10. Appendix A – LCWIP technical guidance core design principles



Coherent

The network must be coherent; it must link all the places cyclists want to start and finish their journeys with a route quality that is consistent and easy to navigate. Abrupt changes in the level of provision for cyclists will mean that an otherwise serviceable route becomes disjointed and unusable by the majority of potential users.



Comfortable

Smooth surfaces, with minimal stopping and starting, without the need to ascend or descend steep gradients and which present few conflicts with other users creates comfortable conditions that are more conducive to cycling. The presence of high speed, high volume motor traffic affects both the safety and the comfort of the user.



Attractive

Cyclists are more aware of the environment they are moving through than people in cars or other motor vehicles. Cycling is a pleasurable activity, in part because it involves such close contact with the surroundings. The attractiveness of the route itself will therefore affect whether users choose to cycle.



Direct

Routes for cyclists must provide direct and fast routes from origin to destination. In order to make cycling preferable to driving, routes for cyclists must be at least as direct - and preferably more direct - than that available for private motor vehicles.

An indirect route for cyclists may result in some of them choosing the more direct, faster route, even if it is unsuitable for cycling.



Safe

Cycle networks must not only improve cyclists' safety, but also their feeling of how safe the environment is. Consideration must be given to reducing the speeds of motor vehicles to acceptable levels, particularly when cyclists are expected to share the carriageway. The need for cyclists to come into close proximity and conflict with motor traffic must be removed, particularly at junctions, where the majority of crashes occur.

LCWIP Technical Guidance (Figure 8, page 24), Department for Transport, 2017

11. Appendix B - AMAT user interface inputs

Inputs	Method
General:	
Intervention name	Scheme name
Intervention promoter	Leicestershire County Council
Appraisal year	2022
Intervention opening year	The opening year is assumed to be 2026 for all schemes
Last year of funding	2043 or 2063 depending on the appraisal period
Appraisal period	20 years and 40 years appraised for each scheme
Local area type	Determined using the AMAT spreadsheet 'Area Lookup' sheet
Cycling:	
Number of trips without the proposed intervention	Cycling flows from the Propensity to Cycle Tool (PCT) Census 2011 commuting Route Network (LSOA) dataset, uplifted to account for all trip purposes and return journeys.
Number of trips with the proposed intervention	Central cycling potential estimates from Active Travel England's (ATE) Active Travel Uplifts Tool and Cost Benchmarks spreadsheet.
The average proportion of a trip which used the scheme infrastructure	Calculated by dividing the length of the scheme by the length of an average cycling trip (as stated in the AMAT spreadsheet).

Inputs	Method
Cycling cont'd:	
Current cycling infrastructure for this route	Selected the type of infrastructure currently in place along the route from the dropdown. Where there are more than one infrastructure type present along a route, the type was assigned based on which covers more of the route.
Proposed new cycling infrastructure for this route	Selected the type of infrastructure being proposed from the dropdown. Where more than one infrastructure type was being proposed (for >25% of the total scheme length) separate AMATs were completed for each infrastructure type.
Are any additional shower facilities being added?	Shower facilities are not being proposed for any of the schemes.
Are any additional secure storage facilities being added?	Secure storage facilities are not being proposed for any of the schemes.
Walking:	
Number of trips without the proposed intervention	Census 2011 data on commuters by Lower Super Output Area from the DataShine Tool, uplifted to account for all trip purposes and return journeys. Proportion of total network as compared to proposed network was applied to the walking trips by LSOA in 2011.
Number of trips with the proposed intervention	Central walking potential estimates from Active Travel England's (ATE) Active Travel Uplifts Tool and Cost Benchmarks spreadsheet.
The average proportion of a trip which used the scheme infrastructure	Calculated by dividing the length of the scheme by the length of an average walking trip (as stated in the AMAT spreadsheet).
Current walking infrastructure for this route	Selected the type of infrastructure currently in place along the route from the options listed.
Proposed new walking infrastructure for this route	Selected the type of infrastructure being proposed from the options listed.

12. Appendix C - Proposed cycling and walking routes

			20	-Year Appr	aisal	40-Year Appraisal			
Corridor No.	Corridor Segment	Brief Description of Scheme	PCT 2011 Census	Govt. Target Scenario	Go Dutch Scenario	PCT 2011 Census	Govt. Target Scenario	Go Dutch Scenario	
	1A	This scheme goes west from the town centre and connects to Loughborough University. This section stops at west of Ashby Rd / Greenclose Ln junction.	1.62	2.88	13.16	3.03	5.39	24.72	
	1B	This scheme goes west from the town centre and connects to Loughborough University. This section ends on the east of Ashby Rd / A6004 roundabout.	1.82	7.13	35.07	3.40	13.40	66.55	
1	1C	This scheme aims to upgrade the existing large signalised roundabout at Ashby Rd /A6004 intersection to a LTN1-20 style signalised roundabout with cycle tracks on the peripheral and crossing on each arm. This section ends on the west of Ashby Rd / A6004 roundabout.	1.12	2.84	12.52	2.11	5.37	23.75	
	1D	This scheme aims to complete the connection westwards from the town centre to the Loughborough University. This section ends on the east of Ashby Rd / Holywell Way roundabout	1.52	2.17	8.08	2.85	4.09	15.32	
3	3	This scheme provides connection south of Ashby Roundabout to the other major East-west corridor, utilising the existing wide footway space. Improving access to Loughborough College.	1.30	4.34	18.57	2.47	8.28	35.55	

			20	-Year Appr	aisal	40-Year Appraisal			
Corridor No.	Corridor Segment	Brief Description of Scheme	PCT 2011 Census	Govt. Target Scenario	Go Dutch Scenario	PCT 2011 Census	Govt. Target Scenario	Go Dutch Scenario	
4 (NW)	4A	This scheme aims to upgrade the existing large signalised roundabout at Bishop Meadow to a LTN1-20 style signalised roundabout with cycle tracks on the peripheral and crossing on each arm.	1.50	2.68	11.47	2.81	5.02	21.54	
	4B	This corridor aims to provide a connection from the Bishop Meadow roundabout in the west towards Loughborough town centre. This section stops at Clifford Rd.	1.48	4.24	17.45	2.77	7.97	33.06	
	4C	This scheme aims to provide connection from the Bishop Meadow roundabout in the west towards Loughborough town centre. This section stops at right at Swan Street.	0.66	1.65	6.74	1.22	3.11	12.76	
	4E	This scheme aims to connect the south-eastern region with the town centre. The majority of High St is one-way and does not allow motor vehicles only for access. This section is just the Southfield Rd / Leicester Rd Junction.	1.30	0.54	1.04	2.47	1.01	1.96	
4 (SE)	4F	This scheme aims to connect the south-eastern region with the town centre. This section stops at right after Southfield Rd / Leicester Rd Junction.	1.19	1.96	7.58	2.23	3.68	14.32	
	4G	This scheme aims to provide a new signalised junction arrangement for cyclists and pedestrians, continue south and ends at Cedar Rd before the A6 becomes 40mph. This section ends at the Cedar Rd / A6 Leicester Rd Junction.	1.69	7.08	35.00	3.14	13.23	65.97	

			20	-Year Appr	aisal	40	aisal	
Corridor No.	Corridor Segment	Brief Description of Scheme	PCT 2011 Census	Govt. Target Scenario	Go Dutch Scenario	PCT 2011 Census	Govt. Target Scenario	Go Dutch Scenario
	6A	This scheme aims to connect the Loughborough train station with the town centre. This section ends at west of Sparrow Hill Junction.	1.34	11.58	53.02	2.50	21.93	101.78
6	6B	This scheme aims to connect the Loughborough train station with the town centre. This section ends at east of the canal.	1.74	3.28	13.55	3.26	6.19	25.66
	6C	This scheme aims to connect the Loughborough train station with the town centre. This section ends at the Loughborough train station.	1.36	1.15	5.57	2.55	2.15	10.42
7	7	This scheme goes through Loughborough town centre high street which is non-motorised and currently a pedestrian zone and only allows cyclists and loading between the hours of 4 pm and 10 am. This route would link routes 1A, 4C, 4E and 8 together. The route has a market which will need to be addressed and operates Thursdays and Saturdays. This section is the Loughborough Town Centre Pedestrianised Area. This section stops right after High St / Baxter Gate Junction.	1.50	1.59	5.78	2.81	2.97	10.83
8	8	This scheme aims to connect the Loughborough train station with the town centre. This section ends at west of Lemyngton St Junction.	1.64	1.45	4.66	3.09	2.74	8.82
10	10	This scheme aims to upgrade the existing large signalised roundabout at Forest Rd/ A6004 to a LTN1-20 style signalised roundabout with cycle tracks on the peripheral and crossing on each arm.	1.07	2.91	12.20	2.00	5.47	23.00
22	22	This scheme provides connection north of Ashby Roundabout, utilising the existing wide footway space.	0.26	0.78	3.54	0.49	1.47	6.72

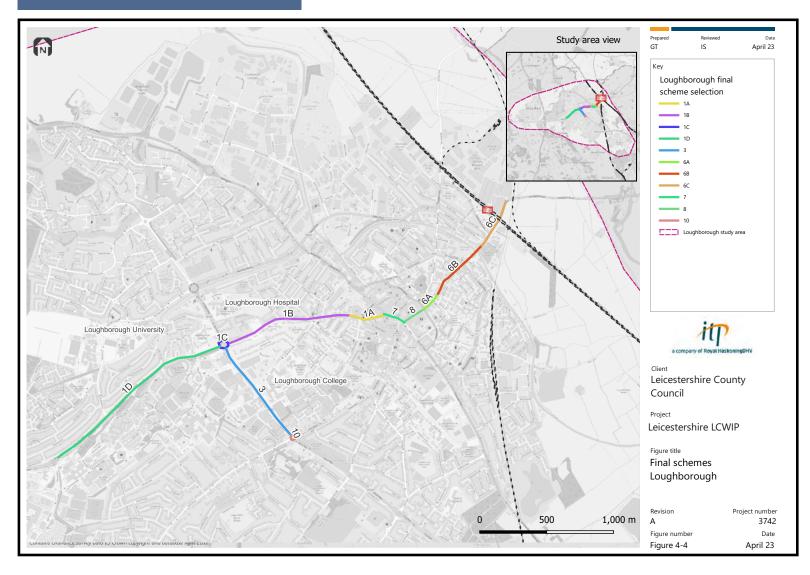
13. Appendix D – Loughborough area LCWIP prioritisation table

	Effectiveness Attractiv					Policy								nomic	Deliverability	Prioritisation	
Scheme	1a. Potential to encourage new walking trips	1b. Potential to encourage new cycling trips	2. Population who directly benefit from the intervention	3. Potential to improve road safety	4. Healthy Streets score	5a. Improvement in air quality -proximity to an AQMA area	5b. Improvement in air quality - PBCC car emissions	5. Air Quality (5a and 5b Average)	6. Links to / through an area of deprivation	7. Proximity to schools / education	8. Priority / importance of the intervention as defined through the engagement process	9. Improved multimodal transport connections	10. Value for money	11. Proximity to a major growth site	12. Scheme feasibility	Total Score	Rank
1A	2	0	1	2	1	3	0	1.5	1	1	0.6	0	3	1	0	14.1	15
1B	2	0	2	1	2	3	0	1.5	1	3	0.1	0	3	0	0	15.6	9
1C	2	3	0	1	2	3	0	1.5	2	2	0.1	0	3	0	0	16.6	7
1D	2	0	3	1	2	0	0	0	2	2	0.2	0	3	2	0	17.2	6
3	3	2	1	3	2	0	0	0	0	3	0.3	0	3	0	0	17.3	5
4A	2	2	0	1	3	0	0	0	1	0	0.1	0	3	0	3	15.1	12
4B	2	1	1	2	3	3	0	1.5	1	0	0.1	0	3	0	3	17.6	3
4C	2	1	2	3	2	3	0	1.5	1	1	0.1	0	1	1	0	15.6	9
4E	2	0	1	2	1	3	0	1.5	2	1	1	0	3	1	0	15.5	11
4F	2	1	2	2	2	3	0	1.5	3	3	0.6	0	3	1	0	21.1	1

	Effectiveness Attra				Attractiveness	Policy							Economic		Deliverability Prior		sation
Scheme	1a. Potential to encourage new walking trips	1b. Potential to encourage new cycling trips	2. Population who directly benefit from the intervention	3. Potential to improve road safety	4. Healthy Streets score	5a. Improvement in air quality -proximity to an AQMA area	5b. Improvement in air quality - PBCC car emissions	5. Air Quality (5a and 5b Average)	6. Links to / through an area of deprivation	7. Proximity to schools / education	8. Priority / importance of the intervention as defined through the engagement process	9. Improved multimodal transport connections	10. Value for money	11. Proximity to a major growth site	12. Scheme feasibility	Total Score	Rank
4G	0	0	0	0	2	0	0	0	2	0	0.6	0	3	0	3	10.6	18
6A	2	0	1	2	1	0	0	0	3	1	0.3	1	3	2	0	16.3	8
6B	2	0	1	1	2	0	0	0	3	1	0.5	2	3	2	3	20.5	2
6C	2	0	0	0	1	0	0	0	3	0	0.4	3	3	2	3	17.4	4
7	3	0	1	1	0	3	0	1.5	1	1	0.7	0	3	1	0	13.2	16
8	2	0	1	2	0	0	0	0	3	1	0.5	0	3	2	0	14.5	13
10	1	3	1	0	1	0	0	0	1	2	0.3	0	2	0	3	14.3	14
22	2	2	1	2	1	3	0	1.5	1	1	0.3	0	0	0	0	11.8	17

 $[\]mbox{\scriptsize \star}$ The scores for criteria 8 and the total scores have been rounded to 1 d.p.

14. Appendix E - Concept designs



The concept drawings included below are shown for illustrative purposes only. They are intended purely to show how aspects of the latest design standards, such as LTN1/20, could be applied to improve the cycling, walking and wheeling routes in the LCWIP area. They are not final definitive schemes. The design of the actual final deliverable schemes will be subject to the amount of funding available, considerations around affordability of long-term maintenance, further stages of detailed design and importantly, further rounds of public stakeholder engagement.

128

