Kent County Council
kent.gov.uk

Transport Business Case Report

A26 Cycle Route, Tunbridge Wells

CO04300618/002 Revision 02

July 2017

INVESTORS IN PEOPLE | Gold

INVESTORS IN PEOPLE | Champion

amey

Document Control Sheet

Project Name:	A26 Cycle Route, Tunbridge Wells
Project Number:	CO04300618
Report Title:	Transport Business Case Report
Report Number:	002

Issue Status/Amendment	Prepared	Reviewed	Approved
00 (Draft for Comment)	Name: Paul Beecham Signature: Date: 14/06/2017	Various County & Borough Council officers	Name: Jeff Webb Signature: Date: 19/06/2017
01 (Issue for Gate 1 submission to SELEP)	Name: Paul Beecham Signature: Date: 22/06/2017	Various County & Borough Council officers Signature: Date:	Name: Jeff Webb Signature: Date: 22/06/2017
02 (Issue for Gate 2 submission to SELEP)	Name: Paul Beecham Signature: Date: 22/07/2017	Various County & Borough Council officers Signature: Date: 24/07/17	Name: Steve Whittaker Signature: S. Whittaker Date: 25/07/17
	Name: Signature: Date:	Name: Signature: Date:	Name: Signature: Date:

Contents

1 Introduction 4
1.1 SELEP Schemes – Business Case Preparation 4
1.2 Purpose of Report 4
1.3 Specific Scheme 4
2 Scheme Summary 5
2.1 Introduction to Project 5
2.2 Project Roles 6
2.3 Category of Transport Business Case 6
2.4 Scheme Status 6
2.5 The Transport Business Case 8
2.6 Context of the Transport Business Case 9
2.7 Location 9
2.8 A26 Cycle Route Description 10
2.9 Existing Situation, Proposed Improvements and Options 12
2.10 Complementary Schemes 15
2.11 Air Quality Management Area 18
3 Strategic Case 19
3.1 Purpose of the Proposed Investment 19
3.2 Strategic Fit - National Planning Policy Framework 19
3.3 Strategic Fit – National Transport Priorities 20
3.4 Strategic Fit – National Cycling and Walking Strategy 21
3.5 Strategic Fit – Public Health England 22
3.6 Strategic Fit - South Eastern Local Enterprise Partnership 22
3.7 Strategic Fit – Strategic Economic Plan 23
3.8 Strategic Fit – Growth without Gridlock 25
3.9 Strategic Fit – Kent Local Transport Plan 4 26
3.10 Strategic Fit – Kent County Council Active Travel Strategy 28
3.11 Strategic Fit – Local Plans (Housing and Employment Growth) 29
3.12 Strategic Fit - Schools 34
3.13 Strategic Fit - Tunbridge Wells Borough Cycling Strategy 34
3.14 Strategic Fit - Tonbridge and Malling Borough Cycling Strategy 38
3.15 Case for Change - Rationale for the Scheme 40
3.16 Congestion Data 42

3.17 Accident Data 44
3.18 Causal Chain 45
3.19 Summary of Scheme Objectives 47
3.20 Critical Success Factors (CSFs) 49
3.21 Constraints 50
3.22 Stakeholders 52
3.23 Consultation to Date 57

4 Economic Case 60
4.1 Introduction 60
4.2 Background 60
4.3 Appraisal Assumptions 61
4.4 Options Considered 61
4.5 Economic Overview 66
4.6 Appraisal Flowchart 68
4.7 Projected Scheme Usage – Demand Projections 69
4.8 Economic Appraisal 72
4.9 Sensitivity Testing 74
4.10 Increased Demand Predictions – Case Examples 75
4.11 Value for Money Statement 78
4.12 Performance management 81

5 Financial Case 83
5.1 Sources of Funding 83
5.2 Developer Contributions 83
5.3 Cost Breakdown 84
5.4 Overall Affordability 85

6 Commercial Case 86
6.1 Commercial Issues 86
6.2 Scheme Procurement Strategy 86
6.3 Potential for Risk Transfer 87

7 Management Case 88
7.1 Project Plan 88
7.2 Project management Arrangements 90
7.3 Roles and Responsibilities 90
7.4 Project Governance 90

7.5 Evidence of Previously Successful Scheme Management Strategy 93
7.6 Project Risk Management 95
7.7 Project Assurance 96
7.8 Benefit Realisation Plan and Monitoring 96
7.9 Key Project Risks and Risk Management Strategy 98
7.10 Gateway Review Arrangements 99

8 Conclusions and Recommendation 100

8.1 Conclusions 100
8.2 Recommended Next Steps 101
8.3 Value for Money Statement 101
8.4 Funding Recommendation 101
Appendix A – Phase 1, Grosvenor Rd to Speldhurst Rd/Yew Tree Rd 102
Appendix B – Phase 2, Speldhurst Rd/Yew Tree Rd to Bidborough Ridge 103
Appendix C – Phase 3, Bidborough Ridge to Brook St 104
Appendix D – A26 Cycle Route Audit 105

1 Introduction

1.1 SELEP Schemes – Business Case Preparation

1.1.1 Amey have been commissioned by Kent County Council (KCC) to prepare Transport Business Cases, appropriate to the size and scope of each scheme, for each of the projects which have been allocated Local Growth Fund finance.

1.2 Purpose of Report

1.2.1 The overall purpose of this report is to provide a Business Case covering one of schemes, the A26 Cycle Route. It also forms the basis of a brief to deliver the required elements in order to assist Kent County Council in delivering these or in procuring resource to deliver them.

1.2.2 The report broadly follows the 5-Case Model for Transport Business Case preparation, incorporating design and environmental issues as well as a summary of the overall risks in terms of project delivery and project funding approval. This includes:

- The potential for the project to be called in for review by the Department for Transport (DfT) or other bodies before it is delivered;
- The potential for challenge from stakeholders which may jeopardise or delay the project; and
- The potential that a subsequent review of the project after implementation may identify issues relating to the delivery of overall outcomes (e.g. job creation or transport modal shift).

1.3 Specific Scheme

1.3.1 This scheme, in previous submissions to the SELEP, is entitled:

Improving Sustainable Accessibility to Tunbridge Wells Town Centre – A26 London Road/St John's Road Cycle Route Improvements.

1.3.2 This describes the function of the proposal, though the scheme itself consists of improvements to cycle infrastructure on the A26 between its junctions with Grosvenor Rd, Tunbridge Wells and Brook St, Tonbridge and bringing these together to establish a single, consistent, cycle route between the two towns.

2 Scheme Summary

2.1 Introduction to Project

2.1.1 The A26 Cycle Route scheme will deliver significant improvements to cycle infrastructure along the length of the A26 between Grosvenor Road, Tunbridge Wells and Brook Street, Tonbridge, a distance of 6.1km (3.8mls). The A26 is a main inter-urban road that is subject to heavy traffic flows, especially at peak times. Department for Transport (DfT) annual average daily flow data (2012, extrapolated to 2016) confirms that 82% of daily traffic comprises of cars and taxis in comparison to 0.6% of journeys by bicycle. The route is also a designated Air Quality Management Area.

2.1.2 A solution is required to encourage more cycling use along the route which will contribute towards congestion relief, improvements in air quality, accessibility, improved safety, health, quality of life and support economic growth (housing and jobs) in the area. To achieve this the proposals offer a combination of new links, upgrades to existing cycle paths (on and alongside the highway), improvements to junctions, provision of bus stop by-passes, reduced speed limits, improved signage and other traffic management measures, along the route.

2.1.3 The route will link with other proposed cycle routes for the A21 and outlined in the Tunbridge Wells Borough Cycling Strategy, 2016 and the Tonbridge & Malling Cycle Strategy, 2014 to 2019. Together, these routes will form a substantial, joined up and complimentary cycle network throughout the boroughs of Tunbridge Wells and Tonbridge and Malling and for journeys between the two.

2.1.4 The A26 Cycle Route will also link directly with improvements to the public realm and town centre environment in both Tonbridge and Tunbridge Wells, cycle improvements to Tonbridge station and Tunbridge Wells station. It will also be supported and promoted by the Kent Connected and StAR smarter travel choices programmes.

2.1.5 The enhancements will provide attractive, direct cycle routes for commuters and others, offering car-competitive journey times in places which will attract people away from their cars and reduce growing demand on the road network. The scheme will be co-ordinated with road improvements proposed for the A26 and A21 corridors and will help to 'lock in' the benefits of these investments.

2.1.6 The health and wellbeing of residents will also be improved through increases in active travel opportunities, increased safety, reductions in noise and air pollution and increased journey quality and travel choices.

2.2 Project Roles

2.2.1 The following key staff have overall responsibility for the scheme:

Role	Name
KCC Cabinet Member Environment, Transport & Waste	Matthew Balfour
KCC Corporate Director Growth, Environment & Transport	Barbara Cooper
KCC Programme Manager for SELEP schemes	Lee Burchill
KCC Commissioning Officer for specific scheme (Project Sponsor)	Jamie Watson
Amey Project Manager for SELEP schemes	Stephen Whittaker
Amey Environmental Lead	Jen Taylor
Amey contact for specific scheme Business Case	Paul Beecham

2.3 Category of Transport Business Case

2.3.1 With a projected overall expenditure of just over £1.2m, this scheme is categorised as 'small'. Of this total £1.039m is sought from the South East Local Enterprise Partnership (SELEP) via the Local Growth Fund (LGF), while match funds totalling £166k are available from section 106 contributions of developers of nearby schemes.

2.4 Scheme Status

2.4.1 The final scheme design is at an advanced stage and the outline scheme has been completed. There are few identified gaps which would jeopardise the scheme.

2.4.2 The A26 Cycle Route was the subject of a comprehensive public consultation between 7th November and 18th December 2016. The route is also included in the Tunbridge Wells Cycle Strategy for which a detailed options appraisal was undertaken as part of the process of establishing the routes to include in this. The strategy was also subject to a full public consultation exercise in October 2015.

2.4.3 The design approach is based upon the following criteria:

- Seek to provide a safe, coherent, comfortable and attractive route that conforms to established cycle route design principles, providing segregated space where this is achievable. Where this can't be achieved reduce traffic speed as a means of improving perceived safety;

- Application of measures which seek to minimise stopping to maintain traffic flow and provide enhanced priority for cyclists;
- Use land that is within the ownership of KCC Highways, with their agreement (now in place) Southborough Town Council; and
- Take account of up-to-date guidance and legislation, including the DfT Traffic Signs Regulations and General Directions 2016.

2.4.4 The only remaining design/delivery risks include:

- Final detailed design and any associated costing issues; and
- Completion of the TRO process.

2.4.5 Any gaps in the business case and scheme appraisal elements must be seen in the context that this 'small' scheme only requiring a light touch appraisal. This is generally recognised as being based on:

- A narrative argument supported where possible with existing information;
- The strategic fit of the scheme, which is already well established in this case, in relation to supporting housing and employment growth in the area; and
- Complementary support for larger schemes, which in this case includes junction upgrades on the A26 and A264 corridor, the dualling of the A21 between Pembury Road and Tonbridge and the A21 NMU (non-motorised user) bridleway alongside this and onwards to Tonbridge Station (as well as the housing and employment growth proposals for the area).

2.4.6 In relation to the latter there are particular:

- Outcome benefits, especially in terms of the role of the cycleway scheme in helping 'lock in' the decongestion benefits of road schemes by encouraging more use of non-car modes between new developments and employment sites;
- Design issues whereby the designs of each scheme must take into account the requirements of the others to ensure that conflicts are avoided and there is maximum scope for synergy between the road schemes, the A26 cycle route and the wider cycle network envisaged.

2.5 The Transport Business Case

2.5.1 The UK Treasury 'Green Book' sets out a process for presenting the business case for investment schemes involving public funds. This approach involves three stages:

Strategic Outline Case (SOC)

2.5.2 This is the scoping stage of the investment process. The purpose of the SOC is to confirm the strategic context of the investment; to make a robust case for change; and to provide stakeholders and customers with an indication of the proposed way forward, together with indicative costs.

Outline Business Case (OBC)

2.5.3 This is the detailed planning phase of the investment, revisiting the OBC in more detail and to identify a preferred option which demonstrably optimises value for money. It also sets out the likely approach to funding; demonstrates its affordability; and details the supporting procurement strategy, together with management arrangements for the successful rollout of the scheme.

Full Business Case (FBC)

2.5.4 This takes place within the procurement phase of the project, though before a formal decision to proceed has been made and prior to the formal signing of contracts and the procurement of goods and services. The purpose of the FBC is to revisit the OBC and record the findings of the subsequent procurement process. It also sets out the recommendation for an affordable solution which continues to optimise VFM, and includes detailed arrangements for the successful delivery of goods and implementation of services from the recommended supplier.

5-Case Model

2.5.5 The Transport Business Case process is designed to ensure that investments are directed at the right schemes and that these are managed and delivered in the best way. This ensures that transport investment addresses important issues in an effective way, delivering value for money.

2.5.6 The core of each stage of the Transport Business Case is the 5-Case Model which ensures that schemes:

- Are supported by a robust **case for change** that fits with wider public policy objectives – the 'strategic case';

- Demonstrate **value for money** – the 'economic case';
- Are **financially affordable** – the 'financial case';
- Are **commercially viable** – the 'commercial case'; and
- Are **achievable** – the 'management case'.

2.5.7 This document uses this 5-case model in an appropriate and proportionate way to demonstrate the merit of investing in the proposed A26 Cycle Route.

2.6 Context of the Transport Business Case

2.6.1 Currently promoters of all schemes involving an investment of public funds over £5m ('major schemes') are required to prepare and submit a Transport Business Case. Previously a Business Case would be submitted to the Department for Transport (DfT).

2.6.2 Government policy changes have involved the devolution of decision-making for smaller major schemes to Local Enterprise Partnerships (LEPs). These bodies are designed to direct investment for an area based on economic priorities set through a partnership which is private-sector led. Kent County Council is in the South East LEP (SELEP) area.

2.6.3 The devolved funding arrangements were put in place in July 2014 through the Local Growth Deal announcements, including devolution of funds to the SELEP.

2.6.4 This Transport Business Case, which will be submitted to the SELEP, effectively forms a bid to request confirmation of the already allocated LGF funding for the scheme.

2.7 Location

2.7.1 The boroughs of Tonbridge and Malling and Tunbridge Wells are located in West Kent, to the south of the M25/M26/M20 corridor. Tonbridge and Malling Borough is in the mid-west of the county of Kent and covers an area from the North Downs at Burham and Snodland in the north to the town of Tonbridge in the south.

2.7.2 Tunbridge Wells Borough is immediately to the south of Tonbridge and Malling and takes its name from its main town, Royal Tunbridge Wells in the west of the borough. The borough itself lies along the south-western border of Kent, partly on the northern edge of the Weald and the remainder on the Weald Clay plain in the upper reaches of the rivers Teise and Beult.

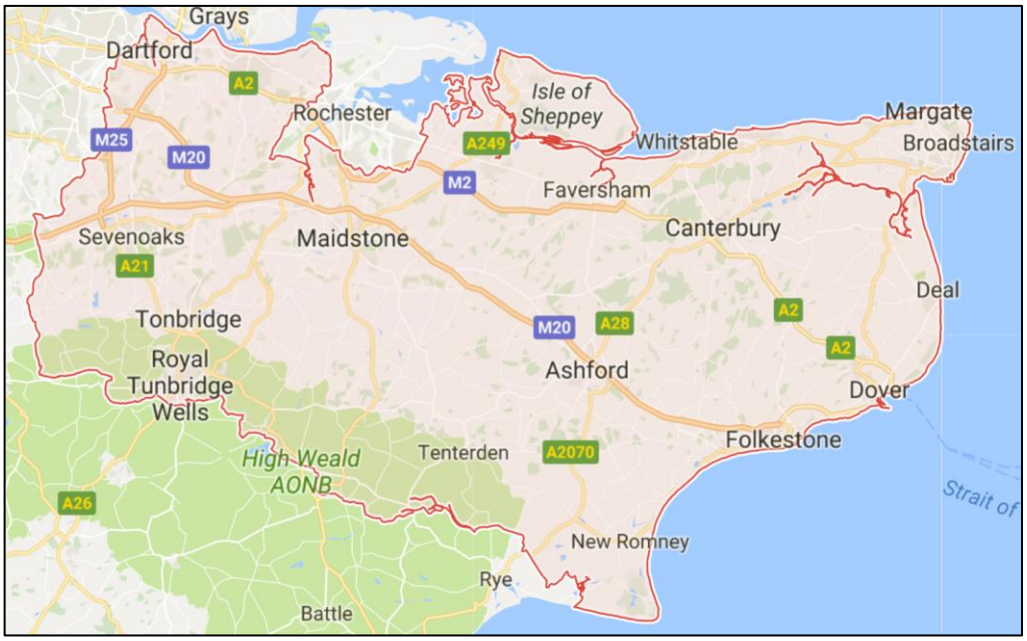


Table 2-1 – Location Map

2.7.3 The A26 Cycle route will be provided between the edge of the town centres of Tonbridge and Royal Tunbridge Wells. The majority of the route is within Tunbridge Wells borough, the northern boundary of which is just to the south of the A21. The remainder of the route, from just south of the A21 to the outskirts of Tonbridge town centre, is in Tonbridge and Malling.

2.7.4 There are currently around 40,000 residents of Tonbridge (2015), 55,000 residents of Royal Tunbridge Wells (2016) and just over 11,000 residents of Southborough which lies on the A26 between the two. The current Local Development Plan for Tunbridge Wells proposes an additional 1,500 homes (circa 3,300 residents) for Royal Tunbridge Wells and Southborough by 2026, while proposals for Tonbridge indicate an additional 300 to 500 homes (up to circa 1,100 residents) will be added to the central area of the town by 2021.

2.8 A26 Cycle Route Description

2.8.1 Cycling offers an increasingly important opportunity for modal shift for commuter and school journeys, particularly into urban areas which suffer from peak period traffic congestion. Cycling is also used to access retail facilities and is a popular leisure activity that offers significant health benefits.

2.8.2 Current travel to work data (2011 census) for residents of Tunbridge Wells and those of Tonbridge and Malling is provided below:

	Tunbridge Wells	Tonbridge and Malling
Work mainly at or from home	8.48%	6.28%
Underground, metro, light rail, tram	0.23%	0.22%
Train	14.72%	12.16%
Bus, minibus or coach	2.33%	2.16%
Taxi	0.31%	0.28%
Motorcycle, scooter or moped	0.62%	0.88%
Driving a car or van	52.86%	63.15%
Passenger in a car or van	3.98%	4.38%
Bicycle	1.16%	1.43%
On foot	14.76%	8.59%
Other method of travel to work	0.56%	0.48%

Table 2-2 – Mode Split Tunbridge Wells & Tonbridge and Malling

2.8.3 It is acknowledged that levels of cycling in Tunbridge Wells and in Tonbridge and Malling are relatively low at present, due to perceptions and barriers including topography, road safety, cycling competency and a lack of knowledge about suitable routes and parking facilities. Nonetheless there is growing interest in cycling amongst groups and individuals within the Boroughs. Indeed, in January 2014, the Tunbridge Wells Cycling Forum was established with the specific objective of making Tunbridge Wells a more cycle-friendly Borough. Both boroughs have also recently established a cycle strategy.

2.8.4 The ideas and experience of Tunbridge Wells Cycle Forum members has been used to inform the Tunbridge Wells Cycling Strategy. One of the main issues identified is to address existing deficiencies on the key radial cycle routes into Tunbridge Wells Town Centre, including the A26 corridor to the north of the town, which is currently viewed by members of the Cycling Forum as the most hazardous route for cyclists and consequently one which should be prioritised initially for investment.

2.8.5 The A26 London Road/St John's Road serves a wide catchment area including the towns and villages of Bidborough, Southborough and High Brooms, which look to Tunbridge Wells for their primary employment, education, shopping and leisure opportunities. It also provides strategic highway connectivity between much of East Sussex and the A21 at Tonbridge and is therefore heavily trafficked for much of the day.

2.8.6 Tunbridge Wells Borough Council and the Tunbridge Wells Cycling Forum jointly undertook a comprehensive audit of cycling facilities on the A26 London Road/St John's Road during October 2014. Many of the issues and opportunities identified by this audit will be addressed by the proposed improvement scheme. The detailed results of the audit are provided as Appendix 4.

2.8.7 The proposed route runs from Grosvenor Road in Tunbridge Wells to Brook Street in Tonbridge. It is around 4 miles in length which at average speeds a cyclist could be expected to navigate in a time of around 20 minutes.

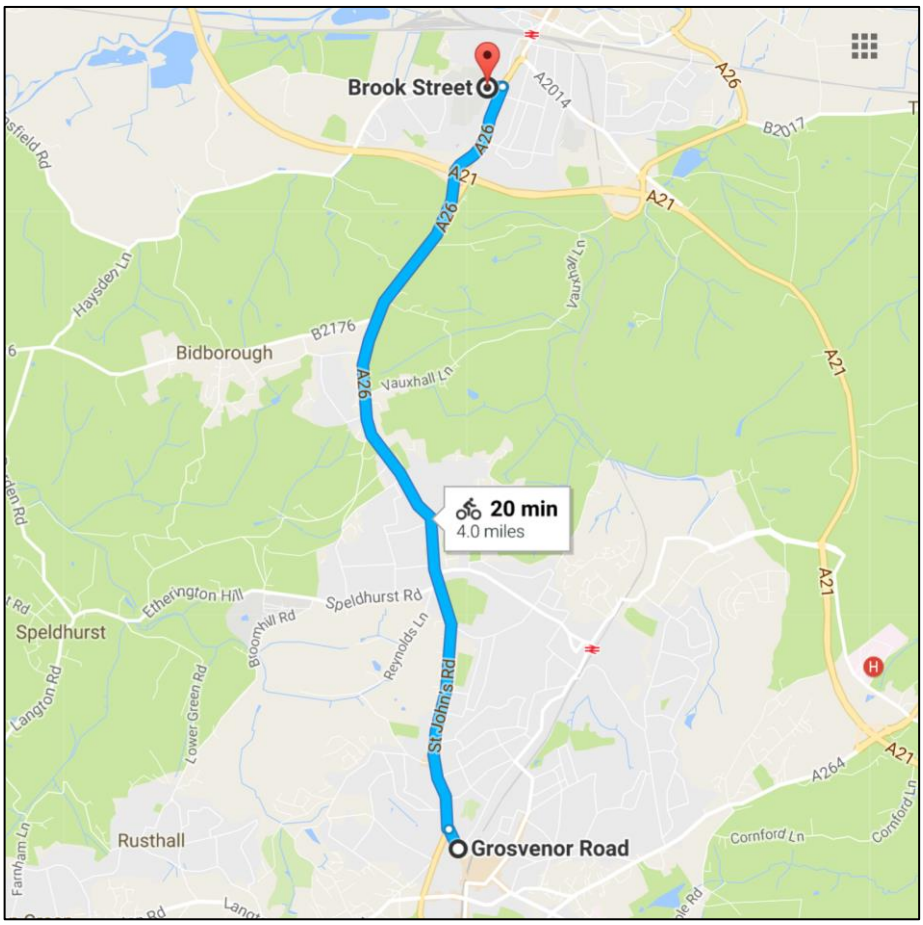


Table 2-3 – A26 Cycle Route

2.9 Existing Situation, Proposed Improvements and Options

2.9.1 The route follows the alignment of the A26 and benefits from segregated cycle infrastructure in some places including mandatory and advisory cycle lanes. The route is broadly flat between Tunbridge Wells and Southborough at which point it includes inclined sections at Southborough Common and Quarry Hill which is steep. The route is aligned to the A26 Air Quality Management Area between Southborough (junction of Pennington Road) to Tunbridge Wells (junction of Grosvenor Road).

2.9.2 At present the route is incomplete and utilises a range of different highway / hard infrastructure measures along its length, with varying degrees of success. Quarry Hill, Tonbridge is a significant barrier to less confident / fit cyclists due to its steep gradient. The A26 is a busy and heavily trafficked route.

2.9.3 The route is considered to be essential for inter-urban cyclists and would improve accessibility to Tunbridge Wells and Tonbridge for residents in Bidborough, Southborough and High Brooms. With the benefit of improved infrastructure (i.e. segregated lanes/paths and other priority measures), the route will encourage more people to cycle (and walk), especially to the numerous schools and employment sites along the route and in both towns. The route will support a reduction in local vehicular trips and improvement in local air quality.

2.9.4 Although sections of the A26 already accommodate cyclists there is not a single continuous route along its length. The sections that do exist also require improvement. The scheme will address both these issues, by filling in the gaps and achieving a uniform, high quality standard throughout.

2.9.5 The key proposals for the route are summarised below:

- Existing advisory cycle lanes are to be widened to provide mandatory lanes (minimum 1.5m wide). All new and existing cycle lanes will be lined and resurfaced in red asphalt or Red high friction surfacing;
- Revised geometry at some side junctions and the inclusion of raised tables or contrasting surface treatment at all side junctions. Raised tables help to reduce the speed of vehicular turning movements and provide an enhanced crossing arrangement for pedestrians.

EXAMPLE OF BLOCK PAVED RAISED CROSSING AT SIDE ROAD

EXAMPLE OF BLOCK PAVED RAISED CROSSING AT SIDE ROAD

Table 2-4 – Examples of block paved raised crossing

-
-

- Block paved surface treatments at St John's Road junctions with Newcomen Road and Somerset Road and at London Road junctions with Holden Park Road, Forge Road, Hythe Road & Meadow Road.
- Raised table tops to be provided at St John's Road junction with Queens Road, John Street, Somerset Road, Western Road and London Road/Springfield Road junction in Tunbridge Wells;
- Raised table tops at London Road junction with Baltic Road and Woodside Road and blocked paved surface treatment to be installed at junction with Springwell Road, Tonbridge & Malling;
- Provision of continuous red surfacing throughout the scheme on all cycle lanes with priority for cyclists at side junctions;
- Removal of two short sections of on street parking on the western side of the A26 between Southfield Road and Beltring Road, and between Still Lane and Holden Road;
- Introduction of 20mph limit on the A26 between the junctions of Pennington Road and Holden Park Road;
- Provision of two bus stop bypass features (Floating Bus Stop) north of the junctions with Culverden Park and Pennington Road (Southborough) to enable cyclists to pass stationary buses at stops safely;

Table 2-5 – Example of bus stop by-pass

- Removal of the southbound bus lane between the Hand and Sceptre and junction at Yew Tree Road to allow for cycle lanes to be introduced in both directions;
- Improvement of segregated provision at Mabledon, including the extension of shared use pedestrian and cycle paths both north and southbound;

- Provision of new shared use link on Quarry Hill;
- Carriageway resurfacing works on London Road from the junction with Pennington Road to Church Road, Tunbridge Wells; and
- Installation of sign posts and signs throughout the scheme, existing remaining signage to be cleaned and vegetation to be cleared from around these.

2.9.6 The proposed improvements to the route will be undertaken in 3 phases:

- Phase 1 – Grosvenor Rd, Tunbridge Wells to Speldhurst Road/Yew Tree Road, at the southern boundary of Southborough;
- Phase 2 – Speldhurst Road/Yew Tree Road, Southborough to Bidborough Ridge at the northern boundary of Bidborough; and
- Phase 3 – Bidborough Ridge, Bidborough to Brook St, Tonbridge.

2.9.7 The specific works proposed for each phase are illustrated in detail in the plans provided in the appendices to this report.

2.9.8 It should be noted that the above reflects the design aspirations at this time. Although these are well advanced there is further work to be done to refine and finalise the plans. In particular, the maintenance implications of red surfacing all of the route remains a consideration, that may change the surfacing and lining proposals. Also the placing of a 20mph speed limit on the A26 is subject to consultation, as required for any Traffic Regulation Order.

2.10 Complementary Schemes

2.10.1 A number of complementary schemes have recently been completed or are due to be progressed in the near future along the A26 or in the nearby vicinity of the A26 Cycle Route.

2.10.2 Complimentary cycle schemes include:

- A21 NMU – A Highways England led major scheme (£69.7m) to dual the A21 between Pembury and Tonbridge due to complete in 2017. A new bridleway for pedestrians, cyclists and horse riders will be provided along the whole length of the scheme. A new footbridge will also be provided across the Pembury Bypass at Blackhurst Lane, replacing the existing crossing.

- A21 Pembury Road to Tonbridge Station Pedestrian/Cycle Route – KCC together with Tunbridge Wells Borough Council (TWBC) and Tonbridge and Malling Borough Council (TMBC) have recently submitted a funding bid to provide a new 'shared use' pedestrian/cycle route facility to link the A21 NMU to Tonbridge Station at its northern end and to Tunbridge Wells Hospital at its southern end.
- 21st Century Way cycle route – Part of the Tunbridge Wells Cycle Strategy, the 21st Century cycle route is proposed to run between Royal Tunbridge Wells town centre and the North Farm Estate to the north west of the town and along Longfield Lane to link with the A21 NMU. The route will be funded by section 106 developer contributions mainly from developments at North Farm but also others on the route nearer the town centre.

2.10.3 Together with the A26 Cycle Route the above schemes will form an almost complete cycle loop of cycle paths between Royal Tunbridge Wells and Tonbridge. At either end this will connect other cycle routes proposed by the cycle strategies of each borough (see section 4 below) forming a comprehensive, joined-up cycle network throughout both boroughs.

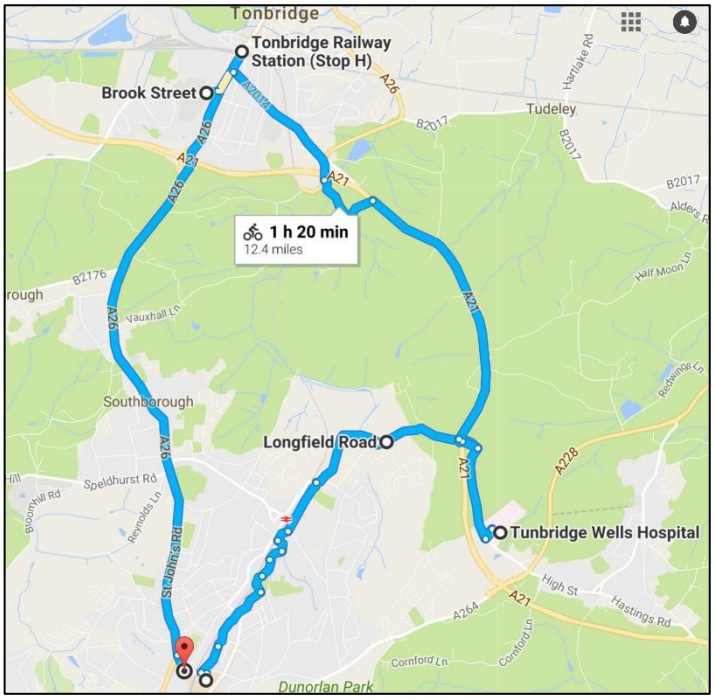


Table 2-6 – Cycle loop, Royal Tunbridge Wells to Tonbridge

2.10.4 Other complimentary schemes include:

- A26 Speldhurst Rd/Yew Tree Rd junction - LGF funds have recently supported junction improvements at the A26 London Road/Yew Tree Road/Speldhurst Road junction in Southborough. Works undertaken include the provision of staggered pedestrian crossing facilities and re-optimisation of the traffic signal operation to improve capacity;
- A26 Corridor – Work has recently been completed to improve the Yew Tree Road/Speldhurst junction on the A26;
- A264 Corridor - Work is currently in progress to examine the need for highway improvements at a number of key junctions along the A264 corridor into Royal Tunbridge Wells;
- Tonbridge Station (a) - Southeastern has recently been successful in attracting £994k Cycle Rail funds to establish a cycle hub at Tonbridge Station. The cycle hub will be a secure covered compound offering 2 tier cycle parking for 262 bikes, electric bike charging points, a repair stand and bike pump, real time Customer Information screen, CCTV and lighting and will be accessed by a swipe card entry system. In addition the Hub will provide a retail facility offering cycle hire, cycle maintenance, repair, and sales, with 10 Brompton bikes and 2 electric bikes available;
- Tonbridge Station (b) – Southeastern is also in the process of implementing the 'Improving Access to Tonbridge Station' scheme which will consolidate bus stops, provide improved pedestrian/cycle access to the station and wider footway space outside of the station to cater for large numbers of commuters and school pupils coming through;
- Public Realm improvements - There has been substantial recent investment to improve the public realm in the town centres of both Royal Tunbridge Wells and Tonbridge, including improvements to cycle infrastructure;
- St Johns 20mph Zone – TWBC have recently established a 20mph Zone in the St Johns area of the town, alongside the A26 and between this and the rail line;
- Kent Connected - Kent Connected is a Local Sustainable Transport Fund supported package of measures designed to promote and simplify access to sustainable transport and travel information. It is centred on the Kent Connected website (https://kentconnected.org/) and will contribute to the marketing of the A26 Cycle Route;

- StAR – StAR is an integrated package of measures, funded primarily by the DfT Access Fund 2017/20, to support economic development and healthy lifestyles in Kent, by encouraging use of active and sustainable modes of travel to access employment, education and training. The measures are targeted specifically at complimenting schemes that receive LGF investment, as well as significant economic development sites across Kent, due to be completed before 2020.

2.11 Air Quality Management Area

2.11.1 An Air Quality Management Area is in place, along the A26 from Southborough throughout the length of Royal Tunbridge Wells to beyond the junction of Eridge Road and Nevill Terrace, and along Grosvenor Road to the junction with Calverley Road. Development proposals within this Area must be accompanied by Air Quality Assessments and incorporate adequate mitigation measures.

2.11.2 Monitoring is carried out on a permanent basis on A26 St Johns Road, Southborough monitoring levels of NO2 and PM10. In addition, a number of sites within the A26 AQMA are monitored using passive diffusion tubes. Tunbridge Wells Borough Council has examined the results from monitoring in the borough. Concentrations within the AQMA still exceed the annual mean objective for NO2 at the continuous monitoring station A26 Roadside and at three diffusion tube monitoring locations, and as a result the AQMA remains.

3 Strategic Case

3.1 Purpose of the Proposed Investment

3.1.1 The overall purpose of the investment is to encourage cycling by providing an attractive and consistent cycle route along the A26 to enable cyclists to access employment, education and other facilities along the corridor and within the towns of Royal Tunbridge Wells and Tonbridge.

3.1.2 By encouraging greater use of active modes (cycling and walking) this will address congestion on the A26, while also providing health benefits for existing and future residents in the area. It will also help 'lock in' the benefits of highway investments on the A26, other highway and cycle schemes in the area and Local Sustainable Transport Fund (LSTF) schemes in Tunbridge Wells and Tonbridge. This in turn will enable the sustainable growth of both towns and their surrounding area, supporting the housing and employment growth plans set out in their Local Plans.

3.1.3 These goals are to be achieved with reference to other important factors such as the local environment, the safety of road users and any impact on 'drivers' of climate change.

3.1.4 Figure 3.7 sets out these elements in a Causal Chain.

3.2 Strategic Fit - National Planning Policy Framework

3.2.1 The National Planning Framework (NPPF) was published in March 2012 and is designed to set out how planning authorities are expected to enable sustainable development. To achieve this, it sets out an overarching presumption in favour of sustainable development, taking account of the three dimensions of:

- An economic role relating to building a strong, responsive and competitive economy. In relation to the planning system this is fundamentally about ensuring that sufficient land is available to enable job creation, together with the infrastructure to support this;
- A social role in supporting strong, vibrant and healthy communities, with an emphasis on the provision of housing in the context of high-quality built environment and access to local services;

- An environmental role in terms of protecting and enhancing the local environment and helping mitigate and adapt to climate change.

3.2.2 Transport and connectivity play a key role in all three of these dimensions and the NPPF contains a section which outlines this and sets out a number of key requirements in terms of planning and decision-making by local planning authorities. Much of this is about limiting the impacts of developments and improving their long-term sustainability. In relation to this scheme, it includes:

- The use of technology and the balancing of land use to reduce the need to travel and minimise journey lengths (e.g. walking to school and working from homes or local hubs);
- Balancing the transport system in favour of sustainable models for the movement of goods and people, including priority to pedestrian and cycle movements and access to high quality public transport;
- Creating safe and secure layouts which minimise conflicts between traffic and cyclists or pedestrians, avoiding street clutter;
- Encouraging the reduction of congestion and of greenhouse gas emissions;
- The effective use of tools including Transport Statements (TS), Transport Assessments (TA) and Travel Plans (TP);
- Protection of sites and routes which could be critical in developing infrastructure to widen transport choice;
- Inclusivity, including meeting the needs of disabled people.

3.3 Strategic Fit – National Transport Priorities

3.3.1 The Government has long-term objectives aimed at improving the economy, environment and society. These are the three tenets against which major transport infrastructure projects are assessed, and will continue to be assessed in future.

3.3.2 In its National Infrastructure Plan 2014, the Government presented its vision for the UK transport system:

- Transport infrastructure can play a vital role in driving economic growth by improving the links that help to move goods and people around and by supporting the balanced, dynamic and low-carbon economy that is essential for future prosperity;

- Local transport systems must enable suburban areas to grow. The transport network must support good value and rapid movement of goods around the country. The transport system must be efficient but also resilient and responsive to infrequent and unexpected pressures; and
- Airports and ports are the gateways to international trade and the Government will work to improve the road and rail connectivity to major ports and airports.

3.4 Strategic Fit – National Cycling and Walking Strategy

3.4.1 In 2017 the DfT on behalf of government published its Cycling and Walking Investment Strategy. This outlines its ambition for walking and cycling to be a normal part of everyday life, and the natural choices for shorter journeys such as going to school, college or work, travelling to the station, and for simple enjoyment. As part of their aim to build a society that works for all, government want more people to have access to safe, attractive routes for cycling and walking by 2040.

3.4.2 Through their ambition government seeks:

- Change which will tackle congestion;
- Change which will extend opportunity to improved physical and mental health; and
- Change which will support local economies.

3.4.3 They recognise this will require sustained investment in infrastructure and that walking and cycling need to be seen as transport modes in their own right; i.e. as an integral part of the transport network, rather than as niche interests or town-planning afterthoughts.

3.4.4 The strategy identifies some specific objectives, including that by 2020:

- Cycling activity will increase, where cycling activity is measured as the estimated total number of cycle stages made;
- The rate of cyclists killed or seriously injured on England's roads will reduce, measured as the number of fatalities and serious injuries per billion miles cycled

and, that by 2025:

- Cycling will double, where cycling activity is measured as the estimated total number of cycle stages made each year, from 0.8 billion stages in 2013 to 1.6 billion stages in 2025 (and will work towards developing the evidence base for this over the next year).

3.4.5 This proposal, involving the provision of a high-quality cycle route designed to attract commuting and other trips is clearly consistent with the National policies outlined above.

3.5 Strategic Fit – Public Health England

3.5.1 In May 2016 Public Health England produced 'Working Together to Promote Active Travel - A briefing for local authorities'. This guide suggests a range of practical action for local authorities, from overall policy to practical implementation, highlighting in particular the importance of community involvement and setting out key steps for transport and public health practitioners.

3.5.2 The guide identifies some key messages when developing a healthy local transport strategy include:

- Physical inactivity directly contributes to 1 in 6 deaths in the UK and costs £7.4 billion a year to business and wider society;
- The growth in road transport has been a major factor in reducing levels of physical activity and increasing obesity;
- Building walking or cycling into daily routines are the most effective ways to increase physical activity;
- Short car trips (under 5 miles) are a prime area for switching to active travel and to public transport;
- Health-promoting transport systems are pro-business and support economic prosperity. They enable optimal travel to work with less congestion, collisions, pollution, and they support a healthier workforce.

3.5.3 In this context the guide has been used to inform the design and implementation proposals for the A26 Cycle Route.

3.6 Strategic Fit - South Eastern Local Enterprise Partnership

3.6.1 Local Enterprise Partnerships (LEPs) are voluntary partnerships between businesses and local authorities which are intended to determine economic priorities for an area and to take a lead in fostering economic growth and creating jobs. There are 39 LEPs in England.

3.6.2 The South East LEP (SELEP) is one of the biggest, encompassing Thurrock, Essex and Southend to the north of the Thames, along with East Sussex, Kent and Medway to the south. Each of the LEPs was invited by Government to submit Strategic Economic Plans (see below) as the basis for negotiating a portion of the Local Growth Fund (LGF) to be allocated over the period between 2015 and 2021.

3.6.3 The SELEP Growth Deal and Strategic Economic Plan emphasise the importance of 'investment in our transport growth corridors/areas'. This is alongside four other themes of 'building on our economic strengths'; 'boosting productivity',' improving skills' and 'building more houses and re-building confidence'. Clearly in each of these four themes, transport and connectivity have a key role to play.

3.7 Strategic Fit – Strategic Economic Plan

3.7.1 This proposal should be seen in the context of the imperatives for economic growth as set out in the South East LEP Growth Deal and Strategic Economic Plan. Published in March 2014, the SELEP Strategic Economic Plan (SEP) sets out the investment strategy for the area to 2021.

3.7.2 A component element of this is the Kent and Medway Growth Deal which sets out plans for the public and private sectors to invest over £80 million each year to unlock growth potential through:

- Substantially increasing the delivery of housing and commercial developments;
- Delivering transport and broadband infrastructure to unlock growth;
- Backing business expansion through better access to finance and support; and
- Delivering the skills that the local economy needs.

3.7.3 The SEP involves delivering the biggest local transport programme in the country to realise the potential of the growth corridors and sites, transforming connectivity for businesses and residents unlocking jobs and homes, and bringing substantial benefits to the UK economy. This in turn includes:

- A request for Government commitment to deliver specific national rail network, motorway, and national trunk road investments by agreed dates; and
- A corresponding commitment from local authorities and private developers to meet a significant proportion of the costs.

3.7.4 These are complemented by proposals for local sustainable transport funding to ensure that growth occurs in a sustainable manner, including the 'locking in' of benefits from highway and other investments. A total of £154.2m of SEP Local Growth Fund investment in transport schemes over the six-year period will be focused on capital investments in sustainable transport measures.

3.7.5 Within West Kent it is recognised that locations for growth need careful selection. With much of West Kent covered by metropolitan green belt, new sites must be carefully planned and supported by appropriate investment in transport infrastructure. However, scope to intensify a number of key existing sites is identified by addressing the following challenges:

- Congestion is often high, especially in town centres such as Tonbridge, Tunbridge Wells and Sevenoaks;
- Improvements in the road network have not kept pace with the rate of economic growth, particularly in relation to access to the motorway network and the lack of capacity on rail services to London (especially on the Maidstone line via West Malling);
- Localised pockets of deprivation, often masked by impressions of general affluence, where targeted investment is required.

3.7.6 In West Kent, the solution to unlocking growth is seen in terms of relatively small amounts of public investment to unlock substantial private sector leverage. The focus is on the major town centres and business locations, with public investment helping to rationalise and intensify existing sites and bring forward new sites for development.

3.7.7 In Royal Tunbridge Wells substantial housing growth and cultural-led investment is envisaged to drive forward growth in tourism, media and the creative industries. A comprehensive package of transport measures is considered necessary to support this growth, to tackle congestion hotspots, including improvements to the A26 and A264 approaches to Tunbridge Wells and measures to improve public transport. At the key North Farm development, a major location for employment growth, linked with additional investment in vocational further education, a feasibility study is examining options to widen the existing railway bridge and unlock the scope for development.

3.7.8 In Tonbridge high congestion levels impact on the sustainability of the town centre and the growth deal seeks to support a coordinated congestion relief package.

Appraisal and Business Case Preparation

3.7.9 The SEP sets out the process through which schemes will be identified, appraised and prioritised for delivery. This process if based on the HM Treasury 5-Case Model. For transport schemes, the SELEP has adopted the Assurance Framework agreed between the former Local Transport Board and the Department for Transport (DfT). For smaller schemes, this sets out a 'light touch' approach geared towards the following:

- Value for Money – based on BCR and wider Economic Benefits;
- Environmental and Community Impact – Potential benefits and adverse impacts;
- Contribution to Objectives – LTP, SE LEP and SELTB Objectives;
- Deliverability – affordability. Practicality, key risks, stakeholder and public support.

3.7.10 This Transport Business Case is designed to conform to this process.

3.8 Strategic Fit – Growth without Gridlock

3.8.1 Growth without Gridlock is the delivery plan for transport investment in Kent. It was published in 2010. It sets out the priorities for transport investment and how these will be delivered in order to meet the current and future demands of the County in the context of its crucial role in the UK and European economy.

3.8.2 The overarching goal of Growth without Gridlock is to enable growth and prosperity for Kent and the UK as a whole. Although predating the South-East LEP Strategic Economic Plan, the key elements of both are entirely in accord. This has enabled the development of an effective package of transport schemes to be brought forward as part of the Local Growth Fund investment.

3.8.3 Growth without Gridlock recognises that road transport is responsible for around 30% of Kent's greenhouse gas emissions and that the way forward is to provide low carbon transport options allied with better planning to reduce the need to travel, which in turn will support economic growth, housing growth and tackle climate change.

3.8.4 The Plan states that:

"*the private car will continue to remain the most popular and dominant form of transport for our residents and these expectations and demands increase pressure on our transport network, on our environment and on us as individuals. This reliance is also the reason why our road network is congested and in response our vision is to create a high quality integrated transport network which will create opportunities for real transport choice as well as enabling economic growth and regeneration*".

3.8.5 Some of the key transport challenges identified by the Plan are:

- Transferring existing and new car trips onto public transport, walking and cycling, especially for short journeys;
- Tackling congestion hotspots;
- Integrating rail services and improving connectivity between stations; and
- Providing sufficient transport infrastructure to mitigate the impact of the planned development including walking and cycling routes.

3.9 Strategic Fit – Kent Local Transport Plan 4

3.9.1 Kent is South East England's fastest recovering region and has great potential for successful economic growth. In the last 20 years, Kent has seen 100,000 more people living in the county, housing stock increase by over 60,000 homes and 130,000 more cars on roads. This pace of change is set to accelerate further over the next 20 years with a projected 8 per cent population increase, accompanied by the presence of two of the UK's four Growth Areas in Thames Gateway and Ashford.

3.9.2 Local growth alone is predicted to result in 250,000 extra journeys on Kent's roads by 2026. Coupled with a forecast increase in international traffic this leads to tackling congestion being regarded as one of the main priorities for Kent.

3.9.3 KCC's framework for regeneration "Unlocking Kent's Potential" defines what Kent should look like in 20 years' time and includes as 1 of its 5 priorities "delivering growth without transport gridlock" - by designing communities that will encourage walking, cycling, and healthy leisure activities. Based on this Growth without gridlock: A transport delivery plan for Kent (above) establishes transport priorities for the next 20 to 30 years to support Kent's Environment Strategy target of reducing greenhouse gas emissions by 20% by 2020 and 80% by 2050.

3.9.4 Kent's fourth "Local Transport Plan (LTP4): Delivering Growth without Gridlock 2016–2031" has recently been put to public consultation and will be published shortly. In LTP4 Kent County Council set out their policies to deliver strategic outcomes for transport, details their key transport priorities and longer term transport objectives. Investment in transport networks is regarded as essential for unlocking development sites, relieving congestion, improving safety and enabling a shift to more sustainable modes of travel.

3.9.5 Five overarching policies are identified, targeted at delivering specific outcomes. All these policies align with the vision in Increasing Opportunities, Improving Outcomes: KCC's Strategic Statement 2015 – 2020. The five policies are:

- **Outcome 1: Economic growth and minimised congestion**
  Policy: Deliver resilient transport infrastructure and schemes that reduce congestion and improve journey time reliability to enable economic growth and appropriate development, meeting demand from a growing population.
- **Outcome 2: Affordable and accessible door-to-door journeys**
  Policy: Promote affordable, accessible and connected transport to enable access for all to jobs, education, health and other services.
- **Outcome 3: Safer travel**
  Policy: Provide a safer road, footway and cycleway network to reduce the likelihood of casualties, and encourage other transport providers to improve safety on their networks.
- **Outcome 4: Enhanced environment**
  Policy: Deliver schemes to reduce the environmental footprint of transport, and enhance the historic and natural environment.
- **Outcome 5: Better health and wellbeing**
  Policy: Promote active travel choices for all members of the community to encourage good health and wellbeing, and implement measures to improve local air quality.

3.9.6 The overarching policies are supported by a number of strategic, Kent wide and District priorities. In Tunbridge Wells four major A roads converging in Royal Tunbridge Wells (A26, A264, A267 and A228) and the A21 on its borders are identified as facing significant congestion with the A26 between Royal Tunbridge Wells and Tonbridge, highlighted in particular.

3.9.7 In Tonbridge and Malling the importance of links between Tonbridge and Royal Tunbridge Wells is identified. Tonbridge is a significant transport interchange, with good road and rail connections, whereas Royal Tunbridge Wells is a substantial economic and service centre, meaning that there are many movements between the complementary centres. Tonbridge town itself has a lot of through traffic, and positive signing and the public realm enhancements to the High Street are aiming to reduce this.

3.9.8 LTP4 is accompanied by a series of implementation plans including a Kent wide Active Travel Strategy produced by the County Council and District/Borough Cycling Strategies. The A26 Cycle Route scheme strongly supports these local policies.

3.10 Strategic Fit – Kent County Council Active Travel Strategy

3.10.1 The Kent Active Travel Strategy builds on KCC's statutory transport, environment and road safety policies to promote walking and cycling as a regular means of travel. The overarching ambition of the Active Travel Strategy is to make active travel an attractive and realistic choice for short journeys in Kent.

3.10.2 The strategy identifies three broad actions to deliver its ambition:

- Action 1: Integrate active travel into planning - by influencing commissioning decisions, ensuring active travel is prioritised in future planning processes and encouraging active travel to be better integrated with other types of transport e.g. walking to the bus stop or cycling to the train station.
- Action 2: Provide and maintain appropriate routes for active travel - Kent's existing cycling and walking routes have developed over time as resources have allowed and as a result are not always continuous or direct or may not serve important community services. This means some people who would like to actively travel are unable to do so. There is a need to provide facilities such as safe crossings along routes and secure cycle storage at destinations. It is also important that these routes are well maintained and designed to be as inclusive as possible.
- Action 3: Support active travel in the community - People need the skills, confidence, information and, most importantly, the motivation to make active travel their preferred choice. To support this the strategy proposes pedestrian and cycle training, road safety campaigns, projects to encourage active travel to schools and work, and promotion of available routes.

3.10.3 For each of the above the strategy details the actions and steps required to bring them about, focussing in particular on new ideas or improvements to existing schemes. This includes the following actions all of which will support the delivery of the A26 Cycle Route scheme:

- Engage with District Council planning departments & senior management to support inclusion and delivery of active travel in Local Plans, Infrastructure Delivery Plans and Transport Strategies;
- Prioritise key active travel routes in order of maximum measurable benefit (potential for greatest number of users);
- Monitor funding opportunities to bid for new and improvements to active travel infrastructure;
- Introduce 20mph schemes to target increased active travel, improved health and reduced air pollution;
- Recruit Sustrans rangers to regularly patrol and provide light maintenance for active travel routes in designated areas;
- Improve signage on key active travel routes;
- Work with Clinical Commissioning Group (CCG) and wider health and social care sector to promote active travel initiatives and to embed active travel in care pathways;
- Seek private sponsorship funding to deliver more Bikeability training in schools
- Promote appropriate driving around cyclists; and
- Seek funding to update and provide town active travel maps.

3.11 Strategic Fit – Local Plans (Housing and Employment Growth)

3.11.1 Growth plans in the Tunbridge Wells and Tonbridge & Malling areas are ambitious and contribute to the targets set out in the SEP. It is important that these developments take place in a sustainable manner.

3.11.2 Along with the National Planning Framework, the Town and Country Planning Act 2012 set out requirements for Local Planning Authorities to develop and adopt Local Plans which set out the strategic priorities for the development of the area. This process replaced the previous arrangements put in place in 2004 for Local Development Frameworks.

3.11.3 The current Local Plan for Tunbridge Wells covers the period from 2006 to 2026. The plan is in the process of being reviewed with the aim of producing an amended plan for the period up to 2031. This Strategic Housing Market Assessment undertaken identifies a need for 648 homes per year in the borough between 2013 and 2033 amounting to 12,960 new homes in total.

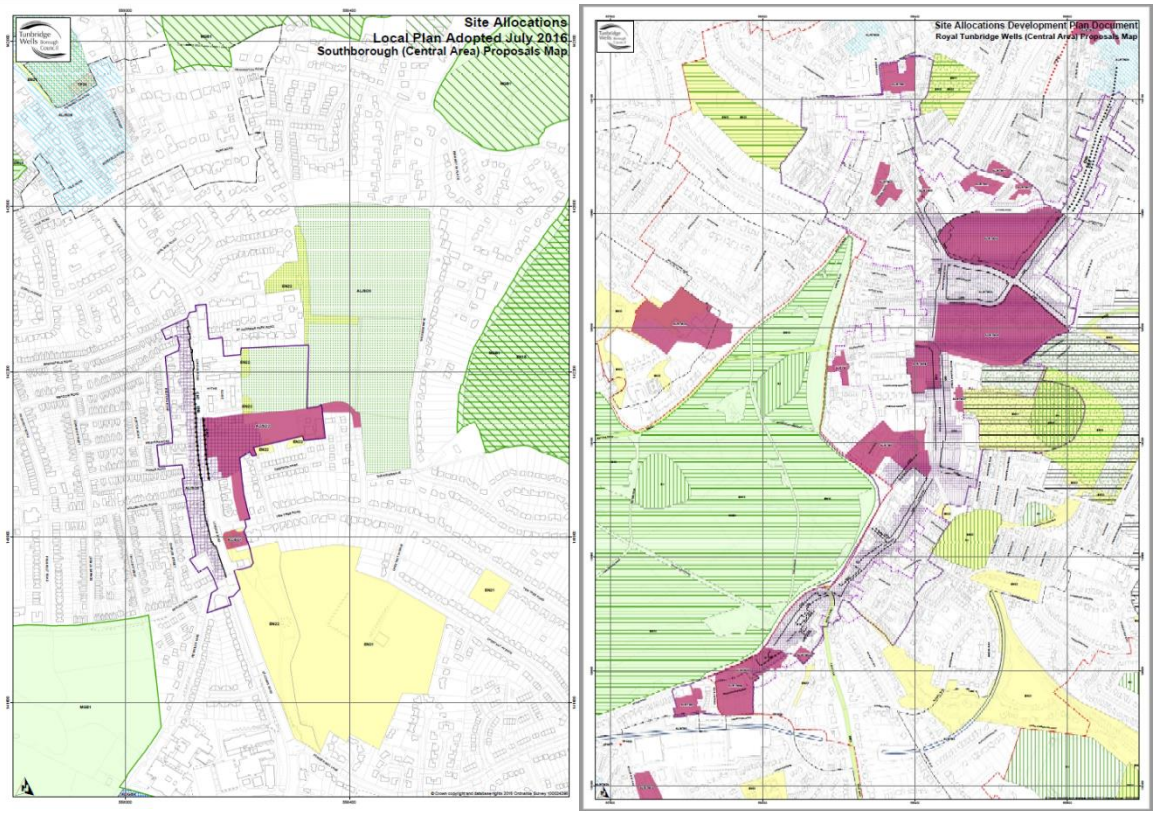
3.11.4 The Core Strategy for 2006 to 2026 identifies Royal Tunbridge Wells, together with the adjoining town of Southborough, as the main urban area of the borough and, as such, the appropriate location for three quarters of the borough's housing growth and 90% of its retail growth. Based on the Site Allocations Plan established in 2016 to inform the updated Local Plan the following growth is proposed within Royal Tunbridge Wells and Southborough:

Housing (2006/26)	Housing (balance @ 2014)	Retail (@ 2010)	Retail (@ 2014)	Employment
4,500 net dwellings	1,550 net dwellings	Tunbridge Wells - 23,500 sqm net comparison retail floorspace Southborough - 500sqm net comparison retail floorspace	30,900sqm net comparison floorspace 1,700sqm net convenience floorspace	Maintain existing floorspace

Table 3-1 – Royal Tunbridge Wells Housing and Employment Growth

3.11.5 At this time some key elements, including the size and location of housing developments, have not been fully defined. Whilst this makes it difficult to be precise about the growth in trips which will be served by the A26 Cycle Route, it is clear that significant growth will take place in Royal Tunbridge Wells and Southborough, both of which the route will serve directly.

3.11.6 Many of the housing and employment sites identified in the draft plans lie alongside or are close to the route. The maps below of the draft land allocations for Tunbridge Wells and Southborough demonstrate:



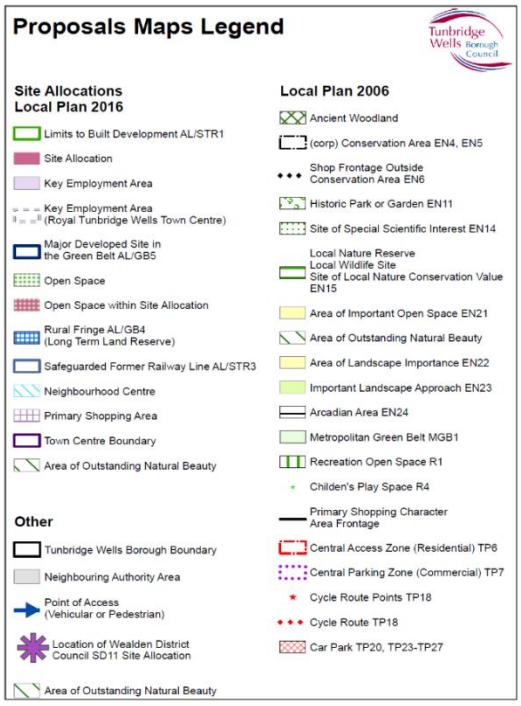


Table 3-2 – Tunbridge Wells Land Allocations

3.11.7 The route also serves development sites identified in the Tonbridge and Malling Local Plan, based on the LDF which was adopted in 2007. This plan includes an explicit policy (Policy CP2; Sustainable Transport) encompassing elements intended to ensure that new developments likely to generate significant numbers of trips should be located and developed such as to ensure that trips can be undertaken by sustainable modes (including walk and cycle). The A26 Cycle Route is designed to provide the facility to achieve this for sites close to the route.

3.11.8 The current Local Plan for Tonbridge and Malling covers the period 2007 to 2021. As with that for Tunbridge Wells it is in the process of being reviewed with the intention of producing a new plan for the period up to 2031. In the summer of 2016 the Strategic Housing Market Assessment (SHMA) identified a need for 13,920 new homes across the Borough over the 20 year Local Plan period or 696 a year. However, once existing planning permissions and known sites are taken into consideration, this reduces to a need to find land for approximately 6,000 additional homes between 2016 and 2031. To this end a site identification exercise was undertaken in 2016 which highlights the potential sites available, including scope for an additional 309 homes in the centre Tonbridge, alone, between 2016 and 2020.

3.11.9 Alongside the need for housing, the evidence base being considered for the new Local Plan identifies a requirement to find up to a further 33 hectares of employment land up to 2031. The map below illustrates the potential site allocations for housing and employment across the Borough up to 2031.

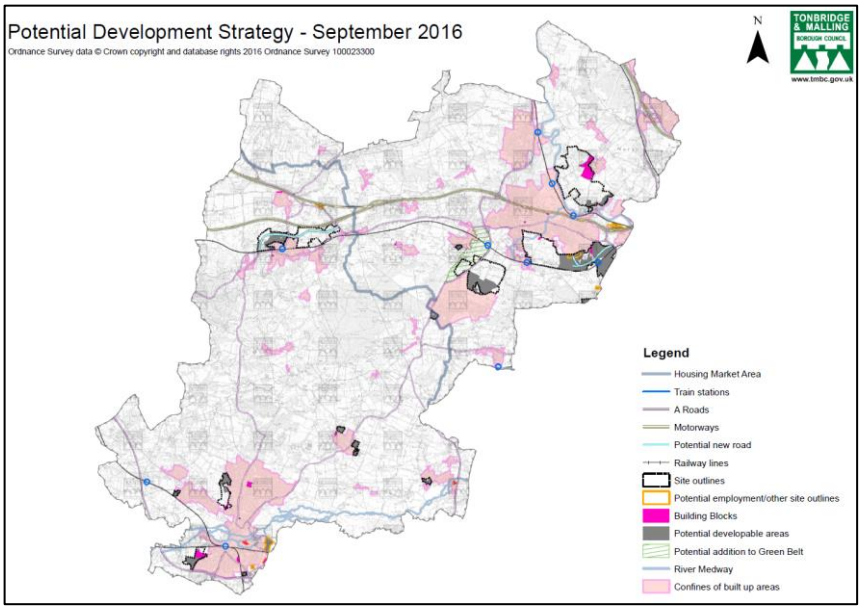


Table 3-3 – Tonbridge & Malling Land Allocations

3.11.10 The map clearly illustrates that there are a number of potential developments proposed for the town of Tonbridge that lie alongside or are close to the A26 Cycle Route. These will build on development already taking place in the town that has been driven by the Tonbridge Central Area Action Plan, established in 2008.

3.11.11 Tonbridge is the principal town in the Borough. As a result of the Action Plan there are more people living in the heart of the town, there have been improvements to the high street to improve the environment for shoppers, workers and visitors and an increasing emphasis on leisure, service and more individual retailing. Equally, the area just beyond and adjoining the heart of the town centre is currently the subject of change and investment proposals.

3.11.12 The masterplan supporting the action plan for Tonbridge town centre and illustrating the development that is taking place is provided below. The A26 Cycle Route will be relevant to all development within this.

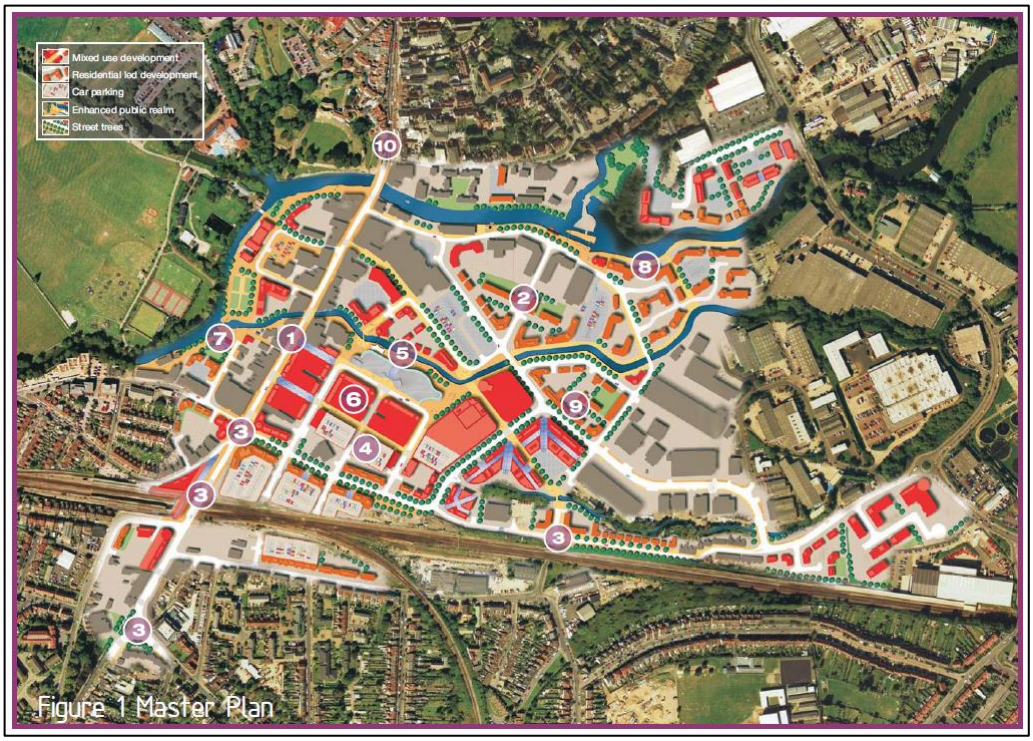


Table 3-4 – Tonbridge Town Centre Masterplan

3.11.13 Governments National Trip End Model (NTEM) draws on a range of data sources including population, employment, housing, car ownership and trip rates to establish projections for housing and jobs in each administrative area of the UK. Using Tempro 7.2 (software designed to interrogate NTEM data) it can be identified that currently (2017) in Tonbridge and Malling there are 52,576 households and 69,711 jobs. Over the next ten years households are predicted to increase by 6,404 to 58,980 and jobs by 2,709 to 72,420 many of these in Tonbridge.

3.11.14 In Tunbridge Wells there are currently 49,065 households and 64,120 jobs. Over the next ten years households are predicted to increase by 3,344 to 52,409 and jobs by 2,518 to 66,638, around three quarters of these in Royal Tunbridge Wells and Southborough. Collectively this suggests the A26 Cycle Route will support, at least, an additional 3,789 households and 2,431 jobs by 2027.

3.11.15 The A26 Cycle Route scheme will enable the planned economic growth to be achieved in a sustainable way and carbon emissions generated by new trips to be mitigated.

3.12 Strategic Fit - Schools

3.12.1 There are a total of 25 schools in Royal Tunbridge Wells within a 2 mile radius of the Grosvenor Rd end of the Cycle Route and 15 in Tonbridge within 2 miles of Brook Street. There is a new school planned for North Farm in Royal Tunbridge Wells and there are 4 schools that lie directly on the route corridor, 2 in Southborough and 2 in Tonbridge.

3.12.2 By capturing a proportion of the trips generated by these schools, the impact of existing traffic and the growth envisaged will be reduced.

3.13 Strategic Fit - Tunbridge Wells Borough Cycling Strategy

3.13.1 Tunbridge Wells Borough Council, working in conjunction with Kent County Council published the Tunbridge Wells Borough Cycling Strategy 2016/20, in January 2016.

3.13.2 The strategy aims to deliver a vision:

"To make cycling a normal part of everyday life in the Borough, by creating a safe and welcoming environment for cyclists of all ages and abilities".

3.13.3 Cycling rates in Tunbridge Wells are currently very low due to a range of actual and perceived barriers including a lack of confidence to cycle, insufficient infrastructure and road safety concerns. Yet it is recognised that an appetite for change exists, following the establishment of an active and well-supported Borough Cycling Forum, and growing public interest in cycling more generally. This has been energised by recent events including the Tour de France, Ride London, and closer to home, the Great Tunbridge Wells Bike Ride.

3.13.4 The Strategy puts forward ambitious yet practical proposals for the creation of a network of high quality cycle routes, within the urban areas of the Borough. It is intended that this will enable people of all ages and abilities to cycle safely for everyday journeys to education, employment and leisure activities. The routes will complement and in part be delivered as a consequence of highway, public transport and other town centre improvements that are identified in the new Borough Transport Strategy, as well as the County Council's road safety and driver awareness campaigns, which seek to ensure that cyclists and motorists look out for and respect one another.

3.13.5 Eight actions are identified to deliver the strategy:

- Action 1: A network of high quality cycle routes will be completed in the urban areas of Royal Tunbridge Wells, Southborough, Paddock Wood and Cranbrook. Inter-urban and leisure cycling routes will also be delivered. Where a proposed route requires new or upgraded public rights of way, partners will work with landowner(s) to secure implementation.
- Action 2: a) Cycle parking will continue to be improved in town and village centres, as well as other key locations in the Borough. b) Cycle parking will be provided in all commercial and residential developments (both new build and change of use), secured by partners through the planning process.
- Action 3: KCC and TWBC will work with partners to ensure the regular maintenance of all cycle routes within the Borough.
- Action 4: a) All Year 6 children will have access to Level 1 and 2 Bikeability training, and children in Years 7 to 9 will have access to Level 3 training. b) Adult cycle training will continue to be offered, through initiatives including work place travel planning.

- Action 5: Partners will continue to promote road safety campaigns and consider the introduction of 20mph speed limits and zones in accordance with KCC policies and procedures.
- Action 6: KCC and TWBC will ensure cycle routes are fully advertised and signposted within the Borough and that a cycle map and related information is provided online.
- Action 7: TWBC and/or the Cycling Forum will continue to support local cycling events where appropriate.
- Action 8: The Cycling Strategy will be regularly monitored, alongside the Transport Strategy, to review the implementation of agreed projects and initiatives.

3.13.6 Alongside the above actions, all of which will support the A26 Cycle Route, 9 potential cycle routes have been prioritised for development within the period covered by the strategy. The A26 Cycle Route is one of these and is identified as the highest priority for delivery. Together the 9 routes are:

- Route 1 - Tonbridge to Tunbridge Wells via the A26
- Route 2 - Pembury to Tunbridge Wells via the A264
- Route 4 - Routes across The Commons
- Route 5 - 21st Century Way including Home Farm Lane link
- Route 6 - Woodsgate Corner to Vauxhall Lane via Tonbridge Road and A21
- Route 7 - Forest Road to Grove Hill Road via Farmcombe Road
- Route 8 - A26 London Road to Dowding Way via Barnetts Wood
- Route 9 - Langton Green to Tunbridge Wells including Rusthall and Speldhurst links
- Route 10 - Ramslye and Showfields links

3.13.7 The overall cycle network formed by these routes is illustrated by the map below:

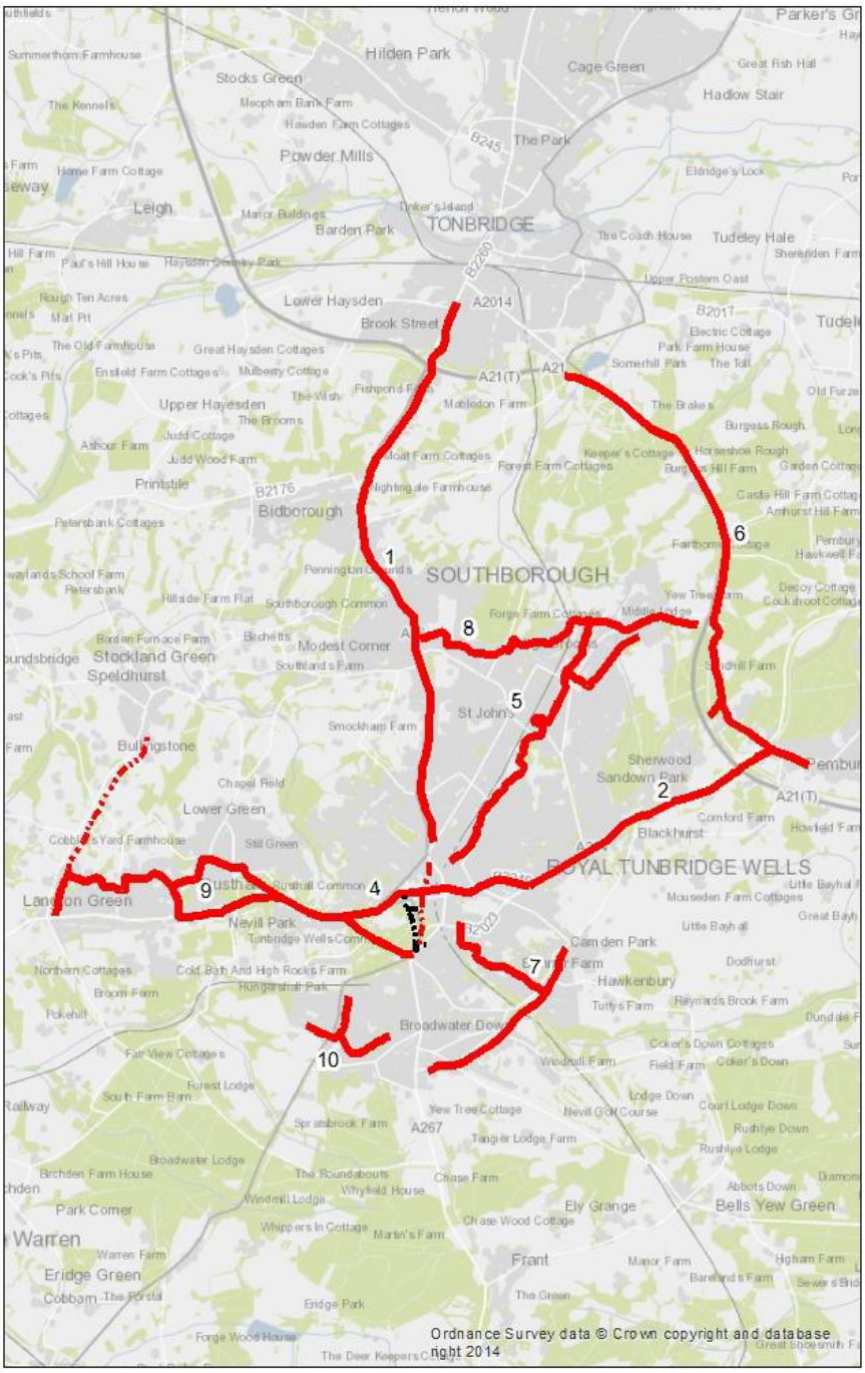


Table 3-5 – Tunbridge Wells proposed Cycle Network

3.13.8 Alongside seeking support to implement the A26 Cycle Route the Council are also currently working with KCC to progress the 21st Century Way cycle route between the town centre and North Farm and onwards to link with the A21 NMU, which is being progressed by HE. It is envisaged that all routes in the strategy will be in place within the timescale of the strategy with many of the remaining routes supported through section 106 developer contributions.

3.14 Strategic Fit - Tonbridge and Malling Borough Cycling Strategy

3.14.1 The Tonbridge and Malling Cycling Strategy 2014-2019 was produced by Sustrans in partnership with Tonbridge and Malling Borough Council and Kent County Council. It builds on a previous strategy "Putting the Wheels in Motion", published in September 1998.

3.14.2 The vision for the strategy is:

"to create an environment, particularly in the urban areas of the borough, where people of all ages and abilities feel able to cycle safely and easily and to enjoy the experience".

3.14.3 Its aim is to release some of the suppressed demand to cycle, particularly in urban areas and in this context its focus is on routes in the urban areas of Tonbridge and the Medway Gap, as this is where population densities are highest and where most new development will take place. In addition, it recognises the need to provide the missing links identified in the National Cycle Network to encourage inter-urban travel and cycle tourism.

3.14.4 The strategy identifies 7 principles that will be used to guide the design of cycle routes in the borough all of which support delivery of the A26Cycle Route:

- Principle 1: A network of high quality routes will be completed in the urban areas of Tonbridge and the Medway Gap providing convenient and safe access throughout those areas.
- Principle 2: Wherever possible measures will be provided which give cyclists priority over motorised traffic in terms of accessibility and journey time.
- Principle 3: Cycle parking will be provided in all developments (both new build and change of use) that result in the employment of people and secure cycle storage will be provided in all new residential developments in the borough.
- Principle 4: KCC will work with partners to ensure the regular maintenance of all cycle tracks within the borough.
- Principle 5: a) All year 6 children will have the opportunity to participate in Level 1 and 2 Bikeability Training. b) All children in years 7 to 9 will have access to Level 3 training. c) Adult cycle training will be available through a range of initiatives including work place travel planning.
- Principle 6: Ensure cycle routes are fully advertised and signposted within the borough and that cycle maps are available for all routes.

- Principle 7: Automatic counters will be installed throughout the cycle network to enable a detailed analysis of usage. Each new proposal will be assessed to see if an additional counter should be added to augment the data gathering process.

3.14.5 The Council undertook substantial consultation to identify key areas that have to be tackled to enable more people to cycle safely, more often. In addition, Sustrans undertook an audit of the existing cycling facilities throughout the urban areas of Tonbridge, the Medway Gap, Snodland, Kings Hill, Borough Green and Wrotham and Medway Valley East. Some of the routes in Tonbridge and Malling are amongst the oldest dedicated facilities in Kent and were built to specifications that have long since been superseded.

3.14.6 Together the above was used to establish a representation of what the Tonbridge cycle network could look like with the recommended improvements in place. The map below illustrates. Implementation of the network is dependent upon securing the necessary funding for the design and construction of each route which TMBC aims to achieve over the lifetime of the strategy, primarily through section 106 developer contributions.

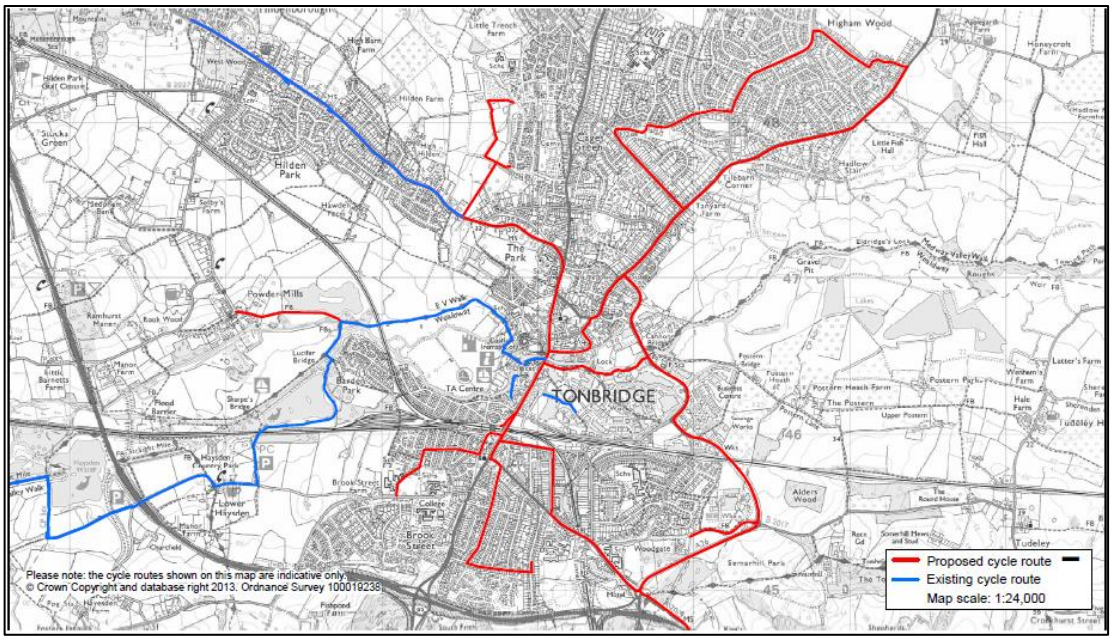


Table 3-6 – Tonbridge Proposed Cycle Network

3.14.7 The network illustrated focuses on routes within the borough, and as such does not include the A26 Cycle Route, the majority of which is in Tunbridge Wells. However, as identified above the strategy as a whole also seeks to support inter-urban requirements and the Council regard the A26 route as a priority in this respect.

3.14.8 It is envisaged that A26 Cycle Route will link to the internal network via the 2 proposed routes from the centre of Tonbridge and the railway station to schools and colleges to the south. In particular that proposed to connect to Tonbridge Grammar School for Girls via Quarry Hill Road, Pembury Road, St. Mary's Road and Baltic Road will provide a direct cycle link from the A26 route into the centre of the town and railway station, as well as the wider cycle network proposed.

3.14.9 Alternatively, Waterloo Road can be used to access the station directly. It will also be possible to access the wider internal network from the A26 route using side roads to join the proposed route to Brook Street, which will access the town via the Public Footpath skirting The Judd School.

3.15 Case for Change - Rationale for the Scheme

3.15.1 The key rationale for the scheme lies in its role in addressing congestion on the A26. It will also encourage active travel, improve access and inclusion, increase safety, improve health and well-being and support planned growth in housing and employment by helping ensure that this takes place in a sustainable manner. This is within the following context:

- The A26 represents a key arterial route between the towns of Tonbridge and Royal Tunbridge Wells, linking the towns and villages along the corridor to the two market towns and the strategic cycle networks for each borough. However, it is heavily congested, especially at peak times and existing traffic junction arrangements are sensitive. Unlocking the existing congestion and providing additional capacity where possible are seen as a fundamental part of achieving the aims of the LGF;
- Housing and employment growth in both boroughs is focussed on the main towns. In Tunbridge Wells three quarters of growth is proposed for Royal Tunbridge Wells and Southborough both of which will be served directly by the A26 Cycle Route. Tonbridge, also served directly by the route, is the principal town in Tonbridge and Malling and the focus for significant growth in the borough. Housing and employment growth (and resultant activities such as education and shopping) in all of these locations will generate additional trips in the area;

- Investment in the highway network (especially the A26 and A21) is designed to cater for these additional trips, enabling the developments to take place. The benefits of these investments can be 'locked in' if a proportion of the trips can be undertaken by sustainable modes, including public transport, walking and cycling. This 'locking in' will ensure that growth can continue as planned and not become unsustainable through rising congestion;
- Take up of cycling in both boroughs is currently low compared to other modes and national averages. However, interest is growing and the formation of cycle strategies by both borough councils as well as KCC offers significant support to encourage this. Improving cycling as a proportion of the active travel undertaken offers significant scope to improve the health and well-being of residents in all towns and villages that will be served by the A26 Cycle Route

3.15.2 In order to achieve this a safe, attractive and direct route for cyclists along the A26 corridor is required. Where there are shared sections of the route or junction improvements the route will also benefit pedestrians and the disabled. This will attract users who would normally travel by car, especially where the route can provide car-competitive journey times through congestion hot spots.

3.15.3 A further significant issue is that active travel provides major health benefits, both in terms of reduced mortality and better overall health, leading in turn to higher productivity. The A26 Cycle Route scheme will encourage cycling (and walking), transferring many trips which would otherwise be made by car. The health benefits achieved by this are a significant part of the rationale for the scheme.

3.15.4 The A26 Cycle Route scheme is designed to bring this about by:

- Providing a high quality and consistent cycle route along the length of the A26 corridor that links to the centres of Tonbridge and Royal Tunbridge Wells, the facilities and local cycle networks to be found there and the housing and employment growth planned;
- Providing a safe, coherent, comfortable and attractive route that conforms to established cycle route design principles;
- Facilitating and promoting use of the route to commuters for access to work, those accessing education and for leisure and tourism purposes;
- Providing segregated space where this is achievable and where this can't be achieved, reduced traffic speed as a means of improving perceived safety;

- Application of measures which seek to minimise stopping to maintain traffic flow and provide enhanced priority for cyclists, especially at junctions;
- Improving crossing and interchange arrangements at all junctions on the corridor;
- Taking account of up-to-date guidance and legislation, including the DfT Traffic Signs Regulations and General Directions 2016.

3.16 Congestion Data

3.16.1 Recent (2015) junction counts in at the junction of the A26 London Road with Grosvenor Road in Royal Tunbridge Wells illustrate the congestion issues on the A26. The table below indicates that significant queuing is observed in both peak periods, in particular on A26 London Road (south) where a sustained queue extends to over 400 metres in length. The A26 St Johns Road and Grosvenor Road approaches by comparison, observe minimal queues during the majority of the peak periods with occasional spikes in queuing.

3.16.2 During the AM peak period the queues extend back to Mount Ephraim Road, Lime Hill Road, York Road and Dudley Road, while in the PM peak period the queuing extends as far back as A264 Church Road. During the peak, many vehicles perform 'U' turns or use side roads as 'rat runs' in an effort to avoid the congestion.

AM Time Period	A26 St Johns Rd		Grosvenor Rd		A26 London Rd
	Nearside	Offside	Nearside	Offside	
07:15	0	20	0	0	0
07:20	0	0	20	15	5
07:25	0	0	0	0	0
07:30	0	5	10	0	10
07:35	0	20	0	5	0
07:40	0	10	0	10	50
07:45	0	10	0	0	60
07:50	0	0	10	20	210
07:55	0	0	5	15	300
08:00	5	5	35	25	235
08:05	0	5	0	0	310
08:10	0	0	5	20	400 *
08:15	0	0	5	15	400 *
PM Time Period					
16:45	0	5	0	35	400 *
16:50	10	0	20	5	400 *
16:55	5	5	10	35	400 *
17:00	0	50	15	0	400 *
17:05	0	0	20	30	400 *
17:10	0	0	45	10	400 *
17:15	0	25	30	15	400 *
17:20	0	5	35	25	400 *
17:25	10	5	0	60	400 *
17:30	15	300	40	20	400 *
17:35	0	10	30	70	400 *
17:40	0	20	20	15	400 *
17:45	0	10	0	20	400 *

* During peak hours many vehicles perform U-turns or turn down Lime Hill Road/Mount Ephraim Road to avoid queueing.
Average length of vehicles - 4.5 metres (CIHT Guidelines), Average length of PCUs - 5.75 metres (JCT Consultancy).

Table 3-7 – Weekday AM and PM Peak Period Queue Lengths (m)

DRAFT

3.16.3 Traffic survey data also indicates that operation of the key junctions along the A26 corridor is a current problem and will only get worse as development occurs. Some form of mitigation is required at each of the key junctions in order to improve traffic flow and ease congestion along the route.

3.16.4 All key junctions along the A26 are currently operating at or over capacity during the peak periods. The queue length data indicates that some moderate to heavy delay is experienced; mainly on the following approaches:

A26/Yew Tree Road and A26/Speldhurst Road junction

- A26 London Road (North) - 52+ vehicles during the AM and PM peak hour;
- Yew Tree Road – 47 and 15 vehicles during the AM and PM peak hour respectively;
- A26 London Road (South) – 34 and 24 vehicles during the AM and PM peak hour, respectively;
- Saint John's Road - 56+ vehicles during the AM and PM peak hour;
- Speldhurst Road – 40+ and 16 vehicles during the AM and PM peak hour, respectively.

A26 London Road/Grosvenor Road junction

- A26 St John's Road - 60+ vehicles (300 metres queue length observed) during the PM peak hour;
- A26 London Road (North) - 80+ vehicles (400 metres queue length observed) during both peak hours.

A26 London Road/Church Road junction

- A26 London Road (North) – 80+ and 75+ vehicles (400 and 380 metres queue length observed) during the AM and PM peak hour, respectively;
- Church Road (East) - 32 and 57 vehicles (160 and 285 metres queue length observed) during the AM and PM peak hour, respectively;
- A26 London Road (South) - 26 and 48 vehicles (130 and 240 metres queue length observed) during the AM and PM peak hour, respectively;
- Church Road (West) - 22 and 10 vehicles (110 and 50 metres queue length observed) during the AM and PM peak hour, respectively;

A26 London Road/Frant Road junction

- A26 London Road (South) – 23 vehicles (115 metres queue length observed) during the AM peak hour;
- A26 London Road (North) – In excess of 80+ (400 metres queue length observed) vehicles during the PM peak hour.

A26 London Road/Major York's Road junction

- A26 London Road (South) – 9 vehicles (45 metres queue length observed) during the AM peak;
- Major York's Road - 8 vehicles (40 metres queue length observed) during the AM peak;
- A26 London Road (North) – 10 vehicles (50 metres queue length observed) during the PM peak hour;

3.17 Accident Data

3.17.1 Personal Injury Crash (PIC) data from KCC has also recently been examined for a five year period beginning 1st January 2010 to 31st December 2014. A desktop analysis of PICs that occurred on the A26, within a 4.1 mile study area between Neville Terrace just beyond Grosvenor Road and the road leading to Apple Acres just short of the A21, was undertaken.

3.17.2 32 PICs involving cyclists were recorded within the study area in the five year period reviewed, of these 4 were recorded as serious and 28 as slight. In total there were 35 individuals injured in these PICs. The figure below shows the locations and severity of all cycle related PICs recorded on the A26 within the 5 year period studied. The majority of cycle related PICs occurred in the 1.1 mile stretch of the A26 from the junction with St Johns Park and the Mount Ephraim roundabout.

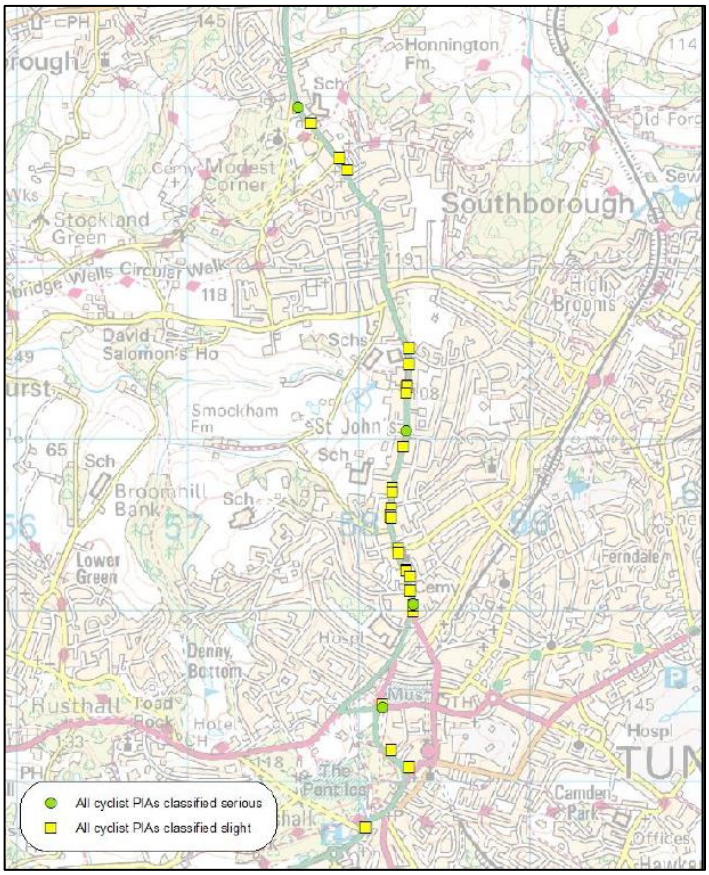


Table 3-8 - Cycle Personal Injury Crashes

3.18 Causal Chain

3.18.1 In order to present the scheme and its objectives in its overall context, a Causal Chain has been prepared and is shown in Table 3-9 below.

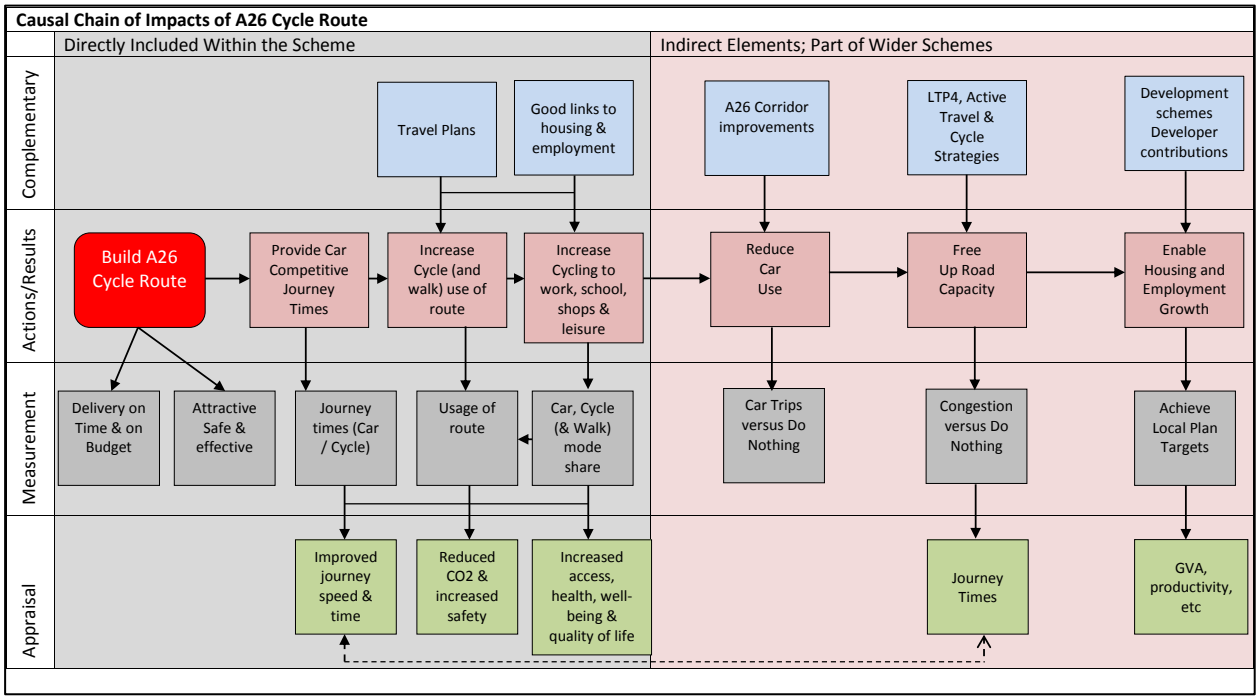


Table 3-9 – Causal Chain

	Impacts	Inclusion in SOC	Design Development (Later Stages)
Economy	Business users & transport providers	Journey time based. Calculated in conjunction with the TWBC and TMBC active travel / cycle strategies	Revision to take account of housing/jobs amended Tunbridge Wells and Tonbridge & Malling Local Plans
	Reliability impact on Business users	Journey time reliability identified as a benefit but not quantified.	Response from LEP and other stakeholders will reinforce case, though this is unlikely to be quantifiable
	Regeneration	Housing and employment growth projections included within cost/benefit calculation	Any revisions to forecasts will be incorporated
	Wider Impacts		
Environmental	Noise	Qualitative appraisal alongside A26/A264 corridor improvements, active travel & cycle strategies, station & public realm improvements	Refinement as housing/jobs plans developed, strategies & improvements
	Air Quality		
	Greenhouse gases	GHG calculated using DfT Active Travel Toolkit	Revision to take account of housing/jobs in amended Local Plans
	Landscape	Landscape issues central to design of cycleway	Will be refined as design progresses
	Townscape	Linkage to Royal Tunbridge Wells & Tonbridge town centres will be key part of design process	Will be refined as design progresses
	Historic Environment	Not assessed at this stage	Will require assessment as scheme is developed
	Biodiversity	Not assessed at this stage	Will be assessed as design progresses
	Water Environment		
Social	Commuting and Other users	Journey time / congestion improvements calculated using DfT Active Travel Toolkit	Revision to take account of housing/jobs in amended Local Plans
	Reliability impact on Commuting and Other users	Journey time reliability identified as a benefit but not quantified.	Response from LEP and other stakeholders will reinforce case
	Physical activity	Key element of scheme, appraised using DfT Active Travel Toolkit	Limited assessment of local walk/cycle routes - to be done as implemented
	Journey quality	No specific assessment but will enhance journey quality	Revision to take account of housing/jobs in amended Local Plans
	Accidents	Key element of scheme, appraised using DfT Active Travel Toolkit	Will be refined based on future counts
	Security	Incorporated as qualitative factor and important part of design	Will be refined as design progresses
	Access to services	Improved journey times and reliability will enhance access. Scheme will improve non-car access to services, including town centres & rail stations.	Will be refined as design progresses
	Affordability	Indication that scheme can be funded from Local Growth Fund & S106	Will be reappraised as scheme design progresses
	Severance	Scheme will reduce severance between town and locally	Will be refined as design progresses
	Option and non-use values	Will have positive benefit, calculated as qualitative factor	Will be reappraised as scheme design progresses

	Impacts	Inclusion in SOC	Design Development (Later Stages)
Public Accounts	Cost to Broad Transport Budget	Encompassed within this SOC	Will be reappraised as scheme design progresses
	Indirect Tax Revenues	Encompassed within this SOC	Will be reappraised as scheme design progresses

Table 3-10 - Summary of Appraisal Criteria

3.19 Summary of Scheme Objectives

3.19.1 The scheme will provide an attractive, direct and in locations where a shared path is provided, traffic-free route for cyclists to travel to employment, education, shopping locations and for leisure. The scheme itself runs between Royal Tunbridge Wells and Tonbridge town centres and links into existing paths and roads to provide good access to a large number of local facilities, including schools Rail Stations and development locations.

3.19.2 The journey times achievable by cyclists on the route will, at current congestion hot spots, be faster than can be achieved by car, capturing existing and future commuters. The current target set for the route is to increase cyclists using the A26 corridor from around 126 to 352 users per day by 2019, an increase of 226 cycle trips. This is consistent with the outcomes for many similar routes that also make up part of a much wider cycle network in an area. Usage will be encouraged by complementary measures, including A26 and A21 corridor improvements, implementation of cycle strategies in both towns, publicity, travel plans, public realm improvements, station improvements, Kent Connected and StAR - KCCs successful access fund bid 2017/20.

3.19.3 Active travel will provide reduced car trips, health benefits and will reduce CO2 emissions. This and other sustainable initiatives (including public transport and other walk/cycle improvements) will reduce car trips and complement highway investment, freeing up road space and improving overall journey times for all road users. The Economic Case uses the Department for Transport Active Travel Toolkit to calculate the most significant of these benefits.

3.19.4 Freeing-up of road space will support the plans for growth in jobs and housing in the area, contributing to overall economic growth. The above objectives are set out in the Causal Chain above and are summarised in the table below which has been used for the initial Options Appraisal:

Table 3-11 - Scheme Objectives

Primary Objectives	***1. Increase cycle trips through the construction of an improved cycle route between Royal Tunbridge Wells and Tonbridge*** a) Increase journey to work and education by cycle b) Increase cycle for other trips, including shopping and leisure c) Provide car-competitive journey times for cycle users d) Estimated 58,986 additional trips per year (226 per day), based on experience of similar schemes
Secondary Objectives	***2. Deliver a sustainable scheme*** e) Limit long-term maintenance liabilities ***3. Delivery of an attractive, safe and effective scheme*** f) Providing safety and security for all users g) Providing safe, direct and attractive routes on the route and onto and off the cycleway at suitable points ***4. Enhance the local environment*** h) Maintaining or improving the local environment around the scheme ***5. Increase Walk trips*** i) Increase walk trips on the route and onto and off the route

3.19.5 The scope of the scheme is set out below:

- The scheme will deliver the route improvement, including undertaking all necessary actions to ensure its suitability for the corridor served. This encompasses environmental aspects, maintainability, safety, security, attractiveness and usability.
- The planning of the scheme is encompassed within the context of the SELEP Strategic Economic Plan, Growth without Gridlock, LTP4, Local Development Plans and the KCC Active Travel Strategy.
- Links to the A21 NMU, local Cycle Strategies for Tunbridge Wells and Tonbridge and Malling and existing rights of way (including the highway network) are included within the scheme. Improvements to cycle routes in the towns are not part of the scheme itself but will be supported by developer contributions and additional funding bids by KCC, TWBC and TMBC.

- Further links to the route from within development schemes (e.g. housing, employment, healthcare, leisure, retail, education etc. developments) are not included within the scheme but will be identified through the planning and development control processes to ensure that they are identified, funded and delivered in a co-ordinated manner in order to improve connections to the route.
- The selection of route has been undertaken in part to optimise the maintainability of the route. However, maintenance is not included in the scheme costs. This will be undertaken through established processes and budgets for highway and rights of way maintenance by Kent County Council, TWBC and TMBC.

3.20 Critical Success Factors (CSFs)

3.20.1 The key CSFs for the A26 Cycle Route scheme, using the 5-Case Model headings are as follows:

- CSF1: Strategic Fit (Strategic Case)
  - Reduced car use and increased active travel;
  - Enables sustainable development (housing; employment) to take place;
  - Locks in benefits of other transport investments in Tunbridge Wells and Tonbridge and Malling areas;
  - Improved public health through active travel;
  - Reduces CO_2 emissions;
- CSF 2: Value for Money (Economic Case)
  - Maximises return on investment, striking a balance between the cost of delivery and the cost to the economy of non-delivery.
- CSF 3: Achievability (Commercial Case)
  - Deliverable utilising current engineering solutions
  - Limits long-term maintenance liabilities
- CSF 4: Affordability (Financial Case)
  - Deliverable within the likely capital funding available;
  - Ongoing Revenue liabilities are affordable within current budgets.
- CRF 5: Timescale for Implementation (Management Case)
  - Deliverable within the timescale during which funding is likely to be available.

3.21 Constraints

3.21.1 There are few potential constraints that may impact the scheme and none that will prevent it from proceeding or being completed. Those identified are described in 4.11.12 and included as risks, together with the proposed mitigation, in Table 7.2. Here we provide some background to these constraints:

Cycle Route Surfacing Design

3.21.2 The current route design proposes use of red surfacing along much of the route. This offers benefits in terms of highlighting the cycle route to other road/pavement users, increased compliance and will contribute to the success and visibility of the scheme, thereby promoting cycle use in the region in general. Many other places use colour delineation for reallocated roadspace; e.g. bus lanes, cycle lanes, road crossings etc. as it helps give information to road users.

3.21.3 Alternatives available include:

a) No specialist surfacing and using standard road markings only. Experience elsewhere suggest compliance with cycle lanes is less if they are not highlighted.

b) Use of a coloured wearing course such as red Hot Rolled Asphalt (HRA), black HRA with red chippings or red Stone Mastic Asphalt (SMA) together with the standard road markings. Resurfacing and reinstatements would be expensive and likely to mean that any lane resurfacing would have to take place in normal working hours due to the limited availability of the material. Coloured wearing courses will not have the colour impact of a surface dressing material.

c) Use of red surfacing, as proposed. The benefits are that the laying of red surfacing is a comparatively quick process usually not causing much disruption. Current materials also have a life span of 7 to 8 years.

3.21.4 Currently, existing red surfacing is not being renewed as part of the highway maintenance programmes, as a result of budget constraints. However, red surfacing does provide benefits from a highway maintenance viewpoint. The red surfacing is a surface dressing that seals the road surface to prevent water ingress, it improves skid resistance, is quick to lay, looks good, especially in the early years and discourages motorists from using the cycle lane.

3.21.5 Discussion is ongoing between KCC Highways, TWBC, TMBC and TWBUG to address the maintenance cost concerns. Were these discussions to take longer than expected they have the potential to delay the works programme. There is also potential additional costs if KCC Highways require a contribution to be made to maintenance, although this would not be required for some years following completion of the route. Risks are considered low to medium.

Drainage Design

3.21.6 Drainage design within block paved ramp sections could require revising to detail existing gullies to be maintained, instead of being infilled due to future maintenance requirements. To consider this further site scoping is proposed in the near future and ahead of scheme commencement, to establish if a drainage survey is required. If so and depending on the outcome of this there may subsequently be a need to amend the scheme design causing delay and additional costs.

3.21.7 Risks are considered low to medium. There is potential to cover any small increase in scheme costs through section 106 negotiations at development locations under consideration near to the scheme but yet to be committed.

Traffic Regulations Orders

3.21.8 Traffic Regulations Orders (TRO) are required for a 20 mph speed limit proposed between Yew Tree Road & Holden Road, the removal of parking bays between Holdon Road & Victoria Road, Tunbridge Wells and the relocation of bus stops at St John's Road opposite the junction of Woodbury Road and between Pennington Road & Victoria Road, Tunbridge Wells.

3.21.9 These TRO's are currently being prepared and will include additional consultation with District Councils, local residents, businesses, bus operators and other road users. The process is integral to the detailed scheme design and is programmed to run alongside this on commencing the scheme. There is the potential for the outputs of consultation to identify a need for some minor adjustments to the scheme design and a resulting increase costs. However, the risks of this are considered low to medium.

Diversion of Utilities

3.21.10 Utilities belonging to Virgin, BT & Zayo are located in the existing footway at St John's Road opposite the junction of Woodbury Park, Tunbridge Wells. Discussions are currently ongoing with all three companies to establish any works required to ensure ongoing access to these utilities following construction of the cycle route.

3.21.11 Estimates for any works have been included in the scheme costs based on the discussions to date. However, until discussions are concluded the final costs of works cannot be specified. Any additional requirements to those identified to date could therefore increase these costs. It is also possible any unknowns may extend the timeframe envisaged for completion of the works, impacting in turn on the overall programme of works for the scheme. However, the risks of this are considered low.

Constraints Addressed

3.21.12 In previous versions of this Business Case two further constraints were identified that are no longer a concern.

- A26 Lane Rental, Road works and Potential working restrictions – Discussions with KCC Highways have now concluded and established that time and cost estimates included in the submission are accurate;
- Land Acquisition, Southborough – To provide a continuous cycle route through Southborough it is necessary to use two layby's, currently used for residents off road parking, that belong to Southborough Town Council. Discussions with TWBC and the town council have now established agreement to the use of these at no additional cost to the scheme.

3.22 Stakeholders

3.22.1 Stakeholders have been defined and analysed in relation to:

- All stakeholders, categorised in terms of their interest in the scheme how they will be engaged with and consulted through the design and delivery process
- Further analysis of stakeholders benefitting from the scheme. These scheme beneficiaries have been mapped against the scheme objectives, enabling consultation to be targeted effectively and assisting in framing the Benefits Realisation Plan for the scheme.

Stakeholder Categorisation

3.22.2 Stakeholders are categorised in the table below:

Category	Detail
Beneficiary	Stakeholders which will receive some direct or indirect benefit from the scheme. For details see separate table
Affected	Stakeholders which are directly affected by the scheme in terms of its construction or operation
Interest	Stakeholders with some interest in the scheme though not affected directly by its construction or operation
Statutory	Stakeholders with a statutory interest in the scheme, its construction, operation or wider impacts
Funding	Stakeholders involved in the funding of the construction or operation of the scheme

Table 3-12 – Stakeholder Categorisation

Engagement Categories

Category	Detail
Intensive consultation	Stakeholders who are directly affected by the scheme and whose agreement is required in order for the scheme to progress. Consultation throughout the design and implementation.
Consultation	Stakeholders who are affected by the scheme and can contribute to the success of its design, construction or operation. Consultation at key stages
Information	Stakeholders with some interest in the scheme or its use. Information to be provided at appropriate stages

Table 3-13 – Stakeholder Engagement

Stakeholder Matrix

Stakeholder	Categories	Engagement and Consultation	Comments
Existing cycle route users	Beneficiary	Consultation Information	Through established mechanisms. Focus on scheme design, construction and operation
Potential new users	Beneficiary Affected	Consultation Information	
Other road users	Beneficiary Affected	Consultation Information	

Stakeholder	Categories	Engagement and Consultation	Comments
Tunbridge Wells Cycle Forum	Beneficiary Affected	Consultation Information	
Other Access and rights of way groups (including cycling)	Interest	Consultation	
Disabled access groups and individuals	Interest Affected	Consultation	
Residents adjoining the route	Beneficiary Affected	Consultation Information	
Bus Operators	Interest Affected	Consultation	
Impacted Landowners	Affected	Intensive consultation	Specific consultation dependent on interest in relation to scheme design
Elected Members	Interest	Intensive consultation	
Other Landowners	Interest	Consultation	
Local authorities	Beneficiary Statutory	Intensive consultation	County, District & Parish
CCG (& local authorities in relation to Public Health)	Beneficiary Statutory	Intensive consultation	Specific consultation
Education Authority / Schools	Statutory	Consultation	Specific consultation
Local Enterprise Partnership	Beneficiary Funding	Information	Through LGF Business Cases & progress reports
Developers	Beneficiary Affected	Consultation	Only as relevant to scheme
Businesses adjoining route	Beneficiary Affected	Information	Travel plan contact as part of benefit realisation plan
Wider business community	Beneficiary	Information	As part of wider LGF consultation
Wider community	Beneficiary	Information	
Local taxpayers	Beneficiary	Information	

Stakeholder	Categories	Engagement and Consultation	Comments
Tourists and visitors	Beneficiary	Information	Through established channels

Table 3-14 – Stakeholder Consultation

Benefit Stakeholders and Relationship to Scheme Objectives

Investment Objectives	Main benefits Criteria by Stakeholder
Investment Objective 1A Increase the number and proportion of trips being made to work and education by cycle;	**Users** Health benefits through active travel Financial benefits through less need to own or use a car Improved access to employment and other services for those without cars **Other Road Users** Reduced congestion due to fewer car trips **Local Authorities, CCG and Local Enterprise Partnership** Public health benefits of active travel Locking in the decongestion benefits of transport investment in the area Improved attractiveness of the area for inward investment and job creation Improved attractiveness of the area for housing **Developers and Employers** Ability to develop schemes without excessive planning conditions Ability to create employment and attract employees
Investment Objective 1B Increase the number and proportion of trips being made for other purposes by cycle;	
Investment Objective 2 Deliver a financially sustainable scheme which limits long-term maintenance liability	**Local Taxpayers** Reduced demand on local taxation **Local Authority** Reduced budgetary demands
Investment Objective 3A Provide safety and security for all users	**Users and their families** Personal safety and security for users of the route and their families **Local authority & Local Enterprise Partnership** Maintaining the attractiveness of the area for jobs and housing

Investment Objectives	Main benefits Criteria by Stakeholder
Investment Objective 3B Provide safe, direct and attractive routes on the route and onto and off the route at suitable points	**Users** Easy, safe and direct access to employment, education and other facilities via the cycle route **Local residents and businesses** Maintenance of the attractiveness and utility of the area **Local authority & Local Enterprise Partnership** Locking in the decongestion benefits of transport investment in the area Improved attractiveness of the area for inward investment and job creation Improved attractiveness of the area for housing
Investment Objective 4 Maintain or improve the local environment around the scheme	**Local residents and businesses** Maintaining the attractiveness of the area Preserving and improving the natural and built environment **Local authority** Meeting statutory duties **Local Enterprise Partnership** Maintaining the attractiveness of the area for investment, jobs and housing
Investment Objective 5 Increase walk trips along the route and onto and off the route	**Users** Health benefits through active travel Financial benefits through less need to own or use a car Improved access to employment and other services for those without cars **Local Authorities, CCG and Local Enterprise Partnership** Public health benefits of active travel Improved attractiveness of the area for inward investment and job creation Improved attractiveness of the area for housing **Developers and Employers** Ability to create employment and attract employees

Table 3-15 – Stakeholder Benefits

3.23 Consultation to Date

3.23.1 To date substantial consultation has been undertaken both in relation to the TWBC cycle strategy which includes the A26 Cycle Route and specifically on the route itself. However, it should be noted that liaison with stakeholders is ongoing and is expected to continue as the preparation of detailed designs continues, including through the TRO process.

3.23.2 Consultation on TWBC Cycle Strategy

- Residents Questionnaire - This was published online alongside the Strategy document and route assessments. Hard copies were issued by post to parties that requested these.
- Schools Questionnaire - All primary, secondary and private school head teachers were contacted by letter during the consultation. A specific questionnaire for schools was issued.
- Written Responses - A range of comments and feedback on the Strategy was received by email.
- Stakeholder Meetings - Meetings to discuss the route proposals were held prior to and during the consultation period, with groups and organisations that will be directly impacted by the proposed cycle routes. In some cases liaison is ongoing. Stakeholders include Parish Councils and landowning parties as follows:
    - Tunbridge Wells Commons Conservators;
    - Inner London Road Residents Association;
    - Royal Tunbridge Wells Access Group;
    - Camden Park Residents Association;
    - Cranbrook and Sissinghurst Parish Council;
    - Rusthall Parish Council;
    - Paddock Wood Town Council;
    - Speldhurst Parish Council;
    - Southborough Town Council.

3.23.3 Responses to the consultation were generally positive:

- 98% of residents supported the vision and 94% the actions proposed;
- The resident's feedback identifies the most prominent reasons why they don't travel by bicycle. These include concerns of road safety (34%) and lack of dedicated routes (29%);
- All responding schools agreed with the Strategy vision;
- Most schools agreed with the route proposals
- Tunbridge Wells Bicycle Users Group (TWBUG) confirmed their support for the Cycling Strategy;
- All that attended the Stakeholder meetings were generally supportive of the strategy, its vision and actions.

3.23.4 Specific Consultation on the A26 Cycle Route

- Publication of the route proposals on the Kent County Council Consultation Portal along with a questionnaire for feedback;
- Two drop-in evenings held at Tunbridge Wells Grammar School for Boys on 14 and 28 November between 5pm and 8pm attended by TWBC officers and consultants DHA Planning. These events were well attended with approximately 40 people visiting on 14 November and over 50 people on 28 November;
- Promotion of the consultation via social media;
- Leaflet drop to all properties (residential and business) along the A26 between Tonbridge to Tunbridge Wells town centres – with details of the events and the on-line questionnaire;
- Signs on lamp columns along the A26 to inform about the consultation;
- Direct mail-out to relevant bus companies and discussions with Arriva at the Quality Bus Partnership meeting (2 December);
- Direct mail-out to local schools;
- Officer attendance at meeting of the Tunbridge Wells Access Group (28 November);
- Direct email to relevant contacts that have expressed an interest in the project.

3.23.5 A total of 212 people/organisations responded to the consultation via the on-line or paper questionnaire. Of these 82% were local residents. Overall the majority of people (67%) that responded via the questionnaire either strongly agreed or agreed with the proposed route designs. This compared with 24% of respondents that either disagreed or strongly disagreed with the proposals and 9% that neither agreed nor disagreed.

4 Economic Case

4.1 Introduction

4.1.1 In accordance with the Capital Investment Manual and requirements of HM Treasury's Green Book (*A Guide to Investment Appraisal in the Public Sector*), this section of the business case documents the options that have been considered in response to the potential scope identified within the strategic case.

4.1.2 Whilst this scheme is expected to contribute to the wider economic development of the area, it is targeted in particular on reducing congestion by increasing the number of cycle trips (especially commuter trips) made between residential locations and local employment and education locations and other services and facilities in the area. This will provide health benefits for users of the route, reductions in greenhouse gas emissions, improvements in safety, improvements in journey quality and (in conjunction with complementary schemes) will contribute to decongestion benefits. These in turn will enable economic growth in the area, especially in terms of jobs and housing. Consequently, the Economic Case is focused on these specific benefits.

4.2 Background

4.2.1 The objectives set out in the Strategic Case, along with their expression as stakeholder benefits, provide a framework for what the scheme must achieve. These Critical Success Factors (CSFs) in turn provide the basis for the appraisal of the scheme. In line with HM Treasury guidance these CSFs are categorised according to Strategic Fit, Value for Money, Achievability, Affordability and Timescale. These effectively map onto the 5-case model, enabling the scheme and its options to be appraised and compared in order to identify the most effective solutions.

4.2.2 The following subsections describe the scheme options, their advantages and disadvantages and whether they have shown sufficient merit to take forward for more detailed economic appraisal. A summary of the options, mapped against the scheme objectives and CSFs is provided.

4.2.3 Following this, the approach towards more detailed economic appraisal is described, followed by the scheme option appraisal itself.

4.3 Appraisal Assumptions

4.3.1 With devolution of major scheme approval to Local Enterprise Partnerships, it is important that an approach to appraisal is used which gives regard to local priorities (especially in enabling investment, job creation and housing construction). This must be done with due regard to standard practice, which in transport terms means the use of WebTAG guidance. Discussions with the Department for Transport have indicated that a 'proportionate' approach to WebTAG should be used.

4.3.2 Kent County Council, has held discussions with the South East Local Enterprise Partnership, in the light of Government Guidance[1], on how the appraisal of devolved small major schemes should be handled. As a result of this the following approach has been used for this Strategic Outline Case:

- All anticipated scheme design and delivery costs have been calculated as accurately as possible, given the stage of the design;
- In line with WebTAG principles: 'optimism bias' at 15%, risk at 10% and inflation have been included in the economic appraisal. However, only risk and inflation are included in the scheme costs (see Financial Case) and the funding bid to SELEP;
- All costs in the economic appraisal are discounted to 2010 market prices to ensure consistent units are applied throughout.

4.4 Options Considered

4.4.1 Priority for provision of the A26 Cycle Route has emerged from the detailed cycle audits undertaken to inform the cycle strategies established by TWBC and TMBC and confirmed through extensive public consultation.

4.4.2 The key elements identified in the Options Appraisal and subsequent consideration have been analysed against the scheme objectives and critical success factors. Outputs are incorporated into the summary of benefits and costs.

4.4.3 There is no obvious parallel route/s that would meet the need for people to cycle into the town centre of Royal Tunbridge Wells or Tonbridge, in particular from the Bidborough and Southborough areas. In the case of Tonbridge there is simply no other alternative route to the town from Southborough or Bidborough that can be considered other than the A26.

[1] Growth Deals; Initial Guidance for Local Enterprise Partnerships. HM Government July 2013

4.4.4 Separate studies have considered options for provision of a Park and Ride service for Royal Tunbridge Wells and for increasing vehicle capacity on the A26. However, the Park & Ride Study that was undertaken demonstrates that there are 'significant barriers to the implementation of park and ride' and the A26 Corridor Study shows that there are no options for vehicular capacity improvements more generally on the A26

4.4.5 Work on the TWBC cycle strategy has assessed some of the potential routes in the vicinity of the A26 to consider the potential to utilise these. However, in general, this found that many of these side roads are heavily trafficked often by people 'rat-running' and/or do not offer a direct route. Putting in measures to create 'quiet ways' would take much longer, requiring 20mph areas and filtered permeability to prevent rat-running for example.

Option 1: Do Nothing

Description

This option will leave the existing dis-jointed sections of cycle route along the A26 unchanged. These are of differing standards and quality and seriously degraded in parts, in some cases making them no longer suitable or unsafe for cyclists.

Advantages

- There will be no expenditure on the route;

Disadvantages

- There is evidence from the consultation undertaken that a perceived lack of safe routes is stopping people cycling;
- There will be no improvement in the route for cyclists (or pedestrians);
- As a result there will be no reduction in congestion or increase in access to employment or other services;
- This will jeopardise the long-term feasibility of the jobs and housing creation planned for the area

Conclusion

The 'do nothing' option is rejected.

Option: Not carried forward but is used as 'baseline' for appraisal

Option 2: Improve A26 Cycle Route

Description

Upgrade existing cycle paths and add to these to provide a single high quality cycle route between Royal Tunbridge Wells and Tonbridge

Advantages

- Provides direct and shortest route between Tonbridge and Royal Tunbridge Wells;
- Serves Bidborough, Southborough and High Broom
- Offers capacity to provide shared paths or mandatory on road cycle route
- Builds on existing infrastructure and use

Disadvantages

- Heavily trafficked;
- Main arterial route;

Conclusion

Will add circa 1.5km to route to town centre. Option not considered suitable.

Option: Preferred Option

Option 3: To the West of the A26

Description

Constitutional Hill Road-Kibbles Lane-Speldhurst Road-Reynolds Lane

Advantages

- Uses side roads, off the main A26;

Disadvantages

- Does not serve Tonbridge
- High traffic speeds;
- Narrow roads
- Indirect route;

Conclusion

Little/no room on Constitutional Hill or Reynolds Lane to provide a dedicated cycle route, raising safety concerns. Option not considered suitable.

Option: Not carried forward

Option 4: To the East of the A26

Description

Yew Tree Road-High Brooms Road-Upper Grosvenor Road

Advantages

- Provides access to High Broom station;

Disadvantages

- Does not serve Tonbridge
- Heavily trafficked;
- High traffic speeds;
- Indirect route;
- Will only serve Royal Tunbridge Wells

Conclusion

Will add circa 1.5km to route to town centre. Option not considered suitable.

Option: Not carried forward

Option 5: A21 NMU

Description

Tonbridge to Pembury

Advantages

- Provides good access to Tonbridge ;

Disadvantages

- Does not serve Southborough;
- Does not serve Bidborough;
- Indirect route;

Conclusion

Will add circa 2.5km to route between Tonbridge and Royal Tunbridge Wells. Option not considered suitable.

Option: Not carried forward

4.4.6 The table below summarises this analysis against the objectives and success factors of the scheme:

Reference to:	Option 1	Option 2	Option 3	Option 4	Option 5
Description of Option:	**Do Nothing**	**A26**	**West of A26**	**East of A26**	**A21 NMU**
1 Increase Cycle Trips–TW to Ton	×	✓	✓	✓	×
2 Deliver a sustainable scheme	×	✓	✓	✓	✓
3 Deliver an attractive, safe, effective scheme	×	✓	×	×	✓
4 Enhance the local environment	×	✓	×	×	✓
5 Increase Walk trips–TW to Ton	×	✓	×	×	×
Strategic Fit	×	✓	✓	✓	×
Value for Money	**N/A**	✓	✓	✓	✓
Potential Achievability	✓	✓	×	×	✓
Potential Affordability	✓	✓	✓	✓	✓
Timescale for Implementation	✓	✓	×	×	✓
Summary	**Discounted**	**Preferred**	**Discounted**	**Discounted**	**Discounted**

Table 4-1 – Options Appraisal

4.5 Economic Overview

4.5.1 As set out in the Strategic Case, this scheme represents an important complementary measure in supporting the development of jobs and housing in Tunbridge Wells and Tonbridge and Malling. It provides a means for commuters to choose to cycle (or in places, to walk) on an attractive, direct and safe route, often achieving faster commute times than are available by car through congestion hotspots.

4.5.2 However, at £1.2m, it is in itself a low-value scheme which cannot justify a fully detailed WebTAG compliant economic appraisal as required for schemes above £5m. In addition, the complementary nature of the scheme does not lend itself to such an appraisal in isolation.

4.5.3 Consequently, the Economic Case for the scheme is focused on:

- The direct benefits of the scheme itself (i.e. not the wider benefits of the scheme as part of an integrated package of complimentary initiatives), including decongestion benefits, health economic benefits, greenhouse gas emission savings stemming from usage of the route (especially usage involving transfer from car), journey quality benefits, safety benefits based on accident reduction and benefits of reduced noise;
- Direct scheme detailed design and construction costs, not taking into account any additional measures such as travel planning or improved connectivity from new developments, etc.;
- Qualitative appraisal of the wider benefits in the context of the planned developments in the area, major transport schemes in the area (including the A21 NMU) and sustainable transport schemes, including the wider cycle networks and those being introduced as part of the Local Sustainable Transport and Access Funds.

4.5.4 For the purposes of this small scheme, the direct employment benefits (i.e. people employed in constructing the scheme) have not been calculated, though these may be aggregated into the direct employment generated by the LGF programme as a whole.

4.5.5 As detailed in the Causal Chain, the benefits of the scheme and the overall approach to the appraisal of these are as follows:

Appraisal Item	Direct/ Indirect	Approach to Appraisal
Decongestion – from transfer from car	Direct	Use of DfT Active Travel tool to calculate congestion savings from transfer from car, based on usage and modal shift projections
Social / Health benefits from active travel using the route	Direct	Use of DfT Active Travel tool to calculate health economic benefits, based on usage projections
Environmental - Carbon emission savings from transfer from car	Direct	Use of DfT Active Travel tool to calculate CO2 savings from transfer from car, based on usage and modal shift projections
Journey Quality	Direct	Use of DfT Active Travel tool, adjusted for proposed design elements
Safety – increased safety of all road users	Direct	Use of DfT Active Travel tool, adjusted for proposed design elements
Noise – reduced noise in the vicinity of the A26	Direct	Use of DfT Active Travel tool, based on usage and modal shift projections
Economy - Journey time reduction on highway network (decongestion)	Indirect	Estimates based on package of schemes, including A21 and A264 improvements, plus other sustainable transport schemes (including LSTF)
Economy - Wider economic benefits (GVA, productivity etc.)	Indirect	Not calculated separately – incorporated in above transport economic benefits.

Table 4-2- Key Appraisal Elements

4.5.6 In addition to these, a number of other key benefits have been taken into account, alongside less detailed commentary on all relevant aspects:

Appraisal Item	Direct/ Indirect	Approach to Appraisal
Economy - Regeneration	Indirect	Narrative approach based on enabling development of area, linked to other cycle and sustainable transport initiatives. Includes tourism.
Environmental – Landscape/Townscape	Direct	Narrative approach based on improvement to the local area through design, planning and consultation processes
Social - Inclusion	Direct	Narrative approach based on provision of improved access to employment, training and education without the need for a car
Social – Security of users	Direct	Narrative approach based on sound design, backed by consultation with users, residents and businesses on route
Social - Accessibility	Direct	Narrative approach based on improved access to employment, education and other services for all residents, including the disabled

Table 4-3 - Additional Appraisal Elements

4.6 Appraisal Flowchart

4.6.1 The approach to economic appraisal, using WebTAG principles is shown in the figure below.

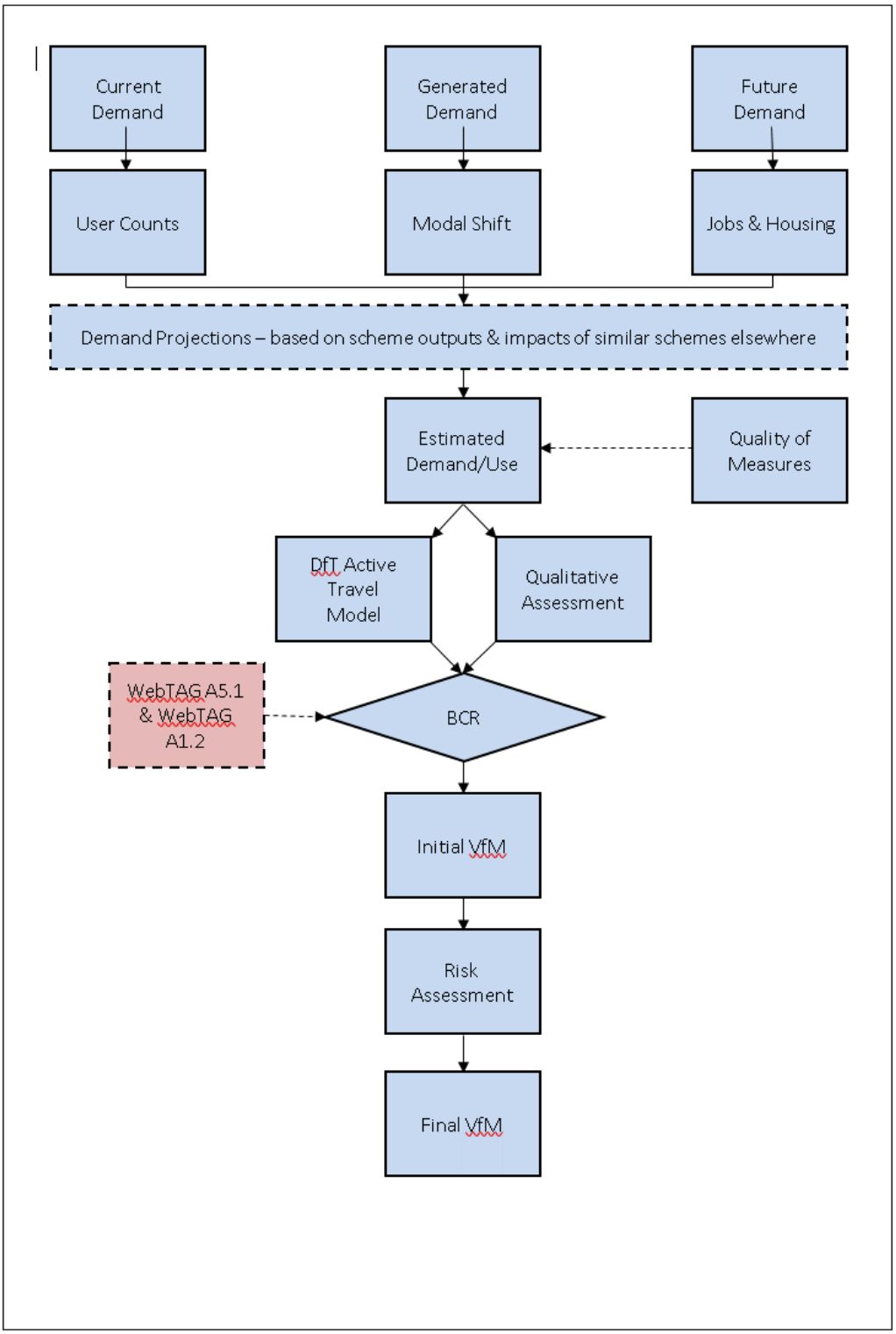


Table 4-4 Appraisal Flowchart

4.7 Projected Scheme Usage – Demand Projections

Appraisal Scenarios

4.7.1 The Preferred Option has been identified through a rigorous options appraisal process, taking into account the long-term maintainability of the scheme as well as its effectiveness against the core objectives. This is detailed in the Strategic Case.

4.7.2 In view of this, with only one option demonstrating overall cost-effectiveness, the appraisal has been undertaken against two options:

- Do Nothing, with the scheme not delivered; and
- Do Something, with delivery of the A26 Cycle Route.

Projected Scheme Usage – Demand Projections

4.7.3 The scheme will provide a direct high quality and consistent route between Tonbridge and Royal Tunbridge Wells. It will:

- Retain existing users - a manual (2012) cycle count on the A26 is used to provide a baseline demand level for the scheme appraisal, including the 'do nothing' scenario;
- Attract new users travelling between existing and proposed housing, employment and education locations - analysis of the resident population within 1km of the route has been used to provide a baseline. The cycle mode shift brought about and specific demand projections for the route have then been calculated based on case study evidence experienced in the UK;
- Attract additional shopping, leisure users and tourists - including those using the link to access the National Cycle Network. These additional users have not been factored in to the quantitative appraisal at this stage.

Cycle mode share Tonbridge to Royal Tunbridge Wells corridor

4.7.4 The cycle mode share along the A26 corridor between Tonbridge and Royal Tunbridge Wells can be estimated based on 2011 census data for the population living within 1km of the route.

Scenario	Corridor	Study Area potential total cycling demand/day	Area Average Cycle Mode Share
'Do Nothing'	A26 Tonbridge to Tunbridge Wells	767	1.66%
'Do Something'	A26 Tonbridge to Tunbridge Wells	1976	4.13%

Table 4-5 – Cycle Mode Share With and Without A26 Cycle Route

4.7.5 Using 2011 super output area (lower layer) population data it is identified that a total of around 46,000 residents live within 1km of the proposed A26 Cycle Route. Based on the mode share (excluding home workers) provided by the 2011 census, specifically for these residents, on average 767 (1.66%) can be expected to cycle each day.

4.7.6 The increase in Area Average Cycle Mode Share to 4.13% following the introduction of the A26 Cycle Route is then calculated based on case study evidence[2] which suggests that an additional mile of infrastructure per 1000 of the population will increase current cycle mode share by 0.546%.

4.7.7 The results, provided in the table above, identify the potential number of all cycle journeys by those living within the vicinity of the corridor following the introduction of the A26 Cycle Route scheme could rise to 1,976 journeys a day.

Forecast Demand With and Without A26 Cycle Route

4.7.8 Existing 2012 DfT Annual Average Daily Flow data (AADT) manual cycle counts on the A26 have been adjusted for population growth between 2012 and 2019 using Tempro 7.2 to investigate NTEM data. Forecast future year trips are based on the case study shift in cycle mode share (157%) as a result of the provision of 6.1km (3.8 miles) of new cycle infrastructure between Tonbridge and Royal Tunbridge Wells (i.e. the proposed A26 Cycle Route). This approach is in line with DfT guidance outlined in WebTAG A5.1 (Active Mode Appraisal – January 2014).

[2] Factors influencing the cycling level in cities – international comparison and literature overview, Kolin Institute of Technology, 2013

DfT AADT Manual Cycle Count A26	Cyclists (Northbound and Southbound AADT Counts)
2012 usage per day (manual cycle count)	126
Baseline usage per day 2019 (including NTEM growth from 2012-2019)	127
Forecast 'Do Something' usage per day 2019 (including NTEM growth 2017-2019 & the cycle mode shift identified)	327
Forecast 'Do Something' usage per day 2034 (including NTEM growth 2019-2034)	347
Forecast 'Do Something' usage per day 2039 (including NTEM growth 2019-2039)	352

Table 4-6 – Forecast Demand With and Without A26 Cycle Route

Demand predictions

4.7.9 Based on the demand forecast, the projected usage of the scheme by 2039 is 91,872 cyclists per annum (assuming 261 calendar year working days). This is made up of the 35,235 existing cyclists and 55,332 new cyclists, including 26,559 (48%[3]) of latter transferring from existing car journeys. The remaining 28,773 cyclists, are either those transferring from other modes or entirely new cycle journeys.

4.7.10 The estimate is considered to be conservative in comparison to the potential maximum cycle demand from all residents living in the vicinity of the A26 Cycle Route. It is in line with the government target in the propensity to cycle tool, slightly exceeds that in the DfT Cycle and Walk strategy, to double cycling by 2025 and is in line with many other case studies of cycle improvements.

Appraisal Period and Future Years

4.7.11 The economic appraisal period is assumed to be 20 years, which is based on the expected lifespan of the scheme and its measures. It is possible that the expected benefits of the scheme will continue beyond the appraisal horizon, however these additional benefits have not been quantified as part of this particular appraisal.

Scheme Costs

4.7.12 The initial estimate of the investment costs is in 2016 prices. Adjustments have then been made based on the following assumptions:

[3] 2011 Census, Office for National Statistics

- Opening Year is assumed to be 2019 with a construction period assumed to be 1.5 years. The construction costs spread is in line with COBA.;
- Maintenance costs are not included as these will be addressed by KCC, TWBC and TMBC using existing budgets;
- The base costs have been adjusted to incorporate real cost increases in construction costs (WebTAG A1.2);
- Risk is included, valued at 10%;
- An optimism bias is included (economic appraisal only), valued at 15%;
- For the purpose of appraisal and consistency, all costs have been converted to the current price base (i.e. 2010) using the governments GDP deflator tool (WebTAG A1.2);
- Costs have been discounted to 2010 present values by applying a discount rate of 3.5% per year (WebTAG A1.2);
- The final stage in preparing the costs for appraisal is to convert them from the factor cost to the market price unit of account using the indirect tax correction factor of 1.19 (WebTAG A1.2).

4.8 Economic Appraisal

4.8.1 The DfT Active Mode Appraisal Toolkit, has been used to assess the following scheme impacts – physical activity benefits for active mode users, through encouraged activity; decongestion benefits as a result of modal shift from cars; savings as a result of reduced accidents; improvements in greenhouse gas emissions; improvements in journey quality, reduced noise and the capital cost to public accounts of preparing and constructing the scheme.

4.8.2 The following assumptions have been applied in the DfT Active Mode Toolkit:

- No of trips without scheme – 127 per day
- No of trips with scheme - 352 per day
- The total cumulative route length is 6.1km;
- Average Speed on route - 13 km/hr
- New cyclists assumed to transfer from car - 48%;
- 261 calendar year working days; and

- A 20 year scheme lifespan.

4.8.3 The costs and benefits are calculated based on the following:

- Scheme cost (2016 prices) – KCC supplied;
- The base costs have been adjusted to incorporate real cost increases (WebTAG A1.2) in construction costs;
- Cost adjusted for quantified risk and optimism bias (2016 prices excl. VAT);
- Risk and optimism bias adjusted cost converted to 2010 prices;
- Discounted Risk and optimism bias adjusted cost in 2010 prices;
- Discounted Risk and optimism bias adjusted cost in 2010 market prices;
- User Benefits (PVB) for the initial BCR are based on vehicle user time savings; and
- PVB has been adjusted to register the cost of developer contributions to the private sector developer.

4.8.4 The results of the economic appraisal are summarised in the table and illustrated in the graph below.

Economic Benefit	Present Values in 2010 market prices and values (£)
Noise	3,422
Greenhouse Gases	10,725
Journey Quality	661,188
Physical Activity	2,005,194
Accidents	50,418
Decongestion	212,633
Wider Public Finances (Indirect Taxation Revenues)	-54,562
Present Value of Benefits (PVB)	2,739,997
Present Value of Costs (PVC)	931,401
OVERALL IMPACTS	
Net Present Value (NPV)	1,808,597
Benefit to Cost Ratio (BCR)	2.94:1

Table 4-7 - Analysis of Monetised Costs and Benefits

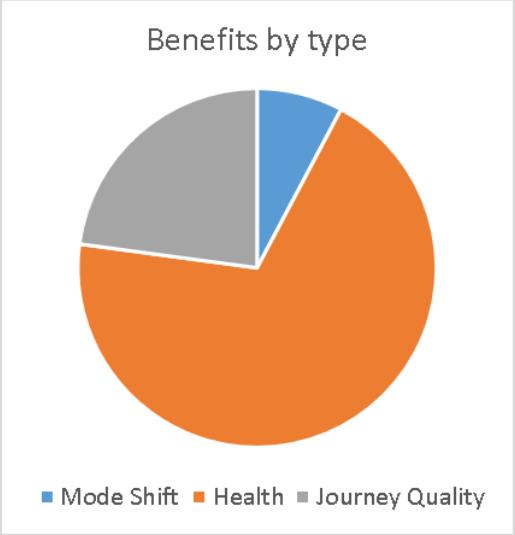


Table 4-8 – Benefits by Type

4.9 Sensitivity Testing

4.9.1 Sensitivity testing has been undertaken to understand how some of the parameters and assumptions used within the appraisal of the A26 cycle route influence the economic and commercial case of the proposal.

4.9.2 Sensitivity analysis will test the vulnerability of the option against unavoidable future uncertainties to test the robustness of A26 cycle route scheme.

4.9.3 Sensitivity tests have been undertaken by assuming uncertainty around the length of the appraisal period. By assuming the current benefits (PVB) variable is an over estimate, sensitivity testing has been conducted by reducing the appraisal horizon to 15 years to understand the full extent of the scheme benefits.

4.9.4 Sensitivity tests have been carried out to provide a broader understanding of the value for money presented by the A26 cycle route scheme. The BCR of 2.94 is based on active mode benefits generated from users of the scheme. The outcome of the BCR calculation and the sensitivity test, which address the assumptions made in the calculation of the active mode benefits, are summarised and compared in the table below:

Item	Present Values (£m)	
	Test 1	BCR
	15 year appraisal period	PVB based on active mode benefits across a 20 year appraisal period
Present Value Benefit (PVB)	£2.22	£2.73
Present Value Cost (PVC)	£0.93	£0.93
Net Present Value (NPV) = PVB – PVC	£1.3	£1.8
Benefit to Cost Ratio (BCR) = PVB / PVC	2.39	2.94

Table 4-9 – Sensitivity Test

4.10 Increased Demand Predictions – Case Examples

4.10.1 Experience from elsewhere in the UK and across Europe demonstrates that new and improved cycle infrastructure commonly gives rise to very significant increases in usage and medium to high value for money. The following case examples support the forecast demand and benefit cost ratio identified of the improved A26 Cycle Route.

Value for money of walking and cycling, Sustrans 2011

- A study for Bristol City Council and NHS Bristol reviewed a selection of cycling and walking infrastructure projects, such as crossings and paths, across the UK. The average benefit to cost ratio (BCR) across the examples considered was 19:1 (Davis, 2010).
- Green Alliance gives the example of improvements to a 6km section of the Union Canal towpath in Brent. Sustrans monitoring of increases in cycling and walking on this route shows a BCR of 3.4:1 (Cary et al., 2009). When including all forms of benefit in the appraisal, the BCR increases to up to 3.5:1(Department for Transport, 2010a).
- Recent calculations by Sustrans of the value for money of infrastructure schemes linking schools and communities shows an average BCR of almost 4:1 (Sustrans, 2010).

- Investment in the London Cycle Network showed a return of approximately 4:1, largely from health, congestion and air quality benefits (Department for Transport and Department of Health, 2010).

Cycling Demonstration Towns

4.10.2 Six English towns were chosen to be cycling demonstration towns to promote the use of cycling as a means of transport in 2005. Each year for three years the towns received £500,000 to spend on cycling (apart from Aylesbury which received £300,000). In 2009 this was further expanded to cover 12 towns and cities.

4.10.3 Results from the first three years of the Cycling Demonstration Towns programme show that it has been a major success. The original six towns achieved their aim of getting more people cycling, more safely, more often. For the first time in the UK outside London, the national trend of a gradual decline in cycling levels was reversed. A comprehensive evaluation of the investment in Aylesbury, Brighton & Hove, Darlington, Derby, Exeter and Lancaster with Morecambe has shown:

- An average increase in cycling across all six towns of 27%
- The increase is the result of more people starting to cycle, or returning to cycling again, not just the result of cyclists using their bikes for more trips
- Cycling to school has more than doubled where towns invested most in children
- Cycling investment generates town-wide increases in physical activity
- These results were not found in comparable towns
- This growth matches the cycling growth rates in London
- Investment in cycling pays back at least 3:1

4.10.4 The Cycling Demonstration Towns programme included area-wide initiatives (such as travel planning) as well as improvements to specific routes. This has been built into cycle strategies locally, with the key investment in the route being matched by complementary actions.

European/USA Experience

4.10.5 Sustained investment in cycling facilities has enabled many European cities to achieve significant increases in cycling. An overall analysis of schemes, Factors influencing the cycling level in cities undertaken by the Kolin Institute of Technology, 2013 established that increasing the length of dedicated cycle infrastructure gives rise to a mode shift towards cycling.

	The average effect of an additional mile per 1000 pop on the increase in shares (in %)			
	cycling	walking	public transport	Car
UK	0.546%	0.047%	0.019%	-0.024%
Germany	0.509%	0.011%	-0.018%	-0.061%
Italy	0.546%	0.048%	0.020%	-0.024%
Slovakia	0.503%	0.004%	-0.024%	-0.067%
Spain	0.542%	0.043%	0.015%	-0.029%
Swiss	0.524%	0.025%	-0.003%	-0.046%

Table 4-10 – Impacts of Infrastructure Improvements

4.10.6 Each country studied has different values for increased cycle mode share, with those with the most developed infrastructure tending to show higher values.

4.10.7 Specific examples in European cities bear this out:

City	Investment	Impact (% Increase Cycle Trips)	Time Period (years)
Hanover	Increased infrastructure	100%	11
Munster	Upgrade to existing infrastructure	50%	11
Munich	Increased infrastructure	225%	22
Seville	Increased infrastructure. Cycle hire	165%	5
Zurich	Opening of one-way streets to 2-way cycling	43%	20
Graz	Increased infrastructure	150%	20
Vienna	Increased infrastructure	300%	20

Table 4-11 - European Comparisons

People for Bikes Website

- In Seville, an 80-mile network of protected bike lanes boosted biking from 0.6 percent to 7 percent of trips in six years;

- The average protected bike lane sees bike counts increase 75 percent in its first year alone;
- Streets with protected bike lanes saw 90 percent fewer injuries per mile than those with no bike infrastructure.

4.10.8 Although many of the above examples are in much larger cities than the towns of Royal Tunbridge Wells and Tonbridge, the significant impact of increasing the infrastructure provision is illustrated, with less substantial improvements (i.e. not linked to a wider cycle network) having more modest impacts. Note that the European increases in cycling are overall increases rather than increased use of the improved infrastructure alone.

4.11 Value for Money Statement

Initial VfM Category

4.11.2 The VFM Category (taking account of only the quantified benefits) with a BCR of 2.94:1 is 'high'.

Additional Benefits

4.11.3 There are a number of additional benefits which have not been quantified but which contribute significantly to the value for money of the scheme:

- Journey time improvement benefits achieved through a transfer of trips from car to cycle;
- Housing and employment development benefits in terms of encouraging people to move to area, making use of the cycle route to travel to employment opportunities or (via the rail network) further afield, including London;
- Regeneration and social inclusion benefits gained by providing improved access to employment, education, training and other facilities served by the route;
- Air quality benefits gained through the transfer of trips from car to walk/cycle and encouraging new journeys to be made by cycle;
- Environmental benefits in terms of active management of the route, including wildlife diversity;
- Tourism benefits in terms of making the area a more attractive destination and through links to the NCN;

- Safety benefits gained through junction improvements and the transfer of cycle trips from on-road to off-road shared paths;
- Security benefits gained through the increased usage of the route; and
- A wide range of walking benefits, many similar in form and scale to those provided for cyclists or the wider community as a result of increased opportunities for active travel.

Present Value of Benefits (Initial VfM Category)

4.11.4 Taking into account the additional benefits above, the Value for Money category of the scheme is considered to remain 'high'.

Risk Adjustment and Final VfM Category

4.11.5 The risks inherent in this project are low. In view of this, the Final VfM Category remains 'high'.

Summary of Benefits and Costs

4.11.6 The immediate benefit from the scheme will be the provision of an attractive, direct route which will facilitate a large increase in cycle and walk trips between residential areas around Royal Tunbridge Wells and Tonbridge employment and education facilities.

4.11.7 In combination with the development of the wider cycle network and complementary measures identified, the scheme will help 'lock in' the benefits of transport investment and will facilitate the sustainable growth of housing and employment set out in the SEP and the Local Plans of Tunbridge Wells and Tonbridge and Malling Councils.

4.11.8 This in turn will encourage inward investment and enable commercial and employment growth in the area.

4.11.9 The primary financial benefits which have been used to calculate the value of the scheme are:

- Physical activity benefits for active mode users, through encouraged activity;
- Decongestion benefits as a result of modal shift from cars;
- Savings as a result of reduced accidents;
- Improvements in greenhouse gas emissions;
- Improvements in journey quality;

- Benefits of reduced noise.

4.11.10 In addition, there are a number of additional benefits which have not been monetised, the most important of which are:

- Economy – Regeneration
  The scheme will support the sustainable development of employment, retail and housing, including on brownfield and contaminated lands in the area.
- Environmental – Landscape/Townscape
  The route corridor will be enhanced and its enjoyment will be improved through the better access.
- Social – Inclusion
  The availability of a safe, direct and attractive route for cyclists (and walkers) will provide significantly improved access for people of low income, the young, elderly and disabled people.
- Social – Road Safety
  The improved route will enable safe, attractive links to residential, employment, education and the town centres.
- Social – Security of users
  The route will be designed with personal security in mind and the increased usage will enhance this further.

4.11.11 The main costs of the scheme are:

- Scheme design and construction costs totalling £1.205,464

Key Risks, Sensitivities and Uncertainties

4.11.12 The following key risks have been identified and mitigation approaches defined to address these (see section 7):

- Cycleway Surfacing Design - Currently designed with red asphalt or Red HFS. Dialogue continuing between KCC and Borough Councils to finalise surfacing and lining arrangements best suited to ongoing maintenance;
- Drainage Design within block paved ramp sections require revising to detail existing gullies to be maintained instead of being infilled due to future maintenance requirements;
- TRO, Traffic Regulations Order - 20 mph between Yew Tree Road & Holden Road;

- TRO, Traffic Regulations Order- Removal of parking bays between Holdon Road & Victoria Road, Tonbridge Wells;
- TRO, Traffic Regulations Order - Relocation of Bus Stops St John's Road opposite junction of Woodbury Road, & between Pennington Road & Victoria Road Tonbridge Wells;
- Diversion of Virgin utilities located in the existing footway at St John's Road opposite junction of Woodbury Park, Tonbridge Wells; and
- Diversion of BT & Zayo utilities located in the existing footway at St John's Road opposite junction of Woodbury Park, Tonbridge Wells;

4.12 Performance management

4.12.1 The Causal Chain sets out the primary measures which will be used to judge the success of the scheme. These will be monitored, evaluated and managed as follows:

Measures	Monitoring	Performance Management	Comments
Delivery on time	Through contract management	Through contract management	
Delivery on budget	Through contract management	Through contract management	
Delivery of safe, attractive, direct route	User satisfaction surveys	Through existing KCC rights of way management	
Car-competitive journey times	User satisfaction surveys	Through existing KCC rights of way management	
Usage	Counters on route	Through existing KCC rights of way management and complementary Smarter Choices	Key element of demonstrating secondary benefits – e.g. health & congestion reduction

Measures	Monitoring	Performance Management	Comments
Mode share	Not measured directly – part of general traffic monitoring	Through existing traffic management	
Health benefits	Not measured directly – derived from usage	Through existing KCC rights of way management and complementary Smarter Choices	Links with NHS monitoring could enhance this
Decongestion, air quality, noise, CO_2 emissions	Not measured directly – derived from usage	Through existing traffic management	
Growth (housing, jobs)	Not measured directly – derived from usage	Local Plan management	
Wider economic benefits	Not measured directly – part of wider LGF package	SELEP SEP management	

Table 4-12 - Measures of Scheme Success

5 Financial Case

5.1 Sources of Funding

5.1.1 The total cost of the scheme is £1,205,464. The sum requested from the Local Growth Fund is £1,039,464, with other contributions (from section 106 developer contributions) being £166,000. The details are provided below:

FUNDING SOURCE	17/18		TOTAL	18/19				TOTAL	GRAND TOTAL
	Q3	Q4		Q1	Q2	Q3	Q4		
Local Growth Fund (SELEP)	£77,500	£82,800	£160,300	£165,482	£345,403	£217,135	£151,144	£879,164	£1,039,464
Local Contribution (sec 106)	£0	£33,200	£33,200	£33,200	£33,200	£33,200	£33,200	£132,800	£166,000
Total	£77,500	£116,000	£193,500	£198,682	£378,603	£250,335	£184,344	£1,011,964	£1,205,464

Table 5-1 - Sources of Finance

5.2 Developer Contributions

5.2.1 Developer contributions are made up of the following section 106 funds:

- Telephone Exchange, £86K – already received and with KCC;
- Dairy Crest, £20K – already received and with TWBC;
- Premier Inn, £30K - agreed and due to be received shortly by TWBC;
- Arriva Depot, £30K – expected, but not yet agreed.

5.2.2 The Telephone Exchange development will contribute specifically to the two bus by-passes proposed. The Dairy Crest contribution will be used toward the provision of the cycle route within the vicinity of the development and to encourage sustainable transport modes. The Premier Inn contribution and that relating to the Arriva Depot will support the route between the town centre and the junction with Yew Tree Road.

5.3 Cost Breakdown

5.3.1 The breakdown of the overall costs for the scheme, including inflation and risk, are as follows:

Item	17/18 costs						17/18	18/19 costs													18/19	Grand
	Oct	Nov	Dec	Jan	Feb	Mar	Total	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar		Total	Total
Contract works																						
Main Contract-	£ -	£ -	£ -	£ -	£ -	£ 75,000	£ 75,000	£ 75,000	£ 75,000	£ -	£ 75,000	£103,005	£ 35,000	£ 35,000	£105,501	£69,834	£50,000	£ 50,000	£52,344		£ 725,684	£ 800,684
Utilities																						
BT	£ -	£ -	£ -	£ -	£ -	£ -	£ -	£ -	£ -	£ -	£ -	£ 30,000	£ 32,989	£ -	£ -	£ -	£ -	£ -	£ -		£ 62,989	£ 62,989
Virgin Media	£ -	£ -	£ -	£ -	£ -	£ 10,000	£ 10,000	£ 12,682	£ -	£ -	£ -	£ -	£ -	£ -	£ -	£ -	£ -	£ -	£ -		£ 12,682	£ 22,682
Fibernet	£ -	£ -	£ -	£ -	£ -	£ -	£ -	£ -	£ -	£ -	£ -	£ 25,000	£ 25,608	£ -	£ -	£ -	£ -	£ -	£ -		£ 50,608	£ 50,608
Ariva / Relocation of Bus Stop	£ -	£ -	£ -	£ -	£ -	£ 5,000	£ 5,000	£ -	£ -	£ -	£ -	£ -	£ 5,000	£ -	£ -	£ -	£ -	£ -	£ -		£ 5,000	£ 10,000
Miscellaneous/Other																						
Lane Rental	£ -	£ -	£ -	£ -	£ -	£ 16,000	£ 16,000	£ 16,000	£ 8,000	£ -	£ -	£ 16,000	£ 16,000	£ 8,000	£ 4,000	£ 8,000	£ 8,000	£ 8,000	£ 4,000		£ 96,000	£ 112,000
Fees																						
Design Fees-Amey	£ -	£ -	£ 68,500	£ -	£ -	£ -	£ 68,500	£ -	£ -	£ -	£ -	£ -	£ -	£ -	£ -	£ -	£ -	£ -	£ -		£ -	£ 68,500
KCC staff	£ -	£ -	£ 4,000	£ 3,000	£ 3,000	£ 4,000	£ 14,000	£ 4,000	£ 4,000	£ 4,000	£ 4,000	£ 2,000	£ 4,000	£ 4,000	£ 8,000	£ 8,000	£ 4,000	£ 4,000	£ 4,000		£ 54,000	£ 68,000
Land																						
Planning permission	£ -	£ 5,000	£ -	£ -	£ -	£ -	£ 5,000	£ -	£ -	£ -	£ -	£ -	£ 5,000	£ -	£ -	£ -	£ -	£ -	£ -		£ 5,000	£ 10,000
Total	**£ -**	**£ 5,000**	**£ 72,500**	**£ 3,000**	**£ 3,000**	**£110,000**	**£193,500**	**£107,682**	**£ 87,000**	**£ 4,000**	**£ 79,000**	**£176,005**	**£123,597**	**£ 47,000**	**£117,501**	**£85,834**	**£62,000**	**£ 62,000**	**£60,344**		**£1,011,964**	**£1,205,464**

Table 5-2 - Breakdown of Costs

5.3.2 Table 5 2 shows that the base cost estimate is £1,205,464. The cost estimate was provided by the KCC Project Delivery Team and is considered by KCC to be robust.

5.3.3 The basis of the inflation calculation is the BCIS (Building Cost Information Service), Civil Engineering Cost Index. The BCIS takes account of the actual level of pricing in the construction market and also anticipates trends. The total allowance for inflation is estimated to be £79,381.

5.3.4 The scheme is dependent on SELEP LGF funding and funding from Section 106 Contributions. Should scheme costs escalate, delivery will be hindered. To address this a Quantified Risk Assessment (QRA) has been undertaken by the Project Delivery Team. A total of £109,588 has been identified as the anticipated QRA.

5.3.5 Optimism bias refers to the tendency for scheme promoters to be overly optimistic about scheme costs. DfT WebTAG unit A1.2 sets out the recommended contingency which should be added to the scheme costs. However, in line with HM Treasury guidance document "Early financial cost estimates of infrastructure programmes and projects and the treatment of uncertainty and risk- March 2015" optimism bias has been excluded from project funding. The risk-adjusted scheme cost estimate is considered robust but will be reviewed as the scheme proceeds.

5.3.6 The cost components that make up the proposed scheme, including inflation and risk allowance, are outlined in Table 5-3 below.

Cost Component	Cost (£)
Scheme Cost	£1,016,496
Inflation	£79,381
Risk Allowance	£109,588
Total	**£1,205,464**

Table 5-3 - Cost Components

5.4 Overall Affordability

5.4.1 The scheme design is at an advanced stage and all costs are reasonably well defined. In view of this the existing committed LGF and Section 106 funds are considered adequate for delivery of the scheme.

6 Commercial Case

6.1 Commercial Issues

6.1.1 The commercial case provides evidence on the commercial viability of the scheme and the procurement strategy that will be used. It sets out the financial implication of the proposed procurement strategy and presents evidence on risk allocation and transfer, contract timetables and implementation timescale as well as details of the capability and skills of the team delivering the project.

6.1.2 The outcomes which the procurement strategy must deliver are to:

- Achieve cost certainty, or certainty that the scheme can be delivered within the available funding constraints;
- Minimise further preparation costs with respect to scheme design by ensuring best value, and appropriate quality;
- Obtain contractor experience and input to the construction programme to ensure the implementation programme is robust and achievable; and
- Obtain contractor input to risk management and appraisals, including mitigation measures, to capitalise at an early stage on opportunities to reduce construction risk and improve out-turn certainty thereby reducing risks to a level that is As Low As Reasonably Practicable.

6.2 Scheme Procurement Strategy

Procurement Options

6.2.2 KCC have identified two procurement options for the delivery of their LEP funded schemes. The alternative options are:

<u>Full OJEU tender</u>

6.2.3 This option is required for schemes with an estimated value of over £4m.

6.2.4 KCC will then need to opt for an 'open' tender, where anyone may submit a tender, or a 'restricted' tender, where a Pre-Qualification is used to whittle down the open market to a pre-determined number of tenderers. This process takes approximately one month and the first part is a 47 day minimum period for KCC to publish a contract notice on the OJEU website.

6.2.5 The minimum tender period is 6 weeks but could be longer for larger schemes. Once the tenders are received they must be assessed and a preferred supplier identified. There is a mandatory 10 day 'standstill' period, during which unsuccessful tenderers may challenge the intention to award to the preferred contractor.

Delivery through existing Amey Highways Term Maintenance Contract (HTMC)

6.2.6 This option is strictly not procurement as the HTMC is an existing contract. The HTMC is based on a Schedule of Rates agreed at the inception of the contract. The price for each individual scheme is determined by identifying the quantities of each required item into a Bill of Quantities. Amey may price 'star' items if no rate already exists for the required item.

6.2.7 If the scope of a specific scheme is different from the item coverage within the HTMC contract a new rate can be negotiated. The HTMC contains an upper limit in terms of scheme value which is £100,000; however, this can potentially be increased with agreement from KCC procurement.

Preferred Procurement Option

6.2.8 The preferred procurement route for the A26 Cycle Route is through the existing Amey Highways Term Maintenance Contract (HTMC).

6.2.9 This option has been selected as the value of the scheme is significantly less than the OJEU scheme value threshold.

6.3 Potential for Risk Transfer

6.3.1 Although many of the design risks can only be resolved through rigorous design and review processes, once the design options are clear and the scope of planning requirements, environmental requirements are fully identified; the primary risks will be related to Traffic Regulation Orders and construction. There is potential for transferring the latter through the construction procurement process. This will be explored fully as the design and procurement process progresses.

6.3.2 Further details of the risk management process are provided in section 7, below.

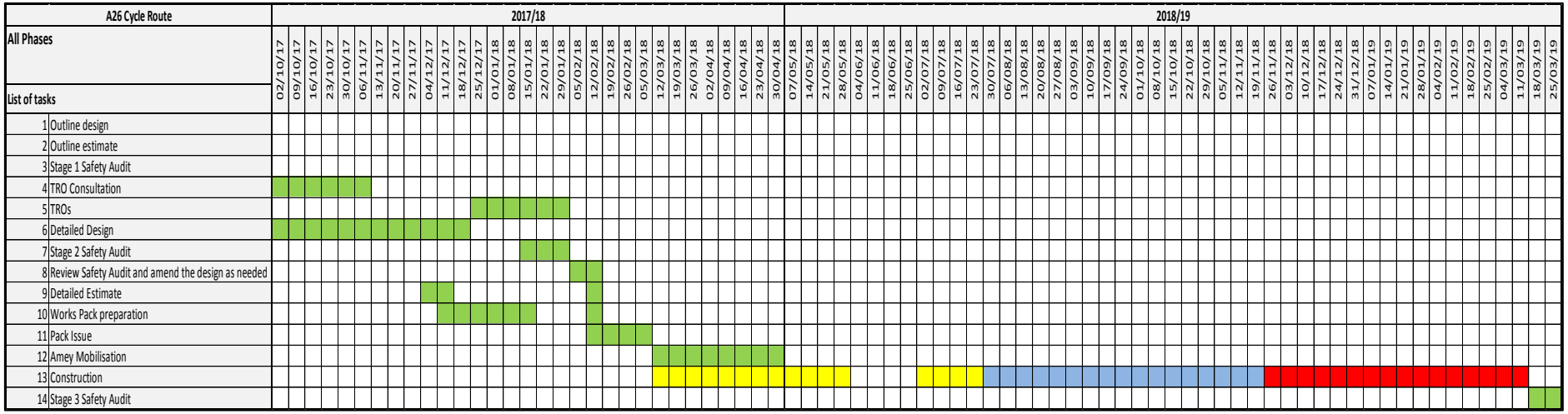
7 Management Case

7.1 Project Plan

7.1.1 The project timetable is still at an early stage and will be refined as the design and procurement processes become clearer. Assuming that funding for the core scheme is provided in 2017/18 and 2018/19, the following chart indicates the schedule.

7.1.2 In summary, this involves:

- Preliminaries – In quarters 2 and 3 of 2017/18, finalising design and cost details, developing and issuing works packs, undertaking the stage 2 safety audit, and establishing the necessary TRO's for the route as a whole. This will be completed by early March 2018. Work to mobilise the contractor (Amey) for all construction phases will also commence in March 2018 and be completed by the end of April 2018.
- Construction Phase 1, Grosvenor Road, Tunbridge Wells to Speldhurst Road, Southborough – Construction will commence, starting from the Tunbridge Wells end of the route, during March 2018. All works between Grosvenor Road and Speldhurst Road will be completed by the end of July 2018.
- Construction Phase 2, Speldhurst Road, Southborough to Bidborough Ridge, Bidborough – All works along the route within Southborough ad Bidborough and on the A26 between the two will be undertaken between August 2018 and mid-November 2018.
- Construction Phase 3, Bidborough Ridge, Bidborough to Brook Street, Tonbridge – The final phase of construction between Bidborough and Tonbridge will commence in mid-November 2018. This will complete all construction works on the route by the end of March 2019 and the route will be available in full and launched to the public in April 2019.



KEY	
	Preliminaries - All Phases
	Construction Phase 1 - Grovesnor to Speldhurst
	Construction Phase 2 - Speldhurst to Bidborough
	Construction Phase 3 - Bidborough to Brook

Table 7-1 - Indicative Project Schedule

7.2 Project management Arrangements

7.2.1 The scheme will be managed in house by PRINCE2 trained and experienced Kent County Council staff using a well-established governance structure that has successfully delivered many large projects across Kent.

7.3 Roles and Responsibilities

7.3.1 The KCC project management and Amey construction teams who will be responsible for delivery of the scheme, together with their roles and responsibilities are detailed in the diagram below:

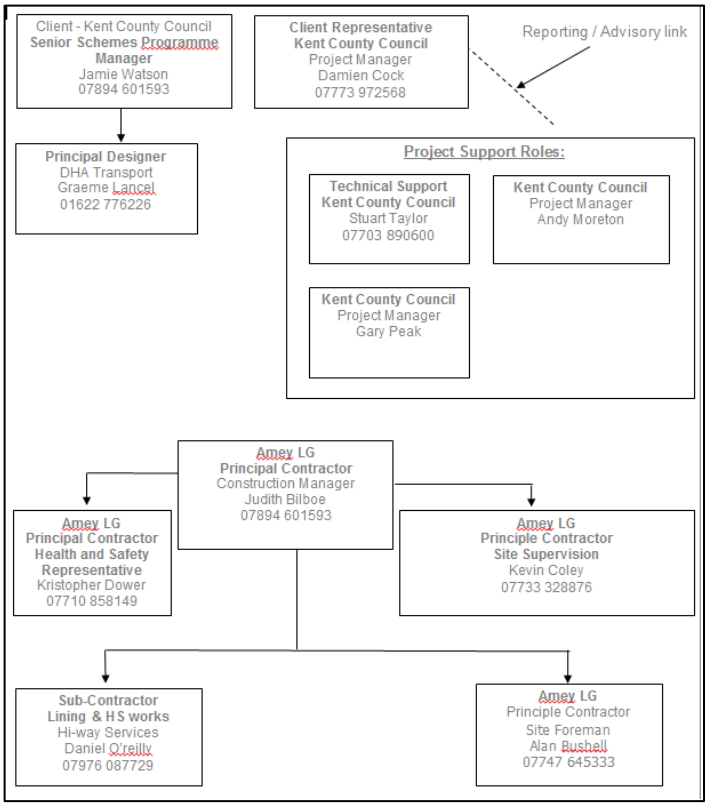


Table 7-2 - Management Roles and Responsibilities

7.4 Project Governance

7.4.1 KCC have set up a clear and robust structure to provide accountability and an effectual decision making process for the management of LEP funded schemes. Each scheme will have a designated project manager who will be an appropriately trained and experienced member of KCC staff.

7.4.2 A detailed breakdown of the meetings (along with the attendees, scope and output of each) which make up the established governance process is set out below.

Project Steering Group (PSG) Meetings

7.4.3 PSG meetings are held fortnightly to discuss individual progress on each scheme and are chaired by KCC Project Managers (PMs). Attendees include representatives from each stage of the LEP scheme (i.e. KCC Bid Team, KCC sponsor, KCC PMs, Amey design team and construction manager). Progress is discussed in technical detail raising any issues or concerns for all to action. A progress report, minutes of meeting and an update on programme dates are provided ahead of the Programme Board (PB) meeting for collation and production of the Highlight Report.

Highlight Report

7.4.4 The Progress Reports sent by the KCC PMs comprise of the following updates; general progress, project finances, issues, risks and governance meeting dates. The Highlight Report identifies any areas of concern or where decisions are required by the PB meeting or higher to the KCC LEP Programme Manager. An agreed version of the Highlight Report is issued to the PB meeting attendees during the meeting.

Programme Board (PB) Meeting

7.4.5 The PB meeting is held monthly and is chaired by Lee Burchill (KCC LGF Programme Manager). Attendees include representatives from all three stages of the schemes (i.e. KCC LEP Management, KCC LEP Bidding, KCC Sponsors, KCC PMs, Amey Account Manager, Amey Technical Advisors, Amey Construction representatives). This meeting discusses project progress to date, drilling into detail if there is an issue or action (as identified in the PSG meeting), financial progress, next steps and actions. Outputs of this meeting are the Highlight Report and the minutes of meeting.

Escalation Report

7.4.6 A list of actions and decisions that the PB meeting was unable to resolve is prepared ready for the Sponsoring Group (SG) meeting to discuss and ultimately resolve.

Sponsoring Group (SG) Meeting

7.4.7 The SG is held monthly and will be chaired by Tim Read (KCC Head of Transportation). Attendees are Matthew Balfour (Cabinet Member Environment, Transport and Waste) Barbara Cooper (Corporate Director Growth, Environment and Transport), Roger Wilkin (Director of Highways, Transportation and Waste), Katie Stewart (Director of Environment, Planning and Enforcement), Cath Head (Head of Financial Management), and Mary Gillett (KCC Major Projects Planning Manager).

Table 7-3 – KCC Project Governance Structure

KCC LGF Meeting Governance Diagram

Bid / Design / Construction	High level Agenda	Frequency	Attendees	Format	Scope	Agenda Items	Key Deliverables/Feedback	Templates
Sponsoring Group	Bid Design Construction	Monthly - Can be called in emergency if required	**Chair: TR** MB/BC/RW/KS/CH/MG Supported by PB attendees as required	Face to face meeting, rotating venue	To discuss programme (i.e. high level progress/preview next steps and discuss and resolve issues.	LEP programme (high level) progress to date Programme Financial reporting Next steps Issues/Risk/Change Actions	Minutes of Meeting Action/Decision Log Output distributed by LB	**Agenda** **Minutes** **Decision list**
Sponsoring Group Progress Report	Decisions Needed	Monthly	LB	Report	To record outstanding actions/issues that require a decision made by the board		Action list ready for the Steering Group	**Action List**
Programme Board Meeting	Bid Design Construction	Bi- Monthly	**Chair: LB** MG/KCC Promoters/KCC PMs/ AQ or RC/Amey TE's SW&MA	Face to face meeting, rotating venue	To discuss progress/preview next steps and discuss and resolve issues	LEP programme progress to date Project financial reporting Next steps Issues/Risk/Change Actions	Minutes of Meeting Action List Output distributed to all attendees	**Agenda** **Minutes**
Highlight Report	Identify key points for Programme Meeting	Monthly	LB/AA	Face to face meeting/report	AA to collate and streamline all reports highlighting areas of interest for the programme meeting. To be fed back to LB by report/meeting		Highlight report for LB to use for Programme Meeting. Highlight report shared with PB attendees.	**Highlight Report**
Steering Group Meeting	Progress Update	Monthly/Fortnightly as required	**Chair: KCC PMs** All input staff - KCC Bidding/KCC Promoters/KCC PMs/Amey Design/TMC	Face to face meeting	Individual meetings per project (including each stage of the LEP process to discuss progress in detail).	LEP project progress to date/MS Programme Project financial reporting Issues/Risk/Change Actions	MS Programme Update Progress update in template for each project	**Progress Report**

List of Initials:

MB	Matthew Balfour
BC	Barbara Cooper
RW	Roger Wilkin
KS	Katie Stewart
CH	Cath Head
TR	Tim Read
MG	Mary Gillett
LB	Lee Burchill
AQ	Andrew Quilter
RC	Richard Cowling
SW	Steve Whittaker
MA	Martin Addison
AA	Alice Alexander

7.4.8 This meeting discusses high-level programme progress to date, financial progress, next steps and closes out any actions from the escalation report. Output is sent to Lee Burchill for distribution. Technical advisors are invited if necessary to expand upon an issue. All actions from the start of this meeting cycle are to be closed out by the SG when they meet (i.e. no actions roll over to subsequent meetings).

7.5 Evidence of Previously Successful Scheme Management Strategy

7.5.1 KCC have a successful track record of delivering major transport schemes within the county. Two recent examples are the East Kent Access Phase 2 (EKA2) and Sittingbourne Northern Relief Road schemes (SNRR).

7.5.2 The EKA2 scheme, completed in May 2012, was designed to support economic development, job creation and social regeneration, improving access with high quality connections between the urban centres, transport hubs and development sites in East Kent. The overall objectives of the scheme were to unlock the development potential of the area, attract inward investment and maximise job opportunities for local people. The extent of the scheme is shown in Table 7-4 overleaf.

7.5.3 The scheme was successfully delivered within budget and ahead of programme through the adoption of a robust management approach similar to that set out above to deliver the Tonbridge Town Centre Regeneration scheme. The total value of the scheme was £87.0m of which £81.25m was funded by Central Government.

7.5.4 The intended scheme outcomes are currently being monitored but the intended benefits of the scheme are anticipated to be realised.

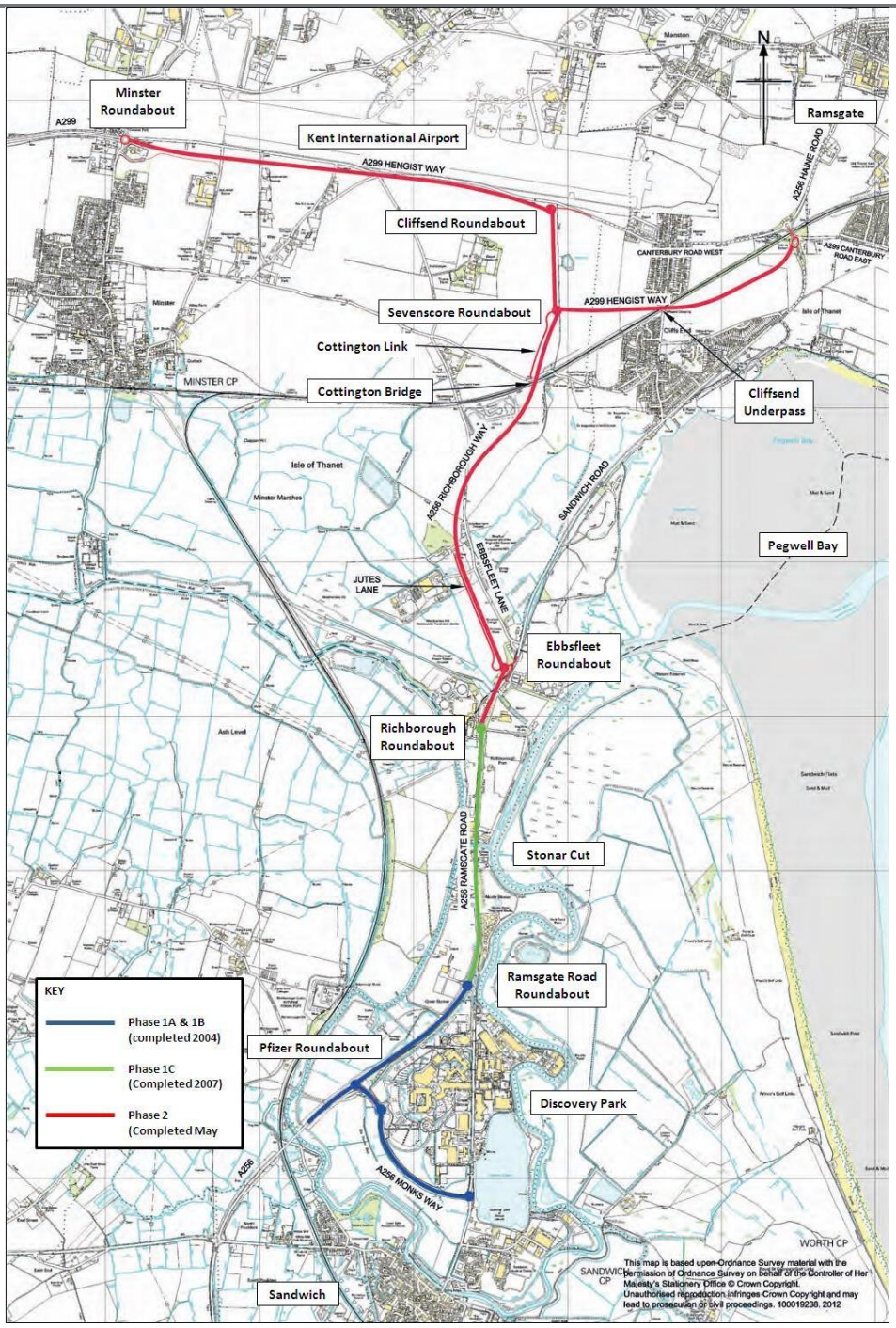


Table 7-4 – EKA2 Scheme Layout

7.5.5 The SNRR scheme, completed in December 2011, was designed to remove the severance caused by Milton Creek and give direct access to the A249 trunk road for existing and new development areas, thereby relieving Sittingbourne town centre.

7.5.6 The delivered scheme is shown in Table 7-5 below:

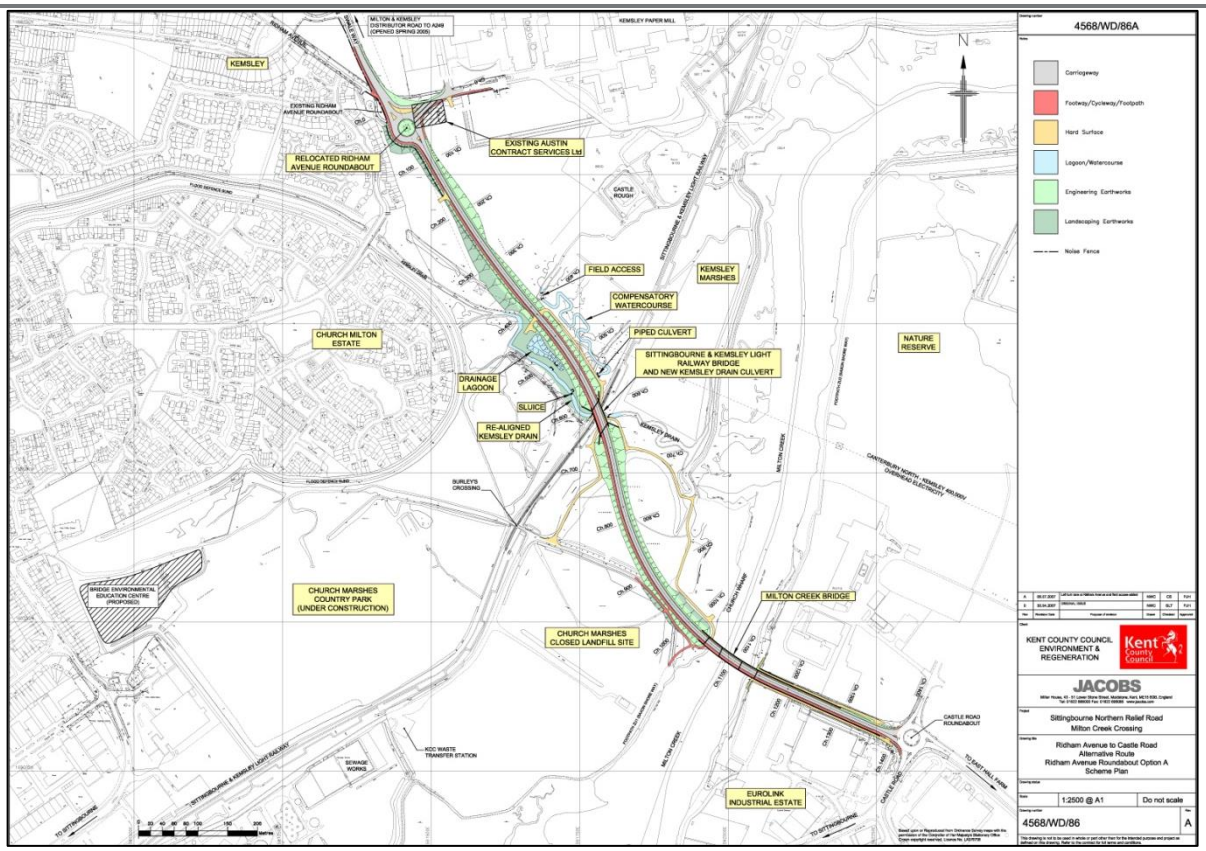


Table 7-5 – SNRR Scheme Layout

7.5.7 The project is an excellent example of multi agencies working towards a common aim. The scheme was funded by the Homes & Communities Agency in its Kent Thameside regeneration role, by the Department of Transport in its support of local major schemes and by private sector S106 contributions. The scheme was delivered under budget and to programme.

7.5.8 Both the EKA2 and SNRR schemes have since been awarded regional Institute of Civil Engineers (ICE) Excellence Awards.

7.6 Project Risk Management

Risk Management Strategy

7.6.2 Project risk is managed as an on-going process as part of the scheme governance structure, as set out in section 7.4 of this report. A scheme risk register is maintained and updated at each of the two-weekly Project Steering Group meetings. Responsibility for the risk register being maintained is held by the KCC PM and is reported as part of the monthly Progress Reports.

7.6.3 Any high residual impact risks are then identified on the highlight report for discussion at the Programme Board (PB) meeting. Required mitigation measures are discussed and agreed at the PB meeting and actioned by the KCC PM as appropriate.

7.6.4 An example scheme risk register is shown in below:

Table 7-6 – Project Delivery Programme

7.7 Project Assurance

7.7.1 Project assurance is provided by the section 151 letter provided by KCC.

7.8 Benefit Realisation Plan and Monitoring

7.8.1 Tracking of the scheme benefits will be a key element in understanding the success of a specific intervention. The realisation of benefits is intrinsically linked to the Monitoring and Evaluation plan.

7.8.2 Table 7.1 details how the scheme benefits are derived either directly through the scheme itself or collectively with other schemes.

7.8.3 The scheme objectives have been used to develop the desired outputs and outcomes for the scheme. The desired outputs are the actual benefits that are expected to be derived from the scheme and are directly linked to the original set of objectives. The definition of outputs and outcomes are:

- **Outputs** – tangible effects that are funded and produced directly as a result of the scheme; and
- **Outcomes** – final impacts brought about by the scheme in the short and medium/long term.

Measures	Monitoring	Benefits Realisation	Comments
Delivery on time	Through contract management	Through contract management	
Delivery on budget	Through contract management	Through contract management	

Measures	Monitoring	Benefits Realisation	Comments
Delivery of a safe, attractive, direct route	User satisfaction surveys	Includes key aspects of existing highway infrastructure and linked schemes	Delivery will be enhanced through use of existing partnership working
Car-competitive journey times	User satisfaction surveys	Includes key aspects of existing highway infrastructure and linked schemes	Delivery will be enhanced through use of existing partnership working
Usage	Counters on route (DfT, Annual Average Daily Flow data)	Requires complementary schemes; publicity and travel planning including DfT Access Fund initiatives	Key element of demonstrating secondary benefits – e.g. health & congestion reduction
Mode share	Not measured directly – part of general traffic monitoring & census	Realisation involves other schemes, local cycle strategies, public realm & station improvements	Delivery will be enhanced through use of existing partnership working
Health benefits	Not measured directly – derived from usage	Requires complementary schemes; publicity and travel planning including Access Fund initiatives	Links with NHS monitoring may enhance this
Decongestion, air quality, noise, CO_2 emissions	Not measured directly – derived from usage	Realisation involves other schemes	

Measures	Monitoring	Benefits Realisation	Comments
Growth (housing, jobs)	Not measured directly – derived from usage	Realisation involves other schemes, including non-transport (e.g. development)	Part of SELEP SEP Performance Management and Local Plan management
Wider economic benefits	Not measured directly – part of wider LGF package	Realisation involves other schemes, including non-transport (e.g. development)	Part of SELEP SEP Performance Management

Table 7-7 – Scheme Monitoring

7.8.4 KCC will conduct a full evaluation of the impact of the scheme in the period after it is completed. The Council will prepare evaluation reports one year and five years after scheme opening, using the information to be collected as set out above to gauge the impact of the scheme on the traffic network, and assess the success of the scheme in meeting the objectives of Local Development Plans and supporting transport/cycle strategies. Unexpected effects of the scheme will be reported upon and, where appropriate, remedial measures identified.

7.9 Key Project Risks and Risk Management Strategy

7.9.1 Although this business case has been developed on the basis of the most relevant and accurate information available, there may be some minor changes to the design as the scheme progresses towards delivery. This introduces a number of risks which will require active management as the design and delivery progresses.

7.9.2 The current potential risks identified and the mitigation measures proposed are outlined in the table below:

Technical and Environmental Services Contract (TESC)

Task Order Risk Register

(Clause 15)

Task Order Name: A26 Cycleway, Tonbridge Wells to Tonbridge & Malling | **Issue Date :** 22/07/17 | **Revision No. :** 0

WAMS Job No: TBA | **Amey SAP No. :** 18/19 External - TW-348

Type of commission: Option C - Target Cost | Score colours graduate from green (low) to red (high) | Ref: TESC/Form 2 (Version 1 - 07/3/2014)

No.	Risk Description	Effect / Consequence	Date Risk Entered	EW? (Y/N)	EW No.	Likely cost (£)	Initial Severity	Initial Likelihood	Initial Risk Score	Mitigation Measures	Residual Severity	Residual Likelihood	Residual Risk Score	Residual Risk	Risk Owner	Closed (Y/N)	Residual Allowance in Cost (£)
							1 - Low to 5 - High	1 - Low to 5 - High	1 - Low to 25 - High		1 - Low to 5 - High	1 - Low to 5 - High	1 - Low to 25 - High				£14,700
1	Cycleway Surfacing Design - Currently designed with red asphalt or Red HFS. Kent proposing to use black only due to Maintenance costs	Delay to works programme / additional costs	25/05/2017	N		£10,000	3	2	6	Further discussions with Tonbridge Wells, Tonbridge & Malling, TWBUG & KCC staff.	3	3	9	Delay to works programme / additional costs	Employer	N	£3,600
2	Drainage Design within block paved ramp sections require revising to detail exsiting gullies to be maintained instead of being infilled due to future maintenance requirements	Delay to works programme / additional costs	25/05/2017	N		£15,000	3	3	9	Undertake site scoping to establish if drainage survey is required and amend design.	2	4	8	Delay to works programme / additional costs	Employer	N	£4,800
3	TRO, Traffic Regulations Order 20 mph between Yew Tree Road & Holden Road	Delay to works programme / additional costs / Further design required and revised TRO.	25/05/2017	N		£10,000	3	3	9	Further discussions with Tonbridge Wells, Tonbridge & Malling.	3	3	9	Delay to works programme / additional costs	Employer	N	£3,600
4	TRO, Traffic Regulations Order, Removal of parking bays inbetwwen Holdon Road & Victoria Road, Tonbridge Wells.	Delay to works programme / additional costs / Further design required and revised TRO.	25/05/2017	N		£2,500	1	1	1	Further discussions with Tonbridge Wells Borough Council & local residents / Businesses.	1	1	1	Delay to works programme / additional costs	Employer	N	£100
5	TRO, Traffic Regulations Order, Relocation of Bus Stops St John's Road opposite jct of Woodbury Road, & inbetween Pennington Road & Victoria Road Tonbridge Wells.	Delay to works programme / additional costs / Further design required and revised TRO.	25/05/2017	N		£5,000	3	3	9	Further discussions with Tonbridge Wells Borough Council & Arriva UK Bus company.	3	3	9	Delay to works programme / additional costs	Employer	N	£1,800
6	Diversion of Virgin utilities located in the existing footway at St John's Road opposite jct of Woodbury Park, Tonbridge Wells.	Delay to works programme / additional costs / Further design required.	25/05/2017	N		£5,000	2	1	2	Further discussions with Utility companies and potential additional design works.	2	1	2	Delay to works programme / additional costs	Employer	N	£400
7	Diversion of BT & Zayo utilities located in the existing footway at St John's Road opposite jct of Woodbury Park, Tonbridge Wells.	Delay to works programme / additional costs / Further design required.	25/05/2017	N		£5,000	2	1	2	Further discussions with Utility companies and potential additional design works.	2	1	2	Delay to works programme / additional costs	Employer	N	£400
8	A26 Lane Rental, Road works. Potential working restrictions.	Delay to works programme.	25/05/2017	N		£0	2	2	4	Discussions with Road works, Kent Highways completed.	0	0	0	N/A	Employer	Y	

Table 7-8 - Key Project Risks

7.10 Gateway Review Arrangements

7.10.1 Dates have been set for the SELEP Accountability Board Meetings through to February 2018, providing key stages to the Gateway Review process. Lead times for the submission (and hence preparation) of relevant documentation to these meetings have been aligned with the key stages these define.

7.10.2 The following timetable illustrates:

	Accountability Board 22/09/2017	Accountability Board 17/11/2017	Accountability Board 15/12/2017	Accountability Board 23/02/2018
Outline business case submission	23/06/2017	08/09/2017	22/09/2017	24/11/2017
Gate 1 Review Completing	07/07/2017	22/09/2017	06/10/2017	08/12/2017
Full Business Case Submission deadline	21/07/2017	29/09/2017	20/10/2017	19/12/2017
Decision items for forward plan to be sent to the secretariat	22/08/2017	13/10/2017	06/11/2017	20/01/2018
Forward plan to be published	24/08/2017	19/10/2017	9/11/2017	25/01/2018
Gate 2 Review completion	04/08/2017	13/10/2017	3/11/2017	19/01/2018
Board papers to Secretariat for sign-off	25/08/2017	20/10/2017	10/11/2017	26/01/2018
Board papers to Accountable Body for sign-off	05/09/2017	02/11/2017	21/11/2017	08/02/2018
Board papers to Democratic Services	12/09/2017	08/11/2017	01/12/2017	14/02/2018
Board papers published on CMIS	14/09/2017	09/11/2017	07/12/2017	15/02/2018

Table 7-9 – SELEP Accountability Board lead times

8 Conclusions and Recommendation

8.1 Conclusions

8.1.1 The proposal to make significant improvements to the A26 Cycle Route and link this into cycle networks for both Royal Tunbridge Wells and Tonbridge involves a combination of provision of new links, upgrades to existing paths, improvements to junctions along the route, provision of bus stop by-passes, traffic management measures and improved signage.

8.1.2 The scheme will attract significant numbers of users, all of whom will benefit from the improved health attendant on cycling and walking as part of daily life. As well as an effective way to travel to work or school the route will also provide access to shopping and other facilities in the towns of Tonbridge and Royal Tunbridge Wells, access to rail stations for onward travel and an attractive and valuable leisure route.

8.1.3 The availability of the route for commuter use will act as a significant attractor for people wishing to move to the area. People will be able to use the route for cycle and (in parts) walk commuting, both between the towns and to end destinations along the length of the route corridor, including in Southborough and Bidborough. The housing and employment growth plans for the area are dependent on providing an attractive offer and also ensuring that trips generated will not cause or add to existing damaging congestion, noise and air pollution.

8.1.4 Complementary schemes include Smarter Choices activities which will encourage use, as well as linked schemes such as the proposed cycle networks for Tunbridge Wells and Tonbridge and Mallling, public realm improvements, cycle parking and improved access to the rail stations. In addition, the highway schemes in the area (including the A26/A264 corridor improvements and A21 NMU) will be made more effective through the delivery of the A26 Cycle Route by 'locking in' the benefits of the highway scheme by transferring to cycle (and walk) trips which would otherwise be made by car.

8.1.5 Although the proposed route and its quantitative economic appraisal is presented in the context of a stand-alone Transport Business Case, it is a key part of an integrated approach towards the sustainable economic development of Tunbridge Wells, Tonbridge and Malling, West Kent and Kent as a whole.

8.2 Recommended Next Steps

8.2.1 It is recommended that development and delivery of the scheme should be approved and should proceed.

8.3 Value for Money Statement

8.3.1 A Value for Money Statement has been prepared and has produced an overall category of 'high', taking account of a combination of quantitative and qualitative factors.

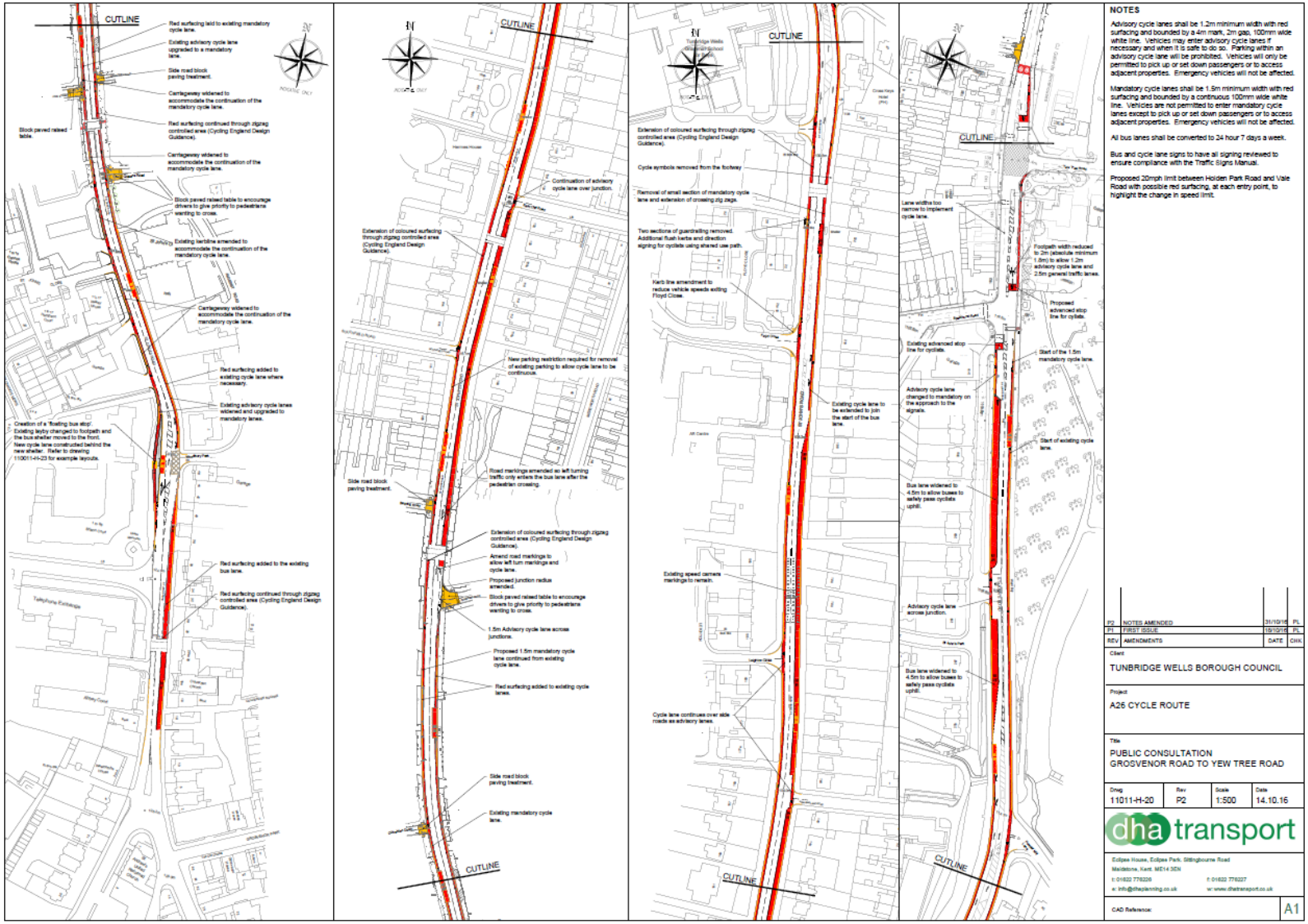
8.3.2 The scheme has wider impacts that will benefit the area considerably more than solely from a transport perspective.

8.3.3 This VfM is based on the quantified initial BCR for the scheme of High (2.94:1) and remains high if non-quantified BCR components, qualitative outcomes and risks/sensitivities are included.

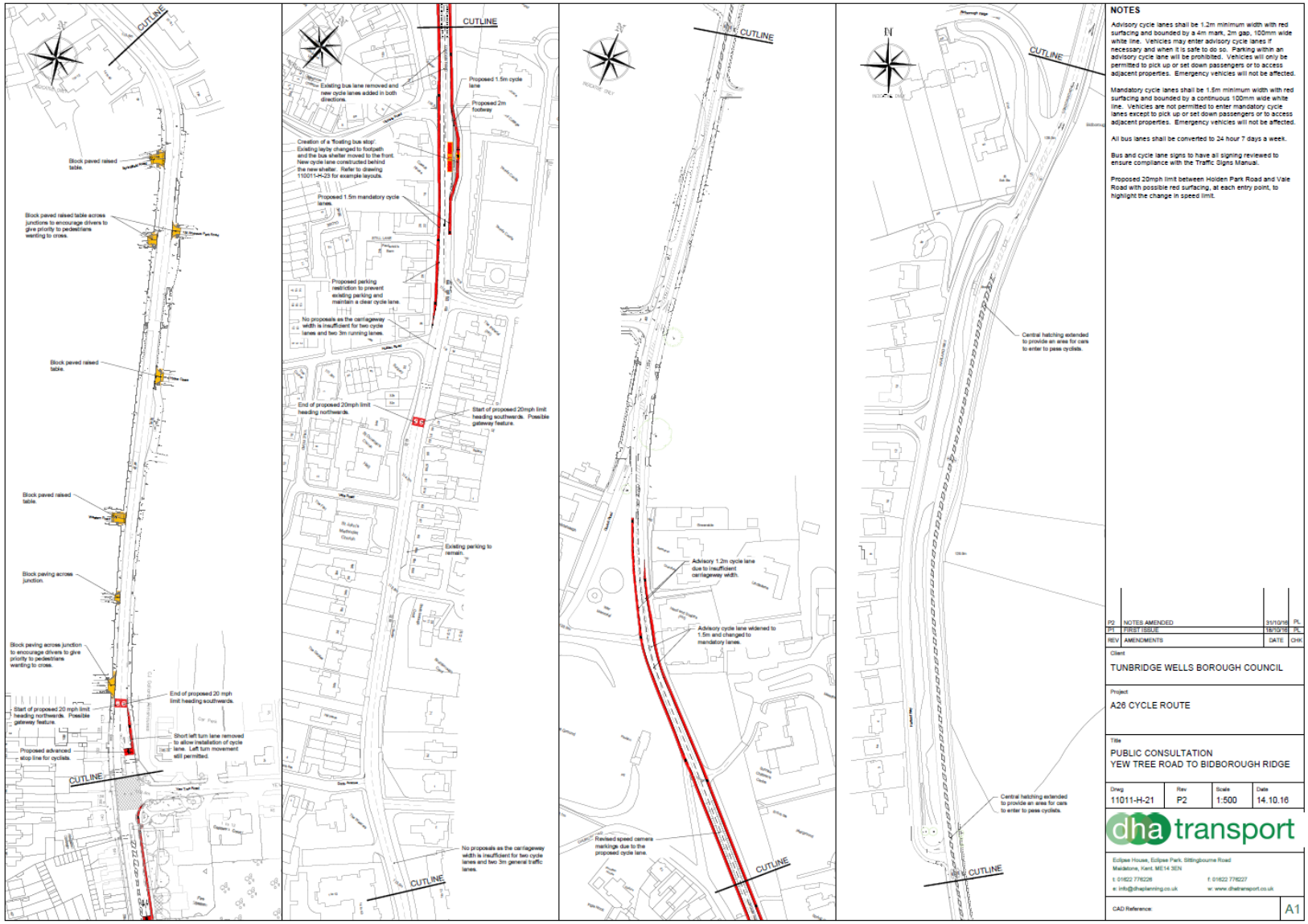
8.4 Funding Recommendation

8.4.1 It is recommended that the funding stream required for the scheme from SELEP, through the LGF, should be released to Kent CC. This involves funding in total of £1,039,464 made up of £160,300 during 2017/18 and £879,164 during 2018/19.

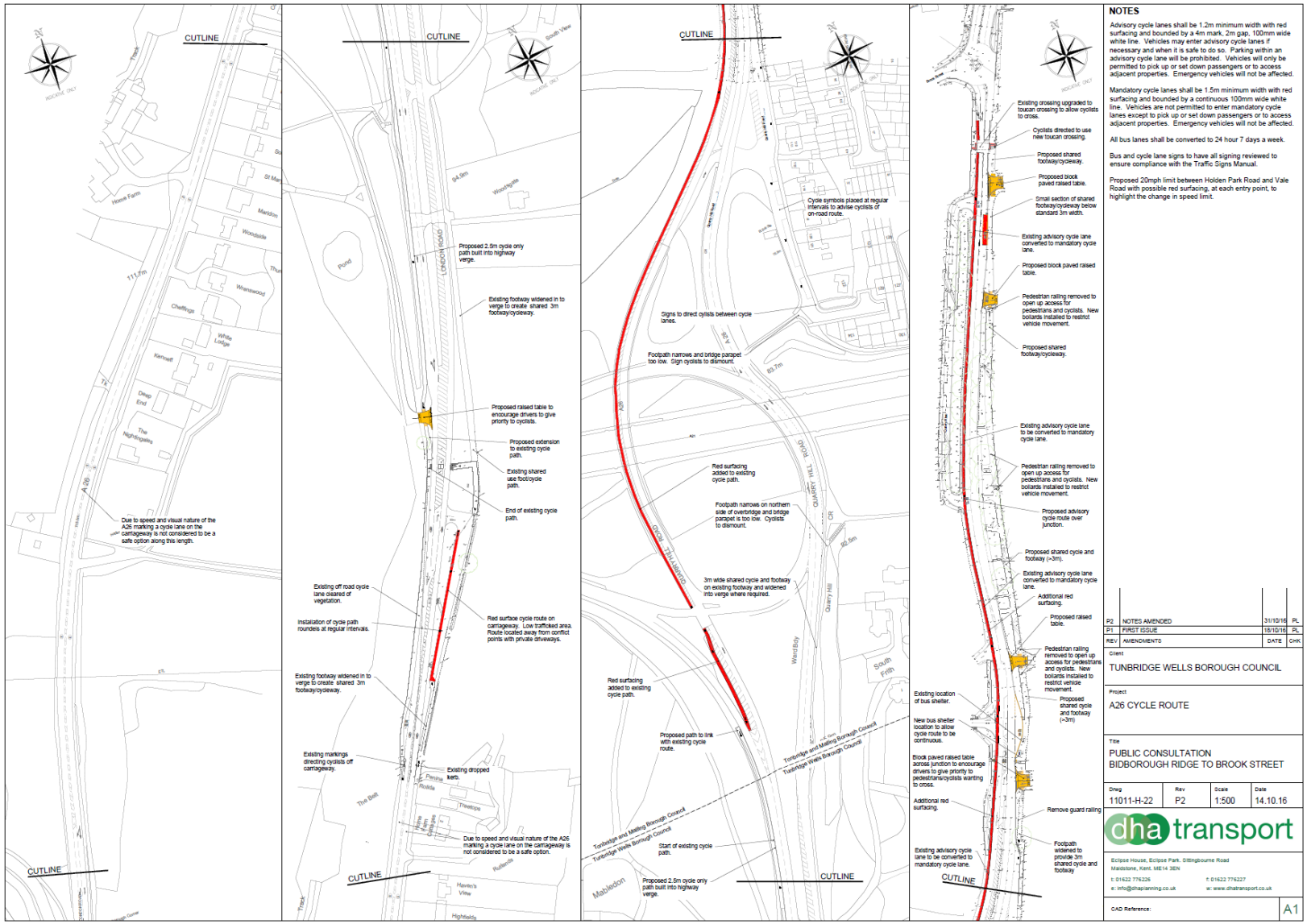
Appendix A – Phase 1, Grosvenor Rd to Speldhurst Rd/Yew Tree Rd



Appendix B – Phase 2, Speldhurst Rd/Yew Tree Rd to Bidborough Ridge



Appendix C – Phase 3, Bidborough Ridge to Brook St



Appendix D – A26 Cycle Route Audit

Route Log			
Location	**Picture**	**Issues**	**Ideas for Improvement**
A26 junction with Brook Street		The roundabout is busy, especially at peak times. Advisory cycle lane on Quarry Hill approach and shared path on Brook Street.	There is very limited provision for cyclists at this junction, the advisory cycle lane and shared path on Brook Street have limited benefit. Need to provide a shared use crossing to link with Waterloo Road and an improved pedestrian/cycle path to the eastern side of Quarry Hill.
A26 view southbound up Quarry Hill		Whilst there is an advisory cycle lane on the downhill side of the road, there is no provision uphill where cyclists will be travelling slower than the traffic.	Need to provide a segregated uphill pedestrian / cycle route. This could be achieved through widening the existing footway and utilising the generous pedestrian route which runs adjacent to the road. This could provide a shared use route, removing the existing conflict between cyclists and motorised traffic. This could however, introduce conflict between cyclists and pedestrians due to downhill speeds.

Route Log			
A26 junction with Springwell Road		If segregated provision were to be implemented, there is no priority for cyclists across the side junction.	If a segregated route is implemented, priority would need to be provided here, and at other side turnings. This could include set back give way lines and speed tables to provide a flush and continuous surface for cyclists.
A26 Quarry Hill junctions with Woodside Road		No priority over the side turning. Street furniture is inappropriately positioned.	Need to give priority to cyclists at this and other side junctions. Reposition street furniture.
Segregated path at Quarry Hill		A separate and generous public right of way which runs adjacent to Quarry Hill is inaccessible to cyclists, due to prohibitive signage and guard railings.	The path is sufficiently wide to be used for shared pedestrian / cycle. Remove guard railings and consider alternative access controls (if necessary). Continued access for residential dwellings is required.
Bus shelter position adjacent to junction with Baltic Road		Existing bus shelter is positioned in the middle of the path and causes obstruction.	The shelter requires repositioning. Ideally the profile of the bus stop lay-by should be reviewed to identify if any additional width can be provided for the shared pedestrian / cycle route.

Route Log			
A26 Quarry Hill junction with Baltic Road		Guard railings are positioned inappropriately and restrict the available width of the path. No priority for cyclists over the side junction.	Railings should be removed or repositioned to the kerb line. Provide priority for cyclists to include a flush and continuous surface.
Quarry Hill Road		At this point cyclists are signed into Quarry Hill Road, away from faster moving traffic. This is suitable however, directional signage is poorly maintained and vegetation on the path linking to the flyover is encroaching on path.	Clean signage and undertake regular vegetation clearance. A regular maintenance regime needs to be introduced.
View southbound on A21 flyover		Path at this point is insufficiently wide to be suitable for shared use, however, is not heavily used by pedestrians. Signage suggests that cyclists dismount.	The potential to widen the path should be explored. Shared use paths should be a minimum of 2.5m wide.

Route Log			
View northbound at flyover		Provision for cyclists is confusing. Refuge and crossover is provided to the left hand side of the carriageway. This however, is poorly signed and markings are worn. Most confident cyclists proceed in the right hand lane at this point, directly to the junction, at which point there is an advisory cycle lane descending into Tonbridge. This however, becomes narrow towards the junction of Brook Street.	Review the layout and/or signing of the crossover which is rarely if ever used.
View southbound between A21 gyratory and Mabledon		Dismount signage part way along shared path at flyover, is ignored by cyclists. Wayfinding signage for the route is also poor.	If possible remove dismount signage (it is acknowledged that this may be required for the path to be compliant with current regulations). Wayfinding signage needs to be improved along the whole route.
A26 side turning at Mabledon		No priority for the segregated path over the side turning.	Revise layout of the junction to provide a continuous level surface and priority for the shared route over the side turning.

Route Log			
A26 crossover at Mabledon		The crossover utilises the existing footpath in a southbound direction. It provides a wide and comfortable crossing, suitable for less confident cyclists who are traveling southbound, to access the shared path. Surfacing is poorly maintained.	Maintenance is required. Due to its limited use by cyclists, signalised priority is not considered necessary here.
A26 southbound at Mabledon, junction with unnamed road		End of segregated route. From this point cyclists are required to re-join the A26 from a lightly trafficked side road, returning to the busy main road.	Shared path could be extended over the side junction through an area of informal parking / layby, to provide an extension to the segregated provision southbound. This area is however, used informally for on-street parking at present.
View northbound between Mabledon and Bidborough Ridge junction.		No provision for cyclists at this point.	If southbound segregated path were extended, it could re-join the carriageway at this point, opposite the northbound shared path access.

Route Log			
A26 Mabledon to Hand and Sceptre		No provision for cyclists. Lack of cycle lanes / paths along this section of the route. Section of road currently subject to street lighting switch off trial and 40mph speed limit.	The full width of highway ownership needs to be identified, to explore if segregated lanes could be introduced. Protected trees, highway ownerships and gradient may be constraints. Residential entrances are a safety risk. Operation of street lighting needs to be reviewed. Speed limit reduction could be considered.
A26 at Southborough Common		A shared cycle / bus lane is provided southbound. This has sufficient width however; motorists crossing the lane do not always see / look out for oncoming cyclists. There have been collisions here. No cycle lane on opposite side.	Better signage may help to reduce the risk from left turning, crossing traffic accessing Meadows School. An uphill northbound lane is required to remove cyclists from the carriageway. A segregated lane could be provided on the edge of Southborough common. A sensitive design would be required.
A26 Southborough Common towards junction with Pennington Road		Potential for conflict between cyclists and buses parked on the bus stand at end of shared lane.	Sufficient width is available to consider a bus-stop boarder here. This may however, not be necessary due to the low frequency of waiting buses.

Route Log			
A26 Junction with Pennington Road to Yew Tree Road		Carriageway geometry narrows from junction with Pennington Road. There is currently no dedicated provision for cyclists. No signage or route markings. 30mph speed limit.	There are limited opportunities to introduce provision for cyclists due to narrow footways. KCC to check extent of highway ownership. Opportunity to introduce a short length of segregated cycle lane between Garlinge Road and Pinewood Gardens. No opportunity to further reduce traffic speed at this point, as this is an A road. Partial alternative route via Pennington Road / Park Road would not be direct.
A26 junction with Western Road, view northbound		No provision for cycling.	Borough Local Plan includes a proposal for cycle crossing and link here, crossing the A26 from Western Road as part of the Southborough to North Farm cycle route. This has yet to be delivered; the stretch across Yew Tree Road playing fields is to be provided as part of the Southborough Hub project.
A26 junctions with Speldhurst Road and Yew Tree Road		These are busy junctions. At the present time there is no dedicated provision for cyclists.	Junctions are to be improved as a consequence of LEP funding award. Design options to incorporate provision for cyclist and pedestrians.

Route Log			
A26 adjacent to Tunbridge Wells Boys Grammar School		Existing toucan crossing integrates with both mandatory on-road lanes and shared use paths. Layout is comprehensive if confusing, with conflicting signage and markings.	Review crossing to identify if legibility can be improved. Remove unnecessary safety barriers.
A26 St Johns Road - Shared cycle and bus lanes / cycle lanes		Shared bus lanes operate 7am-7pm Monday to Friday. Priority for cyclists is therefore, not always maintained. Mandatory lanes are not enforced motorists encroach into lanes.	Revise traffic regulation order and signage to provide full time mandatory lanes. Consider options to introduce physical segregation (e.g. armadillos) along the mandatory cycle lanes, this could help prevent traffic encroachment.
A26 between Southfield Road and Beltring Road		At this point the cycle lane northbound is advisory, and is interrupted by a section of informal vehicular parking. This forces cyclists to move out into the flow of traffic.	Revise traffic regulation order and attempt to remove on-street parking. However, residents may have no alternative off-street parking options. Upgrade lane to mandatory if sufficient width is available.

Route Log			
A26 between Southfield Road and Somerset Road		Priority for cyclists is lost at this point as vehicles are given advance junction priority over cyclists and buses. No northbound cycle lane at this point. Cycle lanes resume adjacent to Skinners School.	Review layout of the highway and identify if these deficiencies can be resolved. Available highway lane and geometry are likely to be constraints.
A26 between Culverden Down and Queens Road		Adjacent to retail units the cycle lanes are advisory and narrow. There is no segregation to prevent encroachment from traffic. Goods vehicles and pull-in traffic also block the route. Road markings are poor.	Review highway layout to identify if the width of the lanes can be increased to 1.5m with mandatory designation through revised traffic regulation order. Replace carriageway lines and consider introducing segregation (armadillos). Pull-in deliveries are unlikely to be resolvable.
A26 between Queens Road and Culverden Park Road		Cycle lanes are narrow and advisory. Carriageway lines are worn due to traffic encroachment especially at bend in the road.	KCC has funding to deliver improvements to this stretch of the A26. To include the removal of verges, partial realignment of the carriageway and provision of 1.5m wide cycle lanes in both directions. Physical segregation options are being discussed as part of the project, these could deter traffic encroachment.

Route Log			
A26 between Culverden Park Road and junction with Grosvenor Road		Shared bus / cycle lane extends southbound at this point from Woodbury Park Road. There is however, no corresponding northbound lane towards Culverden Park Road. There is no cycling provision into the town centre from this point. The mini roundabout is also difficult for cyclists to navigate from Grosvenor Road, due to the gradient.	Review geometry of the carriageway to identify if a cycle lane can be implemented northbound from the junction. No connecting dedicated cycle links into the town centre can be achieved from this point, due to narrow road geometry / built environment constraints. Explore the potential to decrease the speed of Grosvenor Road and Meadow Road to 20mph.