Environment and Transport Commissioning Framework



South of Leicester Area LCWIP

Phase 2 Report – Prioritisation and Appraisal of Cycling and Walking Schemes

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Document Sign-off

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1. Introduction

1.1. Background

- 1.1.1. Leicestershire County Council Network Data and Intelligence has been commissioned by Assets and Major Projects to provide evidence to inform the preparation of the South of Leicester Area Local Cycling and Walking Infrastructure Plan (LCWIP).
- 1.1.2. Table 1 shows the recommended method for producing LCWIPs as set out in the Department for Transport's (DfT) Local Cycling and Walking Infrastructure Plans Technical Guidance¹. The South of Leicester Area LCWIP Phase 1 Report details the work undertaken during stages 2 4 of the process, namely how the evidence gathered was used to develop walking and cycling network plans for the study area.

Stage	Name	Description
1	Determining Score	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

Table 1. LCWIP Process

1.1.3. This document summarises the work undertaken during stage 5 of the LCWIP process, including scoring several factors in a prioritisation table and providing a value for money assessment for each of the proposed schemes.

1.2. Walking and Cycling Networks

1.2.1. Figures 1 and 2 show the walking and cycling network plans that were produced during the initial phase of the LCWIP development. The plans were passed to consultants, ITP, who have audited the networks and designed concept schemes where infrastructure improvements are needed, as per the LCWIP Technical Guidance.

¹ https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/908535/cycling-walking-infrastructure-technical-guidance-document.pdf



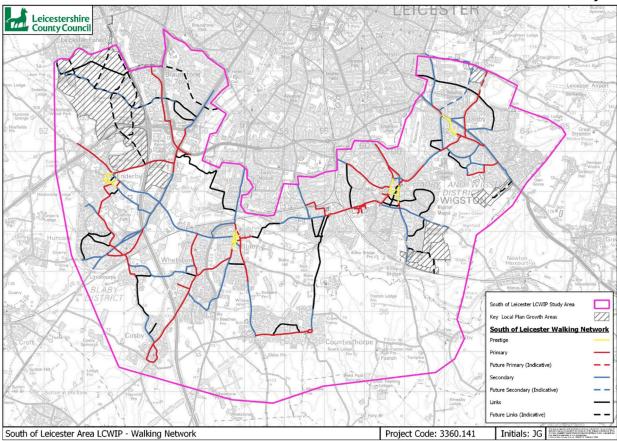


Figure 1. Walking Network Plan

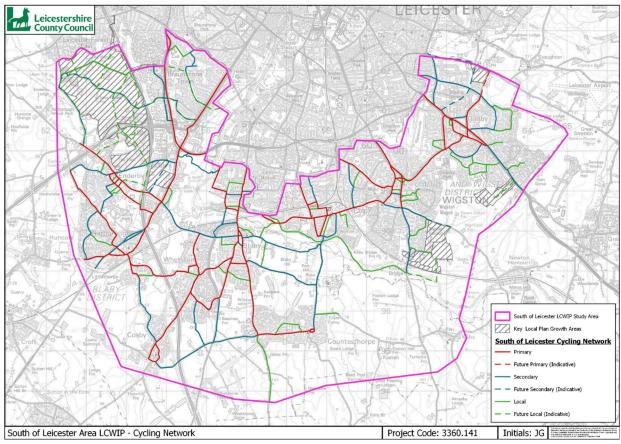


Figure 2. Cycling Network Plan



2. Scheme Proposals

2.1.1. ITP have identified 35 potential infrastructure improvements within the priority networks, see Table 2. These schemes include improvements to both the walking and cycling networks.

Table 2. Potential Infrastructure Improvements

Corridor	Corridor Name	Route	Route Name	Concept	Costs Provided
	B582 Oadby Road / Wigston Road, Wigston - Oadby	1A	Oadby Road B582	×	Cost Bracket Estimate
1		1B	Oadby Road B582	×	Cost Bracket Estimate
•		1C	Oadby Road B582	×	Cost Bracket Estimate
		1D	Oadby Road B582	×	Cost Bracket Estimate
		2A	Leicester Road / Bull Heads Street	✓	Detailed Cost Estimate
	A5199 Leicester	2B	Bull Head Street / B582 Roundabout	✓	Detailed Cost Estimate
2	Road / Bull Head	2C	Bullhead Street	✓	Detailed Cost Estimate
_	Street, Wigston	2D	Bull Head Street / Newton Lane Junction	✓	Detailed Cost Estimate
		2E	Welford Road / Guthlaxton Way Roundabout	×	Cost Bracket Estimate
		2F	Welford Road	×	Cost Bracket Estimate
		3A	Blaby Road (East)	×	Cost Bracket Estimate
		3B	B582	×	Cost Bracket Estimate
	B582 Enderby Road / Blaby Road, Blaby - Enderby	3C	The Ford / Mill Lane / Church Lane	×	Cost Bracket Estimate
3		3D	Sycamore Street / Cross Street / Enderby Road	✓	Detailed Cost Estimate
		3E	B582	✓	Detailed Cost Estimate
		3F	B582	✓	Detailed Cost Estimate
		3G	B582 / St Johns Roundabout	✓	Detailed Cost Estimate
		3H	Blaby Road / Mill Hill	✓	Detailed Cost Estimate
	A6 Leicester Road / Harborough Road, Oadby	4A	Leicester Road / Palmerston Way Roundabout, A6	√	Detailed Cost Estimate
		4B	Leicester Road, A6	✓	Detailed Cost Estimate
_		4C	Leicester Road to Harborough Road, A6	✓	Detailed Cost Estimate
4		4D	Harborough Road, A6	✓	Detailed Cost Estimate
		4E	Harborough Road, A6	✓	Detailed Cost Estimate
		4F	Harborough Road to Glen Road, A6	✓	Detailed Cost Estimate
		4G	Harborough Road, A6	✓	Detailed Cost Estimate
7	Wakes Road / Leicester Road / Long Street, Wigston	7	Leicester Road / Long Street	×	Cost Bracket Estimate
40	Warwick Road,	12A	Warwick Road	✓	Detailed Cost Estimate
12	Narborough	12B	Warwick Road	√	Detailed Cost Estimate
		15A	Cambridge Road	×	Cost Bracket Estimate
		15B	Park Road	×	Cost Bracket Estimate
4-	Cambridge Road / Park	15C	Cambridge Road X Cost Bra		Cost Bracket Estimate
15	Road, Whetstone - Cosby	15D	Cambridge Road	X Cost Bracket Es	
	wnetstone - Cosby	15E	Cambridge Road	×	Cost Bracket Estimate
		15F	Cambridge Road	×	Cost Bracket Estimate
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Corridor	Corridor Name	Route	Route Name	Concept	Costs Provided
24A	Kenilworth Road / Kirkdale Road / Station Street S. Wigston Train Station	24A	Station Street / Kirkdale Road / Marstown Avenue	×	Cost Bracket Estimate

- 2.1.2. Concept designs and detailed cost estimates have been provided for 18 of the 35 proposed schemes. The selection of these schemes was informed by the aspirations of LCC, the outputs from the route audits and the findings of Healthy Streets² audits. The 18 locations identified are where interventions are most needed and where the greatest improvements might be achieved. The proposed schemes vary considerably in size and extent due to the space available along each route. For the remaining 17 schemes, the consultants have provided a description of the proposed improvements and cost bracket estimates.
- 2.1.3. Figure 3 shows the spatial distribution of the proposed schemes summarised in Table 2.

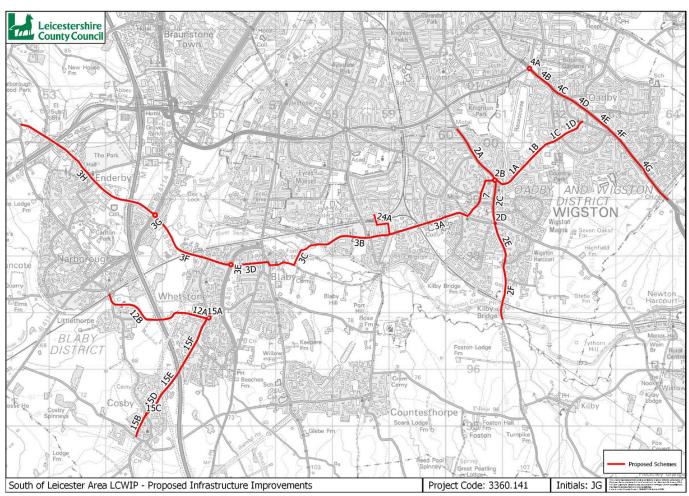


Figure 3. Approximate Location of Proposed Infrastructure Improvements

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² https://www.healthystreets.com/



3. Scheme Prioritisation

3.1.1. This chapter sets out the approach for prioritising the cycling and walking infrastructure improvements. The method undertaken follows the principles set out in the LCWIP Technical Guidance. The proposed corridor segments were assessed against a range of criteria in a prioritisation table, including an economic assessment using the DfT's Active Mode Appraisal Toolkit (AMAT), version 2.08.

3.2. Prioritisation Criteria

- 3.2.1. The long-term aspiration is to deliver the proposed cycling and walking routes in their entirety as funding becomes available. However, to establish which of the infrastructure improvements should be prioritised, the schemes have been assessed against five factors:
 - Effectiveness
 - Attractiveness
 - Policy
 - Economic
 - Deliverability
- 3.2.2. Each potential corridor segment has been scored against the following criteria:

Criteria	How this has been assessed		
Effectiveness:			
1a. Potential to encourage new	Access to key destinations, based on proximity to Key Trip		
walking trips	Attractors identified in the Phase 1 report.		
1b. Potential to encourage new	Number of vehicle trips <10km in the Pan Regional Transport Mode		
cycling trips	(PRTM) 2021.		
2. Population who directly benefit	Number of residents surrounding the intervention, based on 2011		
from the intervention	Census population data.		
3. Potential to improve road safety	Number and severity of pedestrian / cyclist accidents from 2015 -		
	19.		
Attractiveness:			
4. Healthy Streets score	Overall Healthy Streets score.		
Policy:			
*5a. Improvement in air quality	Proximity to an Air Quality Management Area (AQMA).		
*5b. Improvement in air quality	Place Based Carbon Calculator (PBCC) Car Emissions Grade.		
6. Links to / through an area of	Indices of Multiple Deprivation (IMD) Deciles.		
deprivation			
7. Proximity to schools / education	Distance from a school, college or university.		
8. Priority / importance of the	Scoring calculation provided by the client, see paragraph 3.2.3.		
intervention as defined through			
the engagement process			
9. Improved multimodal transport	Distance from a rail station, bus station, park & ride (or other key		
connections	transport route).		



Criteria How this has been assessed

Economic:	
10. Value for money	Active Mode Appraisal Toolkit (AMAT) BCR (40-Year Appraisal
	Period)
11. Proximity to a major growth	Distance from local plan committed developments (>100 houses or
site	jobs by 2036)
Deliverability:	
12. Scheme feasibility	Land ownership, based on whether the route is on LCC highway
	<u>and</u>
	National designation, based on whether the route falls within a
	protected area (SSSI, conservation area, parks & gardens,
	scheduled monument, listed building).

^{*} Please note: the scores for the two criteria relating to air quality have been averaged to ensure that air quality is not being given a greater weighting than other factors.

- 3.2.3. The following method for assessing criteria 8 (priority / importance of the intervention as defined through the engagement process) was provided by the client.
- 3.2.4. Public and stakeholder engagement feedback was sought via several forms, which included written feedback by emails or letters, usually from stakeholders such as County or District Councillors, Parish Councils, and subject matter experts or advocacy groups. Members of the public were also invited to provide feedback on the map-based online public engagement portal. Public engagement comments could be posted as original messages or as a 'thread' in reply to comments left by other users. Members of the public could also "like" comments left by other users. Once the engagement period closed, the feedback was anonymised and analysed to identify which routes received the most comments, and the improvements and issues which residents said they think are important.
- 3.2.5. The primary 'themes' of the comments were identified, depending on what issue the respondent had raised or what type of improvement they had requested. Some users raised several points in the same comment. In these cases, multiple themes were assigned to the comment to ensure that all of the users' points were taken into account.
- 3.2.6. The engagement feedback needed to be expressed on a 0-3 point scale, in order to incorporate the engagement views into the prioritisation table. As the methodology used needed to be consistent across all the LCWIP areas, in addition to being mindful that future public and stakeholder engagements may receive varying numbers of feedback responses, the importance of a route to people was not analysed based solely on the number of comments. Instead, a system was developed which considers both the number and strength of the responses, as well as any "likes" a post had received on the engagement portal.
- 3.2.7. The below Table sets out the scoring criteria for each category of engagement feedback:



Table 3. Engagement Feedback Scoring Criteria

Category	Score and Criteria					
Category	0	1	2	3		
Councillors (County / District)	None	General reference to immediate area	Reference to specific road but limited detail	Detailed comments regarding issues on specific road/at a specific location.		
Councillors (Parish)	None	General reference to immediate area	Reference to specific road but limited detail	Detailed comments regarding issues on specific road/at a specific location.		
Expert stakeholders and advocacy groups	None	General reference to immediate area	Reference to specific road but limited detail	Detailed comments regarding issues on specific road/at a specific location.		
Members of the Public	None	Limited number of general references to the area	1 or more specific references to issues on the road or in the immediate area. Comments on engagement portal have received no additional 'likes'.	2 or more references to specific improvements/issues on this road or in the immediate area. Comments on engagement portal have received 1 or more additional 'likes'.		

Weighting:

- 3.2.8. As District / County Councillors and Parish Councils are considered to speak for their communities as a whole, and expert stakeholders / lobbying groups are speaking from a position of greater knowledge, we decided to weight the analysis accordingly. Therefore, we split the responses into 4 categories for analysis:
 - District / County Councillors (given a weighting of x3)
 - Parish Councils (given a weighting of x2)
 - Experts and lobbying groups (given a weighting of x3)
 - Public (given a weighting of x1)
- 3.2.9. This meant that the maximum score available was 27, which had the potential to unduly influence the overall prioritisation score. Therefore, the scores were normalised to a maximum of 3 per category of stakeholder. The 4 individual category scores were then modally averaged to give a single overall score for stakeholder and public engagement.

3.3. Prioritisation Table

- 3.3.1. Appendix 1 shows how the criteria has been considered in a prioritisation table. Each criterion was given a score of 0 3; higher scores indicate where infrastructure improvements are likely to return the most benefit. As different design typologies were proposed along a given corridor, the individual route segments were scored separately.
- 3.3.2. For consistency, the same methodology has been applied to all LCWIP's being prepared by Leicestershire County Council. This will allow for direct comparison between the proposed schemes in different areas when funding opportunities become available. Therefore, the scoring system for most of the criteria is alike for all LCWIP areas.



4. Economic Appraisal

4.1.1. As part of the prioritisation process, the proposed schemes have been appraised to determine which are likely to be better value for money.

4.2. Active Mode Appraisal Toolkit (AMAT)

- 4.2.1. The Active Mode Appraisal Toolkit (AMAT)³, produced by the DfT, is a spreadsheet-based tool which can be used to assess the overall benefits and costs of proposed cycling and walking interventions. The DfT have also published an Active Mode Appraisal Toolkit User Guide which details the process to be undertaken to complete an assessment in AMAT⁴.
- 4.2.2. AMAT provides a measure of the Value for Money (VfM) of a scheme in the form of a benefit-cost ratio (BCR). A BCR of greater than one indicates that the benefits outweigh the costs, i.e., a pound of expenditure is expected to generate more than a pound's worth of benefits. Table 4 shows the categories used by the DfT to assess value for money⁵. These categories have been used to score value for money in the prioritisation table.

Table 4. DfT Value for Money Categories

VfM Category	Implied by
Very High	BCR greater than or equal to 4
High	BCR between 2 and 4
Medium	BCR between 1.5 and 2
Low	BCR between 1 and 1.5
Poor	BCR between 0 and 1
Very Poor	BCR less than or equal to 0

4.2.3. Several AMAT (v2.08) spreadsheets have been completed for each of the proposed schemes using the following 'User Interface Intervention' inputs:

³ https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/1120994/active-mode-appraisal-toolkit_November2022.xlsx

⁴ https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/1102781/active-model-appraisal-toolkit-user-guidance.pdf

⁵ https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/918479/value-for-money-framework.pdf



Inputs	Method
General:	
Intervention name	Provided by ITP
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	Cycling flows from the Propensity to Cycle Tool (PCT) Census 2011
proposed intervention	commuting Route Network (LSOA) dataset ⁶ , uplifted to account for all
	trip purposes and return journeys.
Number of trips with the	Central cycling potential estimates from Active Travel England's
proposed intervention	(ATE) Active Travel Uplifts Tool and Cost Benchmarks spreadsheet.
The average proportion of a trip	Calculated by dividing the length of the scheme by the length of an
which used the scheme	average cycling trip (as stated in the AMAT spreadsheet).
infrastructure	
Current cycling infrastructure for	Selected the type of infrastructure currently in place along the route
this 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	Selected the type of infrastructure being proposed from the dropdown.
infrastructure for this route	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	Shower facilities are not being proposed for any of the schemes.
facilities being added?	
Are any additional secure	Secure storage facilities are not being proposed for any of the
storage facilities being added?	schemes.
Walking:	
Number of trips without the	Census 2011 data on commuters by Lower Super Output Area from
proposed intervention	the DataShine Tool ⁷ , 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	Central walking potential estimates from Active Travel England's
proposed intervention	(ATE) Active Travel Uplifts Tool and Cost Benchmarks spreadsheet.
The average proportion of a trip	Calculated by dividing the length of the scheme by the length of an
which used the scheme	average walking trip (as stated in the AMAT spreadsheet).
infrastructure	
Current walking infrastructure for	Selected the type of infrastructure currently in place along the route
this route	from the options listed.
Proposed new walking	Selected the type of infrastructure being proposed from the options
infrastructure for this route	listed.

⁶ https://www.pct.bike/m/?r=leicestershire7 https://datashine.org.uk/



4.3. Walking and Cycling Demand

4.3.1. For this LCWIP, the number of cycling and walking trips could not be obtained from local count or survey data. VivaCity smart traffic monitoring sensors have recently been installed around the study area, see Figure 4. However, the sensors have not been in place for a full year so it was not suitable to determine an average day from the data, when taking account of seasonality. Having said this, the counts from these sensors will be beneficial for future LCWIPs as well as monitoring the success of implemented schemes.

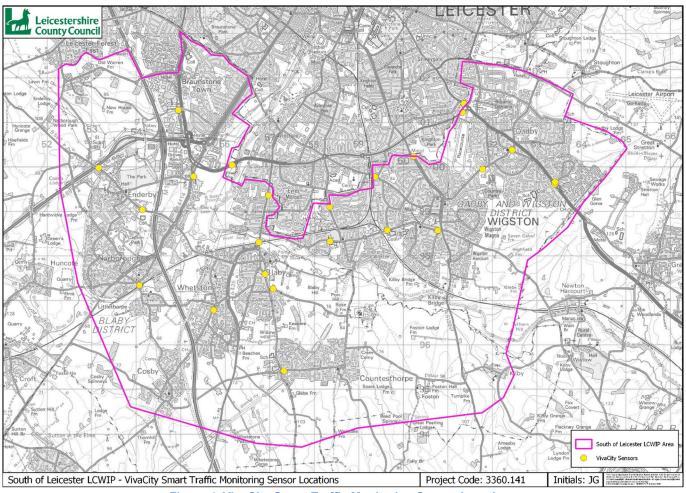


Figure 4. VivaCity Smart Traffic Monitoring Sensor Locations

Without Scheme Trips:

4.3.2. For corridor schemes, the number of cycling trips without the proposed intervention has been determined using the route network (LSOA) geojson⁸ from the Propensity to Cycle Tool (PCT). This layer includes the number of weekday cycling trips assumed along each link based on origin-destination commuting data from the 2011 Census (main mode of

⁸ https://npttile.vs.mythic-beasts.com/pct-outputs-regional-notR/commute/Isoa/leicestershire/rnet_full.geojson



travel to work), see Figure 5. The links in the PCT are generally shorter than the LCWIP corridor segments. Where there is more option available for a scheme, the highest trip rate was used for the AMAT.

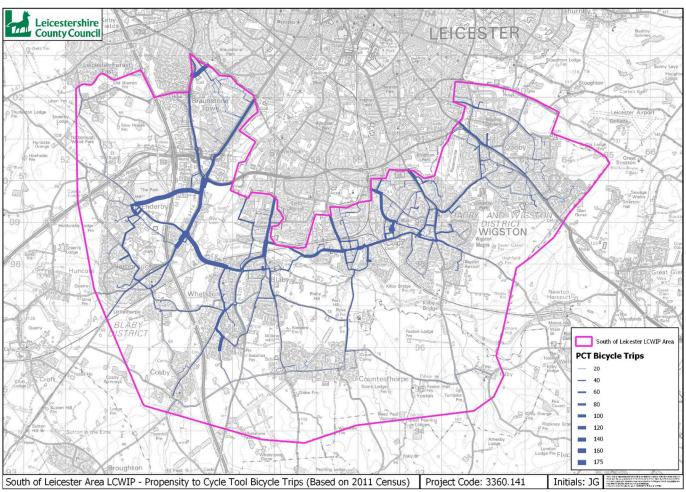


Figure 5. Propensity to Cycle Tool Weekday Bicycle Trips (2011 Census)

4.3.3. As the PCT does not account for all trip purposes, the National Travel Survey (NTS) (Table NTS0409⁹) was used to calculate what percentage of total cycling trips were commuters. The ATE Active Travel Fund 4 (ATF4) Value for Money Guidance states, 'Given that permanent walking and cycling schemes are likely to be around for many years, baseline cycling, and walking trips should be estimated based on trip rates outside the COVID-19 period (before March 2020 or in 2022), assuming long term walking and cycling trips will revert to these levels without Government intervention'. In 2018, commuters made up 33.59% of all cycling trips (see Table 5). Therefore, the following multiplier has been used to estimate total weekday cycling trips, ('no. of trips' / 33.59) * 100.

https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/1019882/nts-2020-ods-tables.zip



Table 5. Average Number of Trips by Purpose and Main Mode in 2018 (from National Travel Survey Table NTS0409)

	Trips Per Per	rson Per Year	Percentage of Total Trips			
Purpose	Walk	Bicycle	Walk	Bicycle		
Commuting	18.6	5.7	7.08%	33.59%		
Business	2.7	0.4	1.03%	2.43%		
Education / Escort Education	53.1	2.1	20.24%	12.3%		
Shopping	50.5	1.4	19.24%	8.28%		
Other Escort	11.3	0.3	4.3%	2.03%		
Personal Business	21.0	1.0	8.02%	6.1%		
Leisure	43.6	6.0	16.6%	35.27%		
Other, inc. Just Walk	61.7	0	23.49%	0%		
All Purposes	262.5	17.1	100%	100%		

^{*} The figures do not add up exactly due to rounding.

- 4.3.4. In addition, the AMAT User Guide¹⁰ indicates that 90% of all cycling trips result in a return cycling trip that same day, as per TAG Unit A5.1. Therefore, the number of cycling trips has been multiplied by 1.9 to account for return journeys.
- 4.3.5. The number of walking trips without the proposed intervention has been determined using the travel to work data from the DataShine Tool (QS701EW0011 Number of trips 'on foot'). The data includes the number of weekday walking trips for each LSOA in 2011 (see Figure 6). In order to determine the number of walking trips on a specific link, the number of trips per metre of the road network in the associated output area has been calculated. This figure has then been multiplied by the length of the proposed route.
- 4.3.6. As this dataset only includes commuting trips, it was uplifted using the same method as for cycling. In 2018, commuters made up 7.08% of all walking trips so the number of trips has been uplifted as follows, ('no. of trips' / 7.08) * 100. The number of walking trips has also been uplifted to account for return journeys.

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¹⁰ https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/1102781/active-model-appraisal-toolkit-user-guidance.pdf



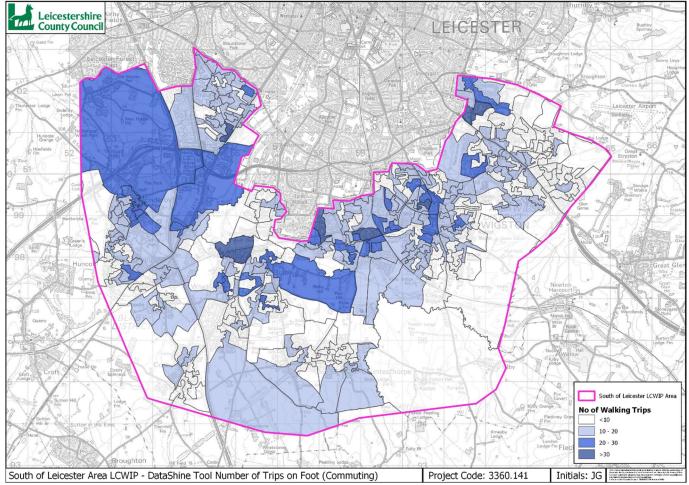


Figure 6. DataShine Tool Number of Weekday Commuting Trips on Foot (2011 Census)

With Scheme Trips:

- 4.3.7. The number of cycling and walking trips with the proposed intervention has been estimated using the ATE Uplifts Tool. The tool estimates the increase in weekday trips 'based on data for scheme cost, evaluation evidence for the cost effectiveness of past spending by infrastructure type and estimates for the relative cost effectiveness of spending by area'. It was developed using pre-covid evaluation evidence and was informed by a comprehensive literature review of around 200 studies.
- 4.3.8. The Uplifts Tool has completed for each of the proposed schemes using the following inputs:
 - Scheme name
 - Local authority
 - Total scheme cost
 - Pre-intervention walking and cycling trips (per weekday)
 - Scheme cost by infrastructure category
 - Percentage difference between scheme and benchmark costs



4.3.9. The tool gives a range of estimated walking and cycling trips with the proposed scheme. The central estimates, based on the intrinsic cycling and walking potential and car ownership in the local authority area, have been used for the AMAT. Table 6 details the number of walking and cycling trips used for each of the corridor segments.

Table 6. Walking and Cycling Demand for Corridor Schemes

			Сус	ling		Walk	ing
		Without		With Scheme	9	Without	With
Corridor	Corridor	PCT 2011	PCT 2011	Govt.	Go Dutch	PCT 2011	All
	1A	379	486	628	2511	187	448
	1B	294	396	469	2138	147	396
1	1C	170	230	288	1488	42	188
	1D	51	144	96	634	95	322
	2A	566	674	888	2404	319	582
	2B	130	159	249	854	87	158
	2C	356	463	583	2223	190	451
2	2D	334	388	583	2053	49	181
	2E	11	118	23	68	304	565
	2F	6	100	11	34	61	292
	3A	441	459	826	3094	112	145
	3B	667	660	1177	3564	239	226
	3C	187	261	351	1114	91	228
	3D	373	437	673	2036	75	194
3	3E	311	404	554	1787	78	249
	3F	781	869	1408	4090	74	236
	3G	922	1011	1629	4661	52	216
	3H	348	427	716	2447	22	166
	4A	368	451	758	2890	76	278
	4B	272	360	509	1946	16	230
	4C	351	455	611	2410	144	399
4	4D	221	321	407	1380	77	321
	4E	221	328	379	1244	280	541
	4F	209	279	221	645	44	215
	4G	119	227	283	956	117	380
7	7	351	453	667	2455	162	412
	12A	170	201	209	588	33	90
12	12B	181	242	441	1550	78	192
	15A	334	355	537	1635	11	50
	15B	153	235	283	1029	106	257
4-	15C	153	168	283	1029	13	42
15	15D	153	227	255	826	67	204
	15E	153	233	255	826	88	236
	15F	453	626	752	2099	25	345
24A	24A	351	455	577	1691	368	622

4.4. Scheme Costs

4.4.1. It should be noted that the proposed schemes are at a very early stage of development and the below costs will change as the designs are developed further. In addition, the costs shown are in current nominal prices that have not been adjusted for inflation.



Investment Costs:

- 4.4.2. For the 18 detailed schemes, itemised investment costs have been estimated by ITP based on the design work undertaken to date. These costs were scrutinised by LCC officers and amended to reflect area-specific rates.
- 4.4.3. For the 17 schemes without concept designs, cost bracket estimates have been provided by ITP based on the size of the schemes. In order to determine more detailed investment cost estimates for the AMAT, indicative costings have been developed based on the following average per metre cost of detailed schemes:
 - Medium schemes £3,991.69 per m
 - Large schemes £3,938.03 per m
 - Extra large schemes £4,203.98 per m
- 4.4.4. More details have been provided in Table 7.

Table 7. Detailed Scheme Costs for Economic Appraisal

Corridor	Corridor	Scheme	Investment	Cost /m	Scheme	Cost	Derived
	1A	0.72km	-	-	Large	£1m to £2.5m	£2,835,381.6
4	1B	0.52km	-	-	Medium	£200k to £1m	£2,075,678.8
	1C	0.27km	-	-	Large	£1m to £2.5m	£1,063,268.1
1 2 3 4 7 12 15 24A	1D	0.43km	-	-	Medium	£200k to £1m	£1,716,426.7
	2A	1.097km	£3,386,356.7	£3,086.92	Extra Large	-	-
	2B	0.503km	£465,987.12	£926.42	Extra Large	-	-
•	2C	0.65km	£2,859,923.81	£4,399.88	Medium	-	-
2	2D	0.172km	£931,406.66	£5,415.16	Large	-	-
	2E	0.65km	-	-	Extra Large	£2.5m+	£2,732,587
	2F	1km	-	-	Extra Large	£2.5m+	£4,203,980
	3A	1.4km	-	-	Extra Large	£2.5m+	£5,885,572
	3B	1.5km	-	-	Extra Large	£2.5m+	£6,305,970
	3C	1km	-	-	Medium	£200k to £1m	£3,991,690
•	3D	0.701km	£1,398,446.42	£1,944.93	Large	-	-
3	3E	0.4km	£2,836,111.01	£7,090.28	Extra Large	-	-
	3F	1.56km	£4,017,004.46	£2,575	Extra Large	-	-
	3G	0.42km	£2,436,221.41	£5,800.53	Extra Large	-	-
	3H	2.493km	£4,106,985.08	£1,647.41	Extra Large	-	-
	4A	0.2km	£1,645,464.97	£8,227.32	Extra Large	-	-
	4B	0.41km	1,805,638.94	£4,404	Large	-	-
	4C	0.38km	£2,591,231.14	£6,819.03	Extra Large	-	-
4	4D	0.45km	£2,312,542.15	£5,138.98	Medium	-	-
	4E	0.64km	£2,839,551.02	£4,436.80	Medium	-	-
	4F	0.29km	£1,297,761.45	£4,475.04	Extra Large	-	-
	4G	1.23km	£3,430,152.31	£2,788.74	Extra Large	-	-
7	7	1km	-	-	Large	£1m to £2.5m	£3,938,030
40	12A	0.29km	£577,415.44	£1991.19	Medium	£200k to £1m	-
12	12B	1.81km	£5,080,767.15	£2807.05	Extra Large	£2.5m+	-
	15A	0.089km	-	-	Extra Large	£2.5m+	£374,154.22
	15B	0.44km	-	-	Medium	£200k to £1m	£1,756,343.6
45	15C	0.07km	-	-	Large	£1m to £2.5m	£275,662.1
15	15D	0.37km	-	-	Medium	£200k to £1m	£1,476,925.3
	15E	0.5km	-	-	Large	£1m to £2.5m	£1,969,015
	15F	1km	-	-	Extra Large	£2.5m+	£4,203,980
24A	24A	0.82km	-	-	Medium	£200k to £1m	£3,273,185.8



Operating Costs:

4.4.5. Projected maintenance costs have also been provided by LCC officers based on a 20-year maintenance programme (10-year minor maintenance and 20-year major maintenance), see Table 8.

Table 8. Projected Scheme Maintenance Costs for Economic Appraisal

Corridor	Corridor	Base	Maintenance	Projected
	1A	£2,835,381.6	16%	£453,661.06
1	1B	£2,075,678.8	22%	£456,649.34
'	1C	£1,063,268.1	24%	£255,184.34
	1D	£1,716,426.7	16%	£274,628.27
	2A	£3,386,356.7	16%	£541,817.07
	2B	£465,987.12	24%	£111,836.91
2	2C	£2,859,923.81	16%	£457,587.81
_	2D	£931,406.66	22%	£204,909.47
	2E	£2,732,587	14%	£382,562.18
	2F	£4,203,980	14%	£588,557.20
	3A	£5,885,572	14%	£823,980.08
	3B	£6,305,970	16%	£1,008,955.20
	3C	£3,991,690	12%	£479,002.80
3	3D	£1,398,446.42	18%	£251,720.36
3	3E	£2,836,111.01	22%	£623,944.42
-	3F	£4,017,004.46	22%	£883,740.98
	3G	£2,436,221.41	22%	£535,968.71
	3H	£4,106,985.08	18%	£739,257.31
	4A	£1,645,464.97	24%	£394,911.59
	4B	£1,805,638.94	16%	£288,902.23
	4C	£2,591,231.14	14%	£362,772.36
4	4D	£2,312,542.15	16%	£370,006.74
	4E	£2,839,551.02	14%	£397,537.14
	4F	£1,297,761.45	22%	£285,507.52
	4G	£3,430,152.31	14%	£480,221.32
7	7	£3,938,030	12%	£472,563.60
12	12A	£577,415.44	14%	£80,838.16
12	12B	£5,080,767.15	14%	£711,307.40
	15A	£374,154.22	20%	£74,830.84
	15B	£1,756,343.6	12%	£210,761.23
45	15C	£275,662.1	12%	£33,079.45
15	15D	£1,476,925.3	12%	£177,231.04
	15E	£1,969,015	14%	£275,662.10
	15F	£4,203,980	12%	£504,477.60
24A	24A	£3,273,185.8	16%	£523,709.73

Private Sector Contributions:

4.4.6. There have been no committed private sector contributions for the LCWIP schemes. Having said this, funding opportunities relating to cycling and walking will be sought from all available internal and external sources in the future, such as local developer contributions, contributions from partner organisations, and national funding streams. One expected source of funding for schemes near to committed developments is section 106 contributions secured from developers during the planning process. Figure 7 shows the proximity of the proposed corridor schemes to committed future developments.



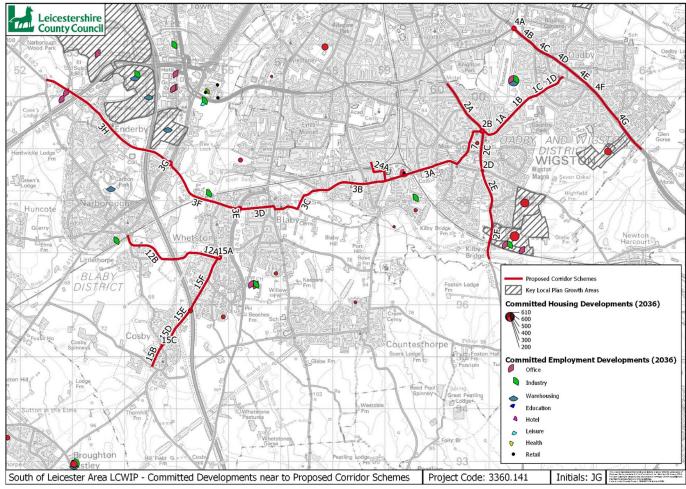


Figure 7. Committed Developments near to Proposed Corridor Schemes

4.5. Sensitivity Testing

4.5.1. The AMAT User Guide notes that uncertainty in the inputs and outputs in economic appraisal are expected. Therefore, sensitivity testing should be undertaken around key uncertainties. 'Sensitivity analysis in AMAT involves altering the relevant parameters in the user input sheets to demonstrate the change in benefits that result'.

Length of Appraisal Period:

- 4.5.2. The monetised costs and benefits have been assessed for two appraisal periods:
 - 20-year appraisal period based on the AMAT User Guide, 'Most appraisals of cycling and walking infrastructure schemes assume an appraisal period of 20 years. Some infrastructure may be justified in adopting a longer appraisal period, for example if they are considered to have a comparable design life to major road and rail capacity improvements.'
 - 40-year appraisal period based on the ATF4 Value for Money Guidance, 'A
 default appraisal period assumption of 40 years should be used for high quality
 walking and cycling infrastructure schemes, compliant with Manual for Streets and



LTN 1/20 guidance and built to design standards comparable to highways.' Where possible, the proposed infrastructure schemes have been designed in accordance with the recent design standards, Cycling Infrastructure Design (LTN 1/20)¹¹.

Optimism Bias:

4.5.3. The AMAT spreadsheet includes a default optimist bias of 23%. Due to the early stage of scheme development, the optimist bias has been increased to 46%, as per the recommendations in the AMAT User Guide (see Table 9). This will ensure that inflation and any underestimation of costs are being accounted for.

CategoryStage 1Stage 2Stage 3Local Authority and Public
Transport SchemesStrategic Outline
Business CaseOutline Business CaseFull Business CaseOptimism Bias Level46%23%20%

Table 9. Stage of Scheme Development and Relevant Optimism Bias

PCT Scenarios:

- 4.5.4. The PCT includes five scenarios which explore possible cycling futures in England and Wales. These consider the removal of different infrastructural, cultural, and technological barriers that currently prevent cycling being the natural mode of choice for trips of short to medium distances¹². Each scenario is described below:
 - Government Target (Equality) models a doubling of cycling nationally. Models the increase as occurring solely as a function of trip distance and hilliness, i.e., equitably across age, sex, and other socio-demographic groups.
 - Government Target (Near Market) models a doubling of cycling nationally.
 Models the increase as occurring as a function of trip distance and hilliness, plus several sociodemographic and geographical characteristics (including age, sex, ethnicity, car ownership, income deprivation).
 - Go Dutch represents what would happen if Dutch cycling levels were reached in England and Wales.
 - E-Bike models the additional increase in cycling that would be achieved through the widespread uptake of electric cycles. This is an extension of the Go Dutch scenario, making the further assumption that all cyclists in the Go Dutch scenario own an ebike.
 - Gender Equality in the 2011 Census women accounted for 48% of all commuters but only 27% of cycle commuters. This scenario models a situation

¹¹ https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/951074/cycle-infrastructure-design-ltn-1-20.pdf

¹² https://npct.github.io/pct-shiny/regions_www/www/static/03a_manual/pct-bike-eng-user-manual-c1.pdf



where gender disparities are eliminated. This differs from the other scenarios as it does not use distance and hilliness data to model propensity to cycle.

- 4.5.5. It is important to note that these scenarios are not predictions of the future but are snapshots that indicate how the spatial distribution of cycling might change as cycling grows based on current travel patterns.
- 4.5.6. For each of the proposed schemes, further versions of the AMAT spreadsheet will be completed using cycling demand from the Government Target (Equality) and Go Dutch scenarios. These sensitivities will show the potential benefits of the schemes if the uptake of cycling were to increase.



5. Results

5.1. Scheme Prioritisation

- 5.1.1. The corridor segments were given a score from 0 3 for each of the prioritisation criteria. The resulting scores were combined and each scheme was prioritised as:
 - Very high (scores greater than 16)
 - High (13.1 16)
 - Medium (10 -13)
 - Low (scores less than 10)
- 5.1.2. Table 10 shows the overall scores for the corridor segments which have been ranked in order of priority. The full completed prioritisation table can be seen in Appendix 2.

Table 10. Proposed Schemes in Order of Priority

Corridor	Effectiveness	Attractiveness	Policy	Economic	Deliverability	Total	Priority
3B	9	2	7.1	1	0	19.1	Very High
12B	6	2	7	1	0	19.0	Very High
4C	8	2	2.5	3	3	18.5	Very High
3H	7	3	6.4	2	0	18.4	Very High
15F	8	3	1.3	2	3	17.8	Very High
3F	6	2	5	1	3	17.0	Very High
1A	7	2	2.5	2	3	16.5	Very High
7	9	2	4	1	0	16.0	High
2A	8	2	1	2	3	16.0	High
3A	7	2	6	1	0	16.0	High
3D	6	2	2.8	2	3	15.8	High
4B	7	3	1.5	1	3	15.5	High
24A	5	1	6	3	0	15.0	High
1C	4	2	4	2	3	15.0	High
2B	4	2	3	3	3	15.0	High
4E	6	2	2.5	1	3	14.5	High
2C	7	2	3	2	0	14.0	High
4G	5	2	1.5	2	3	13.5	High
4D	4	2	3.5	1	3	13.5	High
15C	3	2	2.3	3	3	13.3	High
15A	5	2	0.8	2	3	12.8	Medium
2E	3	3	1.6	2	3	12.6	Medium
4A	5	1	1.6	1	3	11.6	Medium
2D	3	2	1.5	2	3	11.5	Medium
1B	3	2	2.5	1	3	11.5	Medium
3G	4	2	1.3	1	3	11.3	Medium
15B	3	2	2.3	1	3	11.3	Medium
15D	2	2	2.3	2	3	11.3	Medium
4F	2	2	2	2	3	11.0	Medium
15E	1	2	1.8	3	3	10.8	Medium
3E	4	1	2.8	0	3	10.8	Medium



Corridor	Effectiveness	Attractiveness	Policy	Economic	Deliverability	Total Score	
1D	3	2	3	2	0	10.0	Medium
12A	2	2	3.5	2	0	9.5	Low
2F	2	3	1.6	2	0	8.6	Low
3C	4	2	1.8	0	0	7.8	Low

^{*} The policy and total scores have been rounded to 1 d.p.

- 5.1.3. It should be noted that the prioritisation scores are a guide and some flexibility may be needed to account for external factors. For example, there are some schemes classed as high and very high priority that have received a score of 0 for deliverability, due to being in a protected area. This is likely to impact their delivery due to the supplementary planning controls that apply. Moreover, it may be necessary to tailor specific schemes to meet the criteria of external funding opportunities. Proposals near the county boundary may also need to be given more priority if they align with cycling and walking schemes being brought forward by neighbouring authorities.
- 5.1.4. Figure 8 shows the colour coded priority of each corridor segment obtained from the total scores summarised in Table 10.

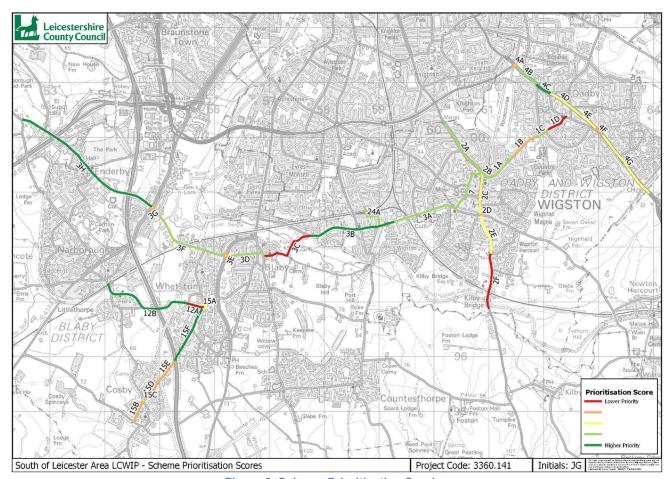


Figure 8. Scheme Prioritisation Scoring



5.1.5. Each of the longer corridors is made-up of segments with varying prioritisation scores; none of the routes are scoring highly in their entirety. Therefore, the proposed segments have also been prioritised as part of a corridor to establish the benefits of delivering a complete and coherent route, see Table 11. This is an average of the segments that make up the overall route.

Table 11. Full Corridor Schemes in Order of Priority

Location	Corridor	Effectiveness	Attractiveness	Policy	Economic	Deliverability	Total
Wakes Road / Leicester Road / Long Street, Wigston	7	9.0	2.0	4.0	1.0	0.0	16.0
Kirkdale Road / Station Street, South Wigston	24A	5.0	1.0	6.0	3.0	0.0	15.0
East to West - Blaby to Wigston	3A / 3B / 3C / 7	7.3	2.0	4.8	0.8	0.0	14.7
East to West - Enderby to Blaby	3D / 3E / 3F / 3G / 3H	5.4	2.0	3.6	1.2	2.4	14.6
East to West - Enderby to Wigston	3A / 3B / 3C / 3D / 3E / 3F / 3G / 3H	5.9	2.0	4.2	1.1	1.5	14.5
Whetstone to Littlethorpe	12A / 12B	4.0	2.0	5.3	1.5	1.5	14.3
East to West - Enderby to Oadby	3D / 3E / 3F / 3G / 3H / 3A / 3B / 3C / 7 / 1A / 1B / 1C / 1D	5.6	2.0	3.7	1.2	1.6	14.2
A6 Oadby	4A / 4B / 4C / 4D / 4E / 4F / 4G	5.4	2.0	2.2	1.6	3.0	14.0
East to West - Wigston to Oadby	1A / 1B / 1C / 1D	4.3	2.0	3.1	1.8	2.3	13.3
A5199 Wigston	2A / 2B / 2C / 2D / 2E / 2F	4.5	2.3	1.9	2.2	2.0	13.0
Whetstone to Cosby	15A / 15B / 15C / 15D / 15E / 15F	3.6	2.2	1.9	2.2	3.0	12.8

- 5.1.6. The routes scoring as higher priority are Wigston Town Centre and South Wigston Train Station, as well as the east-west movements between Enderby and Wigston.
- 5.1.7. Figure 9 shows the breakdown of the prioritisation scores, highlighting the impact of the various criteria. For instance, in this study area, criteria 9 is only impacting the score of 4 corridor segments while criteria 4 is affecting all of them.



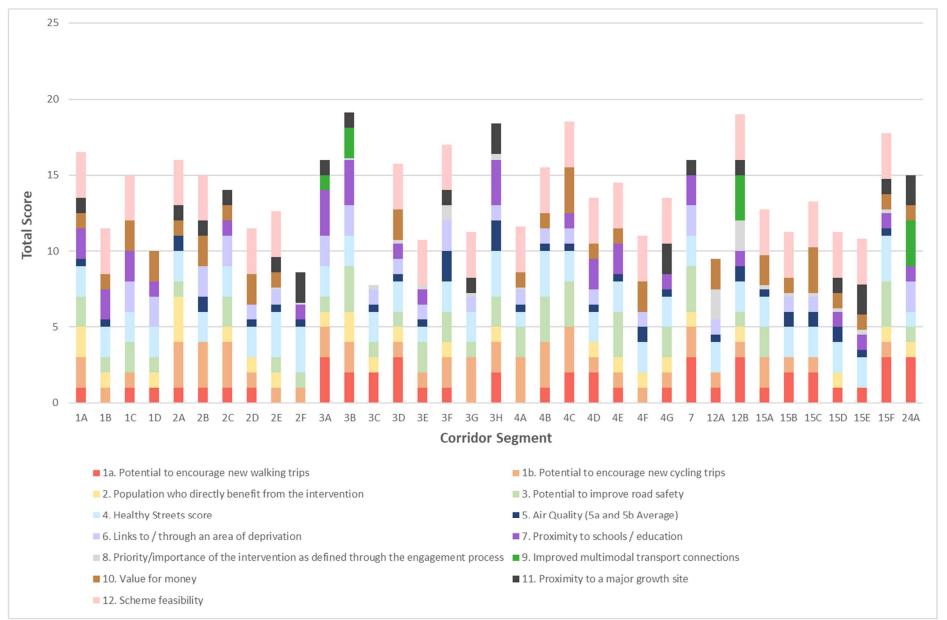


Figure 9. Breakdown of the Total Prioritisation Scores



Limitations:

- 5.1.8. A potential limitation of the prioritisation table is the inclusion of existing Healthy Streets scores, as this could be disfavouring routes that already have walking and cycling infrastructure in place. While it is beneficial to improve routes with no infrastructure, it is also valuable to upgrade routes that have poor quality infrastructure that is incompliant with current design standards. This is something that should be kept in mind when considering a programme of delivery.
- 5.1.9. In addition, the approach towards scoring the majority of criteria was very methodical. Conversely, the method for scoring criteria 8 (priority / importance of the intervention as defined through the engagement process) was reasonably subjective. As a result, the scores for this criterion are low, with only two corridor segments scoring higher than 1.

Timescales:

- 5.1.10. Following the prioritisation process, it is possible to create a pipeline of schemes (subject to funding) based on the following timescales from the Technical Guidance:
 - Short-term (typically implemented <3 years) improvements which can be implemented quickly or are under development
 - Medium-term (typically implemented <5 years) improvements where there is a clear intention to act, but delivery is dependent on further funding availability or other issues (e.g. detailed design, securing planning permissions, land acquisition)
 - Long-term (typically implemented >5 years) more aspirational improvements or those awaiting a defined solution
- 5.1.11. Table 12 shows how the timeframes have been categorised based on a combination of priority, project deliverability and indicative cost.

Table 12. Prioritisation Timescales Scoring

Priority	Conditions	Timescale
Very	Scored 3 for criteria 12 (scheme feasibility) and is <£3,000,000	Short-term
High	Scored 0 for criteria 12 and / or is >£3,000,000	Medium-term
Himb	Scored 3 for criteria 12 and is <£3,000,000	Short-term
High	Scored 0 for criteria 12 and / or is >£3,000,000	Medium-term
Medium	Scored 3 for criteria 12 and is <£3,000,000	Medium-term
Wedium	Scored 0 for criteria 12 and / or is >£3,000,000	Long-term
Law	Scored 3 for criteria 12 and is <£3,000,000	Medium-term
Low	Scored 0 for criteria 12 and / or is >£3,000,000	Long-term

5.1.12. Table 13 lists all of the corridor schemes including indicative timescales. Those schemes with greater potential for deliverability issues and / or higher cost are likely to be implemented over the longer term, and vice versa. Only schemes with concept designs and detailed cost estimates have been classified as short-term. The remaining 17 schemes have been classified as either medium or long-term due to their lack of detailed plans.



Table 13. Indicative Prioritisation of Infrastructure Improvements - Timescales

				Drioviti			Indicative	
Corridor	Corridor	Street(s)	Length	Prioriti	Rank	Priority		Timescales
	1A	Oadby Road B582	0.72	16.5	7	V. High	£3,289,042.66	Medium-term
<u>.</u>		•	0.52	11.5	24	Medium	£2,532,328.14	Medium-term
1	1C	•	0.27	15.0	13	High	£1,318,452.44	Medium-term
1	0.43	10.0	32	Medium	£1,991,054.97	Long-term		
	2A	Leicester Road / Bull	1.10	16.0	8	High	£3,928,173.77	Medium-term
	2B		0.50	15.0	13	High	£577,824.03	Short-term
	2C	Bullhead Street	0.65	14.0	17	High	£3,407,511.62	Medium-term
2	2D	Newton Lane Junction	0.17	11.5	24	Medium	£1,136,316.13	Medium-term
	2E	Guthlaxton Way Roundabout	0.65	12.6	22	Medium	£3,115,149.18	Long-term
	2F		1.00	8.6	34	Low	£4,792,537.20	Long-term
	3A	• ' '	1.40	16.0	8	High	£6,709,552.08	Medium-term
	3B		1.50	19.1	1	V. High	£7,314,925.2	Medium-term
	3C	Church Lane	1.00	7.8	35	Low	£4,470,692.8	Long-term
3	3D		0.70	15.8	11	High	£1,650,166.78	Short-term
ļ	3E	B582	0.40	10.8	31	Medium	£3,460,055.43	Long-term
	3F		1.56	17.0	6	V. High	£4,900,745.44	Medium-term
	3G		0.42	11.3	26	Medium	£2,972,190.12	Medium-term
	3H	Blaby Road / Mill Hill	2.49	18.4	4	V. High	£4,846,242.39	Medium-term
	4A	Palmerston Way	0.20	11.6	23	Medium	£2,040,376.56	Medium-term
	4B	Leicester Road, A6	0.41	15.5	12	High	£2,094,541.20	Short-term
4	4C		0.38	18.5	3	V. High	£2,954,003.50	Short-term
	4D	Harborough Road, A6	0.45	13.5	18	High	£2,682,548.89	Short-term
	4E	Harborough Road A6	0.64	14.5	16	High	£3,237,088.16	Medium-term
	4F		0.29	11.0	29	Medium	£1,583,268.97	Medium-term
	4G	Harborough Road, A6	1.23	13.5	18	High	£3,910,373.63	Medium-term
7	7	_	1.00	16.0	8	High	£4,410,593.6	Medium-term
12	12A	Warwick Road	0.29	9.5	33	Low	£658,253.60	Long-term
'-	12B	Warwick Road	1.81	19.0	2	V. High	£5,792,074.55	Medium-term
		-	0.09	12.8	21	Medium	£448,985.06	Medium-term
			0.44	11.3	26	Medium	£1,967,104.83	Medium-term
15		-	0.07	13.3	20	High	£308,741.55	Medium-term
]		1	0.37	11.3	26	Medium	£1,654,156.34	Medium-term
		-	0.50	10.8	30	Medium	£2,244,677.10	Medium-term
	15F		1.00	17.8	5	V. High	£4,708,457.6	Medium-term
24A	24A	Station Street / Kirkdale Road / Marstown Avenue	0.82	15.0	13	High	£3,796,895.53	Medium-term



5.2. Economic Appraisal

5.2.1. Table 14 summarises the number of routes in different BCR categories for each of the three scenarios. The BCRs for each of the corridor schemes is shown in Appendix 3.

Table 14. Number of Proposed Corridor Segments in each Value for Money Category

	20-	Year Apprai	sal	40-Year Appraisal			
BCR	PCT 2011	Govt.	Go Dutch	PCT 2011	Govt.	Go Dutch	
No of Segments with a BCR >=4	0	2	22	1	7	32	
No of Segments with a BCR 2 – 4	1	5	11	1	7	1	
No of Segments with a BCR 1.5 - 2	0	2	0	8	11	0	
No of Segments with a BCR 1 – 1.5	2	7	0	14	5	0	
No of Segments with a BCR 0 – 1	32	19	2	11	5	2	
No of Segments with a BCR <=0	0	0	0	0	0	0	

- 5.2.2. As expected, the BCRs for the two PCT future scenarios are much higher than those using current demand. As 2011 Census data was used to establish the BCRs, it is likely that up-to-date counts would be required for future comprehensive economic appraisal work.
- 5.2.3. The BCRs for the wider corridors have also been established, see Table 15. This is an average of the segments that make up the overall route. The routes scoring higher BCRs are the corridors from Whetstone to Cosby and Wigston to Oadby, as well as the two radial routes into Leicester City from Oadby (A5) and Wigston (A5199).

Table 15. Average BCRs for Full Corridor Schemes

		20-Year Appraisal			40-Year Appraisal		
Location	Corridor	PCT	Govt.	Go	PCT	Govt.	Go
Whetstone to Cosby	15A / 15B / 15C / 15D / 15E / 15F	1.17	2.19	13.65	2.32	4.14	26.10
East to West - Wigston to Oadby	1A / 1B / 1C / 1D	0.81	1.03	6.74	1.52	1.93	12.66
A6 Oadby	4A / 4B / 4C / 4D / 4E / 4F / 4G	0.77	1.19	5.86	1.45	2.22	11.03
A5199 Wigston	2A / 2B / 2C / 2D / 2E / 2F	0.74	1.33	6.52	1.43	2.49	12.26
Kirkdale Road / Station Street, South Wigston	24A	0.61	0.92	3.73	1.15	1.73	7.03
East to West - Enderby to Oadby	3D / 3E / 3F / 3G / 3H / 3A / 3B / 3C / 7 / 1A / 1B / 1C / 1D	0.52	1.17	6.29	0.97	2.20	11.87
Whetstone to Littlethorpe	12A / 12B	0.51	0.72	4.19	0.97	1.36	7.95
East to West - Enderby to Blaby	3D / 3E / 3F / 3G / 3H	0.50	1.66	8.12	0.94	3.12	15.32



		20-`	Year Appra	isal	40-Year Appraisal				
Location	Corridor	PCT	Govt.	Go	PCT	Govt.	Go		
Wakes Road / Leicester Road / Long Street, Wigston	7	0.46	0.90	4.57	0.88	1.71	8.70		
East to West - Enderby to Wigston	3A / 3B / 3C / 3D / 3E / 3F / 3G / 3H	0.38	1.27	6.29	0.71	2.40	11.88		
East to West - Blaby to Wigston	3A / 3B / 3C / 7	0.24	0.70	3.57	0.46	1.31	6.77		

6. Appendices



6.1. Appendix 1: Prioritisation Scoring Criteria

Table 16. Scheme Prioritisation Scoring Criteria

		Score 0	Score 1	Score 2	Score 3	Notes
	1(a). Potential to encourage new walking trips	Scheme is >800m from a Key Trip Attractor	Scheme is within 800m of a Key Trip Attractor	Scheme is within 400m of a Key Trip Attractor (Core Walking Zone)	Scheme goes through / adjoins a Key Trip Attractor	If any of the scheme goes
Effectiveness	1(b). Potential to encourage new cycling trips	Less than 300 PCUs Travelling <10km (PRTM 2021)	301 - 600 PCUs Travelling <10km	601 - 900 PCUs Travelling <10km	More than 900 PCUs Travelling <10km	Where there are no
	2. Population who directly benefit from the intervention	<2,500 residents within a 400m buffer (2011 Census)	2,500 - 5,000 residents within a 400m buffer	5,001 - 7,500 residents within a 400m buffer	>7,500 residents within a 400m buffer	-
	3. Potential to improve road safety	Scheme is on a route that has a cost per casualty score of 0 from 2015-19 (COBALT Parameter File v2020.1)	Scheme is on a route that had a cost per casualty score of 1 - 10 from 2015-19	Scheme is on a route that had a cost per casualty score of 11 - 20, or where there were >5 incidents, from 2015-19	Scheme is on a route that had a cost per casualty score of >21, or where there were >10 incidents, from 2015-19	
Attractiveness	4. Healthy Streets score	Healthy Streets score of >=42	Healthy Streets score of 29 - 42	Healthy Streets score of 15 - 28	Healthy Streets score of <=14	-
	5(a). Improvement in air quality – proximity to an AQMA	Scheme does not go through / adjoin an AQMA	-	-	Scheme goes through / adjoins an AQMA	If any of the scheme goes
	5(b). Improvement in air quality - PBCC car emissions grade	PBCC Grades A-C (above average)	PBCC Grades D (below average)	PBCC Grades E	PBCC Grades F (worst 10%)	Where the route goes
Policy	6. Links to / through an area of deprivation	IMD Deciles 9-10	IMD Deciles 6-8	IMD Deciles 3-5	IMD Deciles 1-2	Where the route goes
	7. Proximity to schools / education	Scheme is >400m from the entrance to an education facility	Scheme is within 400m (core walking zone) of the entrance to an education facility	Scheme is within 200m of the entrance to an education facility	Scheme directly adjoins the entrance to an education facility	If any of the scheme
	8. Priority / importance of the intervention as defined through the engagement process	Scoring provided by the client (See Paragraph 3.2.3)	Scoring provided by the client	Scoring provided by the client	Scoring provided by the client	
	9. Improved multimodal transport connections	Scheme is >800m from a key transport connection	Scheme is within 800m of a key transport connection	Scheme is within 400m of a key transport connection	Scheme directly adjoins a key transport connection	
	10. Value for money	Very poor / poor (BCR <1) (40 Year Appraisal)	Low (BCR 1-1.5)	Medium (BCR 1.5-2)	High / very high (BCR >2)	
Economic	11. Proximity to a major growth site	Scheme is > 400m from a committed development (>100 Houses / >50 Jobs in '36)	Scheme is within 400m of a committed development	Scheme runs adjacent to a committed development	Scheme runs through a committed development	If any of the scheme is
Deliverability	12. Scheme feasibility	Land ownership or other issue likely to delay or prevent the scheme	-	-	No issues, scheme feasible to be undertaken	If any of the scheme falls any of the scheme falls



6.2. Appendix 2: Full Prioritisation Table for the South of Leicester LCWIP

Table 17. South of Leicester Area LCWIP Prioritisation Table

		Effect	iveness		Attrac				Policy				Econ	omic	Delive	Priorit	isation
Scheme	1a. Potential to encourage new	1b. Potential to encourage new	2. Population who directly benefit	3. Potential to improve road safety	4. Healthy Streets score	5a. Improvement in air quality -	5b. Improvement in air quality -	5. Air Quality (5a and 5b Average)	6. Links to / through an area of	7. Proximity to schools / education	8. Priority/importance of the engagement process	9. Improved multimodal transport	10. Value for money	11. Proximity to a major growth site	12. Scheme feasibility	Total	Rank
1A	1	2	2	2	2	0	1	0.5	0	2	0	0	1	1	3	16.5	7
1B	0	1	1	1	2	0	1	0.5	0	2	0	0	1	0	3	11.5	24
1C	1	1	0	2	2	0	0	0	2	2	0	0	2	0	3	15.0	13
1D	1	0	1	1	2	0	0	0	2	1	0	0	2	0	0	10.0	32
2A	1	3	3	1	2	0	2	1	0	0	0	0	1	1	3	16.0	8
2B	1	3	0	0	2	0	2	1	2	0	0	0	2	1	3	15.0	13
2C	1	3	1	2	2	0	0	0	2	1	0	0	1	1	0	14.0	17
2D	1	1	1	0	2	0	1	0.5	1	0	0	0	2	0	3	11.5	24
2E	0	1	1	1	3	0	1	0.5	1	0	0.1	0	1	1	3	12.6	22
2F	_ ^	1 4	1 -	1										I .			
	0	1	0	1	3	0	1	0.5	0	1	0.1	0	0	2	0	8.6	34
3A	3	2	1	1	2	0	0	0	2	3	0	1	0	1	0	16.0	8
3B	3 2	2 2		'	2 2	0	0	0	2 2	3	0 0.1	1 2	0	1	0	16.0 19.1	8
3B 3C	3 2 2	2	1	1	2 2 2	0 0	0 0	0 0 0.5	2	3	0 0.1 0.3	1 2 0	0 0 0	1 1 0	0 0	16.0 19.1 7.8	8 1 35
3B 3C 3D	3 2 2 3	2 2	1 2 1 1	1 3 1 1	2 2 2 2	0 0 0	0 0 1 1	0 0 0.5 0.5	2 2	3	0 0.1 0.3 0.3	1 2 0 0	0 0 0 2	1 1 0 0	0 0 0 3	16.0 19.1 7.8 15.8	8 1 35 11
3B 3C	3 2 2	2 2 0	1 2 1	1 3 1	2 2 2	0 0	0 0	0 0 0.5	2 2 1	3	0 0.1 0.3	1 2 0	0 0 0	1 1 0	0 0	16.0 19.1 7.8	8 1 35



		Effecti	veness		Attrac				Policy				Econ	omic	Delive	Priorit	isation
Scheme	1a. Potential to encourage new	1b. Potential to encourage new	2. Population who directly benefit	3. Potential to improve road safety	4. Healthy Streets score	5a. Improvement in air quality -	5b. Improvement in air quality -	5. Air Quality (5a and 5b Average)	6. Links to / through an area of	7. Proximity to schools / education	8. Priority/importance of the engagement process	9. Improved multimodal transport	10. Value for money	11. Proximity to a major growth site	12. Scheme feasibility	Total	Rank
3G	0	3	0	1	2	0	0	0	1	0	0.3	0	0	1	3	11.3	26
3H	2	2	1	2	3	3	1	2	1	3	0.4	0	0	2	0	18.4	4
4A	0	3	0	2	1	0	1	0.5	1	0	0.1	0	1	0	3	11.6	23
4B	1	3	0	3	3	0	1	0.5	1	0	0	0	1	0	3	15.5	12
4C	2	3	0	3	2	0	1	0.5	1	1	0	0	3	0	3	18.5	3
4D	2	1	1	0	2	0	1	0.5	1	2	0	0	1	0	3	13.5	18
4E	1	1	1	3	2	0	1	0.5	0	2	0	0	1	0	3	14.5	16
4F 4G	1	1	1	0 2	2	0	2	0.5	0	0	0	0	0	2	3	11.0 13.5	29 18
7	3	2	1	3	2	0	0	0.5	2	2	0	0	0	1	0	16.0	8
12A	1	1	0	0	2	0	1	0.5	1	0	2	0	2	0	0	9.5	33
12B	3	1	1	1	2	0	2	1	0	1	2	3	0	1	3	19.0	2
15A	1	2	0	2	2	0	1	0.5	0	0	0.3	0	2	0	3	12.8	21
15B	2	1	0	0	2	0	2	1	1	0	0.3	0	1	0	3	11.3	26
15C	2	1	0	0	2	0	2	1	1	0	0.3	0	3	0	3	13.3	20
15D	1	0	1	0	2	0	2	1	0	1	0.3	0	1	1	3	11.3	26
15E	1	0	0	0	2	0	1	0.5	0	1	0.3	0	1	2	3	10.8	30
15F	3	1	1	3	3	0	1	0.5	0	1	0.3	0	1	1	3	17.8	5
24A	3	0	1	1	1	0	0	0	2	1	0	3	1	2	0	15.0	13

^{*} The scores for criteria 8 and the total scores have been rounded to 1 d.p.



6.3. Appendix 3: Benefit Cost Ratios

Table 18. BCR – Proposed Cycling and Walking Routes

			20-	Year Appra	isal	40-Year Appraisal			
Corridor	Corridor	Brief Description of Scheme	PCT	Govt.	Go	PCT	Govt.	Go	
	1A	This scheme aims to connect East-west. This section stops at east of Shenley Rd mini	0.72	1.13	6.57	1.35	2.12	12.41	
	1B	This scheme aims to connect East-west. This section stops at west of Wigston Rd/ Brabazon	0.77	1.04	7.24	1.44	1.94	13.58	
1	1C	This scheme aims to connect East-west. This section stops at east of B582/ Rosemead Dr	0.87	1.29	9.98	1.63	2.41	18.67	
	1D	This scheme aims to connect East-west. This section stops at B582/ London Rd mini	0.88	0.66	3.17	1.66	1.24	5.99	
	2A	This scheme goes from the northern end of SELT corridor on Leicester Rd and travels south	0.73	1.26	5.02	1.36	2.36	9.46	
	2B	Upgrade the existing signalised roundabout at Wakes Rd/ Bull Head St/ B582 and to	1.04	2.54	12.7	1.94	4.74	23.78	
	2C	This scheme aims to provide segregated cycle tracks for both directions along Bull Head St,	0.69	1.04	5.71	1.30	1.95	10.79	
2	2D	This scheme aims to provide segregated cycle crossings at this busy junction. Rearranging	0.98	2.61	14.98	1.82	4.88	28.15	
	2E	This scheme continues the route south on A5199 Welford Rd, the verge can be converted	0.64	0.35	0.49	1.20	0.67	0.92	
	2F	This scheme continues the route south on A5199 Welford Rd, the verge and footway on	0.37	0.19	0.24	0.70	0.36	0.45	
	3A	This scheme forms part of the East-west corridor and connects to the Tesco Superstore for	0.04	0.53	3.54	0.08	1.00	6.72	
	3B	This scheme forms part of the East-west corridor and connects to the non-motorised road of	0.16	0.87	4.13	0.29	1.62	7.78	
3	3C	This scheme utilises the non-motorised path of The Ford to connect roads on the East-West	0.30	0.49	2.05	0.57	0.92	3.89	
	3D	This scheme upgrades some existing cycle facilities to connect the East-West Corridor.	0.86	2.23	10.20	1.60	4.19	19.22	
	3E	This scheme carries the East-West corridor further west and north west. Connecting with	0.45	0.85	4.20	0.84	1.60	7.88	



			20-	Year Appra	isal	40-Year Appraisal			
Corridor	Corridor	Brief Description of Scheme	РСТ	Govt.	Go	PCT	Govt.	Go	
	3F	This scheme carries the East-West corridor further west and north west. Connecting with	0.30	1.33	6.48	0.56	2.49	12.15	
	3G	This scheme focuses on the large roundabout at St Johns B4114 intersection. This section is	0.47	2.26	11.12	0.88	4.26	21.01	
	3H	This scheme carries the East-West corridor to the furthest point on the LCWIP region,	0.44	1.62	8.58	0.83	3.08	16.35	
	4A	Leicester Rd / Palmerston Way roundabout (start of cycle corridor). To upgrade an existing 8-arm roundabout by introducing signals to LTN 1/20 and to tie into the existing cycle route on the eastern and western footway near Glebe Rd.	0.78	2.21	12.20	1.46	4.13	22.84	
	4B	From Leicester Rd / Palmerston Way roundabout to Oadby Hill Drive to provide a segregated cycle line for both north and southbound on Leicester Rd.	0.77	1.41	7.62	1.45	2.66	14.43	
	4C	Brabazone Rd signalised junction (ASDA) to Regent St signalised junction. To provide segregated cycle lanes for both north and southbound direction and to provide links to ASDA from the surrounding areas for both cyclists and pedestrians to improve active travel.	1.25	1.84	8.64	2.32	3.43	16.25	
4	4D	The scheme starts at the junction with Stoughton Rd and ends at the junction with the New	0.68	0.97	4.25	1.29	1.83	8.04	
	4E	Upland Rd to Waldron Drive/ London Road junction on Harborough Rd A6. The route is to	0.60	0.74	3.11	1.13	1.39	5.91	
	4F	Waldron Drive/ London Road junction on Harborough Rd A6 to Sainsbury's signalised	0.84	0.50	3.01	1.57	0.93	5.64	
	4G	Scheme 3 continues down Sainsbury's signalised junction over the Florence Wragg way	0.50	0.63	2.16	0.95	1.19	4.09	
7	7	This scheme aims to connect between the Wakes Rd roundabout in Wigston and the A6 in	0.46	0.90	4.57	0.88	1.71	8.70	
	12A	This scheme aims to provide connection west towards Narborough train station, utilising	0.85	0.96	6.20	1.61	1.82	11.77	
12	12B	This scheme aims to provide connection west towards Narborough train station, utilising	0.17	0.47	2.18	0.32	0.90	4.13	
	15A	This scheme reaches the southwestern corner of the LCWIP region, connecting to the major	0.86	4.65	27.74	1.63	8.73	52.52	
15	15B	This scheme reaches the southwestern corner of the LCWIP region, connecting to the major	0.67	0.87	4.08	1.27	1.66	7.80	
	15C	Park Road / Main street junction and Cambridge road / Narborough road roundabout. This is	3.45	5.10	39.81	6.57	9.72	76.70	



			20-	iisal	40-`	isal		
Corridor	Corridor	Brief Description of Scheme	PCT	Govt.	Go	РСТ	Govt.	Go
	15D	Cambridge road junction - Stevenson Gardens.	0.71	0.85	3.76	1.36	1.63	7.18
	15E	North side of Cosby - 40mph road underneath the M1.	0.59	0.67	2.86	1.11	1.27	5.45
	15F	Around Dog and Gun Lane the route is eligible and permits LTN 1-20 improvements.	0.72	0.97	3.66	1.35	1.83	6.95
24A	24A	This scheme connects the major East-West corridor with the major destination of South	0.61	0.92	3.73	1.15	1.73	7.03

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