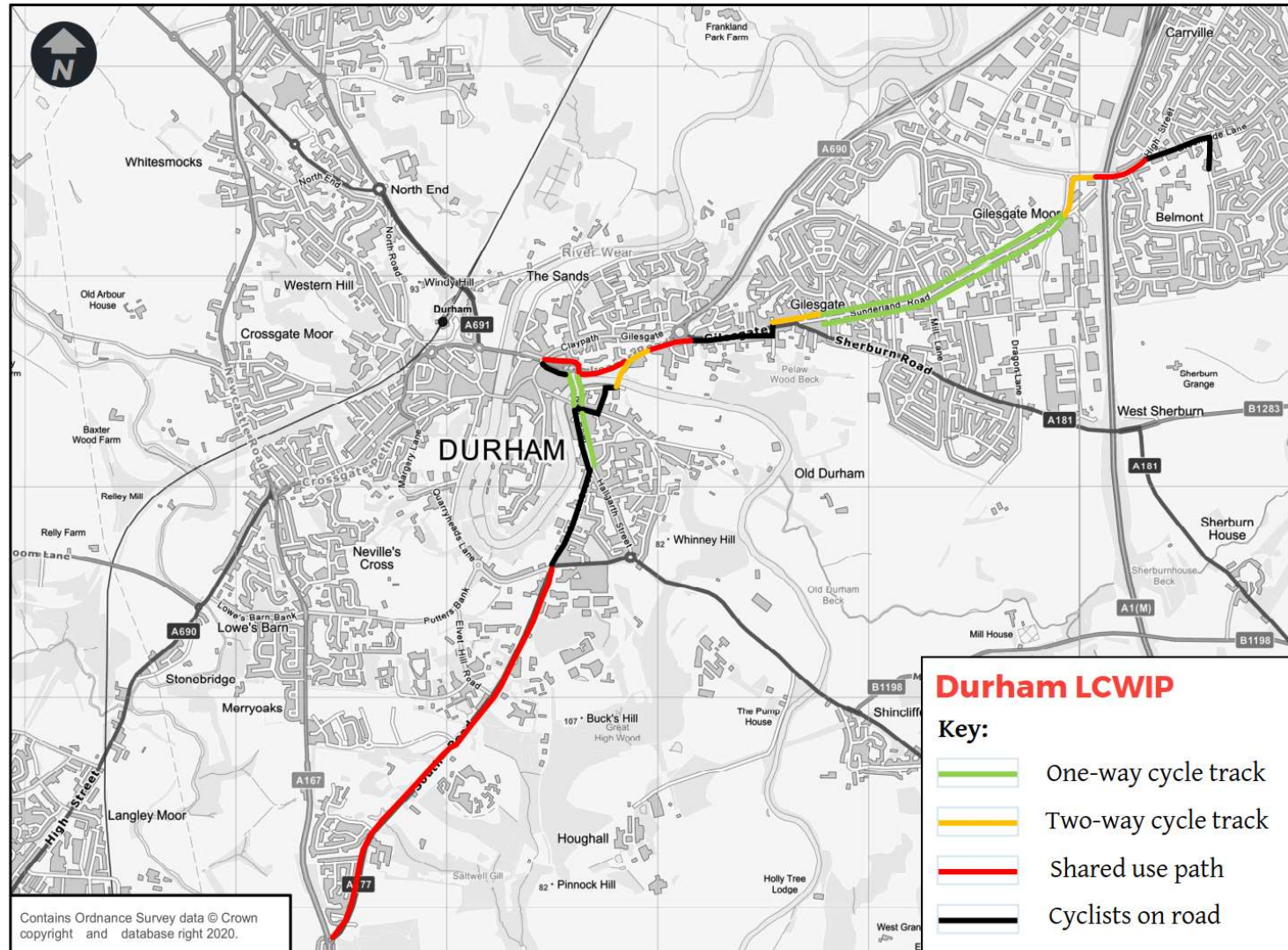
- 4.4.1. DCC's aspiration for the LCWIP cycle network is for transformational change and therefore ambitious cycling infrastructure proposals were developed for the three prioritised routes to address issues identified through condition audits. The schemes were specified following the latest design standards, 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*
Belmont to city centre	<ul style="list-style-type: none"> Shared-use path alongside the A690 between Silver Street and St Hild's Lane. Formalise access road along Gilesgate bank for use by cyclists and consider options to reduce traffic flow. Segregated cycle tracks on Sunderland Road. Shared use path on Broomside Lane where space permits and otherwise traffic calming measures. Reconfiguration of major junctions along Sunderland Road. 	£££
Gilesgate to Durham University Mountjoy campuses	<ul style="list-style-type: none"> Formalise access road along Gilesgate bank for use by cyclists and consider options to reduce traffic flow. Shared-use path on southern side of the A690 connecting to Pelaw Leazes Lane. Quiet Mixed Traffic Street measures on Old Elvet, Territorial Lane and Elvet Waterside. Southbound stepped cycle track on New Elvet. Changes to signalised junctions with Hallgarth and Old Elvet to incorporate early-release for cyclists. Reduce speed limit on Church Street to 20mph. 	£
Cock o' the North to city centre	<ul style="list-style-type: none"> Shared-use path along South Road between Cock o' the North and Church Street. Reduce speed limit on Church Street to 20mph. Southbound stepped cycle track on New Elvet. Changes to signalised junctions with Hallgarth and Old Elvet to incorporate early-release for cyclists. 	££

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

Figure 4-3 - Overview of scheme proposals in Durham



5 STAGE 4: NETWORK PLANNING FOR WALKING

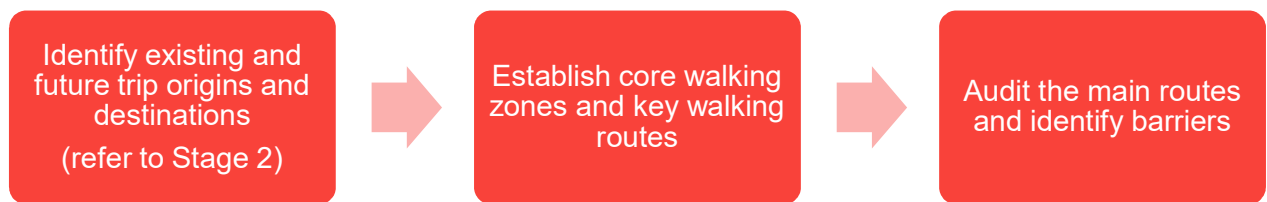
5.1 OVERVIEW

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

5.2 DURHAM 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 Durham is shown in Figure 5-2 overleaf.

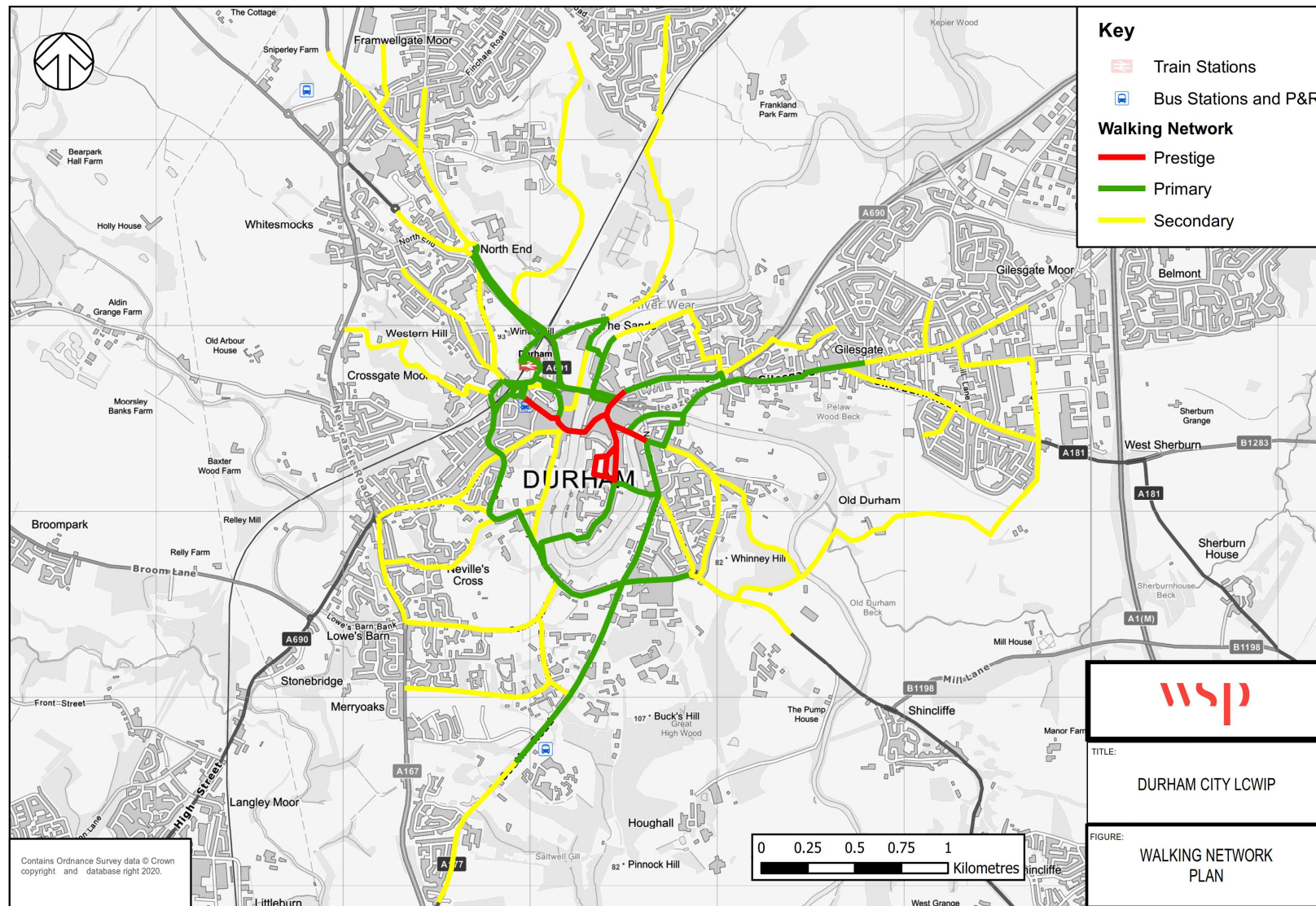
5.3 IDENTIFYING PRIORITY ROUTES

- 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 - Durham City 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

Scheme	Description	Cost*
Belmont to city centre	<ul style="list-style-type: none"> Shared-use path alongside the A690 between Silver Street and St Hild's Lane. Shared use path on Broomside Lane where space permits and otherwise traffic calming measures. Reconfiguration of major junctions along Sunderland Road. Raised side road crossings for pedestrians. 	££
Gilesgate to Durham University Mountjoy campuses	<ul style="list-style-type: none"> Shared-use path on southern side of the A690 connecting to Pelaw Leazes Lane. Quiet Mixed Traffic Street measures on Old Elvet, Territorial Lane and Elvet Waterside. Removal of parking on New Elvet to widen western footway. Reduce speed limit on Church Street to 20mph and remove parking where possible to build out the footway. Raised side road crossings for pedestrians. 	£
Cock o' the North to city centre	<ul style="list-style-type: none"> Shared-use path along South Road between Cock o' the North and Church Street. Reduce speed limit on Church Street to 20mph and remove parking where possible to build out the footway. Removal of parking on New Elvet to widen western footway. 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 Durham.

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 Durham City and their ranking is provided in Table 6-1.

Table 6-1 – LCWIP Prioritisation Table

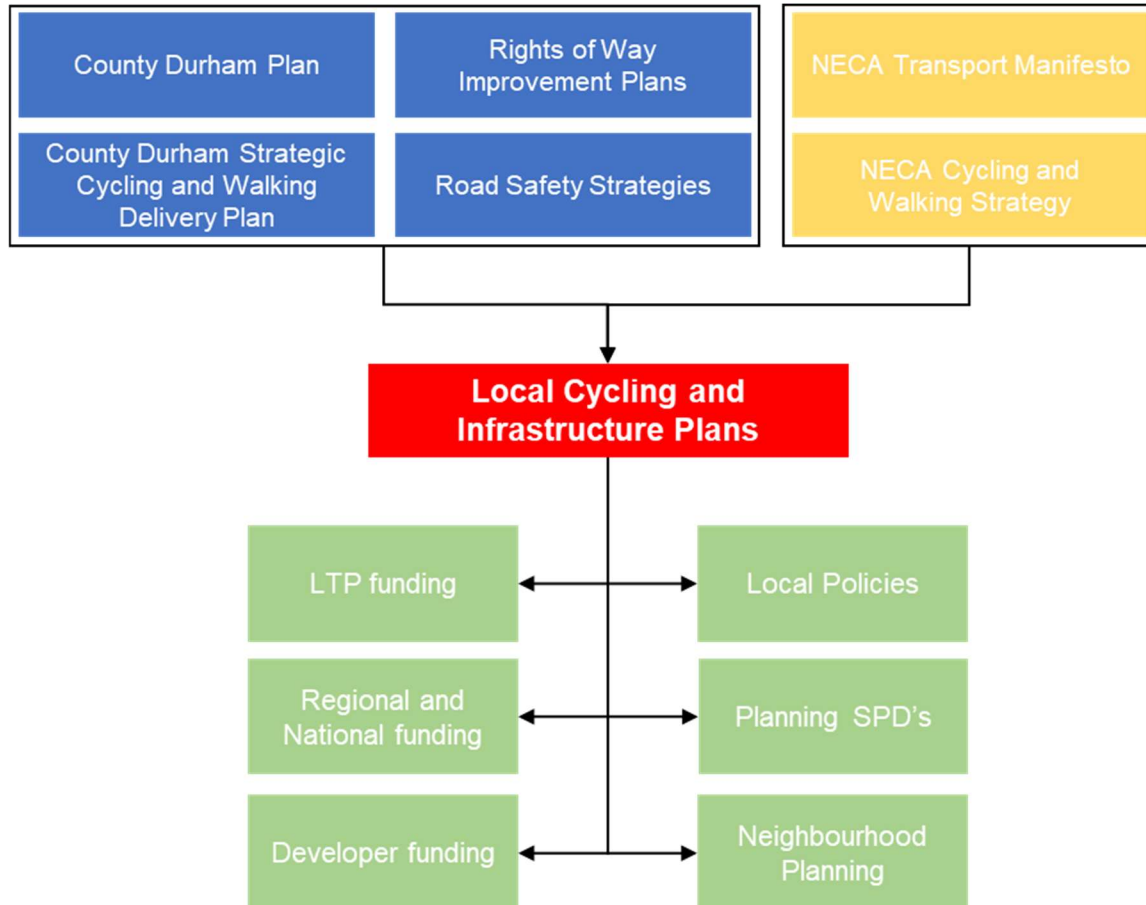
	Effectiveness	Policy alignment	Economic	Deliverability		
Routes	12.0	6.0	12.0	10.0	Total	Rank
Belmont to Durham City Centre	11.6	5.4	5.0	1.0	23.0	2
Cock o' the North to Durham City Centre	10.2	4.2	7.0	1.0	22.4	3
Gilesgate to University Mountjoy campus	10.8	6.0	11.0	1.0	28.8	1

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 Durham LCWIPs in strategy and policy

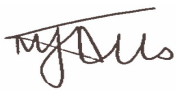
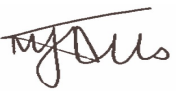
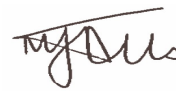







- 7.1.2. Further information about the integration and application of the LCWIP is provided in the accompanying County Durham LCWIP Programme Report.

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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Checked by	Phil Freestone	Phil Freestone	Phil Freestone	Phil Freestone
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