

NORTH HERTFORDSHIRE DISTRICT COUNCIL



Publication Date

Our Ref Southern Rural Committee/Meeting Date
Contact. Committee Services
Direct Dial. (01462) 474655
Email. committee.services@north-herts.gov.uk

To: Members of the Committee: Councillor George Davies (Chair), Councillor Mandi Tandi (Vice-Chair), Councillor David Barnard, Councillor Faye S Frost, Councillor Ian Moody, Councillor Ralph Muncer, Councillor Lisa Nash, Councillor Sam North, Councillor Claire Strong and Councillor Terry Tyler

NOTICE IS HEREBY GIVEN OF A

MEETING OF THE SOUTHERN RURAL COMMITTEE

to be held in the

**COUNCIL CHAMBER, DISTRICT COUNCIL OFFICES, GERNON
ROAD, LETCHWORTH**

On

THURSDAY, 29TH SEPTEMBER, 2022 AT 7.30 PM

Yours sincerely,

Jeanette Thompson
Service Director – Legal and Community

****MEMBERS PLEASE ENSURE THAT YOU DOWNLOAD ALL AGENDAS AND REPORTS VIA THE MOD.GOV APPLICATION ON YOUR TABLET BEFORE ATTENDING THE MEETING****

Agenda

Part I

Item		Page
1.	APOLOGIES FOR ABSENCE	
2.	MINUTES - 30 JUNE 2022 To take as read and approve as a true record the minutes of the meeting of the Committee held on the 30 June 2022.	(Pages 5 - 10)
3.	NOTIFICATION OF OTHER BUSINESS Members should notify the Chair of other business which they wish to be discussed at the end of either Part I or Part II business set out in the agenda. They must state the circumstances which they consider justify the business being considered as a matter of urgency. The Chair will decide whether any item(s) raised will be considered.	
4.	CHAIR'S ANNOUNCEMENTS Members are reminded that any declarations of interest in respect of any business set out in the agenda, should be declared as either a Disclosable Pecuniary Interest or Declarable Interest and are required to notify the Chair of the nature of any interest declared at the commencement of the relevant item on the agenda. Members declaring a Disclosable Pecuniary Interest must withdraw from the meeting for the duration of the item. Members declaring a Declarable Interest, wishing to exercise a 'Councillor Speaking Right', must declare this at the same time as the interest, move to the public area before speaking to the item and then must leave the room before the debate and vote.	
5.	PUBLIC PARTICIPATION To receive petitions, comments and questions from the public.	
6.	GRANT APPLICATIONS AND COMMUNITY UPDATE REPORT OF THE POLICY AND COMMUNITY MANAGER To advise the Committee on the current expenditure and balances of the Committee Grant budgets To bring to the Committee's attention details of recent requests received for Committee grant funding, made by community groups and local organisations, including: <ul style="list-style-type: none">• Offley Parish Council• Kimpton Primary School• Breachwood Green Charity Group (CIO)	(Pages 11 - 20)

To advise the Committee of the activities and schemes with which the Community Engagement officers have been involved in

To bring to the Committee's attention some important community-based activities that will take place during the next few months

**7. LOCAL CYCLING AND WALKING INFRASTRUCTURE PLAN
REPORT OF THE SENIOR TRANSPORT POLICY OFFICER**

(Pages
21 - 222)

To introduce the Local Cycling and Walking Infrastructure Plan consultation with a short presentation and to take questions.

**8. WARD MATTERS AND OUTSIDE ORGANISATIONS - MEMBERS'
REPORTS**

To receive any verbal reports from Members regarding Ward matters and Outside Organisations.

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Public Document Pack Agenda Item 2

NORTH HERTFORDSHIRE DISTRICT COUNCIL

SOUTHERN RURAL COMMITTEE

MEETING HELD IN THE COUNCIL CHAMBER, DISTRICT COUNCIL OFFICES, GERON
ROAD, LETCHWORTH
ON THURSDAY, 30TH JUNE, 2022 AT 7.30 PM

MINUTES

Present: *Councillors: Councillor George Davies (Chair), Councillor Mandi Tandi (Vice-Chair), David Barnard, Faye Frost, Ralph Muncer, Sam North and Claire Strong*

In Attendance:

James Lovegrove (Committee, Member and Scrutiny Officer), Claire Morgan (Community Engagement Team Leader), Aimee Flack (Community Engagement Officer) and Abigail Hamilton (Committee, Member and Scrutiny Officer)

Also Present:

At the commencement of the meeting approximately 5 members of the public, including registered speakers.

88 WELCOME

The Chair welcomed Members, Officers and members of the public to the Southern Rural Committee meeting.

The Chair advised Members of an error to the published agenda, which had incorrectly included Hitchin Area Committee minutes from the meeting on 26 May 2022. The correct Southern Rural Area Committee minutes had been published as a supplementary document.

89 APOLOGIES FOR ABSENCE

Audio recording – 2:00

Apologies for absence were received by Councillors Ian Moody and Lisa Nash.

Councillor Terry Tyler was absent.

90 MINUTES - 3 MARCH 2022, 26 MAY 2022

Audio Recording – 2:16

Councillor George Davies, as Chair, proposed and Councillor Claire Strong seconded and, following a vote, it was:

RESOLVED: That the Minutes of the Meeting of the Committee held on 3 March 2022 and 26 May 2022 be approved as a true record of the proceedings and be signed by the Chair.

91 NOTIFICATION OF OTHER BUSINESS

Audio recording – 4:03

There was no other business notified.

92 CHAIR'S ANNOUNCEMENTS

Audio recording – 4:07

- (1) The Chair welcomed those present at the meeting, especially Members attending their first Southern Rural Committee and the members of public who had attended to give a presentation and Councillor Ralph Muncer who had attended his first Area Committee meeting following his election in May;
- (2) The Chair drew attention to the item on the agenda front pages regarding Declarations of Interest and reminded Members that, in line with the Code of Conduct, any Declarations of Interest need to be declared immediately prior to the item in question.

93 PUBLIC PARTICIPATION

Audio recording – 4:30

The Chair invited Aimee Flack, Assistant Community Engagement Officer, to update Members on budgets.

- The current base budget from April 2022 - March 2023 is £8,700
- £222 was brought forward from last year, this leaves a budget of £8,922
- The grant applications from this meeting totalled £1,780 and after deducting this, left a budget balance of £7142
- The Codicote tennis club application, which was deferred at the last meeting, had withdrawn their application as they had been awarded funding elsewhere

Ann Warner and Councillor Yvonne Hart from Holwell Parish Council, thanked the Chair for the opportunity to address the Committee regarding funding for the Pavilion as follows:

- The Parish Council gets £9000 a year
- The old pavilion was dilapidated and was a danger and because of this they couldn't retain any of the old pavilion and had to complete demolish it and rebuild
- Holwell Parish Council managed to get grants to build the new pavilion and the Parish Council contributed to the build
- Parish Council didn't have enough money to furnish the pavilion
- They wanted the new pavilion to be used by residents for things such as parties and community events
- The pavilion is used for sports such as cricket in the summer and football in the winter and has changing rooms for this

The Chair thanked Ms Warner and Ms Hart for their presentation.

The following members asked questions:

- Councillor Muncer
- Councillor Barnard
- Councillor Strong

In response to questions, Ms Warner and Ms Hart advised:

- The build should be completed in July or August
- Parish Council applied for many other grants before the new build but didn't get them

- Parish Council received a grant from the football foundation which is why there are changing rooms, as well as Settle Homes, and the Rands Foundation Trust
- The pavilion is rented out during events however the charge would be minimal as they want it to be accessible and used by all the residents. The only amount they would charge would be to cover the cost of cleaning after the event and to help with the maintenance of the grounds.

Councillor Barnard also advised that if any small items are needed in the future then he would consider using the Hertfordshire County Council locality budget.

94 GRANT APPLICATION - HOLWELL PARISH COUNCIL

Councillor Sam North proposed, Councillor David Barnard seconded and, following a vote, it was:

RESOLVED: That the Committee allocate £1,211 to Holwell Parish Council towards chairs, tables, cooker, and fridge/freezer as outlined in paragraph 8.1.1 of the officer's report.

95 PUBLIC PARTICIPATION

Audio recording – 18:08

Clare Gooden from the River Hiz Conservation Group thanked the Chair for the opportunity to address the Committee regarding conservation of the River Hiz as follows:

- Chalk streams are rare rivers, there are only 200 in the world. 85% of these are found in the south of England and North Hertfordshire has three of these.
- These streams have a fragile environment with specialised plants and support special wildlife habitats and species and are important for natural events such as fish like brown trout laying eggs
- The rivers are at risk from overextraction of ground water, invasive non-native species, disturbance or destruction of bank sides and flood plain habitats, and pollution
- A shared initiative was launched in 2019 by Ickleford Parish Council and the Herts and Middlesex Wildlife Trust to involve local residents who are interested in protecting the chalk streams in Ickleford and the surrounding areas
- 96 people attended the first meeting and the living rivers officer from the Herts and Middlesex Wildlife Trust created a 5-year plan which the Ickleford Parish Council adopted in 2020
- The River Hiz Conservation Group (RHCG) received a start-up grant from North Hertfordshire District Council in 2021
- RHCG relies on around 20 volunteers to carry out the physically demanding work in the river within a seasonal calendar, as well as guidance from the Herts and Middlesex Wildlife Trust
- RHCG have worked on other projects such as website design, education groups, newsletters and information boards
- RHCG needed funding for essential expenses such as a 3-year environment agency permits, public liability insurance, protective safety clothing, suitable tools, and professional training and supervision for volunteers
- These resources cost £1,550 in total, and they have received £986 in donations and so are asking for the remaining balance to keep the volunteers well equipped and safe

The Chair thanked Ms Gooden for her presentation.

Councillor David Barnard also offered an additional 50% of the grant amount from Hertfordshire County Council locality budget.

96 GRANT APPLICATION - RIVER HIZ CONSERVATION GROUP

Councillor Claire Strong proposed, Councillor David Barnard seconded and, following a vote, it was:

RESOLVED: That the Committee allocate £569 to River Hiz Conservation Group towards conservation work of Ickleford's Chalk Stream as outlined in paragraph 8.1.2 of the officer's report.

97 GRANTS & COMMUNITY UPDATE

Audio recording – 32:22

NB: Parts of this item was considered prior to Item 5 (Minute 4:30 refers)

Aimee Flack, Assistant Community Engagement Officer, presented the report entitled Grants & Community Update and gave a verbal presentation, which included:

- The Community Engagement team have explored the idea of creating a Parish forum – a chance for Parishes in the Southern Rural area to meet online to connect and share information, events and projects and explore any common issues that could be worked on collaboratively or raised in Full Council
- There was a potential that the Parish forum to be done quarterly with the first one being in autumn. Gather responses about whether it needs to be done more or less frequently and using the first meeting to discuss themes which Parishes want to talk about
- The Council has processed grants to utilise the Health Protection Board funding to assist the community's recovery following the pandemic
- The Community Engagement team currently have one application and a couple pending, and are arranging a date for a panel meeting
- Aimee highlighted the network groups that coordinate with themes such as food provision, youth action and the reintroduction of green and growing network group which is an opportunity for those who use green spaces to support local communities with sustainability and healthy lifestyles
- Aimee brought attention to the North Herts Engage Facebook page where community groups can share events and information can be highlighted
- There was an update from Down the Woods who had 8 participants and really benefitted from the activities the group put on
- Since the report was published there was also an update from Pirton Joycare who hosted a Jubilee afternoon tea with 74 residents aged 60+ who celebrated and met new friends, and received really positive feedback

Councillor Claire Strong also gave an update on Pirton Players and their new lighting system which received positive feedback.

Councillor David Barnard gave an update on the Ickleford Larder which started at the beginning of the pandemic. Food that would normally be taken to landfill has been distributed to the community for free and has provided food for those who really need it. This has not only provided for Ickleford but also the surrounding areas in North Hertfordshire.

Councillor George Davies proposed, Councillor Faye Frost seconded and, following a vote, it was:

RESOLVED: That the Committee be recommended to endorse actions taken by the Community Engagement team to promote greater community capacity and well-being for Southern Rural.

REASON FOR DECISION:

- (1) To ensure the Members are kept informed of the work of the Community Engagement Team
- (2) This report intended to inform Members of the financial resources available. It draws attention to the current budgetary situation by assisting in the effective financial management of the budgets. This ensures that all actions are performed in line with the Authority's Financial Regulations, the Council's Constitution, and the guidance of the existing Grants policy as agreed by Cabinet in January 2020.
- (3) The awarding of financial assistance to voluntary organisations and the use of discretionary spending allows the Committee to further the aims of the Council Plan.

98 WARD MATTERS AND OUTSIDE ORGANISATIONS - MEMBERS' REPORTS

Audio recording – 41:28

Members gave updates on the following Ward Matters and Outside Organisations:

Closure of Kimpton Surgery –

Councillor Ralph Muncer advised that there was a public consultation and a public meeting opposing the NHS closure of the Kimpton Surgery and that many residents attended. He stated that the closure of this surgery would force residents to travel elsewhere and would have a large impact on elderly and vulnerable people, as well as those who rely on public transport. He reassured Kimpton residents and in response to a question from Councillor Sam North said that the local MP and County Councillor are heavily involved in this.

Councillor David Barnard proposed wording for a motion for consideration to Council as follows: "That this Council regrets the proposal of the NHS to close the surgery in Kimpton and urges the Clinical Commissioning Group (CCG) to take urgent action to withdraw this proposal, and ensure that residents of Kimpton and surrounding rural communities can readily access important medical care". He was advised that specific wording would have to be reviewed.

Councillor Sam North advised that the Council appoints members to sit on organisations such as the Hertfordshire Health Scrutiny Committee and that residents might benefit from consideration of the topic by full Council.

Councillor David Barnard proposed, Councillor Ralph Muncer seconded and, following a vote, it was:

RECOMMENDED TO FULL COUNCIL: That the Council discusses the closure of Kimpton GP surgery and the issue of accessibility of healthcare services for residents in rural wards.

REASON FOR RECOMMENDATION: To act as forum for discussion on matters of local interest and to make arrangements for the provision of information about local services and other matters to people in the area.

Proposals to build solar parks in North Hertfordshire –

Councillor David Barnard advised that he has seen a proposal to build a solar park in the east of Luton and will come out as far as the villages in Beechwood Green. There will be a formal

application by the summer. He asked everyone to be mindful and to support the villages around the region as it will have a visual impact on the green belt.

Councillor George Davies also noted that he was aware of the proposals in his own ward and advised Councillors that they will see further proposals soon.

Rand's Educational Foundation –

Councillor Claire Strong advised that the charity is changing and that a council nomination from North Hertfordshire District Council is no longer needed.

Councillors Portal –

The Chair advised that a new Councillors Portal was available for Members to report ward issues and that further training would be made available for Members on this.

The meeting closed at 8.26 pm

Chair

SOUTHERN RURAL COMMITTEE 29 September 2022

*PART 1 – PUBLIC DOCUMENT

TITLE OF REPORT: GRANTS & COMMUNITY UPDATE

REPORT OF: THE POLICY & COMMUNITIES MANAGER

EXECUTIVE MEMBER: COMMUNITY ENGAGEMENT

CURRENT COUNCIL PRIORITIES: PEOPLE FIRST, SUSTAINABILITY, A BRIGHTER FUTURE TOGETHER

1 EXECUTIVE SUMMARY

- 1.1 To advise the Committee on the current expenditure and balances of the Committee Grant budgets.
- 1.2 To bring to the Committee's attention details of recent requests received for Committee grant funding, made by community groups and local organisations.
- 1.3 To advise the Committee of the activities and schemes with which the Community Engagement officers have been involved in.
- 1.4 To bring to the Committee's attention some important community-based activities that will take place during the next few months.

2 RECOMMENDATIONS

- 2.1 That the Committee be recommended to consider allocating funding from their discretionary community budget towards the projects below.
- 2.2 **£500** to Offley Parish Council towards a new noticeboard for the village of Offley as outlined in 8.1.1-8.1.4.
- 2.3 **£1157** to Kimpton Primary School for a painting station as part of their playground development as outlined in 8.1.5-8.1.10.
- 2.4 **£659** to Breachwood Green Charity Group (CIO) for two community coffee mornings, website management and annual insurance for litter picking in 8.1.11-8.1.14.
- 2.5 That the Committee be recommended to endorse the actions taken by the Community Engagement team to promote greater community capacity and well-being for Southern Rural.

3. REASONS FOR RECOMMENDATIONS

- 3.1 To ensure the Committee is kept informed of the work of the Community Engagement Team.
- 3.2 This report is intended to inform Members of the financial resources available to the Committee. It draws attention to the current budgetary situation by assisting in the effective financial management of the Area Committee's budget. This ensures that all actions are performed in line with the Authority's Financial Regulations, the Council's Constitution, and the guidance of the Grants Policy as agreed by Cabinet in July 2021.
- 3.3 The awarding of financial assistance to voluntary organisations and the use of discretionary spending allows the Committee to further the aims of the Council Plan.

4. ALTERNATIVE OPTIONS CONSIDERED

- 4.1. There are no alternative options being proposed other than those detailed within the text of this report. However, during debate at committee, Members may wish to comment and offer additional views on any of the items included within this report.

5. CONSULTATION WITH RELEVANT MEMBERS AND EXTERNAL ORGANISATIONS

- 5.1 Consultation with Members has occurred in connection with the allocation of funds for Community Projects.
- 5.2 Consultation with the respective officers and external bodies/groups has taken place regarding funding proposals for Committee Funds.

6. FORWARD PLAN

- 6.1 This report does not contain a recommendation on a key Executive decision and has therefore not been referred to in the Forward Plan.

7. BACKGROUND

- 7.1 With reference to the Council's Constitution, Section 9.3 Area Committees will include budgets for the purpose of providing grants and discretionary budgets that may be used within the area of the Committee for economic, social, and environmental well-being.
- 7.2 Members are asked to note the information detailed in Appendix 1. Southern Rural Area Committee Budget spreadsheet, which relates to the Committee budget balances for 2022/23. The spreadsheet also details pre-allocated sums carried forward from the previous financial year, including balances and past expenditure.

8. RELEVANT CONSIDERATIONS

Councillors are at liberty to consider any amount requested in a grant application if the committee has sufficient funds in the 2022/2023 budget.

8.1 Grant Applications

8.1.1

Applicant	Offley Parish Council
Project	Noticeboard for the village of Offley.
Sum requested	£500
Total project cost	£1,812.19
Match funding	£300 HCC Locality Budget £1,012.19 Parish Reserves
Previous support	2020: £2,000 towards playground equipment
NHDC Policy met	Yes
Council objectives	People First

8.1.2 Offley Parish Council would like to purchase a new noticeboard for the village of Offley as the existing board is old, leaks and is difficult to operate.

8.1.3 The Parish has many posters on display promoting local groups and businesses, as well as communicating important dates such as Parish Council meetings and Police Surgeries.

8.1.4 All residents and visitors to the village will benefit from being able to view latest updates.

8.1.5

Applicant	Kimpton Primary School
Project	Painting station (part of playground redevelopment).
Sum requested	£1,157
Total project cost	£1,157
Match funding	Exploring options for the rest of the playground redevelopment.
Previous support	None from NHC
NHDC Policy met	Yes
Council objectives	People First A Brighter Future Together

8.1.6 Kimpton Primary School are in the process of developing the KS1 playground environment for their early years children to improve both their well-being and more importantly to enhance their physical development that was so greatly affected during the pandemic lockdowns.

8.1.7 They have considered different proposals and have chosen one which has the least financial layout but the maximum impact on the developmental skills of the children. It will include things such as a climbing/obstacle track, water play area, stage for play acting etc.

8.1.8 As part of this development, they are applying for funding for a painting station. Below is a mock up from the company of the painting station:



8.1.9 The playground development is all about putting people first. The children are the primary beneficiaries but the skills they will learn and the improvements to their development both physically and socially, as well as improved well-being, will also benefit their families.

8.1.10 The design and materials used in the playground development have been chosen specifically to be long-lasting and hard wearing. Happy children are better learners, better learners will have a brighter future together with their families.

8.1.11

Applicant Project	Breachwood Green Charity Group (CIO) Two community coffee mornings, website management and annual insurance for litter picking.
Sum requested	£659
Total project cost	£669
Match funding	£10 funds raised from coffee shop June 2022.
Previous support	2021 £441 for litter picking equipment
NHDC Policy met	Yes
Council objectives	People First Sustainability

8.1.12 Breachwood Green Charity Group conduct monthly Parish-wide litter picks to keep the area clean using local resident volunteers. They provide pop-up not-for-profit coffee shops to encourage social interaction and mobilisation in the local community.

8.1.13 They would like funding towards:

- Hall hire and refreshments for two community coffee mornings which will be held in October and December 2022. It is hoped that through charging for the refreshments, this will go towards funding future events.
- Management of their website which is used to communicate and engage with the local residents and avoid paper wastage – www.breachwood.green.
- Annual insurance for litter picking.

8.1.14 Local residents will benefit from the group's work as the meetups provide an opportunity to connect and build community resilience. In one year, they have increased from 4 to 15 volunteers involved in their monthly litter picking.

8.2 Community Engagement Update and previous grants awarded

8.2.1 Community Engagement Team

8.2.2 The team have been continuing to engage and network with local community groups and initiatives. This involved:

- Co-ordinating the first online Parish Forum Network meeting for 26th September, for Parishes to connect and share current challenges and issues.
- As part of a webinar for North Herts CVS, we are putting together a short online presentation to highlight local support available for Ukrainian refugees, available from 14th September.
- Processing grants to utilise the Health Protection Board funding to assist the community's recovery following the Covid 19 Pandemic.

- To celebrate Local Democracy Week and Parliament Week in October/November, the team are developing youth democracy activities for Keystage 2 primary school children.
- Supporting various local and district wide Network Groups such as Youth Action, Food Provision, Arts and Culture and the newly resurrected Green and Growing Group.
- Continuing to share and disseminate information on social media and to mailing lists, keeping in touch with the community, voluntary, statutory and non-statutory agencies.

8.3 Highways Matters

- 8.3.1 This section is included within the community update report for each committee cycle to facilitate debate and enable appropriate feedback on any of the proposed or listed Highways related schemes.
- 8.3.2 Any new proposals or revised schemes will be forwarded to the respective Herts County Councillor for consideration who will in turn report back and advise the Committee accordingly.

9. LEGAL IMPLICATIONS

- 9.1 Sections 9.8.1 (a) and 9.8.1 (b) of the Council's Constitution in respect of the Area Committees' Terms of Reference, notes the following: - To allocate discretionary budgets within the terms determined by the Council and to allocate devolved budgets and activities within the terms determined by the Council. This is outlined in the current Grant Policy agreed by Cabinet in July 2021. Section 9.8.2 (h) of the Constitution in respect of Area Committees' Terms of Reference notes that they may: - Establish and maintain relationships with outside bodies/voluntary organisations operating specifically with the area including, where appropriate, the provision of discretionary grant aid/financial support etc. but excluding grants for district-wide activities.
- 9.2 Chapter 1, s1-8 of the Localism Act 2011 provides a General Power of Competence which gives local authorities the powers to do anything provided that it is not specifically prohibited in legislation.
- 9.3 Section 137 of the Local Government Act 1972 provides specific authority for the Council to incur expenditure on anything which is in the interests of and will bring direct benefit to its area. This includes a charity or other body operating for public service.

10. FINANCIAL IMPLICATIONS

- 10.1 As outlined in Appendix 1. Southern Rural Area Committee budget 2022/23.
- 10.2 The 2022/23 base budget was **£8,700**, with **£222** carried forward from the 2021/22 budget. **£1,780** was granted at the last Committee meeting. This leaves a budget available of **£7,142**.
- 10.3 The grant applications for this meeting total **£2,316** and if the Members agree the grants outlined in this report this will leave a balance of **£4,826**.

11. RISK IMPLICATIONS

- 11.1 There are no relevant risk entries that have been recorded on Pentana Risk, the Council's performance and risk system. Individual events should have their own risk assessments in place to mitigate any health and safety issues. Whenever a request for grant funding for equipment is received, the recipient of the funding will be advised to obtain insurance for the item to avoid a repeat request for funding in the event of the equipment being stolen or damaged. There are no pertinent risk implications for the Authority associated with any items within this report.

12. EQUALITIES IMPLICATIONS

- 12.1. In line with the Public Sector Equality Duty, public bodies must, in the exercise of their functions, give due regard to the need to eliminate discrimination, harassment, victimisation, to advance equality of opportunity and foster good relations between those who share a protected characteristic and those who do not.
- 12.2. Area committee funding is awarded to community groups that clearly demonstrate positive impact on the community and wider environment. The projects outlined in this report seek to advance equality of opportunity and foster good relations.

13. SOCIAL VALUE IMPLICATIONS

- 13.1. The Social Value Act and "go local" requirements do not apply to this report.

14. ENVIRONMENTAL IMPLICATIONS

- 14.1 Breachwood Green Charity Group securing annual insurance for litter picking will enable them to continue maintaining and improving their local environment.

15. HUMAN RESOURCE IMPLICATIONS

- 15.1 There are no pertinent Human Resource implications associated with any items within this report.

16. APPENDICES

- 16.1 Appendix 1 – Appendix 1 Southern Rural Area Committee budget 2022/23

17. CONTACT OFFICERS

- 17.1 Author:

- 17.1.1 Aimee Flack, Assistant Community Engagement Officer
Email: aimee.flack@north-herts.gov.uk ext. 4274

- 17.2 Contributors:

- 17.2.1 Claire Morgan, Community Engagement Team Leader
Email: Claire.morgan@north-herts.gov.uk ext. 4226

- 17.2.2 Reuben Ayavoo, Policy & Communities Manager
Email: reuben.ayavoo@north-herts.gov.uk ext. 4212

- 17.2.3 Georgina Chapman, Policy Officer
Email: Georgina.Chapman@north-herts.gov.uk ext. 4121

- 17.2.4 Anne Miller, Assistant Accountant
Email: Anne.Miller@north-herts.gov.uk ext. 4374

- 17.2.5 Nurainatta Katevu, Legal Regulatory Team Manager
Email: Nurainatta.katevu@north-herts.gov.uk ext. 4364

- 17.2.6 Rebecca Webb, HR Services Manager
Email: Rebecca.Webb@north-herts.gov.uk ext. 4481

- 17.2.7 Tim Everitt, Performance & Risk Officer
Email: tim.everitt@north-herts.gov.uk ext. 4646

18. BACKGROUND PAPERS

- 18.1 Review of Policies and Procedures for Financial Assistance to Voluntary and Community Organisations, November 2002.

- 18.2 Review of Grant Policy, Cabinet July 2021.

SOUTHERN RURAL AREA COMMITTEE BUDGET 2022/23

<u>SUMMARY/ TOTALS</u>	<u>Funding</u>	<u>Allocated</u>	<u>Spent</u>	<u>Outstanding</u>	<u>Unallocated Budget</u>					
CARRY FORWARD BUDGET 2021/22	£222	£222	£222	£0	£0					
BASE BUDGET 2022/23	£8,700	£1,558	£1,558	£0	£7,142					
TOTAL	£8,922	£1,780	£1,780	£0	£7,142					

<u>2020/21</u>	<u>Funding</u>	<u>Code</u>	<u>Project</u>	<u>Allocated</u>	<u>Date</u>	<u>Spent</u>	<u>Outstanding</u>	<u>Unallocated Amount</u>	<u>Comments</u>
CARRY FORWARD BUDGET 2021/22	£222		Holwell Parish Council - tables & chairs for pavilion	£222	30-Jun-22	£222	£0		Total grant £1,211 - £989 from 2022/23 base budget
	£222			£222		£222	£0	£0	

<u>2021/22</u>	<u>Funding</u>		<u>Project</u>	<u>Allocated</u>	<u>Date</u>	<u>Spent</u>	<u>Outstanding</u>	<u>Unallocated Amount</u>	<u>Comments</u>
BASE BUDGET 2022/23	£8,700		Holwell Parish Council - tables & chairs for pavilion	£989	30-Jun-22	£989	£0		Total grant £1,211 - £989 from 2021/22 c/fwd budget
			Ickleford Parish Council - conservation activities	£569	30-Jun-22	£569	£0		
							£0		
							£0		
							£0		
							£0		
							£0		
	£8,700			£1,558		£1,558	£0	£7,142	

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**Southern Rural Committee
29 September 2022**

PUBLIC DOCUMENT

TITLE OF REPORT: CONSULTATION ON NORTH HERTFORDSHIRE DISTRICT LOCAL CYCLING AND WALKING INFRASTRUCTURE PLAN

REPORT OF: SERVICE DIRECTOR - REGULATORY

EXECUTIVE MEMBER: EXECUTIVE MEMBER FOR PLANNING AND TRANSPORT

COUNCIL PRIORITIES: PEOPLE FIRST & SUSTAINABILITY

1. EXECUTIVE SUMMARY

- 1.1. To inform Members of a public consultation on the draft North Hertfordshire District Local Cycling and Walking Infrastructure Plan (LCWIP) running from 26 September to 7 November 2022 for six weeks.

2. RECOMMENDATIONS

- 2.1. That the committee note the contents of the report.
- 2.2. That the committee Members be encouraged to, individually and through the Area Committee, respond to the North Hertfordshire District LCWIP consultation draft attached at Appendix 1, and encourage residents and local organisations to do so too.

3. REASONS FOR RECOMMENDATIONS

- 3.1. The LCWIP is a critically important document that sets out priorities for future investment to make the built environment safer and more attractive for people walking, cycling, using a wheelchair or mobility scooter, or (subject to new legislation) e-scootering (collectively referred to as 'active travel').
- 3.2. Schemes set out in the draft LCWIP can expect to be funded over the next several years by Active Travel England (a funding body and inspectorate set up by Government) and Section 106 contributions from developers following approval of their planning applications.
- 3.3. Having a comprehensive plan with strong local buy-in should ensure North Herts attracts significant government funding, and that schemes in the LCWIP can be developed and delivered.

4. ALTERNATIVE OPTIONS CONSIDERED

- 4.1 There are no alternative options being proposed as this report is informing members about the draft LCWIP consultation process being undertaken by Hertfordshire County Council. The Council could refrain from contributing to the preparation of or responding to the draft LCWIP, but this could result in a document that may not accord with the Council's own Transport, Local Plan and Climate Change policies.

5. CONSULTATION WITH RELEVANT MEMBERS AND EXTERNAL ORGANISATIONS

- 5.1 Executive Members and Deputies have been briefed on the relevant matters in this report. Members received a presentation on the consultation draft at the Highways Liaison Panel meeting on 14 September.
- 5.2 The development of the draft LCWIP included consultation with local members and organisations in 2021 through online workshops on 21 July and 29 November, and an in-person workshop on 1 December.
- 5.3 The consultation process is online, and open to all residents, members and organisations to respond to. Hard copies of the report and consultation questionnaire are available at the District Council Office and local libraires. NHC and Hertfordshire County Council (HCC) have worked together on a communication and engagement plan in order to reach local members, organisations and residents. This will be through internal and external newsletters, press releases, social media, Town Talks, councillor surgeries, and other talks and meetings.

6. FORWARD PLAN

- 6.1. This report does not contain a recommendation on a key Executive decision and has therefore not been referred to in the Forward Plan.

7. BACKGROUND

- 7.1. The government's *Active travel: local authority toolkit*, published on 10 August 2022, sets out the primary actions for local authorities with respect to active travel:
- **Develop Local Cycling and Walking Infrastructure Plans (LCWIPs).**
 - Develop and implement Travel Demand Management Plans.
 - Plan for and improve active travel infrastructure.
 - Promote behaviour change to enable active travel.
- 7.2. LCWIPs are part of the government's 2017 cycling and walking investment strategy.
- 7.3. Although not mandatory, the aim of an LCWIP is to help authorities in England take a strategic approach to improving conditions for walking and cycling and ensure that consideration is given to walking and cycling within local planning and transport policies.

7.4. Developing an LCWIP will help an authority make a strong case for future investment in active travel infrastructure.

7.5. The main outputs from an LCWIP are:

- a mapped network plan for walking and cycling that identifies preferred routes, current and future travel patterns, and core zones for further development;
- a prioritised programme of infrastructure improvements for future investment in the short, medium and long term that contributes towards meeting broader local goals;
- a report that sets out the underlying analysis, including the barriers and enablers for walking and cycling, and provides a narrative to support the improvements identified.

7.6. Government funding for active travel (£2 billion, announced in May 2020) will now be administered by Active Travel England.

7.7. Active Travel England (ATE) is a new executive agency of government, set up to deliver on two clear objectives (key points emboldened):

*The DfT [Department for Transport] and ATE share the common objective of delivering **increases in active travel to 50% of all journeys in urban areas**. To achieve this ATE and the DfT will work together in recognition of each other's roles and areas of expertise, providing an effective environment for ATE to achieve its objectives through the promotion of partnership and trust and ensuring that ATE also supports the strategic aims and objective of the DfT and wider government as a whole.*

*ATE will support the department's objectives by driving up standards and the capacity and motivation of local authorities and other organisations providing transport works to deliver active travel infrastructure and provide best practice design standards. **It will manage funding for dedicated walking and cycling initiatives and challenge failure by withholding funding for failure to meet standards**. It will assess the compliance of schemes in the City Region Sustainable Transport Fund, Roads Investment Strategy 2, the Levelling Up Fund and other significant departmental investments that deliver active travel and **prevent funding for schemes that do not meet DfT design guidance**. It will offer training and be a repository of best practice guidance for local authorities and developers working to ensure active travel design is embedded in new developments.*

7.8. ATE will also act as a statutory consultee on strategic (large) planning applications to ensure compliance with the government's strategy on active travel and agreed standards, as set out in Local Transport Note 1/20. (See link in section 17 below)

8. RELEVANT CONSIDERATIONS

8.1. HCC in partnership with NHC have prepared the draft North Hertfordshire District LCWIP for public consultation. The draft Report is attached at Appendix 1 and associated

appendices at Appendix 2. The LCWIP seeks to unlock substantial new funding from government for North Hertfordshire.

8.2. The LCWIP will determine the priorities for investment in walking and cycling infrastructure in North Herts for the next several years.

8.3. The LCWIP will be an important part of the evidence for the Sustainable Travel Town programmes for Letchworth Garden City and Royston.

8.4. The LCWIP supports:

- Local Transport Plan policies 1 (Transport User Hierarchy), 6 (Accessibility), 7 (Active Travel – Walking), 8 (Active Travel – Cycling), 15 (Speed management), 17 (Road Safety), 18 (Transport Safety and Security), 19 (Emissions Reduction).
- The North Hertfordshire Growth and Transport Plan, adding detail to Packages 4, 5, and 7–15 of the interventions proposed for Hitchin, Letchworth, Baldock, Royston, Knebworth and Little Wymondley.
- Emerging Local Plan policies SP6 (Sustainable transport), SP9 (Design and Sustainability) SP14 (Site BA1 – North of Baldock), SP15 (Site LG1 – North of Letchworth Garden City), SP17 (Site HT1 – Highover Farm, Hitchin), T1 (Assessment of transport matters), BA3 (Land south of Clothall Common), BA4 (Land east of Clothall Common), IC3 (Land at Bedford Road), KB1 (Land at Deards End), KB2 (Land off Gipsy Lane), KB4 (Land east of Knebworth), and generally supports future developments in Hitchin, Letchworth, Baldock, Royston, Knebworth and Little Wymondley.
- North Herts Transport Strategy policies:
 - 2. Adoption of a transport user hierarchy;*
 - 3. Deliver a step change in cycling and improved walking within the main urban centres through travel behaviour change and better facilities;*
 - 5. A 'Sustainable Spine' corridor along the A5051 with a focus on enhanced public transport and cycling connectivity between the towns.*
- North Herts Council Climate Change Strategy:
 - Progressing the implementation of a better cycle network in North Herts, linking the district and beyond*
- Knebworth Neighbourhood Plan Policy KBT1:
 - KBT1 Sustainable Modes of Travel The provision of sustainable modes of transport, electric vehicle charging points and the protection and enhancement of public rights of way will be supported.*

(Links to the above reports are provided at Section 17 Background Papers)

8.5 This is the first iteration of the North Herts LCWIP. Hertfordshire County Council are developing LCWIPs with each of the ten districts and boroughs in Hertfordshire. This necessarily limits the amount of officer time and budget available to develop the North Herts LCWIP. For this reason it focuses on Hitchin, Letchworth, Baldock, Royston,

Knebworth, and the shortest inter-urban route, Stevenage–Hitchin via Little Wymondley. The plan identifies priority routes elsewhere in the district, and acknowledges that a second iteration is needed to complete the plan. NHC and HCC will work in partnership to review this first iteration of the LCWIP and its effect within a 2 year timeframe and will be subject to available funding and resources both locally and nationally.

- 8.6 Consultation on the draft LCWIP will run from 26 September to 7 November 2022 for six-weeks. HCC will be running the consultation. The consultation will be run entirely online, largely because of its scale. Officers will present a report on it to each of the Area Committees. Officers will also be giving Town Talks, attending councillor surgeries and other pop-up events during the consultation. Dates and venues will be published on both the HCC and the NHC websites. Hard copies of the consultation questionnaire and a hard copy of the draft report and appendices will be made available at the Council Offices Customer Services Centre and in the local libraries. Members are also requested to help collate any consultation responses for those residents that are not able or do not have access to the internet. Full details on how to submit a response will be published prior to and during the consultation period. The below online link to the consultation will be accessible from 26th September. [Local cycling and walking infrastructure plans \(LCWIPs\) | Hertfordshire County Council](#).
- 8.7 The outcome of public consultation will be reported to Hertfordshire Highway & Transport Cabinet Panel together with the revised LCWIP for adoption. The final LCWIP will subsequently be reported to Cabinet for endorsement.

9. LEGAL IMPLICATIONS

- 9.1. Under the Terms of Reference of the Constitution, paragraph 9.8.2 (d) provides that area committees should act as a forum for discussion on matters of local interest and in particular elicit/hear the views of local bodies and organisations
- 9.2. There are no legal implications arising from this report as this is a consultation being undertaken by Herts County Council.

10. FINANCIAL IMPLICATIONS

- 10.1. There are no financial implications for North Herts arising from this report. North Herts contributed circa £15k towards the preparation of the draft LCWIP which was funded from the GAF Revenue reserve budget, with HCC funding two thirds of the budget.
- 10.2. The consultation on the draft LCWIP is being funded by HCC.

11. RISK IMPLICATIONS

- 11.1. There are no risk implications arising from this report or the consultation.
- 11.2. Development and adoption of an LCWIP by HCC and endorsement by NHC will greatly reduce the risk of missing out on future funding opportunities to deliver improvements for active travel.

12. EQUALITIES IMPLICATIONS

- 12.1. In line with the Public Sector Equality Duty, public bodies must, in the exercise of their functions, give due regard to the need to eliminate discrimination, harassment, victimisation, to advance equality of opportunity and foster good relations between those who share a protected characteristic and those who do not.
- 12.2. The LCWIP consultation will endeavour to reach a broadly representative cross-section of the North Herts population. Members' assistance is sought in getting word out to residents in their ward/division.
- 12.3. Feedback through the consultation that relates to the needs and concerns of people with protected characteristics will be addressed in updates to the Draft LCWIP.

13. SOCIAL VALUE IMPLICATIONS

- 13.1. The Social Value Act and "go local" requirements do not apply to this report.
- 13.2. The consultation involves no external procurement.

14. ENVIRONMENTAL IMPLICATIONS

- 14.1. There are no direct environmental implications from the consultation.
- 14.2. Feedback through the consultation that relates to environmental protections or enhancements will be addressed in updates to the Draft LCWIP.

15. HUMAN RESOURCE IMPLICATIONS

- 15.1. Engagement and communications around the consultation is being managed within the existing resources of Hertfordshire and North Herts Councils.

16. APPENDICES

- 16.1. Appendix 1: North Hertfordshire District LCWIP: Consultation Draft
- 16.2. Appendix 2: North Hertfordshire District LCWIP: Consultation Draft – Combined Appendices

17. CONTACT OFFICERS

- 17.1 Ian Fullstone, Service Director of Regulatory
01462 474480 ian.fullstone@north-herts.gov.uk

Contributors

- 17.2 Edward Leigh, Senior Transport Policy Officer
01462 474368 edward.leigh@north-herts.gov.uk

- 17.3 Louise Symes, Strategic Projects & Infrastructure Manager
01462 474359 louise.symes@north-herts.gov.uk
- 17.4 Nurainatta Katevu, Legal Regulatory Team Manager
01462 474364 nurainatta.katevu@north-herts.gov.uk
- 17.5 Jodie Penfold, Group Accountant
01462 474332 jodie.penfold@north-herts.gov.uk
- 17.6 Rebecca Webb, HR Services Manager
01462 474481 rebecca.webb@north-herts.gov.uk
- 17.7 Reuben Ayavoo, Policy and Communities Manager
01462 474212 reuben.ayavoo@north-herts.gov.uk

18. BACKGROUND PAPERS

- NHDC: [Draft Local Plan](#)
- NHDC: [Transport Strategy](#)
- Letchworth Heritage Foundation: [Letchworth Garden City Cycling Strategy](#)
- Wymondley Parish Council: [Wymondley Neighbourhood Plan](#)
- Knebworth Parish Council: [Knebworth Neighbourhood Plan](#)
- HCC: [Local Transport Plan](#)
- HCC: [North Central Hertfordshire Growth and Transport Plan](#)
- HCC: [Improving walking and cycling across Hertfordshire \(Active Travel Fund\)](#)
- DfT: [£2 billion package to create new era for cycling and walking](#)
- DfT: [Cycling and walking investment strategy](#)
- DfT: [Active travel: local authority toolkit](#)
- DfT: [Gear Change: a bold vision for cycling and walking](#)
- DfT: [Local Transport Note 1/20](#)
- ATE: [Active Travel England Framework Document](#)

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North Hertfordshire District

LOCAL CYCLING AND WALKING INFRASTRUCTURE PLAN

HCC / NHDC

FINAL DRAFT FOR CONSULTATION



North Hertfordshire District

LOCAL CYCLING AND WALKING INFRASTRUCTURE PLAN

HCC / NHDC

TYPE OF DOCUMENT (VERSION) PUBLIC

PROJECT NO. 70081936

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North Hertfordshire District

LOCAL CYCLING AND WALKING INFRASTRUCTURE PLAN

HCC / NHDC

WSP House

70 Chancery Ln,

London

WC2A 1AF

Phone: 020 7314 500

WSP.com

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LCWIP GIS MODEL: DISTRICT WIDE WALKING OUTPUTS

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NORTH HERTS DISTRICT NETWORK PLANS FOR WALKING AND CYCLING

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APPENDIX J

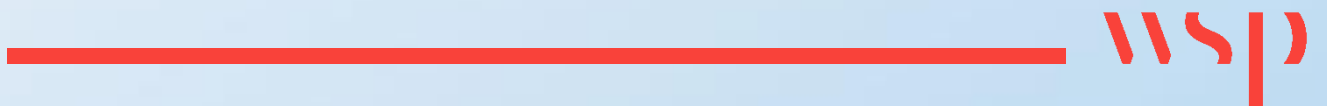
KEY FOR PRIORITISED ROUTES

APPENDIX K

LIST OF ACRONYMS USED IN REPORT

1

INTRODUCTION

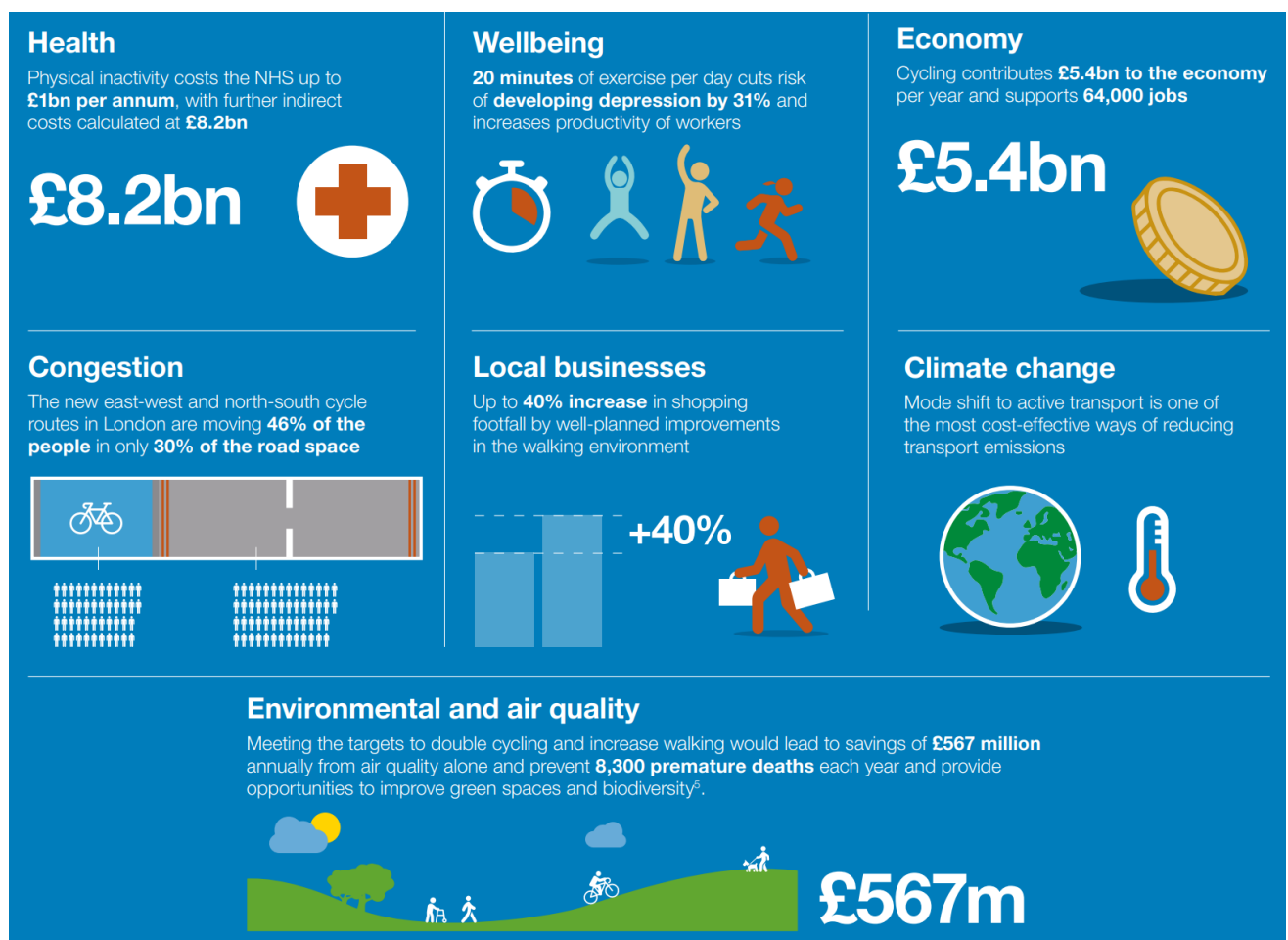


1 INTRODUCTION

1.1 INTRODUCTION

- 1.1.1. This Local Cycling and Walking Infrastructure Plan (LCWIP) covers the North Herts District and showcases that Hertfordshire County Council (HCC) and North Herts District Council (NHDC) share central government's ambition to make cycling and walking the natural choice for shorter journeys or as part of a longer journey.
- 1.1.2. Evidence shows that enabling increased active travel trips brings benefits in areas such as road safety, congestion reduction, air quality, social mobility, the economy and public health and wellbeing. Gear Change (England's Cycling and Walking Strategy, published in 2020 by the Department for Transport) gathers much of the existing research on the benefits of active travel. Figure 1-1 is an infographic taken from Gear Change, listing some of the key benefits.

Figure 1-1 - The Benefits of Cycling and Walking Investment (Source: Gear Change)



- 1.1.3. This LCWIP represents a first stage in the councils' aspirations for active travel network development across the district, with the LCWIP approach being applied across the rest of the county in due course.
- 1.1.4. To achieve this the council recognises the need for a step change in the process of planning active travel networks, identifying and prioritising infrastructure improvements, and incorporating emerging best practice in design.
- 1.1.5. LCWIPs represent an ongoing process where the development of active travel networks can evolve over time, and in a way closely aligned to the councils' strategic corporate objectives and transport, public health, environmental and planning policy.
- 1.1.6. As such, the North Herts LCWIP will be revisited periodically and updated as infrastructure is built throughout the district. While all of North Herts has been considered in this first iteration of the LCWIP, it is acknowledged that the audits and subsequent infrastructure ideas identified are limited to the larger settlements (Hitchin, Letchworth Garden City, Baldock, Royston and Knebworth) and the shorter inter-urban routes (which typically have greater potential). This means that initially the areas and routes in the district being considered are those where the greatest potential for cycling and walking exists and therefore where targeted infrastructure improvements could help generate the most new active trips.
- 1.1.7. However, in the next iteration of the LCWIP, a major focus will be on areas in the district which were not audited in this iteration. These will include (but are not limited to) for example: outer neighbourhoods in Hitchin and Letchworth Garden City, villages such as Ashwell and Pirton, and inter-urban routes such as Stevenage to Letchworth Garden City. This is discussed in more detail in sections 5.6, 6.7, 7.3.5, 7.5 and 9 of this report.
- 1.1.8. WSP has worked in close collaboration with HCC and North Hertfordshire District Council (NHDC) to develop this LCWIP in line with the DfT guidance. WSP are responsible for producing the key deliverables of the LCWIP, including:
- network plans for walking and cycling in North Herts;
 - a prioritised programme of infrastructure improvements for future investment; and
 - this report which sets out the process and underlying analysis carried out and draws together our LCWIP outputs.

- 1.1.9. An LCWIP offers the council a chance to strengthen partnerships with local stakeholders and interest groups who can be influential in identifying and providing infrastructure to enable more walking and cycling journeys to be made. An LCWIP also provides an opportunity for the council to demonstrate its commitment to related policy issues, such as net zero, air quality, reducing congestion and health and wellbeing.

1.2 THE LCWIP PROCESS

- 1.2.1. In 2017 the Department for Transport (DfT) produced a technical guidance document to help local authorities develop LCWIPs. Table 1-1 summarises the six-stage LCWIP process as detailed in this guidance document.

Table 1-1 – 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.

Source: LCWIP Technical Guidance for Local Authorities, DfT, April 2017

1.3 REPORT STRUCTURE

- 1.3.1. This report details the technical support provided by WSP at each of the six LCWIP stages.
- 1.3.2. LCWIP Stage 1 (Determining Scope) was largely completed by HCC and NHDC as defined in their Scoping Report. The majority of support provided by WSP was during LCWIP Stages 2 to 5. For the technical support provided in these stages, details of the approach, methodology, assumptions and outputs are provided in this report.
- 1.3.3. LCWIP Stage 6 (Integration and Application) concerns the integration of the LCWIP into local policy, strategies and plans. In this report, section 9 (Next Steps) sets out some initial ideas and actions for how this can be done, but the actual process of integrating the LCWIP into local policy, strategy and plans will be progressed by HCC and NHDC in the coming months.
- 1.3.4. The report structure is detailed in Table 1-2 below, showing the sections of the report and how they fit within the six-stage LCWIP process.

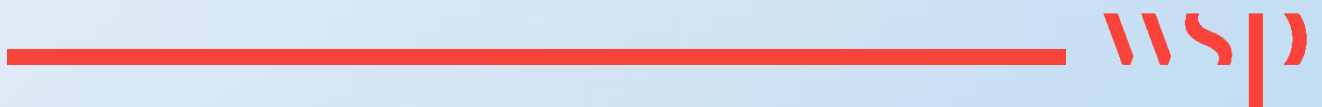
Table 1-2 – Report Structure

Section	Title	Associated LCWIP Stage(s)
2	LCWIP Geographic Scope	1 – Determining Scope
3	Policy Context	2 – Gathering Information
4	Gathering Information	2 – Gathering Information
5	Network Planning for Cycling	3 – Network Planning for Cycling
6	Network Planning for Walking	4 – Network Planning for Walking
7	Walking and Cycling Infrastructure Improvements	3 – Network Planning for Cycling 4 – Network Planning for Walking
8	Scheme Costing and Prioritisation	5 – Prioritising Improvements
9	Next Steps	6 – Integration and Application

- 1.3.5. The appendices after the main body of the report contain additional information and LCWIP deliverables. The contents of each appendix is listed in the report context before this introduction. Of particular help to the reader may be Appendix K, which contains a list of acronyms used in this report.

2

LCWIP GEOGRAPHICAL SCOPE

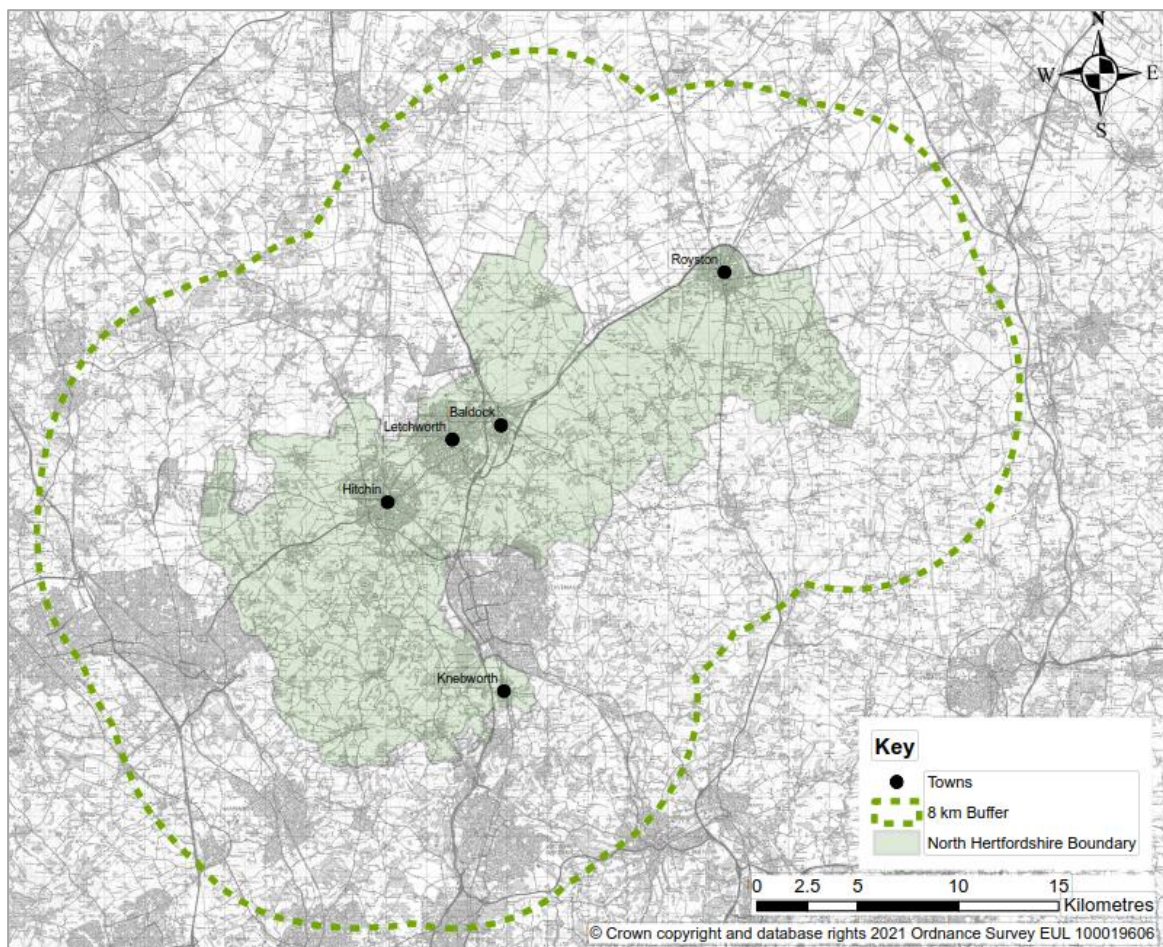


2 LCWIP GEOGRAPHICAL SCOPE

2.1 LCWIP GEOGRAPHICAL SCOPE

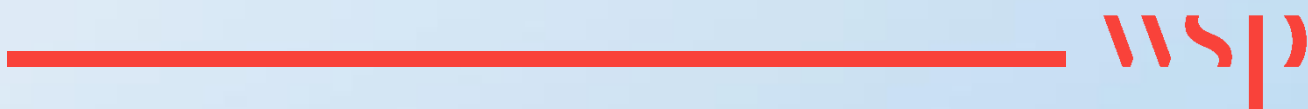
- 2.1.1. The routes and infrastructure plans contained within this LCWIP do not extend beyond the North Herts district boundary. However, these routes and infrastructure plans are influenced by the potential for journeys coming in and out of the district from nearby settlements. As such, when developing this LCWIP, a wider area (8km from the district boundary) has been studied. This is shown in Figure 2-1 along with the North Herts district boundary for context.
- 2.1.2. This 8km (5 mile) distance was selected based on the DfT's Gear Change document, which refers to this as a distance that is 'suited to cycling' for 'many people'. Key settlements within this distance from North Herts include Luton, Stevenage and Welwyn Garden City. The LCWIP has therefore considered trips to/from these settlements and has developed plans for the higher potential connections (e.g. Knebworth to Stevenage and Hitchin to Stevenage).

Figure 2-1 - Geographical Scope of the North Herts LCWIP



3

POLICY CONTEXT



3 POLICY CONTEXT

3.1 OVERVIEW

- 3.1.1. The tables in this section set out the existing policy documents that are relevant to this LCWIp on the national, county and district levels. Table 3-1 sets out the national strategic context while

3.1.3. Table 3-2 and

3.1.4. Table 3-3 set out the county and district strategies, policies and plans respectively. More detail on the policy context and how it all relates to the LCWIP can be seen in Appendix A.

Table 3-1 - National Strategic Context

Document	Publisher and Date Published	Description
Gear Change	Department for Transport (DfT) 2020	Government's vision for a step-change in levels of walking and cycling in England, the strategy details how the Government intends to increase the numbers of people walking and cycling. The document sets out the actions in required, under four key themes, to increase uptake and achieve the target of half of all journeys in towns and cities being cycled or walked by 2030.
Local Transport Note 1/20: Cycle Infrastructure Design	Department for Transport (DfT) 2020	Explains the five overarching design principals (cycle routes and networks must be coherent, direct, safe, comfortable and attractive) and gives context to the need to improve the quality of cycle infrastructure as part of wider strategies, such as increasing physical activity, reducing carbon emissions and stimulating economic growth.
Cycling and Walking Investment Strategy	Department for Transport (DfT) 2017	Outlines ambitious targets up to 2025 including a doubling of cycling trip stages each year whilst also reversing the year-on-year decline in walking trip stages. The benefits of doing this are stated as potentially leading to cheaper travel and better health, increased productivity for business and increased footfall in shops. Along with lowering congestion, better air quality, and vibrant, attractive places and communities.
Future of Mobility: Urban Strategy	Department for Transport (DfT) 2019	The document sets out principles to guide Government decision making, industry and local authorities, it recognises active travel as a key area to help shape the future of urban mobility. It states many journeys could be undertaken by sustainable, active modes of transport leading to better air quality, health outcomes and lower congestion which could in turn be supported by new technologies making public transport more convenient and responsive.

Clean Air Strategy	Department for Environment, Food and Rural Affairs 2019)	Sets out a comprehensive action plan required to tackle all sources of air pollution. It suggests encouraging an increase in cycling and walking for short journeys delivers a reduction in congestion and emissions in addition to the associated health benefits from a more active lifestyle.
Bus Back Better, National Bus Strategy	Department for Transport (DfT) 2021	A long-term national bus strategy setting out the vision and opportunity to deliver better bus services for passengers across England, through ambitious and far-reaching reform of how services are planned and delivered.
The Inclusive Transport Strategy (Department for Transport, 2018)	Department for Transport (DfT) 2018	Plans to create a more inclusive transport system for everyone. The report focusses on transport inclusivity, explaining how vehicles, stations and streetscapes can be designed to be inclusive to people with different forms of disability.
Active Travel Fund	Department for Transport (DfT) 2020 – present	To support a desired shift to walking and cycling following Covid-19 restrictions and to make social distancing easier the government announced a £250m Emergency Active Travel Fund (11/05/20). HCC used funding it was awarded from the first tranche to improve active travel infrastructure across Hertfordshire. The fund was renamed the Active Travel Fund and the second tranche of funding was awarded based on plans submitted to the DfT.

Table 3-2 - County Strategies, Policies and Plans

Document	Publisher and Date Published	Description
Local Transport Plan 4 (2018-2031)	Hertfordshire County Council (HCC)	The plan sets out a new transport vision for Hertfordshire and accelerates the transition towards a less car-centric, more balanced approach which caters for all forms of transport and seeks to encourage a switch from the private car to sustainable transport wherever possible. The key policy is the transport user hierarchy which puts the needs of vulnerable road users above those of private car users. The document also highlights several regionally strategic corridors in which sustainable transport is a priority (see Appendix A for details).
North Central Growth and Transport Plan (NCGTP)	Hertfordshire County Council (HCC)	The suite of GTPs are area-based transport strategies which support LTP4. The area covered by NCGTP includes North Herts District. The NCGTP recognises the large amount of development proposed which will increase demand on an already constrained highway network unless a significant shift towards walking, cycling and public transport is achieved. It contains several intervention packages relating to connections for active and sustainable transport which are relevant to this LCWIPs (see Appendix A for details).
Intalink Hertfordshire Bus Strategy	Hertfordshire County Council (HCC)	Sets out in greater detail the plans to grow the local bus network to support the shift towards more sustainable transport within Hertfordshire. The strategy's plans include giving greater priority to bus services in traffic, making sure bus information is easy to access and raising standards of operation across the county.
Bus Service Improvement Plan	Hertfordshire County Council (HCC) 2021	Acts as the vision for how bus services will be developed and enhanced across Hertfordshire in the coming years. Key corridors with gaps in the bus network across Hertfordshire have been identified; these corridors would benefit from increased frequencies and enhanced connectivity particularly during the weekday peak and interpeak periods.
Emerging Place and Movement Design Guide – Draft	Hertfordshire County Council (HCC) Draft 2021	A technical approach to highway design which recognises the needs of different road users in Hertfordshire and the interfaces between them. It intends to provide a way of looking at the appropriate function of any section of highway and a basis for deciding which activities should be prioritised. In doing so, it aims to provide a means to translate LTP4 policies into practice.

Sustainable Hertfordshire Strategy	Hertfordshire County Council (HCC) 2020	Sets out initial policies and strategies needed to embed sustainability across all its council operations and services throughout the county. Identifies the need for an increased mode shift away from the car towards walking and cycling will help achieve the county's plans for fighting climate change.
Speed Management Strategy	Hertfordshire County Council (HCC) 2020	An update of the previous strategy adopted in 2014 and reflects changes in regulation, guidance and policy (including the adoption of LTP4). The key aim of the strategy is to ensure that the speed limit for any road is in keeping with its environment and one of the core principles is that there will be the encouragement of speed limit changes that support active travel (walking and cycling).
Hertfordshire Active Travel Strategy	Hertfordshire County Council (HCC) 2013	Identifies key challenges that people living and working in Hertfordshire face when making decisions to replace car journeys, or generate new trips, through more walking and cycling. It also set out how the County Council and its partners would identify, deliver and promote interventions to increase the numbers of people walking and cycling in Hertfordshire.
Roads in Herts Design Guide	Hertfordshire County Council (HCC) 2011	Encourages a holistic approach to street design and a reduced dominance of motorised traffic through design objectives that promote alternative modes of transport. The document is due to be replaced by the Place and Movement Design Guide.
Sustainable Travel Towns	Hertfordshire County Council (HCC)	A programme of town-based measures (including behaviour change initiatives as well as infrastructure improvements). Each Sustainable Travel Town will implement a package of measures aimed at achieving a significant switch to walking, cycling and public transport.
B197 Corridor Study	Hertfordshire County Council (HCC)	The NCGTP and its equivalent for the South Central area identified a need for a sustainable transport corridor along the B197 from Stevenage in the north to Welwyn Garden City in the south via the villages of Knebworth, Woolmer Green and Oaklands. The section between Stevenage and Woolmer Green via Knebworth is in North Herts and the LCWIP project team has seen the emerging findings of this study, which the work in the LCWIP support. More information on this is included throughout the report.

Table 3-3 - District Strategies, Policies and Plans

Document	Publisher and Date Published	Description
Emerging Local Plan (North Herts District Council, 2011-2031)	North Herts District Council	The Emerging Local Plan sets out the planning framework for the borough for the plan period. It seeks to address the key issues facing North Hertfordshire and sets a strategic vision and spatial strategy for the district. It is yet to be adopted but gives an indication of the prevailing policy for the district. The document highlights the challenges facing North Hertfordshire and contains policies to bring about sustainable development, and promote sustainable modes of transport including making appropriate provision for pedestrians and cyclists.
Transport Strategy	North Herts District Council 2017	The Transport Strategy was produced as supporting evidence for the Emerging Local Plan and also informed the NCGTP. It assesses the implications of the Local Plan proposals on the local transport networks and recommends a strategic approach to provide for transport through the Emerging Local Plan period. The transport strategy reflects a new approach to transport which places far greater emphasis on more sustainable travel choices such as cycling and public transport, and lower emphasis on highway improvements. The Transport Strategy identifies key principles to be delivered through various policies, some of which reference specific corridors in and around the District (see Appendix A for details).
Letchworth Garden City Cycling Strategy	LGC Heritage Foundation 2018	This strategy was produced to assist HCC, NHDC and other external funders in identifying and proposing potential improvements for cyclists in Letchworth Garden City (LGC). It identifies 'quick-win', as well as medium- to long-term improvements to cycling conditions in Letchworth. Its objectives include enhancing and extending cycle routes to create a comprehensive network, making cycling an easy, pleasant choice whether in or through residential areas or en route to key destinations in LGC. This LCWIP has reviewed the suggestions identified and, where there was evidence for the improvements and the suggestions conformed with latest best practice and the results of LCWIP auditing, these have been incorporated into the LCWIP.
Knebworth Neighbourhood Plan	Knebworth Parish Council	The Knebworth Neighbourhood Plan (KNP) sets out a plan to make Knebworth a vibrant and inclusive place to live, with aspirations around good design and sustainable

	2021	growth while maintaining a rural character. While it primarily focuses on new developments, it “supports proposals that encourage change of travel mode away from the private car to more sustainable forms of transport” and goes on to talk about “encouraging a switch to walking and cycling by improving the safety and quality of existing facilities”.
Baldock, Bygrave and Clothall Neighbourhood Plan	(Produced by volunteers from community organisations in Baldock, Bygrave and Clothall) 2021	This neighbourhood plan contains policies that complement the Emerging Local Plan, providing additional safeguards and requirements. It supports walking and cycling infrastructure, having highlighted the need for improved infrastructure in certain key locations (for details, see Appendix A). The report also states the importance of reducing congestion and air pollution, suggesting providing walking and cycling routes between key sites within Baldock as a way to tackle this.
Pirton Neighbourhood Development Plan	Pirton Parish Council 2018	This neighbourhood plan sets out a vision for the future of the Pirton up to 2031. Its key purpose is to encourage sustainable development in accordance with the character of the village, with an emphasis on encouraging walking and cycling in and around the village and parish. It highlights certain key areas for this, which the LCWIP supports (for details, see Appendix A).
Ashwell Neighbourhood Plan	Ashwell Parish Council 2021	The stated purpose of the plan is to structure development within the parish. It supports improving walking and cycling infrastructure to encourage short, local journeys to be made by foot, including a complete walking and cycling link between Ashwell and the railway station, which is also supported by this LCWIP.
Wymondley Parish Neighbourhood Plan	Wymondley Parish Council 2019	This neighbourhood plan includes policies which aim to create a more sustainable way of life for residents, recognising the importance of green infrastructure in reducing carbon footprints. It supports appropriate initiatives to maintain, improve and facilitate use of green transport routes, including footpaths and bridleways.
Preston Parish Neighbourhood Plan	Preston Parish Council 2020	This plan includes objectives to promote and improve walking and cycling facilities. Although no specific infrastructure proposals in the Preston area are included in this LCWIP, the need for active travel routes within Preston town and from Preston to Hitchin and Stevenage have been recognised and included in this LCWIP.

3.2 RELEVANT PLANS IN NEIGHBOURING AUTHORITIES

- 3.2.1. At the time of writing, St Albans City and District Council and Welwyn Hatfield Borough Council are also developing LCWIPs in partnership with HCC, with WSP supporting. The walking and cycling networks in these three LCWIPs have therefore been aligned.
- 3.2.2. The key inter-urban route between these areas relevant to the North Herts LCWIP is the connection south from Knebworth into Welwyn Hatfield Borough along the B197 corridor. This connection passes south through the settlements of Woolmer Green, Oaklands and Welwyn, eventually reaching Welwyn Garden City. For more on this connection please see sections 5.6, 6.7, 7.4 and 9.5 of this report as well as the 'Stevenage LCWIP' section below.
- 3.2.3. HCC has further aspirations to produce LCWIPs for each of the authorities across Hertfordshire County, including East Herts District which also borders North Herts District.

STEVENAGE LCWIP

- 3.2.4. Stevenage Borough Council developed the Stevenage LCWIP in 2019, which sets out a network of preferred and future routes for walking and cycling in the borough. There are a few interfaces between the two LCWIPs identified in this report:
 - This LCWIP has confirmed a need for an active travel link between Hitchin and Stevenage. High-level infrastructure ideas for this link are included in section 7 of this report. Plans included in this LCWIP end at the district boundary, to the west of Junction 8 of the A1(M). The Stevenage LCWIP Route 1 'North Stevenage to Stevenage Central', links this junction to Stevenage town centre via the A602, creating an opportunity for a long, cross-boundary connection. However, plans in the Stevenage LCWIP stop short of continuing the route over the junction, instead continuing the route north along the National Cycle Network route towards Letchworth via Gravelly. While this link is important too, there is a need to address the A602 barrier in order to provide a more direct connection between Stevenage and Hitchin. This would require further collaboration between HCC, Stevenage Borough Council and NHDC.
 - The B197 corridor study links Stevenage in the north with Welwyn Garden City in the south and the North Herts section (from Stevenage to Woolmer Green via Knebworth) is also covered in this LCWIP. However, the first iteration of the Stevenage LCWIP did not include connections to such a route. Further collaboration between the three

authorities is therefore required here too, in order to ensure any future B197 connection is properly integrated into Stevenage's walking and cycling networks.

- There are some developments planned on the edge of the Stevenage urban area (by Great Ashby) which are inside North Herts district. In terms of active travel, the key connections for these developments will be into Great Ashby and Stevenage, which are in Stevenage Borough. These connections have been identified in sections 5 and 6 of this report.

CAMBRIDGESHIRE GREENWAYS

- 3.2.5. The Greater Cambridge Partnership are working on the development of a high-quality greenway network, which will encourage walking and cycling as a mode of travel both into and out of Cambridge. The Melbourn Greenway is relevant to this LCWIP as it proposes to link Royston to Cambridge via Melbourne, Foxton and Trumpington. The analysis conducted for this LCWIP also identifies a need for this connection (see sections 5 and 6) and infrastructure proposed in section 7 would tie in with the Melbourn Greenway's proposal for a bridge over the A505 to link into Royston. Current validation work is being undertaken separately by HCC to look at these links.

LUTON LCWIP

- 3.2.6. Luton Borough Council are currently developing an LCWIP, which is expected to be completed in 2022. There are some developments planned on the edge of Luton which are inside North Herts district. The key walking and cycling connections for these developments will be into Luton, on the other side of the district boundary. These connections have been identified in sections 5 and 6 of this report.

LUTON AIRPORT EXPANSION

- 3.2.7. Luton Airport, which is located on the border of North Hertfordshire is currently consulting on opening a second terminal. To minimise the impact of additional trips on the road network, the proposals for the expansion would include funding for highway improvements. This might also include changes to parking controls, traffic management and calming measures close to the airport and in rural areas to the east of the airport. The proposals assumed that few passengers would walk or cycle to the airport.
- 3.2.8. The mitigations document proposes a number of junctions in Hitchin that would require mitigation to accommodate extra traffic flows to the airport. Any junction improvements will

also need to include walking and cycling enhancementsA602 Parkway/ Upper Tilehouse Street

- A505 Offley Road/ Upper Tilehouse St
- A602 Park Way/ Stevenage Road/ Hitchin Hill

3.2.9. There are also some traffic calming areas identified in the villages to the east of Luton.

3.2.10. The two key documents are:

- Getting to and from the Airport
- Highway Mitigation Drawings (contained in an appendix)

4

GATHERING INFORMATION



4 GATHERING INFORMATION

4.1 INTRODUCTION

4.1.1. The following information sources were mapped in GIS and referred to as the first drafts of the walking and cycling network plans were developed:

- Outputs of the Propensity to Cycle Tool
- Outputs of the WSP/HCC LCWIP GIS Model
- Existing Rights of Way
- Existing Cycle Routes and Facilities
- Strategic Routes / Connections (from strategies, plans and policies detailed in section 3).

4.1.2. This section of the report introduces each of these information sources, explaining why they are relevant to the LCWIP. Sections (5 and 6) of the report explain how they were used together to develop the draft network plans.

4.2 PROPENSITY TO CYCLE TOOL

OVERVIEW

4.2.1. The Propensity to Cycle Tool (PCT) was developed on behalf of the DfT between 2016-2019. It is a web-based tool designed to help authorities plan cycle networks, with LCWIPs in mind.

4.2.2. The PCT helps identify desire lines for cycle traffic for trips to work and to schools. It can also help inform network development, as its outputs can be configured to be applied to the existing network, giving 'heat maps' of indicative demand.

4.2.3. It is based on data from the 2011 Census, which is then manipulated and uplifted to represent a number of future scenarios, showing potential cycle demand patterns. Two scenarios were modelled in the study area for this LCWIP: "Government Target (Near Market)" and "Go Dutch". The latter scenario looks at the distances between homes and workplaces and applies Dutch willingness to cycle to these, imagining how many additional trips could be cycled if there was Dutch-style cycle infrastructure in the UK and Dutch levels of willingness to cycle.

4.2.4. More information on the PCT and its scenarios is on the <https://www.pct.bike> website.

PCT OUTPUTS

- 4.2.5. The PCT outputs for both journeys to work in both the “Government Target (Near Market)” and “Go Dutch” scenarios are shown at a district- wide level, applied to the network, in Figure 4-1 and Figure 4-2 respectively. This can be found in greater resolution in Appendix B.
- 4.2.6. The coloured lines on these plans represent a heat map of the potential for commuting cycle trips on a given part of the network under the two different scenarios. The numbers in the scale refer to potential cycle commute trips on a weekday.
- 4.2.7. The parts of the network highlighted in orange and red in these figures show the routes with the greatest potential for commuter cycle trips. There is greater potential shown in the “Go Dutch” output, as this scenario is based on more optimistic assumptions. These outputs highlight a number of inter-urban routes which may have moderate to high potential for increased cycle commute trips:
- Hitchin to Stevenage
 - Letchworth Garden City to Stevenage
 - Baldock to Stotfold
 - Letchworth Garden City to Stotfold
 - Henlow Camp to Hitchin
 - Hitchin to Arlesey
 - Letchworth Garden City to Arlesey
 - Royston to Kneesworth/Bassingbourn
 - Royston to Melbourn/Meldreth
 - Knebworth to Stevenage
 - Knebworth to Welwyn via Woolmer Green, Oaklands and Bull’s Green

Figure 4-1 – PCT Output - District-wide “Government Market (Near Market)” Scenario

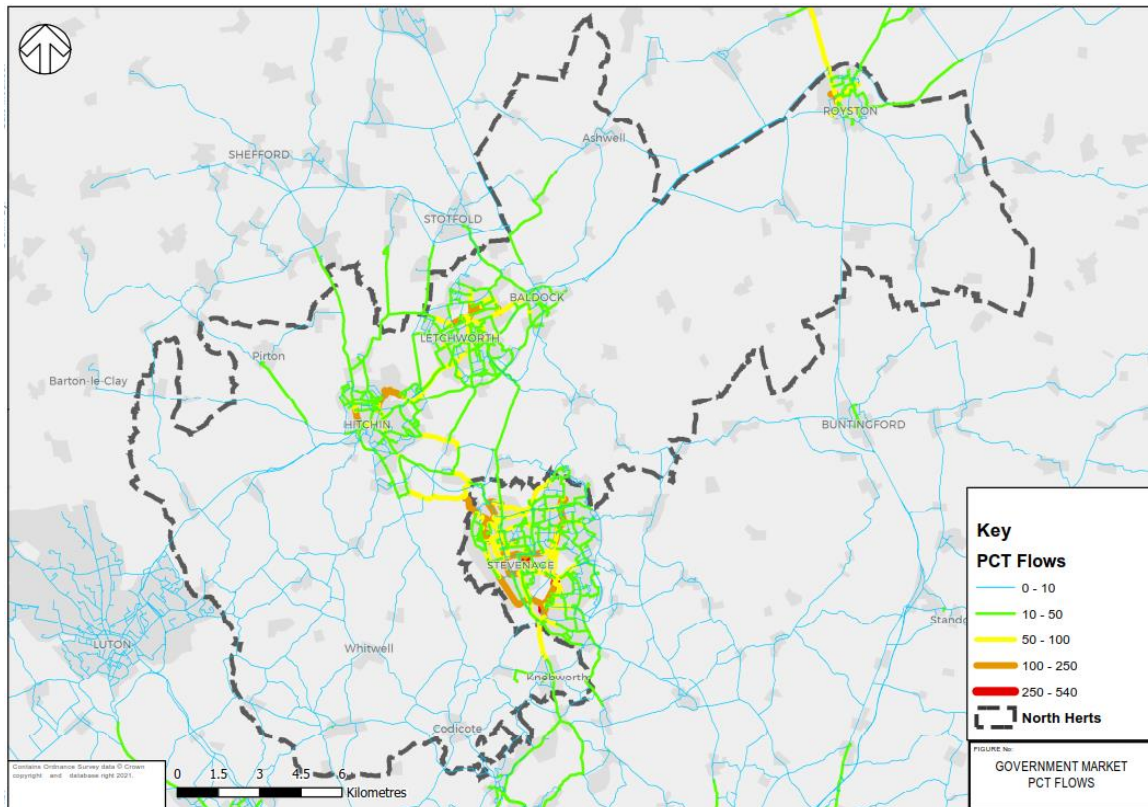
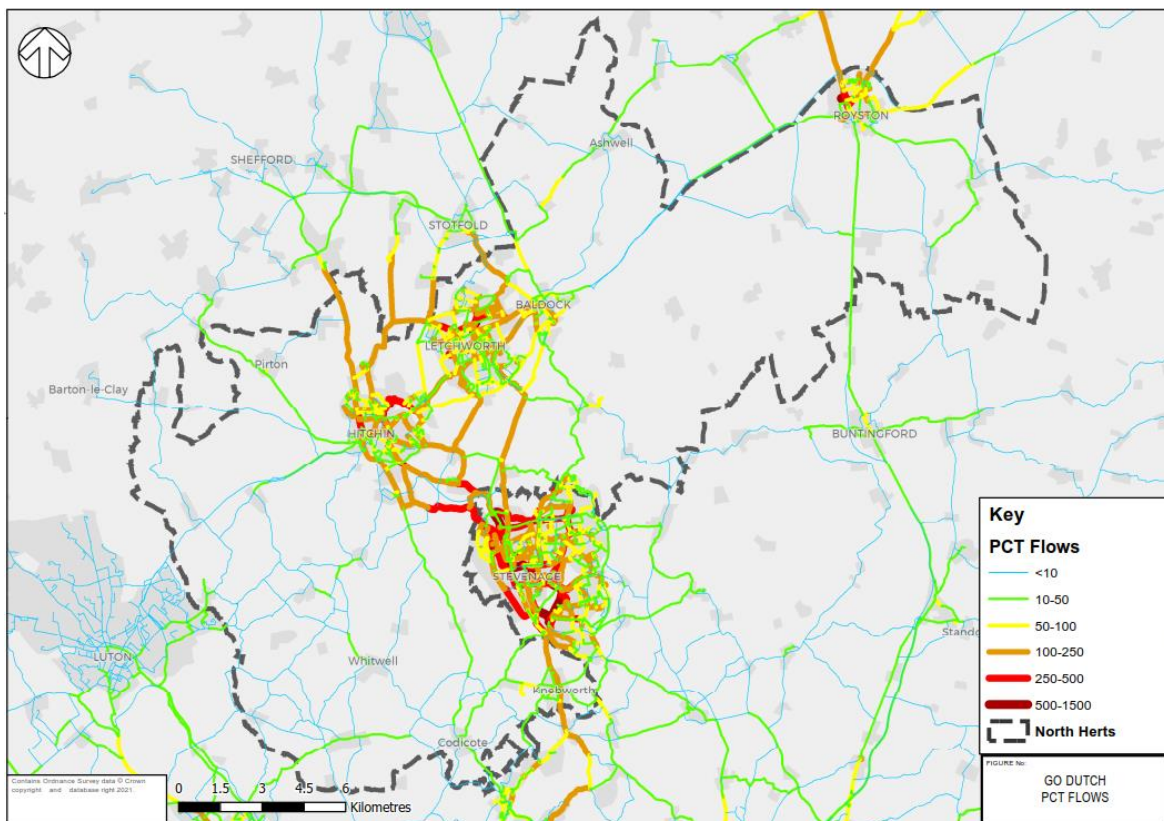


Figure 4-2 – PCT Output - District-wide “Go Dutch” Scenario



LIMITATIONS

- 4.2.8. While the PCT is a very useful tool, it has some key limitations when considering potential demand for cycling, which lead to an underestimate of demand. These are also acknowledged in the DfT guidance.
- 4.2.9. The first key limitation is that it only looks at journeys to work and school. This misses out a large number of shorter trips that are well-suited to cycling, such as trips to the shops, town centres and multi-modal trips to and from stations.
- 4.2.10. A second key limitation is that it is based on old data and does not consider new residential developments built since 2011, nor any future planned developments. It also doesn't take into account any new key employment areas that have been developed since 2011.
- 4.2.11. Finally, it also is limited in that it only considers cycling trips.
- 4.2.12. For these reasons, WSP has built a GIS-based LCWIP model for Hertfordshire which has a similar functionality to the PCT but is customisable in terms of the origins, destinations and network that is input. The next section of the report explains this in more detail and displays and discusses the outputs of the model.

4.3 LCWIP GIS MODEL

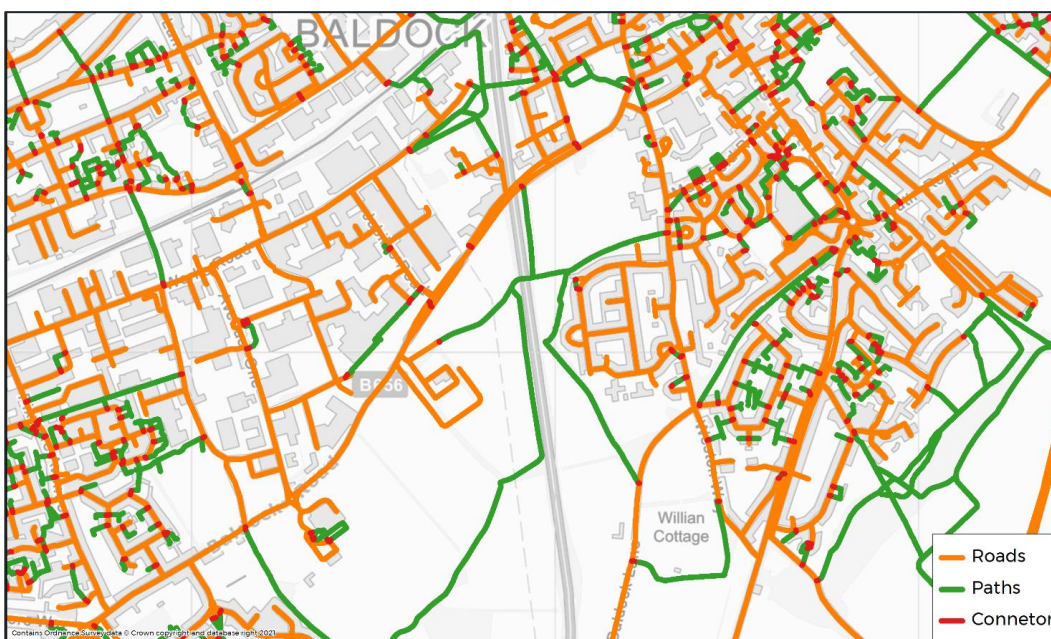
OVERVIEW

- 4.3.1. WSP has built a GIS model for HCC to use in their LCWIPs. This model compensates for the limitations in the PCT by allowing the latest origin and destination data to be input and applied to a custom network. This gives us an indication of potential demand for cycle and walk trips beyond the commute and the school run, and also takes into account potential demand from housing built since 2011 and housing planned from the future.
- 4.3.2. This section of the report explains the model in layman's terms. A more detailed technical explanation included in Appendix C. In brief, the model consists of a custom network (which trips are assigned to), a series of origin points (based on existing and future housing locations) and a series of destination points. Potential walk and cycle trips are then assigned to the network to link these origins and destinations, based on a set of assumptions agreed between WSP, HCC and NHDC. This gives an indication of where in the network there may be suppressed demand for walking and cycling trips, and/or potential future demand.

NETWORK

- 4.3.3. The model's network consists of all the roads and paths which are assumed to be walkable and cyclable in Hertfordshire and its surrounding areas (the network extends to 8km beyond the county boundary in all directions, including settlements such as Luton, Biggleswade, Harlow and Aylesbury for example).
- 4.3.4. The network consists of two Ordnance Survey MasterMap datasets (as of May 2021): the most detailed road network available and its associated paths dataset. These were merged together as shown in Figure 4-3, with motorways removed from the network.
- 4.3.5. It is acknowledged that not every road or path on the network will be walkable (as some roads don't have footways etc.). For the purposes of modelling this is okay as the model's purpose is to identify potential demand, which includes suppressed demand due to lack of facilities. Where footways aren't present, this will likely be identified during the audit stage in any case.
- 4.3.6. Similarly, not every road or path on network will be cyclable, either legally or practically (due to traffic speeds, gradients etc). Again, the purpose of the model is to identify potential demand. Whether roads and paths are cyclable or can be made cyclable, is investigated later.
- 4.3.7. One-way streets have been modelled as two-way on this network. For cycling, this is to reflect the fact that many one-way streets can often be converted to two-way streets for cycling with relative ease. This allows us to see where such an intervention may be beneficial.

Figure 4-3 – Model Network (built from Ordnance Survey MasterMap Datasets)



ORIGIN POINTS

4.3.8. The origin points dataset used in the model was created from three sources:

- Current residential addresses (Source: Experian Mosaic postcodes with 2019/20 population estimates);
- Recently completed and proposed housing sites (Source: North Herts COMET R6 Housing Completions – these represented completed housing sites as of Autumn 2020) ; and
- Proposed housing developments (Source: North Herts COMET R6 Perm Sites L3).

4.3.9. In the model, this first source represents existing residential origin points while the second and third sources represent potential future origin points.

4.3.10. There are a total of 19,628 origin points in the study area (North Herts district boundary plus 8km). Each origin point is weighted to represent its current or likely future population.

DESTINATION POINTS

4.3.11. The destination points datasets were supplied by HCC. They include:

- Bus stops
- Coach stations
- Colleges/universities
- Community centres
- Dentists
- Events spaces
- GPs/walk-in centres
- Hospitals
- Key employment areas
- Libraries
- Local (neighbourhood) centres
- Market areas / marketplaces
- Nurseries
- Parks/open spaces
- Post offices
- Primary schools
- Railway stations

- Retail parks
- Secondary schools
- Sport and leisure centres
- Supermarkets
- Tourist attractions / points of interest
- Town centre areas

4.3.12. The walking destination points dataset combined all of these destinations, creating a total of 9,157 points.

4.3.13. The cycling destination points dataset omitted bus stops (as few cycle trips are made to bus stops), creating a total of 6,839 points.

ASSUMPTIONS

4.3.14. In simple terms, the model connects the origins and destinations using the network, and gives a heat map style output, showing the relative number of trips on different parts of the network. These outputs (for the walking model run and cycling model run) are shown in Figure 4-4 and Figure 4-5 respectively.

4.3.15. There are a series of assumptions that inform these outputs:

- Not all origin points are linked to all destination points. For most destination types, origin points are only linked with the closest of each type (e.g. the closest library, the closest supermarket).
- For some destination types, such as schools, origin points were linked with the nearest 3 or 5 destinations of that type.
- For a small number of destination types, including town centres and key employment areas, origin points were linked with every destination of that type.
- Where origins linked with multiple destinations of a type, the model assigned more trips to closer destinations and, in the case of key employment areas, it additionally factored in the likely number of jobs (based on the size of the key employment area) and would assign more trips to larger, closer employment sites.
- Origins are linked with destinations along the shortest route available on the network, as directness is a key factor when considering walking and cycling desire lines.

- Trips over 2km in length are excluded from the walking model, as the focus in an LCWIP is on short utility trips. 2km is length referred to in the LCWIP guidance and most people can walk this distance in 20-30 minutes.
- Trips over 8km in length are excluded from the cycling model for a similar reason. Gear Change refers to trips up to 5 miles (roughly 8km) in length as journeys ‘perfectly suited to cycling’ for ‘many people’. Trips within this distance generated by the model include trips north from Letchworth Garden City to Stotfold, trips from Hitchin to Stevenage and trips from Royston to Bassingbourn.
- The model generates more trips to some destinations than others. Trip proportions were initially based on data on trip types from the Hertfordshire Travel Survey, then discussed, adjusted and agreed. Trip proportions are different in the walking and cycling models. More trips were generated to key employment areas, town centres, schools, railways and retail.

4.3.16. Greater detail on the model and its assumptions (e.g. a breakdown of percentages of trips in the model to different destinations) can be found in Appendix C.

LIMITATIONS

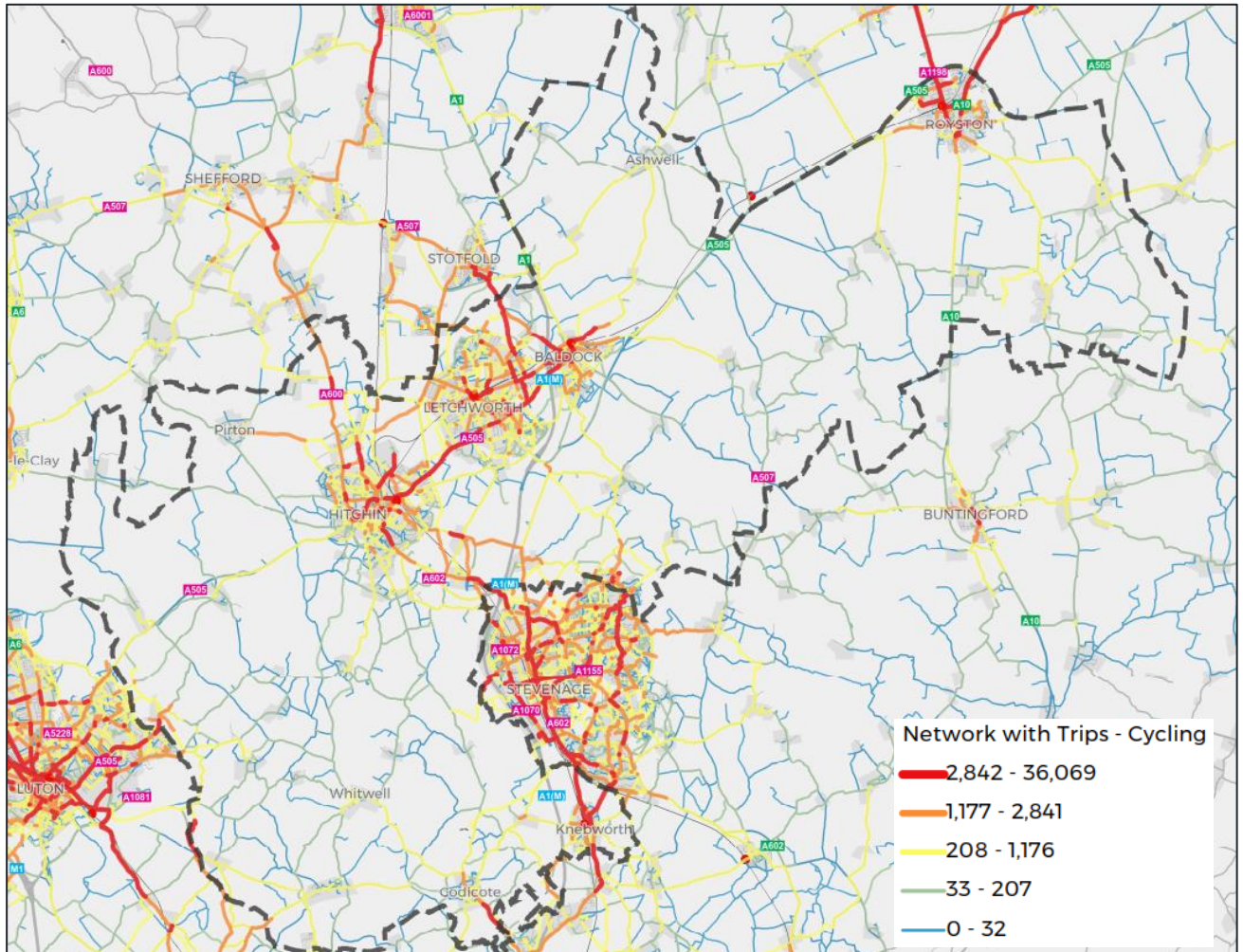
4.3.17. As with the Propensity to Cycle Tool, the WSP/HCC LCWIP GIS model has limitations and is not a perfect representation of reality. This is true of most models in transport planning. In the case of the GIS model, for example, the model does not take into account topography and many assumptions had to be made as listed in the previous section. However, it approximates trips to the network which may be missed by the Propensity to Cycle Tool, and by using the two together (along with other information sources), a fuller picture of potential walking and cycling demand in North Herts has been built.

4.3.18. The exclusion of trips over 8km in length keeps the focus on shorter, local journeys which are achievable for more people than longer inter-urban or rural trips on country lanes. However, it is worth noting that there is still great potential for longer trips among some parts of the population and, with the increased uptake of e-bikes, distance constraints are becoming less important. As such, the 8km cut-off used in the model could be considered a limitation. However, as discussed in section 4.2, the PCT outputs do capture the potential for some of these longer trips, such as Letchworth Garden City to Stevenage.

GIS MODEL CYCLING OUTPUTS

4.3.19. The model outputs for the cycling model run are shown at a district- wide level in Figure 4-4. This can be found in greater resolution in Appendix D.

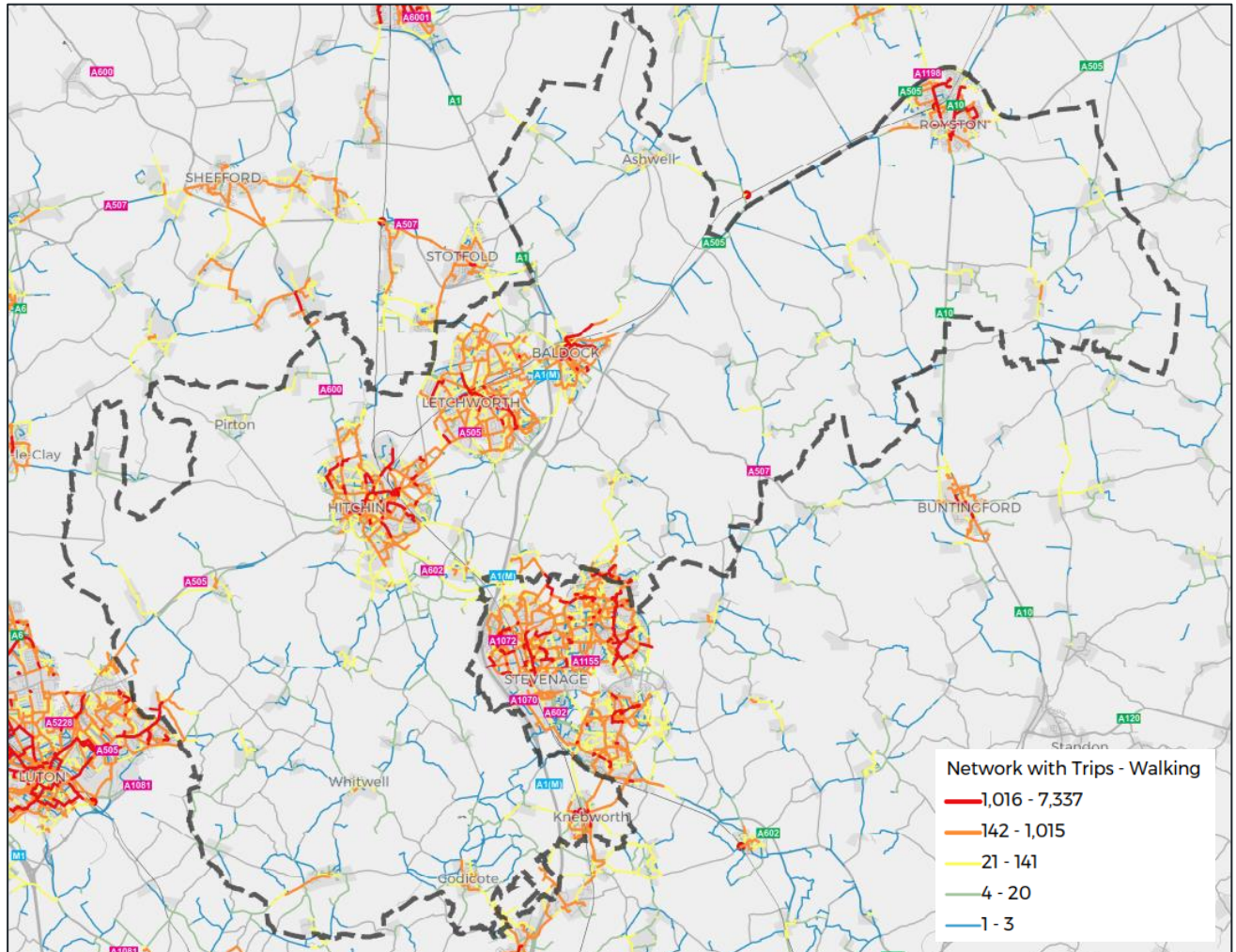
Figure 4-4 - LCWIP GIS Model - District-wide Cycling Outputs



GIS MODEL WALKING OUTPUTS

4.3.20. The model outputs for the walking model run are shown at a district- wide level in Figure 4-5. This can be found in greater resolution in Appendix E.

Figure 4-5 – LCWIP GIS Model - District-wide Walking Outputs



DISCUSSION

- 4.3.21. The effect of the different assumptions made in the two different models can clearly be seen when comparing the two outputs. The cycling model output, with the greater trip distance of up to 8km, shows high demand for inter-urban trips (e.g. between Stevenage and Knebworth, between Stevenage and Hitchin, between Royston and Melbourn, and between Hitchin, Letchworth and Baldock). By contrast, the walking model output shows demand concentrated more within the towns and villages.
- 4.3.22. It should be noted that the numbers referenced in the legend are relative and not absolute (i.e. they do not represent that there is more potential for cycling trips than walking trips).

4.3.23. As the cycling model removes any journeys over 8km in length, this results in low demand between Letchworth Garden City and Stevenage according to the cycling model output as this is a distance of 10.7km, while a good demand is shown between Hitchin and Stevenage (Hitchin is slightly closer to Stevenage). However, for those willing to make such inter-urban journeys, a difference of a two or three kilometres may not make much difference in terms of their willingness to cycle, especially if they were using an e-bike. That being said, the potential for inter-urban journeys between Letchworth Garden City and Stevenage is identified in the ‘Go Dutch’ output of the Propensity to Cycle Tool (see Figure 4-2), and the need to improve this connection also features in HCC’s North Central Growth and Transport Plan Policy SM82. For more on this connection, please see sections 7.5 and 9.5.

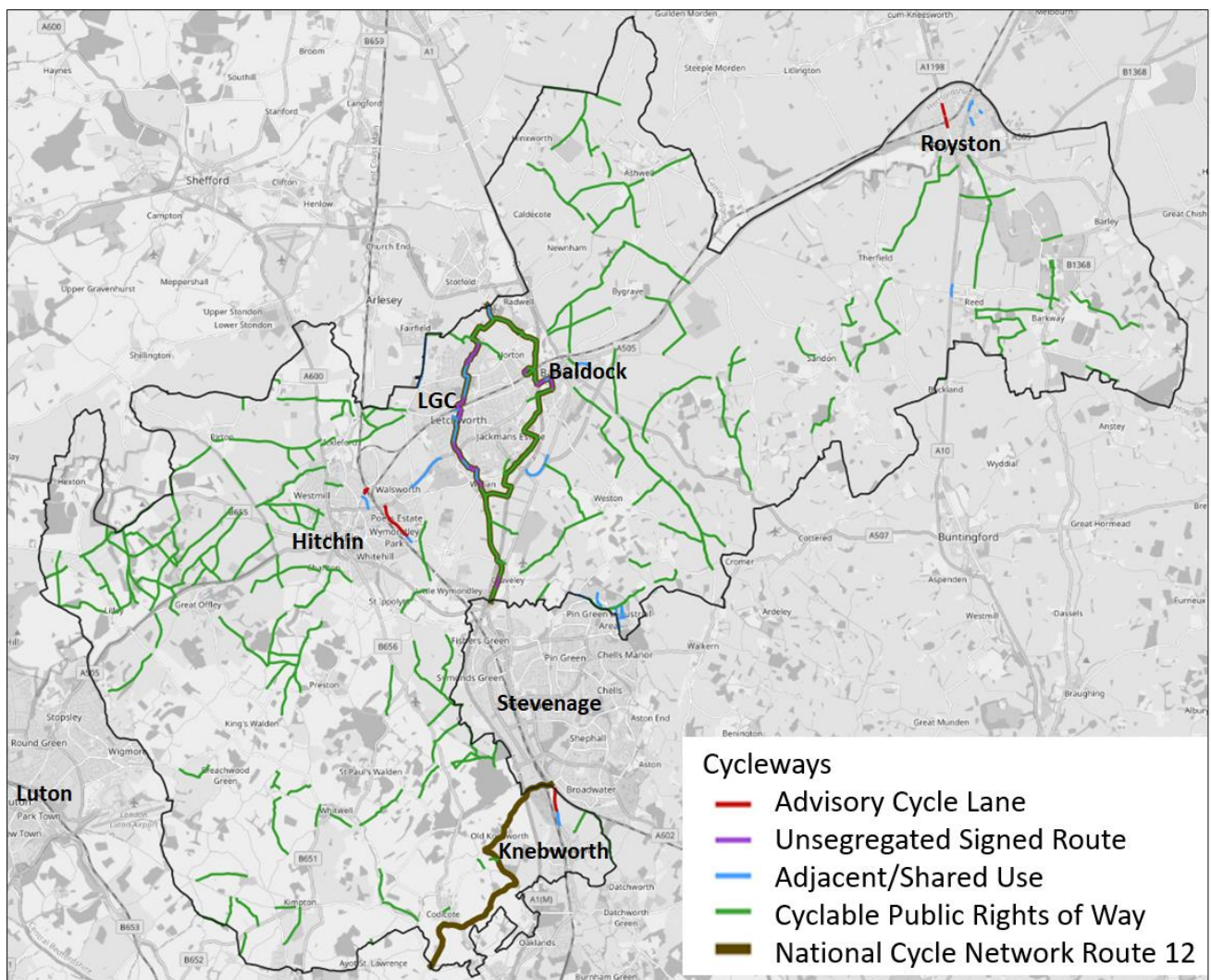
4.4 RIGHTS OF WAY

- 4.4.1. Hertfordshire County Council provided a GIS database of the existing Rights of Way (ROW) across North Herts. This database included three different classifications: Bridleways, Restricted Byways and Byways Open to All Traffic. These are all types of ROW where walking, cycling and horse-riding are permitted and are the main modes of transport. Motor vehicles are only allowed on the latter type of ROW.
- 4.4.2. For the purpose of this LCWIP, these layers were combined and shown as a singular layer ‘Rights of Way’ (also sometimes referred to in the LCWIP as ‘Cyclable Public Rights of Way’). Based on the definitions above, it was assumed that all identified ROW were legally accessible for pedestrians and cyclists, although it is acknowledged that many of these may not be fully accessible at all times of year and in all weather conditions and would therefore require specialist equipment for people to use such as walking boots or specialist bikes. Furthermore, during consultation some stakeholders reported cycling bans on certain ROW.
- 4.4.3. These ROW were taken into account when planning the walking and cycling networks – connectivity between the ROW and planned routes has been sought wherever possible.
- 4.4.4. Where ROW were on audited routes, visited and identified as not being fully accessible, improvements such as widening and resurfacing have been suggested. More detail on the improvements proposed is available in section 7.
- 4.4.5. ROW coverage is extensive particularly in the area to the west of Hitchin. It would be useful if, in future, information on surfacing, ‘walkability’ and ‘cyclability’ of these (and other) ROW could be logged.

4.5 EXISTING CYCLE FACILITIES AND ROUTES

- 4.5.1. In addition to the ROW layers, HCC also provided details of other existing cycle facilities. These included advisory cycle lanes and shared footways.
- 4.5.2. There are a number of leisure routes and signed cycle routes in North Hertfordshire which make use of ROW, advisory cycle lanes and shared footways, although some of these routes also make use of country lanes (unsegregated from motor traffic). Two notable routes are the Letchworth Greenway (a loop route for walkers, runners and cyclists) and National Cycle Network (NCN) Route 12. An additional cycle facility of note is the high-quality pedestrian/cycle underpass in North Royston, connecting areas either side of the railway line. Figure 4-6 below shows the location of the different types of existing cycle facilities and routes in North Hertfordshire.

Figure 4-6 – Existing Cycle Facilities in North Hertfordshire



- 4.5.3. It should be noted that WSP has not assessed each of these for suitability (only those which were on routes selected for audit). However, it is not expected that many are LTN 1/20 compliant, as LTN 1/20 discourages shared use footways and advisory cycle lanes. Where existing cycle routes have been audited, improvements such as converting advisory cycle lanes into segregated facilities and upgrading shared use footways to separate pedestrian have been suggested. More detail on the improvements proposed is available in section 7.

4.6 STRATEGIC ACTIVE TRAVEL ROUTES AND CONNECTIONS

- 4.6.1. Specific strategic active travel routes mentioned in section 3 (shown in detail in Appendix A) were mapped and considered when developing the draft walking and cycling networks. These are listed below, organised by their document of origin:

Local Transport Plan 4

- 4.6.2. Three strategic routes from HCC's Local Transport Plan 4 pass through North Herts District:
- Corridor 3: Luton – Stevenage – Peterborough
 - Corridor 6: Luton – Stevenage, via Hitchin
 - Corridor 7: Stevenage – Cambridge

North Central Growth and Transport Plan

- 4.6.3. The following connections are locations of packages of measures from the NCGTP where improvements for walking and cycling have been identified as being required:
- PK4 Stevenage to Welwyn Garden City
 - PK5 Stevenage to Hitchin, Luton and Luton Airport
 - PK6 Stevenage to Letchworth Garden City
 - PK7 Hitchin centre including the rail station
 - PK8 North Hitchin and industrial estate to Hitchin centre
 - PK9 West Hitchin (Bearton and Westmill) to Hitchin centre
 - PK10 Hitchin to Letchworth Garden City / Baldock
 - PK11 Letchworth Garden City to Letchworth Gateway (industrial estate)
 - PK12 North Letchworth Garden City to Letchworth Garden City centre
 - PK13 Baldock connectivity to rail stations and development sites
 - PK14 Connections to Central Beds from Hitchin and Letchworth Garden City
 - PK15 Royston connectivity

North Herts Transport Strategy

4.6.4. The following connections were identified as desired sustainable transport corridors in NHDC's Transport Strategy:

- Ashwell and Morden connection to railway statopm
- Connect Barley and Barkway
- Sustainable spine along the A505 (including connecting Baldock and Royston)

Letchworth Garden City Cycle Strategy

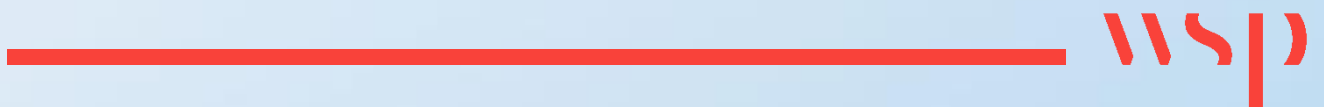
4.6.5. The following connections were identified as key for improving conditions for cycling in Letchworth Garden City in the LGC Heritage Foundation's Cycling Strategy:

- Secondary north / south cycle corridor
- East / west cycle corridor improvements
- Re-route of greenway away from Wilbury Road
- Green link from standalone farm to Norton Common
- Letchworth Gateway to town centre
- Access to North Herts Leisure Centre
- Improve NCN12 route through and north of Norton Common
- Improved NCN12 link to Stevenage
- Cycle improvements north of Grange Estate
- Broadway improvements for cyclists

4.6.6. The location of these strategic routes was considered when identifying primary and secondary walking and cycling routes as described more in sections 5.2 and 6.3. For example, where a particular route was identified as high potential in the GIS Model, the PCT outputs, and was also included in the list of strategic routes above, this was a clear case for a route to be a primary route rather than a secondary route.

5

NETWORK PLANNING FOR CYCLING



5 NETWORK PLANNING FOR CYCLING

5.1 INTRODUCTION

- 5.1.1. This section explains how the information gathered in the previous section was used to develop an initial draft network. It goes on to explain how this draft network was presented to stakeholders, amended, and then used to determine the relative importance of different routes and thus which routes to audit and develop infrastructure plans for.
- 5.1.2. A key goal at this LCWIP stage was to determine where the greatest propensity for cycling exists – where targeted infrastructure improvements could generate the most new cycle trips.

5.2 IDENTIFYING KEY CYCLING ROUTES

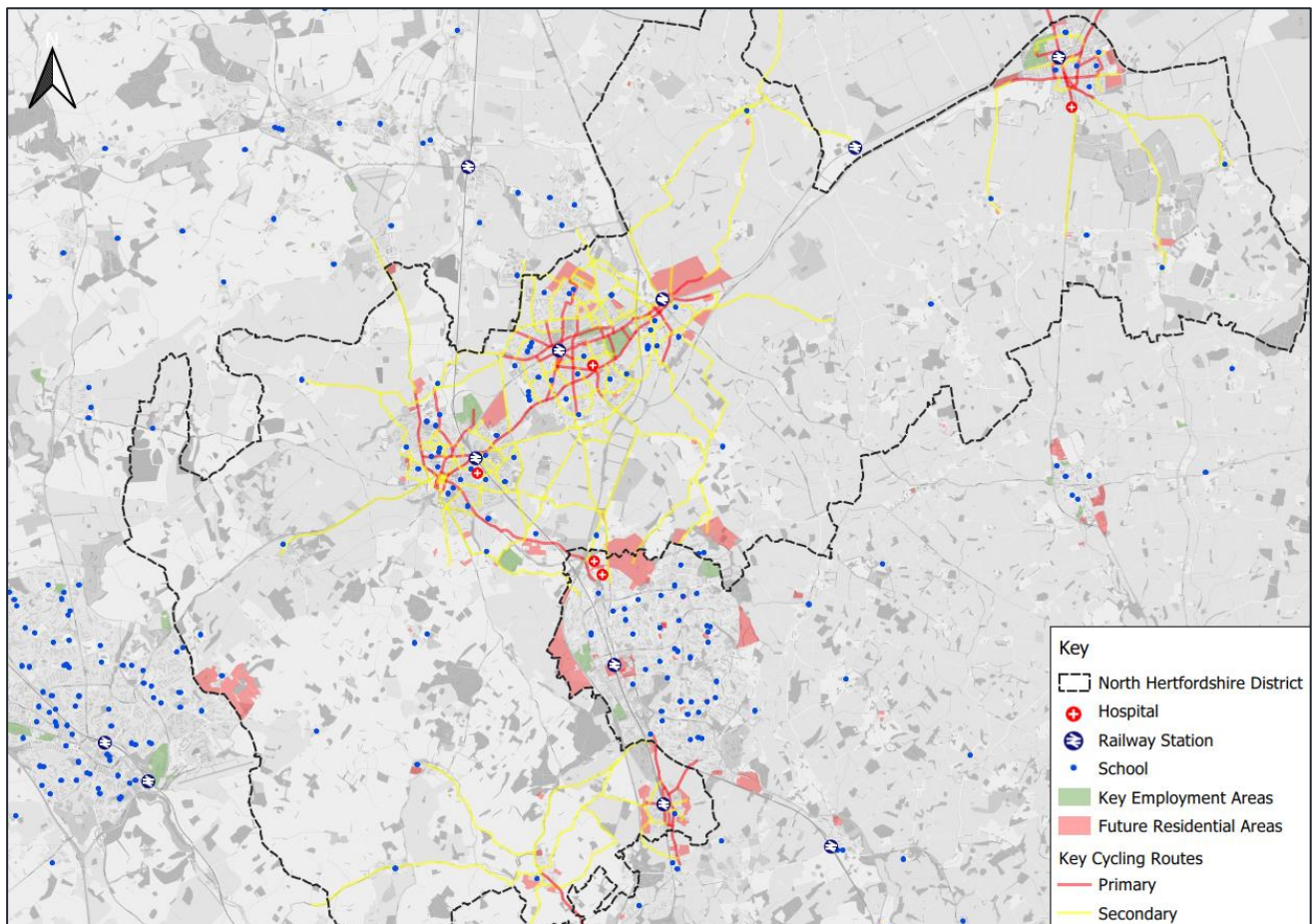
- 5.2.1. As identified in section 4, model outputs, existing cycle facilities and strategic active travel routes and connections were mapped alongside potential future developments and key destinations (rail stations, schools and key employment areas) for reference. The LCWIP project team then used the model outputs to determine ‘primary’ and ‘secondary’ cycle desire lines across North Herts as per the definitions in the LCWIP guidance.
- 5.2.2. Where the model outputs identified desire lines with greater potential demand and/or connected large residential areas with key destinations such as town centres, these were classed as primary desire lines / primary routes. Other routes, connecting to schools, colleges and employment sites were classed as secondary desire lines / secondary routes
- 5.2.3. Multiple primary and secondary routes were identified within each of the five key urban areas specified in the scoping report (Hitchin, Letchworth Garden City, Baldock, Royston and Knebworth). Secondary routes were identified connecting these areas with surrounding villages and settlements. Some inter-urban cycle routes were identified, notably linking Hitchin and Knebworth to Stevenage with primary routes. Links between Stevenage and Letchworth Garden City and Baldock were also identified, but due to the model outputs and greater distances involved, these were classed as secondary routes.
- 5.2.4. When identifying routes, the LCWIP project team also referred to the existing cycle facilities and routes, to ensure these were either considered as potential secondary or primary routes, or at least connected to the network. For example, the Letchworth orbital greenway and NCN routes were included as primary / secondary routes. Most county and district strategic routes

and connections were backed up by the model outputs and therefore also catered for with secondary and primary cycle routes as a minimum.

5.3 DRAFT NETWORK PLAN FOR CYCLING

5.3.1. The draft network plan for cycling was developed and can be seen in Figure 5-1 below. It is important to note that this is not the final network plan for cycling, which is presented later in this report and in Appendix F. This draft plan was presented to key stakeholders to gain feedback on the routes selected and identify any key routes that may have been omitted or misclassified. More information on the initial round of stakeholder engagement is available in the following sub-section.

Figure 5-1 – Draft North Herts District Network Plan for Cycling



5.4 STAKEHOLDER ENGAGEMENT

5.4.1. Key stakeholders were given the opportunity to provide feedback on the draft network plans for cycling, review the trip attractors mapped in the data gathering process and identify any key origin points, destination points and routes that were missing from the plan.

- 5.4.2. This stakeholder engagement began with a virtual workshop using Microsoft Teams and the online whiteboard tool 'Miro'. This workshop took place on 15 July 2021.
- 5.4.3. Both walking and cycling were discussed at this workshop and stakeholders were able to comment on the draft network plans for walking as well as cycling. For more information on the aspects of this stakeholder engagement period regarding network planning for walking, please see section 6 (section 6.5 in particular).
- 5.4.4. The workshop was attended by representatives from:
- Hertfordshire County Council;
 - North Hertfordshire District Council;
 - Welwyn Hatfield Borough Council;
 - Stevenage Borough Council;
 - Central Bedfordshire Council;
 - Ickleford Parish Council;
 - Knebworth Parish Council;
 - Kimpton Parish Council;
 - Pirton Parish Council;
 - Royston Parish Council;
 - Living Streets;
 - Letchworth Cyclists; and
 - Transition Town Letchworth.
- 5.4.5. The Miro 'whiteboard' provided stakeholders a way to directly comment on a map of the draft network. The whiteboard remained open and available for comment online for two weeks after the workshop. This allowed stakeholders who attended the workshop additional time to digest the draft network plan and comment in full. It also allowed stakeholders who were unable to attend the virtual workshop a chance to view the material and comment in their own time.
- 5.4.6. Stakeholders provided valuable feedback in relation to the draft cycling network, including:
- Identifying existing active travel routes that need integration into the wider network;
 - Highlighting where areas should be linked to the NCN route 12; and
 - Pointing out alternative adjacent routes that are more popular among residents.

- 5.4.7. Some stakeholders had technical difficulty using Miro. The LCWIP project team sent these stakeholders the plans via email and received comments back via email.
- 5.4.8. Extensive comments were received from Letchworth Cyclists, who had already produced an LCWIP-style 'Community Plan for a Letchworth Cycling and Walking Network'. This is a valuable document, written by people who regularly walk and cycle in Letchworth. For methodological consistency, the LCWIP project team took the same approach to developing the LCWIP in Letchworth Garden City as the rest of the district, referring to the Letchworth Cyclists plan principally during the stakeholder engagement windows for verification of routes and infrastructure ideas. However, it is encouraging that the two independent processes have much overlap in terms of findings and recommendations. Two notable differences are:
- The North Herts LCWIP places more emphasis on inter-urban trips (e.g. linking Letchworth Garden City with Hitchin and Baldock) while the Letchworth Cyclists plan focuses on trips within Letchworth. This is particularly noticeable when considering approaches to the primary cycle route on the A505, for example.
 - The Letchworth Cyclists plan has greater coverage of Letchworth Garden City in terms of infrastructure ideas. As the LCWIP project team was covering four other urban areas as part of this LCWIP and time and resource was limited, it was simply not possible to audit routes covering all of Letchworth Garden City in this first iteration of the LCWIP. When this LCWIP is revisited, areas which were not visited and audited (for example, outer neighbourhoods such as the Jackmans Estate) should be prioritised for audit. The Letchworth Cyclists plan will likely still be a valuable resource at that time.
- 5.4.9. Some key stakeholders were invited to the virtual workshop and to engage in the process but did not attend. Representatives were invited from organisations including Sustrans and Cycling UK and various relevant local organisations, but they did not attend the workshop or engage at this stage of the process. However, a representative from Sustrans did attend a virtual workshop and engage later in the LCWIP (described in section 7 of this report).
- 5.4.10. Following the stakeholder engagement, the network plan was updated to reflect relevant comments and suggestions received. The updated network plans are available in section 7.6 and Appendix F.

5.5 ROUTE AUDITING

5.5.1. Once the network plans were updated following stakeholder comments, the final selection of primary routes were considered for auditing. In order to make the process manageable at this stage, the focus was on prioritising a sub-set of primary routes where it was identified there was likely to be the greatest demand for cycling. A subset of primary routes for audit was selected based on stakeholder feedback and discussions between WSP, HCC and NHDC. This included primary routes in Hitchin, Letchworth Garden City, Baldock, Royston and Knebworth as well as three inter-urban routes:

- Hitchin to Stevenage
- Stevenage to Knebworth
- Hitchin to Baldock via Letchworth Garden City

5.5.2. Audits were undertaken by trained WSP personnel visiting each route corridor on location using the Department for Transport's Route Selection Tool (RST). The tool was used to assess the suitability of a route in its existing condition against the core design outcomes of directness, gradient, safety, connectivity and comfort. The process of scoring routes against the criteria in the RST identified issues (e.g. cyclists mixing with too high volumes of traffic) which informed the identification of infrastructure solutions (e.g. segregated infrastructure). The RST also identified critical issues at junctions to be addressed with infrastructure changes

5.5.3. Audits took place in September 2021 with staff from HCC also in attendance on certain days.

5.5.4. At the request of NHDC, additional virtual audits were undertaken for routes in the Hitchin area in early 2022 using Google Streetview.

5.5.5. Once route audits were complete, infrastructure improvements were identified in cycle infrastructure improvement plans. These were combined with walking infrastructure improvement plans. These are introduced and discussed in section 7 of this report.

5.6 NON-AUDITED ROUTES

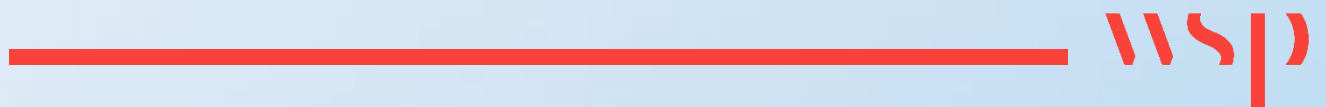
5.6.1. There are many primary and secondary routes which were identified but not fully audited in this first iteration of the LCWIP. Generally, there are no infrastructure improvements proposed on most of these routes for this reason. However, in visiting the towns and engaging with stakeholders, the LCWIP project team inevitably saw opportunities for active travel infrastructure improvements on routes that weren't formally audited. Many of these were

included and presented to stakeholders in a second round of engagement discussed in section 7 and additional suggestions were added after that engagement too.

- 5.6.2. Where primary and secondary routes have been identified but not audited, these should be priorities for further investigation into active travel provision. This could be as part of a formal revision to this LCWIP or taken forward separately on a case-by-case basis. For example, where there are routes in the vicinity of proposed developments, Section 106 money could potentially be used to fund the auditing of these routes, the identification of infrastructure changes needed, and the design and construction of this infrastructure.
- 5.6.3. It should be noted that separate work is already being undertaken by HCC to identify the potential for active travel provision on the following routes:
- B197 corridor (Stevenage - Welwyn);
 - Hitchin - Westmill area to the station;
 - NCN route 12 Stevenage - Letchworth (in conjunction with Sustrans);
 - Royston - links from proposed A505 cycle bridge to the town centre and station.
- 5.6.4. Detailed design work is also underway looking at the North Road corridor in Stevenage.

6

NETWORK PLANNING FOR WALKING



6 NETWORK PLANNING FOR WALKING

6.1 INTRODUCTION

- 6.1.1. This section explains how the information gathered in section 4 was used to develop a draft network plan for walking, with core walking zones and key walking routes. It goes on to describe how this draft network was presented to stakeholders, amended and then used to determine the relative importance of different routes and thus which routes to audit and develop infrastructure plans for.
- 6.1.2. As with the network planning for cycling, a key goal at this stage of the LCWIP was to determine where the greatest propensity for walking exists – where targeted investment in infrastructure improvements could generate the most new walking trips..

6.2 IDENTIFYING CORE WALKING ZONES

- 6.2.1. Core Walking Zones (CWZs) are defined in the LCWIP guidance as areas consisting “of a number of walking trip generators that are located close together – such as a town centre or business parks”. It states that “within CWZs, all of the pedestrian infrastructure should be deemed to be important”, i.e. the pedestrian infrastructure within CWZs (and connections to surrounding areas) should be of a high standard to support and encourage more walking trips.
- 6.2.2. Five core walking zones were identified across North Hertfordshire, located in the town centres of Hitchin, Letchworth Garden City, Baldock, Royston and Knebworth. A sixth core walking zone was also identified at Letchworth Gateway, a large retail and industrial area. The town centres in Hitchin, Baldock and Royston are a short distance from the rail stations which serve them and so these CWZs do not contain rail stations, unlike the CWZs for Letchworth Garden City and Knebworth. (Letchworth Gateway does not have its own rail station). In the cases of Hitchin, Baldock and Royston, routes between the station and CWZ have been included as Key Walking Routes and audited.
- 6.2.3. The extent of each core walking zone considered within this LCWIP are shown in Figure 6-1 to Figure 6-5 below.

Figure 6-1 – Hitchin Core Walking Zone

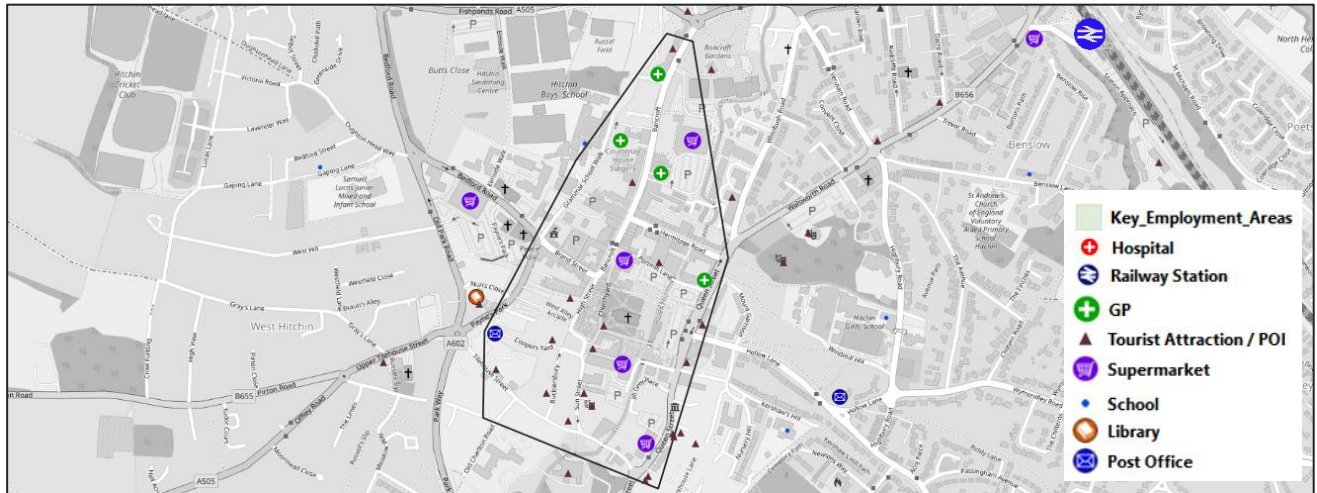


Figure 6-2 – Letchworth Garden City & Letchworth Gateway Core Walking Zones



Figure 6-3 – Baldock Core Walking Zone

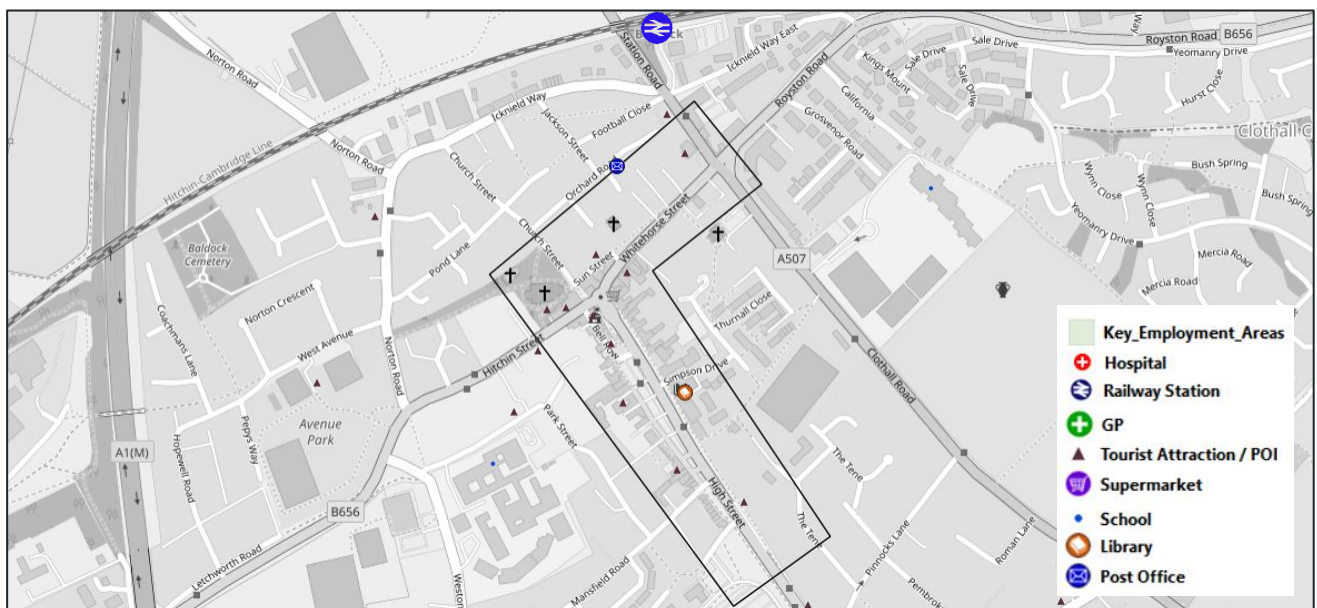


Figure 6-4 – Royston Core Walking Zone

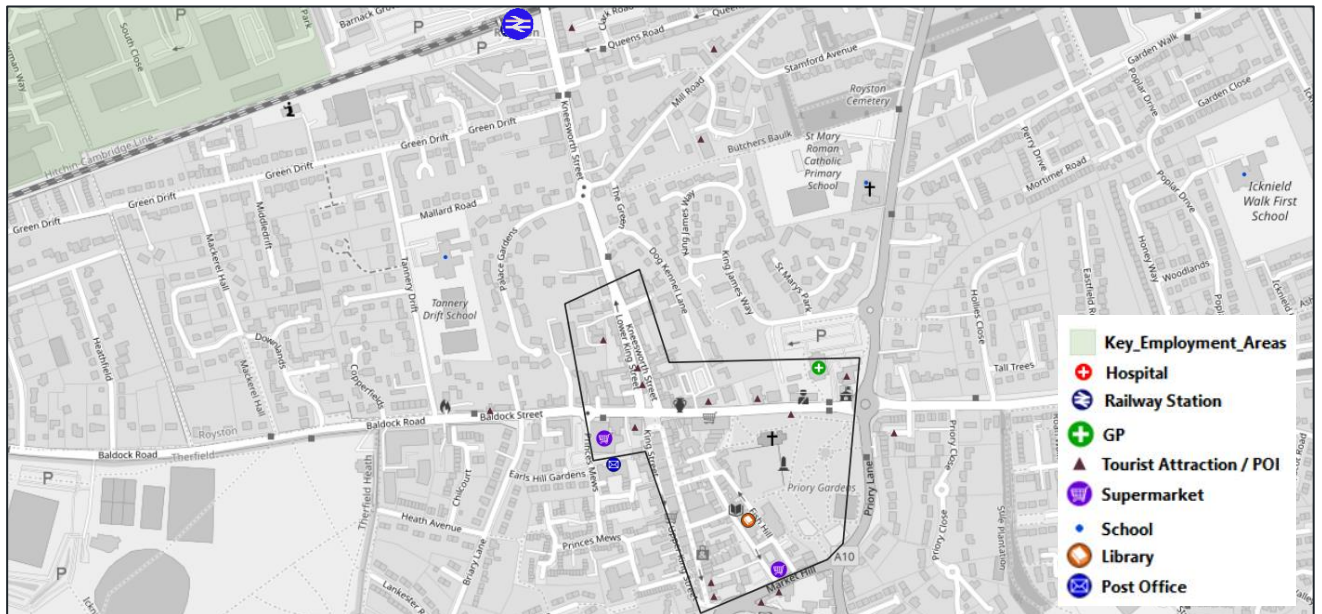
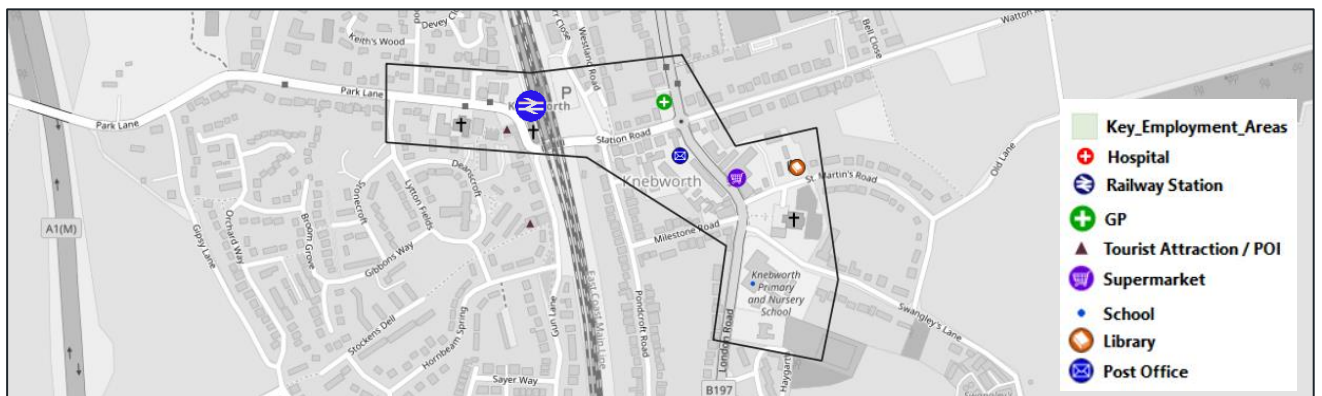


Figure 6-5 – Knebworth Core Walking Zone



6.3 IDENTIFYING KEY WALKING ROUTES

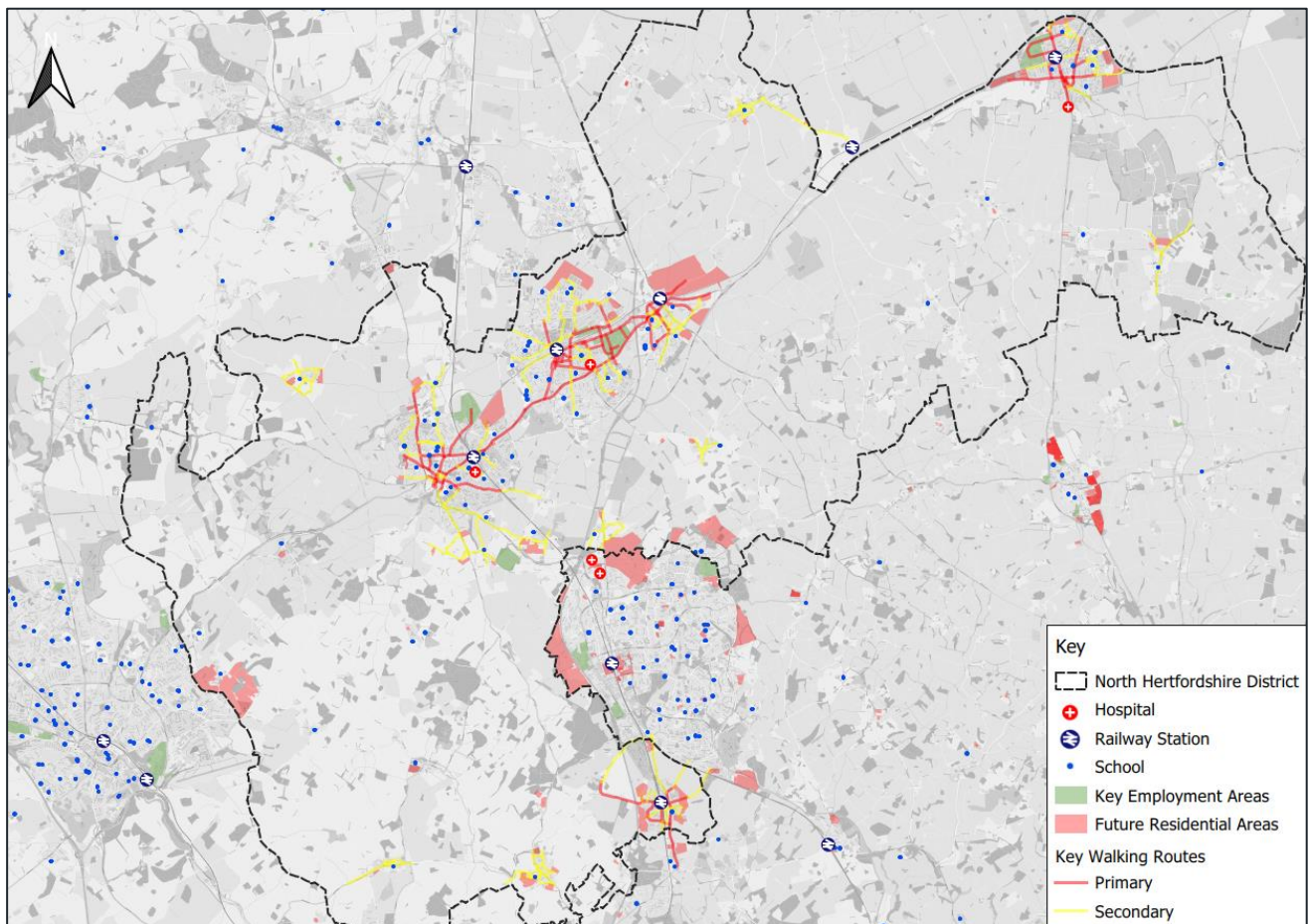
- 6.3.1. The CWZs represent the focal points for pedestrian journeys within North Hertfordshire, and therefore the starting point for mapping walking routes is to identify those that serve these CWZs. For this first iteration of the LCWIP, primary routes were considered those main pedestrian routes within CWZs as well as routes connecting to the CWZ (up to 2km in length). Secondary routes (e.g. through local areas and connecting to primary routes) were added to increase the coverage in the urban areas. Secondary routes were also added within each of the key villages as identified in the scoping report.

6.3.2. The output of the LCWIP GIS model's walking run was mapped alongside the CWZs, ROW, strategic active travel routes and connections, potential future developments and key destinations (rail stations, schools and key employment areas) for reference. The LCWIP project team used the model output and the location of key destinations to identify primary walking routes to the CWZ and secondary routes across the district.

6.4 DRAFT NETWORK PLAN FOR WALKING

6.4.1. The draft network plan for walking can be seen in Figure 6-6 below. It is important to note that this is not the final network plan for walking, which is presented later in this report. This draft plan was presented to key stakeholders to gain feedback on the routes selected and identify any key routes that may have been omitted or misclassified. More information on the initial round of stakeholder engagement is available in the following sub-section.

Figure 6-6 – Draft North Herts District Network Plan for Walking



6.5 STAKEHOLDER ENGAGEMENT

- 6.5.1. During the same engagement period described in section 5.4, key stakeholders were given the opportunity to provide feedback on the draft network plans for both walking, review the trip attractors mapped in the data gathering process and identify any key origin and destination points that were missing from the plan.
- 6.5.2. This stakeholder engagement began at the same virtual workshop described in section 5.4 (see this section for the stakeholder attendance list). Again, stakeholders could comment on the walking plans on the Miro board for up to two weeks after the session. Some stakeholders preferred to receive plans and comment via email.
- 6.5.3. Stakeholders provided valuable feedback in relation to the draft walking network, including:
- Identifying areas affected by heavy traffic which may deter pedestrians;
 - Identifying locations where crossings would reduce severance;
 - Highlighting areas where steps affect accessibility for some individuals; and
 - Identifying where routes should connect to existing ROW and greenways.
- 6.5.4. Following the stakeholder workshop, the network plan was updated to reflect the comments and suggestions received.

6.6 ROUTE AUDITING

- 6.6.1. Once the network plans were updated following stakeholder comments, the final section of primary routes were considered for auditing. Due to resource limitations, secondary routes and some primary routes could not be audited by the LCWIP project team. A subset of primary routes for audit was selected based on stakeholder feedback and discussions between WSP, HCC and NHDC. The routes audited are all either within, or connected to, the six CWZs.
- 6.6.2. Audits were undertaken by trained WSP personnel visiting each route corridor on location using the DfT's Walking Route Audit Tool (WRAT). This tool assesses existing infrastructure on the routes against five core design outcomes for pedestrian infrastructure: attractiveness, comfort, directness, safety and coherence. The WRAT process considers the needs of all users, including vulnerable pedestrians, such as those who are older; visually impaired; mobility impaired; hearing impaired; with learning difficulties; buggy users or children. The process of scoring routes against the criteria in the WRAT identified issues (e.g. lack of

crossing points) which informed the identification of infrastructure solutions (e.g. new zebra or signalised crossings).

- 6.6.3. Audits took place at the same time as the RST audits, in September 2021, with HCC staff also accompanying walking audits for training purposes.
- 6.6.4. Once route audits were complete, walking infrastructure improvements were identified in walking infrastructure improvement plans. These were combined with cycling infrastructure improvement plans. These plans are introduced and discussed in the next section of this report.

6.7 NON-AUDITED ROUTES

- 6.7.1. As with the cycle routes, there are many primary and secondary walking routes which were identified but not fully audited in this first iteration of the North Herts LCWIP. Generally, there are no infrastructure improvements proposed on most of these routes for this reason. However, as was the case with non-audited cycle routes (described in section 5.6), opportunities for active travel infrastructure on non-audited routes were identified while visiting the towns and engaging with stakeholders. Many of these were included and presented to stakeholders in a second round of engagement discussed in the next section of this report, and additional suggestions were added after that additional engagement too.
- 6.7.2. Again, as with the cycle routes, where primary and secondary walking routes were identified but not audited, these should be priorities for further investigation into active travel provision. This is described more in section 5.6 and 9.
- 6.7.3. There are various infrastructure improvement schemes currently being undertaken by HCC, which has been considered when determining the audit network. These include the identification of walking improvements along the following corridors:
 - B197 corridor between Stevenage to Welwyn; and
 - Walsworth Road corridor between Hitchin Station and the town centre.

7

WALKING AND CYCLING INFRASTRUCTURE IMPROVEMENTS



7 WALKING AND CYCLING INFRASTRUCTURE IMPROVEMENTS

7.1 OVERVIEW OF LCWIP INFRASTRUCTURE IMPROVEMENTS

- 7.1.1. Following the route audits, auditors generated plans of the high-level infrastructure improvements that would be needed to enable mode shift to walking and cycling. This was originally done individually by auditors (i.e., walking infrastructure improvements were generated separately from cycling infrastructure improvements). The plans were then checked against one another (to ensure there were no clashes where walking routes and cycling routes overlapped), then combined into the infrastructure plans discussed in this section of the report and in Appendix G.
- 7.1.2. The completed and detailed walking and cycling audit forms are not included in this report but have been retained by HCC for information for use when schemes are taken forward.
- 7.1.3. The completed walking audit forms (and associated documentation) contain the specific information on what specific footway improvements (e.g., widening, resurfacing, lighting) would be needed where in order to bring walking provisions in line with current best practice. The plans shown in this section of the report and in Appendix G do not go into this level of detail for footway improvements as this is simply too much information to convey in these formats. The plans in the report and appendices instead identify the locations where footway improvements are needed (without specifying precisely what these are), alongside the locations where there is a need for new/improved crossings and other relevant walking (and cycling) infrastructure.
- 7.1.4. In terms of cycle infrastructure, all the detail of the suggested improvements is contained in this report and its appendices. Certain specifics are not included (for example bus stop treatments where segregated cycleways are proposed) but general principles and assumptions are given where possible.
- 7.1.5. The infrastructure improvements identified in this section of the report have not been taken through feasibility design. Rather, they are concepts of the types of infrastructure which are believed possible, should be investigated further and, if implemented correctly and in appropriate packages, should bring about modal shift.

7.2 INTERVENTION TYPES

7.2.1. Information on each type of intervention shown in the infrastructure plans is given below:

- **Minor junction improvement (side road):** where a need for minor junction improvements has been identified at side roads, this typically denotes a need to build out the footways (to tighten junction geometry, reduce turning speeds and shorten crossing distances) and add dropped kerbs and/or tactile paving where missing. In some cases, it might be good to consider additional measures, such as banned turns, raised tables, continuous footway crossings, cycleways or modal filters.
- **Minor junction improvement (mini roundabout):** where a need for minor junction improvements has been identified at junctions which are currently mini roundabouts, this denotes a review against LTN 1/20 guidance and potentially tightening of the junction geometry, and/or improving the crossing facilities. In some cases, especially where there are double mini-roundabouts it may be better to simply replace them with unsignalised priority T-junctions.
- **Mid-size junction improvement:** at mid-size junctions, improvements typically denote a need for pedestrian crossings and protected cycle infrastructure on all arms. In some cases, this might mean signalling the junction.
- **Large junction improvement:** at large junctions where a need for junction improvements has been identified, this typically denotes a need for pedestrian crossings and protected cycle infrastructure on all arms. At particularly large junctions this might mean a Dutch-style roundabout (with parallel crossings on each arms) or a signalised 'CYCLOPS' style junction (as have been installed in Manchester in recent years). Some large junctions which are roundabouts may need converting to signalised crossroads or signalised junctions to provide the required improvements to pedestrians and cyclists.
- **New / improved signalised crossing:** this denotes the installation of new signalised crossings or improving existing signalised crossings through increasing the green time and/or repairing audit aids. Where these are aligned with cycle facilities, these should be pedestrian and cycle crossings, preferably with separate parallel crossing points for pedestrians and cyclists as opposed to toucan crossings. Otherwise, these should be simple pedestrian crossings (i.e. puffin crossings). Whether a crossing should be a zebra/parallel crossing or a signalised crossing should be investigated further in feasibility design – at this stage designations are only indicative.

- **New zebra / parallel crossing:** where these are included in the plans, this denotes includes providing new priority crossings to reduce severance. Where these are aligned with cycle facilities these should be parallel crossings; otherwise, they should be zebra crossings. In some cases these have been proposed to replace existing uncontrolled crossings with traffic islands – an additional benefit in converting these crossings for cyclists is that they remove pinch points on the carriageway. Whether a crossing should be a zebra/parallel crossing or a signalised crossing should be investigated further at the feasibility design stage – at this stage the designations are only indicative.
- **New modal filter:** these typically refer to LTN 1/20 compliant infrastructure on the carriageway which filters out vehicles but allows cyclists to pass. This could take the form of bollards or planters and could potentially have camera enforcement. Where these are proposed on bus routes, these would take the form of a camera-enforced bus gate (which also allows cyclists through).
- **Traffic calming:** this denotes adding cycle-friendly traffic calming features to streets and/or reducing speed limits to safe levels for cyclists following LTN 1/20 guidance. Where traffic calming features are considered, these should be cycle friendly (e.g. narrowing traffic lanes and carriageways, removing centre lines or raising tables). Speed cushions in particular should be avoided as a form of traffic calming, as they result in motor traffic and cyclists changing their positions in the carriageway, which increases the potential for conflict between modes. Furthermore, non-standard cycles such as tricycles can have issues with balance when going over speed cushions. Additional measures could include parking restrictions, resurfacing and gulley cover replacement. Some traffic-calmed streets may also be suitable for contraflow cycling (either with or without cycle lanes/tracks) – this has been indicated on the plans where it may be especially useful for the cycle network.
- **Footway improvements:** this could refer to a number of different types of footway improvement. It could denote ensuring footways have 1.5m clear width to allow wheelchairs and buggies to pass, widening and/or relocation of permanent/temporary footway obstructions as necessary (including footway parking). It could also denote resurfacing (to fix patching, trenching, uneven surfaces, trip hazards), lighting improvements, and/or the removal of excess bollards, guard railing and vegetation.

- **Segregated cycleway:** this denotes the addition of LTN 1/20 compliant segregated cycle facilities such as kerb-segregated tracks, stepped cycle tracks, footway level tracks, off-road cycle tracks or lightly segregated cycle lanes (whichever is judged most suitable in feasibility design). It also includes the necessary traffic calming and speed limit changes need to make the route LTN 1/20 compliant, as well as bus stop redesign (i.e. to bus stop bypass or shared use bus border) resurfacing, wayfinding and gully cover replacement as necessary. Generally, where this is shown on the plans, a single red line will refer to a one-way cycle facilities on both sides of the road. In some cases, a two-way track on one side of the road may be preferable. Indications of where this may be the case have been given in text boxes on the plans in Appendix G but all options should remain open for investigation at the feasibility design stage.
- **Signalised shuttle system:** this denotes the installation of a signal-controlled system to alternate flows on a narrowed section of road. This is proposed where there are width constraints (e.g. under a rail bridge) and the street currently provides traffic lanes in both directions at the expense of having very narrow footways for pedestrians. By installing a shuttle system, footways can be widened making this a more appealing, comfortable and safe route for pedestrians and cyclists. There is an example of such a system on a bridge over a rail line in Stevenage (Chequers Bridge Road).
- **Pedestrian zone:** this denotes urban realm improvements (similar in style to those on Church Street in Baldock) including high-quality paving, seating, lighting and planting.
- **New Pedestrian and Cycle Bridge:** these are shown on the plans where a long-term plan for a new pedestrian and cycle bridge might bring benefit to the walking and cycle networks. These are accompanied by text boxes giving additional information.

7.3 STAKEHOLDER ENGAGEMENT

- 7.3.1. Following the completion of the route auditing process, possible interventions were identified and six infrastructure plans combining the walking and cycling interventions were created (one each for Hitchin, Letchworth Garden City, Baldock, Royston, Knebworth and one for the Hitchin to Stevenage inter-urban route). These were presented to key stakeholders in a second round of stakeholder engagement. Stakeholders had the choice of attending a virtual workshop, which took place on 29 November 2021, or an in-person workshop which was held on 1 December 2021. The purpose of this second period of stakeholder engagement was to inform the stakeholders about the infrastructure improvements identified and give

stakeholders an opportunity to comment and provide additional improvements that could be considered. Stakeholders were also shown updated network plans which had changed following stakeholder comment from the first period of stakeholder engagement.

7.3.2. As with the first period of stakeholder engagement, feedback was primarily obtained using Miro, an online collaborative whiteboard platform that enabled the stakeholders to view the plans and provide location-specific comments and feedback. Access to the Miro board was available for two weeks post workshop to ensure all stakeholders had an opportunity to review the materials. Stakeholders were also provided with the materials and given the option to provide feedback via email.

7.3.3. The workshops were attended by representatives from:

- Hertfordshire County Council (both officers and councillors)
- North Hertfordshire District Council (both officers and councillors)
- Welwyn Hatfield Borough Council (officers only)
- Stevenage Borough Council (officers only)
- Knebworth Parish Council
- Pirton Parish Council
- Great Ashby Community Council
- Sustrans
- Letchworth Cyclists

7.3.4. Stakeholders provided valuable feedback in relation to the infrastructure plans, including:

- Whether they were supportive of particular infrastructure or not
- Potential issues and opportunities which might be associated with implementing the infrastructure
- Further issues and opportunities for active travel (some of which were not raised in the first period of engagement)
- Suggestions for additional routes and infrastructure.

7.3.5. Some key stakeholders were invited to the virtual workshop and to engage in the process but did not attend. Representatives were invited from organisations including Living Streets, Cycling UK and various relevant local organisations but they did not attend the workshop or engage at this stage of the process.

7.4 PROPOSED INFRASTRUCTURE IMPROVEMENTS

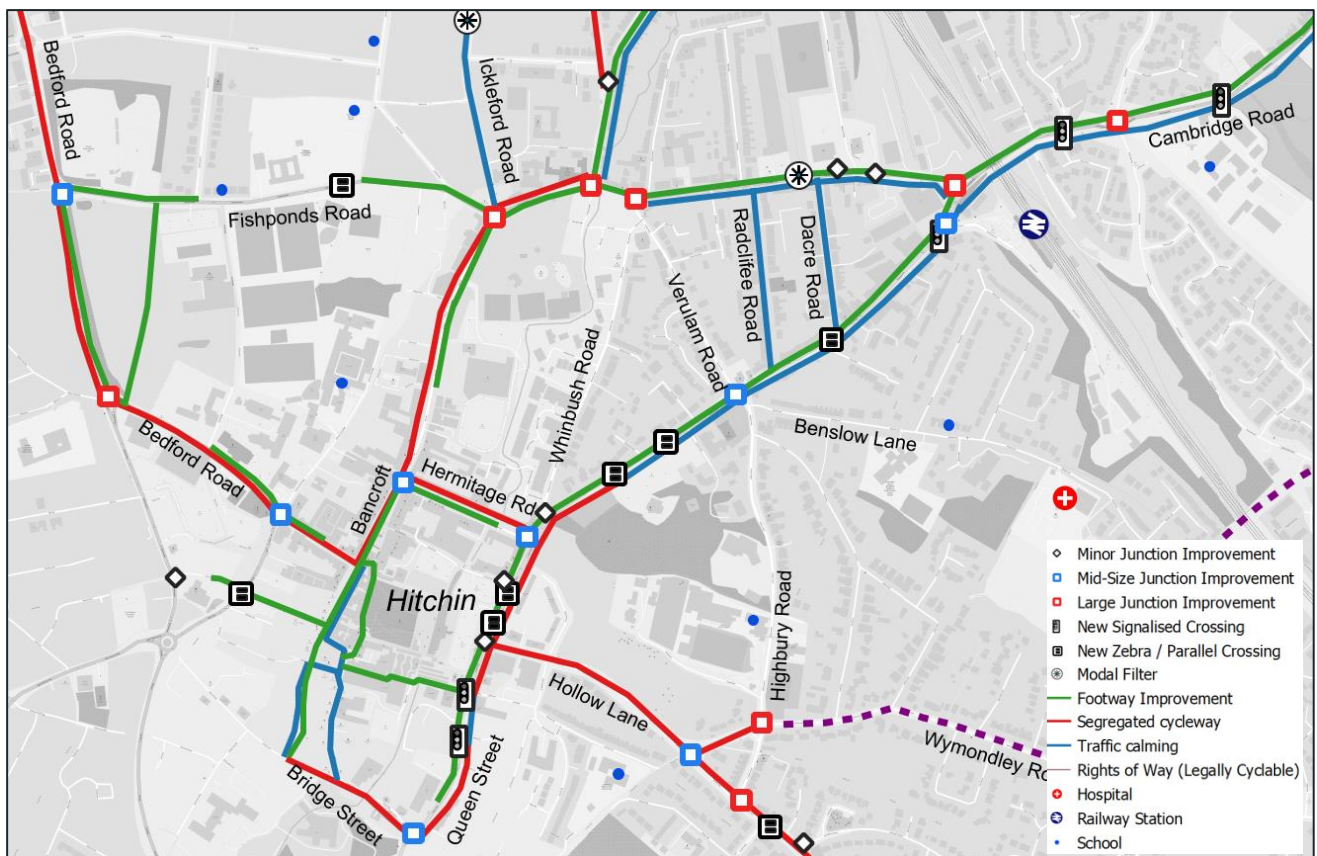
- 7.4.1. Following the second round of stakeholder engagement, final versions of the six infrastructure plans were developed. These are presented in full in Appendix G (with additional text boxes). Previews of the plans are shown in this section of the report from Figure 7-1 to Figure 7-6 below without these text boxes but accompanied by some overview text.
- 7.4.2. These final versions of the plans take into account the results of all audits (in person and virtual), relevant stakeholder comments from both periods of engagement and further internal discussions between HCC and NHDC officers. It is important to note that where stakeholders expressed opposition to certain infrastructure, this has not necessarily resulted in removal of the infrastructure from the plans. Rather, the opposition has been captured in the prioritisation process (see section 8 of the report). Moreover, any infrastructure identified in this LCWIP would undergo additional stakeholder consultation as part of the standard design and development process – allowing a fuller picture of support/opposition.

HITCHIN

- 7.4.3. Infrastructure improvements proposed in Hitchin are generally centred in the old town centre, where footway and junction improvements are accompanied by new crossings and segregated cycle facilities on Queen Street, Bancroft and Hollow Lane among others. Allowing contraflow cycling on the streets around Market Square would be a quick win that would help cyclists navigate the centre. Infrastructure ideas for North-South routes to Ickleford and along Bedford Road are also prominent in the plans.
- 7.4.4. The ability to improve cycling conditions in Hitchin is greatly hampered by constraints on the Nightingale Road, Cambridge Road and Walsworth Road, which link the town with the station and Letchworth Garden City. These roads are heavily trafficked and physically constrained, especially under the rail bridge. To fit cycle infrastructure on these streets, a traffic lane would need removing and a one-way system implementing. This will require extensive traffic analysis and substantial political support. Further work to investigate this, beyond this study, is required to identify whether there is a workable solution.

Figure 7-1 – Selection of Proposed Infrastructure Interventions in Hitchin

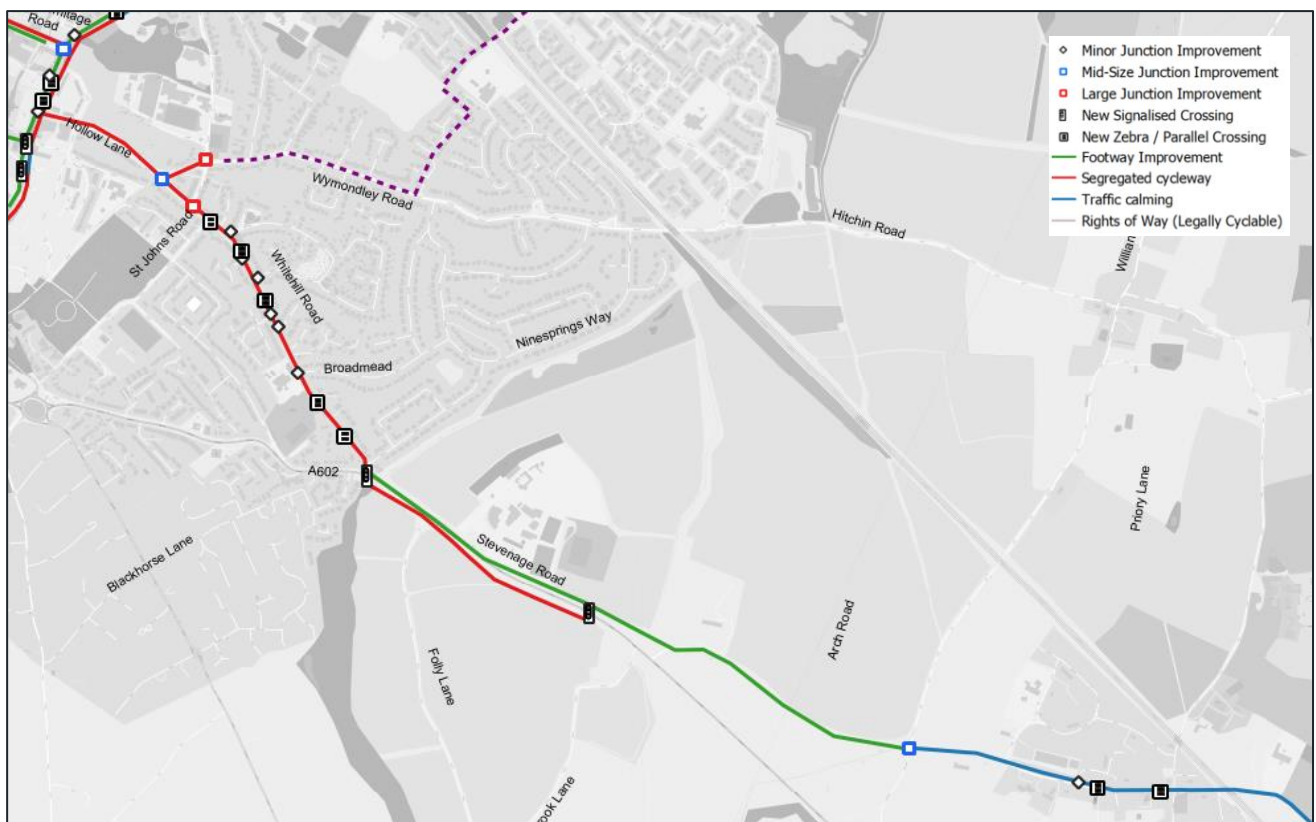
(Full Map with Additional Detail shown in Appendix G)



INTER-URBAN ROUTE (HITCHIN TO STEVENAGE)

- 7.4.5. Coming out of Hitchin, the proposals include a major design of the triangular gyratory (Hollow Lane / Highbury Road / Whitehill Road), to provide for pedestrians and cyclists. It should be possible to provide segregated cycle infrastructure on Whitehill Road if roadspace is reallocated from right turn pockets and traffic islands. At Stevenage Road, however, the highway becomes very constrained and there are sections where there is a 1m wide footway adjacent to a 60mph road. Land take may be required here to provide for cyclists, whether by removing carriageway and widening the existing highway or creating a parallel route, accessed by new crossings. East of Ash Brook, there may be scope to use the grass verge to widen the existing footway and create a wide shared footway. Through Little Wymondley, traffic calming is proposed alongside new crossings. On the approach to A1(M) junction 8, once speed limits are higher, segregated cycleway would again be required. Segregated infrastructure is required over the A1(M) junction (this is in Stevenage Borough) and to link with routes in the Stevenage LCWIP. Further work is required on this link.

Figure 7-2 – Selection of Proposed Infrastructure Interventions on Inter-Urban Route
(Full Map with Additional Detail shown in Appendix G)

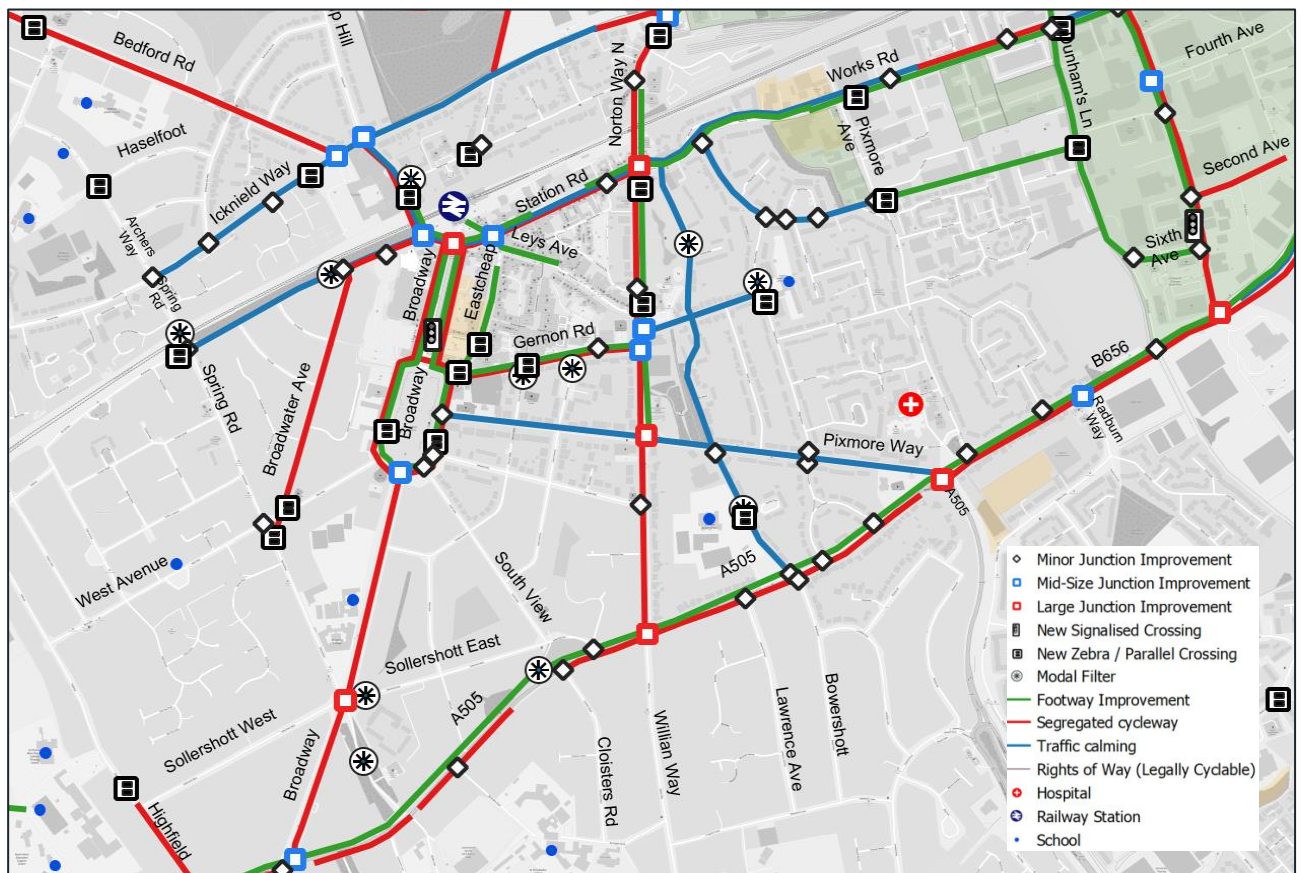


LETCHWORTH GARDEN CITY

- 7.4.6. The infrastructure improvements proposed in Letchworth Garden City centre on key changes near the rail station and on Broadway. On Bridge Road, Station Place and Station Road, the physical constraints mean that roadspace would need reallocating to provide LTN 1/20 compliant cycle infrastructure. The proposals therefore include a one-way system for traffic on these roads, with one lane replaced with a two-way cycle track. This would enable many more people to choose to walk and cycle short or multi-modal journeys in Letchworth. This would require traffic analysis and political support, but without it there would likely be a large gap in the cycle network in the centre due to the physical constraints.
- 7.4.7. Around Broadway Gardens, there is lots of space available, but due to the importance of green space here it is proposed to instead reallocate a lane of traffic to create a segregated carriageway facility for cyclists. The current shared footway (part of the National Cycle Network) does not meet current best practice for cycling. On Broadway (south of the gardens), an off-road cycle facility may be preferable.

Figure 7-3 - Proposed Infrastructure Interventions in Letchworth Garden City

(Full Map with Additional Detail shown in Appendix G)



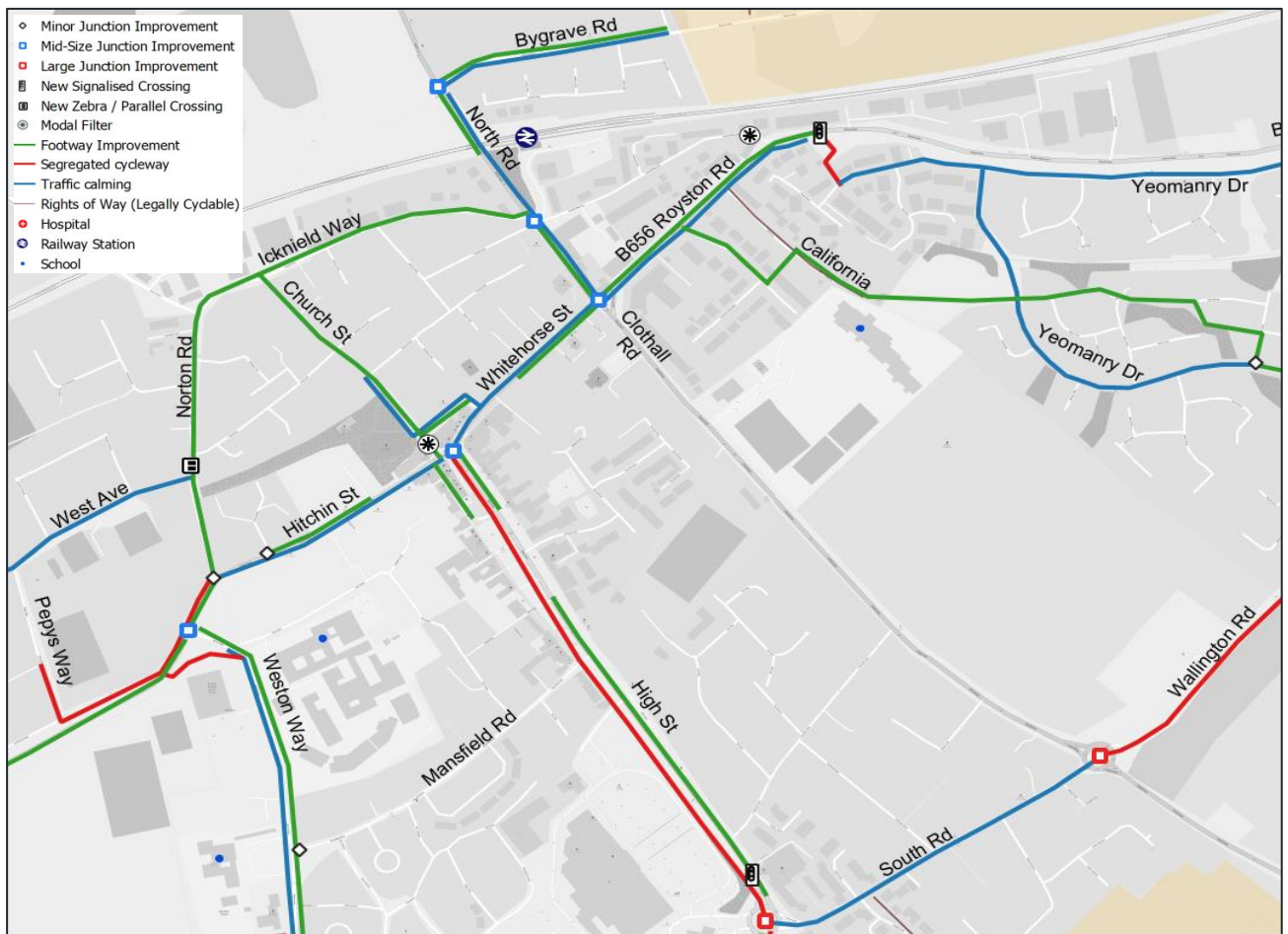
- 7.4.8. Elsewhere, modal filters and crossings are proposed throughout Letchworth Garden City to reduce severance and create quiet routes for pedestrians and active travel.
- 7.4.9. Physical constraints on Works Road mean that segregated cycle infrastructure is not possible along the whole of the route, unless a one-way system is implemented (this could be considered in the long-term). As such the infrastructure proposed there currently is not fully LTN 1/20 compliant.
- 7.4.10. There are similar constraints in places along the Hitchin Road A505/ Baldock Road B656 route, meaning that a continuous facility may not be possible unless more radical solutions are considered. However, proposals for segregated cycle infrastructure on this route are nonetheless included wherever possible as it is a key inter-urban route connecting Hitchin, Letchworth Garden City and Baldock. It is acknowledged however that this route is not particularly helpful for journeys within Letchworth, though junction improvements on this route would help make it easier to cross and therefore facilitate more north-south journeys.

BALDOCK

- 7.4.11. Infrastructure improvements in Baldock centre around the provision of a segregated cycle facility on the High Street and the creation of quiet routes north of the B656. Much of north Baldock can be made suitable for utility cycling without a need for segregated infrastructure if contraflow cycling is permitted on Church Street, a crossing over Norton Road is provided and a modal filter is added to Hopewell Road. This would also help connections to Letchworth Garden City via the bridge over the A1(M), for which improvements are also suggested.
- 7.4.12. Elsewhere, a new crossing is provided over Royston Road to help connect east Baldock with the rail station via Icknield Way East and it is proposed to redesign several junctions with improvements to walking and cycle facilities.

Figure 7-4 - Proposed Infrastructure Interventions in Baldock

(Full Map with Additional Detail shown in Appendix F)

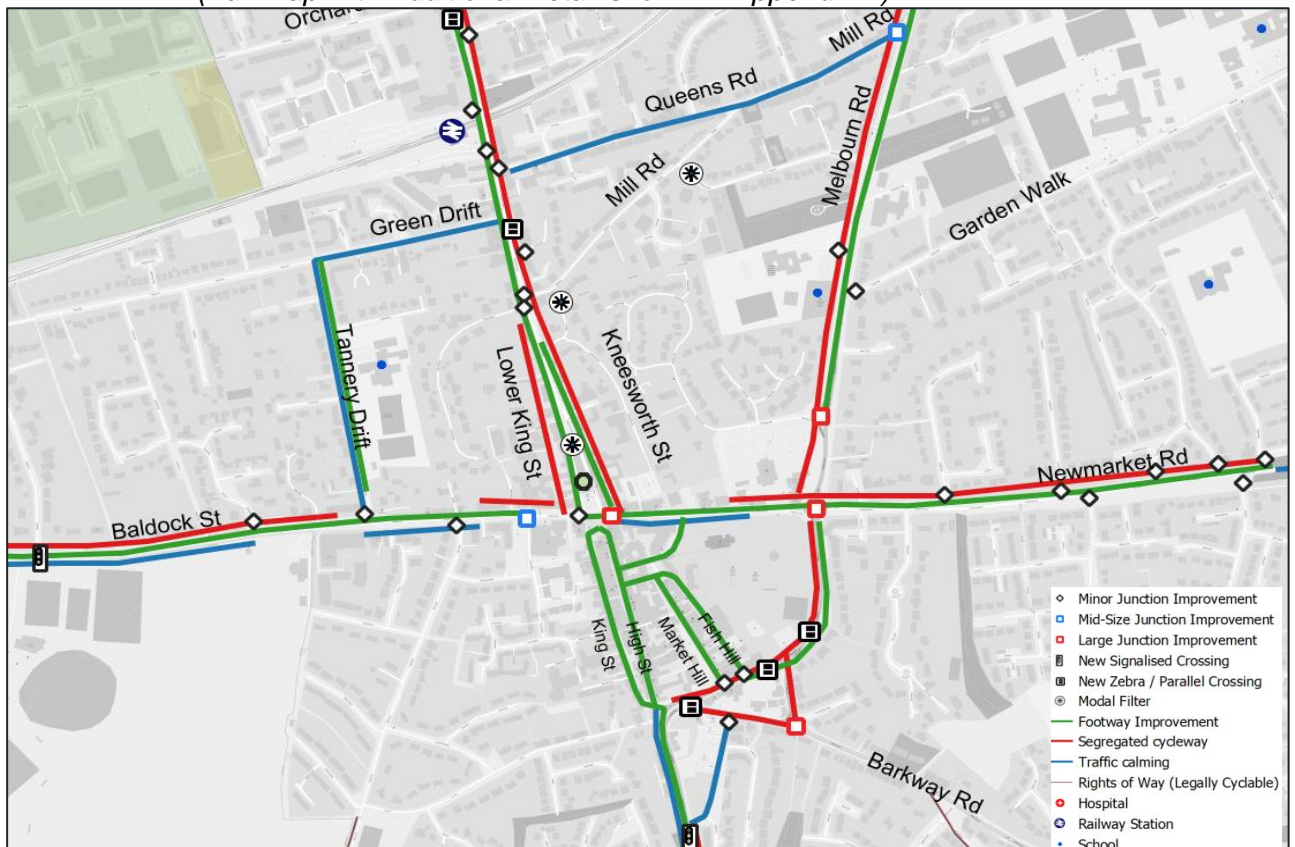


ROYSTON

- 7.4.13. A key improvement needed in Royston is better walking and cycling connections between the old centre and the rail station. Currently on both Lower King Street and Kneesworth Street, footways are extremely narrow and motor traffic is prioritised at the expense of active travel. As such, a modal filter is proposed on Lower King Street (creating space for a pedestrian zone). Motor traffic wishing to travel from south Royston to North Royston (e.g. to the rail station) would instead have to go via the A10 or Tannery Drift.
- 7.4.14. Segregated cycle facilities are proposed along the length of A10 Melbourn Road and Kneesworth Street / Old North Road, as well as the triangular A10 gyratory. Constraints on Baldock Street and Newmarket Road prevent a continuous segregated cycle facility, but segregation has been proposed where there is space, with traffic calming proposed where there is not. Junction improvements are proposed at several larger junctions, where there are currently many risks for cyclists. Modal filters are proposed to reduce through traffic issues / create quiet routes. Crossings are proposed to improve active connections to the hospital, sports clubs and other locations.

Figure 7-5 - Proposed Infrastructure Interventions in Royston

(Full Map with Additional Detail shown in Appendix F)

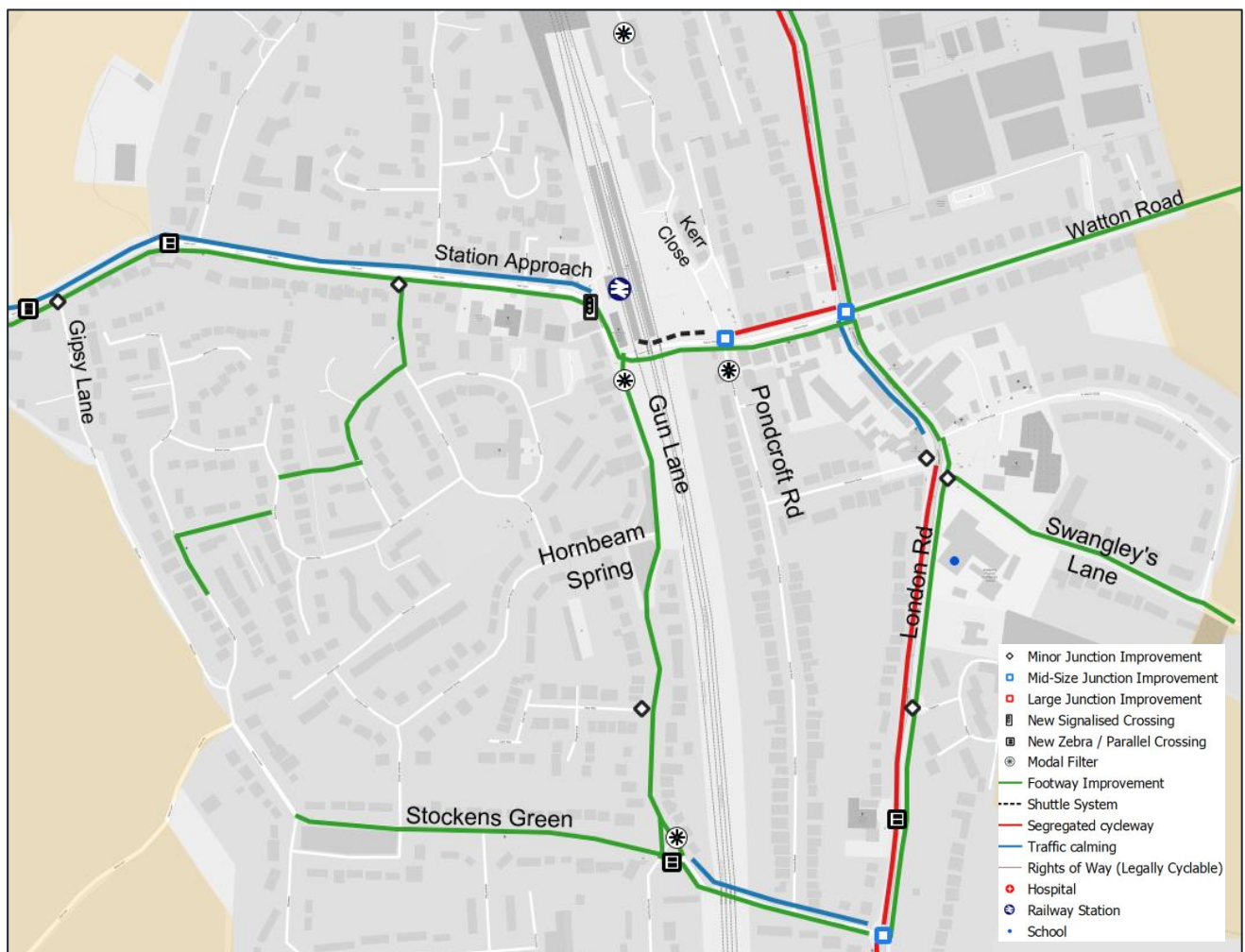


KNEBWORTH

- 7.4.15. A major constraint in Knebworth currently is the rail bridge, under which motor traffic has been prioritised at the expense of walking. The footway under the bridge is narrow and unpleasant. A key proposal in this LCWIP is to investigate the potential for a signal shuttle system under the bridge, to allow for a widened footway (and possibly cycle facilities) under the bridge, to increase the attractiveness of active modes. A signal crossing is proposed to improve access to the station.
- 7.4.16. Modal filters are proposed on Gun Lane and Pondcroft Road to create quiet routes for active modes and simplify junctions on Station Road. Segregated cycle facilities are proposed on the B197 to connect Knebworth with Stevenage, Woolmer Green and beyond. Parking in the High Street section needs addressing if a continuous facility is to be provided.

Figure 7-6 - Proposed Infrastructure Interventions in Knebworth

(Full Map with Additional Detail shown in Appendix F)



OTHER INFRASTRUCTURE IMPROVEMENTS

- 7.4.17. During the engagement periods, stakeholders raised issues and suggested improvements in places which were not audited as part of the first iteration of this LCWIP. Many of these suggestions were reasonable and fit with the philosophy of the LCWIP. Infrastructure plans have not been produced for these improvements, but they are listed here for reference.
- 7.4.18. In Pirton, reports of road safety issues merit consideration of traffic calming solutions on:
- Holwell Road, Waterloo Lane and Pirton Road
 - Royal Oak Lane
 - High Street
 - Grove Lane and Shillington Road
- 7.4.19. Additionally in Pirton, suggestions for improvements on the Hambridge Way path connecting to Hitchin are supported by the LCWIP.
- 7.4.20. In Great Ashby, crossings were suggested at the junction of Great Ashby Way and Whitehorse Lane to improve pedestrian access to two schools.
- 7.4.21. The improvements in Pirton and Great Ashby have been costed and prioritised separately from the rest of the infrastructure improvements identified, but the list and digitised shapefiles have been passed to HCC.

7.5 OTHER PRIORITY ROUTES

- 7.5.1. There are two other key connections in North Herts for which audits have not been completed and no infrastructure improvements have been identified in this first iteration of the LCWIP. These are:
- Letchworth Garden City / Baldock to Stevenage
 - Ashwell to Ashwell and Morden rail station
- 7.5.2. Improvements to walking and cycling conditions on these routes are of equal priority to improvements listed in section 7.4. These routes* should be audited, with improvements identified, at the earliest possible opportunity, with the LCWIP updated accordingly.

*It may not be necessary to audit the Letchworth Garden City to Stevenage connection, as there are already proposals to upgrade this between the HCC ROW team and Sustrans as part of NCN 12 improvements.

- 7.5.3. It is important to note that these routes extend beyond the North Herts district and so cross-boundary collaboration (with South Cambridgeshire District and Stevenage Borough Council respectively) would be required to improve these connections.

7.6 FINAL NETWORK PLANS FOR WALKING AND CYCLING

- 7.6.1. During the second round of stakeholder engagement stakeholders were also shown updated district-wide network plans for walking and cycling. As well as showing stakeholders how primary and secondary route designations had changed following the first round of stakeholder engagement, these plans also identified which primary routes had been audited.
- 7.6.2. After the second round of engagement, these plans were again updated with routes added and/or reclassified following stakeholder feedback.
- 7.6.3. The final network plans for both walking and cycling can be seen in Figure 7-7 and Figure 7-8 respectively. Higher resolution versions of these plans are shown in Appendix F.

Figure 7-7 – North Herts District Network Plan for Walking

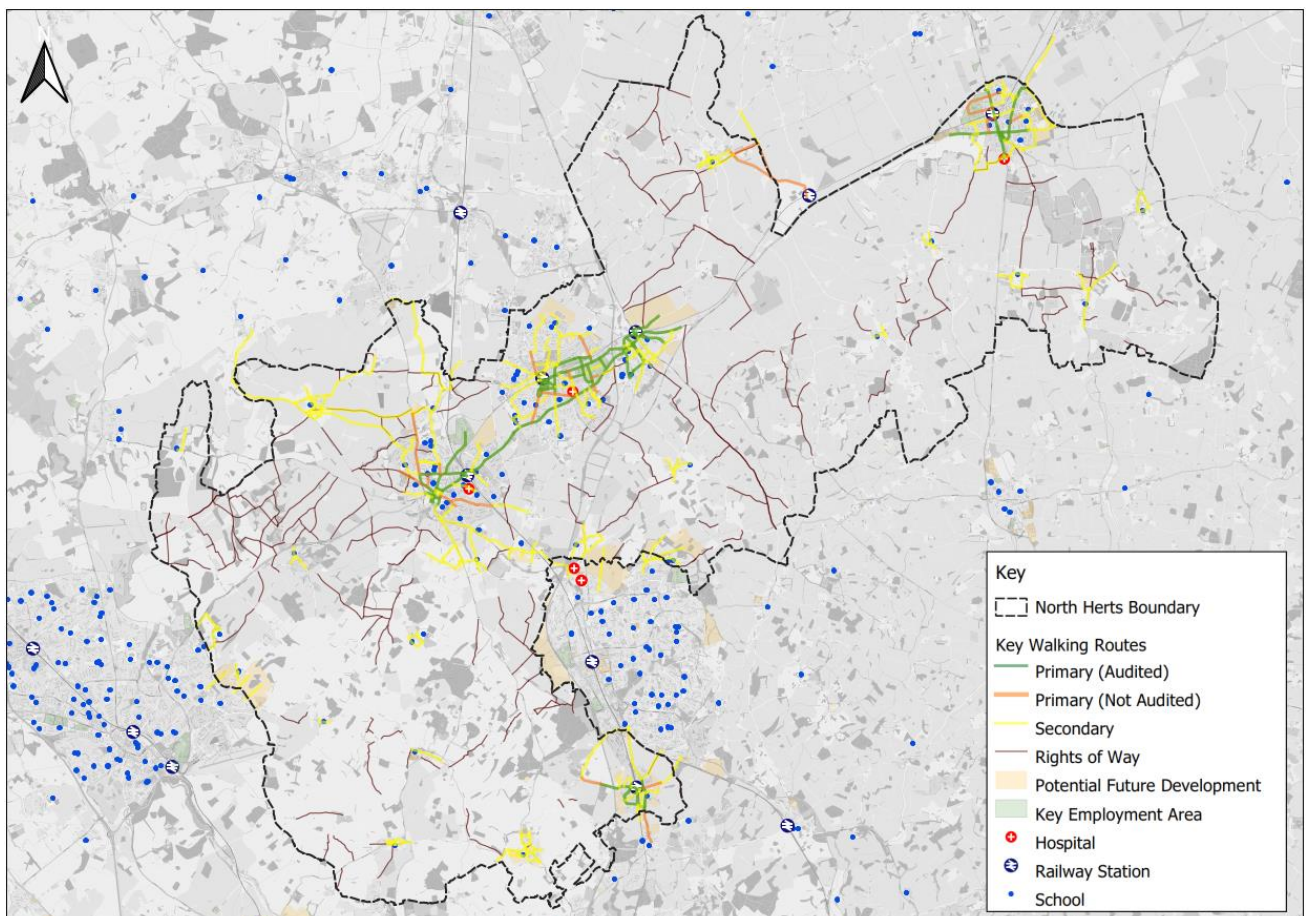
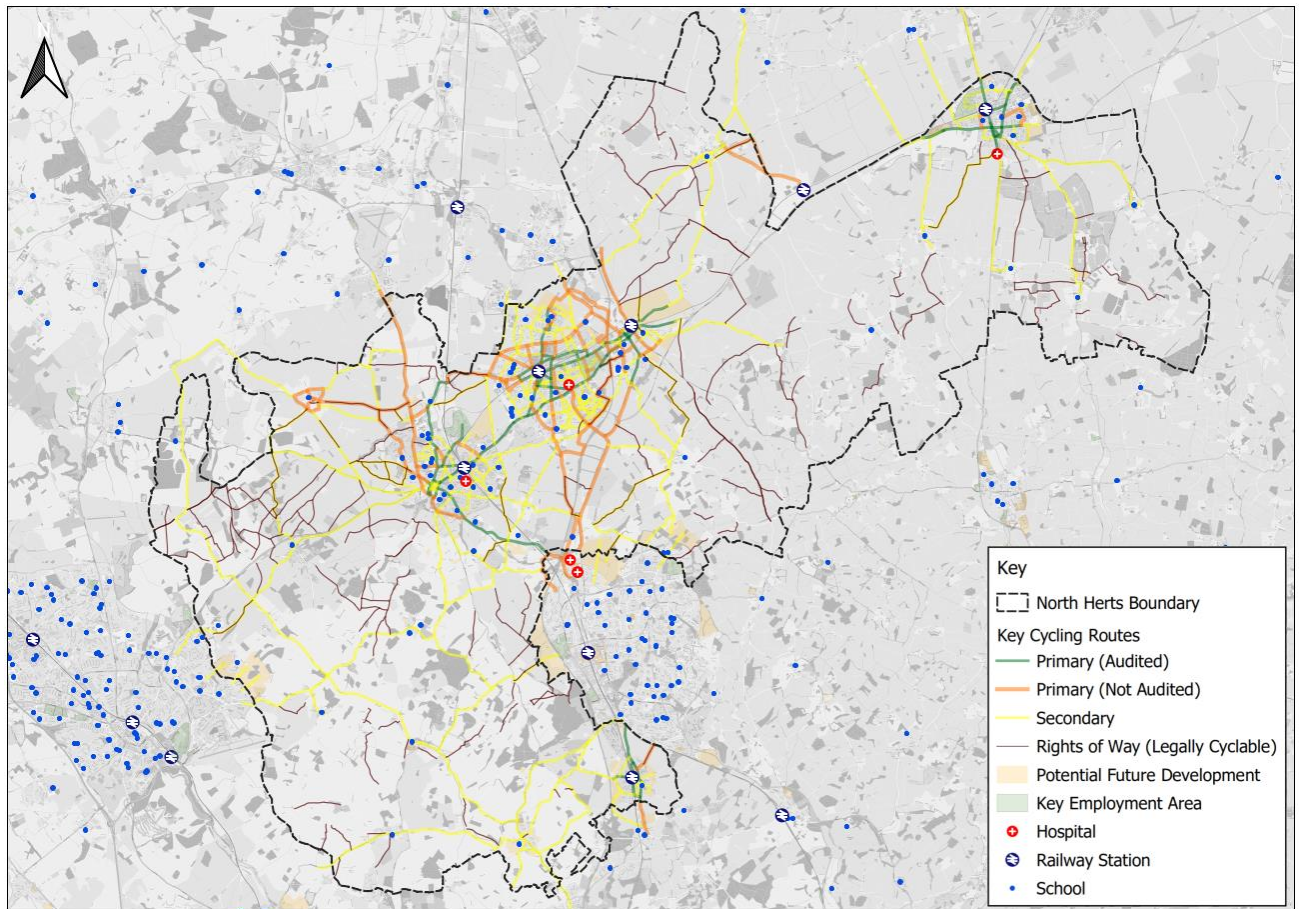


Figure 7-8 – North Herts District Network Plan for Cycling



7.7 OTHER ACTIVE TRAVEL INFRASTRUCTURE IMPROVEMENTS

- 7.7.1. This section has so far focussed on infrastructure improvements that have been identified as part of the LCWIP six-stage process. However, as mentioned in section 3.1 and Appendix A, there are a number of pre-existing plans to improve active travel infrastructure in North Herts District. These are primarily high-level plans for route improvements or small-scale measures, such as plans for new crossings. They are mostly contained within the North Central Growth and Transport Plan (NCGTP) which brought together several earlier plans for Hitchin, Letchworth/Baldock and Royston.
- 7.7.2. These plans are summarised in Appendix H, which includes a table giving each measure a unique reference number, describes them and gives the status of each as of July 2022. Each measure is then also compared against what has been identified in the LCWIP – in some cases the LCWIP proposal may eventually replace the earlier measure, although it depends on the status of the measure. Appendix H also contains mapping showing the location of these measures in Hitchin, Royston and Letchworth/Baldock.

8

ROUTE COSTING AND PRIORITISATION



8 ROUTE COSTING AND PRIORITISATION

8.1 APPROACH TO ROUTE COSTING

- 8.1.1. Each infrastructure improvement or 'scheme' was given a high-level costing estimate based on the type of infrastructure alone. Indicative costs were sourced from LCWIP guidance and reference schemes in Hertfordshire and nearby counties. These were agreed between NHDC and HCC and are given in Table 8-1.

Table 8-1 - High Level Cost Estimate by Infrastructure Type

Infrastructure	Cost
Segregated cycleway	£1000 per metre
Traffic calming	£350 per metre
Footway improvements	£200 per metre
Large junction improvement	£1,580,000
Mid-size junction improvement	£500,000
Minor junction improvement	£30,000
New signal crossing	£65,000
New zebra crossing	£65,000
New parallel crossing	£65,000
Modal filter	£20,000
Signalised shuttle system	£750,000
Pedestrian zone	£350,000
New pedestrian and cycle bridge	£2,000,000

- 8.1.2. It is very important to note that these costs are high level approximations of construction costs only. They do not account for inflation and do not include design, risk and contingency costs. They also do not account for optimism bias. Further feasibility design work accompanied by a more detailed costing process will be needed for any scheme which is being considered for funding or further development.

8.2 APPROACH TO ROUTE PRIORITISATION

8.2.1. Initially, the individual infrastructure improvements were scored using a high-level scheme prioritisation, resulting in a joint prioritised list of cycling and walking schemes. Each individual infrastructure improvement was considered and scored in terms of two groups of criteria:

- Desired Outcomes:
 - Modelled increase in walking & cycling trips (from the LCWIP GIS Model)
 - The likely impact of the infrastructure on facilitating more active travel trips
 - How well it fits with existing strategic priorities
 - Whether it supports new housing developments
 - Whether it supports access to jobs
- Technical Deliverability:
 - How well it aligns with LTN 1/20
 - How technically feasible it is likely to be
 - Its dependency on other schemes and projects

8.2.2. Individual infrastructure improvements were then grouped to form a selection of 'prioritised routes', which combine all the infrastructure improvements on an alignment (including both pedestrian and cycling improvements). The costs of individual infrastructure items were summed to create a total cost for each prioritised route. Concurrently, the average scores for all the infrastructure on a route were determined. The score for Desired Outcomes was calculating by multiplying the route's score for 'Modelled increase in walking & cycling trips' by the sum of its scores in the other four criteria. This was then added to the score for Technical Deliverability to give prioritisation scores for the routes. These were then used to rank the routes in a prioritised list.

8.2.3. Likely level of stakeholder support was considered as a metric, but there isn't enough information available at this stage to accurately quantify and score this. As such, likely level of stakeholder support has not fed into the prioritisation process, In any case, more stakeholder engagement will be required before any routes are taken forward through design and implementation.

8.2.4. The costed, prioritised list of routes can be seen in Appendix I.

8.3 SCORING CRITERIA AND RANGES

8.3.1. Different scoring ranges were given for the criteria listed in paragraph 8.2.1, based on their perceived relative importance and impact. Details of the scoring ranges of the different criteria are outlined in Table 8-2, along with a commentary of how they were scored.

Table 8-2 – MCAT: Scoring Criteria, Score Ranges and how infrastructure was scored

Criteria	Range	Description of How Scheme Was Scored
Modelled Increase in walking & cycling trips	0 to 2	Locations of proposed scheme were compared against the outputs from the relevant LCWIP GIS Model run (e.g. footway improvements were compared against the walking model output; segregated cycleways were compared against the cycling model outputs). Where outputs indicated higher potential for trips, higher scores were given.
Infrastructure impact on active travel	-1 to 3	The type of infrastructure improvement and its role within the network was considered in these scores. For example, large junction improvements, segregated cycleways, modal filters and crossings were considered high impact, and scored higher, compared to minor junction improvements and traffic calming.
Strategic fit	-1 to 1	Where schemes were on or connected to existing or planned strategic connections, these were scored higher than schemes which were far from any strategic routes.
Support for new housing	0 to 2	Where schemes were on or connected to routes to potential future housing, these were scored higher than infrastructure improvements which were further away.
Access to jobs	0 to 2	Where schemes were on or connected to routes to key employment areas, these were scored higher than infrastructure improvements which were further away.
LTN 1/20 compliance	-1 to 3	Where schemes strongly supported the principles of LTN 1/20 (e.g. modal filters, segregated cycleways), these were scored higher than other infrastructure improvement types (e.g. traffic calming).
Technical feasibility	-2 to 1	Schemes with no major technical or land ownership obstacles were considered 'quick wins', scoring higher than others with such challenges.
Dependency	-1 to 1	Schemes which could be implemented in isolation and would still bring benefit if implemented were scored higher than schemes which were dependent on the implementation of other infrastructure for success.

8.3.2. The total number of points a proposed route could score was 15. Routes were then sorted by total score, creating a 'ranked order' of prioritised routes.

8.4 COMMENTARY ON THE PRIORITISED LIST

8.4.1. A total of 80 routes were identified. The 20 highest scoring routes are detailed in Table 8-3 below, with the full list available in Appendix I.

8.4.2. A map showing where each route is located can be seen in Appendix J. It should be noted that in some cases, routes have been combined in such a way that it makes more sense to refer to them as 'areas'.

Table 8-3 - Top Twenty Highest Scoring Prioritised Routes

Route / Area	Location	Total Cost	Total Score
Bedford Road	Hitchin	£7,140,000	15.7
Woolgrove Road	Hitchin	£4,775,000	13.6
A1(M) Pedestrian Bridge	Baldock	£220,000	13.0
Cambridge Road	Hitchin	£8,809,500	12.8
Grove Road & Wilbury Way	Hitchin	£5,244,500	12.2
Norton Common N-S	Letchworth Garden City	£600,000	12.0
Bedford Road (One-Way) & Brand Road	Hitchin	£1,786,000	12.0
Baldock Road (A505 & B656)	Letchworth Garden City	£10,465,000	11.9
B656 Royston Road	Baldock	£750,000	11.4
Fishponds Road & Butts Close	Hitchin	£2,285,000	11.4
Station Place & Station Road & Bridge Road	Letchworth Garden City	£5,868,750	11.3
Nightingale Road	Hitchin	£6,844,000	11.1
Baldock High Street	Baldock	£2,865,000	10.9
Hitchin to Stevenage Route	Inter-Urban	£4,285,000	10.8
A505 Hitchin Road	Letchworth Garden City	£1,725,000	10.8
Icknield Way & Green Lane	Letchworth Garden City	£5,868,000	10.6
Baldock Road – Baldock St	Royston	£3,422,500	10.5
California	Baldock	£206,000	10.3
Melbourn Road	Royston	£6,770,000	10.3
Workers Path & Bridge	Letchworth Garden City	£2,116,000	10.2

- 8.4.3. Of the twenty highest scoring routes: seven are in Hitchin, six are in Letchworth Garden City, four are in Baldock, two are in Royston and one is the inter-urban route between Hitchin and Stevenage.
- 8.4.4. Four of the five top scoring routes are corridor schemes on busy roads which would generally require the installation of segregated cycleways and pedestrian/cycle crossings as well as the redesign of larger junctions and side roads. The exception to this is the A1(M) Pedestrian Bridge improvements, for which a few small changes to surfacing, lighting, bollards and vegetation management would help improve cycle (and pedestrian) links between Letchworth Garden City and Baldock.
- 8.4.5. Many of the routes which had the highest scores included the following types of infrastructure improvement, which may be a reflection of the higher 'impact on active travel' and 'LTN 1/20 compliance' scores these types of infrastructure received:
- Mid-size junction improvement
 - Large junction improvement
 - New parallel crossing
 - New/improved signal crossing
 - Modal filter
 - Segregated cycleway
- 8.4.6. The high percentage of routes in Hitchin, Letchworth Garden City and Baldock in the top twenty routes can be explained by the fact that there are more existing or planned strategic connections in these areas compared to Royston and Knebworth. It may also reflect the distribution of key employment areas and potential new housing across North Herts District.
- 8.4.7. In Knebworth, the highest scoring route was the B197 corridor, a strategic route which HCC are already developing as a separate project. The plans in this LCWIP align with that work.

8.5 BENEFITS AND LIMITATIONS OF PACKAGING INFRASTRUCTURE INTO PRIORITISED ROUTES

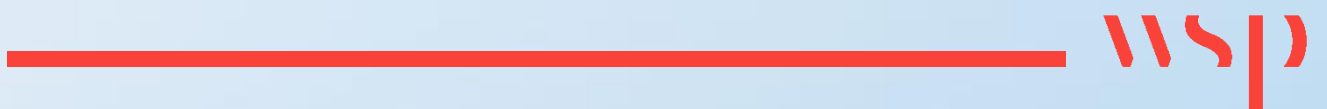
- 8.5.1. Packaging infrastructure improvements into routes has many benefits. One principal benefit is that it fits with HCC's method of taking schemes forward and makes it easier to apply for funds, which are often deliberately targeted at corridor schemes (for example, requiring the use of the DfT's Active Mode Appraisal Toolkit). Another benefit is that it combines pedestrian

and cycling improvements, to ensure that both modes of transport are catered for when plans are taken forward.

- 8.5.2. One limitation of this approach is that it can double, triple or even quadruple count junction improvements, as junctions often sit at the intersection of multiple routes. Therefore, summing the total cost of all improvements in this LCWIP would count junctions' multiple times and therefore be inaccurate. Care must also be taken when schemes are taken forward that junctions are not just improved to facilitate the connection that is being made along the single linear corridor being developed.
- 8.5.3. Another limitation of packaging infrastructure into routes is that there are a number of schemes identified in this LCWIP that do not easily align with any particular routes, such as individual crossings by schools on streets which were not audited (or do not require other improvements). It is important that these infrastructure improvements are not forgotten about simply because they don't fit neatly into a linear route. Similarly, just because an infrastructure improvement (such as a crossing) has been packaged into a particular prioritised route doesn't mean that it can't or shouldn't be taken forward on an individual basis if there is a good opportunity to do so.

9

NEXT STEPS



9 NEXT STEPS

9.1 INTEGRATION WITH TRANSPORT POLICY

- 9.1.1. This LCWIP has identified specific walking and cycling infrastructure schemes that can be incorporated into local transport policy and capital investment programmes.
- 9.1.2. North Herts District Council has prepared an updated Local Plan and a supporting Transport Strategy which seek to address the key issues facing North Hertfordshire and sets a strategic vision and spatial strategy for the district over the period of 2011 to 2031. This LCWIP together with the North Central Herts Growth and Transport Plan provide focus on where and why targeted investment in active travel infrastructure will be taken forward across the district, along with the other measures identified in the Infrastructure Delivery Plan.
- 9.1.3. This LCWIP will also support local policy such as Letchworth Garden City Cycling Strategy and the Knebworth Neighbourhood Plan.

9.2 INTEGRATION WITH HIGHWAYS DELIVERY PROGRAMMES

- 9.2.1. Once some packages of routes/schemes to be delivered in the short-term have been identified and confirmed, these should be added into HCC's highways delivery programmes. These would then go through HCC's project validation process, have concept design developed, undergo further stakeholder engagement and, if there are no major obstacles and funding is available, the schemes would then be designed in detail and delivered.
- 9.2.2. Highway improvement programmes separate from the LCWIP will continue to be delivered in coming years. A firm commitment to following the principles of Gear Change and the design guidance contained in LTN 1/20 when delivering new highways infrastructure would help align delivery of non-LCWIP highway schemes with the LCWIP. Some important examples of what this might look like include:
 - Minimising the delivery of shared footways on new schemes, and instead seeking to provide separate facilities for pedestrians and cyclists wherever possible.
 - Committing to avoiding speed cushions when adding traffic calming to streets, instead referring to LTN 1/20 for guidance on cycle-friendly traffic calming.
 - Using cycle-friendly gulley covers (i.e. gulley covers which bike wheels can't get stuck in) and replacing dangerous gulley covers for cyclists (e.g. on Grove Road in Hitchin).

9.3 MAINTENANCE

- 9.3.1. Walking and cycling facilities, both new and existing, require ongoing maintenance if they are to remain safe, comfortable and attractive for users. Examples of issues arising from a lack of maintenance include uneven pavements (loose sets) causing rainwater to pool, blocked drains, vegetation encroaching onto pavements, potholes and sunken gullies. These types of issues can create safety issues for pedestrians and cyclists as well as making the experience of walking and cycling less comfortable and attractive as modes of transport.

9.4 FUTURE BIDS FOR EXTERNAL FUNDING

- 9.4.1. HCC will explore any opportunities to apply for funding from external sources, such as any future Government capital grants or funding competitions for active travel infrastructure such as future tranches of the active travel fund. In these instances, additional business case development may be undertaken on schemes outlined in this LCWIP to help form the basis for strong applications to secure funding for design and delivery.
- 9.4.2. This LCWIP may also be a reference point for any Section 106 funds which become available. In addition to the infrastructure improvements identified for further investigation, the LCWIP can be taken as evidence of the need for high quality walking and/or cycling provision along any primary or secondary routes identified in the network plans, throughout the district.

9.5 PROCESS OF REVIEW AND UPDATE

- 9.5.1. This LCWIP represents the culmination of a first round of developing cycling and walking networks and infrastructure improvement plans. While the initial focus has been on the urban areas of Hitchin, Letchworth Garden City, Baldock, Royston and Knebworth due their density and associated higher potential for more active travel trips, future iterations of this LCWIP should look to expand this process to other areas and routes. In particular, inter-urban routes which should be looked at as soon as possible (and updated in the LCWIP) are:

- Letchworth Garden City / Baldock to Stevenage*
- Ashwell to Ashwell and Morden rail station
- Hitchin to Stevenage
- Baldock to Stotfold
- Letchworth Garden City to Stotfold
- Henlow Camp to Hitchin

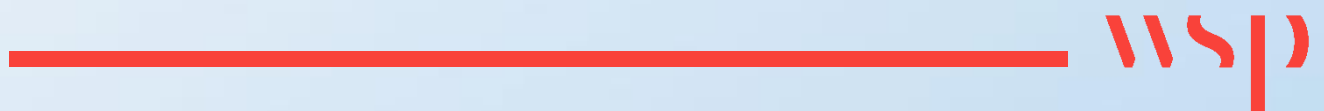
- Hitchin to Arlesey
- Letchworth Garden City to Arlesey
- Royston to Kneesworth/Bassingbourn
- Royston to Melbourn/Meldreth

*The Letchworth Garden City to Stevenage connection is being looked at as part of ongoing work on National Cycle Route 12 by Sustrans. The Baldock to Stevenage connection could potentially be covered by an extension to the B197 corridor validation work.

- 9.5.2. The next formal revision of the LCWIP should include audits of all primary routes which were not audited in this first iteration of the LCWIP. It should include audits and infrastructure improvement plans for neighbourhoods in the five urban areas which were not looked at in detail in this first iteration (e.g. Jackmans Estate in Letchworth Garden City), as well as routes to and within smaller settlements including (but not limited to) Ashwell, Barkway, Codicote, Gravelly, Ickleford, Kimpton, Little Wymondley, Pirton, St Ippolyts and Gosmore, Weston, and, Great Ashby.
- 9.5.3. Revisiting the LCWIP to include infrastructure improvement plans for these routes and areas will ensure a more inclusive district-wide approach to the LCWIP is taken over time, and one which maximises opportunities for active travel trips between North Herts District and its neighbouring authorities.
- 9.5.4. HCC and NHDC will work in partnership to review this first iteration of the LCWIP and its effect within a 2 year timeframe and will be subject to available funding and resources both locally and nationally.

Appendix A

POLICY CONTEXT



Appendix B

PCT OUTPUTS



Appendix C

GIS MODEL TECHNICAL NOTE



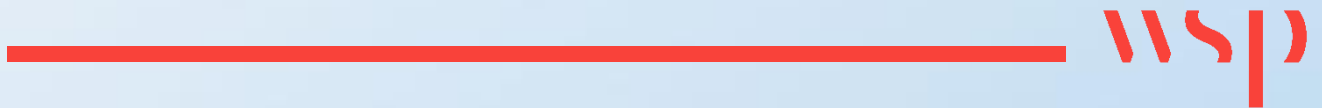
Appendix D

LCWIP GIS MODEL: DISTRICT WIDE CYCLING OUTPUTS



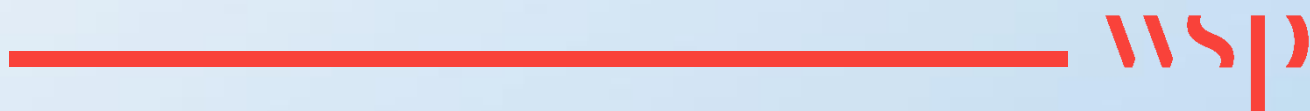
Appendix E

LCWIP GIS MODEL: DISTRICT WIDE WALKING OUTPUTS



Appendix F

NORTH HERTS DISTRICT NETWORK PLANS FOR WALKING AND CYCLING



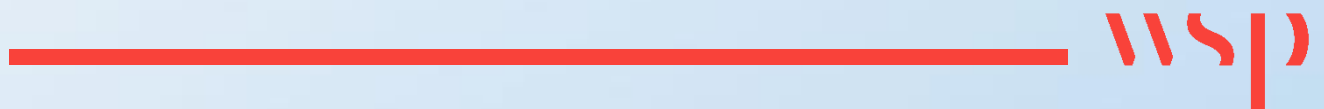
Appendix G

DETAILED INFRASTRUCTURE PLANS



Appendix H

OTHER NORTH HERTS ACTIVE TRAVEL INFRASTRUCTURE IMPROVEMENTS (UTP, NCGTP)



Appendix I

PRIORITISED COSTED LIST OF INFRASTRUCTURE IMPROVEMENTS



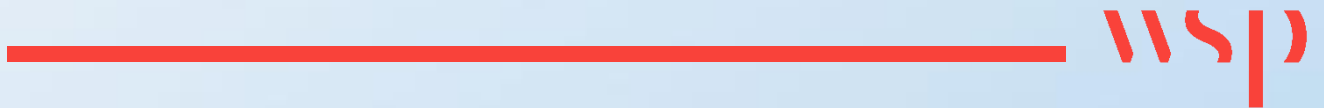
Appendix J

KEY FOR PRIORITISED ROUTES



Appendix K

LIST OF ACRONYMS USED IN REPORT





70 Chancery Ln,
London
WC2A 1AF

wsp.com

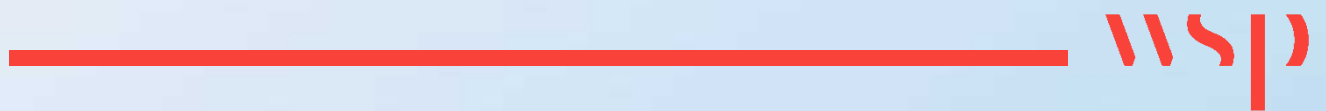
North Herts LCWIP
Final Draft for Consultation
June 2022

APPENDICES A TO J

APPENDIX A

Appendix A

POLICY CONTEXT



1 POLICY CONTEXT

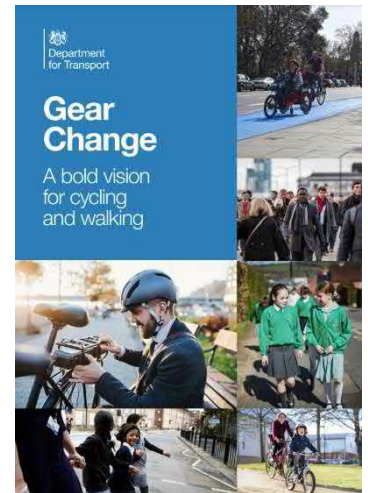
1.1 NATIONAL STRATEGIC CONTEXT

- 1.1.1. This section presents the existing policy documents that are relevant to this LCWIP on a national level.

GEAR CHANGE: A BOLD VISION FOR CYCLING AND WALKING (DEPARTMENT OF TRANSPORT, 2020)

- 1.1.2. Gear Change is the Government's vision to see a step-change in levels of walking and cycling in England. The strategy details how the Government intends to invest £2 billion on increasing the numbers of people walking and cycling.

- 1.1.3. A core focus of the strategy is on improving safety for all by building high quality cycle infrastructure, the lack of which is a significant barrier to more people choosing to walk or cycle for the everyday journeys. The strategy highlights the need to dramatically improve the quality of cycling infrastructure on England's roads to achieve the substantial increases in cycling required.

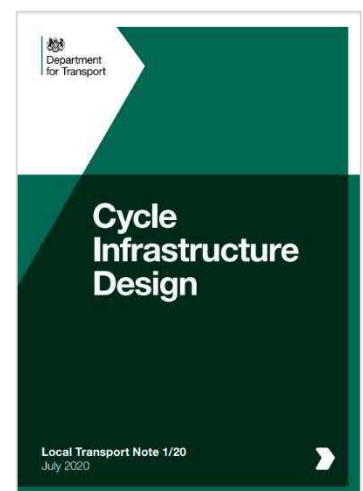


- 1.1.4. The document sets out the actions required at all levels of government, grouped under four themes:
- 1.1.5. **Theme 1 – 'Better streets for cycling and people'** outlines how the Government will help to fund safe, continuous, direct routes for cycling that help people reach the places they need to get to. The key design principles highlight how routes must be physically separated from pedestrians and from high volumes of motor traffic on links and at junctions. The creation of low traffic neighbourhoods and school streets is also featured due to their role in facilitating local walking and cycling trips and creating better places for people to live in.
- 1.1.6. **Theme 2 - 'Putting cycling and walking at the heart of transport, place-making and health policy'** focuses on how cycling and walking should complement and help expand the range of other modes of transport such as bus and rail travel. The strategy mentions how new local and strategic A road schemes should include appropriate provision for cycling and that the tools used to assess transport schemes' value for money will give fair weight to the broader benefits of active travel schemes.

- 1.1.7. **Theme 3 – ‘Empowering and encouraging local authorities’** outlines the new powers and improved assistance for local authorities, such as improving enforcement of traffic violations that impact on pedestrian and bicycle user safety. An important statement under this theme is how funding available for local authorities will only be applied to schemes that meet the new standards and principles described within the first theme.
- 1.1.8. **Theme 4 – ‘Enabling people to cycle and protecting them when they do’** focuses on encouraging more people to cycle by providing people with the confidence and skills to cycle where the appropriate infrastructure facilities cycle journeys. The Government also stipulate their aim to make legal changes to protect vulnerable road users, strengthen the Highway Code to improve safety and mandate higher safety standards on lorries.

LOCAL TRANSPORT NOTE 1/20: CYCLE INFRASTRUCTURE DESIGN (DEPARTMENT FOR TRANSPORT, 2020)

- 1.1.9. Alongside Gear Change, the DfT also published updated cycle infrastructure design guidance in 2020. LTN1/20 provides guidance and good practice for the design of cycling infrastructure in support of the DfT Cycling and Walking Investment Strategy. LTN 1/20 replaces LTN 2/08: Cycle Infrastructure Design and LTN1/12: Shared Use Routes for Pedestrians and Cyclists have been withdrawn.
- 1.1.10. The Government expects local authorities to demonstrate they have given due consideration to the guidance when designing new cycle schemes and when applying for Government funding that includes cycle infrastructure.
- 1.1.11. LTN 1/20 is based around five overarching design principles (that cycle routes and networks must be coherent, direct, safe, comfortable and attractive) and 22 further principles that represent the essential requirements to achieve more people travelling by foot or cycle for more of their trips.
- 1.1.12. The LTN 1/20 explains these principles and gives context to the need to improve the quality of cycle infrastructure as part of wider strategies, such as increasing physical activity, reducing carbon emissions and stimulating economic growth. The LTN also focuses on specific types of cycling infrastructure and the highway network, such as facilities within the

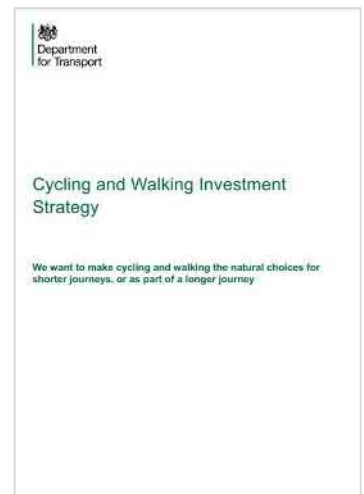


highway corridor, motor traffic free routes, quiet mixed traffic streets and junctions and crossings.

- 1.1.13. LTN 1/20 also covers cycle parking, signage and markings and construction and maintenance which all together provides guidance through the whole process of planning designing and implementing high quality cycle infrastructure.

CYCLING AND WALKING INVESTMENT STRATEGY (DEPARTMENT FOR TRANSPORT, 2017)

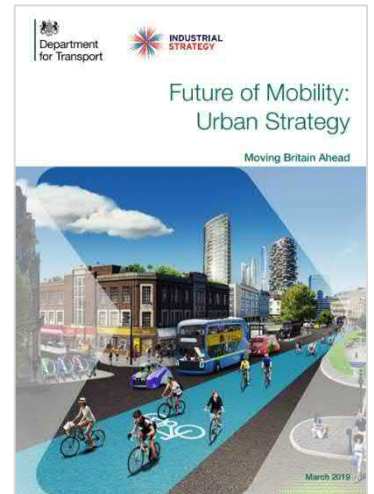
- 1.1.14. The Government published its first Cycling and Walking Investment Strategy (CWIS) in 2017, setting out an ambition to make walking and cycling the natural choice for shorter journeys or as part of a longer journey. The CWIS states that the benefits to doing this would be substantial, potentially leading to cheaper travel and better health, increased productivity for business and increased footfall in shops. Benefits will also include lower congestion, better air quality, and vibrant, attractive places and communities.



- 1.1.15. The CWIS outlines ambitious targets for the period to 2025. This includes 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.
- 1.1.16. Following the publication of the CWIS (and in line with its strategic objectives), the Government also published its LCWIPs Technical Guide for Local Authorities. As explained in Section 1.2, this document sets out a flexible six-stage methodology for producing an LCWIP. The methodology developed by HCC and WSP for this LCWIP follows this guidance.

FUTURE OF MOBILITY: URBAN STRATEGY (DEPARTMENT FOR TRANSPORT, 2019)

- 1.1.17. The 'Future of Mobility: Urban Strategy' recognises the challenges associated with the rise in motor transport including safety, pollution and space. As the number of people living in urban areas in England is forecast to rise by 4.7 million between 2016 and 2041, towns and cities will become increasingly crowded. This provides us with an opportunity to transform the way we travel and the infrastructure within our towns and cities.
- 1.1.18. The document sets out principles to guide Government decision making, industry and local authorities, and has recognised active travel as a key area to help shape the future of urban mobility. The principle 'Walking, cycling and active travel must remain the best option for short urban journeys' states, in England, 45% of all journeys taken by urban residents are under 2 miles. Many such journeys could be undertaken by sustainable, active modes of transport leading to better air quality, health outcomes and lower congestion. This can be supported by new technologies including intelligent use of real-time data and connectivity making public transport more convenient and responsive. With these improvements active travel can become a more desirable option for multi-stage journeys.
- 1.1.19. An additional principle identified; 'Mobility as a Service', suggests introducing well-managed bike-sharing schemes and e-bikes which would encourage people who wouldn't normally chose cycling as a travel option to switch. This may be especially important given the trend towards an aging population, 62% of e-bikes in the UK are sold to people over the age of 55.



CLEAN AIR STRATEGY (DEPARTMENT FOR ENVIRONMENT, FOOD & RURAL AFFAIRS, 2019)

1.1.20. The Clean Air Strategy sets out a comprehensive action required to tackle all sources of air pollution.

1.1.21. A key action in achieving this is reducing emissions from transport by facilitating modal shift towards low and zero emission options. The report suggests encouraging an increase in cycling and walking for short journeys delivers a reduction in congestion and emissions in addition to the associated health benefits from a more active lifestyle.

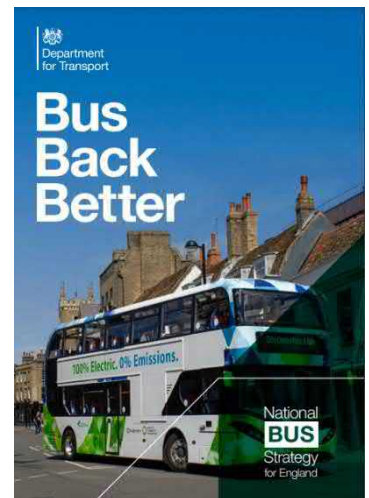
1.1.22. Drivers and passengers inside vehicles are often exposed to significantly higher levels of air pollution in comparison to those walking and cycling on the same route. People can be persuaded to walk or cycle in North Herts, as even when there is a build-up of traffic within the town centres, the strategy suggested that those travelling actively, experience lower exposure. Pedestrians and cyclists can be encouraged to use quieter routes away from vehicle traffic to reduce exposure even further.

1.1.23. This method of travel also creates less pollution, with associated health benefits such as improved fitness, mental health and lower risk of obesity and heart diseases. In addition to the funding identified through the Cycling and Walking Investment Strategy, local authorities and mayors have been allocated an additional £700 million to safe infrastructure and other Active Travel projects since the CWIS was published. There has also been £34 million spent to improve cycle facilities at stations, making it easier and more accessible to get to and from station by bike, including 22,000 new cycle parking spaces which as a result increased cycle trips to stations by 40%.



BUS BACK BETTER, NATIONAL BUS STRATEGY (DEPARTMENT FOR TRANSPORT, 2021)

1.1.24. Bus Back Better is a long-term strategy for buses in England, outside of London. This new national bus strategy sets out the vision and opportunity to deliver better bus services for passengers across England, through ambitious and far-reaching reform of how services are planned and delivered. The strategy includes various ambitions, such as to “make buses more frequent, more reliable, easier to understand and use, better co-ordinated”, and with “simple, cheap flat fares ... with daily and weekly price capping across operators.”.

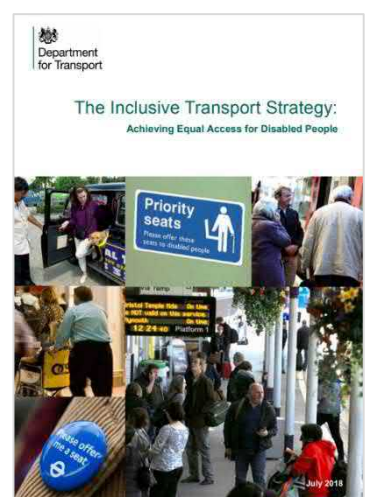


1.1.25. The new strategy challenges councils to give buses greater priority at traffic lights, reallocate road-space for bus lanes, create bus gates, and manage their roads with bus reliability in mind. It recommends looking carefully at street design and locations of bus stops, parking and loading bays and developing ‘Bus Service Improvement Plans’ (BSIPs). Hertfordshire’s BSIP was published in October 2021 and is discussed the next section.

1.1.26. Where bus priority infrastructure is considered for the same corridors as cycle infrastructure and there is limited space, this needs to be taken into account and reconciled. Furthermore, cyclists needs’ should be taken account when designing bus infrastructure and vice versa.

THE INCLUSIVE TRANSPORT STRATEGY (DEPARTMENT FOR TRANSPORT, 2018)

1.1.27. The Inclusive Transport Strategy plans to create more inclusive transport system for everyone. The report itself focusses on transport inclusivity, explaining how vehicles, stations and streetscapes can be designed to be inclusive to people with different forms of disability.



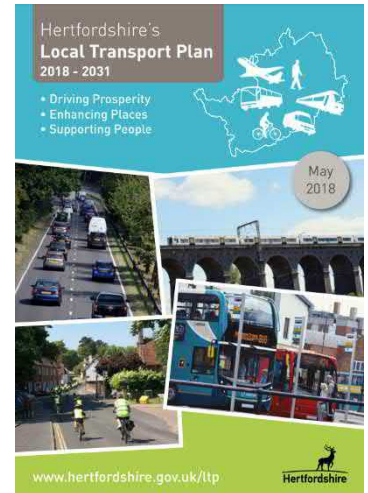
1.1.28. The LCWIP process aims to create a network to support this ambition and allow for users of all abilities to travel safely and comfortably via active travel in and around North Hertfordshire. As part of this LCWIP the council has identified improvements to support a transport system fit for all users, identifying infrastructure interventions to make key cycling and walking routes more accessible and inclusive.

1.2 COUNTY STRATEGIES, POLICIES AND PLANS

- 1.2.1. This section will present the existing policy documents that are relevant to this LCWIP on a county level. All of these have been produced by Hertfordshire County Council.

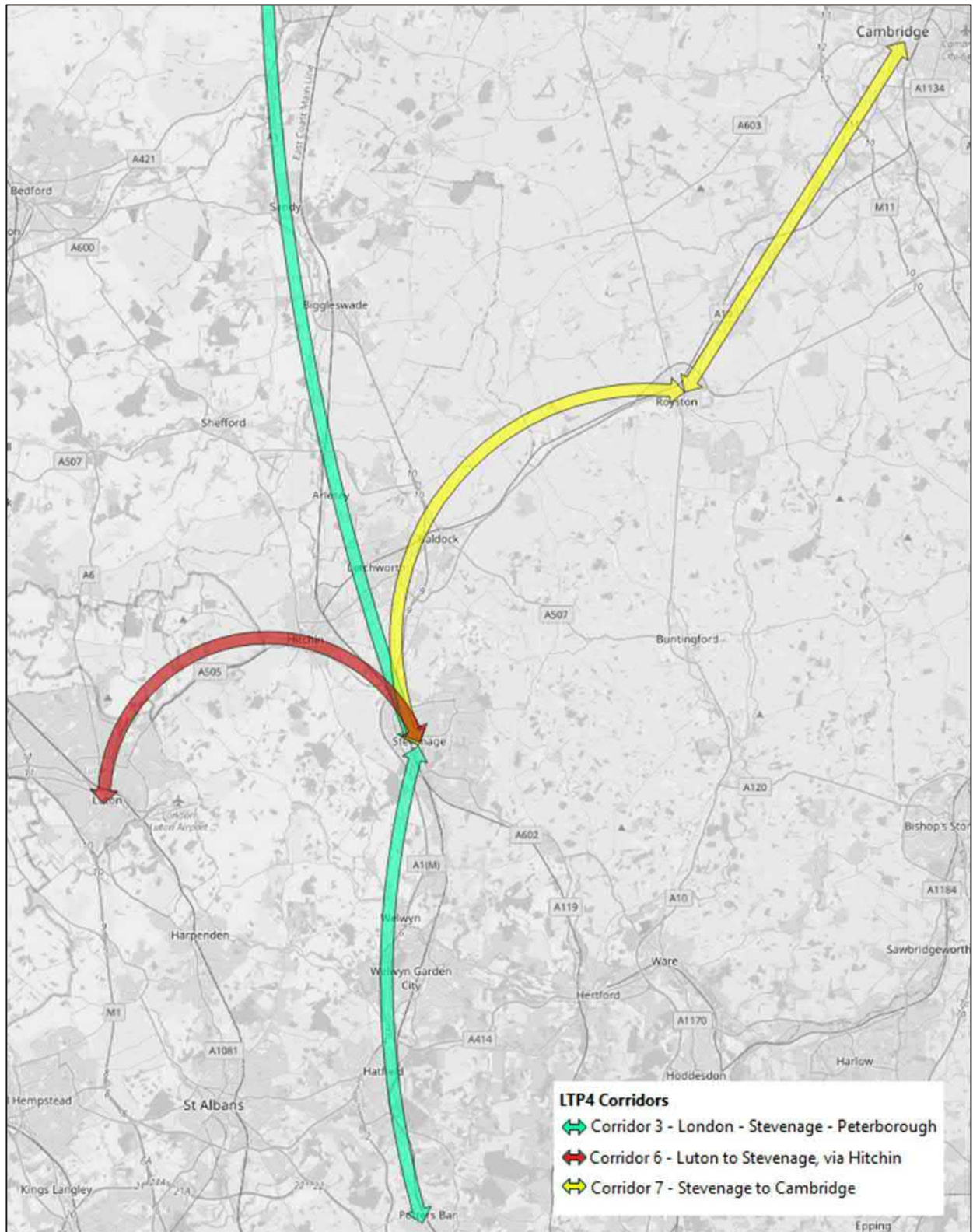
LOCAL TRANSPORT PLAN 4 (2018-2031)

- 1.2.2. The Hertfordshire Local Transport Plan 4 (LTP4) sets out a transport vision for Hertfordshire. The plan accelerates the transition from the previous transport strategy (LTP3) towards a less car-centric, more balanced approach which caters for all forms of transport and seeks to encourage a switch from the private car to sustainable transport (e.g. walking, cycling and passenger transport) wherever possible. LTP4 recognises the potential public health benefits associated with increased levels of active travel, further emphasising active travel improvements as an essential feature of the future transport systems within Hertfordshire.



- 1.2.3. LTP4 Policy 1 'Transport User Hierarchy' is especially important to this LCWIP as it places vulnerable road users such as pedestrians and cyclists at the top of the user hierarchy.
- 1.2.4. LTP4 highlights strategic corridors in which sustainable transport is a priority. Of relevance to this study are corridor 3 (London-Stevenage-Peterborough) and corridor 6 (Luton-Stevenage), which are highlighted in Figure 1-1. First and last mile connectivity to these corridors could be improved through the development of infrastructure identified in this LCWIP.

Figure 1-1 - Priority Sustainable Transport Corridors Highlighted in LTP4



1.2.5. The LTP4 also sets out various objectives to help encourage walking and cycling, which are detailed below.

Walking

1.2.6. LTP4 recognises that there is a high walking mode share for trips of up to 1 mile across the county, with 76.5% of such trips being undertaken on foot (County Travel Survey, 2015). Policy 7 – Active Travel (Walking) sets out the objectives to further encourage walking, many of which are captured in this LCWIP:

- Implementing measures to increase the priority of pedestrians relative to motor vehicles, especially in town centres, and creating walking friendly towns and centres;
- Delivering infrastructure to provide safer access to key services, and pedestrian facilities to enable and encourage walking.
- Identifying and promoting networks of pedestrian priority routes.
- Promoting walking as a mode of travel and for recreational enjoyment.
- Supporting the implementation of the Rights of Way Improvement Plan.

Cycling

1.2.7. LTP4 recognises that compared with walking, cycling has a much lower more share across Hertfordshire, only making up 1.7% of trips under 1 mile, 4.8% of trips between 1-3 miles and 3.1% of trips between 3-5 miles. LTP4 highlights that there is significant potential in the county to increase cycling activity. Policy 7 – Active Travel (cycling) sets out the objectives to further encourage cycling, many of which will be captured within this LCWIP:

- Infrastructure improvements, especially within major urban areas to enable and encourage more cycling.
- Implementing measures to increase the priority of cyclists relative to motor vehicles.
- Improved safety including delivery of formal/informal cycle training schemes.
- Supporting promotion campaigns to inform, educate, reassure and encourage cycling provision and education, such as Bikeability.
- Facilitating provision of secure cycle parking.

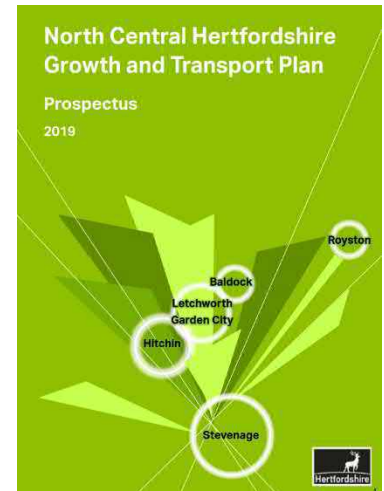
1.2.8. Given the Government CWIS targets and the significant potential to increase cycling activity in Hertfordshire, the LTP4 shows that the council is seeking to achieve a large increase in cycling and walking over the next 10 years. This will require an increase in investment in active travel to create routes and networks which can attract a broader demographic to walk

and cycle. This is exactly what an LCWIP helps to plan and so the LCWIP is very well-aligned with the LTP4.

NORTH CENTRAL GROWTH AND TRANSPORT PLAN (2019)

1.2.9. The North Central Growth and Transport Plan (NCGTP) follows on from the LTP4 to provide more detail on specific measures associated with growth and transport within North Herts and Stevenage. A draft version of this document was consulted on in 2019 but it has not yet been published. The NCGTP proposes measures within this area under the following themes:

- Improved walking links within towns including new crossings on busy roads;
- Improved road junctions to reduce delays on key roads and reduce rat-running on quieter roads;
- Improved bus services and priority for buses at junctions;
- Improved cycle links within and between towns, and cycling parking facilities at key locations; and
- Improved walking, cycling and bus connections to railway stations.



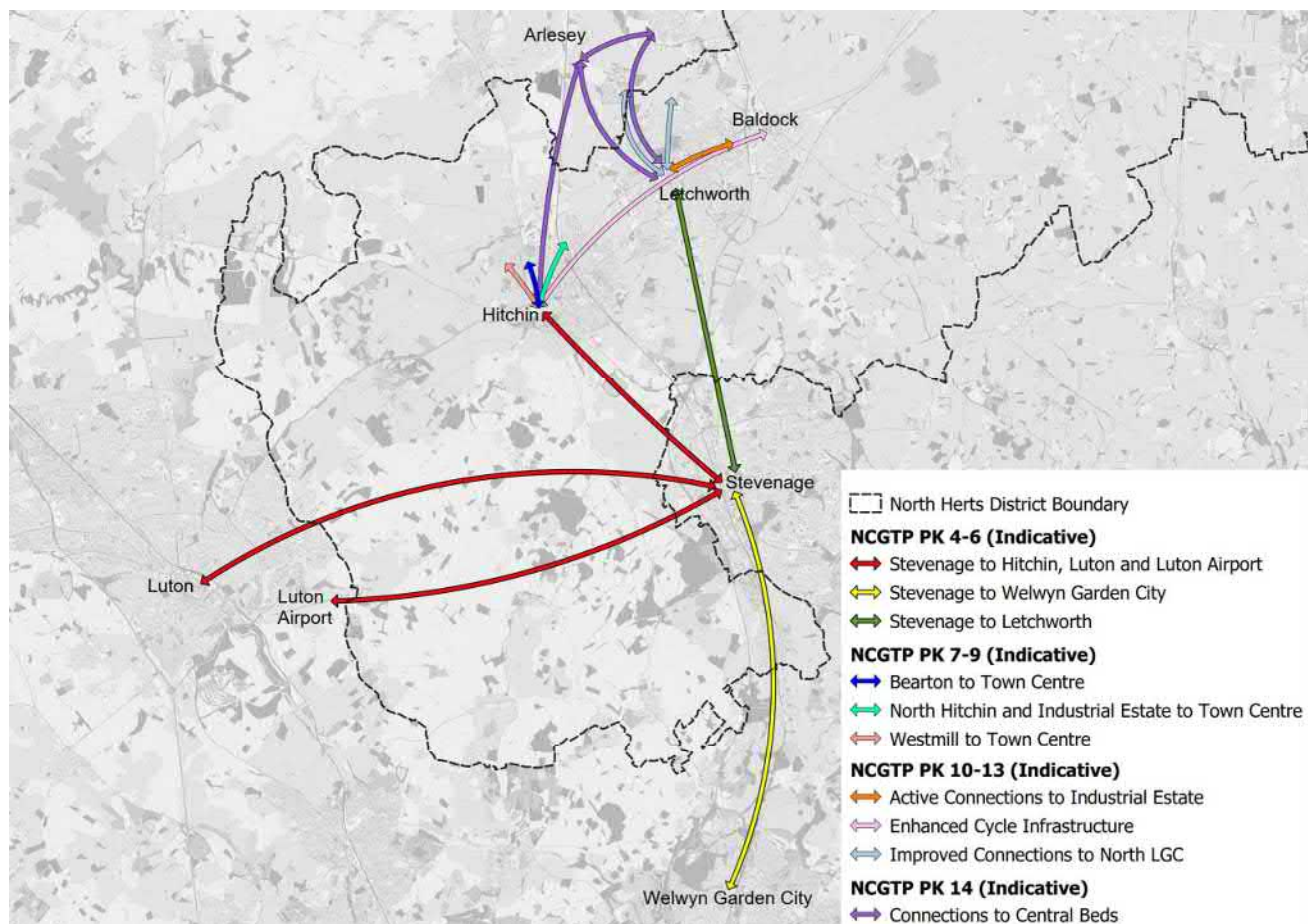
The proposals in the NCGTP are defined as interventions, which are grouped into packages. The following packages relevant to the LCWIP study area are shown in Table 1-1 and, where corridors are mentioned, these are shown indicatively on Figure 1-2. This LCWIP supports these objectives through proposals for routes and infrastructure which align with these packages.

Table 1-1 – NCGTP Intervention Packages Relevant to North Herts

Area	PK	Name	Aim of Package
Stevenage connections to other towns	PK4	Stevenage to Welwyn Garden City	To improve reliability and enable faster journey times for public transport along the B197 from Welwyn to Stevenage
	PK5	Stevenage to Hitchin, Luton and Luton Airport	To develop a multimodal corridor between Stevenage, Hitchin and Luton Airport that supports public transport and cycling through improvement of existing infrastructure
	PK6	Stevenage to Letchworth	To form a sustainable corridor between Stevenage and Letchworth by upgrading existing cycling infrastructure, improving the public realm in villages on the B197 as well as ensuring bus priority
Hitchin	PK7	Hitchin Centre including Rail Station	To encourage use of public transport through support for services and creation of a safe and attractive corridor to take advantage of the services within Hitchin Centre and Rail Station.
	PK8	North Hitchin and Industrial Estate	To build connections to the development site H1 and industrial estate with public transport and increased links to active transport infrastructure.
	PK9	West Hitchin	To unlock the potential for active trips with high quality improvements to pedestrian and cycling infrastructure from Hitchin Westmill and Bearton areas to the town centre.
Hitchin connections	PK10	Hitchin to Letchworth Garden City/Baldock	To enhance cycling infrastructure between Hitchin, Letchworth Garden City and Baldock; and make it a safe and attractive option for sustainable trips.

to other towns	PK11	Letchworth Centre Industrial Estate	To increase active transport provision between the centre of Letchworth Garden City and the employment area by providing a signposted and connected active transport network, improve access to the rail station, and improve the safety of routes through the industrial estate (including the link between Avenue One and the B656 and via Works Road to the NMU bridge over the A1.
Letchworth Garden City	PK12	North Letchworth Garden City	To provide improved sustainable connections by supporting a more frequent bus connection as well as a cycling facility between north Letchworth Garden City and the town centre.
Baldock	PK13	Baldock connectivity, railway & dev.	To make Baldock a safe, convenient and attractive place to make sustainable transport trips through improvements to cycling and walking infrastructure and facilities
To Central Beds	PK14	To Hitchin/Letchworth Garden City	Encourage a modal shift in trips from Central Bedfordshire through supporting development trips to use sustainable modes and the creation of inter-urban cycling and walking routes.
Royston	PK15	Royston	To transform Royston into a town that facilitates safe, attractive and convenient journeys by active and sustainable transport modes.

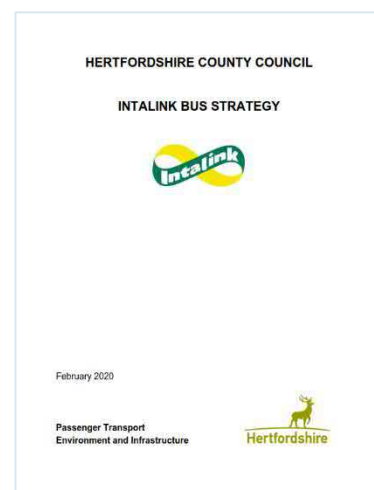
Figure 1-2 - Corridors from NGGTP relevant to the North Herts LCWIP



INTALINK HERTFORDSHIRE BUS STRATEGY (FEBRUARY 2020)

1.2.57. The Intalink Hertfordshire Bus Strategy sets out in greater detail the plans to grow the local bus network to support the shift towards more sustainable transport within Hertfordshire (as shown in LTP4).

1.2.58. The strategy states that there is clear potential for growth in bus travel in Hertfordshire, noting that only 3% of journeys to work in Hertfordshire are made by bus, which is less than half the national average. It also notes the large numbers of residents who make multi-modal trips to London on the train and the LTP4 declaration that “with 175,000 additional residents by 2031, it will not be acceptable in environmental, economic or social terms to continue to depend on cars.”



1.2.59. The strategy's plans include giving greater priority to bus services in traffic, making sure bus information is easy to access and raising standards of operation across the county.

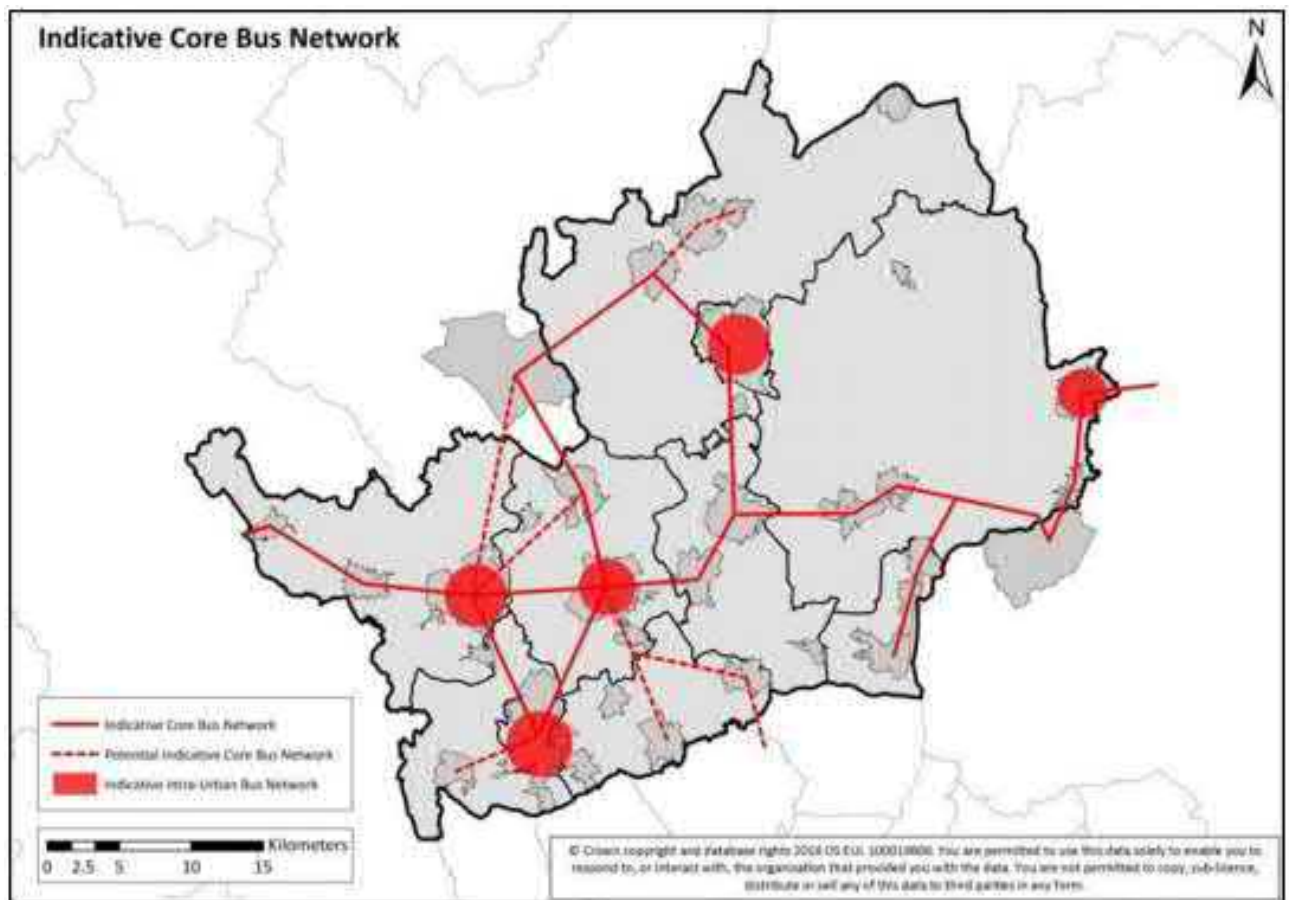
Walking & Cycling

1.2.60. The Intalink Bus Strategy recognises that infrastructure improvements should also be targeted to enhance access to the bus network by walking and cycling. The location, nature and design of interchanges is evolving, and these should consider current and future growth requirements and capacity.

1.2.61. The Strategy focuses on the prioritised improvements presented within LTP4, stating that the prioritised corridors and towns should be well-served in terms of frequency and investment will support patronage growth on routes serving them.

1.2.62. Figure 1-3 shows the indicative core infrastructure corridors identified in LTP4. Routes connecting Hitchin with Stevenage and Luton are identified as part of the indicative core bus network. Another route on the indicative core bus network connects Stevenage with Welwyn Garden City via Stevenage. A route connecting Hitchin with Letchworth Garden City and Baldock is included as part of the potential indicative core bus network.

Figure 1-3 - Indicative Core Infrastructure Corridors from the Strategy



1.2.63. Short and long-term packages for improving bus services and facilities across Hertfordshire have been identified as part of the Bus Service Improvement Plan. The interventions proposed as part of this LCWIP aim to improve pedestrian and cyclist accessibility in Hitchin, Letchworth Garden City, Baldock and Knebworth, which provide an opportunity to enable more walking and cycling as the first or last stages in multi-modal journeys.

BUS SERVICE IMPROVEMENT PLAN (OCTOBER 2021)

1.2.64. The Hertfordshire Bus Service Improvement Plan (BSIP) acts as the vision for how bus services will be developed and enhanced across Hertfordshire County in the coming years.

1.2.65. Work on Hertfordshire's BSIP began after the LCWIP was underway and was published in October 2021. It should be noted that this document was not available when the key routes contained in this LCWIP were developed. However, future iterations of this LCWIP should compare and align the plans to complement one another. Co-ordination between the development of walking and cycling networks and the bus network provides a great opportunity to maximise the potential for multi-modal travel in North Herts and ensure new

developments are well-connected. It should also be noted that new DfT funding for bus priority improvement schemes may even be able to fund certain LCWIP improvements if well-coordinated.

- 1.2.66. Key corridors where there are gaps in the bus network across Hertfordshire have been identified within the BSIP. These are key corridors that would benefit from increased frequencies and enhanced connectivity particularly during the weekday peak and interpeak periods. Those relevant to North Herts include Hitchin to St Albans, Hitchin to Luton, Hertford to Royston and Letchworth to Royston. However, there is not yet much information on this and whether additional infrastructure would be proposed to support these connections.
- 1.2.67. A feasibility study has been conducted for Hitchin to identify a package of short- and long-term measures to improve bus travel. A total of nine schemes have been proposed in Hitchin, with an estimated investment of £1.5 million, although there is no information in the BSIP about what these nine schemes comprise.
- 1.2.68. A challenge could be if bus priority infrastructure is planned on the same corridor as cycle infrastructure and there is limited space available. However, where there is sufficient space, infrastructure (such as bus stop bypasses and bus stop boarders) is available to enable pedestrians, cyclists and buses all to use the same corridors.

PLACE AND MOVEMENT DESIGN GUIDE – INCOMPLETE DRAFT (MARCH 2021)

- 1.2.69. The Place and Movement approach is a technical approach intended to recognise the needs of different road users in Hertfordshire and manage the interfaces between them. It intends to provide a way of looking at the appropriate function of any section of highway and therefore a basis for deciding which activities should be prioritised. In doing so, it aims to provide a means to translate LTP4 policies into practice.
- 1.2.70. As part of this work, each street on Hertfordshire's highway network has been categorised into 9 different street types based on each street's place and vehicle movement function as designed by the guide. The nine street types take the form of a 3x3 matrix and are based on the Healthy Streets approach developed by Transport for London. The LCWIP project team has been given a GIS layer which maps the North Herts highway network onto these street types. Wherever possible, we have sought to match the proposals in this LCWIP with the functionality of the street type. However, due to physical constraints on some streets, it is only possible to provide the infrastructure needed to enable mode shift to walking and cycling by

reallocating roadspace away from motor vehicles or adding crossings which may slow down traffic. Where this is the case, further work and consultation may be needed to decide the best way forward as schemes are progressed.

- 1.2.71. This design guide supports a mode shift towards walking and cycling and is therefore aligned with this LCWIP. The document emphasises that routes should be carefully positioned and easily accessed by all, with particular consideration given to those routes connecting communities to local centres, healthcare facilities and schools.

SUSTAINABLE HERTFORDSHIRE STRATEGY (2020)

- 1.2.72. Following its Climate Emergency Declaration in July 2019, Hertfordshire County Council started developing a Sustainable Hertfordshire Strategy to set out initial policies and strategies needed to embed sustainability across all its council operations and services throughout the county. The strategy has the aim of enabling environmental action across the county; from delivering net zero carbon to preparing for extreme weather.
- 1.2.73. The strategy identifies that increasing mode-shift away from car towards walking and cycling will help achieve the county's plans for fighting climate change. The document sets out targets, and what is required in order to achieve these. The aims and objectives of the Sustainable Hertfordshire Strategy and the North Herts LCWIP are aligned. Enabling more walking and cycling across North Herts will reduce greenhouse gases and air pollution for those in the district, including any HCC staff that live, travel or work there.

SPEED MANAGEMENT STRATEGY (2020)

- 1.2.74. The Speed Management Strategy (SMS) is a supporting document to the fourth Local Transport Plan, LTP4. Its purpose is to establish a consistent approach to the setting of speed limits based on the function and nature of the route as set out in DfT Circular 01/2013 Setting Local Speed Limits. The document is an update of the previous strategy adopted in 2014 and reflects changes in regulation, guidance and policy. A key change is the adoption of LTP4, which places much greater emphasis on the consideration of the needs of vulnerable road users such as pedestrians and cyclists.
- 1.2.75. In order to support this the council has also adopted a place and movement approach which takes account of the varying functions and uses of its roads and categorises them based on whether they are places people want to visit or whether they are primarily focussed on vehicle

movement. This helps identify locations which may be suitable for the application of lower speed limits.

1.2.76. To enable the SMS to both deliver LTP4 policies and to provide a consistent approach to setting speed limits across the county, the following core principles have been developed:

- To encourage speed limit changes that support active travel;
- Lower speed limits, where appropriate;
- To change the design of roads in order to change behaviour, where appropriate; and
- Where it has been established that speed limits are too low for the environment, speed limits may be raised.

1.2.77. There is an opportunity to create more suitable environments for active modes where speeds are lowered, such as in 20mph zones. However, 20mph may need to be accompanied by changes in road design (e.g. cycle friendly traffic calming) to ensure that speeds do in fact reduce.

1.2.78. Given the first and third core principles, it is assumed that the proposals in the LCWIP will be supported by the SMS. This is especially important when considering inter-urban cycling trips. Speed limits on roads between settlements (for example between Hitchin, Letchworth and Baldock) often increase to over 30mph. On many of these roads there is limited roadspace for fully kerbed cycle tracks (the only LTN 1/20 compliant infrastructure solution) and there are few or no alternative routes available for cyclists. As such, speed limits (and design speeds) on these roads would need lowering in order to enable on road cycling in a safe manner in accordance with LTN 1/20 guidelines. The LCWIP has proposed this in places, despite the fact that this may be at odds with other strategic transport priorities around the speed and flow of motor traffic and would need to be assessed in line with the SMS guidelines.

OTHER COUNTY POLICY, STRATEGIES AND PLANS

Sustainable Travel Towns

1.2.79. Letchworth and Royston are part of the Sustainable Travel Town programme which aims to reshape the local highway network in line with the sustainable transport objectives set out in LTP4. Each Sustainable Travel Town (STT) will contain a package of measures that will aim to achieve a significant switch to walking, cycling and public transport. The types of potential measures range from: new infrastructure for walking, cycling and public transport; behaviour change programmes; lighting; planting; promotion and marketing; and maintenance.

1.2.80. Action plans are currently being developed for each of the towns and the schemes identified as part of this LCWIP will feed into this process.

B197 Corridor Study

1.2.81. The North Central and South Central Growth and Transport Plans identified the need for a sustainable transport corridor along the B197 from Stevenage in the north and Welwyn Garden City in the south, via the villages of Knebworth, Woolmer Green and Oaklands. The section between Stevenage and Woolmer Green via Knebworth is in North Herts. Validation work has been undertaken and has identified a number of options for the improvement of walking, cycling and bus routes along this corridor.

1.2.82. The LCWIP project team has seen the emerging findings of this study, which included suggestions for new crossings in Knebworth, modal filters and a signalised shuttle system under the rail bridge near the station. The work in this LCWIP supports these suggestions and more information is included within the main body of the report.

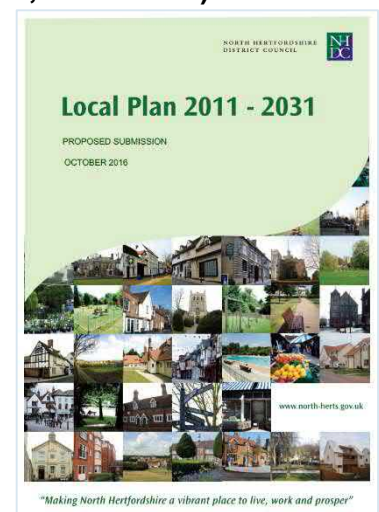
1.3 DISTRICT STRATEGIES, POLICIES AND PLANS

1.3.1. This section will present the existing policy documents that are relevant to this LCWIP on a district level.

EMERGING LOCAL PLAN (NORTH HERTS DISTRICT COUNCIL, 2011-2031)

1.3.2. The emerging local plan has been prepared by North Herts District Council in order to replace the previous Local Plan, released in 1996. The Local Plan seeks to address the key issues facing North Hertfordshire and sets a strategic vision and spatial strategy for the district over the period of 2011 to 2031. The Local Plan is yet to be adopted but gives an indication of the prevailing policy for the district.

1.3.3. The document highlights that there are a number of challenges facing North Hertfordshire over the next 15 years which the Local Plan will need to address in terms of national policy and at the district and local level. It also highlights that there are also a number of opportunities associated with development which the Council should seek to utilise for the benefit of the district as a whole.



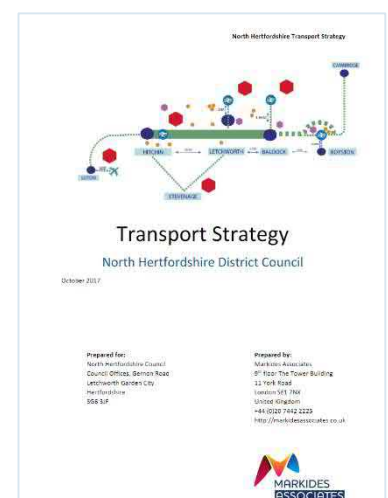
Walking & Cycling

1.3.4. Policy SP6: Sustainable Transport details how the council will deliver accessibility improvements and promote the use of sustainable transport modes insofar as reasonable and practicable. This includes:

- Complying with the provisions of the Local Transport Plan and other supporting documents as considered necessary;
- Encouraging development in locations which enable sustainable journeys to be made to key services and facilities;
- Working with Hertfordshire County Council, Highways England and service providers to ensure that a range of sustainable transport options are available to all potential occupants or users. This may involve new or improved pedestrian, cycle and passenger transport (including rail and/or bus) links and routes;
- Seeking the early implementation of sustainable travel infrastructure on Strategic Housing Sites in order to influence the behaviour of occupiers or users, along with supporting Travel Plans in order that sustainable travel patterns become embedded at an early stage;
- Assessing development proposals against the parking standards set out in this Plan and relevant supplementary advice;
- Requiring applicants to provide assessments, plans and supporting documents to demonstrate the safety and sustainability of their proposals; and
- Protect existing rights of way, cycling and equestrian routes and, should diversion be unavoidable, require replacement routes to the satisfaction of the Council.

TRANSPORT STRATEGY (NORTH HERTS DISTRICT COUNCIL, 2017)

1.3.5. The Transport Strategy was produced as supporting evidence for the emerging North Hertfordshire District Council (NHDC) Local Plan covering the period 2011-2031 and also informed the NCGTP discussed earlier. It will sit alongside the Local Plan and be updated over its lifetime, and NHDC will continue to work in close cooperation with the highway authority (Hertfordshire County Council) and other stakeholders, including Highways England, and adjacent local authorities.



- 1.3.6. The Strategy assesses the implications of the Local Plan proposals on the local transport networks and recommends a strategic approach to provide for transport through the Local Plan period. In recent years, Hertfordshire County Council (HCC) signalled a shift in strategic thinking about transport. The new approach places far greater emphasis on more sustainable travel choices such as cycling and public transport, and lower emphasis on highway improvements. The Transport Strategy has developed from this view and is focused on the potential for solutions and mitigations to better reflect the new sustainable transport priorities of HCC.
- 1.3.7. The Strategy has identified key principles which will be delivered through various policies. These are detailed in Table 1-2 below and relevant corridors from these are shown on Figure 1-4.

Table 1-2 – NHDC Transport Strategy Policies

Policy Name	Policy Description
New developments have sustainable transport 'built-in'	New developments need excellent walk and cycle links to adjacent areas and key destinations, and good public transport connections. These modes should generally take precedence over highway access and offer easy direct access by sustainable modes to attractions such as schools, railway stations and town centres.
Transport user hierarchy	Remove the priority of designing roads and urban areas for vehicle movements and give priority to other sustainable modes of transport such as walking, cycling and public transport.
Step change in cycling and improved walking within the main urban centres	This requires dedicated travel behaviour change staff based locally, with sufficient resources to develop campaigns and events during the plan lifetime, and who can develop relationships with local stakeholders.
Improvement in bus-based public transport in urban centres	Discussions with the local operators to determine if amendments or enhancements to bus services can be considered, potential bus priority schemes, improved information, better passenger facilities and marketing.
'Sustainable Spine' corridor along the A505	The corridor should be reconsidered in relation to its 'people movement' function, rather than as a highway link only.
A traffic management plan for each main urban town,	This plan should review existing traffic movements and capacity, air quality issues and links to other measures such as buses, walking and cycling. It should then propose a management framework for future changes.
Rural management and improvement measures	These will be site specific measures aimed at resolving traffic issues or taking opportunities to improve the 'place' function of the village or to better link villages to each other or the main urban towns.
Review, provide for and utilise technology improvements	Technological innovation is rapidly changing the transport sector. Many of these are likely to improve highway capacity and/or reduce the cost of highway travel, which may work against measures to encourage more sustainable modes.

Figure 1-4 - Sustainable Transport Corridors from the NHDC Emerging Transport Strategy (relevant to the North Herts LCWIP)



LETCHWORTH GARDEN CITY CYCLING STRATEGY (LGC HERITAGE FOUNDATION, 2018)

- 1.3.8. The overall aim of this strategy is to assist HCC, NHDC and other external funders in identifying and proposing potential improvements for cyclists in Letchworth Garden City.
- 1.3.9. The purpose of this strategy is therefore to build on the strong foundations of Letchworth Garden City's built environment for active travel modes and to identify 'quick-win', as well as medium- to long-term improvements to cycling conditions in Letchworth. The strategy also considers what cycling schemes / improvements could be included within new developments.
- 1.3.10. The objectives of this strategy are:
1. Enhance and extend cycle routes to create a comprehensive network, making cycling an easy, pleasant choice;
 2. Make it easier and safer for all to cycle in and through residential areas;

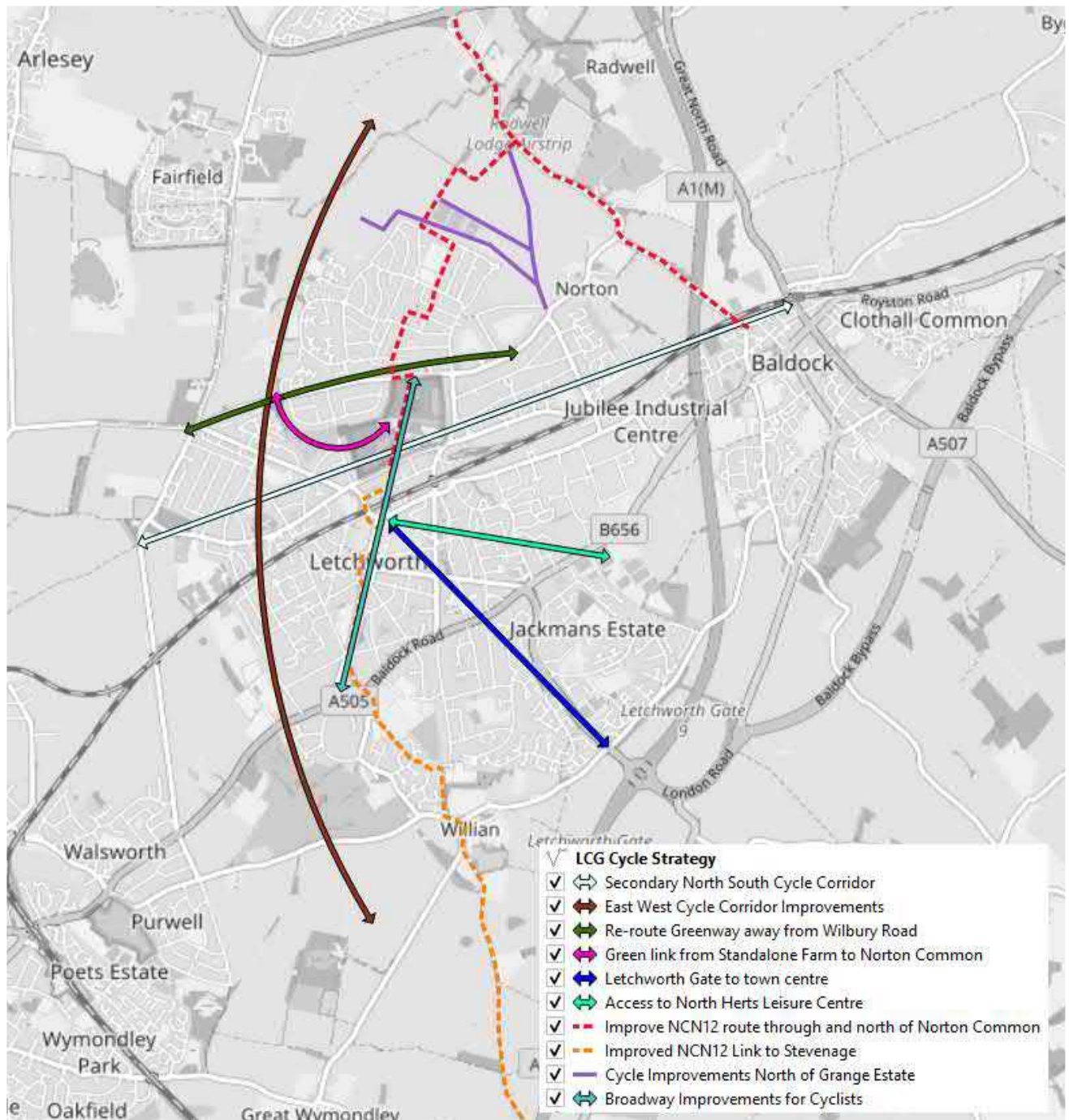
3. Improve access by bicycle to key destinations in Letchworth Garden City including the town centre, the station and the leisure centre; and
4. Give people the confidence and skills to cycle and encourage positive and safe interactions between cyclists and other road users.

1.3.11. The strategy proposes potential recommended schemes to improve conditions for cycling in Letchworth. These are shown Table 1-3 and mapped on Figure 1-5.

Table 1-3 – Schemes presented in the LGC Cycling Strategy

ID	Scheme Description
1.1	Improve NCN12 route through and north of Norton Common
1.2	Development of secondary north-south cycle corridor
1.3	East-west cycle corridor improvements
1.4	Re-route Greenway away from Wilbury Road mini-roundabouts
1.5	Surfacing and access improvements to Greenway
1.6	Green link from Standalone Farm to Norton Common
1.7	Improve NCN12 link to Stevenage
1.8	Create cycling link from Letchworth Gate to town centre
1.9	Improvements to the cycling network in and north of the Grange Estate
2.1	Improved wayfinding for cyclists
2.2	Cycle track priority over junction mouths
2.3	Tightening junction turning radii
2.4	Designating more footways as shared use
3.1	Creation of a leisure cycle hub
3.2	Town centre access improvements for cyclists
3.3	Broadway improvements for cyclists
3.4	Town centre cycle parking improvements
3.5	Improving cyclist access to North Herts Leisure Centre
3.6	Development of a cycle to school strategy
4.1	Mitigating path user conflict on the Greenway
4.2	Driver behaviour cycle awareness campaign
4.3	Extend the programme of cycle training
4.4	Develop a programme of community cycling events

Figure 1-5 - LGC Cycling Strategy Schemes



1.3.12. This LCWIP reviewed the suggestions identified and, where there was evidence for the improvements and the suggestions conformed with latest best practice and the results of LCWIP auditing, these have been incorporated into the LCWIP. The scheme prioritisation in Section 8 also takes into account the location of the infrastructure improvements in relation to this strategy in its scoring system.

KNEBWORTH NEIGHBOURHOOD PLAN (KNEBWORTH PARISH COUNCIL, 2021)

- 1.3.13. The Knebworth Neighbourhood Plan (KNP) sets out a plan to make Knebworth a vibrant and inclusive place to live, with aspirations around good design, environmental performance and sustainable growth while maintaining its rural character.
- 1.3.14. Several policies in the neighbourhood plan are in alignment with the goals of the LCWIP, notably KBT1. While this policy is primarily focused on new developments, the text states that the Parish Council “supports proposals that encourage change of travel mode away from the private car to more sustainable forms of transport” and goes on to talk about “encouraging a switch to walking and cycling by improving the safety and quality of existing facilities”.
- 1.3.15. The main barriers to improving the active travel network in Knebworth are the very busy ‘high street’ section of the B197 and the constraints under the rail bridge near Knebworth station. In order to create a continuous quality cycle facility on the B197, at least some of the parking on the ‘high street’ would need to be relocated. The KNP does not currently support this and so the LCWIP has instead identified a need for traffic calming in this area with a note that there should be a long-term goal to relocate the parking if possible. Under the rail bridge, a shuttle system has been proposed but this would require much further work and consultation to determine its feasibility and the level of local support.

BALDOCK, BYGRAVE AND CLOTHALL NEIGHBOURHOOD PLAN (2021)

- 1.3.16. This neighbourhood plan has been produced by a small number of volunteers drawn from community organisations in Baldock, together with representatives from Bygrave and Clothall. The plan contains policies that complement the emerging North Hertfordshire Local Plan, providing additional safeguards and requirements.
- 1.3.17. The plan supports walking and cycling infrastructure, having highlighted the need for improved infrastructure in key areas, as detailed below:
- Improving the link between Baldock High Street and Tesco superstore;
 - Improving access to Baldock station;
 - Providing a sustainable link between Bygrave and Baldock, via Bygrave Road/Ashwell Road; and
 - Upgrading Royston Road to become a sustainable travel corridor.

1.3.18. The report also emphasises the importance of reducing congestion and improving air quality within Baldock, stating that a key way to combat this to provide walking and cycling routes that allow safe and convenient access between the sites and Baldock town centre, railway station, employment areas and primary and secondary schools.

1.3.19. This LCWIP supports these plans and in some cases identifies the infrastructure needed.

PIRTON NEIGHBOURHOOD DEVELOPMENT PLAN (PIRTON PARISH COUNCIL, 2018)

1.3.20. This neighbourhood plan was developed by Pirton Parish Council in conjunction with numerous local organisations and sets out a vision for the future of the Pirton up to 2031.

1.3.21. The key purpose of this plan is to encourage sustainable development in accordance with the character of the village and Parish of Pirton, with an emphasis on encouraging walking and cycling in and around the village and parish. Key areas highlighted within the plan which this LCWIP supports include:

- Safe pedestrian links to the principal village facilities, including the village centre and recreation ground; and
- Improved access to the Icknield Way path and the Chiltern Cycleway;

ASHWELL NEIGHBOURHOOD PLAN (ASHWELL PARISH COUNCIL, 2021)

1.3.22. This neighbourhood plan was produced by a working group acting on behalf of the Parish Council, incorporating the views of the residents of the Parish of Ashwell. The purpose of the plan is to structure development within the parish and provide guidance to any interested parties wishing to submit planning applications for development within the parish.

1.3.23. The plan supports improving walking and cycling infrastructure to encourage short, local journeys to be made by foot. The plan supports the need for improved walking and cycling connections within the area as well as a complete walking and cycling link between Ashwell and the railway station, both of which are supported by this LCWIP.

WYMONDLEY PARISH NEIGHBOURHOOD PLAN (WYMONDLEY PARISH COUNCIL, 2019)

1.3.24. This neighbourhood plan was produced by the Wymondley Neighbourhood Plan Committee, a sub-committee of Wymondley Parish Council. The plan includes policies which strive to create a more sustainable way of life for residents, resulting in Wymondley Parish becoming a safer, healthier and greener place to live and work.

1.3.25. The plan recognises the importance of green infrastructure in reducing carbon footprints and supports appropriate initiatives to maintain, extend, improve, promote or facilitate use of these transport routes. Plans in this LCWIP complement the plan's intentions around improving footpaths and bridleways to facilitate safe walking and cycling within the Parish and reduce motoring.

PRESTON PARISH NEIGHBOURHOOD PLAN (PRESTON PARISH COUNCIL, 2020)

1.3.26. Preston Parish Council have developed this neighbourhood plan to establish a vision for the whole Parish and to help deliver the local community's wishes and needs for the plan period 2018 – 2031.

1.3.27. The plan presents various objectives in relation to the promotion and improvement of walking and cycling facilities, including:

- To support and encourage safe and sustainable transport, including walking and cycling.
- To support and encourage safe use of roads, paths and bridleways for all users: walkers, joggers, cyclists and horse riders.

1.3.28. Policy TC1 'Safe and Sustainable Transport' further emphasises Preston Parish's desire to improve sustainable transport infrastructure, stating that development proposals will be supported where "amenities in the village can be readily and safely accessed by pedestrians and cyclists".

1.3.29. Although no specific infrastructure proposals in the Preston area are included in this LCWIP, the need for active travel routes within Preston town and from Preston to Hitchin and Stevenage have been recognised and included in this LCWIP.

1.4 RELEVANT PLANS IN NEIGHBOURING AUTHORITIES

CAMBRIDGESHIRE GREENWAYS

1.4.1. The Greater Cambridge Partnership are working on the development of a high-quality greenway network, which will encourage walking and cycling as a mode of travel both into and out of Cambridge. The Melbourn Greenway is relevant to this LCWIP as it proposes to link Royston to Cambridge via Melbourn, Foxton and Trumpington. The analysis conducted for this LCWIP also identifies a need for this connection, and infrastructure proposed in Section 7 would tie in with the Melbourn Greenway's proposal for a bridge over the A505 to

link into Royston. Current validation work is being undertaken separately by HCC to look at these links.

STEVENAGE LCWIP

1.4.2. Stevenage Borough Council developed the Stevenage LCWIP in 2019, which sets out a network of preferred and future routes for walking and cycling in the borough. There are a few interfaces between the two LCWIPs identified in this report:

- This LCWIP has confirmed a need for an active travel link between Hitchin and Stevenage. High-level infrastructure ideas for this link are included in Section 7 of this report. Plans included in this LCWIP end at the district boundary, to the west of Junction 8 of the A1(M). The Stevenage LCWIP Route 1 'North Stevenage to Stevenage Central', links this junction to Stevenage town centre via the A602, creating an opportunity for a long, cross-boundary connection. However, plans in the Stevenage LCWIP stop short of continuing the route over the junction, instead continuing the route north along the National Cycle Network route towards Letchworth via Gravelly. While this link is important too, there is a need to address the A602 barrier in order to provide a more direct connection between Stevenage and Hitchin. This would require further collaboration between HCC, Stevenage Borough Council and NHDC.
- The B197 corridor study links Stevenage in the north with Welwyn Garden City in the south and the North Herts section (from Stevenage to Woolmer Green via Knebworth) is also covered in this LCWIP. However, the first iteration of the Stevenage LCWIP did not include connections to such a route. Further collaboration between the three authorities is therefore required here too, in order to ensure any future B197 connection is properly integrated into Stevenage's walking and cycling networks.
- There are some developments planned on the edge of the Stevenage urban area (by Great Ashby) which are inside North Herts district. In terms of active travel, the key connections for these developments will be into Great Ashby and Stevenage, which are in Stevenage Borough. These connections have been identified in Sections 5 and 6 of this report.

LUTON LCWIP

1.4.3. Luton Borough Council are currently developing an LCWIP, which is expected to be completed in 2022. There are some developments planned on the edge of Luton which are inside North Herts district. The key walking and cycling connections for these developments

will be into Luton, on the other side of the district boundary. These connections have been identified in Sections 5 and 6 of this report.

LUTON AIRPORT EXPANSION

- 1.4.4. Luton Airport, which is located on the border of North Hertfordshire is currently consulting on opening a second terminal. To minimise the impact of additional trips on the road network, the proposals for the expansion would include funding for highway improvements. This might also include changes to parking controls, traffic management and calming measures close to the airport and in rural areas to the east of the airport. The proposals assumed that few passengers would walk or cycle to the airport.
- 1.4.5. The mitigations document proposes a number of junctions in Hitchin that would require mitigation to accommodate extra traffic flows to the airport. Any junction improvements will also need to include walking and cycling enhancements
- A505 Offley Road/ Upper Tilehouse St
 - A602 Park Way/ Stevenage Road/ Hitchin Hill
- 1.4.6. There are also some traffic calming areas identified in the villages to the east of Luton.
- 1.4.7. The two key documents are:
- Getting to and from the Airport
 - Appendix D Highway Mitigation Drawings

1.5 COVID-19 AND THE ACTIVE TRAVEL FUND

- 1.5.1. As with the rest of the country, travel patterns in North Hertfordshire in 2020 were massively disrupted by the covid-19 pandemic. Many workers started working from home rather than commuting and schools were closed, impacting these trips as well. People were advised by the government to avoid non-essential trips, to not use public transport, and to prioritise walking or cycling rather than driving to help avoid streets becoming gridlocked. Cycle sales in the UK were much higher than usual in 2020 and the DfT reported increases of around 200% in cycling trips made between March 16th and June 1st compared to the year before.
- 1.5.2. To support this desired shift to walking and cycling, and to make social distancing easier, on 11 May 2020 the government announced a £250m Emergency Active Travel Fund (EATF). This fund was distributed to local authorities across England in two tranches. The council

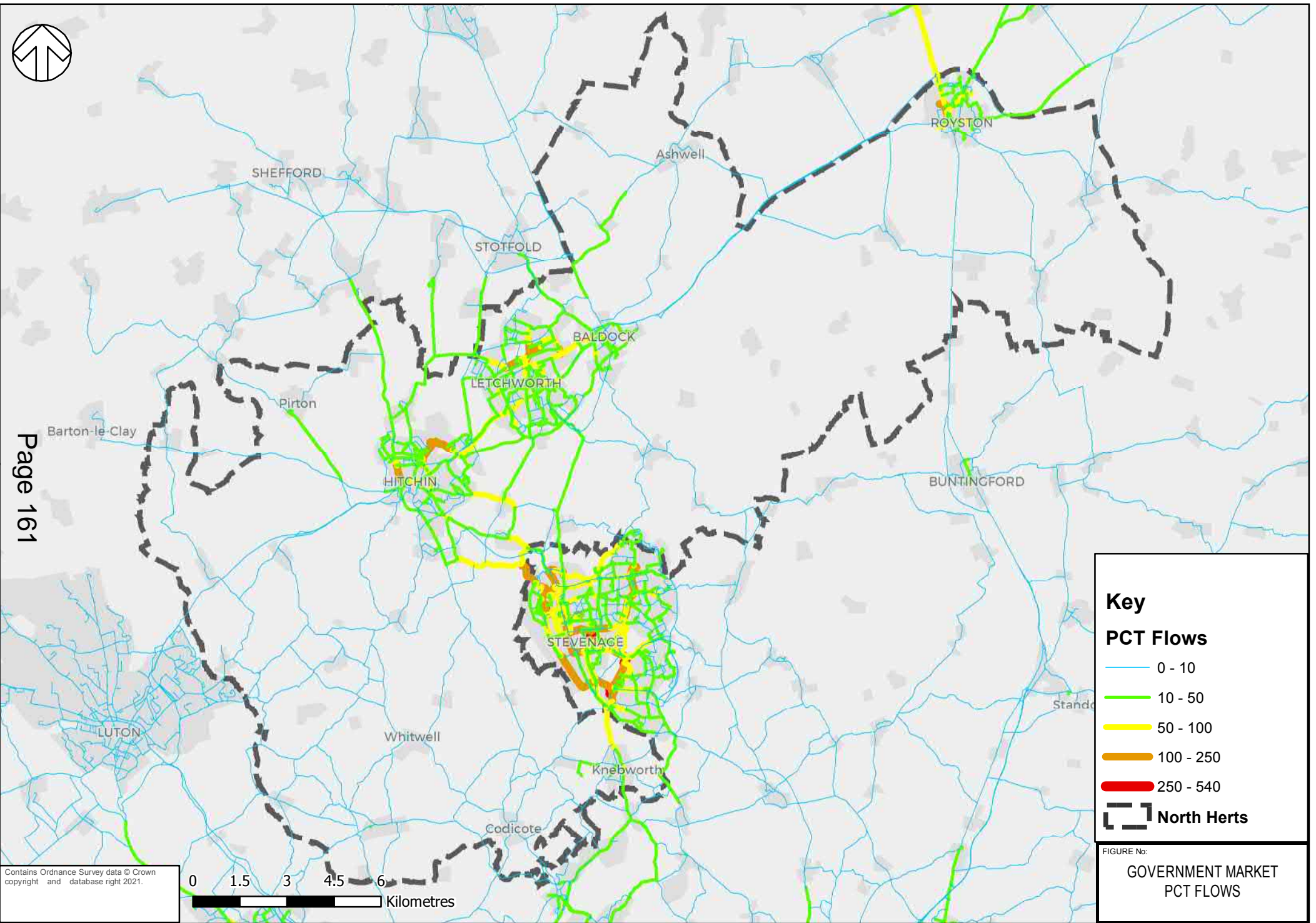
used funding from the first tranche to improve active travel infrastructure across Hertfordshire. This included measures in Hitchin and Royston town centres to support social distancing by providing more space for pedestrians.

- 1.5.3. The fund was then renamed the Active Travel Fund and the second tranche of funding was awarded based on plans submitted to the DfT by the council. This includes development of a new cycle route along North Road in Stevenage. Later tranches of funding are increasingly dependent on authorities having LCWIPs in place. It is hoped that some of the proposals in this LCWIP can be funded through this route, once the LCWIP has been adopted.

APPENDIX B



Contains Ordnance Survey data © Crown copyright and database right 2021.



Key

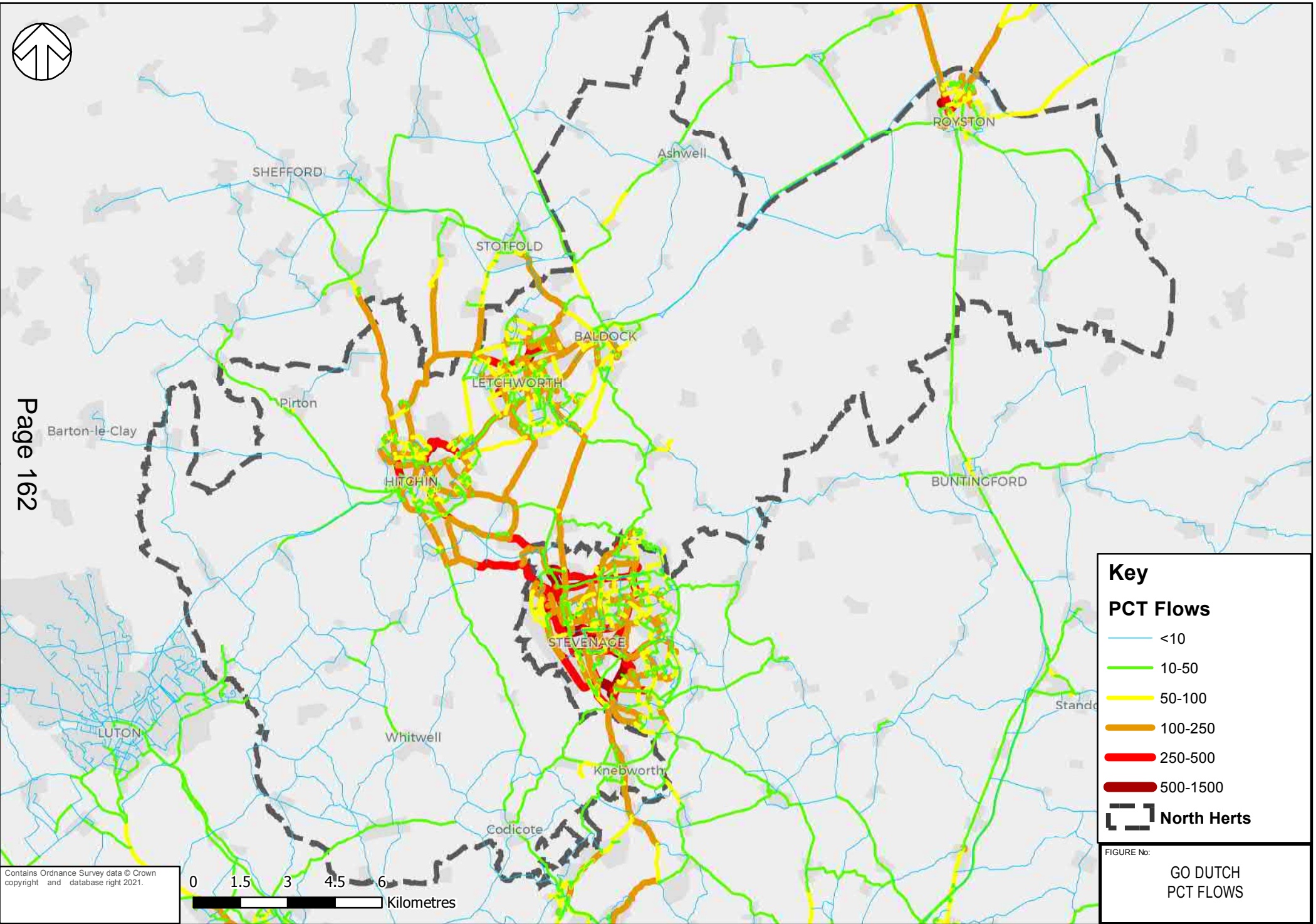
PCT Flows

- 0 - 10
- 10 - 50
- 50 - 100
- 100 - 250
- 250 - 540

North Herts

FIGURE No:

**GOVERNMENT MARKET
PCT FLOWS**



Key

PCT Flows

- <10
- 10-50
- 50-100
- 100-250
- 250-500
- 500-1500

North Herts

FIGURE No:

GO DUTCH
PCT FLOWS

APPENDIX C

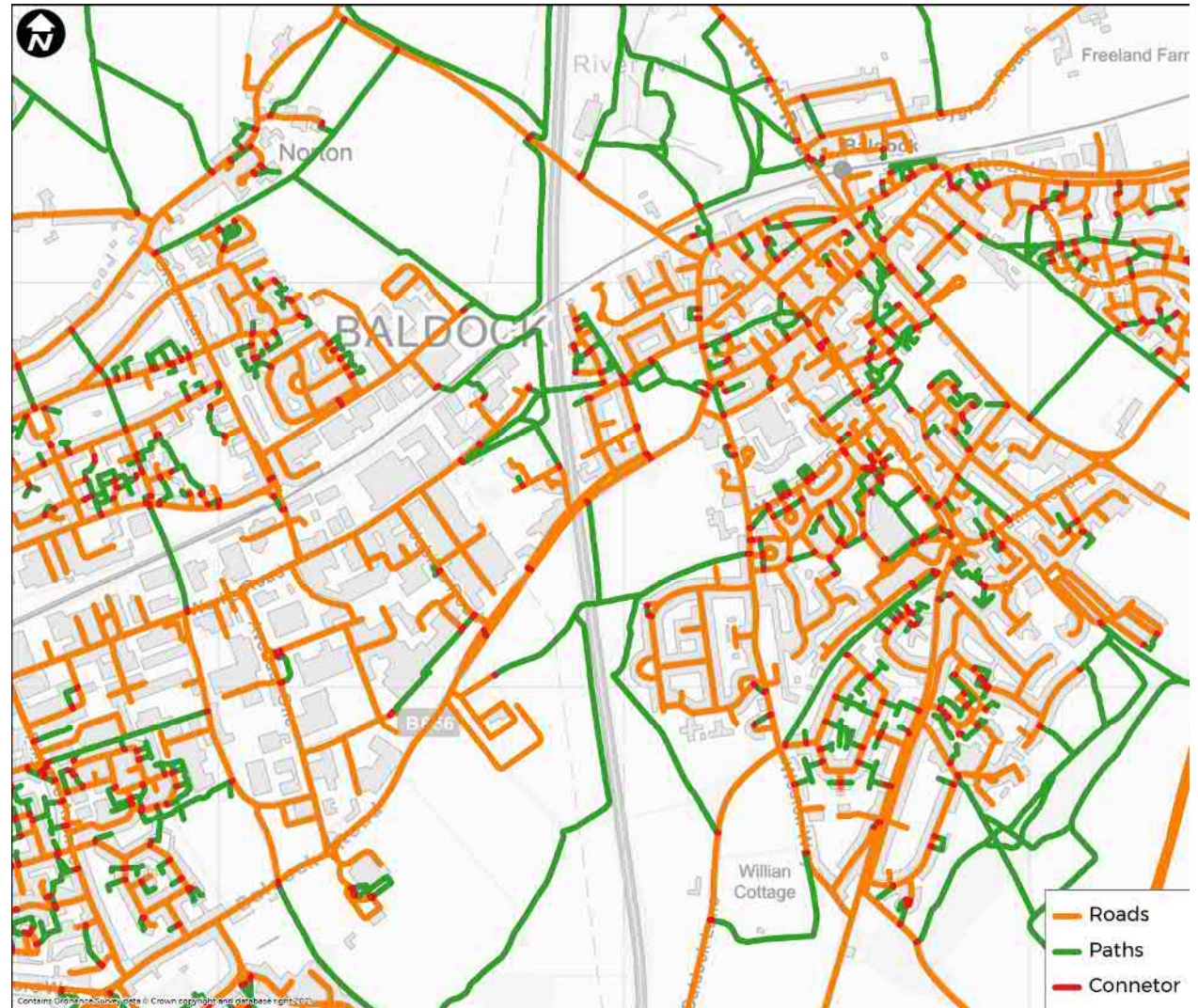
CIS Model Overview

- A suite of models has been developed to automate the creation of desire lines for walking and cycling.
- The models require the following inputs: a walk/cycle network, origins, destinations and associated parameters.
- The models create two types of output:
 1. 'As crow fly' lines with the number of trips calculate between respective origins and destinations
 2. Walk/cycle network based lines that aggregate the number of trips to the actual network

Inputs

Input 1: Walk/Cycle Network

- A walk/cycle network has been built for the whole of Hertfordshire plus an 8km buffer.
- The datasets were downloaded from the vendor (Emapsite) on 4th May 2021.
- The data consist of two Ordnance Survey MasterMap datasets, one is the most detailed road network available and the second is the associated paths dataset. These two datasets have been merged together correctly before building the network.
- The walk/cycle network can be used for any of Hertfordshire County Council's LCWIPs projects.
- One-way streets have not been modelled.



Input 2: Origin Points



- The origin points dataset has been created from three sources:
 1. Experian Mosaic postcodes with 2019/20 population estimates
 2. North Herts COMET R6 Housing Completions L3
 3. North Herts COMET R6 Perm Sites L3
- The COMET datasets were supplied by Hertfordshire County Council. It is understood that the council has its own Acorn data and in future runs this can be used instead of the Experian Mosaic dataset.
- There are a total of 19,628 origin points across North Hertfordshire plus an 8km buffer
- Each origin point has a weight score, representative of the population at each point.

Input 3: Destination Points



- The destination points dataset has been created from 25 individual datasets supplied by Hertfordshire County Council.
- The extent of destinations was North Hertfordshire plus an 8km buffer
- The combined walk destinations dataset includes all 25 individual datasets, which includes bus stops, and contains 9,157 points
- The combined cycle destinations dataset does not include bus stops, and contains 6,839 points
- Each destination dataset is referred to as a “Destination Type”. The Key Employment Areas destination type is made up of three individual destination datasets combined together (Key Employment Areas, Employment Completions, Employment Perm Sites)
- Every destination point within each destination type is given a weighting, however, in the majority of cases, the weighting is a value of one, meaning that all destinations within that destination type, have the same attractiveness as one another. Some destination types have a specific weighting that represents the varying attractiveness of each point, such as number of jobs.
- Each destination type is assigned two pieces of information:
 1. Model Run Category – one of four options (All2All, Nearest1, ClosestX, ClosestY)
 2. Assignment Proportion – each destination type is given a value that represents the proportion of trips being generated by an origin that go to the corresponding destination type. E.g. 10% of all trips from an origin will go to a secondary school.
- The run category will determine how this proportion of trips generated at an origin point is distributed between the respective destinations within the destination type.

Destination Parameters: Run Category Types & Values



Run Category	Description	Example Destination Type
All2All	This run category will generate data between each origin and every one of the destination points within the corresponding destination type. Serious consideration should be given to using this run category as it can generate millions of data rows which will cause the models to fail (run out of memory).	TOWN CENTRES
Nearest1	This run category will generate data between each origin and the single nearest destination point within the corresponding destination type.	Train stations, secondary schools
ClosestX	When running the models, the user assigns a value for X, and this run category will generate data between each origin and the X closest destination point within the corresponding destination type.	Primary schools, bus stops
ClosestY	When running the models, the user assigns a value for Y, and this run category will generate data between each origin and the Y closest destination point within the corresponding destination type.	Business parks, retail centres

Run Category	Value for North Herfordshire Model Runs
ClosestX	3
ClosestY	5

Walk Destination Parameters



Destination Type	Run Category	Proportion (Total = 100%)
Bus Stops	ClosestY	6%
Coach Stations	Nearest1	1%
Colleges/Universities	Nearest1	5%
Community Centres	Nearest1	1%
Dentist	Nearest1	1%
Event Spaces	ClosestX	1%
GPs/Walk-in Centres	Nearest1	1%
Hospitals	All2All	5%
Key Employment Areas / Acorn Data /Future Employment	All2All	10%
Libraries	Nearest1	1%
Local/Neighbourhood Centres	Nearest1	20%
Market Areas / Marketplaces	ClosestX	1%
Nurserys	ClosestX	1%
Parks/Open Spaces	Nearest1	1%
Post Office	Nearest1	1%
Primary Schools	ClosestX	9%
Railway Stations	Nearest1	5%
Retail Parks	All2All	1%
Secondary Schools	ClosestX	10%
Sport and Leisure Centres	Nearest1	1%
Supermarkets	Nearest1	5%
Tourist Attractions / Points of Interest	Nearest1	3%
Town Centre Area	All2All	10%

Cycle Destination Parameters



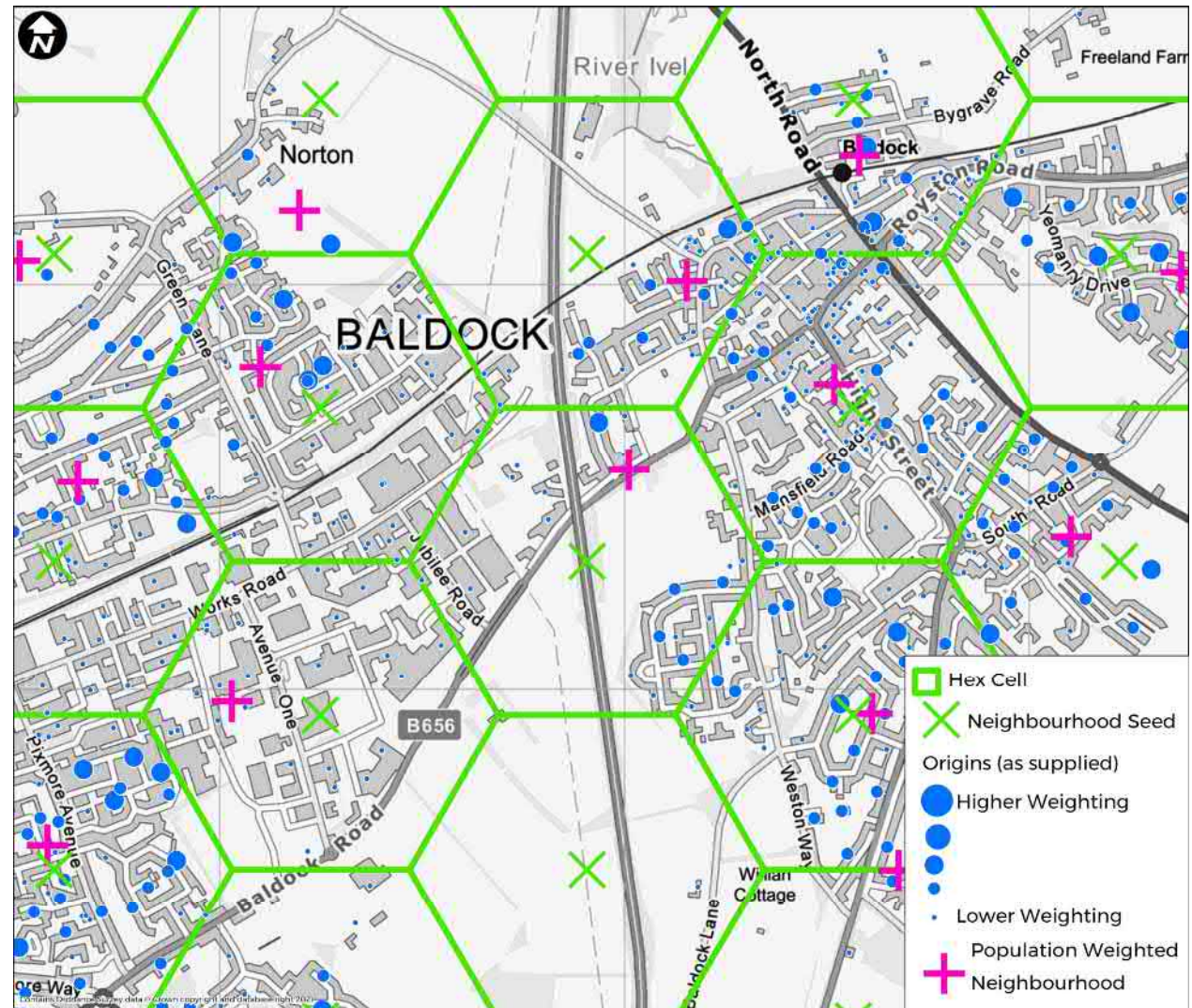
Destination Type	Run Category	Proportion (Total = 100%)
Coach Stations	ClosestY	1%
Colleges/Universities	Nearest1	5%
Community Centres	Nearest1	1%
Dentist	Nearest1	1%
Event Spaces	ClosestX	1%
GPs/Walk-in Centres	Nearest1	1%
Hospitals	All2All	5%
Key Employment Areas	All2All	30%
Libraries	Nearest1	1%
Local/Neighbourhood Centres	Nearest1	5%
Market Areas / Marketplaces	ClosestX	1%
Nurserys	ClosestX	2%
Parks/Open Spaces	All2All	1%
Post Office	Nearest1	1%
Primary Schools	ClosestX	6%
Railway Stations	Nearest1	6%
Retail Parks	All2All	5%
Secondary Schools	Nearest1	6%
Sport and Leisure Centres	Nearest1	1%
Supermarkets	Nearest1	5%
Tourist Attractions / Points of Interest	All2All	5%
Town Centre Area	All2All	10%

Methodology

- A suite of models have been created that run through Esri ArcGIS Desktop.
- Running the models requires an ArcGIS Desktop Advanced license and Network Analyst license.
- The workflow for the models is as follows:
 1. The user manually pre-processes the origin and destination points to ensure both datasets have the required fields and attribute values.
 2. The user selects the required model inputs: walk/cycle network, origin points, destination points and hex cells
 3. The user manually inputs the values of X and Y for ClosestX and ClosestY run categories
 4. The origin and destination points are automatically aggregated to neighbourhood points so that less data is used by the model, however there is no loss to the weighting values associated with origins/destinations. This is essential as with 19,000 origins and 9,000 destinations, up to 171,000,000 trip lines could be generated and a normal computer would not be able to process this.
 5. The model creates an Origin-Destination Matrix (OD Matrix) from all origins to the appropriate destinations, respecting the Run Category parameters for the respective destination type. For example, trips are made from each origin to all hospitals (All2All) and trips are made from each origin to the closest three nurseries (ClosestX). The OD Matrix distances are based on network distances not straight line distances.
 6. The OD Matrix is used to generate the 'as crow flies' lines between origins and destinations. A series of table joins add the origin weight value and destination proportion value to the respective OD lines. A gravity model calculates the number of trips being assigned to each line. The gravity calculation assigns trips based on a formula that balances the distance between origin and destinations and the attractiveness of the destinations. The output dataset is then run through a python script (outside of ArcGIS) to create the clustered desire lines
 7. The OD Matrix is used to generate the walk/cycle network based lines between origins and destinations. A series of table joins add the origin weight value and destination proportion value to the respective OD lines. A gravity model calculates the number of trips being assigned to each line. The gravity calculation assigns trips based on a formula that balances the distance between origin and destinations and the attractiveness of the destinations. Additional processes then aggregate the network based lines to the underlying road network, summing the total number of trips along concomitant sections of road.

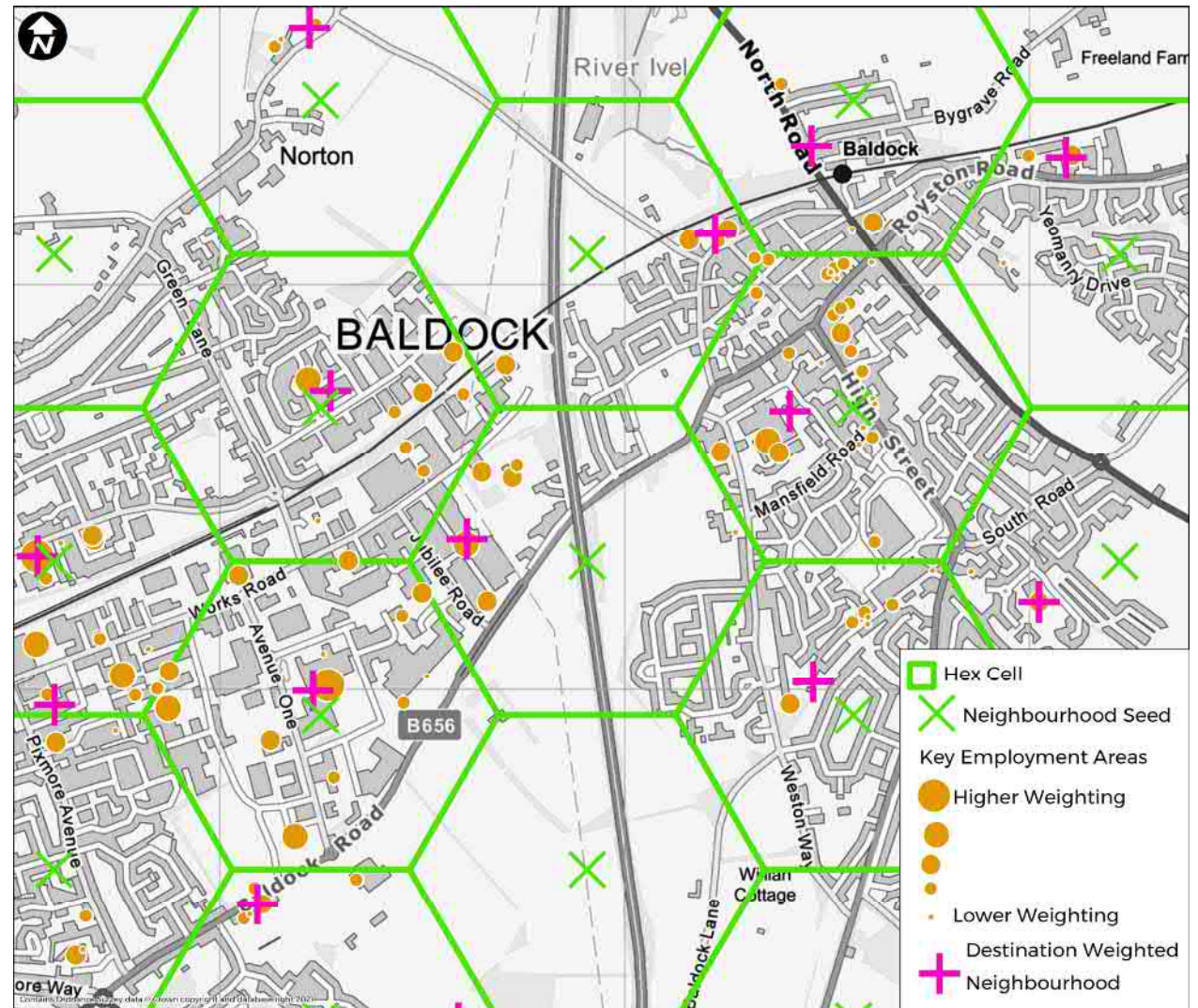
Aggregating Origins

- A grid of hex cells is used as a proxy for neighbourhoods and the centroid of each hex cell used as a 'first step' neighbourhood seed.
- The supplied origins are assigned to the nearest neighbourhood seed using the road network and the total origin weight for each neighbourhood seed calculated (sum of all origin weights)
- A new location to best represent the respective origins is calculated creating a population weighted neighbourhood point
- The population weighted neighbourhood point is now a proxy for all origins deemed to be within a neighbourhood.
- Note that an origin can be physically located in one hex cell, but the closest neighbourhood seed when using the road network is actually in another hex cell. The origin is assigned to the other neighbourhood seed instead.

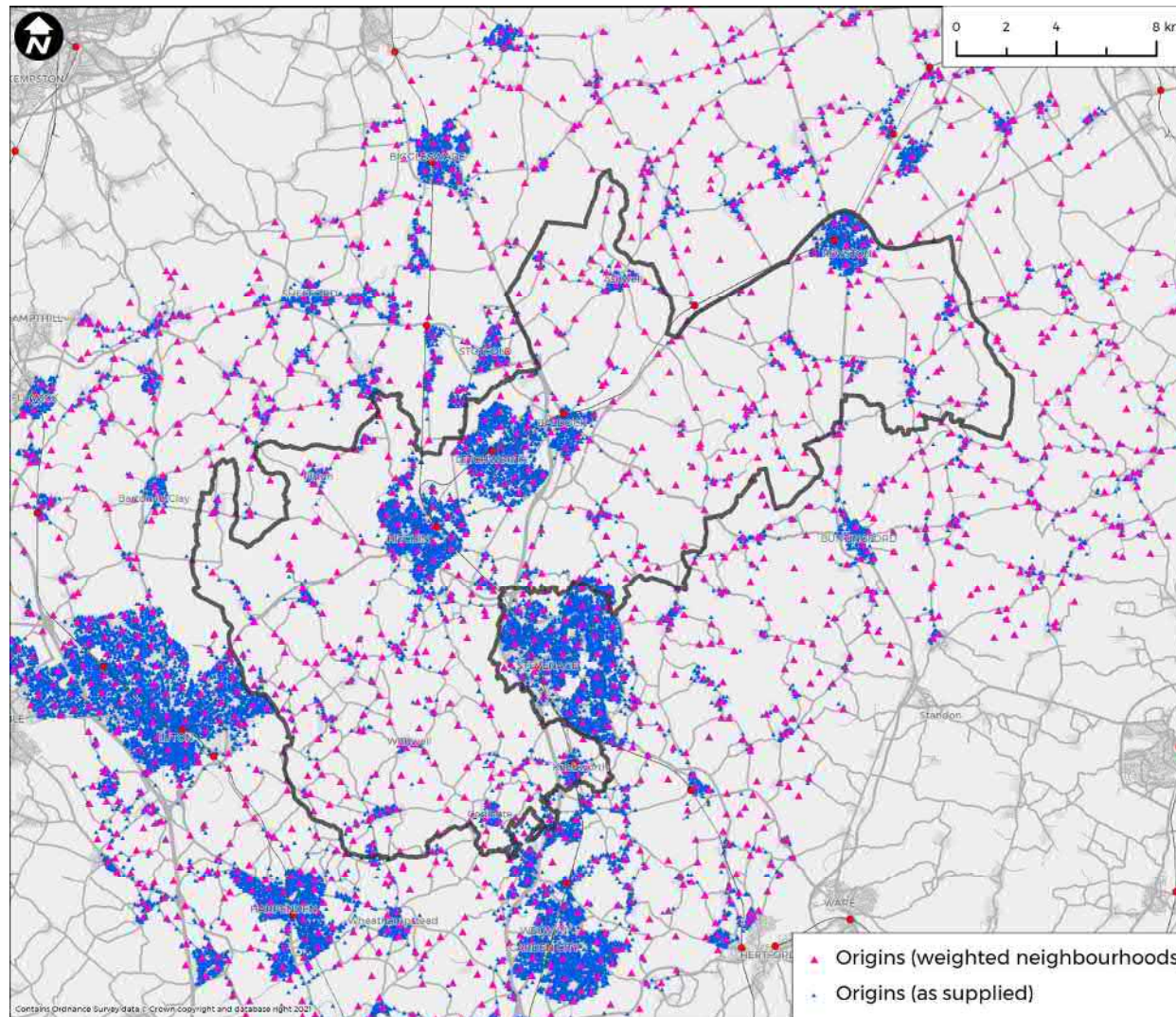


Aggregating Destinations

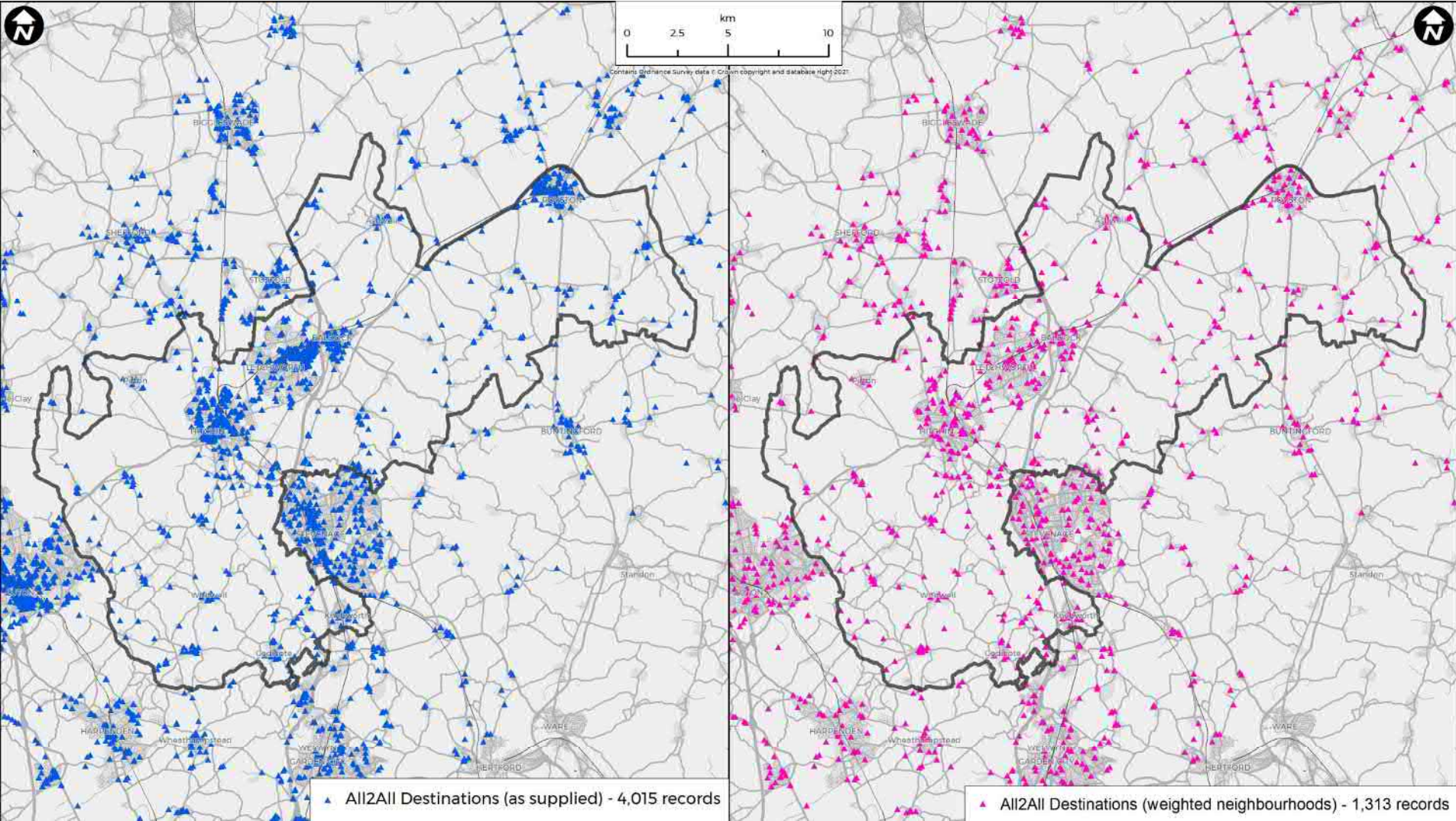
- The same methodology was used as for aggregating origins to weighted neighbourhood points
- A specific set of destination weighted neighbourhood point was created for each of the destination types – the image illustrated the destination type of Key Employment Areas only.
- All sets of destination specific weighted neighbourhood points were merged into one final dataset used by the model.



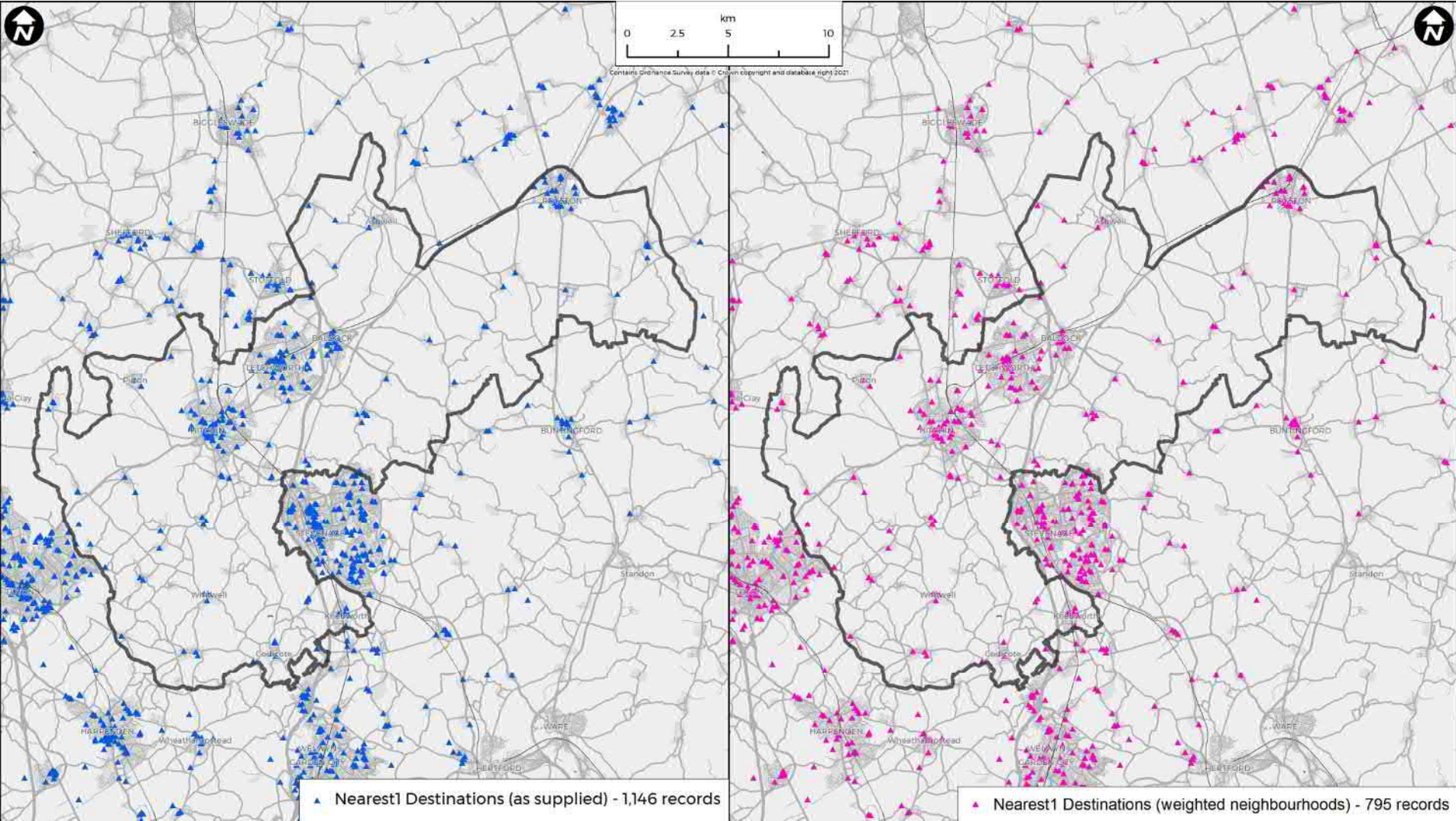
Origins: As supplied & Aggregated to Neighbourhoods



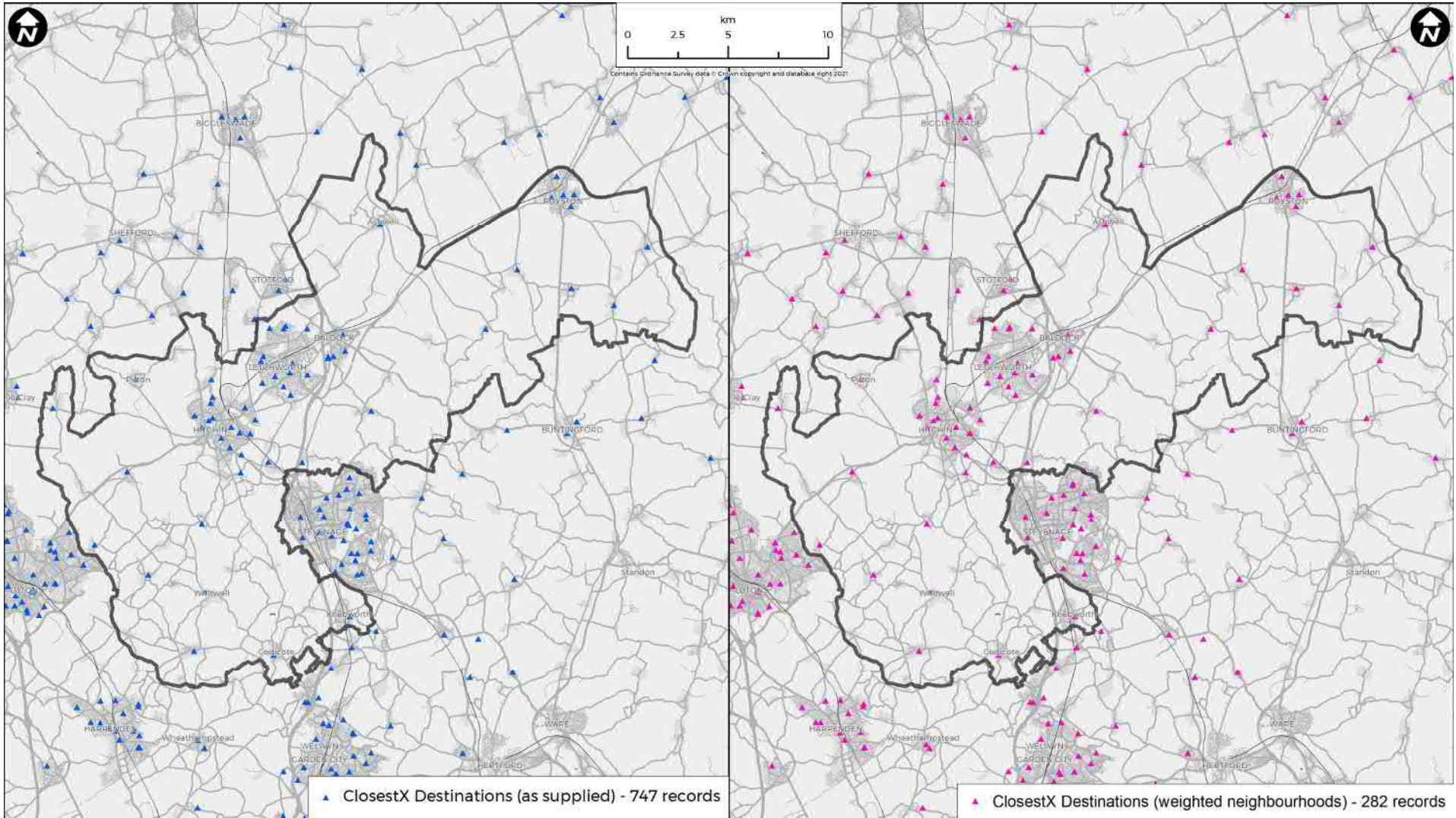
Aggregating All2All Destination Types



Aggregating Nearest1 Destination Types



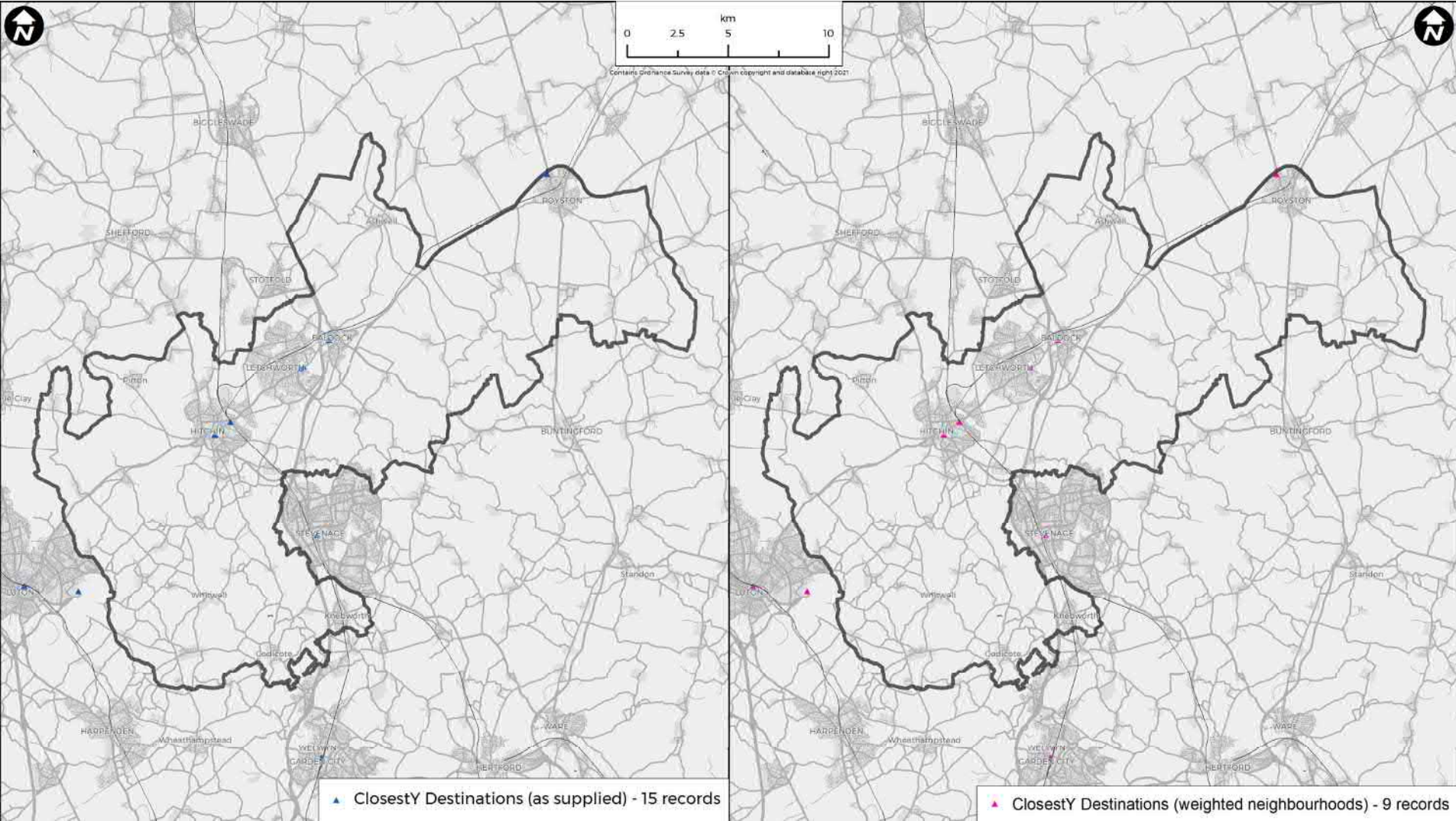
Aggregating ClosestX Destination Types



Aggregating ClosestY Destination Types

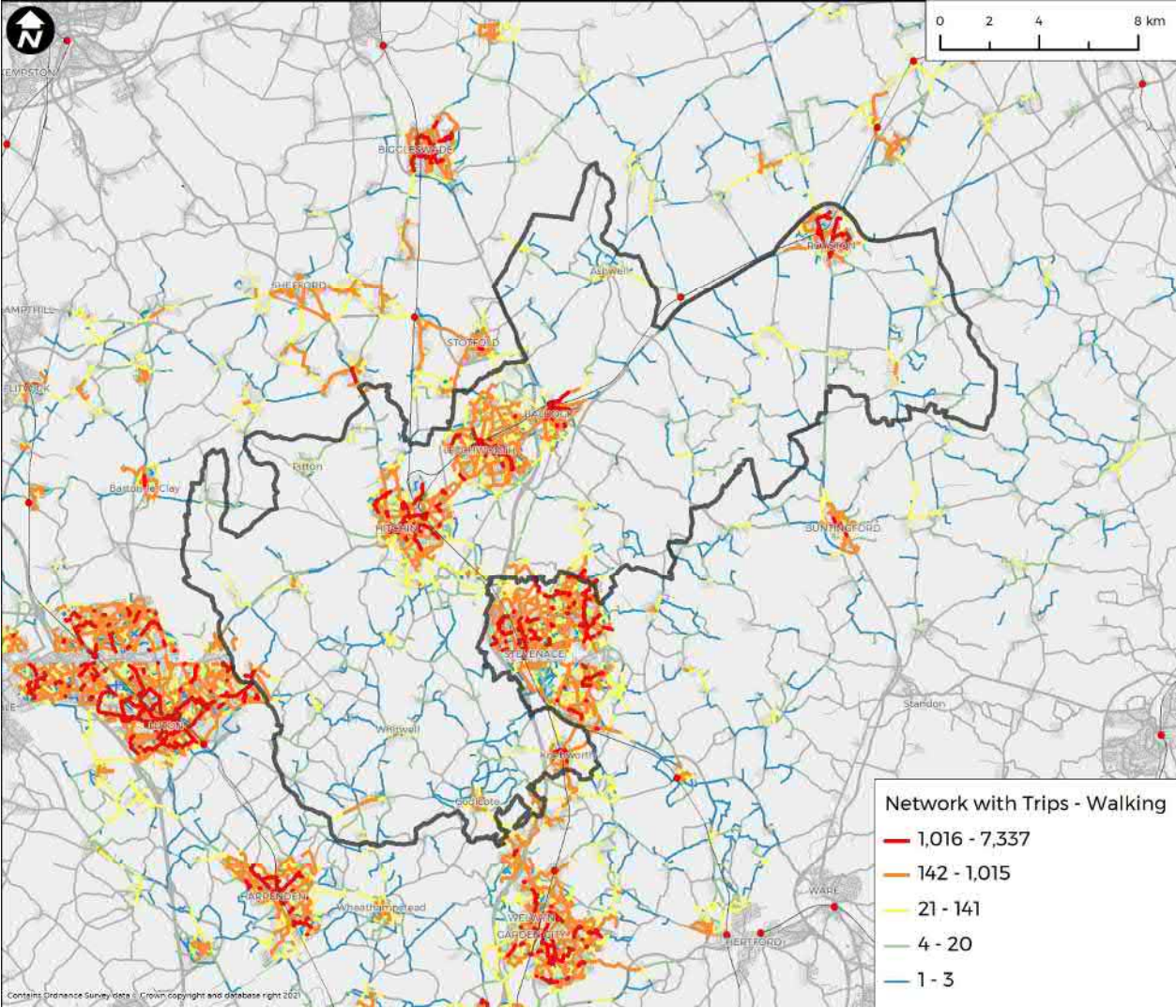


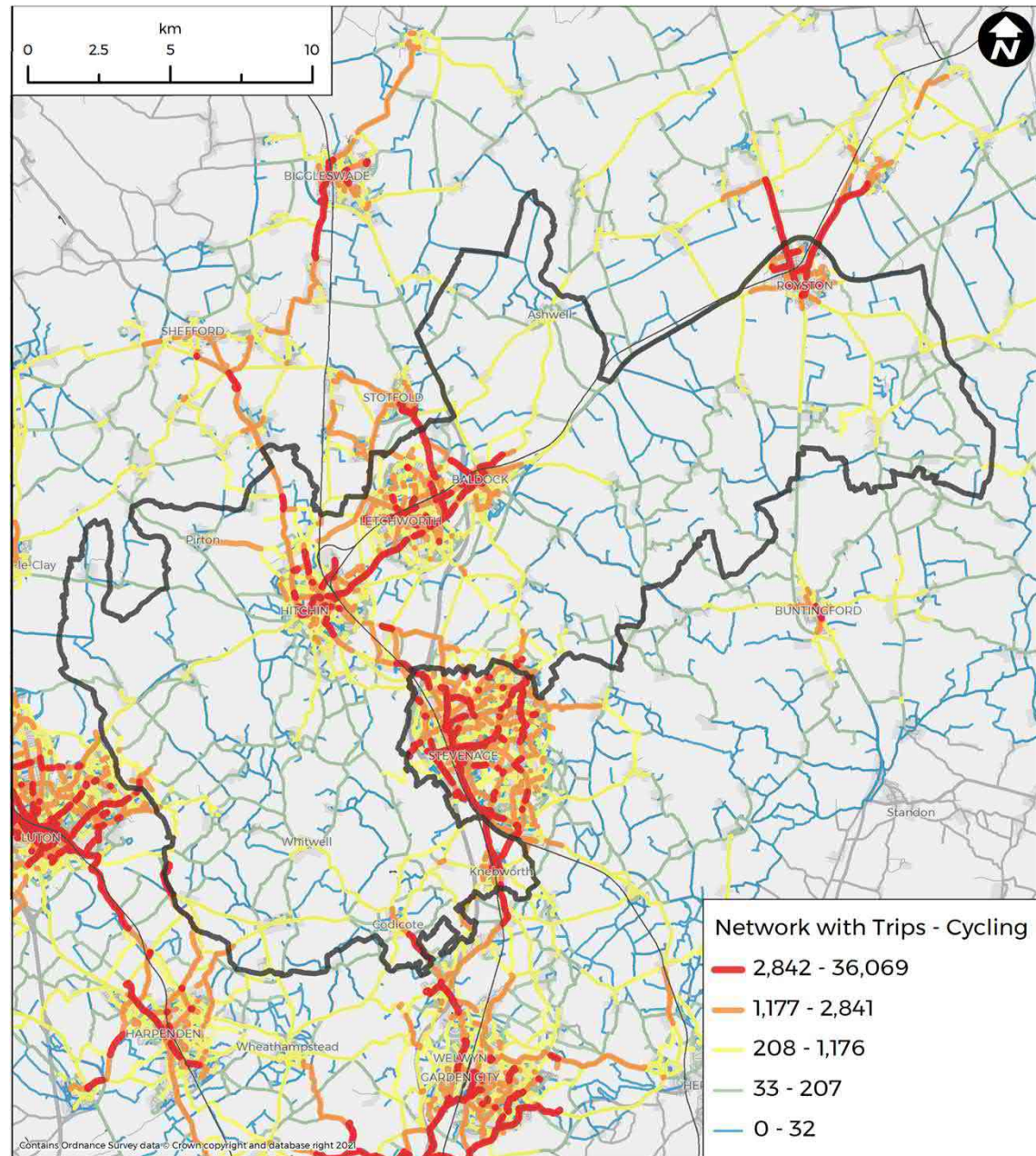
Page 181



Outputs

Aggregating Destinations







WSP House

70 Chancery Lane

London

WC2A 1AF

TECHNICAL NOTE

Software Requirements

- ArcGIS Desktop Advanced license
- Network Analyst extension

LCWIPS Model (Summary)

- This suite of models has been developed to help complete and add value to stages 2, 3 and 4 of the DfT LCWIP six-stage process. The models allow the user to input origin data, destination data, and a network. These are then manipulated by the models to identify potential trips across the study area. The key output is a plan of the network with flows assigned to it, allowing the user to see where future demand for trips may be concentrated.
- This suite of models has several advantages over the widely-used 'Propensity to Cycle Tool' (PCT), which was also developed for LCWIPs. The PCT is based on Census 2011 data, only considers trips to school and workplaces, and does not account for developments built since 2011, or planned for the future. This suite of models allows users to input more recent population data, any type of destination data they like and a more up-to-date network layer too.
- The current version of the model suite is v4.3, and the toolbox is called *LCWIPS_Model_Suite_v4_3*. It is located within the geodatabase called *LCWIPS_Model.gdb*. The toolbox has been created inside a geodatabase to facilitate its portability across servers and local drives.
- The toolbox contains nine models (see Figure 1, below) however only the four models prefixed with "Step ..." are to be run by the user. The five models prefixed with "SubModel_..." are called by the other models, where applicable, and should not be interacted with by the user at all.
- The four interactive models are run through ArcCatalog by either double-clicking the model, or right-clicking the model and selecting "Open". Both ways require the user to input the appropriate required parameters.

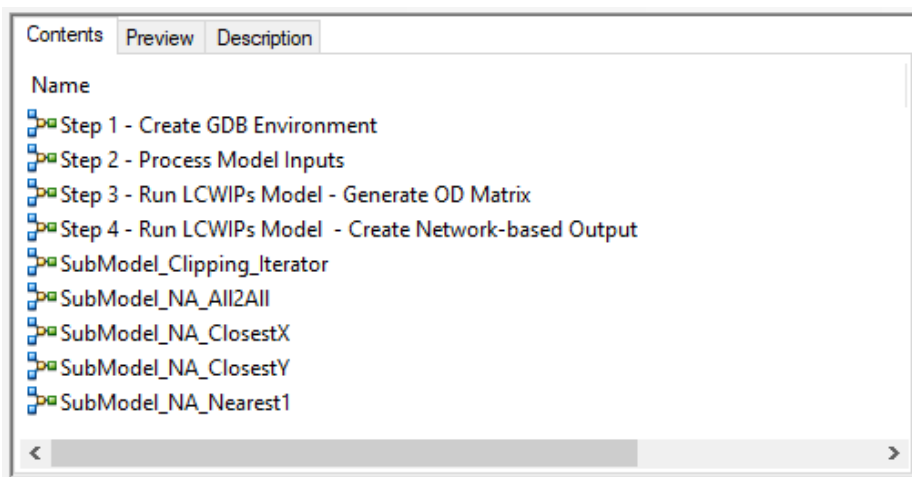


Figure 1: Contents of toolbox

Compatibility

- This suite of models has been created using *Esri ArcGIS Desktop 10.5* ("Desktop"), which will allow them to be compatible with *ArcGIS Pro* ("Pro") in the future. The key incompatibility between Desktop and Pro is the *Calculate Field* tool. In Desktop, the tool is defaulted to Visual Basic (VB), however, Pro does not support VB. Python has been used for all instances of the Calculate Field tool, however a reasonable amount of reworking will still be required to remedy unforeseen incompatibility issues with other tools, as and when Esri update them, and change the underlying code.

Workflow Overview

- Process the input feature classes.
- Run model: *Step 1 - Create GDB Environment* to create the geodatabases in the appropriate model run folder.
- Run model: *Step 2 - Process Model Inputs* to import the model input feature classes.
- Manually populate *In_Destination_Type_Proportions* (this is created by the second model run) with the appropriate values for *Dest_Proportion* and *Run_Category* fields (see Table 4, above).
- Run model: *Step 3 - Run LCWIPs Model - Generate OD Matrix*.
- Run model: *Step 4 - Run LCWIPs Model - Create Network-based Output*.
- QA and map the output feature class called *Out_Network_with_Utilisation_Data* that will be located within *LCWIPs_Model_Run_GDB.gdb*.

Network Dataset

- The network dataset used for the model has been pre-built and covers Hertfordshire plus 8km buffer.
- The network dataset is derived from OS MasterMap data sourced from Emapsite on 4th May 2021. The network contains the full OS MasterMap Highways Network RAMI and OS MasterMap Highways Network Paths, which have been correctly merged with networking junctions. As the analysis concerns walking and cycling, one-way restrictions have not been included (in the case of cycling, the outputs of the model may build a case for introducing a contraflow facility on an existing one-way street, for example).
- Both the network dataset and network feature class are located within a feature dataset called *Network__RAMI_Paths* and are located in the geodatabase called *Hertfordshire_Network__OS_Roads_Paths.gdb*.
- The network impedance field used to build the network dataset is simply the default length value (where the units are metres), and the models are hardcoded to use this.
- The model will require the user to input two aspects of the road network:
 - i The network dataset, called *Network__RAMI_Paths_ND*. This is used by the Network Analyst tools within the models to calculate least-cost paths from all origins to the required destinations (as specified in Table 5).
 - ii The network feature class, called *Network__RAMI_Paths*. This is the line feature class associated with the network dataset.

PROCESSING THE INPUT FEATURE CLASSES

- The inputs of the models, which are manually pre-processed by the user prior to being consumed by the model, require specific fields to be present. Additional fields will not affect the model. The prescribed data structure of the data inputs is detailed in the following sections.
- Emphasis should be placed on meticulous data preparation.

Origin Points

- Origins must be a point feature class, projected to British National Grid.
- The prescribed data structure is shown within Table 1, below.

Table 1: Data structure for origins

FIELD NAME	TYPE	DESCRIPTION
O_ID	Text, 50	A unique ID, containing alpha-numeric characters as well as underscores (" _ ") or dashes (" - "). Spaces should not be used.
Weight	Double	A numeric value representing the population at the origin. This can be the population at a postcode or total number of people forecast on a new development. The value must not be blank, null or zero.

Destination Points

- Destinations must be a point feature class, projected to British National Grid.
- The prescribed data structure is shown within Table 2, below.

Table 2: Data structure for destinations

FIELD NAME	TYPE	DESCRIPTION
Dest_ID	Text, 100	A unique ID, containing alpha-numeric characters as well as underscores (“_”) or dashes (“-”). Ideally, this will acknowledge what type of destination it is, e.g. “PrimSchool_1”. Spaces should not be used.
Dest_Type	Text, 50	A value that describes succinctly the type of destination. Examples include: GP, Hospital, SchoolPrimary, SchoolSecondary, BusStop, RailStation. The string must only contain alpha-numeric characters as well as underscores (“_”) or dashes (“-”). Spaces should not be used.
Weight	Double	<p>A numeric value representing the attractiveness of the destination, in comparison to the other destinations of the same destination type. This can be a factual value - such as number of jobs, number of buses/trains per hour, or floor area, or subjective value - such as a score between 1-10, where 10 is the most attractive. A value of one is assigned to all destinations within a destination type, where an attractiveness factor is not relevant. The value must not be blank, null or zero.</p> <p>For example, in the North Herts LCWIP, the attractiveness of an employment site was calculated from its floor area. It was assumed that 50% of the floor area was usable and that there was one job per 30m².</p>

Hex Cells

- A polygon feature class called *HexCells__Herts_plus_8km* has been supplied and is located in the geodatabase called *Hertfordshire_Datasets.gdb*.
- The hex cell feature class is projected to British National Grid and covers Hertfordshire plus 8km buffer. The size of each hex cell is 500,000m² and a diameter (east to west vectors) of 877m.
- The purpose of the hex cell feature class is to create pseudo neighbourhoods to aggregate the origin and destination datasets and reduce the number results being generated, which would otherwise cause the model to fail due to the processing computer running out of memory.
- Each origin and destination point is assigned to a hex cell (“neighbourhood”) using Network Analyst which calculates the least cost path between the origin and the closest hex cell centroid across the walk/road network. This means that because of the layout of the relevant local road network, an origin point can be assigned to a different hex cell to the one that it is contained within.
- A subset of the *HexCells__Herts_plus_8km* feature class should be created that covers the extent of the required project area. This subset, and not the full dataset, should be the input to the model.

Clipping Cells

- A polygon feature class called *ClippingCells__Herts_plus_8km* has been supplied and is located in the geodatabase called *Hertfordshire_Datasets.gdb*.
- The clipping cell feature class is projected to British National Grid, and covers Hertfordshire plus 8km buffer. The size of each square clipping cell is 100,000,000m² with a width of 10,000m.
- The purpose of the clipping cell feature class is to physically split and then batch process certain elements of the analysis in order to reduce the size of datasets being processed, which would otherwise cause the model to fail due to the processing computer running out of memory.
- A subset of the *HexCells__Herts_plus_8km* feature class should be created that covers the extent of the required project area. This subset, and not the full dataset, should be the input to the model.

RUN MODEL: STEP 1 - CREATE GDB ENVIRONMENT

- This model creates two file geodatabases in the folder that the user specifies (the only parameter).
- These two geodatabases are used by the subsequent models and are called *LCWIPs_Model_Run_GDB.gdb* and *Scratch_GDB.gdb*. Once all the models have been run, all the important feature classes and tables will be within the former.
- The user selected folder should be unique to this scenario test.
- The folder name must only contain alpha-numeric characters and underscores ("_"). Spaces and dashes ("-") should not be used.

RUN MODEL: STEP 2 - PROCESS MODEL INPUTS

- This model has six parameters, as detailed in Table 3, below. The abbreviation "FC" refers to the parameter being a feature class.

Table 3: Model Parameters

PARAMETER	DESCRIPTION
Select Project Folder	The user specifies the correct folder for this scenario test (the same as the previous model).
Select Network Dataset	The user specifies the <i>Network__RAMI_Paths_ND</i> network dataset.
Select Origin Points (FC)	The user specifies the correctly processed origin points feature class.
Select Destination Points (FC)	The user specifies the correctly processed destination points feature class.
Select HexCells (FC)	The user specifies the correct subset of the supplied Hex Cells feature class.
Select Clipping Cells (FC)	The user specifies the correct subset of the supplied Clipping Cells feature class.

- This model will create copies of all the input feature classes and apply numerous geoprocessing steps to prepare them for subsequent models. They are saved within *LCWIPs_Model_Run_GDB.gdb* and can be useful for auditing purposes in the future.
- This model creates a new table called *In_Destination_Type_Proportions* within *LCWIPs_Model_Run_GDB.gdb*, that requires the user to manually input certain additional values before the next model is run. The table lists each unique Destination Type (as per the *Dest_Type* field of the input Destination points feature class), and the user must manually populate the two fields, as detailed in Table 4, below, with specific values determined by subject matter experts for each Destination Type.

Table 4: Destination type additional data

REQUIRED INFORMATION	DESCRIPTION
Destination Type Proportion	Each destination type is assigned a numeric value, where the sum of this value for all destination types is 1. This numeric value therefore represents the proportion of trips produced by an origin that go to the respective destination type.
Run Category	<p>Each destination type is assigned with one of four types of run category. These are:</p> <ul style="list-style-type: none"> ■ All2All ■ Nearest1 ■ ClosestX ■ ClosestY <p>N.B. These four string values must match exactly the text shown above. Additional details of these are given in Table 5.</p>

Table 5: Run categories

RUN CATEGORY	DESCRIPTION	EXAMPLE DESTINATION TYPE
All2All	This run category will generate data between each origin and every one of the destination points within the corresponding destination type. Serious consideration should be given before using this run category as it can generate millions of data rows which will cause the models to fail (run out of memory).	Town centres
Nearest1	This run category will generate data between each origin and the single nearest destination point within the corresponding destination type.	Train stations, secondary schools
ClosestX	When running the model called <i>Step 3 - Run LCWIPs Model - Generate OD Matrix</i> , the user assigns a value for X, and this run category will generate data between each origin and the X closest destination points within the corresponding destination type.	Primary schools, bus stops

RUN CATEGORY	DESCRIPTION	EXAMPLE DESTINATION TYPE
ClosestY	When running the model called <i>Step 3 - Run LCWIPs Model - Generate OD Matrix</i> , the user assigns a value for Y, and this run category will generate data between each origin and the Y closest destination points within the corresponding destination type.	Business parks, retail centres

RUN MODEL: STEP 3 - RUN LCWIPS MODEL - GENERATE OD MATRIX

- This model has five parameters, as detailed in Table 6, below.
- Although the model says some parameters are options, please assume that they are not optional. Insert a value of 0 (zero) if ClosestX or ClosestY are not required. A value must be inserted for *Trip Cut off Distance (m)* – failure to do so will generate enormous amounts of data that will cause the preceding model to fail (run out of memory).

Table 6: Model Parameters

PARAMETER	DESCRIPTION
Select Project Folder	The user specifies the correct folder for this scenario test (the same as the previous model).
Select Network Dataset	The user specifies the <i>Network__RAMI_Paths_ND</i> network dataset.
Number of Destination for ClosestX	The user specifies the value of X (see Table 5) for this Run Category.
Number of Destination for ClosestY	The user specifies the value of Y (see Table 5) for this Run Category.
Trip Cut off Distance (m)	<p>The user specifies the maximum network distance (as opposed to straight line 'as crow flies' distance) that is allowed for trips between an origin and destination. The units are in metres.</p> <p>For example, in the North Herts LCWIP, the <i>Trip Cut off Distance</i> was 8000 for cycling and 2000 for walking.</p>

- This model uses Network Analyst to generate an Origin-Destination Matrix (OD Matrix) table that is consumed by the preceding model. The OD Matrix comprises network trips between all origins and all destinations, conforming to the specification of Destination Types and the associated Run Category (see Table 2, Table 4 and Table 6).
- This model uses iterators to iterate between the individual Destination Types within each Run Category and merges all the individual OD Matrices together.
- The processing within this model principally utilises Network Analyst, is stable and should run until completion.

RUN MODEL: STEP 4 - RUN LCWIPS MODEL - CREATE NETWORK-BASED OUTPUT

- This model has two parameters, as detailed in Table 7 below.

Table 7: Model Parameters

PARAMETER	DESCRIPTION
Select Project Folder	The user specifies the correct folder for this scenario test (the same as the previous models).
Select Network Dataset	The user specifies the <i>Network__RAMI_Paths_ND</i> network dataset.

- This model uses Network Analyst to post-process the OD Matrix table (generated in the preceding model) and generate a line feature class that follows the underlying network dataset. A series of computationally and memory intensive geoprocessing tools are then used to aggregate the line feature class version of the OD Matrix.
- As detailed in Table 5, unnecessary use of the *All2All* Run Category, or unrealistic (large) values for *ClosestX* and *ClosestY* will generate enormous amounts of data that will cause the model to fail.
- Within the model, an iterator is used to split and batch-process the line feature class using the *Clipping Cells* feature class that was processed by the *Step 2 - Process Model Inputs* model. This process aims to mitigate the amount of data being processed at any one time; however, as this increases the number of processes being run, there is a commensurate impact on the overall model run time.

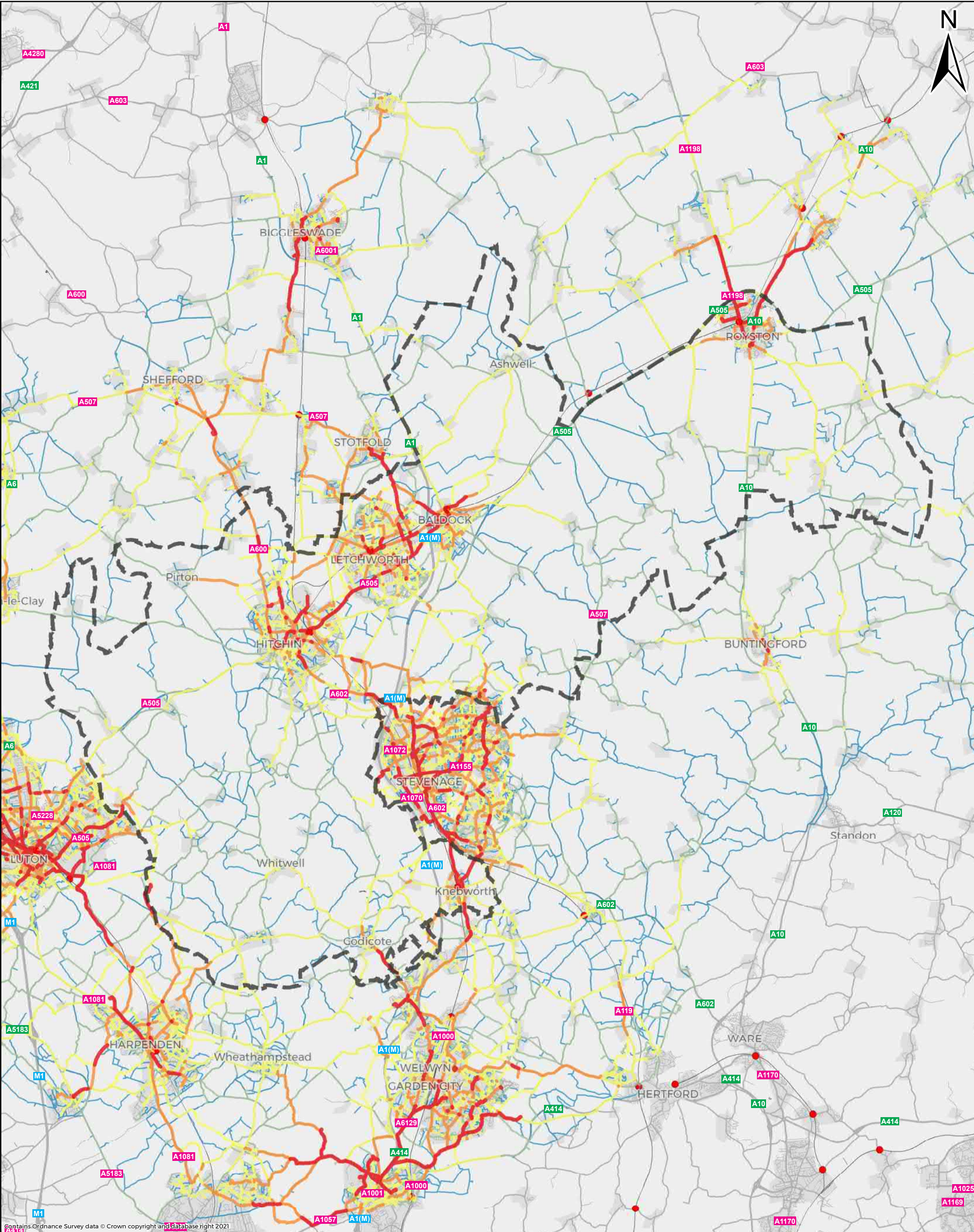
Output Feature Class

- The output line feature class generated by the *Step 4 - Run LCWIPS Model - Create Network-based Output* model is called *Out_Network_with_Utilisation_Data* and is located in the geodatabase called *LCWIPS_Model_Run_GDB.gdb*.
- The output feature class is projected to British National Grid.
- This feature class has three fields that can be mapped, which are detailed in Table 8, below.

Table 8: Mappable fields

FIELD NAME	DESCRIPTION
Trips	The total number of trips calculated and aggregated to the unique segment of road or footpath.
Trips_Reclassified	The total number of trips normalised so that the value is between 0 and 1, where 0 = the lowest value in the data range and 1 = the highest value in the data range.
Trips_Ranked	Each unique segment is ranked in order of the number of trips the segments has. The segment with a rank of 1 has the most trips using it.

APPENDIX D



<p>Network with Trips - Cycling</p> <p>2,842 - 36,069</p> <p>1,177 - 2,841</p> <p>208 - 1,176</p> <p>33 - 207</p> <p>0 - 32</p>	<p>0 2.5 5 10 km</p>	<p>Job Title</p> <p>North Hertfordshire LCWIP</p>
	<p>Scale at A3</p> <p>1:128,000</p>	<p>Drawing Title</p> <p>**See Legend for Details**</p>
	<p>Page 194</p> <p></p>	

APPENDIX E

APPENDIX F



Key

North Herts Boundary

Key Walking Routes

Primary (Audited)

Primary (Not Audited)

Secondary

Rights of Way

Potential Future Development

Key Employment Area

Hospital

Railway Station

School

This map displays the North Herts region, outlined by a dashed black boundary. It features a network of walking routes: green lines for primary audited routes, orange lines for primary non-audited routes, and yellow lines for secondary routes. Brown lines indicate rights of way. Shaded orange areas represent potential future development, and green shaded areas indicate key employment zones. Landmarks are marked with red crosses for hospitals and blue circles with 'N' for railway stations. Numerous blue dots are scattered across the map, representing schools. The background is a light grey aerial photograph.



Key

North Herts Boundary

Key Cycling Routes

Primary (Audited)

Primary (Not Audited)

Secondary

Rights of Way (Legally Cyclable)

Potential Future Development

Key Employment Area

Hospital

Railway Station

School

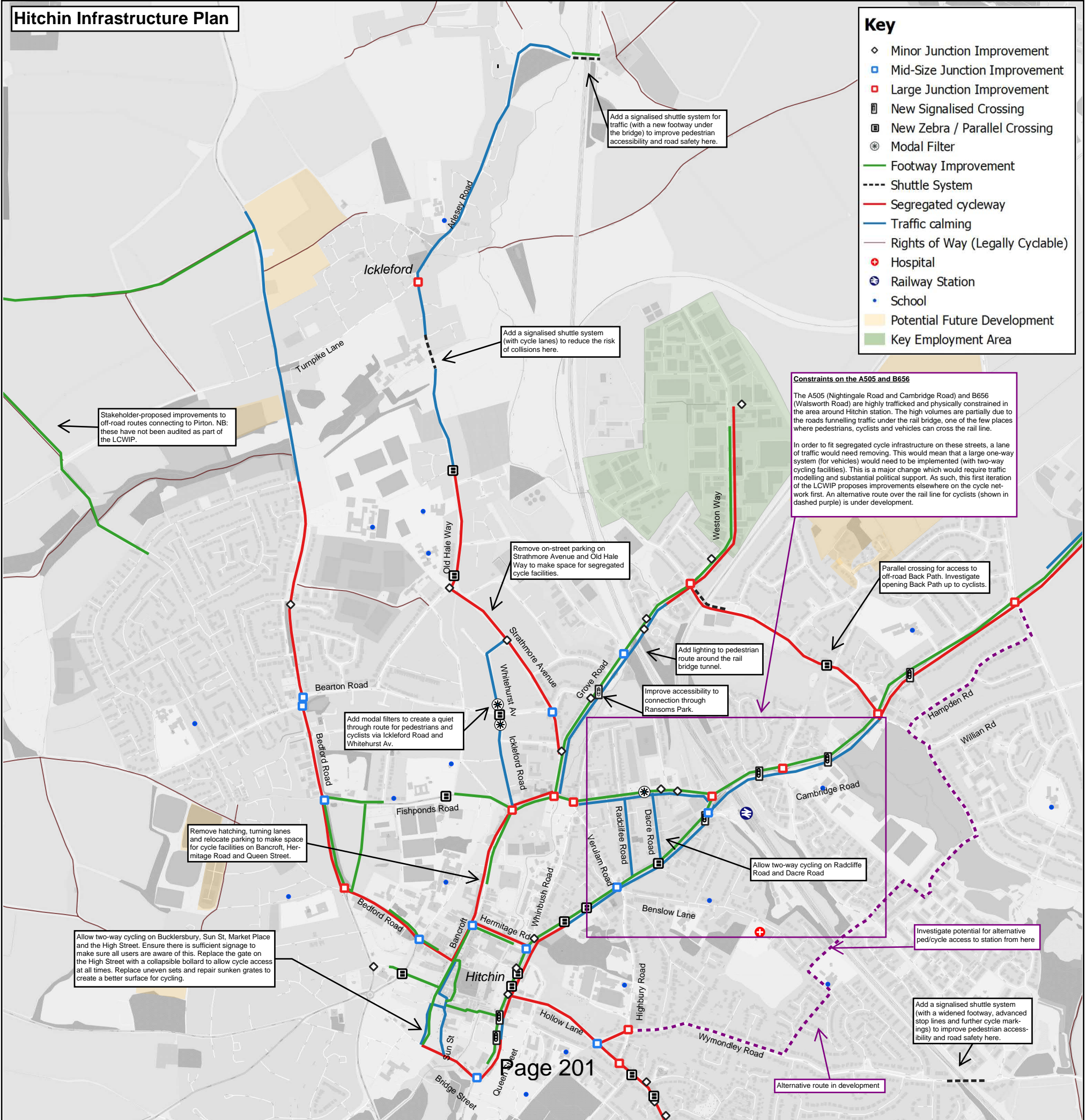
This map displays the North Herts region with various cycling routes and key locations. The North Herts Boundary is shown as a dashed black line. Key cycling routes are color-coded: Primary (Audited) in green, Primary (Not Audited) in orange, and Secondary in yellow. Rights of Way (Legally Cyclable) are shown as thin brown lines. Potential Future Development areas are shaded in light orange, and Key Employment Areas are shaded in light green. Hospitals are marked with red crosses, and Railway Stations are marked with blue circles containing a white 'N'. Numerous blue dots represent schools. The map also shows a network of roads and a north arrow in the top-left corner.

APPENDIX G

Hitchin Infrastructure Plan

Key

- ◇ Minor Junction Improvement
- ▣ Mid-Size Junction Improvement
- ▣ Large Junction Improvement
- 🚶 New Signalised Crossing
- 🚶 New Zebra / Parallel Crossing
- ⊗ Modal Filter
- Footway Improvement
- Shuttle System
- Segregated cycleway
- Traffic calming
- Rights of Way (Legally Cyclable)
- 🏥 Hospital
- 🚉 Railway Station
- 🎓 School
- 🏗️ Potential Future Development
- 🌿 Key Employment Area



Add a signalised shuttle system for traffic (with a new footway under the bridge) to improve pedestrian accessibility and road safety here.

Add a signalised shuttle system (with cycle lanes) to reduce the risk of collisions here.

Stakeholder-proposed improvements to off-road routes connecting to Pilton. NB: these have not been audited as part of the LCWIP.

Constraints on the A505 and B656

The A505 (Nightingale Road and Cambridge Road) and B656 (Walsworth Road) are highly trafficked and physically constrained in the area around Hitchin station. The high volumes are partially due to the roads funneling traffic under the rail bridge, one of the few places where pedestrians, cyclists and vehicles can cross the rail line.

In order to fit segregated cycle infrastructure on these streets, a lane of traffic would need removing. This would mean that a large one-way system (for vehicles) would need to be implemented (with two-way cycling facilities). This is a major change which would require traffic modelling and substantial political support. As such, this first iteration of the LCWIP proposes improvements elsewhere on the cycle network first. An alternative route over the rail line for cyclists (shown in dashed purple) is under development.

Remove on-street parking on Strathmore Avenue and Old Hale Way to make space for segregated cycle facilities.

Add lighting to pedestrian route around the rail bridge tunnel.

Improve accessibility to connection through Ransoms Park.

Parallel crossing for access to off-road Back Path. Investigate opening Back Path up to cyclists.

Add modal filters to create a quiet through route for pedestrians and cyclists via Ickleford Road and Whitehurst Av.

Remove hatching, turning lanes and relocate parking to make space for cycle facilities on Bancroft, Hermitage Road and Queen Street.

Allow two-way cycling on Bucklersbury, Sun St, Market Place and the High Street. Ensure there is sufficient signage to make sure all users are aware of this. Replace the gate on the High Street with a collapsible bollard to allow cycle access at all times. Replace uneven sets and repair sunken grates to create a better surface for cycling.

Allow two-way cycling on Radcliffe Road and Dacre Road

Investigate potential for alternative ped/cycle access to station from here

Add a signalised shuttle system (with a widened footway, advanced stop lines and further cycle markings) to improve pedestrian accessibility and road safety here.

Alternative route in development

Inter-Urban Route (Hitchin to Stevenage) Infrastructure Plan

Page 202

Add a segregated cycle facility on the eastbound (uphill) side between the footway and the parking.

Alternative route in development

The existing one-way system encourages high speeds, is dangerous for cyclists and causes severance for pedestrians. Redesign this gyratory by:

- Introducing two-way movement for vehicles between Hollow Lane and Wymondley Road
- Adding segregated cycleways in both directions on Hollow Lane and Whitehill Road (a lane on Whitehill Road will need removing to add a contra-flow cycle lane here)
- Add a with-flow cycle lane on Highbury Road
- Signalise the three junctions, protecting all cycle movements and adding pedestrian crossings

Reallocate roadscape from right turn pockets, traffic islands and grass verges to add segregated cycleways in both directions on Whitehill Road. Replace uncontrolled island crossings with zebra or signalised crossings.

Widen existing footpath using grass verge and make shared use. Consider reducing speed limit to 40 or 30mph. Alternatively, if possible, create a parallel route away from the road in the adjacent field (though this may require land-take).

The first option should be to investigate creation of a new off-road cycle facility parallel to Stevenage Road (connected through crossings). Land take may be required for this. This could also continue to the Ash Brook right of way.

Additionally, the footway on Stevenage Road should be widened. If a new off-road cycle facility isn't possible then this could be made a shared footway, but it should be noted that this is not the first choice solution for a cycle route. Pedestrians and cyclists would also benefit from a speed limit reduction on this section.

Redesign existing traffic calming through Little Wymondley to be cycle friendly and add priority crossing points for pedestrians.

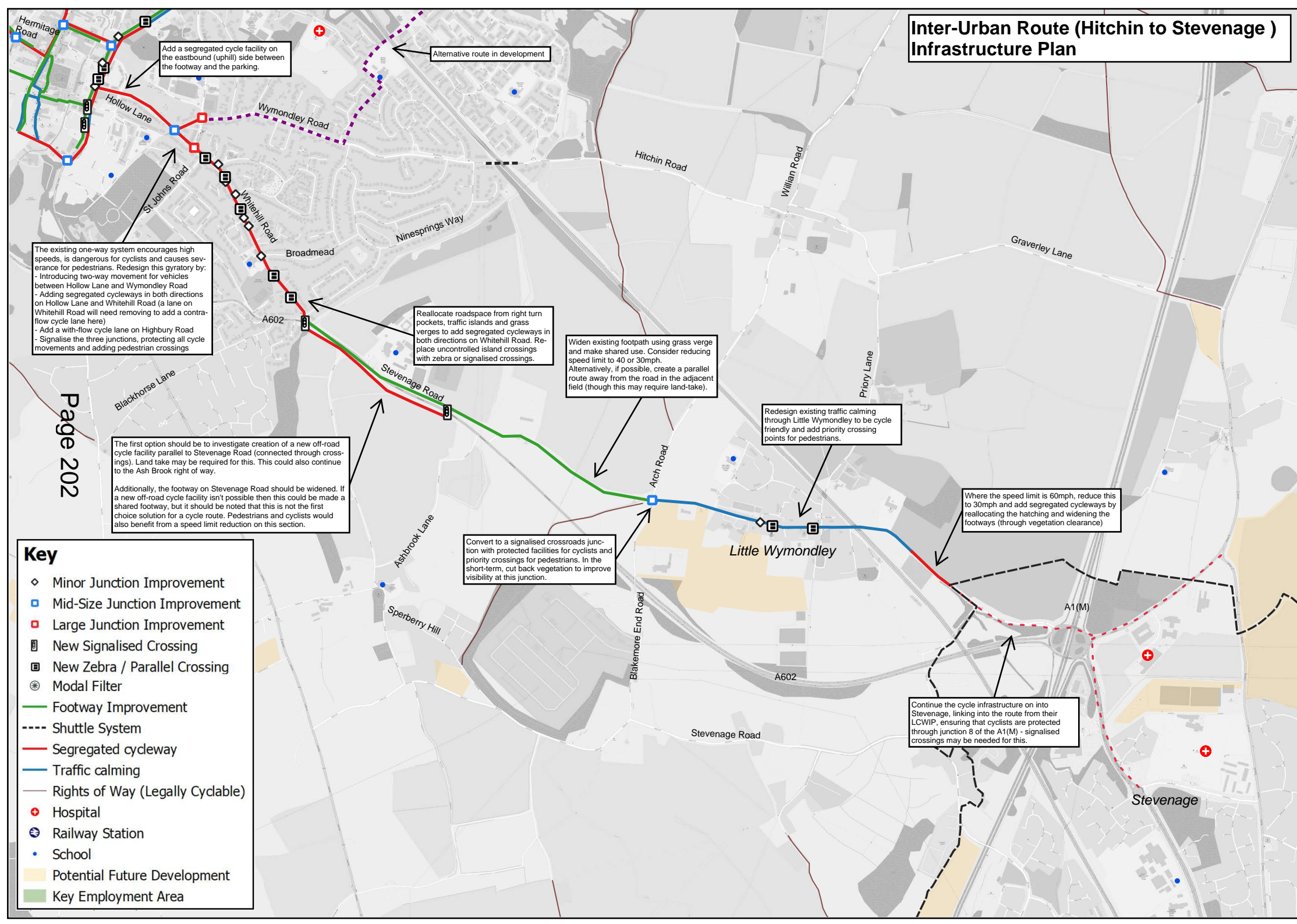
Where the speed limit is 60mph, reduce this to 30mph and add segregated cycleways by reallocating the hatching and widening the footways (through vegetation clearance)

Convert to a signalised crossroads junction with protected facilities for cyclists and priority crossings for pedestrians. In the short-term, cut back vegetation to improve visibility at this junction.

Continue the cycle infrastructure on into Stevenage, linking into the route from their LCWIP, ensuring that cyclists are protected through junction 8 of the A1(M) - signalised crossings may be needed for this.

Key

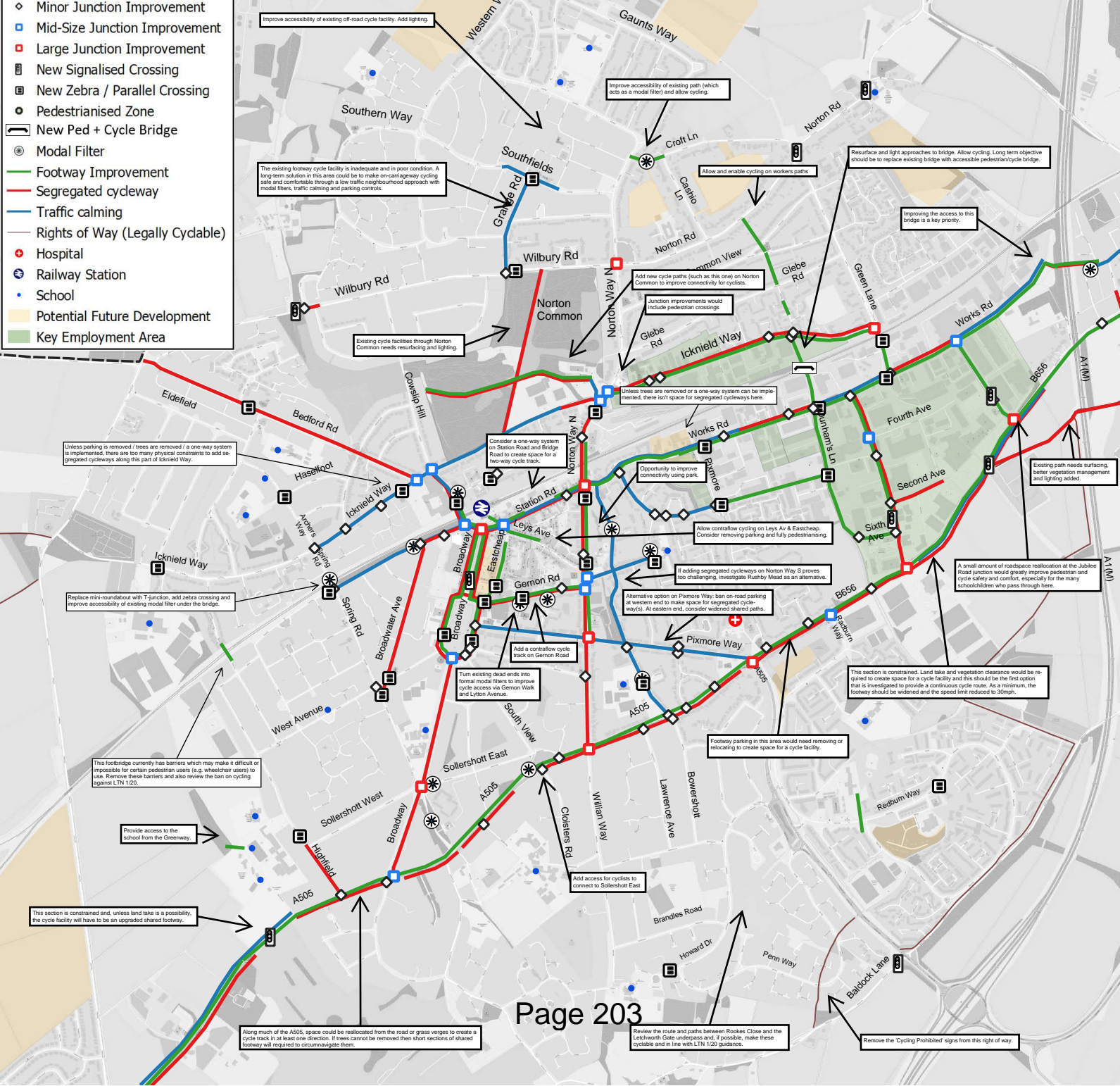
- ◇ Minor Junction Improvement
- Mid-Size Junction Improvement
- Large Junction Improvement
- New Signalised Crossing
- New Zebra / Parallel Crossing
- ⊗ Modal Filter
- Footway Improvement
- Shuttle System
- Segregated cycleway
- Traffic calming
- Rights of Way (Legally Cyclable)
- ⊕ Hospital
- 🚉 Railway Station
- School
- Potential Future Development
- Key Employment Area



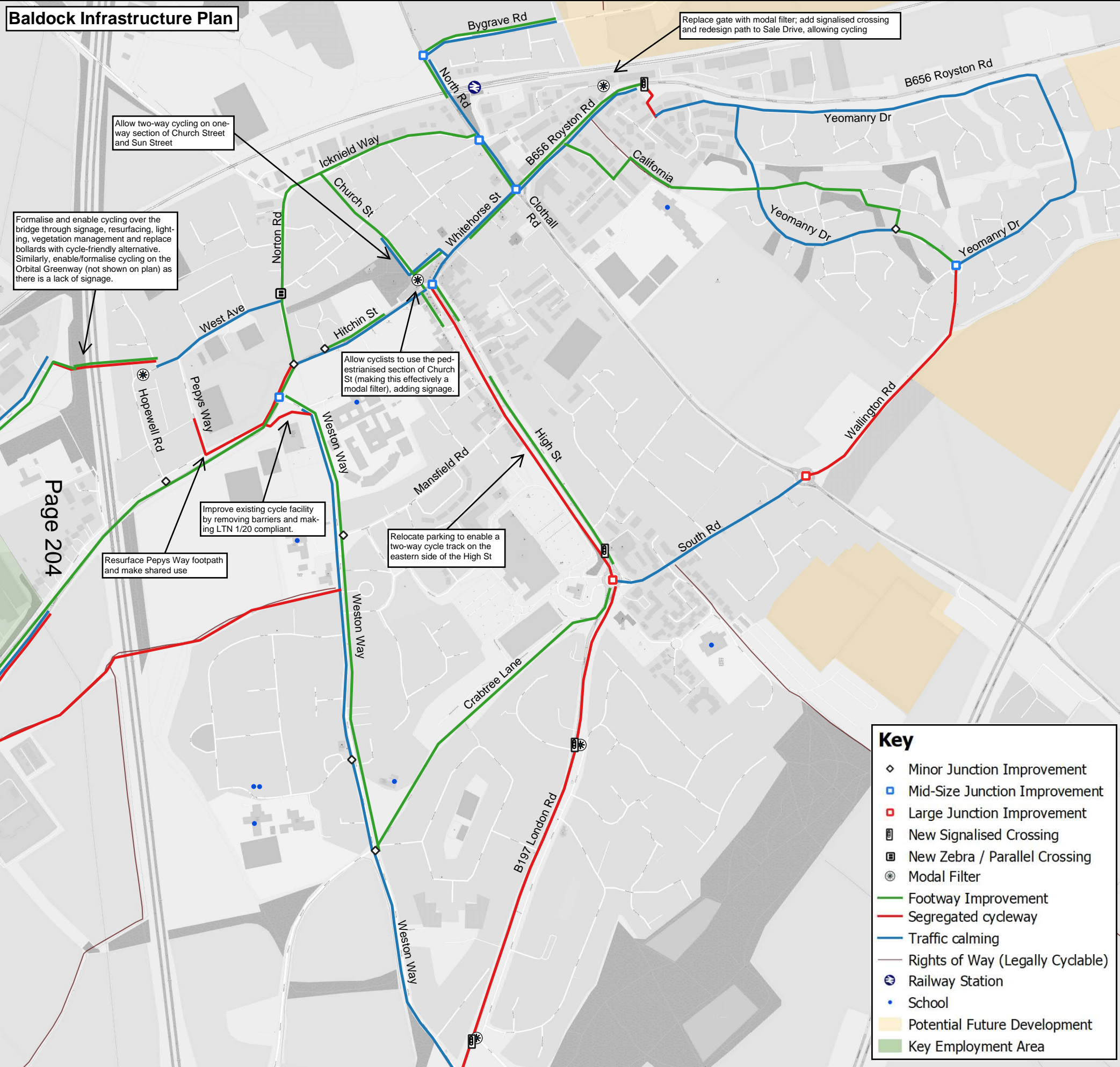
Key

- ◇ Minor Junction Improvement
- Mid-Size Junction Improvement
- Large Junction Improvement
- New Signalised Crossing
- New Zebra / Parallel Crossing
- Pedestrianised Zone
- New Ped + Cycle Bridge
- Modal Filter
- Footway Improvement
- Segregated cycleway
- Traffic calming
- Rights of Way (Legally Cyclable)
- Hospital
- Railway Station
- School
- Potential Future Development
- Key Employment Area

Letchworth Infrastructure Plan



Baldock Infrastructure Plan



Allow two-way cycling on one-way section of Church Street and Sun Street

Formalise and enable cycling over the bridge through signage, resurfacing, lighting, vegetation management and replace bollards with cycle-friendly alternative. Similarly, enable/formalise cycling on the Orbital Greenway (not shown on plan) as there is a lack of signage.

Replace gate with modal filter; add signalised crossing and redesign path to Sale Drive, allowing cycling

Allow cyclists to use the pedestrianised section of Church St (making this effectively a modal filter), adding signage.

Improve existing cycle facility by removing barriers and making LTN 1/20 compliant.

Resurface Pepys Way footpath and make shared use

Relocate parking to enable a two-way cycle track on the eastern side of the High St

Key

◇

Minor Junction Improvement

■

Mid-Size Junction Improvement

■

Large Junction Improvement

🚦

New Signalised Crossing

🚦

New Zebra / Parallel Crossing

⊗

Modal Filter

—

Footway Improvement

—

Segregated cycleway

—

Traffic calming

—

Rights of Way (Legally Cyclable)

🚉

Railway Station

•

School

■

Potential Future Development

■

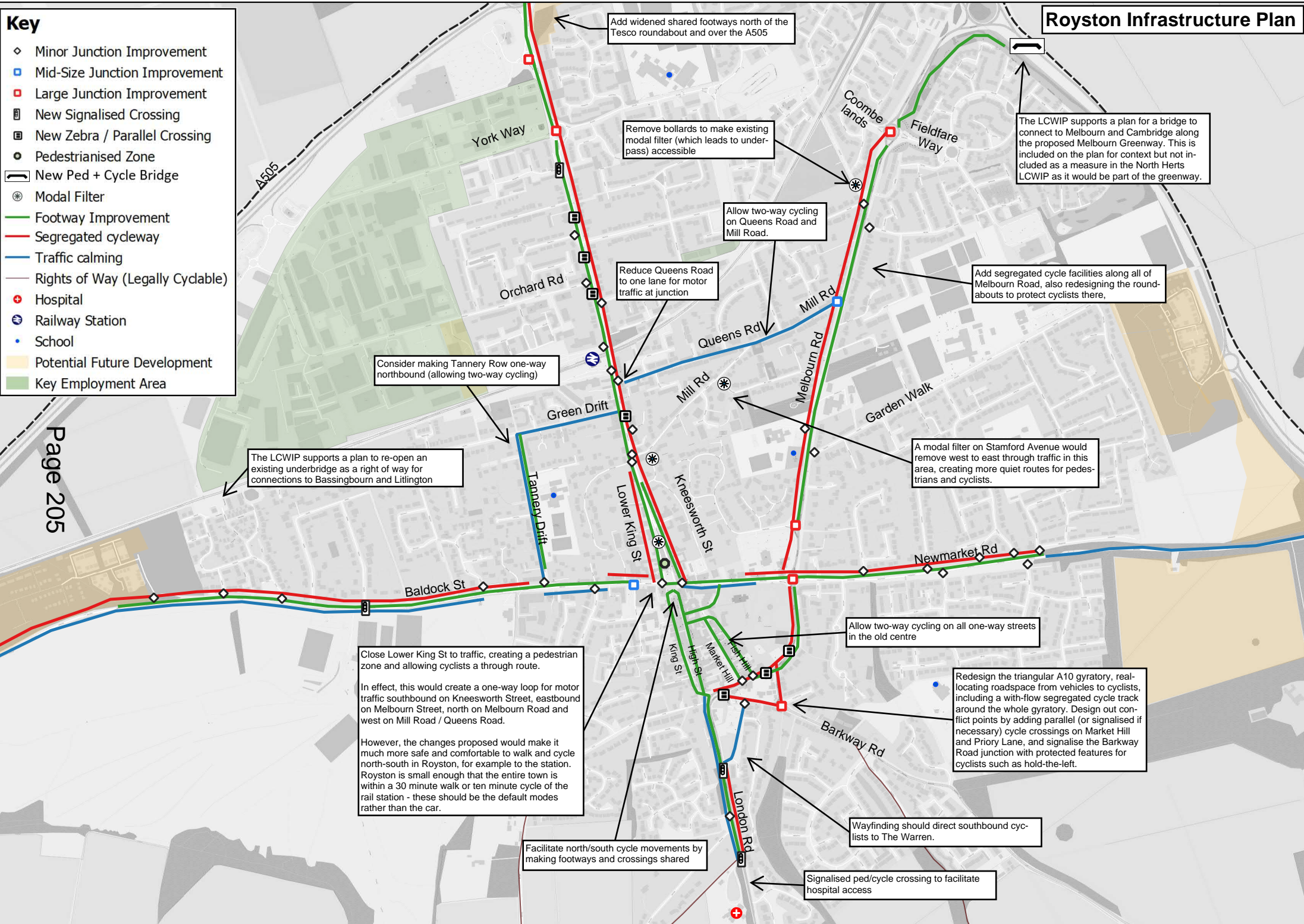
Key Employment Area

Key

- ◇ Minor Junction Improvement
- ▣ Mid-Size Junction Improvement
- ▣ Large Junction Improvement
- Ⓜ New Signalised Crossing
- Ⓜ New Zebra / Parallel Crossing
- Pedestrianised Zone
- Ⓜ New Ped + Cycle Bridge
- ⊗ Modal Filter
- Footway Improvement
- Segregated cycleway
- Traffic calming
- Rights of Way (Legally Cyclable)
- Ⓜ Hospital
- Ⓜ Railway Station
- School
- Potential Future Development
- Key Employment Area

Royston Infrastructure Plan

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Footway improvements and traffic calming to continue west towards Old Knebworth as necessary

Segregated cycleways, footway improvements and speed limit change should continue north to Stevenage.

Long-term goal to relocate existing high street parking to allow continuation of segregated cycleway.

This would need to be a parallel crossing (for both pedestrians and cyclists) as opposed to a simple zebra crossing.

Segregated cycleways and speed limit change should continue south to Woolmer Green.

Key

◇

Minor Junction Improvement

■

Mid-Size Junction Improvement

■

New Signalised Crossing

■

New Zebra / Parallel Crossing

⊗

Modal Filter

—

Footway Improvement

—

Segregated cycleway

—

Traffic calming

—

Rights of Way (Legally Cyclable)

+

Hospital

⚙

Railway Station

•

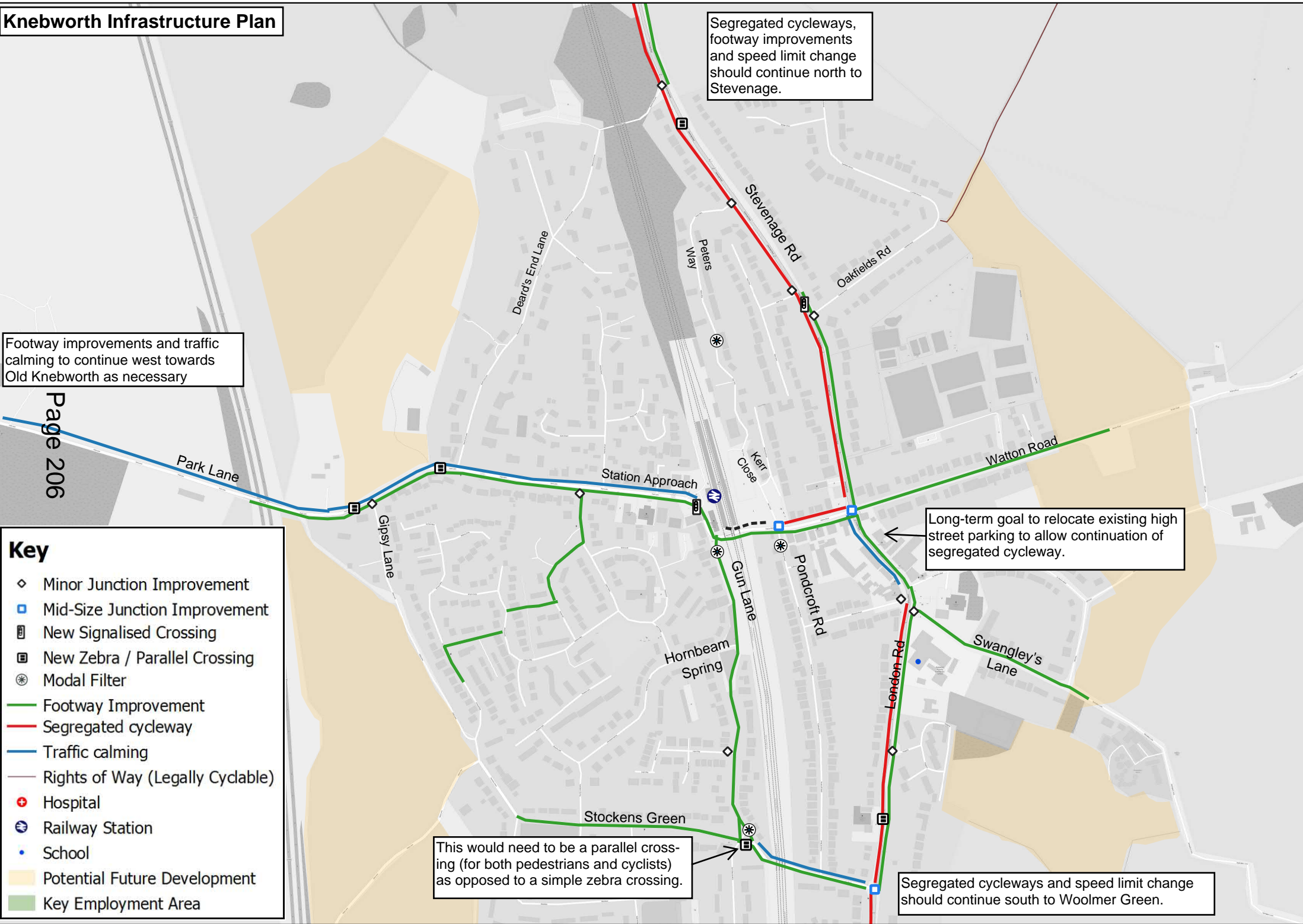
School

■

Potential Future Development

■

Key Employment Area



APPENDIX H

Facility						Min score: Max score:		Costing		Desired outcomes					Technical deliverability				Summary scores					
Ref	Location	Area	Facility	Walking	Cycling	Units or length in metres	Unit Cost	Scheme cost	0	0	-1	-1	0	0	-1	-2	-1	-2	-1	-2	-4	-2	-6	-1
									0	2	3	1	2	2	3	1	2	3	1	2	3	1	2	3
									Increase in walking & cycling trip trips based on GIS model	Infrastructure impact on active travel	Strategic Fit	Support for new housing	Access to jobs	LTN 1/20 compliance	Technical feasibility	Dependency	Desired outcomes	Technical deliverability	Cost	TOTAL			Likely level of stakeholder support	
L380	Baldock Road / Radburn Way	Letchworth Garden City	Mid-Size Junction Improvement	Yes	Yes	1	£500,000.00	£500,000.00	2	3	1	2	2	3	0	1	10	4	0	14	0			
L363	Hitchin Road / Broadway	Letchworth Garden City	Mid-Size Junction Improvement	Yes	Yes	1	£500,000.00	£500,000.00	2	3	1	1	1	3	1	1	8	5	0	13	0			
H533	Bedford Road / Bearton Road	Hitchin	Mid-Size Junction Improvement	Yes	Yes	1	£500,000.00	£500,000.00	2	3	1	2	2	3	0	0	10	3	0	13	0			
H534	Bedford Road / Redhill Road	Hitchin	Mid-Size Junction Improvement	Yes	Yes	1	£500,000.00	£500,000.00	2	3	1	2	2	3	0	0	10	3	0	13	0			
H161	Old Hale Way (near Strathmore Av)	Hitchin	New parallel crossing	Yes	Yes	1	£65,000.00	£65,000.00	1	2	1	1	2	3	1	1	7	5	0	12	1			
H169	Grove Road (near Periwinkle Lane)	Hitchin	New/Improved signal crossing	Yes	Yes	1	£65,000.00	£65,000.00	2	2	1	1	2	3	0	1	8	4	0	12	0			
H195	Nightingale Road / Entrance to Ransoms Recreation Ground	Hitchin	Modal filter	Yes	Yes	1	£20,000.00	£20,000.00	1	3	1	0	1	3	1	1	7	5	0	12	1			
B266	Bridge over A1M	Baldock	Segregated cycleway	Yes	Yes	190	£1,000.00	£190,000.00	2	3	1	1	1	3	1	0	8	4	0	12	0			
L328	Norton Road (by Croft Lane)	Letchworth Garden City	New/Improved signal crossing	Yes	Yes	1	£65,000.00	£65,000.00	2	2	1	2	1	3	0	1	8	4	0	12	1			
L332	Norton Road / Wilbury Road Junction	Letchworth Garden City	Large Junction Improvement	Yes	Yes	1	£1,580,000.00	£1,580,000.00	2	3	1	2	2	3	0	1	10	4	-2	12	1			
L347	Grange Road / Wilbury Road	Letchworth Garden City	Minor Junction Improvement	Yes	Yes	1	£30,000.00	£30,000.00	2	2	1	2	1	3	0	1	8	4	0	12	0			
L396	Icknield Way / Norton Way North (southern roundabout)	Letchworth Garden City	Mid-Size Junction Improvement	Yes	Yes	1	£500,000.00	£500,000.00	2	3	0	2	2	3	0	0	9	3	0	12	1			
L397	Icknield Way / Norton Way North (northern roundabout)	Letchworth Garden City	Mid-Size Junction Improvement	Yes	Yes	1	£500,000.00	£500,000.00	2	3	0	2	2	3	0	0	9	3	0	12	1			
L408	Green Lane	Letchworth Garden City	New parallel crossing	Yes	Yes	1	£65,000.00	£65,000.00	2	2	0	2	2	3	0	1	8	4	0	12	0			
L433	Avenue One / Fourth Avenue	Letchworth Garden City	Mid-Size Junction Improvement	Yes	Yes	1	£500,000.00	£500,000.00	2	3	1	0	2	3	0	1	8	4	0	12	0			
L459	Spring Road (under rail bridge)	Letchworth Garden City	Modal filter	Yes	Yes	1	£20,000.00	£20,000.00	1	3	1	0	2	3	1	1	7	5	0	12	0			
L477	Broadway (Broadway Gardens Loop)	Letchworth Garden City	Segregated cycleway	Yes	Yes	550	£1,000.00	£550,000.00	2	3	1	0	0	3	0	0	9	3	0	12	-1			
L479	Broadway (north of Gardens, east side)	Letchworth Garden City	Segregated cycleway	Yes	Yes	250	£1,000.00	£250,000.00	2	3	1	0	0	3	0	0	9	3	0	12	-1			
L499	Nevels Road	Letchworth Garden City	Modal filter	Yes	Yes	1	£20,000.00	£20,000.00	2	3	1	0	1	3	1	1	7	5	0	12	0			
L507	Station Place & Station Road	Letchworth Garden City	Segregated cycleway	Yes	Yes	410	£1,000.00	£410,000.00	2	3	1	1	1	3	-1	0	10	2	0	12	-1			
B101	Royston Road (near Icknield Way East)	Baldock	New/Improved signal crossing	Yes	Yes	1	£65,000.00	£65,000.00	2	2	1	2	1	3	0	0	8	3	0	11	0			
B106	High Street (near South Road)	Baldock	New/Improved signal crossing	Yes	Yes	1	£65,000.00	£65,000.00	2	2	1	1	2	3	0	0	8	3	0	11	0			
B117	North Road (near West Avenue)	Baldock	New parallel crossing	Yes	Yes	1	£65,000.00	£65,000.00	2	2	1	1	1	3	0	1	7	4	0	11	0			
H150	Paynes Park (near Nuns Close)	Hitchin	New parallel crossing	Yes	Yes	1	£65,000.00	£65,000.00	2	3	1	1	1	3	-1	1	8	3	0	11	0			
H153	Bedford Road / Fishponds Road	Hitchin	Mid-Size Junction Improvement	Yes	Yes	1	£500,000.00	£500,000.00	2	2	1	1	1	3	0	1	7	4	0	11	0			
H154	Fishponds Road (near Bunyan Road)	Hitchin	New parallel crossing	Yes	Yes	1	£65,000.00	£65,000.00	2	2	1	0	2	3	0	1	7	4	0	11	1			
H177	Woodgrove Road (near Orchard Road)	Hitchin	New parallel crossing	Yes	Yes	1	£65,000.00	£65,000.00	2	2	-1	2	1	3	1	1	6	5	0	11	1			
H179	Cambridge Road (near Willian Road)	Hitchin	New/Improved signal crossing	Yes	Yes	1	£65,000.00	£65,000.00	2	2	1	1	1	3	0	1	7	4	0	11	0			
H184	Walsworth Road / Station Approach	Hitchin	Mid-Size Junction Improvement	Yes	Yes	1	£500,000.00	£500,000.00	2	3	1	0	1	3	0	1	7	4	0	11	1			
H193	Starlings Bridge Roundabout	Hitchin	Large Junction Improvement	Yes	Yes	1	£1,580,000.00	£1,580,000.00	2	3	1	1	2	3	0	1	9	4	-2	11	1			
H284	Grove Road & Wilbury Way	Hitchin	Segregated cycleway	Yes	Yes	780	£1,000.00	£780,000.00	2	2	1	2	2	3	0	0	9	3	-1	11	0			
L325	Croft Lane	Letchworth Garden City	Modal filter	Yes	Yes	1	£20,000.00	£20,000.00	2	1	0	2	1	3	1	1	6	5	0	11	0			
L327	Norton Road (by C of E school)	Letchworth Garden City	New/Improved signal crossing	Yes	Yes	1	£65,000.00	£65,000.00	2	2	0	2	1	3	0	1	7	4	0	11	1			
L377	Baldock Road / Ploxmore Way	Letchworth Garden City	Large Junction Improvement	Yes	Yes	1	£1,580,000.00	£1,580,000.00	2	3	1	2	2	3	-1	1	10	3	-2	11	0			
L414	Works Road / Green Lane	Letchworth Garden City	Minor Junction Improvement	Yes	Yes	1	£30,000.00	£30,000.00	2	2	1	0	2	3	0	1	7	4	0	11	0			
L417	Works Road / Avenue One	Letchworth Garden City	Minor Junction Improvement	Yes	Yes	1	£30,000.00	£30,000.00	2	2	1	0	2	3	0	1	7	4	0	11	0			
L435	Avenue One	Letchworth Garden City	Segregated cycleway	Yes	Yes	640	£1,000.00	£640,000.00	2	3	0	0	2	3	0	1	7	4	0	11	0			
L451	Rushby Mead (south)	Letchworth Garden City	Modal filter	Yes	Yes	1	£20,000.00	£20,000.00	2	2	0	0	2	3	1	1	6	5	0	11	1			
L473	Spring Road	Letchworth Garden City	Modal filter	Yes	Yes	1	£20,000.00	£20,000.00	1	3	0	0	2	3	1	1	6	5	0	11	1			
L475	Broadway (south of Broadway Gardens)	Letchworth Garden City	Segregated cycleway	Yes	Yes	840	£1,000.00	£840,000.00	2	3	1	0	0	3	0	0	9	3	-1	11	-1			
L481	Broadway (north of Gardens, west side)	Letchworth Garden City	Segregated cycleway	Yes	Yes	250	£1,000.00	£250,000.00	1	3	1	0	0	3	0	0	8	3	0	11	-1			
K10	Station Approach	Knebworth	New/Improved signal crossing	Yes	Yes	1	£65,000.00	£65,000.00	2	3	0	0	1	3	0	1	6	4	0	10	1			
R48	Stamford Avenue	Royston	Modal filter	Yes	Yes	1	£20,000.00	£20,000.00	2	3	0	1	1	3	1	-1	7	3	0	10	1			
R67	Baldock Street / Princes Mews	Royston	Mid-Size Junction Improvement	Yes	Yes	1	£500,000.00	£500,000.00	2	2	1	2	0	3	-1	1	7	3	0	10	1			
R79	Old North Road near Gower Road	Royston	New parallel crossing	Yes	Yes	1	£65,000.00	£65,000.00	2	2	-1	1	2	3	0	1	6	4	0	10	1			
R80	Orchard Road / Old North Road	Royston	Minor Junction Improvement	Yes	Yes	1	£30,000.00	£30,000.00	2	2	-1	1	2	3	0	1	6	4	0	10	1			
B100	Icknield Way East	Baldock	Modal filter	Yes	Yes	1	£20,000.00	£20,000.00	2	2	1	1	0	3	1	0	6	4	0	10	0			
B118	Weston Way / Letchworth Road	Baldock	Mid-Size Junction Improvement	Yes	Yes	1	£500,000.00	£500,000.00	2	2	1	1	1	3	0	0	7	3	0	10	0			
B122	Church Street	Baldock	Modal filter	Yes	Yes	1	£20,000.00	£20,000.00	2	2	1	0	0	3	1	1	5	5	0	10	0			
I128	Whitehill Road (near Maytrees)	Inter-Urban Route (Hitchin to Stevenage)	New zebra crossing	Yes	Yes	1	£65,000.00	£65,000.00	2	2	1	1	2	1	0	1	8	2	0	10	0			
I132	Whitehill Road (by Junior school)	Inter-Urban Route (Hitchin to Stevenage)	New zebra crossing	Yes	Yes	1	£65,000.00	£65,000.00	2	2	1	1	2	1	0	1	8	2	0	10	0			
I134	Stevenage Road (near Whitehill Road)	Inter-Urban Route (Hitchin to Stevenage)	New/Improved signal crossing	Yes	Yes	1	£65,000.00	£65,000.00	2	3	1	1	1	1	0	1	8	2	0	10	-1			
I136	Stevenage Road / Blakemore End Road	Inter-Urban Route (Hitchin to Stevenage)	Mid-Size Junction Improvement	Yes	Yes	1	£500,000.00	£500,000.00	2	2	1	2	2	2	-1	0	9	1	0	10	0			
H152	Bedford Road / Old Park Road	Hitchin	Large Junction Improvement	Yes	Yes	1	£1,580,000.00	£1,580,000.00	2	2	1	2	2	3	-1	1	9	3	-2	10	-1			
H162	Old Hale Way (near Bessemer Close)	Hitchin	New zebra crossing	Yes	Yes	1	£65,000.00	£65,000.00	2	2	1	1	2	1	0	1	8	2	0	10	0			
H170	Grove Road / Bury Mead Road	Hitchin	Mid-Size Junction Improvement	Yes	Yes	1	£500,000.00	£500,000.00	2	2	1	1	2	2	-1	1	8	2	0	10	0			
H173	Grove Road / Woodgrove Road	Hitchin	Large Junction Improvement	Yes	Yes	1</																		

L502	Nevelis Road / The Quadrant	Letchworth Garden City	Minor Junction Improvement	Yes	Yes	1	£30,000.00	£30,000.00	2	2	1	1	0	3	0	1	6	4	0	10	0	
L503	Station Place / Broadway	Letchworth Garden City	Large Junction Improvement	Yes	Yes	1	£1,580,000.00	£1,580,000.00	2	3	1	0	2	3	0	1	8	4	-2	10	0	
L504	Station Place / Ley's Avenue	Letchworth Garden City	Mid-Size Junction Improvement	Yes	Yes	1	£500,000.00	£500,000.00	2	3	1	0	1	3	0	0	7	3	0	10	0	
L513	Norton Way North (near Icknield Way)	Letchworth Garden City	New parallel crossing	Yes	Yes	1	£65,000.00	£65,000.00	2	2	0	0	2	3	0	1	6	4	0	10	1	
L515	Norton Way North / Station Road	Letchworth Garden City	Large Junction Improvement	Yes	Yes	1	£1,580,000.00	£1,580,000.00	2	3	0	1	2	3	0	1	8	4	-2	10	0	
H530	Bedford Road / Paynes Park	Hitchin	Mid-Size Junction Improvement	Yes	Yes	1	£500,000.00	£500,000.00	2	3	1	1	1	3	-1	0	8	2	0	10	0	
H531	Bedford Road	Hitchin	Segregated cycleway	Yes	Yes	1750	£1,000.00	£1,750,000.00	2	3	1	2	2	3	-1	0	10	2	-2	10	0	
H532	Bedford Road / Lancaster Avenue	Hitchin	Large Junction Improvement	Yes	Yes	1	£1,580,000.00	£1,580,000.00	2	3	1	2	2	3	-1	0	10	2	-2	10	0	
H535	Bedford Road / Deacons Way	Hitchin	Minor Junction Improvement	Yes	Yes	1	£30,000.00	£30,000.00	2	1	1	2	2	1	1	0	8	2	0	10	0	
H537	Bedford Road	Hitchin	Traffic calming	Yes	Yes	400	£350.00	£140,000.00	2	1	1	2	2	1	0	1	8	2	0	10	1	
K4	Gun Lane / Station Approach	Knebworth	Modal filter	Yes	Yes	1	£20,000.00	£20,000.00	2	2	0	0	1	3	0	1	5	4	0	9	-1	
K32	Station Road / Stevenage Road	Knebworth	Mid-Size Junction Improvement	Yes	Yes	1	£500,000.00	£500,000.00	2	2	1	0	1	3	-1	1	6	3	0	9	1	
R42	Coombes Hole	Royston	Modal filter	Yes	Yes	1	£20,000.00	£20,000.00	2	1	0	0	1	3	1	1	4	5	0	9	1	
R45	Melbourn Road / Mill Road	Royston	Mid-Size Junction Improvement	Yes	Yes	1	£500,000.00	£500,000.00	2	1	1	1	1	3	0	1	7	2	0	9	1	
R51	Melbourn Road / King James Way	Royston	Large Junction Improvement	Yes	Yes	1	£1,580,000.00	£1,580,000.00	2	3	1	1	1	3	-1	1	8	3	-2	9	1	
R63	Baldock Road near Heathfield	Royston	New/improved signal crossing	Yes	Yes	1	£65,000.00	£65,000.00	2	2	1	2	0	3	0	-1	7	2	0	9	1	
R64	Baldock Road / Downlands	Royston	Minor Junction Improvement	Yes	Yes	1	£30,000.00	£30,000.00	2	1	1	2	1	1	0	1	7	2	0	9	1	
R65	Baldock Road / Tannery Drift	Royston	Minor Junction Improvement	Yes	Yes	1	£30,000.00	£30,000.00	2	1	1	2	1	1	0	1	7	2	0	9	1	
R70	King Street	Royston	Modal filter	Yes	Yes	1	£20,000.00	£20,000.00	2	3	0	1	1	0	3	1	-1	6	3	0	9	0
R72	Mill Road / Kneesworth Street	Royston	Minor Junction Improvement	Yes	Yes	1	£30,000.00	£30,000.00	2	2	0	1	0	3	0	1	5	4	0	9	1	
R74	Kneesworth Street near Green Drift	Royston	New parallel crossing	Yes	Yes	1	£65,000.00	£65,000.00	2	2	-1	1	1	3	0	1	5	4	0	9	1	
R89	London Road / Barkway Road	Royston	New parallel crossing	Yes	Yes	1	£65,000.00	£65,000.00	2	2	0	0	1	3	0	1	5	4	0	9	0	
R91	Priry Lane	Royston	New parallel crossing	Yes	Yes	1	£65,000.00	£65,000.00	2	2	0	0	1	3	0	1	5	4	0	9	0	
R96	London Road by hospital	Royston	New/improved signal crossing	Yes	Yes	1	£65,000.00	£65,000.00	2	2	-1	0	2	3	0	1	5	4	0	9	1	
B98	Station Road / Icknield Way East	Baldock	Mid-Size Junction Improvement	Yes	Yes	1	£500,000.00	£500,000.00	2	2	1	2	1	1	-1	1	8	1	0	9	0	
B99	North Road / Bygrave Road	Baldock	Mid-Size Junction Improvement	Yes	Yes	1	£500,000.00	£500,000.00	2	2	0	2	1	1	1	0	7	2	0	9	0	
B102	Yeomanry Drive / Bush Spring	Baldock	Minor Junction Improvement	Yes	Yes	1	£30,000.00	£30,000.00	2	1	0	2	2	1	0	1	7	2	0	9	1	
B107	London Road (near Hillcrest)	Baldock	New/improved signal crossing	Yes	Yes	1	£65,000.00	£65,000.00	2	1	1	0	1	3	0	1	5	4	0	9	1	
B116	Hopewell Road	Baldock	Modal filter	Yes	Yes	1	£20,000.00	£20,000.00	1	2	1	0	1	3	0	1	5	4	0	9	0	
I123	Whitehill Road (near St Johns Road)	Inter-Urban Route (Hitchin to Stevenage)	New zebra crossing	Yes	Yes	1	£65,000.00	£65,000.00	2	2	1	1	1	1	0	1	7	2	0	9	0	
I125	Whitehill Road (near South Hill Close)	Inter-Urban Route (Hitchin to Stevenage)	New zebra crossing	Yes	Yes	1	£65,000.00	£65,000.00	2	2	1	1	1	1	0	1	7	2	0	9	0	
I129	Whitehill Road / Mayrees	Inter-Urban Route (Hitchin to Stevenage)	Minor Junction Improvement	Yes	Yes	1	£30,000.00	£30,000.00	2	1	1	1	2	1	0	1	7	2	0	9	0	
I130	Whitehill Road / Walnut Close	Inter-Urban Route (Hitchin to Stevenage)	Minor Junction Improvement	Yes	Yes	1	£30,000.00	£30,000.00	2	1	1	1	2	1	0	1	7	2	0	9	0	
I131	Whitehill Road / Broadmead	Inter-Urban Route (Hitchin to Stevenage)	Minor Junction Improvement	Yes	Yes	1	£30,000.00	£30,000.00	2	1	1	1	2	1	0	1	7	2	0	9	0	
I133	Whitehill Road (near Oakfield Avenue)	Inter-Urban Route (Hitchin to Stevenage)	New zebra crossing	Yes	Yes	1	£65,000.00	£65,000.00	2	2	1	1	1	1	0	1	7	2	0	9	0	
I138	Stevenage Road (near Elms Close)	Inter-Urban Route (Hitchin to Stevenage)	New zebra crossing	Yes	Yes	1	£65,000.00	£65,000.00	2	2	1	2	0	1	0	1	7	2	0	9	0	
H140	Hollow Lane / Whitehill Road	Hitchin	Mid-Size Junction Improvement	Yes	Yes	1	£500,000.00	£500,000.00	1	3	1	1	1	3	-1	0	7	2	0	9	-1	
H147	Queen Street (near Biggin Lane)	Hitchin	New/improved signal crossing	Yes	Yes	1	£65,000.00	£65,000.00	2	2	1	0	0	3	0	1	5	4	0	9	0	
H149	Queen Street / Bridge Street	Hitchin	Mid-Size Junction Improvement	Yes	Yes	1	£500,000.00	£500,000.00	2	2	1	0	0	3	0	1	5	4	0	9	0	
H151	Old Park Road / Nuns Close	Hitchin	Minor Junction Improvement	Yes	Yes	1	£30,000.00	£30,000.00	2	1	1	1	1	1	0	1	7	2	0	9	0	
H157	Whitehurst Avenue	Hitchin	Modal filter	Yes	Yes	1	£20,000.00	£20,000.00	2	3	0	0	0	3	1	0	5	4	0	9	-1	
H171	Grove Road / Redoubt Close	Hitchin	Minor Junction Improvement	Yes	Yes	1	£30,000.00	£30,000.00	2	3	1	1	2	1	0	1	7	2	0	9	0	
H172	Grove Road / Millstream Close	Hitchin	Minor Junction Improvement	Yes	Yes	1	£30,000.00	£30,000.00	2	3	1	1	1	2	1	0	1	7	2	0	9	0
H178	Cambridge Road / Woolgrove Road	Hitchin	Large Junction Improvement	Yes	Yes	1	£1,580,000.00	£1,580,000.00	2	3	1	1	1	3	-1	1	8	3	-2	9	-1	
H180	Cambridge Road / Queenswood Drive	Hitchin	Large Junction Improvement	Yes	Yes	1	£1,580,000.00	£1,580,000.00	2	3	1	1	1	0	3	0	1	7	4	-2	9	-1
H181	Cambridge Road / St Michaels Road	Hitchin	Large Junction Improvement	Yes	Yes	1	£1,580,000.00	£1,580,000.00	2	3	1	0	1	3	0	1	7	4	-2	9	-1	
H194	Nightingale Road / Verulam Road	Hitchin	Large Junction Improvement	Yes	Yes	1	£1,580,000.00	£1,580,000.00	2	3	1	0	1	3	0	1	7	4	-2	9	1	
R224	Melbourn Road	Royston	Segregated cycleway	Yes	Yes	1100	£1,000.00	£1,100,000.00	2	2	1	2	1	1	0	1	8	2	-1	9	1	
R230	Lower King Street	Royston	Segregated cycleway	Yes	Yes	120	£1,000.00	£1,120,000.00	2	2	0	2	1	1	0	1	7	2	0	9	1	
R235	Royston Road	Baldock	Footway Improvements	Yes	Yes	300	£200.00	£60,000.00	2	1	1	2	0	1	0	1	7	2	0	9	0	
R236	Grovesnor Road / California / Wynn Close / Footpath / Bus Stop	Baldock	Footway Improvements	Yes	Yes	880	£200.00	£176,000.00	1	2	1	2	2	1	0	1	7	2	0	9	0	
B260	Sale Drive	Baldock	Segregated cycleway	Yes	Yes	30	£1,000.00	£30,000.00	1	2	0	1	1	3	1	0	5	4	0	9	0	
I267	Whitehill Road	Inter-Urban Route (Hitchin to Stevenage)	Segregated cycleway	Yes	Yes	900	£1,000.00	£900,000.00	2	3	1	1	1	3	-1	0	8	2	-1	9	-1	
H274	Queen Street (North)	Hitchin	Segregated cycleway	Yes	Yes	250	£1,000.00	£250,000.00	2	3	1	0	0	3	0	0	6	3	0	9	0	
H280	Bancroft	Hitchin	Segregated cycleway	Yes	Yes	560	£1,000.00	£560,000.00	2	3	0	0	1	3	0	0	6	3	0	9	0	
H304	Cambridge Road & Hitchin Road (to Briar Patch Lane)	Hitchin	Footway Improvements	Yes	Yes	2300	£200.00	£460,000.00	2	2	1	1	1	1	0	1	7	2	0	9	0	
L350	Bedford Road (near Valley Road)	Letchworth Garden City	New parallel crossing	Yes	Yes	1	£65,000.00	£65,000.00	2	2	0	0	1	3	0	1	5	4	0	9	1	
L351	Norton Common north-south path	Letchworth Garden City	Segregated cycleway	Yes	Yes	600	£1,000.00	£600,000.00	2	2	1	2	0	2	0	0	7	2	0	9	1	
L358	Hitchin Road (near Briar Patch Lane)	Letchworth Garden City	New/improved signal crossing	Yes	Yes	1	£65,000.00	£65,000.00	2	2	1	0	1	3	0	0	6	3	0	9	0	
L367	Near Baldock Road and Sollowshot East	Letchworth Garden City	Modal filter	Yes	Yes	1	£20,000.00	£20,000.00	2	1	0	0	1	3	1	1	4	5	0	9	0	
L371	Baldock Road / William Way	Letchworth Garden City	Large Junction Improvement	Yes	Yes	1	£1,580,000.00	£1,580,000.00	2	3	1	0	2	3	-1	1	8	3	-2	9	0	
L381	Baldock Road / Dunhams Lane	Letchworth Garden City	Minor Junction Improvement	Yes	Yes	1	£30,000.00	£30,000.00	2	1	1	1	2	1	0	1	7	2	0	9	0	
L382	Baldock Road / Avenue One	Letchworth Garden City	Large Junction Improvement	Yes	Yes	1	£1,580,000.00	£1,580,000.00	2	3	1	0	2	3	-1	1	8	3	-2	9	0	
L383	Baldock Road (from Pixmore Way to Avenue One)	Letchworth Garden City	Segregated cycleway	Yes	Yes	650	£1,000.00	£650,000.00	2	2	1	1	2	1	-1	1	8	1	0	9	0	
L387	Baldock Road / Jubilee Way	Letchworth Garden City	Large Junction Improvement	Yes	Yes	1	£1,580,000.00	£1,580,000.00	2	3	1	0	2	3	-1	1	8	3	-2	9	1	
L393	Icknield Way / Cowslip Hill / Bridge Road	Letchworth Garden City	Mid-Size Junction Improvement	Yes	Yes	1	£500,000.00	£500,000.00	2	3	1	0	0	2	0	1	6	3	0	9	1	
L400	Green Lane	Letchworth Garden City	Footway Improvements	Yes	Yes	150	£200.00	£30,000.00	2	1	0	2	2	1	0	1	7	2	0	9	0	
L409	Works Road (to bridge over A1M)	Letchworth Garden City	Footway Improvements	Yes	Yes	1500	£200.00	£300,000.00	2	2	1	0	2	1	0	1	7	2	0	9	0	
L412	Works Road / Jubilee Road	Letchworth Garden City	Mid-Size Junction Improvement	Yes	Yes	1	£500,000.00	£500,000.00	2	2	1	0	2	1	0	1	7	2	0	9	0	
L415	Works Road (near Green Lane)	Letchworth Garden City	New zebra crossing	Yes	Yes	1	£65,000.00	£65,000.00	2	2	1	0	2	1	0	1	7	2	0	9	0	
L418	Works Road (near Dunham Lane)	Letchworth Garden City	New zebra crossing	Yes	Yes	1	£65,000.00	£65,000.00	2	2	1	0	2	1	0	1	7	2	0	9	0	
L423	Works Road (near Pixmore Avenue)	Letchworth Garden City	New zebra crossing	Yes	Yes	1	£65,000.00	£65,000.00	2	2	1	0	2	1	0	1	7	2	0	9	0	
L447	Ridge Avenue	Letchworth Garden City	Modal filter	Yes	Yes	1	£20,000.00	£20,000.00	1	2	0	0	1									

R94	London Road near The Warren	Royston	New/Improved signal crossing	Yes	Yes	1	£65,000.00	£65,000.00	2	2	0	0	1	3	0	0	5	3	0	8	1	
B97	Whitehorse Street / Clothall Road	Baldock	Mid-Size Junction Improvement	Yes	Yes	1	£500,000.00	£500,000.00	2	2	1	1	1	0	0	1	7	1	0	8	0	
B105	South Road / High Street	Baldock	Large Junction Improvement	Yes	Yes	1	£1,580,000.00	£1,580,000.00	2	3	1	1	1	2	-1	0	9	1	-2	8	0	
B119	Letchworth Road / Norton Road	Baldock	Minor Junction Improvement	Yes	Yes	1	£30,000.00	£30,000.00	2	1	1	1	1	1	0	1	6	2	0	8	1	
B120	Hitchin Street / The Gardens	Baldock	Minor Junction Improvement	Yes	Yes	1	£30,000.00	£30,000.00	2	1	1	1	1	1	0	1	6	2	0	8	0	
B121	Hitchin Street / High Street	Baldock	Mid-Size Junction Improvement	Yes	Yes	1	£500,000.00	£500,000.00	2	2	1	1	1	1	0	0	7	1	0	8	0	
I124	Whitehill Road / Passingham Avenue	Inter-Urban Route (Hitchin to Stevenage)	Minor Junction Improvement	Yes	Yes	1	£30,000.00	£30,000.00	2	1	1	1	1	1	0	1	6	2	0	8	0	
I126	Whitehill Road / South Hill Close	Inter-Urban Route (Hitchin to Stevenage)	Minor Junction Improvement	Yes	Yes	1	£30,000.00	£30,000.00	2	1	1	1	1	1	0	1	6	2	0	8	0	
I127	Whitehill Road / Wiltoughby Way	Inter-Urban Route (Hitchin to Stevenage)	Minor Junction Improvement	Yes	Yes	1	£30,000.00	£30,000.00	2	1	1	1	1	1	0	1	6	2	0	8	0	
I137	Stevenage Road / Elms Close	Inter-Urban Route (Hitchin to Stevenage)	Minor Junction Improvement	Yes	Yes	1	£30,000.00	£30,000.00	2	1	1	2	0	0	1	0	1	6	2	0	8	0
I139	Stevenage Road (near Tower Close)	Inter-Urban Route (Hitchin to Stevenage)	New zebra crossing	Yes	Yes	1	£65,000.00	£65,000.00	2	2	1	1	0	1	0	1	6	2	0	8	0	
H156	Ickleford Road	Hitchin	Modal filter	Yes	Yes	1	£20,000.00	£20,000.00	1	3	0	0	0	3	1	0	4	4	4	0	8	-1
H158	Beartown Road (near Whitehurst Avenue)	Hitchin	New parallel crossing	Yes	Yes	1	£65,000.00	£65,000.00	1	3	-1	0	0	3	1	1	3	5	0	8	0	
H160	Strathmore Avenue / Old Hale Way	Hitchin	Minor Junction Improvement	Yes	Yes	1	£30,000.00	£30,000.00	1	1	1	1	1	2	1	0	1	6	2	0	8	0
H164	Turnpike Lane / Arlesley Road	Hitchin	Large Junction Improvement	Yes	Yes	1	£1,580,000.00	£1,580,000.00	2	2	1	1	1	3	-1	1	7	3	-2	8	-1	
H175	Wilbury Way / Girdle Road	Hitchin	Minor Junction Improvement	Yes	Yes	1	£30,000.00	£30,000.00	2	1	1	0	2	1	0	1	6	2	0	8	0	
H183	Cambridge Road / Nightingale Road	Hitchin	Large Junction Improvement	Yes	Yes	1	£1,580,000.00	£1,580,000.00	2	3	1	0	1	3	-1	1	7	3	-2	8	0	
H187	Walsworth Road / Venulam Road	Hitchin	Mid-Size Junction Improvement	Yes	Yes	1	£500,000.00	£500,000.00	2	2	1	0	0	1	2	-1	1	6	2	0	8	0
H188	Walsworth Road (near Harrison Close)	Hitchin	New zebra crossing	Yes	Yes	1	£65,000.00	£65,000.00	2	2	1	0	0	1	1	0	1	6	2	0	8	1
H189	Walsworth Road (near Woodside Gardens)	Hitchin	New zebra crossing	Yes	Yes	1	£65,000.00	£65,000.00	2	2	1	0	0	1	1	0	1	6	2	0	8	1
R204	Melbourn Street	Royston	Footway Improvements	Yes	300	£200.00	£60,000.00	2	1	1	2	1	0	0	0	1	7	1	0	8	1	
R211	Knesworth Street	Royston	Footway Improvements	Yes	460	£200.00	£92,000.00	2	2	0	2	1	0	0	0	1	7	1	0	8	0	
R212	Lower Kings St	Royston	Footway Improvements	Yes	110	£200.00	£22,000.00	2	1	0	2	1	0	1	0	1	7	1	0	8	0	
R228	Baldock Street	Royston	Segregated cycleway	Yes	150	£1,000.00	£150,000.00	2	2	1	2	1	1	-1	0	8	0	0	8	1		
R233	North Road	Baldock	Footway Improvements	Yes	100	£200.00	£20,000.00	2	1	0	2	1	1	0	1	6	2	0	8	1		
B239	High Street (south of Pepper Alley)	Baldock	Footway Improvements	Yes	390	£200.00	£78,000.00	2	1	1	1	1	0	1	0	1	6	2	0	8	0	
B240	High Street	Baldock	Footway Improvements	Yes	80	£200.00	£16,000.00	2	1	1	1	1	1	1	0	1	6	2	0	8	0	
B243	Whitehorse Street	Baldock	Footway Improvements	Yes	130	£200.00	£26,000.00	2	1	1	1	1	1	0	1	6	2	0	8	0		
B248	Letchworth Road (east of A1M)	Baldock	Footway Improvements	Yes	450	£200.00	£90,000.00	2	1	1	0	2	1	0	1	6	2	0	8	0		
B249	Bridge over A1M	Baldock	Footway Improvements	Yes	150	£200.00	£30,000.00	2	1	1	0	2	1	0	1	6	2	0	8	0		
B259	Sun Street & Church Street	Baldock	Traffic calming	Yes	70	£350.00	£24,500.00	2	3	1	0	0	2	0	0	6	2	0	8	0		
B265	Letchworth Road & Pepsys Way	Baldock	Segregated cycleway	Yes	240	£1,000.00	£240,000.00	1	1	0	1	3	1	0	4	4	0	8	0			
B269	Stevenage Road (A602)	Inter-Urban Route (Hitchin to Stevenage)	Footway Improvements	Yes	850	£200.00	£170,000.00	2	1	1	1	1	1	0	1	6	2	0	8	0		
I272	Stevenage Road (approaching A1(M))	Inter-Urban Route (Hitchin to Stevenage)	Segregated cycleway	Yes	250	£1,000.00	£250,000.00	2	2	1	2	0	3	-1	-1	7	1	0	8	-1		
H273	Hollow Lane	Hitchin	Segregated cycleway	Yes	460	£1,000.00	£460,000.00	1	3	1	1	1	2	-1	0	7	1	0	8	0		
H276	Queen Street (South)	Hitchin	Segregated cycleway	Yes	150	£1,000.00	£150,000.00	1	3	1	0	0	3	0	0	5	3	0	8	0		
H277	Bridge Street	Hitchin	Segregated cycleway	Yes	140	£1,000.00	£140,000.00	1	3	0	0	1	3	0	0	5	3	0	8	0		
H278	Hermitage Road	Hitchin	Segregated cycleway	Yes	200	£1,000.00	£200,000.00	2	3	0	0	1	3	-1	0	6	2	0	8	-1		
H281	Nightingale Road (between roundabouts)	Hitchin	Segregated cycleway	Yes	140	£1,000.00	£140,000.00	2	3	1	0	1	2	-1	0	7	1	0	8	0		
H282	Water Lane & Strathmore Avenue	Hitchin	Segregated cycleway	Yes	710	£1,000.00	£710,000.00	2	2	0	1	2	2	0	0	7	2	-1	8	0		
H297	Grove Road	Hitchin	Traffic calming	Yes	770	£350.00	£269,500.00	2	0	1	2	2	1	0	0	7	1	0	8	0		
H300	Arlesley Road	Hitchin	Footway Improvements	Yes	60	£200.00	£12,000.00	2	1	1	1	1	1	0	1	6	2	0	8	0		
H301	Wilbury Way	Hitchin	Footway Improvements	Yes	570	£200.00	£114,000.00	2	1	1	0	2	1	0	1	6	2	0	8	0		
H311	Bedford Road & Brand Street	Hitchin	Footway Improvements	Yes	280	£200.00	£56,000.00	2	1	1	1	0	1	0	1	6	2	0	8	0		
H316	Fishponds Road (east)	Hitchin	Footway Improvements	Yes	200	£200.00	£40,000.00	2	1	1	0	2	1	0	1	6	2	0	8	0		
H317	Fishponds Road (west)	Hitchin	Footway Improvements	Yes	200	£200.00	£40,000.00	2	1	1	0	2	1	0	1	6	2	0	8	0		
H319	Bedford Road	Hitchin	Footway Improvements	Yes	300	£200.00	£60,000.00	2	1	1	1	1	1	0	1	6	2	0	8	0		
L336	Baldock Lane (near Letchworth Gate)	Letchworth Garden City	New/Improved signal crossing	Yes	Yes	1	£65,000.00	£65,000.00	1	2	1	0	0	3	0	1	4	4	0	8	0	
L346	Grange Road	Letchworth Garden City	Traffic calming	Yes	370	£350.00	£129,500.00	2	0	0	1	2	1	0	0	7	1	0	8	0		
L348	Wilbury Road (near Grange Road)	Letchworth Garden City	New parallel crossing	Yes	1	£65,000.00	£65,000.00	1	0	0	1	0	0	1	4	4	0	8	0			
L356	Highfield	Letchworth Garden City	New parallel crossing	Yes	Yes	1	£65,000.00	£65,000.00	1	2	-1	0	2	3	0	1	4	4	0	8	1	
L359	Highfield / Hitchin Road	Letchworth Garden City	Minor Junction Improvement	Yes	Yes	1	£30,000.00	£30,000.00	2	1	1	0	2	1	0	1	6	2	0	8	0	
L366	Baldock Road / Barrington Road	Letchworth Garden City	Minor Junction Improvement	Yes	Yes	1	£30,000.00	£30,000.00	2	1	1	0	2	1	0	1	6	2	0	8	0	
L372	Baldock Road / Lawrence Avenue	Letchworth Garden City	Minor Junction Improvement	Yes	Yes	1	£30,000.00	£30,000.00	2	1	1	0	2	1	0	1	6	2	0	8	0	
L373	Baldock Road / Rushby Mead	Letchworth Garden City	Minor Junction Improvement	Yes	Yes	1	£30,000.00	£30,000.00	2	1	1	0	2	1	0	1	6	2	0	8	1	
L374	Baldock Road / Bowershott	Letchworth Garden City	Minor Junction Improvement	Yes	Yes	1	£30,000.00	£30,000.00	2	1	1	0	2	1	0	1	6	2	0	8	0	
L385	Baldock Road (from Avenue One to Letchworth Road)	Letchworth Garden City	Segregated cycleway	Yes	850	£1,000.00	£850,000.00	2	2	1	0	2	2	-1	1	7	2	-1	8	0		
L388	Icknield Way / Archers Way	Letchworth Garden City	Minor Junction Improvement	Yes	Yes	1	£30,000.00	£30,000.00	2	1	1	0	2	1	0	1	6	2	0	8	0	
L399	Icknield Way (from Norton Way North to Green Lane)	Letchworth Garden City	Footway Improvements	Yes	1000	£200.00	£200,000.00	2	1	1	0	2	1	0	1	6	2	0	8	0		
L401	Icknield Way / Furnston Court	Letchworth Garden City	Minor Junction Improvement	Yes	Yes	1	£30,000.00	£30,000.00	2	1	1	0	2	1	0	1	6	2	0	8	0	
L402	Icknield Way / Showroom Entrance	Letchworth Garden City	Minor Junction Improvement	Yes	Yes	1	£30,000.00	£30,000.00	2	1	1	0	2	1	0	1	6	2	0	8	0	
L403	Icknield Way / Tabbs Close	Letchworth Garden City	Minor Junction Improvement	Yes	Yes	1	£30,000.00	£30,000.00	2	1	1	0	2	1	0	1	6	2	0	8	0	
L404	Icknield Way / path to rail bridge	Letchworth Garden City	Minor Junction Improvement	Yes	Yes	1	£30,000.00	£30,000.00	2	1	1	0	2	1	0	1	6	2	0	8	0	
L405	Icknield Way / Pascal Way	Letchworth Garden City	Minor Junction Improvement	Yes	Yes	1	£30,000.00	£30,000.00	2	1	1	0	2	1	0	1	6	2	0	8	0	
L410	Birds Hill	Letchworth Garden City	Footway Improvements	Yes	430	£200.00	£86,000.00	2	1	1	0	2	1	0	1	6	2	0	8	0		
L419	Works Road / Dunham Lane	Letchworth Garden City	Minor Junction Improvement	Yes	Yes	1	£30,000.00	£30,000.00	2	1	1	0	2	1	0	1	6	2	0	8	0	
L420	Works Road / Meredews	Letchworth Garden City	Minor Junction Improvement	Yes	Yes	1	£30,000.00	£30,000.00	2	1	1	0	2	1	0	1	6	2	0	8	0	
L424	Works Road / DPD entrance	Letchworth Garden City	Minor Junction Improvement	Yes	Yes	1	£30,000.00	£30,000.00	2	1	1	0	2	1	0	1	6	2	0	8	0	
L430	Second Avenue	Letchworth Garden City	New/Improved signal crossing	Yes	Yes	1	£65,000.00	£65,000.00	1	2	-1	0	2	3	0	1	4	4	0	8	0	
L438	Dunhams Lane	Letchworth Garden City	New zebra crossing	Yes	Yes	1	£65,000.00	£65,000.00	2	2	0	0	2	1	0	1	6	2	0	8	0	
L448	Ridge Avenue	Letchworth Garden City	New parallel crossing	Yes	Yes	1	£65,000.00	£65,000.00	1	2	0	0	1	3	0	1	4	4	0	8	1	
L452	Rushby Mead (near Pixmore Junior School)	Letchworth Garden City	New zebra crossing	Yes	Yes	1	£65,000.00	£65,000.00	2	2	0	0	2	1	0	1	6	2	0	8	1	
L461	Spring Road / Burrell Rise	Letchworth Garden City	Minor Junction Improvement	Yes	Yes	1	£30,000.00	£30,000.00	2	2	0	0	0	3	0	1	4	4	0	8	1	
L467	Station Way	Letchworth Garden City	Segregated cycleway	Yes	160	£1,000.00	£160,000.00	2	3	1	0	0	3	-1	0	6	2	0	8	0		
L468	Bridge Road & Station Place	Letchworth Garden City	Segregated cycleway	Yes																		

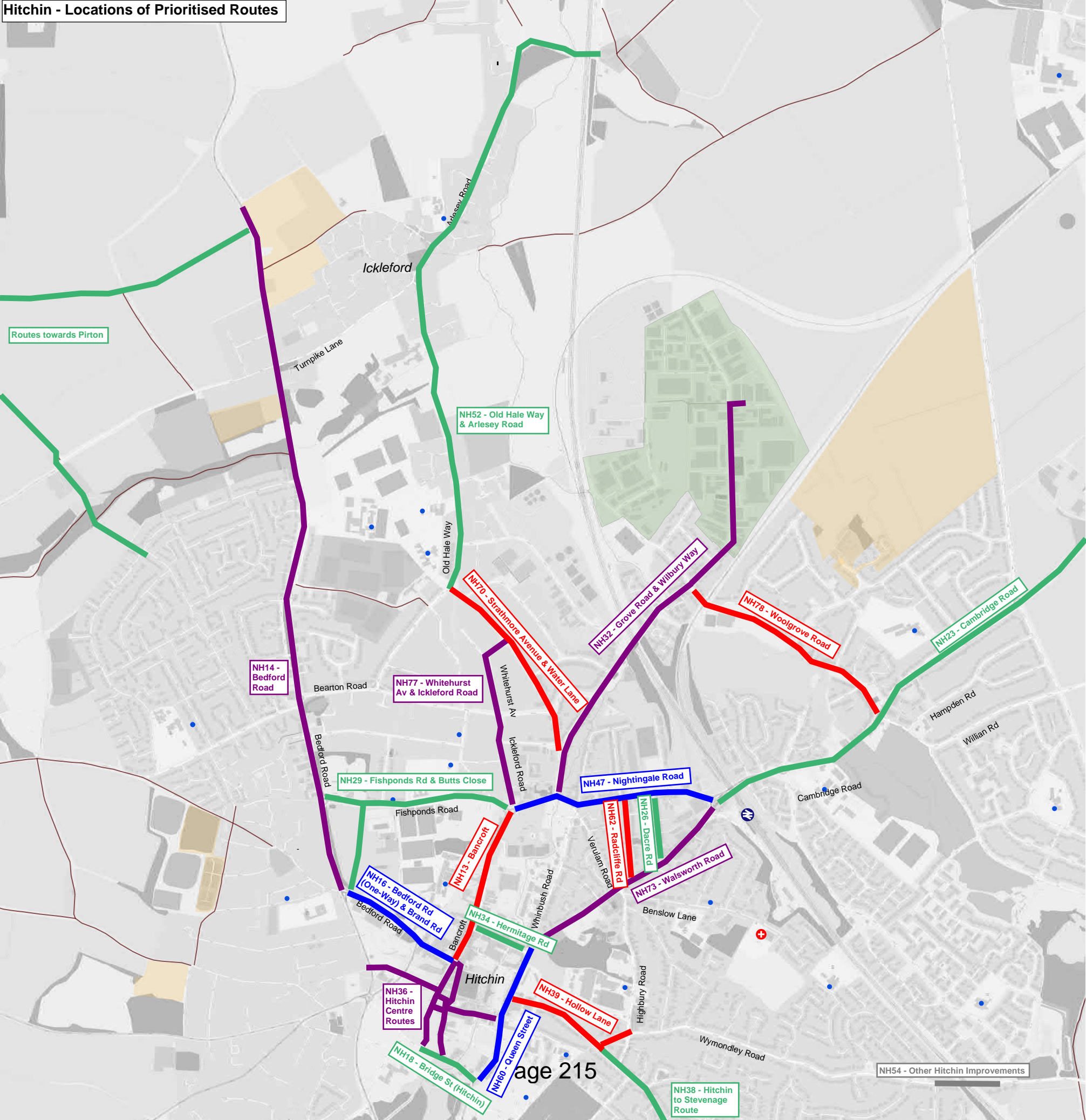
K38	Stevenage Road (south of New Close)	Knebworth	Footway Improvements	Yes		330	£200.00	£66,000.00	2	1	1	0	1	1	0	1	5	2	0	7	1	
R43	Melbourn Road / Green Street	Royston	Minor Junction Improvement	Yes	Yes	1	£30,000.00	£30,000.00	2	1	1	0	1	1	0	1	5	2	0	7	1	
R46	Coombelands Roundabout	Royston	Large Junction Improvement	Yes	Yes	1	£1,580,000.00	£1,580,000.00	2	3	1	0	0	3	-1	1	6	3	-2	7	1	
R53	Newmarket Road / Hollies Close	Royston	Minor Junction Improvement	Yes	Yes	1	£30,000.00	£30,000.00	2	1	0	2	0	1	0	1	5	2	0	7	1	
R57	Newmarket Road / Poplar Drive	Royston	Minor Junction Improvement	Yes	Yes	1	£30,000.00	£30,000.00	2	1	-1	2	1	1	0	1	5	2	0	7	1	
R59	Newmarket Road / Ickfield Walk	Royston	Minor Junction Improvement	Yes	Yes	1	£30,000.00	£30,000.00	2	1	-1	2	1	1	0	1	5	2	0	7	1	
R75	Queens Road / Kneessworth Street	Royston	Minor Junction Improvement	Yes	Yes	1	£30,000.00	£30,000.00	2	1	0	1	1	1	0	1	5	2	0	7	1	
R76	Station entrance (S) / Kneessworth Street	Royston	Minor Junction Improvement	Yes	Yes	1	£30,000.00	£30,000.00	2	1	0	1	1	1	0	1	5	2	0	7	1	
R77	Station entrance (N) / Old North Road	Royston	Minor Junction Improvement	Yes	Yes	1	£30,000.00	£30,000.00	2	1	0	1	1	1	0	1	5	2	0	7	0	
R81	Old North Road near Serby Road	Royston	New zebra crossing	Yes	Yes	1	£65,000.00	£65,000.00	2	2	-1	1	1	1	0	1	5	2	0	7	1	
R83	Old North Road near Phillips Avenue	Royston	New zebra crossing	Yes	Yes	1	£65,000.00	£65,000.00	2	2	-1	1	1	1	0	1	5	2	0	7	0	
R85	Old North Road / York Way	Royston	Large Junction Improvement	Yes	Yes	1	£1,580,000.00	£1,580,000.00	2	2	-1	1	2	3	-1	1	6	3	-2	7	1	
R90	Market Hill	Royston	New parallel crossing	Yes	Yes	1	£65,000.00	£65,000.00	1	2	0	0	0	3	0	1	3	4	0	7	-1	
R92	Priry Lane / Barkway Road	Royston	Large Junction Improvement	Yes	Yes	1	£1,580,000.00	£1,580,000.00	2	3	0	0	1	3	-1	1	6	3	-2	7	-1	
B100	London Road (near Chalk Hills)	Baldock	New/improved signal crossing	Yes	Yes	1	£65,000.00	£65,000.00	1	1	1	0	0	1	3	0	1	3	4	0	7	0
B112	Weston Way / Baldock Lane	Baldock	Minor Junction Improvement	Yes	Yes	1	£30,000.00	£30,000.00	2	1	0	0	2	1	0	1	5	2	0	7	0	
B113	Weston Way / St Marys Way	Baldock	Minor Junction Improvement	Yes	Yes	1	£30,000.00	£30,000.00	2	1	0	0	2	1	0	1	5	2	0	7	0	
B114	Weston Way / Mansfield Road	Baldock	Minor Junction Improvement	Yes	Yes	1	£30,000.00	£30,000.00	2	1	0	0	2	1	0	1	5	2	0	7	0	
B115	Letchworth Road / Hopewell Road	Baldock	Minor Junction Improvement	Yes	Yes	1	£30,000.00	£30,000.00	2	1	1	0	1	1	0	1	5	2	0	7	0	
H143	Queen Street / Hollow Lane	Hitchin	Minor Junction Improvement	Yes	Yes	1	£30,000.00	£30,000.00	1	2	1	0	0	1	1	0	1	5	2	0	7	0
H144	Queen Street (near Hollow Lane)	Hitchin	New zebra crossing	Yes	Yes	1	£65,000.00	£65,000.00	1	3	1	0	0	1	0	1	5	2	0	7	1	
H145	Queen Street (near Portmill Lane)	Hitchin	New zebra crossing	Yes	Yes	1	£65,000.00	£65,000.00	1	3	1	0	0	1	0	1	5	2	0	7	1	
H155	Barcroft Road / Ickford Road rt	Hitchin	Large Junction Improvement	Yes	Yes	1	£1,580,000.00	£1,580,000.00	2	3	1	0	0	1	3	-1	1	6	3	-2	7	-1
H167	Water Lane / Grove Road	Hitchin	Minor Junction Improvement	Yes	Yes	1	£30,000.00	£30,000.00	2	1	1	0	0	1	0	1	5	2	0	7	0	
H168	Periwinkle Lane / Grove Road	Hitchin	Minor Junction Improvement	Yes	Yes	1	£30,000.00	£30,000.00	2	2	1	0	0	1	0	1	5	2	0	7	0	
H174	Woolgrove Road (under rail bridge)	Hitchin	Signalised shuttle system	Yes	Yes	1	£750,000.00	£750,000.00	2	3	1	1	2	1	-1	-1	9	-1	-1	7	0	
H176	Wilbury Way / Hunting Gate	Hitchin	Minor Junction Improvement	Yes	Yes	1	£30,000.00	£30,000.00	1	1	1	0	2	1	0	1	5	2	0	7	0	
H196	Nightingale Road / Audi	Hitchin	Minor Junction Improvement	Yes	Yes	1	£30,000.00	£30,000.00	1	1	1	0	1	1	0	1	5	2	0	7	1	
H197	Nightingale Road / McDonalds	Hitchin	Minor Junction Improvement	Yes	Yes	1	£30,000.00	£30,000.00	2	1	1	0	0	1	1	0	1	5	2	0	7	1
R199	Melbourn Road	Royston	Footway Improvements	Yes		1000	£200.00	£200,000.00	2	1	1	1	1	0	0	1	6	1	0	7	-1	
R203	Newmarket Road	Royston	Footway Improvements	Yes		600	£200.00	£120,000.00	2	1	0	2	1	0	0	1	6	1	0	7	1	
R209	Baldock Road	Royston	Footway Improvements	Yes		1300	£200.00	£260,000.00	2	1	1	2	1	0	0	7	0	0	7	0	0	
R225	Newmarket Road & Melbourn Street	Royston	Segregated cycleway		Yes	720	£1,000.00	£720,000.00	2	1	1	2	1	0	-1	0	8	0	-1	7	1	
R231	Kneessworth Street & Old North Road	Royston	Segregated cycleway		Yes	1500	£1,000.00	£1,500,000.00	2	2	0	2	1	1	0	1	7	2	-2	7	1	
B232	Station Road	Baldock	Footway Improvements	Yes		100	£200.00	£20,000.00	2	1	1	1	0	1	0	1	5	2	0	7	1	
B234	Bygrave Road	Baldock	Footway Improvements	Yes		250	£200.00	£50,000.00	2	1	0	2	0	1	0	1	5	2	0	7	1	
B238	Weston Way	Baldock	Footway Improvements	Yes		870	£200.00	£174,000.00	2	1	1	0	1	1	0	1	5	2	0	7	0	
B242	Hitchin Street	Baldock	Footway Improvements	Yes		120	£200.00	£24,000.00	2	1	1	0	1	1	0	1	5	2	0	7	0	
B247	Norton Road	Baldock	Footway Improvements	Yes		300	£200.00	£60,000.00	2	1	1	0	1	1	0	1	5	2	0	7	-1	
B261	Wallingford Road	Baldock	Segregated cycleway		Yes	470	£1,000.00	£470,000.00	1	2	0	2	1	3	-1	-1	6	1	0	7	-1	
B264	Back Lane Improvements	Baldock	Segregated cycleway		Yes	820	£1,000.00	£820,000.00	0	2	1	0	2	2	1	0	5	3	-1	7	0	
I270	Stevenage Road (not A602)	Inter-Urban Route (Hitchin to Stevenage)	Footway Improvements	Yes		700	£200.00	£140,000.00	1	2	0	1	2	0	1	5	2	0	7	0		
I279	Brand Street	Hitchin	Segregated cycleway		Yes	150	£1,000.00	£150,000.00	2	2	0	1	1	2	-1	0	6	1	0	7	0	
H285	Woolgrove Road	Hitchin	Segregated cycleway		Yes	800	£1,000.00	£800,000.00	2	2	-1	2	2	2	-1	0	7	1	-1	7	0	
H303	Nightingale Road	Hitchin	Footway Improvements	Yes		680	£200.00	£136,000.00	2	1	1	0	1	1	0	1	5	2	0	7	0	
L326	Croft Lane	Letchworth Garden City	Footway Improvements	Yes		130	£200.00	£26,000.00	1	1	0	2	1	1	0	1	5	2	0	7	1	
L340	Archers Way	Letchworth Garden City	New zebra crossing	Yes		1	£65,000.00	£65,000.00	1	2	0	0	0	2	1	0	1	5	2	0	7	1
L341	Wilbury Road (near Kite Way)	Letchworth Garden City	New/improved signal crossing	Yes	Yes	1	£65,000.00	£65,000.00	1	2	0	1	0	3	0	0	4	3	0	7	1	
L345	Southfields	Letchworth Garden City	New zebra crossing	Yes		1	£65,000.00	£65,000.00	1	2	0	0	1	1	0	1	5	2	0	7	1	
L360	Hitchin Road / Baldock Road (A505) from Briar Patch Lane	Letchworth Garden City	Footway Improvements	Yes		3700	£200.00	£740,000.00	2	2	1	0	2	1	0	1	6	2	-1	7	0	
L361	Hitchin Road (near Highfield)	Letchworth Garden City	Segregated cycleway		Yes	360	£1,000.00	£360,000.00	2	2	1	0	1	1	-1	1	6	1	0	7	0	
L362	Hitchin Road / Pasture Road	Letchworth Garden City	Minor Junction Improvement	Yes	Yes	1	£30,000.00	£30,000.00	2	1	1	0	1	1	0	1	5	2	0	7	0	
L364	Baldock Road (near Letchworth Lane)	Letchworth Garden City	Segregated cycleway		Yes	250	£1,000.00	£250,000.00	2	2	0	0	2	0	1	4	3	0	7	0		
L368	Baldock Road / Cloisters Road	Letchworth Garden City	Minor Junction Improvement	Yes	Yes	1	£30,000.00	£30,000.00	2	1	1	0	1	1	0	1	5	2	0	7	0	
L369	Baldock Road / Sollershot East	Letchworth Garden City	Minor Junction Improvement	Yes	Yes	1	£30,000.00	£30,000.00	2	1	1	0	1	1	0	1	5	2	0	7	0	
L375	Baldock Road / The Crescent (west)	Letchworth Garden City	Minor Junction Improvement	Yes	Yes	1	£30,000.00	£30,000.00	2	1	1	0	1	1	0	1	5	2	0	7	0	
L376	Baldock Road / The Crescent (east)	Letchworth Garden City	Minor Junction Improvement	Yes	Yes	1	£30,000.00	£30,000.00	2	1	1	0	1	1	0	1	5	2	0	7	0	
L384	Baldock Road (from Avenue One to A1M)	Letchworth Garden City	Traffic calming	Yes		1000	£350.00	£350,000.00	2	0	1	0	2	1	0	0	6	1	0	7	0	
L392	Ickfield Way / Bedford Road	Letchworth Garden City	Mid-Size Junction Improvement	Yes		1	£500,000.00	£500,000.00	2	2	1	0	0	1	0	1	5	2	0	7	1	
L395	Ickfield Way (near Pix Brook Court)	Letchworth Garden City	Segregated cycleway		Yes	130	£1,000.00	£130,000.00	1	1	1	1	2	1	0	0	6	1	0	7	0	
L411	Works Road (east of Jubilee Road)	Letchworth Garden City	Traffic calming	Yes	Yes	400	£350.00	£140,000.00	2	0	1	0	2	1	0	0	6	1	0	7	0	
L413	Works Road (Green Lane to Jubilee Road)	Letchworth Garden City	Segregated cycleway		Yes	260	£1,000.00	£260,000.00	2	1	1	0	2	2	-1	0	6	1	0	7	0	
L416	Works Road (Dunhams Lane to Green Lane)	Letchworth Garden City	Traffic calming	Yes	Yes	300	£350.00	£105,000.00	2	0	1	0	2	1	0	0	6	1	0	7	0	
L422	Birds Hill and Works Road (to Arden Press Way)	Letchworth Garden City	Traffic calming	Yes	Yes	590	£350.00	£206,500.00	2	0	1	0	2	1	0	0	6	1	0	7	0	
L427	Jubilee Rd / retail park entrance	Letchworth Garden City	Minor Junction Improvement	Yes	Yes	1	£30,000.00	£30,000.00	2	1	0	0	2	1	0	1	5	2	0	7	0	
L431	Avenue One / Sixth Avenue	Letchworth Garden City	Minor Junction Improvement	Yes	Yes	1	£30,000.00	£30,000.00	2	1	0	0	2	1	0	1	5	2	0	7	0	
L432	Avenue One / Royal Mail	Letchworth Garden City	Minor Junction Improvement	Yes		1	£30,000.00	£30,000.00	2	1	0	0	2	1	0	1	5	2	0	7	0	
L434	Avenue One	Letchworth Garden City	Footway Improvements	Yes		530	£200.00	£106,000.00	2	1	0	0	2	1	0	1	5	2	0	7	0	
L436	Dunhams Lane & Sixth Avenue	Letchworth Garden City	Footway Improvements	Yes		650	£200.00	£130,000.00	2	1	0	0	2	1	0	1	5	2	0	7	0	
L437	Dunhams Lane / Sixth Avenue	Letchworth Garden City	Minor Junction Improvement	Yes	Yes	1	£30,000.00	£30,000.00	2	1	0	0	2	1	0	1	5	2	0	7	0	
L440	Pixmore Avenue (near Ridge Road)	Letchworth Garden City	New parallel crossing	Yes	Yes	1	£65,000.00	£65,000.00	1	2	-1	0	1	3	0	1	3	4	0	7	1	
L469	Broadwater Avenue	Letchworth Garden City	Segregated cycleway		Yes	560	£1,000.00	£560,000.00	1	2	-1	0	1	3	-1	0	5	2	0	7	0	
L487	Broadway (near Meadow Way)	Letchworth Garden City	New zebra crossing	Yes		1	£65,000.00	£65,000.00	2	2	1	0	0	1	0	1	5	2	0	7	0	
L494	Eastcheap (near Gernon Avenue)	Letchworth Garden City	New parallel crossing	Yes	Yes	1	£65,000.00	£65,000.00	1	2	0	0	0	3	0							

R49	The Green	Royston	Modal filter	Yes	Yes	1	£20,000.00	£20,000.00	1	1	-1	0	0	3	1	1	1	5	0	6	1	
R54	Newmarket Road / Eastfield Road	Royston	Minor Junction Improvement	Yes	Yes	1	£30,000.00	£30,000.00	2	1	-1	2	0	1	0	1	4	2	0	6	1	
R55	Newmarket Road / Studlands Road	Royston	Minor Junction Improvement	Yes	Yes	1	£30,000.00	£30,000.00	2	1	-1	2	0	1	0	1	4	2	0	6	-1	
R56	Newmarket Road / Wheatfield Crescent	Royston	Minor Junction Improvement	Yes	Yes	1	£30,000.00	£30,000.00	2	1	-1	2	0	1	0	1	4	2	0	6	1	
R58	Newmarket Road / Valley Rise	Royston	Minor Junction Improvement	Yes	Yes	1	£30,000.00	£30,000.00	2	1	-1	2	0	1	0	1	4	2	0	6	1	
R76	Gower Road / Old North Road	Royston	Minor Junction Improvement	Yes	Yes	1	£30,000.00	£30,000.00	2	1	-1	1	1	1	0	1	4	2	0	6	1	
R82	Phillips Avenue / Old North Road	Royston	Minor Junction Improvement	Yes	Yes	1	£30,000.00	£30,000.00	2	1	-1	1	1	1	0	1	4	2	0	6	-1	
R84	Old North Road near Willowside	Royston	New/Improved signal crossing	Yes	Yes	1	£65,000.00	£65,000.00	2	1	-1	1	1	1	0	1	4	2	0	6	0	
R86	Old North Road / Tesco Roundabout	Royston	Large Junction Improvement	Yes	Yes	1	£1,580,000.00	£1,580,000.00	2	2	-1	0	1	1	3	-1	1	5	3	-2	6	-1
R93	The Warren / Barkway Street	Royston	Minor Junction Improvement	Yes	Yes	1	£30,000.00	£30,000.00	2	1	0	0	1	1	0	1	4	2	0	6	0	
R95	Layton Park / London Road	Royston	Minor Junction Improvement	Yes	Yes	1	£30,000.00	£30,000.00	2	1	-1	0	2	1	0	1	4	2	0	6	0	
B108	Anchor Road	Baldock	Modal filter	Yes	Yes	1	£20,000.00	£20,000.00	1	1	1	0	0	3	0	0	3	3	0	6	0	
B109	Chalk Hills	Baldock	Modal filter	Yes	Yes	1	£20,000.00	£20,000.00	1	1	1	0	0	3	0	0	3	3	0	6	0	
H142	Whitehill Road / Highbury Road	Hitchin	Large Junction Improvement	Yes	Yes	1	£1,580,000.00	£1,580,000.00	2	2	0	1	1	1	3	-1	0	6	2	-2	6	-1
H146	Queen Street / Portmill Lane	Hitchin	Minor Junction Improvement	Yes	Yes	1	£30,000.00	£30,000.00	1	2	1	0	0	1	0	1	4	2	0	6	0	
H148	Queen Street (near Asda)	Hitchin	New/Improved signal crossing	Yes	Yes	1	£65,000.00	£65,000.00	1	1	1	0	1	1	0	1	4	2	0	6	0	
H159	Whitehurst Avenue / Strathmore Avenue	Hitchin	Minor Junction Improvement	Yes	Yes	1	£30,000.00	£30,000.00	2	1	1	0	0	1	0	1	4	2	0	6	0	
H166	Strathmore Avenue / Perthwinkle Lane	Hitchin	Mid-Size Junction Improvement	Yes	Yes	1	£500,000.00	£500,000.00	2	2	0	0	0	0	2	-1	1	4	2	0	6	0
H190	Walsworth Road / Whinbush Road	Hitchin	Minor Junction Improvement	Yes	Yes	1	£30,000.00	£30,000.00	2	1	1	0	0	0	1	0	1	4	2	0	6	0
R208	London Road	Royston	Footway Improvements	Yes		400	£200.00	£80,000.00	2	2	0	0	0	1	0	0	1	5	1	0	6	1
R210	Tannery Drift	Royston	Footway Improvements	Yes		300	£200.00	£60,000.00	2	1	0	1	1	0	0	1	5	1	0	6	0	
R213	Old North Road	Royston	Footway Improvements	Yes		850	£200.00	£170,000.00	2	1	-1	2	1	0	0	1	5	1	0	6	0	
R216	Mill Road & Queens Road	Royston	Traffic calming	Yes		580	£350.00	£203,000.00	2	0	1	1	1	0	0	0	6	0	0	6	0	
R220	Melbourn Street	Royston	Traffic calming	Yes	Yes	200	£350.00	£70,000.00	2	0	1	2	1	0	0	0	6	0	0	6	1	
R221	Baldock Street	Royston	Traffic calming	Yes	Yes	150	£350.00	£52,500.00	2	0	1	2	1	0	0	0	6	0	0	6	1	
R223	Tannery Drift & Green Drift	Royston	Traffic calming	Yes	Yes	630	£350.00	£220,500.00	2	2	0	1	1	0	0	0	6	0	0	6	1	
R226	Priory Lane, Barkway Street, Market Hill (Gyratory)	Royston	Segregated cycleway		Yes	640	£1,000.00	£640,000.00	2	2	0	1	0	1	-1	1	5	1	0	6	1	
B237	Crabtree Lane	Baldock	Footway Improvements	Yes		640	£200.00	£128,000.00	1	1	1	0	1	1	0	1	4	2	0	6	0	
B244	Sun Street	Baldock	Footway Improvements	Yes		60	£200.00	£12,000.00	2	1	1	0	0	1	0	1	4	2	0	6	0	
B245	Church Street	Baldock	Footway Improvements	Yes		280	£200.00	£56,000.00	2	1	1	0	0	1	0	1	4	2	0	6	0	
B251	Station Road & North Road	Baldock	Traffic calming	Yes	Yes	300	£350.00	£105,000.00	2	0	1	2	0	1	0	0	5	1	0	6	1	
B252	Royston Road	Baldock	Traffic calming	Yes	Yes	300	£350.00	£105,000.00	2	0	1	2	0	1	0	0	5	1	0	6	0	
B254	South Road	Baldock	Traffic calming	Yes	Yes	360	£350.00	£126,000.00	2	0	1	1	1	1	0	0	5	1	0	6	0	
B255	Weston Way	Baldock	Traffic calming	Yes	Yes	870	£350.00	£304,500.00	2	0	1	0	2	1	0	0	5	1	0	6	0	
B257	Hitchin Street	Baldock	Traffic calming	Yes	Yes	280	£350.00	£98,000.00	2	0	1	1	1	1	0	0	5	1	0	6	0	
B258	Whitehorse Street	Baldock	Traffic calming	Yes	Yes	230	£350.00	£80,500.00	2	0	1	1	1	1	0	0	5	1	0	6	0	
I268	Stevenage Road (parallel)	Inter-Urban Route (Hitchin to Stevenage)	Segregated cycleway		Yes	610	£1,000.00	£610,000.00	2	2	1	1	1	2	-2	-1	7	-1	0	6	-1	
I271	Stevenage Road (through Little Wymondley)	Inter-Urban Route (Hitchin to Stevenage)	Traffic calming		Yes	1200	£1,000.00	£1,200,000.00	1	3	0	1	2	1	0	-1	6	0	0	6	0	
H286	Cambridge Road (to Briar Patch Lane)	Hitchin	Segregated cycleway		Yes	1600	£1,000.00	£1,600,000.00	2	3	1	1	1	2	-2	0	8	0	-2	6	0	
H290	High Street	Hitchin	Traffic calming	Yes	Yes	110	£350.00	£38,500.00	2	3	-1	0	0	2	0	0	4	2	0	6	0	
H291	Backcliffe Road	Hitchin	Traffic calming	Yes	Yes	270	£350.00	£94,500.00	2	3	0	0	0	2	0	0	4	2	0	6	0	
H292	Dacre Road	Hitchin	Traffic calming	Yes	Yes	230	£350.00	£80,500.00	2	3	0	0	0	2	0	0	4	2	0	6	0	
H295	Cambridge Road	Hitchin	Traffic calming	Yes	Yes	670	£350.00	£234,500.00	2	0	1	1	1	1	0	0	5	1	0	6	0	
H298	Old Hale Way	Hitchin	Traffic calming	Yes	Yes	370	£350.00	£129,500.00	1	0	1	1	2	1	0	0	5	1	0	6	0	
H299	Arlesley Road	Hitchin	Traffic calming	Yes	Yes	1300	£350.00	£455,000.00	2	0	1	1	1	1	0	0	5	1	0	6	0	
H305	Walsworth Road	Hitchin	Footway Improvements	Yes		800	£200.00	£160,000.00	2	1	1	0	0	1	0	1	4	2	0	6	0	
H306	Queen Street	Hitchin	Footway Improvements	Yes		480	£200.00	£96,000.00	1	1	1	0	1	1	0	1	4	2	0	6	0	
H310	West Alley & Nun's Close	Hitchin	Footway Improvements	Yes		200	£200.00	£40,000.00	2	1	0	1	0	1	0	1	4	2	0	6	0	
H313	Bancroft (south)	Hitchin	Footway Improvements	Yes		110	£200.00	£22,000.00	2	1	0	0	1	1	0	1	4	2	0	6	0	
H314	Hemitage Road	Hitchin	Footway Improvements	Yes		150	£200.00	£30,000.00	2	1	0	0	0	1	0	1	4	2	0	6	0	
H315	Bancroft (north)	Hitchin	Footway Improvements	Yes		230	£200.00	£46,000.00	2	1	0	0	1	1	0	1	4	2	0	6	0	
H318	Path through Butts Close	Hitchin	Footway Improvements	Yes		300	£200.00	£60,000.00	1	1	0	1	1	1	0	1	4	2	0	6	0	
L329	Workers Lane (alley) (North of Common View)	Letchworth Garden City	Footway Improvements	Yes		150	£200.00	£30,000.00	2	1	0	1	0	1	0	1	4	2	0	6	0	
L330	Workers Lane (south of Common View)	Letchworth Garden City	Footway Improvements	Yes		120	£200.00	£24,000.00	2	1	0	1	0	1	0	1	4	2	0	6	0	
L335	Radburn Way off-road path & steps improvements	Letchworth Garden City	Footway Improvements	Yes		100	£200.00	£20,000.00	1	1	0	1	1	1	0	1	4	2	0	6	0	
L338	Bridge between Highover Road and Chiltern View	Letchworth Garden City	Footway Improvements	Yes		70	£200.00	£14,000.00	1	1	1	0	1	1	0	1	4	2	0	6	1	
L355	Link to The Highfield School from RoW	Letchworth Garden City	Footway Improvements	Yes		70	£200.00	£14,000.00	1	1	0	0	2	1	0	1	4	2	0	6	0	
L389	Idnield Way / Redhods Way West	Letchworth Garden City	Minor Junction Improvement	Yes	Yes	1	£30,000.00	£30,000.00	2	1	1	0	0	1	0	1	4	2	0	6	0	
L391	Idnield Way (near Bedford Road)	Letchworth Garden City	New zebra crossing	Yes		1	£65,000.00	£65,000.00	1	2	1	0	0	0	1	0	4	2	0	6	0	
L394	Idnield Way (from Spring Road to Norton Way North)	Letchworth Garden City	Traffic calming	Yes	Yes	1200	£350.00	£420,000.00	2	0	1	0	1	1	0	0	5	1	0	6	-1	
L421	Works Road (Ardien Press Way to Dunham Lane)	Letchworth Garden City	Segregated cycleway		Yes	300	£1,000.00	£300,000.00	2	1	1	0	2	1	-1	0	6	0	0	6	0	
L425	Jubilee Rd	Letchworth Garden City	Footway Improvements	Yes		350	£200.00	£70,000.00	2	1	0	0	2	1	0	1	4	2	0	6	0	
L428	Second Avenue	Letchworth Garden City	Segregated cycleway		Yes	200	£1,000.00	£200,000.00	1	1	-1	0	2	3	0	0	3	3	0	6	0	
L429	Second Avenue / Avenue One	Letchworth Garden City	Minor Junction Improvement	Yes	Yes	1	£30,000.00	£30,000.00	2	1	-1	0	2	1	0	1	4	2	0	6	0	
L445	Ridge Road / Birds Hill	Letchworth Garden City	Minor Junction Improvement	Yes	Yes	1	£30,000.00	£30,000.00	2	1	0	0	1	1	0	1	4	2	0	6	0	
L454	Rushby Mead / Ploxmore Way	Letchworth Garden City	Minor Junction Improvement	Yes	Yes	1	£30,000.00	£30,000.00	2	1	1	0	0	1	0	1	4	2	0	6	1	
L478	Broadway (Broadway Gardens Loop)	Letchworth Garden City	Footway Improvements	Yes		550	£200.00	£110,000.00	2	1	1	0	0	1	0	1	4	2	0	6	0	
L480	Broadway (north of Gardens, east side)	Letchworth Garden City	Footway Improvements	Yes		250	£200.00	£50,000.00	2	1	0	0	0	1	0	1	4	2	0	6	0	
L484	Broadway (near West View)	Letchworth Garden City	New zebra crossing	Yes		1	£65,000.00	£65,000.00	1	2	1	0	0	1	0	1	4	2	0	6	0	
L485	Broadway / South View	Letchworth Garden City	Minor Junction Improvement	Yes	Yes	1	£30,000.00	£30,000.00	2	1	1	0	0	1	0	1	4	2	0	6	0	
L486	Broadway / Meadow Way	Letchworth Garden City	Minor Junction Improvement	Yes	Yes	1	£30,000.00	£30,000.00	2	1	1	0	0	1	0	1	4	2	0	6	0	
L488	Broadway / Ploxmore Way	Letchworth Garden City	Minor Junction Improvement	Yes	Yes	1	£30,000.00	£30,000.00	2	1	1	0	0	1	0	1	4	2	0	6	0	
L505	Leys Avenue & Station Place	Letchworth Garden City	Footway Improvements	Yes		190	£200.00	£38,000.00	2	1	0	0	1	1	0	1	4	2	0	6	0	
L506	Bridge Road & Station Place & Station Road	Letchworth Garden City	Footway Improvements	Yes		360	£200.00	£72,000.00	2	1	1	0	0	1	0	1	4	2	0	6	0	
L512	Norton Way North and South	Letchworth Garden City	Segregated cycleway	</																		

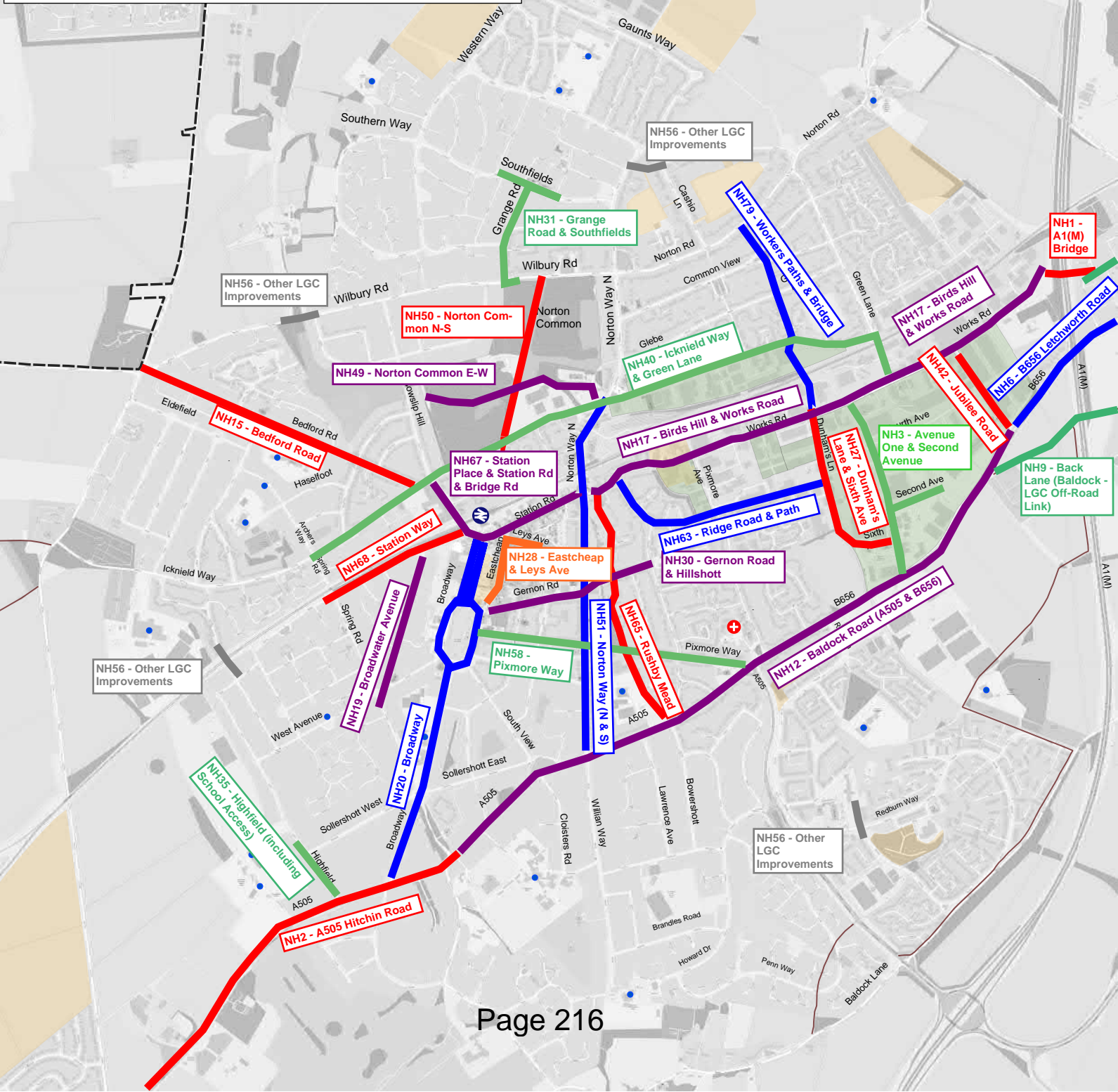
B246	Icknield Way	Baldock	Footway Improvements	Yes		380	£200.00	£76,000.00	2	1	0	0	0	1	0	1	3	2	0	5	0	
B256	West Avenue	Baldock	Traffic calming	Yes	Yes	270	£350.00	£94,500.00	2	1	0	0	1	1	0	0	4	1	0	5	1	
H287	Sun Street	Hitchin	Traffic calming	Yes	Yes	160	£350.00	£56,000.00	1	3	-1	0	0	2	0	0	3	2	0	5	0	
H288	Bucklersbury	Hitchin	Traffic calming	Yes	Yes	150	£350.00	£52,500.00	1	3	-1	0	0	2	0	0	3	2	0	5	0	
H289	Market Place	Hitchin	Traffic calming	Yes	Yes	110	£350.00	£38,500.00	1	3	-1	0	0	2	0	0	3	2	0	5	0	
H293	Nightingale Road	Hitchin	Traffic calming	Yes	Yes	480	£350.00	£168,000.00	2	0	1	0	1	1	0	0	4	1	0	5	0	
L333	Railway bridge (north of Dunhams Lane)	Letchworth Garden City	Pedestrian/cycle bridge	Yes	Yes		£2,000,000.00	£2,000,000.00	2	1	1	2	2	1	-2	0	8	-1	-2	5	0	
L342	Kite Way / Wilbury Road	Letchworth Garden City	Minor Junction Improvement	Yes	Yes	1	£30,000.00	£30,000.00	1	1	1	0	0	1	0	1	3	2	0	5	1	
L343	Wilbury Road (near Kite Way)	Letchworth Garden City	Segregated cycleway		Yes	80	£1,000.00	£80,000.00	1	2	0	1	0	2	-1	0	4	1	0	5	1	
L344	Southfields	Letchworth Garden City	Traffic calming	Yes	Yes	220	£350.00	£77,000.00	1	0	0	1	1	1	0	0	4	1	0	5	0	
L349	Bedford Road	Letchworth Garden City	Segregated cycleway		Yes	1000	£1,000.00	£1,000,000.00	2	2	0	0	1	2	-1	0	5	1	-1	5	1	
L352	Norton Common east-west path	Letchworth Garden City	Segregated cycleway		Yes	620	£1,000.00	£620,000.00	1	2	0	0	0	2	0	0	3	2	0	5	1	
L390	Icknield Way / Marnet Avenue	Letchworth Garden City	Minor Junction Improvement	Yes	Yes	1	£30,000.00	£30,000.00	1	1	1	0	0	1	0	1	3	2	0	5	0	
L439	Path between Pixmore Avenue and Dunhams Lane	Letchworth Garden City	Footway Improvements	Yes	Yes	420	£200.00	£84,000.00	1	2	-1	0	1	1	0	1	3	2	0	5	1	
L442	Ridge Road / Ridge Road	Letchworth Garden City	Minor Junction Improvement	Yes	Yes	1	£30,000.00	£30,000.00	1	1	0	0	1	1	0	1	3	2	0	5	0	
L443	Ridge Road / Ridge Road	Letchworth Garden City	Minor Junction Improvement	Yes	Yes	1	£30,000.00	£30,000.00	1	1	0	0	1	1	0	1	3	2	0	5	0	
L444	Ridge Road / Ridge Avenue	Letchworth Garden City	Minor Junction Improvement	Yes	Yes	1	£30,000.00	£30,000.00	1	1	0	0	1	1	0	1	3	2	0	5	0	
L449	Hillshott	Letchworth Garden City	Traffic calming	Yes	Yes	250	£350.00	£87,500.00	2	0	0	0	1	1	0	0	4	1	0	5	0	
L453	Rushby Mead	Letchworth Garden City	Traffic calming	Yes	Yes	920	£350.00	£322,000.00	2	0	0	0	0	1	1	0	0	4	1	0	5	1
L460	Burnell Rise (near Spring Road)	Letchworth Garden City	New zebra crossing	Yes	Yes	1	£65,000.00	£65,000.00	1	2	0	0	0	1	0	1	3	2	0	5	1	
L464	Station Way / Broadwater Avenue	Letchworth Garden City	Minor Junction Improvement	Yes	Yes	1	£30,000.00	£30,000.00	2	1	0	0	0	1	0	1	3	2	0	5	0	
L465	Station Way / Morrisons Entrance	Letchworth Garden City	Minor Junction Improvement	Yes	Yes	1	£30,000.00	£30,000.00	2	1	0	0	0	1	0	1	3	2	0	5	0	
L470	West View / Spring Road	Letchworth Garden City	Minor Junction Improvement	Yes	Yes	1	£30,000.00	£30,000.00	1	1	-1	0	2	1	0	1	3	2	0	5	1	
L482	Broadway (north of Gardens, west side)	Letchworth Garden City	Footway Improvements	Yes		250	£200.00	£50,000.00	1	1	1	0	0	1	0	1	3	2	0	5	0	
L489	Broadway (near Arena Parade)	Letchworth Garden City	New/improved signal crossing	Yes		1	£65,000.00	£65,000.00	1	1	1	0	0	1	0	1	3	2	0	5	0	
L490	Gernon Road	Letchworth Garden City	Footway Improvements	Yes		380	£200.00	£76,000.00	2	1	0	0	0	1	0	1	3	2	0	5	0	
L493	Eastcheap (near Arena Parade)	Letchworth Garden City	New zebra crossing	Yes		1	£65,000.00	£65,000.00	1	2	0	0	0	1	0	1	3	2	0	5	0	
L498	Gernon Road / Rowland Way	Letchworth Garden City	Minor Junction Improvement	Yes	Yes	1	£30,000.00	£30,000.00	2	1	0	0	0	1	0	1	3	2	0	5	0	
L516	Norton Way South (near Station Road)	Letchworth Garden City	New zebra crossing	Yes		1	£65,000.00	£65,000.00	1	2	0	0	0	1	0	1	3	2	0	5	0	
L522	Norton Way South (near Openshaw Way)	Letchworth Garden City	New zebra crossing	Yes		1	£65,000.00	£65,000.00	1	2	0	0	0	1	0	1	3	2	0	5	0	
L523	Norton Way South / Meadow Way	Letchworth Garden City	Minor Junction Improvement	Yes	Yes		£30,000.00	£30,000.00	1	1	0	0	1	1	0	1	3	2	0	5	0	
K524	Swanley's Lane	Knebworth	Footway Improvements	Yes		340	£200.00	£68,000.00	1	1	0	2	1	1	0	-1	5	0	0	5	1	
K23	Cippy Lane / Park Lane	Knebworth	Minor Junction Improvement	Yes	Yes	1	£30,000.00	£30,000.00	1	1	0	1	0	1	0	0	3	1	0	4	1	
K25	Stockens Green	Knebworth	Footway Improvements	Yes		360	£200.00	£72,000.00	1	1	0	0	0	1	0	1	2	2	0	4	-1	
K34	Park Lane	Knebworth	Traffic calming	Yes	Yes	1200	£350.00	£420,000.00	2	0	0	1	1	1	-1	0	4	0	0	4	1	
K35	High Street (London Road)	Knebworth	Traffic calming	Yes	Yes	150	£350.00	£52,500.00	2	0	1	0	1	1	-1	0	4	0	0	4	-1	
R87	Market Hill / Market Hill	Royston	Minor Junction Improvement	Yes	Yes	1	£30,000.00	£30,000.00	1	1	0	0	0	0	1	2	2	0	4	0		
R88	Fish Hill / Market Hill	Royston	Minor Junction Improvement	Yes	Yes	1	£30,000.00	£30,000.00	1	1	0	0	0	1	0	1	2	2	0	4	0	
B104	Wallington Road / Clothall Road	Baldock	Large Junction Improvement	Yes	Yes	1	£1,580,000.00	£1,580,000.00	1	2	0	2	1	2	-1	-1	6	0	-2	4	0	
H165	Artesey Road (under rail bridge)	Hitchin	Signalised shuttle system	Yes	Yes	1	£750,000.00	£750,000.00	2	3	1	0	0	1	-1	-1	6	-1	-1	4	0	
R215	Lower King St (Square)	Royston	Pedestrian Zone	Yes		1	£350,000.00	£350,000.00	2	2	0	1	1	0	-1	6	-2	0	4	0		
R227	London Road	Royston	Segregated cycleway	Yes	Yes	250	£1,000.00	£250,000.00	2	2	0	0	1	1	-1	-1	5	-1	0	4	1	
B250	Bygrave Road	Baldock	Traffic calming	Yes	Yes	250	£350.00	£87,500.00	2	0	0	2	0	1	0	-1	4	0	0	4	0	
B253	Sale Drive & Yeomanry Drive	Baldock	Traffic calming	Yes	Yes	1900	£350.00	£665,000.00	1	0	0	1	1	1	0	0	3	1	0	4	0	
B263	London Road	Baldock	Segregated cycleway		Yes	950	£1,000.00	£950,000.00	1	2	1	0	0	3	-2	0	4	1	-1	4	-1	
H275	Queen Street	Hitchin	Traffic calming	Yes	Yes	120	£350.00	£42,000.00	1	0	1	0	0	1	1	0	0	3	1	0	4	0
H294	Walsworth Road	Hitchin	Traffic calming	Yes	Yes	690	£350.00	£241,500.00	2	0	1	0	0	1	0	0	3	1	0	4	0	
H307	Biggin Lane & Churchgate	Hitchin	Footway Improvements	Yes		190	£200.00	£38,000.00	1	1	0	0	0	1	0	1	2	2	0	4	0	
H309	High Street	Hitchin	Footway Improvements	Yes		110	£200.00	£22,000.00	2	1	-1	0	0	1	0	1	2	2	0	4	0	
L337	Howard Drive (near Lordship Farm Primary School)	Letchworth Garden City	New zebra crossing	Yes		1	£65,000.00	£65,000.00	1	2	-1	0	0	1	0	1	2	2	0	4	1	
L353	Norton Common east-west path	Letchworth Garden City	Footway Improvements	Yes		620	£200.00	£124,000.00	1	1	0	0	0	1	0	1	2	2	0	4	1	
L357	Highfield	Letchworth Garden City	Segregated cycleway		Yes	220	£1,000.00	£220,000.00	1	1	-1	0	0	2	-1	0	3	1	0	4	1	
L441	Pixmore Avenue / Ridge Road	Letchworth Garden City	Minor Junction Improvement	Yes	Yes	1	£30,000.00	£30,000.00	1	1	-1	0	1	1	0	1	2	2	0	4	0	
L446	Ridge Road	Letchworth Garden City	Traffic calming	Yes	Yes	440	£350.00	£154,000.00	2	0	0	0	1	1	0	0	3	1	0	4	0	
L455	Pixmore Way / The Crescent	Letchworth Garden City	Minor Junction Improvement	Yes	Yes	1	£30,000.00	£30,000.00	1	1	-1	0	0	0	1	0	2	2	0	4	0	
L456	Pixmore Way / Ridge Avenue	Letchworth Garden City	Minor Junction Improvement	Yes	Yes	1	£30,000.00	£30,000.00	2	1	-1	0	0	1	0	1	2	2	0	4	0	
L457	Pixmore Way (east)	Letchworth Garden City	Traffic calming	Yes	Yes	570	£350.00	£199,500.00	2	0	0	0	0	1	0	0	3	1	0	4	1	
L458	Pixmore Way (west)	Letchworth Garden City	Traffic calming	Yes	Yes	400	£350.00	£140,000.00	2	0	0	0	0	1	0	0	3	1	0	4	1	
L462	Station Way	Letchworth Garden City	Traffic calming	Yes	Yes	530	£350.00	£185,500.00	2	1	0	0	0	1	0	0	3	1	0	4	0	
L492	Eastcheap	Letchworth Garden City	Footway Improvements	Yes		260	£200.00	£52,000.00	1	1	0	0	0	0	1	2	2	0	4	0		
L517	Norton Way South / Openshaw Way	Letchworth Garden City	Minor Junction Improvement	Yes	Yes	1	£30,000.00	£30,000.00	1	1	0	0	0	1	0	1	2	2	0	4	0	
K525	Watton Road	Knebworth	Footway Improvements	Yes		450	£200.00	£90,000.00	1	1	0	2	0	1	0	-1	4	0	0	4	1	
H529	Wymondley Road	Hitchin	Signalised shuttle system	Yes	Yes	1	£750,000.00	£750,000.00	1	2	1	1	0	1	-1	0	5	0	-1	4	-1	
K2	Under rail bridge (Station Road)	Knebworth	Signalised shuttle system	Yes	Yes	1	£750,000.00	£750,000.00	2	3	0	0	0	1	-2	-1	6	-2	-1	3	-1	
K36	Gun Road	Knebworth	Traffic calming	Yes	Yes	190	£350.00	£66,500.00	2	0	1	0	0	1	-1	0	3	0	0	3	0	
R201	Fish Hill	Royston	Footway Improvements	Yes		200	£200.00	£40,000.00	2	1	0	0	0	0	0	1	2	1	0	3	1	
R202	John St	Royston	Footway Improvements	Yes		50	£200.00	£10,000.00	1	0	0	0	0	0	0	1	2	1	0	3	1	
R205	Jeggs Lane & Church Lane	Royston	Footway Improvements	Yes		130	£200.00	£26,000.00	1	1	0	0	0	0	0	1	2	1	0	3	1	
R206	Market Hill	Royston	Footway Improvements	Yes	Yes	200	£200.00	£40,000.00	1	1	0	0	0	0	0	1	2	1	0	3	1	
R218	The Warren	Royston	Traffic calming	Yes	Yes	170	£350.00	£59,500.00	2	0	0	0	0	1	0	0	3	0	0	3	1	
R219	London Road	Royston	Traffic calming	Yes	Yes	400	£350.00	£140,000.00	2	0	0	0	0	1	0	0	3	0	0	3	1	
H296	Ickleford Road & Whitehust Avenue	Hitchin	Traffic calming	Yes	Yes	610	£350.00	£213,500.00	2	0	0	0	0	1	0	0	2	1	0	3	0	
H308	Bucklersbury	Hitchin	Footway Improvements	Yes		150	£200.00	£30,000.00	1	1	-1	0	0	0	1	0	1	2	0	3	0	
H312	Churchyard Walk	Hitchin	Footway Improvements	Yes		170	£200.00	£34,000.00	1	1	-1	0	0	0	1	0	1	2	0	3	0	
L354	Outdoor Pool (Norton Common) access road	Letchworth Garden City	Traffic calming	Yes	Yes	70	£350.															

APPENDIX I

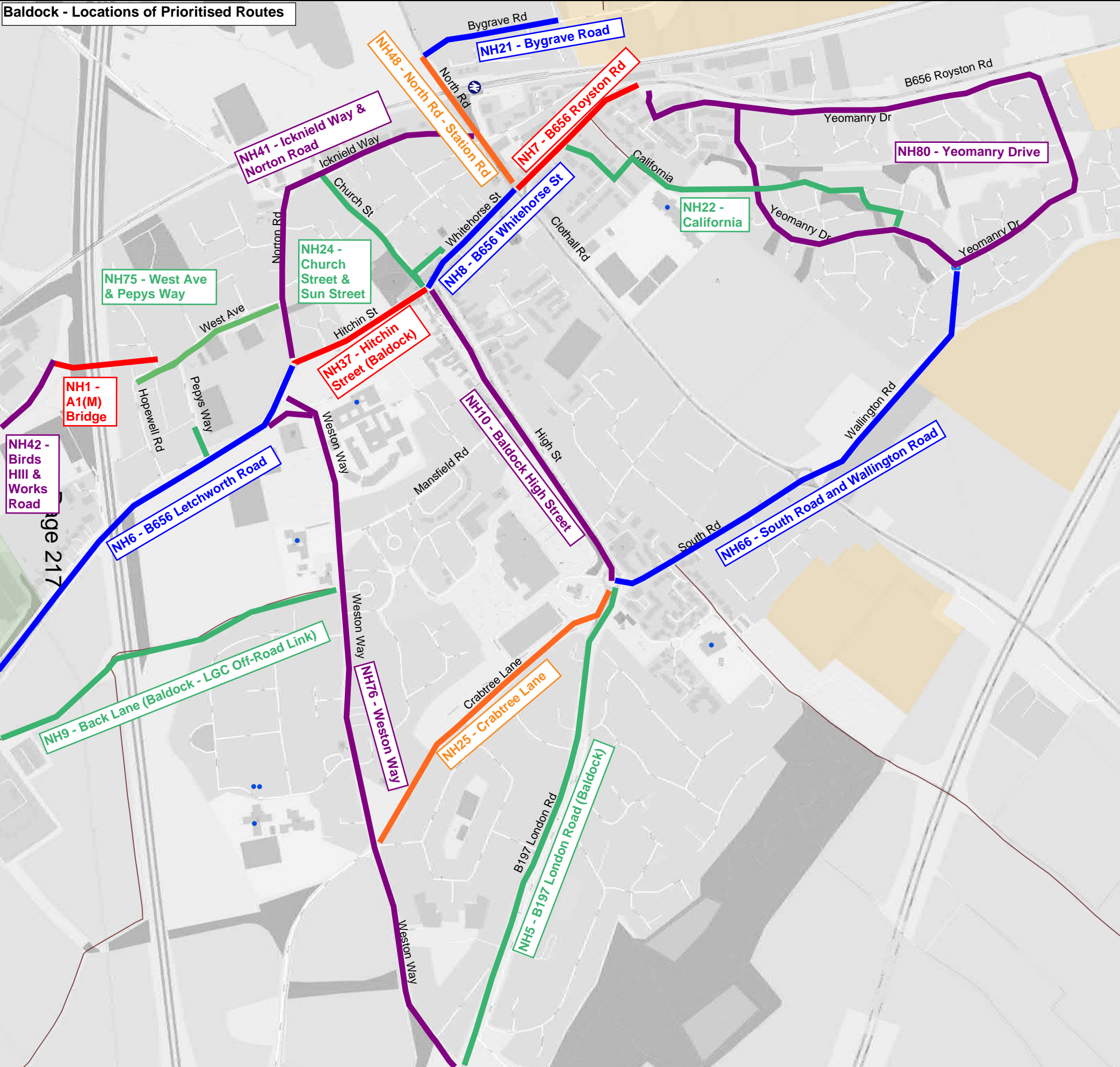
Hitchin - Locations of Prioritised Routes

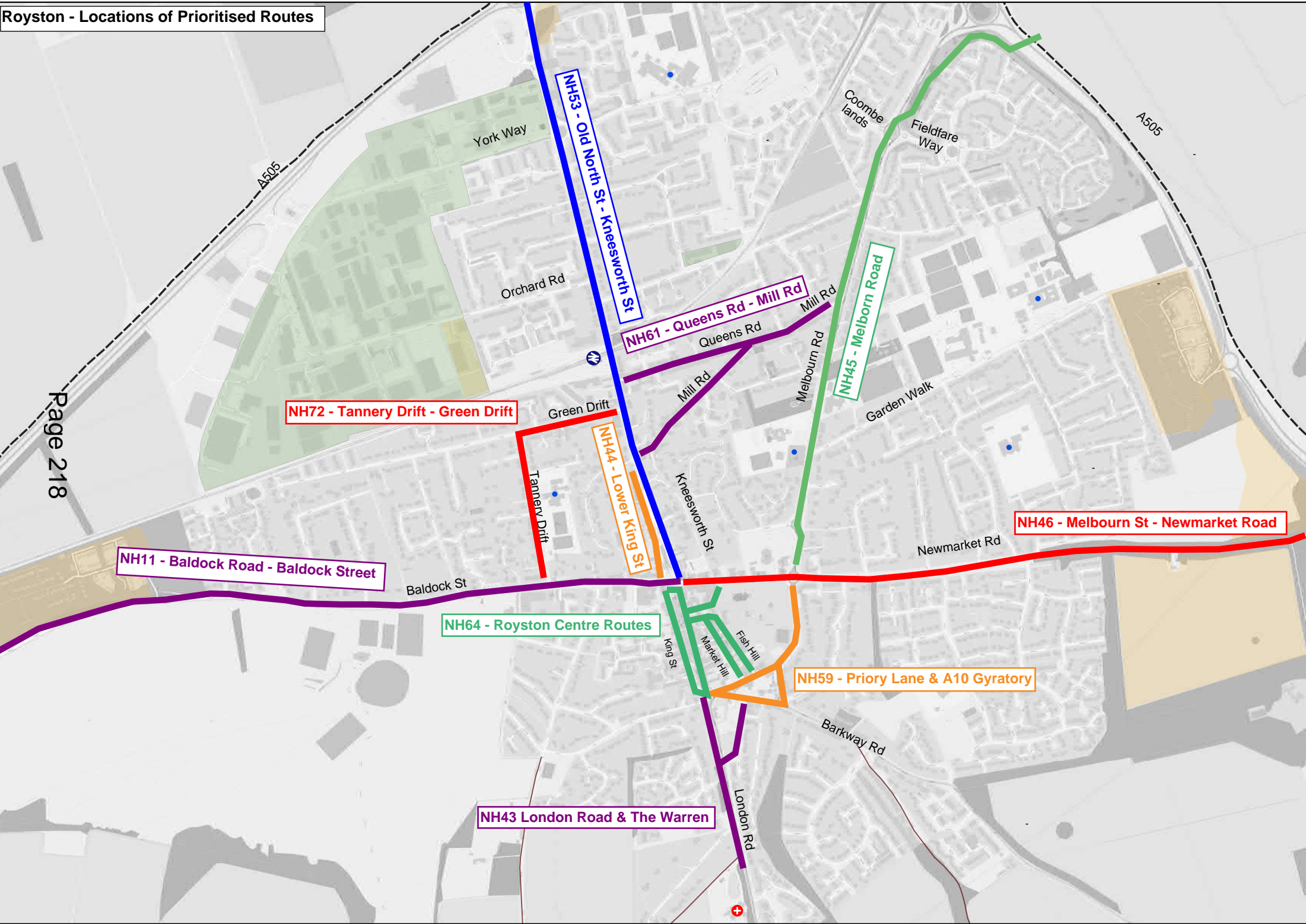


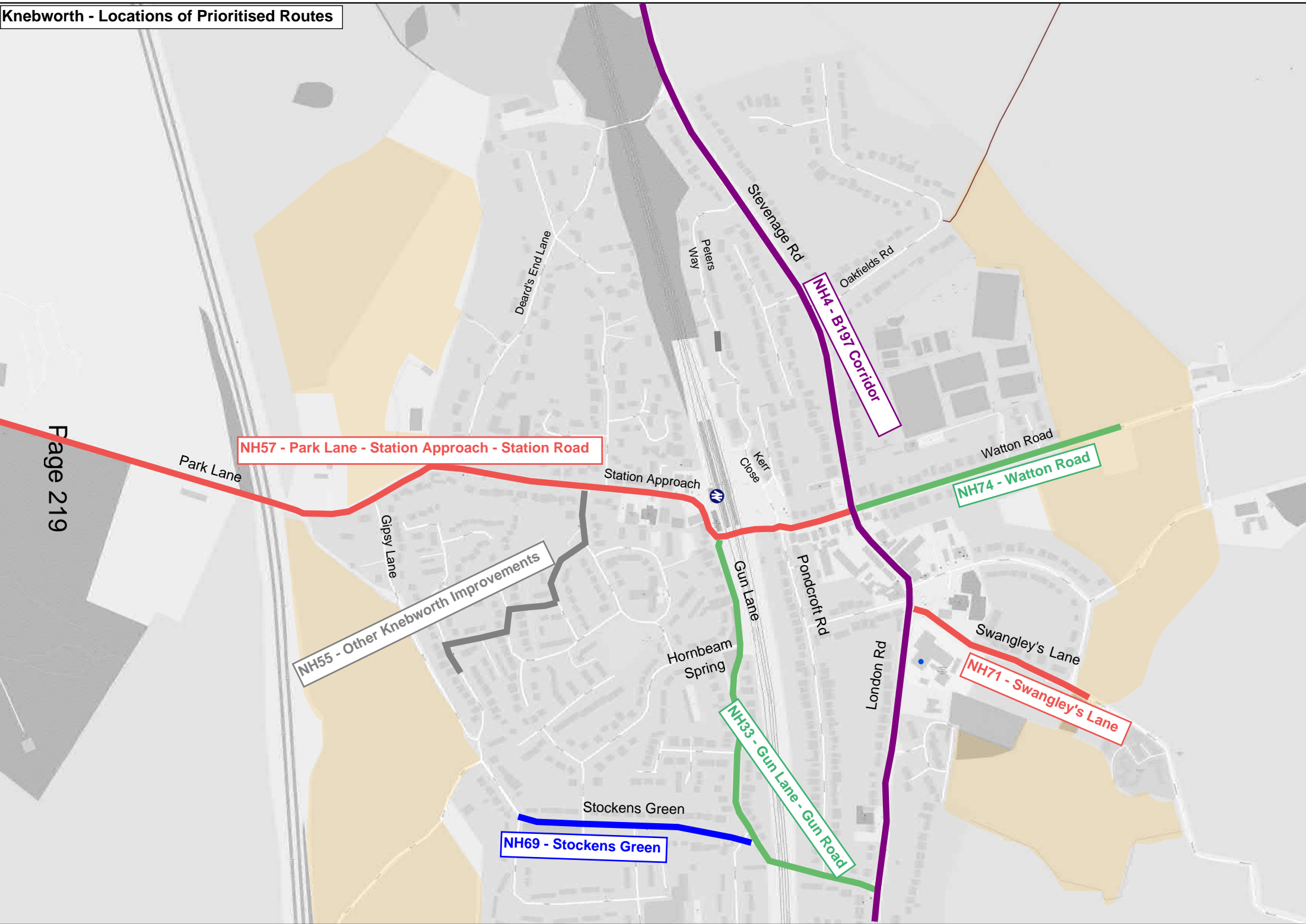
Letchworth Garden City - Locations of Prioritised Routes



Baldock - Locations of Prioritised Routes







APPENDIX J

Acronyms Used in this Report

(listed in alphabetical order)

BSIP	Bus Service Improvement Plan
CWZ	Core Walking Zone
CWIS	Cycling and Walking Investment Strategy
DfT	Department for Transport
GIS	Geographic Information System
HCC	Hertfordshire County Council
KNP	Knebworth Neighbourhood Plan
LCWIP	Local Cycling and Walking Infrastructure Plan
LGC	Letchworth Garden City
LTN 1/20	Local Transport Note 1/20 (Cycle Infrastructure Design)
LTP4	Local Transport Plan 4 (published by HCC)
NCGTP	North Central Growth and Transport Plan
NCN	National Cycle Network
NHDC	North Herts District Council
PCT	Propensity to Cycle Tool
ROW	(Public) Rights of Way
RST	Route Selection Tool (a DfT tool developed for LCWIP audits)
SMS	Speed Management Strategy (supporting document to LTP4)
STT	Sustainable Travel Town
WRAT	Walking Route Audit Tool (a DfT tool developed for LCWIP audits)
WSP	WSP UK (the engineering consultancy firm)

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