

# SE LEP Business Case – Thurrock Cycle Network

## BUSINESS CASE

For

### *Thurrock Cycle Network*

**LOCATION OF PROJECT:** Thurrock

**PROJECT SPONSOR (local authority):** Thurrock Borough Council

**PROJECT MANAGER (lead officer):** Lee Stevens

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In order to pass eligibility stage, part 1 of this document must be completed as a minimum as an initial business case. Parts 1 and 2 of this document together constitute a detailed business case required prior to programme entry. For a detailed business case it is expected that additional information will be provided, and refined, for all parts of the document.

Please clearly state any assumptions you make for figures used in the Business Case. It is your responsibility to make a compelling case.

As you complete part 2 of the business case, please attach any additional paperwork you feel will support your proposal. For example:

- Formal risk assessment and mitigation plan
- Feasibility study results
- Formal project plans

## PART 1

### Strategic Case

#### **1. Project Description**

##### **1.1. Brief description: primary aims and objective; broad description of activities and impact**

A network of cycle routes has been identified and prioritised for implementation using a multi criteria analysis matrix to determine the most beneficial infrastructure to bring about increased cycling levels across the Borough. The routes are targeted towards improving access to employment, growth hubs, areas of regeneration and providing sustainable alternatives in already congested corridors. The project will deliver a package of cycling and walking focussed at addressing barriers such as crossing facilities and missing routes to important destinations, such as rail stations.

The new routes to be provided will be largely off-road, high-quality pedestrian and cycle infrastructure designed especially to attract would-be commuter cyclists who currently drive to work because of a lack of safe and convenient cycling infrastructure. By increasing cycling levels and promoting a modal shift from car use it is envisaged that traffic congestion across the Borough will reduce, accessibility to employment sites and urban centres will improve and cyclists will benefit from a safer and contiguous network. Realisation of these benefits will unlock transport network capacity contributing towards sustainable growth in the Borough.

The key outcomes for Thurrock delivering this project are:

- improve cycling provision and pedestrian connectivity;
- increase the number of cycling and pedestrian journeys;
- reduce the number of vehicle trips in the borough;
- reduce local congestion on key routes;
- improve the health of Thurrock's residents; and
- enhance local air quality.

The outcomes influence a number of inter-related benefits:

- Health inequalities across the borough will be reduced by increasing the number of people travelling actively and being physical active, as well as improved air quality
- Reducing the number of vehicles trips will reduce peak-time congestion and help improve air quality
- Time-cost savings will be accrued by participants by improved journey reliability benefitting local businesses
- Improved infrastructure will enhance the Council's ability to embed a culture of sustainable travel into organisations and communities across the borough

##### **1.2. Strategic fit: please outline the policy and strategic context; how does the project fit and contribute to the LEP?**

Thurrock is going through a period of rapid development, with the number of vehicles expected to be travelling on Thurrock's roads increasing, particularly as a result of the opening of London Gateway Port, Europe's biggest deep sea container port. Thurrock needs to develop an integrated transport network which improves accessibility and promotes journeys by active modes.

The overarching aim of this project is to:

- Establish a contiguous network of walking and cycling routes in Thurrock to influence active travel behaviour to support local growth.

With underlying objectives:

- Reduce the number of vehicle trips in the Borough;
- Reduce local congestion on key routes;
- Enhance local air quality; and
- Improve the health of Thurrock's residents.

The promotion of walking and cycling has become a key component of many local, national and European strategies to improve air quality. A large component of these strategies is to improve walking and cycling infrastructure through the creation of separated cycle paths, shared use routes, and cycle parking. This can provide direct health benefits to

those that walk and cycle, as well as a reduction in NO<sub>2</sub> & PM10 levels if the strategy is successful in decreasing overall car trips and easing traffic.

Thurrock's local strategic objectives reflect national strategy. In 2014, the Dft's Cycling Delivery Plan: Draft outlined the government's aim to double the number of bicycle journey by 2025 to reduce pollution and improve air quality.<sup>1</sup> This was followed by the 2015 Infrastructure Act that sets out a duty to create a Cycling and Walking Investment Strategy for England to detail the objectives for increasing cycling infrastructure provision.

2011 Census data revealed that people in Thurrock are only half as likely to travel to work on foot or by bike (7.6%) in comparison to the East of England average (14.5%), even though 27.4% of Thurrock residents live less than 5km from their workplace. In addition, just over 50% of pupils living within the walking & cycling threshold of their school currently walk and over 1,500 of those living within the walking threshold are currently driven to school by car. Improved infrastructure that is connected to other cycle paths can discourage car use for short journeys, typically those below 5km, and incentivise increased ridership

In addition, Thurrock's latest School Travel Strategy (SMOTs) highlights the need to focus interventions and activities at schools close to AQMAs. For example Tudor Court Primary was identified as one of those schools in order to tackle air quality in the areas surrounding AQMA 3, 4 and 5.

The objectives have been identified in the following Thurrock policy documents:

- The adopted Core Strategy;
- The Thurrock Transport Strategy
- LSTF 2015/16 revenue bid

### **1.3. Reasons:**

#### **1.3.1.**

- *What evidence is there of need for the project?*
- *Why should the SE LEP support the project (is another public body better placed to do so)?*
- *What is the background context and evidence to justify public sector support for the project?*

Local Sustainable Transport Funding (LSTF) awarded to the Council over the period 2011-15 has delivered significant improvements around sustainable travel, incorporating a mix of targeted hard (capital) and soft (revenue) measures. During this funding period, cycling counters across the borough show a 7% increase in cycling levels. Feedback from personalised journey planning interviews identified lack of safe and contiguous cycle routes as a barrier to more cycle use.

The new cycle facilities will directly influence behaviour that supports public health objectives and achieves a number of secondary impacts by encouraging a more active lifestyle, tackling obesity, and reducing the air-quality associated respiratory problems.

The current health implications of air pollution in Thurrock underline the need to improve walking and cycling infrastructure and encourage more active lifestyles. The Public Health Outcomes Framework, showed Thurrock to have the highest proportion of particulate matter in the region (5.9%, compared to 5.3% regionally and 5.1% nationally). A large ratio of emergency hospital admissions for Chronic Obstructive Pulmonary Disease is experienced in Thurrock; the ratio of 225.7 (England = 100). In addition, mortality data indicates that there is a significantly higher rate of deaths due to respiratory conditions than the national average. Finally, obesity is of great concern in Thurrock; 36% of 10-11 year olds in Thurrock are obese which again is higher than the national average. Investing in improvements to the walking and cycle network will contribute towards improving these outcomes by encouraging active travel.

<sup>1</sup> Department for Transport (2014), *Cycling Delivery Plan: Draft*, October 2014. Available online: [https://www.gov.uk/government/uploads/system/uploads/attachment\\_data/file/364791/141015\\_Cycling\\_Delivery\\_Plan.pdf](https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/364791/141015_Cycling_Delivery_Plan.pdf) [accessed 12/10/2015]

In Thurrock's Interim Air Quality Action Plan 2012/13 – 2014/15, the need for Thurrock to establish cycling infrastructure surrounding its Air Quality Management Areas (AQMAs) was identified as 'high'. AQMAs have been established in areas where national air quality objectives were deemed not likely to be achieved. In these areas the Council has been working to reduce air pollution through monitoring air quality levels and through the implementation of its Interim Air Quality Action Plan. The report identified six locations within the borough that would exceed the annual mean objectives for concentrations of NO<sub>x</sub> and NO<sub>2</sub> in 2015, highlighting the need to reduce the number of car trips and reduce congestion by providing improved walking and cycling facilities.

In 2015 a cycle audit was completed across the Borough to review existing routes and identify missing links and barriers to cycling, as well as new routes that would lead to increased uptake in cycling. The schemes were prioritised for their potential to bring about modal shift in more congested areas, particularly on the home to work or school journey and focussed in areas where access to housing, jobs and future growth is vitally important.

The results of this audit has fed into the production of a Cycle Infrastructure Delivery Plan (referred to hereafter as Cycle Plan) to support the business case for economic growth in the Borough. The Cycle Plan identifies a rational network of cycle routes, incorporating existing facilities alongside potential routes from known popular origins and destinations.

To facilitate a robust prioritisation of the potential measures, each scheme was scored against a matrix to understand the maximum benefits that each measure could achieve. The scoring matrix consisted of a number of factors (see Appendix 1) such as scheme cost, safety benefit, access to facilities and deliverability etc. The full list of schemes identified, their rank and total scores can be seen in Appendix 1. More than 35km of new and improved cycle facilities have been identified across the Borough; and a total of 46 missing links and opportunities.

The Cycle Plan has been further reviewed and appraised by Council officers to determine which schemes are most deliverable to identify 3 tranches for implementation as illustrated in Appendix 2.

The Council will implement a package of measures to develop the Thames Riverfront route, serving the entire length of the Borough from Purfleet to SLH/Corringham. This will include measures which address North/South links to the existing cycle network and growth locations such as Purfleet, Lakeside, Grays, Tilbury, Stanford-le-Hope and London Gateway. These measures will support the growth of more than 9,000 new homes and provide sustainable access to more than 20,000 jobs.

Implementation of the Cycle Plan will build on our success and experience of encouraging more individuals and local communities to travel by sustainable modes. This project is seeking to initially fund the capital element of the improvements which will be supported in future through our travel planning, cycle training and promotion and marketing activities targeted at schools and businesses across the Borough.

## 2. Options

### 2.1. Describe at least 3 options which were considered to achieve the project objectives:

- *Do nothing*

With the predicted growth and development in the Borough, traffic levels and congestion are likely to increase resulting in traffic delays, worsening air pollution and a barrier to access to employment. Without intervention and mitigation the positive results that have already been achieved through the LSTF would diminish.

- *Do minimum*

A do minimum solution will involve delivering missing links to the cycle network in key areas where proposed developments may contribute to those schemes. Depending on scope, Thurrock may only be able to use a proportional percentage of any funding awarded by the DfT or from new developments via S106 agreements for cycle routes resulting in an unconnected network and a failure to provide sustainable transport options to existing and new employment sites.

- *Do maximum*

Do maximum would involve delivering all identified cycle network improvements to provide an integrated, safe and attractive cycle network. Due to the full cost of the network identified in the Cycle Plan being greater than LGF funding available, any schemes not developed as part of this project will form a future pipeline of schemes for delivery as opportunity and/or funding arises.

## 2.2. Recommended Option: *What is the preferred option – and why?*

**Do maximum** is the preferred option to bring about realisation of the greatest increase in cycling levels.

Improved safety of cyclists and better accessibility to urban centers, employment areas and schools will unlock the greatest potential for modal shift, helping to tackle congestion, improve the environment and release capacity on the local transport network. This in turn should facilitate local economic growth through reduced congestion and improved journey reliability. Optimism bias has been applied to the project as the current outline costings are approximate and subject to refinement at the next stage of design.

## 3. Constraints

- *Please provide details of any technical, environmental, archeological, or other constraints that need to be overcome before development on the project can begin?*

Consultants have been instructed to undertake detailed designs for all schemes which may identify technical or environmental constraints which need to be overcome. However, it is believed they will be manageable within the project.

The Cycle Plan has been developed in collaboration with Council highway maintenance, traffic management and development management officers and was presented at Thurrock's Local Access Forum and reviewed by Sustrans; Thurrock Cabinet endorsed the planned improvements at its meeting in January. Further public consultation to secure public engagement and buy in will also be required and any outcomes of this consultation will need to be taken into account in the design and construction process.

Land may be required but it is expected that most of the construction will be within the existing highway boundary. The detail of this will become clearer as the detailed design is undertaken.

Statutory undertakers' plant is known to be present in various locations. The impact of this will become clearer and taken into account as part of the detailed design. Mitigation measures will be undertaken to reduce risks to the program and scheme costs.

### Dependencies and Assumptions:

It is a common assumption that people will be keener to walk and cycle in favour of other modes when provision of the shared-use infrastructure is improved. This assumption is grounded in a 2014 study from Portland State University that analysed how new protected bike lanes increased ridership in cities from between 21 to 171 percent, with around 10 percent of new riders drawn from other modes.<sup>2</sup> A statistic confirmed by a UK wide study that found high-quality traffic-free routes generated new walking and cycling trips in the longer term.<sup>3</sup>

Uptake in cycling to reduce school journeys is another assumption. A 2015 study examining new walking and cycling infrastructure in Cardiff, Kenilworth and Southampton has shown a correlation in the substantial differences between awareness and use of sites, highlighting the potential importance of additional mechanisms to enhance the visibility of a scheme.<sup>4</sup> A highly visible scheme may influence not only awareness that the new infrastructure exists, but also its use and the social norms related to individual perceptions of it. As indicated in the risk register below this is not anticipated to be a challenge given engagement with schools is integrated into the scheme. This builds on Thurrock Council's proven propensity to encourage people to travel by active modes of travel as demonstrated through Travel Thurrock project<sup>5</sup>. It is therefore not anticipated that project delivery will be affected by any dependencies or assumptions.

<sup>2</sup> Monsere, C. et al. (2014), *Lessons from the Green Lanes: Evaluating Protected Bike Lanes in the U.S.*, 30 June, Portland State University. Available online: <http://trec.pdx.edu/research/project/583> [accessed 12/10/2015]

<sup>3</sup> Goodman A., Sahlqvist S., Ogilvie D. (2014), 'Do new walking and cycling routes increase physical activity? One- and two-year findings from the UK iConnect study', *Am J Public Health.*; 104. pp38-46

<sup>4</sup> Sahlqvist S. et al (2015), 'Mechanisms underpinning use of new walking and cycling infrastructure in different contexts: mixed-method analysis', *International Journal of Behavioral Nutrition and Physical Activity*, pp.12-24

<sup>5</sup> Travel Thurrock was funded through Department of Transport's Local Sustainable Transport Fund (2012-2015). Travel Thurrock delivered a 4% increase in cycling trips and walking trips increased through Beat the Street (2014) where Thurrock residents collectively walked 70,000 miles.

## Financial Case

- Please state the development cost of the project  
See below
- Please state the total project cost  
£6.0 million.

## Economic Case

### 4. Expected positive impact of the scheme

- Estimate jobs and homes

	2014/15	2015/16	2016/17	2017/18	2018/19	2019/2020	Total
Jobs		100	100	150	150	150	
Homes		80	80	80	80	80	

### 5. Expected negative impact of the scheme

#### Transport Impacts and Environmental Considerations

- Does the scheme implementation or operation have the potential for any significant adverse environmental impacts (e.g. impact on landscape, townscape/heritage, and environmentally sensitive areas)?

No. The schemes are to be undertaken within the highway envelope and so the transport and environmental impacts will be minimal.

- If yes, what progress has been made on identifying / agreeing mitigation?

N/A

### 6. Benefit Cost Ratio – assessment of the value for money

- Please provide description of any modelling and appraisal methodology

An economic appraisal (see Appendix 3) of the Cycle Plan was undertaken based on the DfT's Active Mode Appraisal Toolkit. This requires a number of inputs relating to the scheme being appraised and calculates a number of benefits:

- 'Journey ambience' benefits to cyclists resulting from the improved facilities, such as the creation of new off-road routes
- Health-related benefits due to an increase in the number of people cycling (specifically relating to mortality and absenteeism from work)
- Benefits relating to a reduction on motorised vehicle traffic:
  - Reduced traffic delays
  - Reduced road maintenance costs
  - Reduction in accidents
  - Reduction in greenhouse gas emissions
  - Improvements in noise and air quality

These are added together to produce the present value of benefits (PVB).

Input information on scheme costs is also processed to produce the present value of costs (PVC).

Given the above outputs the benefit-cost ratio (BCR) is produced (equal to PVB divided by PVC).

While the toolkit has the option to enter data for pedestrians as well as cyclists we have not done so. This is mainly because of the difficulty in quantifying the number of pedestrians who would benefit from the shared paths and additional crossings. Our estimate of benefits will therefore be conservative.

The toolkit has been set up to estimate benefits for Tranches 1, 2 and 3 combined. The overall benefits have then been apportioned to the 3 tranches in proportion to the number of route kilometres upgraded in each tranche.

There is, however, an important benefit missing from the DfT toolkit, namely the reduction in cyclist

casualties resulting in cyclists transferring from on-road routes to off-road segregated routes. These benefits have therefore been calculated separately and added to the results from the DfT toolkit.

- *Please show sufficient information to demonstrate the analysis supporting the economic case fitness for purpose. The level of detail in the appraisal summary table should be proportionate to the scale of expected impact with particular emphasis placed on the assessment of carbon, air quality, bus usage, sustainability modes, accessibility and road safety.*

The economic assessment is contained in Appendix 3 of the bid and should be read to understand the detailed assumptions and methodology.

## PART 2

### **Financial Case – further detail**

#### **6.1. Total cost of the project**

List here the gross costs, updated from Outline Business Case using detailed estimates or tender prices

	* Est type	2014/15 £000	2015/16 £000	2016/17 £000	2017/18 £000	2018/19 £000	2019/20 £000
Procurement Cost	E		25	80	120	140	
Feasibility Cost	E		125	30			
Detail Design Cost	E			90	90	50	
Engineering Cost	E						
Equipment Cost	E			1,300	1,750	2,100	
Construction Cost	E						
Audit Cost	E			5	5	5	
Other (add as many lines as necessary)			10	25	25	25	
VAT							
<b>TOTAL COST</b>			<b>160</b>	<b>1,530</b>	<b>1,990</b>	<b>2,320</b>	

\*D = Detailed estimate, T = Tender price.

#### **6.2. Source of funding**

List here the amount of funding sought

Funding Source	2014/15 £000	2015/16 £000	2016/17 £000	2017/18 £000	2018/19 £000	2019/20 £000
SE LEP		160	1,230	1,590	2,020	
SE FUND						
Local Contribution Total (leverage)						
Other Funding S106			300	400	300	
<b>TOTAL FUNDING</b>		<b>160</b>	<b>1,530</b>	<b>1,990</b>	<b>2,320</b>	

## 6.3. Local Contribution Breakdown

List here the amounts, building up the total local contribution

Local Contribution	2014/15 £000	2015/16 £000	2016/17 £000	2017/18 £000	2018/19 £000	2019/20 £000
Local Authority Contributions (incl. S106)			300	400	300	
<b>Other</b> (insert as many rows as required)						
<b>TOTAL FUNDING</b>			<b>300</b>	<b>400</b>	<b>300</b>	

## 6.4. Viability

**6.4.1.** *Please identify how secure other sources of investment outlined in 3.2 are considered to be?*

All funding identified is secured through s106 agreements for new developments already in construction:

- Footpath from Manor Road to Thurrock - £607k – ref: IRL-0090
- Dock Road – Tilbury Town railway stn - £312.5k – ref: 10/50157/TTGOUT
- The Council has recently adopted an infrastructure requirements list in place of the planning obligations strategy. This list has all the Cycle Plan schemes highlighted to capitalise on any new development, to potentially enable any LGF awarded funds to be used on other schemes.

**6.4.2.** *What is the basis of the cost estimated and income estimated in section 3? (Please source, date and attach any supporting reports or data)*

The Cycle Plan (Appendix 2) has indicative cost ranges for each infrastructure scheme from the initial feasibility and cycle audit to provide a basis for the cost estimates. This will be refined through detailed design being carried out by consultants currently.

**6.4.3.** *What is the approximate total value of the wider development that will be unlocked by the delivery of the project?*

As per details above.

## 6.5. Contribution to alternative funding mechanism

**6.5.1.** *If loan funding is requested how will it be repaid?*

N/A

**6.5.2.** *Do you anticipate that the total value of the investment will be repaid? If not, how much will be repaid?*

N/A

## Management Case - Delivery

### 7. Delivery

**7.1.** *Please include detailed project plan (Gantt chart) with critical path, resource requirements, task duration, contingency and float should be easily identifiable.*

**Project Management:** (See project plan in Appendix 4)

The Council intends to manage the delivery of this project through its internal project management and assurance procedures. Overall responsibility for realising the benefits of the projects rests with the Programme Board (PB), comprising senior managers from the Thurrock Highways and Transportation service. As per Appendix 5 the PB authorise the project programme, resource requirements and any major deviations. It is envisaged that the day to day management of the programme will be delegated to the Transport Development Manager, (TDM) (acting as Programme Manager for this project). The TDM will be responsible for interdependencies in the wider

Transport Programme and for identifying and taking actions to ensure the achievement of the project programme and communicating change with the PB as required.

The project manager with responsibility for delivering the project will be the Senior Traffic Engineer, they will liaise with the TDM to secure necessary authorisation and sign off at appropriate stages and to coordinate, monitor and control the project budget, programme and delivery. Due regard will be given to third party funding governance requirements from Section 106 funding and Highway's England infrastructure programme.

The project approval process will follow the procedure set out in Appendix 6.

## 7.2. Key milestones

Feasibility Study:	27/01/2016
Business Case/ Appraisal:	Complete
Detailed Design:	29/02/2016
Tenders Sent:	14/04/2016
Contract Approved:	19/05/2016
Project Start:	02/06/2016
Project Complete:	31/03/2019
Final Retention Payment:	

\* Please add other key milestones where appropriate

## 7.3. Please provide details of any technical, environmental, archaeological, or other constraints that need to be overcome during the development of the project?

## 7.4. Supporting Documentation

### Project Management:

The Council has recently appointed consultants for the production of feasibility and detailed designs for all schemes. It is envisaged that a Gateway approach to project delivery will be employed, such that on completion of feasibility design for a scheme the Client and/or Project Board approval will be sought for progression to detailed design. This will enable faster progression of design work and facilitate multiple scheme progression avoiding length delays in approvals.

### Design:

Thurrock Council does not have the necessary design resource available in-house to develop the Cycle Plan schemes to construction, nor do we currently have a term consultancy providing design services. Therefore, to avoid lengthy delays in procuring services via a Full EU competition, the Council has used an outsourced procurement service, NEPRO. This uses an OJEU compliant framework to obtain bids for services according to the Council's requirements. The Council has experience of using this procurement path for other projects and are confident that this method provides an expedient and cost effective method of securing design services. The Council had considered recruiting fixed term staff to provide design services in house, as well accelerating appointment of our term consultants, however neither option provided a particularly cost effective solution, neither would they have afforded an early start on the design to enable construction to start promptly in 16/17.

The NEPRO procurement process involved a mini competition for the opportunity, advertised to a number of suppliers with a short turnaround for bid evaluation and appointment. By holding a mini-competition we were able to ensure that the prices received were competitive and the Council has secured good value.

### Construction:

The Council will ensure that efficiency and best value are maximised in the procurement of the cycleway construction by packaging schemes together into geographic areas and letting them through competitive tender via the Council's Delta e-sourcing tendering system. Thurrock has significant experience in procuring works in this way and is confident that this will ensure that best value will be gained.

### Stakeholder Engagement Plan:

The Council has developed the Cycle Plan in collaboration with the local access forum and Sustrans. The prioritised list of schemes has been approved by Thurrock Council's Cabinet. Further public and business user consultation on the shortlisted schemes will be undertaken during the feasibility design phase (March – April 16) to seek feedback on the proposals. Once feasibility design work has been completed each scheme will be subject to further public consultation, including posting of notices on site to advertise the creation of the cycleway and amendment to the traffic regulation order.

## Monitoring:

The monitoring of the project will be split into two interlinked elements; the implementation of the project (cycle infrastructure) and project outcomes. At the beginning of the project a more detailed project plan will be developed to enable us to monitor implementation of the project and so progress can be managed and updated throughout the life of the project. CCTV baseline monitoring pedestrian/cycle monitoring will be undertaken at relevant locations and our wider network of existing automatic cycling monitoring locations will be increased to enable a wider assessment of the longer term benefits. Those benefits will report alongside our existing performance indicators for cycle monitoring, which are currently based on cycle flows, cycle parking levels at strategic locations and mode share data from School and Workplace Travel Plans.

## Management Case - Risk

### 8. Risk

8.1. Please identify risks in achieving the project, their severity and potential impact, and detail any mitigation plans

Risk	Likelihood*	Impact**	Likelihood x Impact	Mitigation
Public/political approval of schemes	2	2	4	Provide strategic case highlighting need of infrastructure
Unable to delivery within timescales	1	5	5	Plan resources effectively, using 2014/15 to undertake preparatory work
Schemes exceed estimated costs	2	3	6	Plan schemes effectively, with detailed costs and prioritise delivery.
Access negotiations with Landowners	2	4	8	Flexibility within scheme as feasibility studies have proposed additional options to develop
Lack of cycling uptake after provision of improved infrastructure	2	3	6	Implementation of marketing and promotion measures to increase awareness of new network

#### \*Likelihood Scale

Likelihood	Score	Meaning
Very high	5	More than 1 chance in 10
High	4	More than 1 chance in 25
Medium	3	More than 1 chance in 50
Low	2	More than 1 chance in 100
Very Low	1	More than 1 chance in 1000

#### \*\*Impact Scale

Impact	Score	Meaning
Very high	5	Potential for many months delay
High	4	Potential for a many weeks delay

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Medium	3	Potential for significant delay
Low	2	Potential for a few days delay
Very Low	1	Likely that impact could be resolved within 2 days

# SE LEP Business Case – Thurrock Cycle Network

## Appendix 1 – Cycle Infrastructure Schemes and Scoring Matrix

# SE LEP Business Case – Thurrock Cycle Network

## Appendix 2 – Cycle Infrastructure Prioritisation List

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## Appendix 3 – Economic Case

# SE LEP Business Case – Thurrock Cycle Network

## Appendix 4 – Project Plan

# SE LEP Business Case – Thurrock Cycle Network

## Appendix 5 – Programme Roles and Responsibilities

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## Appendix 6 – Internal Governance Approval Process