



# Transport Business Case Report

**A26 London Rd/Speldhurst Rd/Yew Tree Rd, Tunbridge Wells**

CO04300262 Revision 01

May 2015



## Document Control Sheet

Project Name:	A26 London Rd/Speldhurst Rd/Yew Tree Rd, Tunbridge Wells
Project Number:	CO04300262
Report Title:	Transport Business Case Report
Report Number:	020

<b>Issue Status/Amendment</b>	<b>Prepared</b>	<b>Reviewed</b>	<b>Approved</b>
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# **1 Introduction**

## **1.1 Overview**

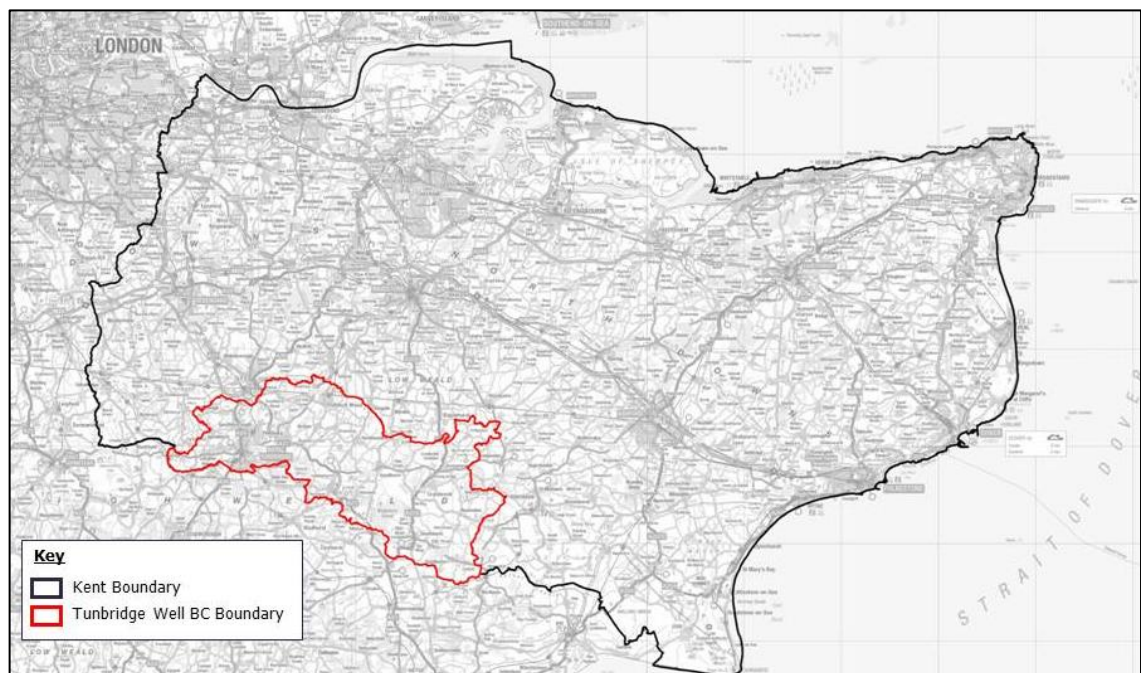
- 1.1.1 Amey have been commissioned by KCC (Kent County Council) to develop proportionate business cases for various South East Local Enterprise Partnership (SELEP) schemes being promoted by Kent to be funded by the South East Growth deal as part of the Government's Local Growth Fund. This report will provide evidence as to the merits of improving the A26 London Road/ Speldhurst Rd/ Yew Tree Rd junctions in Tunbridge Wells in order to justify an application for SELEP funding.

## **1.2 A26 London Rd/ Speldhurst Rd/ Yew Tree Rd – Tunbridge Wells**

- 1.2.1 The scheme's purpose is to help to fulfil the strategic aims of delivering the SELEP housing and employment growth targets, delivering the draft Tunbridge Wells Borough Council Transport Strategy and Local Plan, whilst complying with DfT transport scheme performance and approval criteria to justify investment of capital funds. The scheme is programmed for delivery before the end of 2016.
- 1.2.2 The scheme (alongside a number of others across Kent) will contribute to the planned introduction of 165,000 new jobs and construction of 128,000 new homes across the 6 year period 2015 to 2021.
- 1.2.3 This is the first phase of a wider corridor strategy for the A26 between the A21 and Tunbridge Wells town centre. The scope of this first phase is to improve the junction operation of the A26 London Road/ Speldhurst Road/Yew Tree Rd junction in Tunbridge Wells. At present, the junction is a signalised crossroad arrangement which is heavily congested under peak traffic conditions. A number of options have been considered by KCC to improve the functionality of the junction, in terms of reducing delays and increasing capacity, and these are provided in section 3 of this report.
- 1.2.4 The scheme is designated as a 2015/16 scheme. As such, it is understood that funding from the LGF is committed, subject to transport business case sign off by South East Local Enterprise Partnership (SELEP). The overall corridor improvements have an estimated value of £2.05million; broadly split equally across the 2015-16 funding year and later years.

## 1.3 Area Description

- 1.3.1 Tunbridge Wells is a Non-Metropolitan District with a boundary to the south west of Kent. The main urban settlements within the district are Tunbridge Wells, Southborough and Paddock Wood with rural villages and parishes making up the remainder.



**Figure 1 Kent and Tunbridge Wells Borough Council Boundaries**

- 1.3.2 In 2011, the borough had a population of 115,000<sup>1</sup> with 80% of these people living in urban areas. Census figures indicate that the population of Tunbridge Wells rose by 11% between 2001 and 2011. In 2011, the population<sup>2</sup> of Royal Tunbridge Wells town was estimated to be 58,000 with a further 12,000 residing in Southborough and 8,250 in Paddock Wood.

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<sup>1</sup> Office for National Statistics

<sup>2</sup> Office for National Statistics – Built up Area Populations



- 1.3.3 The town of Royal Tunbridge Wells is situated to the south west of Kent on the border with East Sussex. The town has been attracting visitors for over 400 years to access the spa baths. Whilst the popularity of the town as a bathing destination has waned, the town is still popular with tourists to this day. Tunbridge Wells is located just 40 miles south of London and is surrounded by countryside. Tunbridge Wells is accessed from the south via the A26 and A267, east and west via the A264 and the north via the A26. Figure 2 below indicates the location of Tunbridge Wells in relation to the surrounding highway network.



**Figure 2 Tunbridge Wells Strategic Location**

- 1.3.4 The proposed scheme is located on the A26 London Rd, north of the town centre. The A26 London Road is a key strategic route in and out of the town from the north, ultimately linking with the motorway network.
- 1.3.5 The land use to the north of the town along the A26 is varied but importantly contains the urban extension of Southborough.



## **1.4 Background to the Business Case**

- 1.4.1 In July 2014, the government negotiated a Growth Deal with 39 Local Enterprise Partnerships (LEPs), which awarded a significant proportion of a £12 billion Local Growth Fund to LEPs.
- 1.4.2 The South East Local Enterprise Partnership (SELEP) brings together key leaders from business, local government, further and higher education in order to create the most enterprising economy in England through exploring opportunities for enterprise while addressing barriers to growth Covering Essex, Southend, Thurrock, Kent, Medway and East Sussex and are the largest strategic enterprise partnership outside of London.
- 1.4.3 SELEP has secured £442.2 million in funding from HM Government to boost economic growth - with a particular focus on transport schemes that will bring new jobs and homes until 2021. This includes £358.2 million for new growth schemes on top of £74 million already committed for large transport projects. The Deal will see at least £84.1 million invested in the SELEP area next year, supporting the delivery of up to 35,000 jobs and 18,000 new homes and over £100 million in private investment over the 6 year period. For Kent the funding allocation is £104 million which was won by the Kent & Medway Economic Partnership – the local arm of the SELEP.
- 1.4.4 The government asked all LEPs as part of their Growth Deal to sign up to working with them to develop a single assurance framework covering all Government funding flowing through LEPs, to ensure all LEPs have robust value for money processes in place. The purpose of this LEP assurance framework is to support the developing confidence in delegating funding from central budgets and programmes via a single pot mechanism. As part of their Growth Deal, LEPs will be expected to use this national framework to inform how they work locally, which must be set out in their own local assurance framework.
- 1.4.5 It is important that all LEPs have robust arrangements in place to ensure value for money and effective delivery, through strong project development, project and options appraisal, prioritisation, and business case development.

- 1.4.6 The methodology used to assess value for money and the degree of detail to which business cases are developed in support of particular projects or programmes should be proportionate to the funding allocated and in line with established Government guidance including the HM Treasury Green Book. Typically the Government expect business cases to address, in a proportionate manner, the 5 cases set out in supplementary guidance to the Green Book.

## **1.5 Purpose of this Document**

- 1.5.1 This report follows the 5 case model guidance issued by DfT for Business Case preparation. The intention of the report is to provide robust evidence to the SELEP of the merits of introducing the A26 London Rd/ Yew Tree Rd/ Speldhurst junction upgrade scheme as a key part of a wider improvement strategy for the A26 corridor; and justifying the application for funding.

## **1.6 Structure of the Document**

- 1.6.1 This report is structured in accordance with the Department for Transport's guidance on Transport Business Case, which was updated in January 2013. Following this Introduction, the remainder of the document is structured as follows:
- Chapter 2 provides a description of the scheme design;
  - Chapter 3 states the Strategic Case;
  - Chapter 4 presents the Economic Case including the Value for Money Statement
  - Chapter 5 outlines the Financial Case;
  - Chapter 6 details the Commercial Case; and
  - Chapter 7 provides the Management Case.
  - Chapter 8 offers conclusions and recommendations

## **2 A26 London Rd/ Yew Tree Rd/ Speldhurst Rd Specific Scheme**

### **2.1 Introduction**

**2.1.1** The junction is considered to represent one of the main 'pinch points' along the A26 corridor providing the main access to Tunbridge Wells from the north. The existing junction is a signalised staggered crossroads arrangement which suffers from significant queuing and delays during peak highway periods. As such the wider corridor strategy will need to address the functioning of this portion of the route as a key component.

### **2.2 Location of the scheme**

2.2.1 The scope of the scheme is to improve the existing staggered crossroad configuration of the London Rd/ Yew Tree Rd/ Speldhurst Rd Junction north of Tunbridge Wells town centre in the urban extension of Southborough.

2.2.2 The A26 London Rd connects Tunbridge Wells town centre with the A21 (M25 to Hastings), Tonbridge and Maidstone to the north. London Rd is a single carriageway 30mph road with a dedicated bus and cycle lane northbound, south of Speldhurst Rd. In 2013, London Rd (between Mount Ephraim and Birchwood Avenue) had an average annual daily flow of 17,800<sup>3</sup>.

**2.2.3** Yew Tree Rd connects London Road with the north eastern residential suburb of High Brooms, High Brooms Industrial Estate, North Farm Industrial Estate and the Tunbridge Wells Business Park. Yew Tree Rd is a 30mph single carriageway road.

**2.2.4** On the western side of London Rd is Speldhurst Rd (approximately 100m south of Yew Tree Rd) which allows access to the western residential estates of Southborough and ultimately to the village of Speldhurst. Speldhurst Rd is a 30mph single carriageway road which narrows to a country lane west of Lady's Gift Rd.

**2.2.5** The existing crossroad junction is signal controlled with 2 lane approaches on each arm.

2.2.6 Figure 3 below indicates the location of the junction in relation to Southborough and Tunbridge Wells.

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<sup>3</sup> DfT AADF Counts, Kent



**Figure 3 Location of the proposed junction upgrade**

## **2.3 Purpose of the Scheme**

- 2.3.1 The aim of the scheme is to improve the operation of the Yew Tree Rd and Speldhurst Rd junctions with London Rd. Congestion is a major problem along the corridor, in particular during the peak hours.
- 2.3.2 The corridor also forms part of an established Air Quality Management area and improving air quality is seen as a priority for Kent County Council.
- 2.3.3 Improving the operation is especially important for accommodating new travel demand arising from planned housing and employment allocations in the Tunbridge Wells Borough.

## **2.4 Complementary Measures**

- 2.4.1 The A26 London Rd/ Yew Tree Rd/ Speldhurst Rd scheme is just one of many being undertaken by Kent County Council aiming to achieve its strategic aims of being a better, more accessible and more sustainable county. In particular the scheme will complement the wider corridor strategy for the A26, on which this junction is located, which aims to improve congestion and ease traffic movements along the study corridor.

## 3 Strategic Case

### 3.1 Introduction

3.1.1 The Strategic Case section of the report will clarify;

- whether an investment in the scheme is required;
- why the investment in the scheme is required; and
- How the proposed scheme meets with the strategic aims of the local authority.

3.1.2 The following sub headings will be addressed appropriate to the size and scope of the scheme.

- Business Strategy – Strategic aims and responsibilities of the organisation responsible for the scheme;
- *Problem Identified* – A description of existing issues with supporting evidence;
- *Impact of not Changing* – Consequences of a Do Nothing Option;
- *Internal Drivers for Change* – What is driving the need for change? (technology etc.);
- *External Drivers for Change* - What is driving the need for change? (legislation/ government);
- *Objectives* – Suggestion of appropriate and realistic objectives that meet with strategic aims of authority;
- *Measures for Success* – What would constitute success?
- *Scope* – What will be delivered and what will not be delivered?
- *Constraints* – What are the constraints/ risks to scheme implementation?
- *Interdependencies* – Are there any other factors/ scheme that will affect scheme delivery?
- *Stakeholders* – An indication of the key stakeholders that will be affected by the scheme; and
- Options – Discussion of the options considered and how the favoured option was arrived at.

## 3.2 Business Strategy

### ***National Transport Priorities***

- 3.2.1 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.
- 3.2.2 In its National Infrastructure Plan (NIP) 2014, the Government presented its vision for growth and how infrastructure; *"Has a significant positive effect on output, productivity and growth rates and is a key driver of jobs throughout the economy"*;
- 3.2.3 Transport infrastructure can play a vital role in driving economic growth by improving the links that help to move goods and people around. With regards to the highway network, the strategy aims to;
- increase capacity;
  - tackle congestion;
  - support development;
  - strengthen connectivity; and
  - improve reliability and resilience.
- 3.2.4 The Department for Transport (DfT) is responsible for planning and investing in transport infrastructure to keep people and business in the UK moving. The key priorities for the DfT are aimed at ensuring that these responsibilities are met both now and in future years. Key priorities for the DfT are;
- Continuing to develop and lead preparations for a high speed rail network;
  - Improving existing rail and creating new capacity to improve services;
  - Tackling congestion on roads;
  - Improving road safety;
  - Encouraging sustainable travel;
  - Promoting lower carbon transport;
  - Supporting market for ultra-low emission and electric vehicles;
  - Supporting development of aviation; and
  - Maintaining high standards of safety and security.



- 3.2.5 It is clear that whilst not all of the visions are directly associated with the proposed scheme such as rail and aviation, there is considerable overlap between the scheme and measures to tackle congestion and encourage more sustainable forms of travel.

### ***Regional Transport Priorities***

- 3.2.6 In March 2014, the SELEP submitted their Strategic Economic Plan (SEP). Within the six year period covered by the SEP (2015/16 to 2020/21) several considerable developments are planned within Kent, including:

- The Ebbsfleet Garden City (15,000 homes and 20,000 jobs);
- Paramount Park, Swanscombe Peninsula (27,000 jobs);
- Thames port (6,000 jobs);
- Lodge Hill (5,000 homes);
- Maidstone area housing (11,000 homes);
- Chilmington Green (6,000 homes and 1,000 jobs); and
- Kent Science Park (1,800 jobs).

- 3.2.7 Through the Kent and Medway Growth Deal (as part of the Strategic Economic Plan), the public and private sectors intend to invest over £80 million each year for the next six years to unlock 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.

- 3.2.8 The A26 London Rd/ Yew Tree Rd/ Speldhurst Rd Junction upgrade scheme is named directly as one of the key county wide priorities within the SELEP SEP. The SEP suggests that improving the operation of the junction could lead to the development of 85 new homes and 105 new employment opportunities as a direct consequence.

- 3.2.9 Growth without Gridlock is the delivery plan for transport investment in Kent, 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.

- 3.2.10 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, including the A26 London Rd/ Yew Tree Rd/ Speldhurst Rd junction upgrade.
- 3.2.11 In Growth for Gridlock, Tunbridge Wells is identified as an area with poor air quality and significant congestion challenges. The key transport challenges facing the town and specific to this particular scheme are;
- Addressing congestion hotspots at a number of locations (including A26);
  - Tackling Air Quality Management Areas across the district;
  - Reducing the impact of traffic on the natural and historic environment; and
  - Accommodating development pressures resulting from the Borough's location in a sustainable way.

#### ***Local Transport Priorities***

- 3.2.12 The Tunbridge Wells Borough Council Core Strategy (Development Plan Document) was adopted in June 2010 and is the principal document guiding development across the Borough to 2026. The document sets out what development is required, where the development should take place and how it should be delivered.
- 3.2.13 The Borough will be tasked with providing an additional 6000 homes (2006-2026) and in order to provide this number, the transport infrastructure needs to be able to support this level of development, especially as 75% of this development is earmarked for the urban settlements of Royal Tunbridge Wells and Southborough.
- 3.2.14 Core Policy 3 of the strategy looks specifically at Transport Infrastructure and the following proposals have been identified in order to meet development needs;
- Sustainable modes of transport will be encouraged to reduce dependence on private car use;
  - Maintaining and improving transport infrastructure at strategic and local levels (A26 is specifically mentioned); and
  - Development implications with significant transport implications will require a transport assessment and travel plan indicating how car travel can be minimised.

3.2.15 An Air Quality Management Area was declared in 2005 along the A26 corridor between Royal Tunbridge Wells and Southborough. The site has been monitored ever since and whilst the annual mean levels of nitrogen dioxide have been observed to reduce, the levels are still slightly above or at the objective levels set.

**3.2.16** Kent County Council has a duty under section 86 (3) of the Environment Act 1995 to address the issues and meet air quality objectives set within the Air Quality Management Area.

**3.2.17** A number of measures have been identified as part of the Action Plan to reduce emissions along the corridor. One of the measures yet to be implemented is improving traffic management at various junctions along London Rd which will help reduce congestion and as a consequence, improve air quality as slow moving traffic emits more pollution.

3.2.18 The Tunbridge Wells draft Transport Strategy 2012-2026 (January 2013) sets out the vision for transport for the Borough up to 2026.

3.2.19 The plan pinpoints 8 specific objectives that will guide the delivery of the transport strategy, addressing existing issues and future development pressures. The specific objectives of the strategy are indicated below;

- Objective 1 – Provide transport infrastructure to support development;
- Objective 2 – Improve Strategic road and rail links to London and beyond;
- Objective 3 – Reduce congestion on highway network, particularly on routes into Tunbridge Wells;
- Objective 4 – Improve travel safety for all;
- Objective 5 – Improve air quality within Air Quality Management Area;
- Objective 6 – Encourage sustainable travel choices;
- Objective 7 – Re-balance the provision of parking to support town centres; and
- Objective 8 – Improve public realm within Tunbridge Wells.

3.2.20 One of the key priority projects to be delivered is the corridor intervention along the A26. This is becoming increasingly important due to the allocation of new homes across the Borough (in the Core Strategy) suggesting that 80% of the 3,550 homes will be located in Tunbridge Wells and Southborough<sup>4</sup>. There are also aspirations with regards developing Southborough as a development hub.

### **3.3 Problem Identified**

3.3.1 Kent's LTP3 identifies the following key transport related issues affecting the county;

- Transport congestion;
- Supporting economic growth;
- The need to improve access to jobs and services;
- The need for a resilient network;
- Importance as a UK gateway; and
- A safer and healthier county.

3.3.2 There is currently a severe traffic congestion and delay problem on the A26 northern highway corridor, connecting Tunbridge Wells with Southborough, Tonbridge and beyond, ultimately linking with the motorway network at the M20. The route handles a 2-way traffic flow in excess of 17,000 vehicles per average day, which is estimated to occupy a significant percentage of highway capacity at peak times resulting in heavy delays at junctions and unreliable journey times for cars and buses.

3.3.3 London Rd is an important corridor for buses entering and leaving Tunbridge Wells and whilst dedicated bus lanes are available intermittently both inbound and outbound, bus services are inevitably affected by the severe congestion that exists in the morning and afternoon peak.

3.3.4 Despite the evident importance of buses as a travel mode on the A26 corridor, their attractiveness and competitiveness is diminished by being caught in the prevailing traffic congestion, especially at key junctions along the corridor.

3.3.5 In essence, the scheme is intended to help resolve current issues, particularly:

- Improving the operation of both Yew Tree Rd/ London Rd and Speldhurst Rd/ London Rd junctions in order to reduce congestion;

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<sup>4</sup> Tunbridge Wells Draft Transport Strategy

- Improving journey time reliability; and
- Improving air quality in the Air Quality Management Area along the corridor.

### **3.4 Current conditions**

3.4.1 The A26 is considered a key corridor within the Borough and experiences significant congestion especially at peak times. Proposed growth in the area is likely to exacerbate the problem.

3.4.2 This section of the A26 is also an Air Quality Management Area (AQMA).

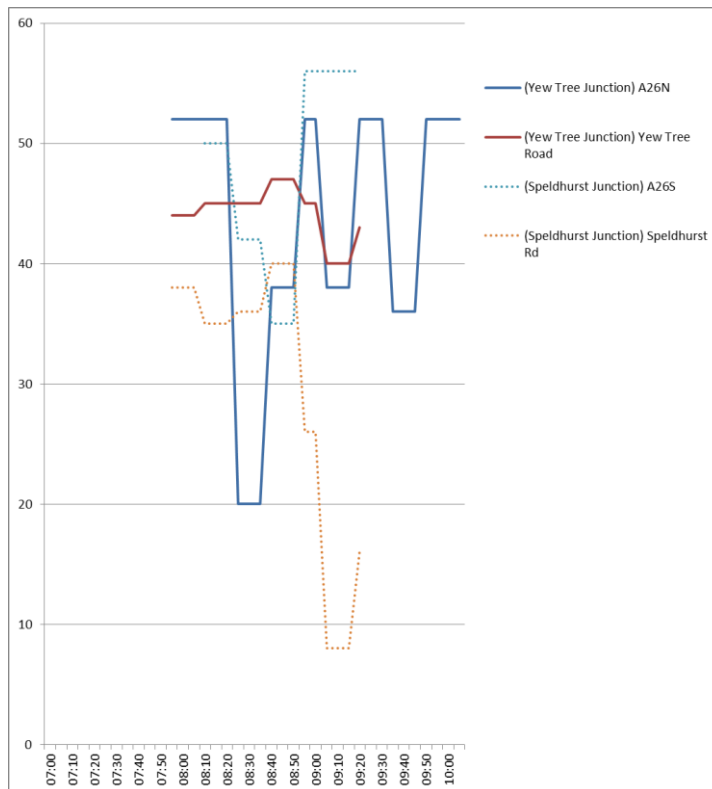
#### ***Congestion Evidence***

3.4.3 In order to assess the extent of congestion experienced along the corridor, traffic surveys were conducted at the London Rd/ Yew Tree Rd/ Speldhurst Rd junction. The results of these surveys were used to test junction improvement options and select a preferred option.

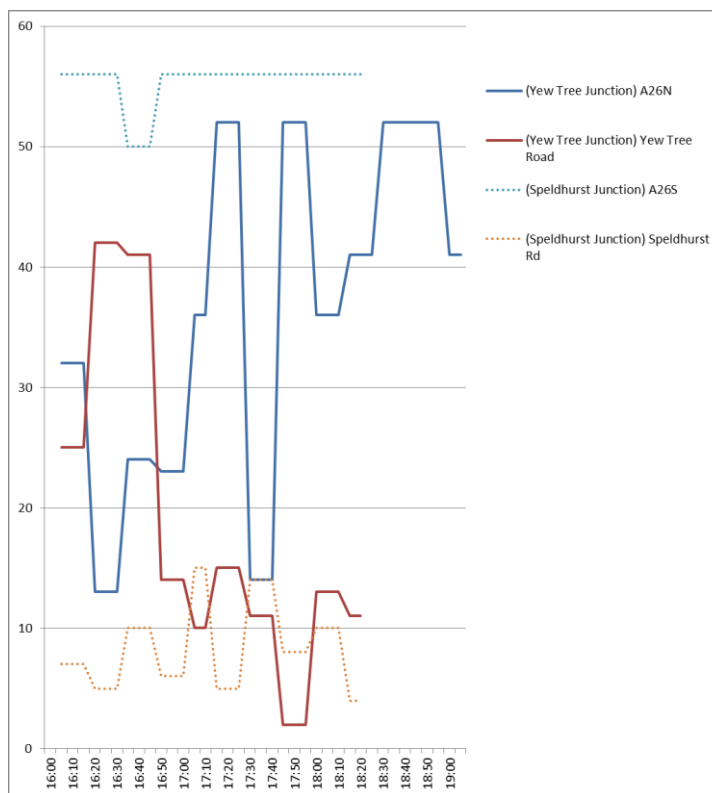
3.4.4 Queue length surveys, Manual Classified Junction Counts and Journey Time surveys were conducted in December 2014 and January 2015 to ascertain the levels of congestion.

#### ***Queue Length Surveys***

3.4.5 Queue length surveys took place on Tuesday 2<sup>nd</sup> and Saturday 6<sup>th</sup> December 2014 in the morning peak period (0800-1000) and PM peak period (1500-1900) with enumerators measuring the length of queue on each arm of the junction (in vehicles). The AM peak queues are shown in **Figure 4** and PM queues in **Figure 5** below.



**Figure 4 AM queues**



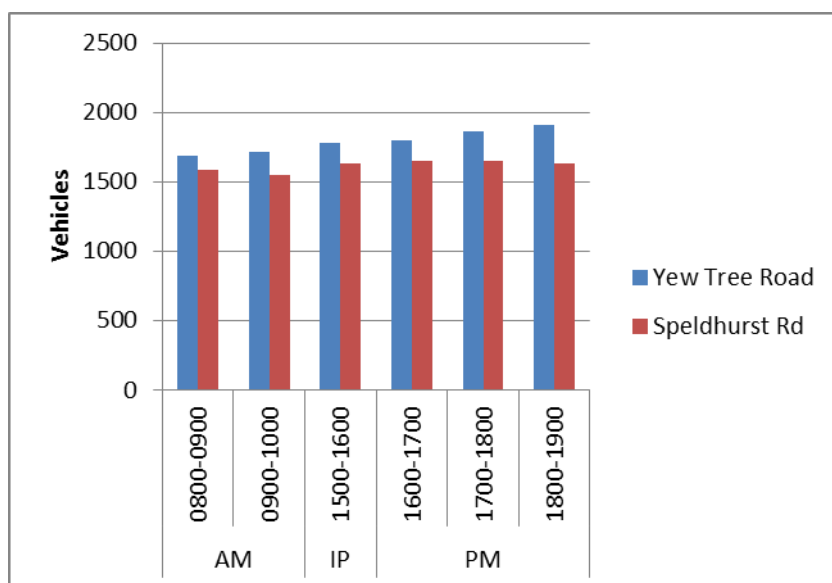
**Figure 5 PM queues**



- 3.4.6 During the weekday survey at the London Rd/Yew Tree Rd junction, considerable queuing was witnessed on London Rd (southbound) in lane 2 travelling straight ahead to St John's Rd. The average queue length in the AM period was 42 vehicles, with over 52 vehicles witnessed queuing during the majority of the period. This also affected traffic turning left onto Yew Tree Rd as the left turning lane only becomes available 40metres before the stopline. The PM peak exhibited similar issues with an average of 35 vehicles in the queue for the straight ahead movement from London Rd north.
- 3.4.7** The Yew Tree Rd arm also witnessed heavy congestion with an average queue length in the AM period of 34 vehicles, with 18 vehicles in the PM turning right to London Rd north.
- 3.4.8 Queuing northbound on London Rd south was limited to isolated incidents during both peaks with a maximum queue in the AM of 34 vehicles and 23 in the PM period.
- 3.4.9** At the London Rd/Speldhurst Rd junction, the worst queuing incidents could be observed on the St John's Rd (northbound) arm. An average queue of 43 vehicles was observed in the AM period and 51 vehicles in the PM. Queues were also witnessed on Speldhurst Rd with the highest average queue witnessed between 0800 and 0900 of 30 vehicles turning tight towards Tunbridge Wells.
- 3.4.10 The Saturday survey (conducted between 1200 and 1500) suggests that congestion is also an issue at the weekend with southbound traffic from London Rd north and the right turn from Yew Tree Rd experiencing the greatest delays at the London Rd/Yew Tree Rd junction. An average queue length of 29 vehicles was witnessed during the period on London Rd north, whilst a constant queue in excess of 47 vehicles between 1200 and 1300 was witnessed on Yew Tree Rd.
- 3.4.11 Congestion issues were also encountered at the London Rd/Speldhurst Rd junction on the Saturday with a constant queue in excess of 56 vehicles observed between 1200 and 1400 on the St John's Rd arm (northbound).
- 3.4.12 Queuing from London Rd (southbound) and Speldhurst Rd was minimal during the Saturday survey.

*Manual Classified Junction Turning Counts*

3.4.13 Manual classified junction turning counts were also conducted on Tuesday 2<sup>nd</sup> and Saturday 6<sup>th</sup> December 2014 (0800-1000 and 1500-1900 on Tuesday, 1200-1500 on Saturday). Figure 4 below indicates the vehicle throughput at the London Rd/Yew Tree Rd junction on Tuesday 2<sup>nd</sup> December. This is shown as **Figure 6**. These counts were combined for the overall junction as a whole, with approximately 2,200 vehicles travelling through the junction during each of the peak hours.

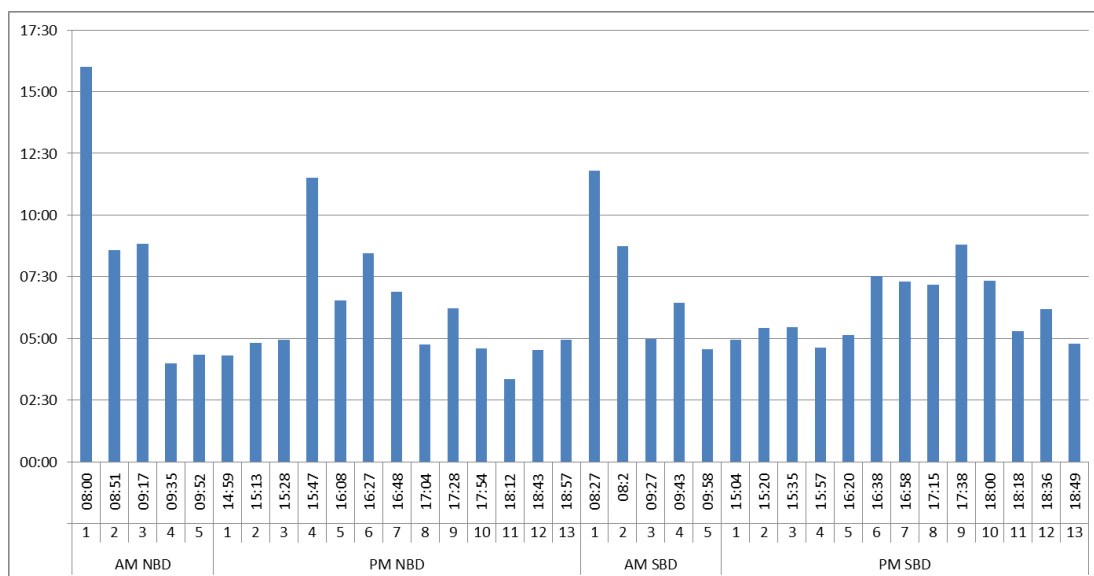


**Figure 6 London Rd/ Yew Tree Rd Junction Counts**

3.4.14 The highest percentage of HGV's was observed during the AM period making the strategic straight ahead movement between London Rd north and south.

#### *Journey Time Surveys*

**3.4.15** In order to add a further user-context to the queue surveys, journey times were also undertaken on the mainline A26 route for a short route which included the approach and egress from the area near the Yew Tree Road and Speldhurst Rd junctions. This puts more substance to the impact of the queues and also gives an indication of journey time reliability. A summary of the observed journey times are shown in **Figure 7**. Observation at the junctions clarified that delay issues include wider issues of blocking back, in addition to over-capacity at the junction itself.



**Figure 7 Journey times**

### ***Air Quality***

- 3.4.16 The A26 has been designated as an AQMA and forms part of the Draft Air Quality Action Plan 2011. The latest available 'Kent and Medway Air Quality Monitoring Network - Monthly Report December 2013' shows that the Southborough monitoring site measured an annual mean Nitrogen Dioxide (NO<sub>2</sub>) level of 47 µgm<sup>-3</sup> in 2014 (to date of report publish) compared with the national objective of 40 µgm<sup>-3</sup>.

## **3.5 Impact of Not Changing**

- 3.5.1 Allowing the existing situation to remain is likely to lead to the issues discussed above to worsen. In the longer term, the lack of improvements along the corridor will partially constrain the planned development in Southborough and Tunbridge Wells as indicated in the Core Strategy, equivalent to some 3,550 homes.
- 3.5.2 The introduction of further homes and employment opportunities to the local area will inevitably increase the number of people using the already saturated highway network.
- 3.5.3 Air quality is already a concern along the corridor, which is why an Air Quality Management Area has been established. The consequence of increasing congestion on London Rd is an increase in the volume of harmful emissions being emitted into the atmosphere.

### **3.6 Internal drivers for Change**

- 3.6.1 A key delivery strand of 21st Century Kent—Unlocking Kent's Potential, "Growth Without Gridlock" outlines how economic growth and regeneration can be delivered in a sustainable manner and also details the infrastructure required to deliver an integrated transport network which is fit for purpose in the 21st Century. If Kent is to accommodate this growth, its transport network must have sufficient capacity and resilience to provide for efficient and reliable journeys.
- 3.6.2 A main objective of the scheme is to reduce travel times and improve journey reliability, for users on the A26 corridor, thereby releasing some 'headroom' capacity to accommodate future trip growth arising from economic and community development aspirations.

### **3.7 External drivers for Change**

- 3.7.1 It is envisaged that successful outcomes from the scheme will be gauged in terms of its easing of travel delays for traffic on the A26 corridor, delivery of planned homes and jobs growth across the District and improved performance against various measures of transport and travel activity on key routes, specifically:
- Pedestrian and cyclist flow volumes;
  - Travel mode shares;
  - Travel time and distance by bus, car and train;
  - Journey time variability by bus and other modes;
  - Accident occurrences and severities; and
  - Air quality and noise impacts on A26 main route and 'rat run' parallel roads.

### **3.8 Objectives**

- 3.8.1 The objectives of the scheme align with both local and national strategic aims. The main purpose of the scheme is to ease congestion along the A26 London Rd, a key strategic route in and out of the town. The introduction of the scheme is expected to improve journey times along the corridor which in turn could witness a reduction in harmful gasses being emitted into the atmosphere as a direct consequence of pollution from vehicles.
- 3.8.2 The following are the primary objectives associated with the scheme:

- Objective 1: Reduce congestion on the A26 London road at Yew Tree Rd and Speldhurst Rd junctions;
- Objective 2: Improve journey time reliability for all vehicles along corridor; and
- Objective 3: Improve air quality along corridor.

**3.8.3** Achieving the primary objectives will inevitably lead to a number of secondary objectives being realised although these may not be directly linked. These are likely to be:

- Improvement in health as greater numbers of people use walking and cycling to access bus services and making short journeys;
- A transfer to more sustainable modes with more reliable journey times; and
- Increasing capacity on the network allowing further development

3.8.4 It can be seen that both primary and secondary objectives accord well with the strategic aims of both the local authority and national policy.

### **3.9 Measures for Success**

3.9.1 It is envisaged that successful outcomes from the scheme will be gauged in terms of its easing of travel delays for traffic on the A26 corridor, delivery of planned homes and jobs growth across the District and improved performance against various measures of transport and travel activity on key routes, specifically:

- Pedestrian and cyclist flow volumes;
- Travel mode shares;
- Travel time and distance by bus, car and train;
- Journey time variability by bus and other modes;
- Accident occurrences and severities; and
- Air quality and noise impacts on A26 main route and 'rat run' parallel roads.

### **3.10 Constraints**

3.10.1 The key constraints likely to affect delivery of the scheme are summarised below:

- Statutory procedures must be completed in time for works procurement, construction preparation, and the main works.

- Funding allocation from SELEP (LGF) has not yet been awarded; this is required to supplement the available funding contribution accumulated from various land-use developers;

### **3.11 Interdependencies**

3.11.1 The junction improvement scheme is intrinsically linked with the wider improvements of the A26 corridor which form part of the overall funding bid. Furthermore, it is considered a part of wider improvements to ease congestion effects across Tunbridge Wells such as schemes on A264 Pembury Rd and North Farm/ Longfield Rd. There is also an on-going scheme on the Highways England (formerly Highways Agency) network with widening of the A21.

### **3.12 Stakeholders**

3.12.1 Key stakeholders have been identified by KCC who will play a key role in ensuring that the scheme can not only be delivered successfully, but also operated and maintained in future. The list of Stakeholders identified by KCC is neither definitive nor exhaustive and will be added to during the transport business case process. The following have been identified at this stage:

- Tunbridge Wells Borough Council;
- Southborough Town Council;
- Arriva Buses and other smaller operators;
- Land-use developers;
- South East Local Enterprise Partnership;
- Kent Fire and Rescue Service (Southborough Fire Station);
- Local residents and businesses; and
- Regular users of affected transport facilities (road, rail, bus, walk and cycle).

3.12.2 In addition to these stakeholders, it is anticipated that a number KCC staff will be consulted across a range of departments.

3.12.3 It is envisaged that conflict could arise amongst stakeholders, in particular if the scheme will see mini-roundabouts introduced in favour of the existing signal control.

### **3.13 Options**



3.13.1 KCC have identified two alternative solution options to improving the existing junction operation. These options have been analysed in detail and are categorised as follows;

- Option A – Replace signals with mini-roundabouts at Yew Tree Rd/ London Rd and Speldhurst Rd/ London Rd junction;
- Option B – Upgrade traffic islands at the junction, and update current vehicle and pedestrian signal timings and phasing. This has two variations:
  - Option B1 –Staggered crossing on Speldhurst Rd; and
  - Option B2 –Straight across crossing facility on Speldhurst Rd (lower land-take requirements).

3.13.2 Option A involves removing the existing signal control in favour of introducing 2 mini-roundabouts at Yew Tree Rd/London Rd and Speldhurst Rd/ London Rd junctions.

3.13.3 At the Speldhurst Rd/London Rd junction, each of the arms entering the mini-roundabout will have lane approaches with a zebra crossing across Speldhurst Rd.

**3.13.4** The Yew Tree Rd/London Rd junction will have a 2 lane approach from south London Rd and single lane approaches from London Rd north and Yew Tree Rd. A zebra crossing will be provided across London Rd north and Yew Tree Rd.

**3.13.5** The signals upgrade in Option B will involve modifying the existing layout by providing staggered pedestrian crossing facilities in order to reduce associated green times and therefore increase capacity at the junction.

**3.13.6** An assessment was undertaken as an earlier commission to establish the merits of both options and aid in the identification of a preferred option. Option B2 has been selected as the preferred option. The reporting of this study is given as Appendix E, where the theoretical capacity of the options was assessed. The final selection also took into account other factors; e.g. cost, highway safety, pedestrian accessibility etc. Option B2 provides an appropriate increase in capacity, is a lower-cost option as it maintains the current established road configuration, and prevents land-take issues. Appendix A indicates the preferred scheme layout.

3.13.7 The remainder of this report will consider the value and benefit of 'Option B2' as KCC's preferred option.

### **3.14 Review of LINSIG Modelling Approach**

The LINSIG signal junction modelling appraisal that was performed for the preferred A26 London Road scheme was undertaken robustly on the basis of conventionally surveyed traffic flows through the junction. However, on review, it is likely that the 'actual' flow count on the A26 arms is misleading, because it would not have allowed for heavily queued traffic upstream, which could be released by the junction improvement. Furthermore, it would not have accounted for the current reduction in exit flows, on the A26 arms, which are a result of 'blocked-back' traffic further downstream.

As the LINSIG model has underestimated 'true' demand on the A26, it may therefore have predicted slightly optimistic signal delay savings for the side roads, with the scheme. Consequently, it was considered prudent to apply a manual reduction of 25% to the value of delay savings achievable on the A26 side road arms. This assumption has been followed through the economic appraisal for the transport business case.

## **4 Economic Case**

### **4.1 Overview**

The Economic Case provides evidence of how the scheme is predicted to perform, in relation to its stated objectives, identified problems and targeted outcomes. The Economic Case determines if the proposed scheme is a viable investment, whose strengths outweigh its weaknesses and which provides good value for money.

The predicted scheme appraisal focuses on those aspects of scheme performance that are relevant to the nature of the intervention. However, we do acknowledge the strands of assessment that are required under various pieces of statutory guidance (e.g. DfT WebTAG, VfM Assessment, LSTF; HM Treasury 'Green Book')

The junction improvement scheme is being assessed from LINSIG results of the junction delays comparing the with- and without-scheme scenarios. These results are available for the AM and PM peaks. The method used was spreadsheet-based, undertaking a TUBA-like calculation for travel time savings.

The LINSIG report is provided as Appendix B.

### **4.2 Assumptions**

- Impacts from the appraisal of signal delay savings (LINSIG), for weekday AM and PM peak hours, have been weighted as two hour periods and annualised over 253 days. There is evidence for some inter-peak and Saturday benefits but these have been excluded.
- Traffic flows are assumed to be all cars. Value of time per vehicle and journey purpose proportions taken from WebTAG DataBook. To be conservative this value was not growthed over time.
- Optimisation of 'with-scheme' signal timings (as given in LINSIG report)
- Downstream capacity initially assumed not to be a limiting factor. However, this will be taken into further consideration with regards to the wider A26 corridor study and the 'Value for Money' statement.
- LINSIG is assumed to be a robust tool for this assessment. However, due to the base performance of LINSIG overestimating potential delay savings on the minor arms, the benefits to these movements have been reduced by 25%.

- Effect of roadworks not included. KCC are aware of importance of minimising impact.
- Maintenance costs not included as broad network stays unchanged.
- No variable demand responses, particularly trip distribution have been included.
- Both opening year (2017) and forecast years assumes same flows as base (2014). This is due to both be conservative in the BCR, and to be realistic with the wider corridor strategy which is likely to include demand management. In addition a Highways Agency (Highways England) scheme on the A21 is expected to reassign some traffic away from the A26. It is noted that LINSIG modelling has been undertaken in the design process to check capacity is sufficient in the presence of growth.
- Optimism bias of 15% - ('conditional approval') allowing some safeguards against cost escalation)
- Appraisal period of 60 years.

**Table 1** compares localised scheme performance against the do minimum. This is predominantly reported as vehicle hours which work as a proxy for journey time savings for this portion of routes. Practical Reserve Capacity from LINSIG is also noted. A breakdown of the LINSIG-based inputs is given as **Error! Reference source not found.**

**Table 1 – Localised Scheme Performance Compared with Do Minimum Reference Case**

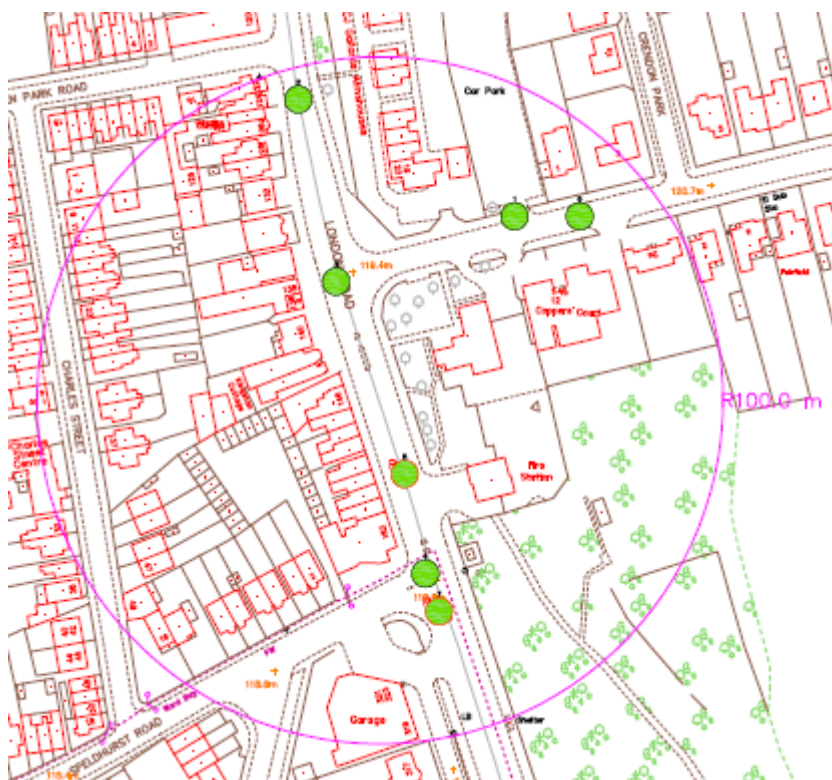
Scenario	Key Performance Indicators	Unit	AM	PM
Do-Minimum (2013)	Performance indicators for Congestion Relief road schemes (LINSIG average delay information)	Veh-hrs	54334	43311
Do-Something (2013)			37540	29955
Do-Minimum (2013)	Performance indicators for Congestion Relief road schemes (LINSIG average delay information)	PRC	-17.7	-19.3
Do-Something (2013)			28.2	34.7

### 4.3 Appraisal Summary Table

A qualitative/quantitative assessment of predicted scheme performance against WebTAG appraisal criteria has been completed using an Appraisal Summary Table (AST) – this is attached as Appendix C.

For this highway scheme a quantitative measure has been calculated for travel time savings, with qualitative statements for other key items.

It is noted that highway schemes are often assessed with both travel time savings and accident benefits. However, for this scheme accident benefits have not been directly assessed for two reasons. Firstly, accident benefits normally come from a change of junction or link types which is not especially pertinent for this scheme. Secondly, the scheme is not being promoted as an accident reduction measure, noting that the accident rate in the area is relatively low. Accident locations are shown in Figure 8. Analysis of this data will become part of the design process; and accident monitoring will be part of the post-opening evaluation.



**Figure 8 – Accident locations**

#### **4.4 Present Value Outcomes from Economic Appraisal**

**Table 2** shows summary of AMCB. This includes the PVC calculation, undertaken as follows:

Scheme cost (2015 prices) - KCC supplied

Risk and optimism bias adjusted cost (2015 prices excl. VAT)

Risk and optimism bias adjusted cost in 2010 prices

Discounted Risk and optimism bias adjusted cost in 2010 prices

Discounted Risk and optimism bias adjusted cost in 2010 market prices

**Table 2 – Summary of Analysis of Monetised Costs and Benefits**

<b>Scheme Summary Analysis of Monetised Costs and Benefits (Present values and prices)</b>	
<b>Net Outcome for:</b>	<b>Present Values (£ 000s)</b>
<b>Do-Something Preferred Scheme minus Do Minimum</b>	
User Present Value Benefit (PVB)	6,409
Capital Present Value Cost (PVC)	877
Scheme Net Present Value (NPV) = PVB - PVC	5,532
Scheme Initial Benefit to Cost Ratio (BCR) = PVB/PVC	7.3

#### **4.5 Sensitivity tests**

A sensitivity test has been undertaken to give more understanding of the value for money and address the following issue:

- As the wider A26 corridor scheme strategy, and subsequent funding, will lock in the benefits of this scheme, a sensitivity test using the whole LGF funding amount, including optimism bias, is appropriate.

If the economic appraisal BCR calculation is revised, using the full scheme capital cost of £2.05m and the junction scenario with assumed 25% reduction in the A26 side road value of delay savings, then the BCR will reduce substantially.

#### **4.6 Adjusted BCR / Value for Money Statement**

An initial BCR was calculated as 7.3 based on the LINSIG results, the localised junction improvement cost and assumptions stated, including 25% reduction in A26 side road benefits. As a highway scheme this is mainly journey-time savings based. By way of sensitivity, the BCR was also calculated with the whole scheme costs including further corridor improvements. It is considered that the wider corridor improvements would be required to fully 'lock in' and realise the full benefits of the junction improvement scheme. The sensitivity test derived a reduced BCR of 3.0.

In terms of an adjusted BCR there are two key components, journey reliability and wider impacts.



There is some evidence of journey time reliability, and a small uplift to the PVB in this regard would be appropriate. The 5%, for slight impacts, suggestion in the DfT 'Value for Money Assessment: Advice Note for Local Transport Decision Makers' seems appropriate.

In addition, the delivery of the Local Plan adds to the value for money.

The possibility of scheme cost escalation is noted as a 'slight adverse'.

A range of BCRs, incorporating the initial BCR and sensitivity tests, has given a range of 3.0-7.3. Taking a conservative approach based on this range and other points discussed the value for money assessment is declared as 'high'.

#### **4.7 Wider scheme**

A wider scheme strategy will lock in the phase 1 benefits, by demand management and further congestion relief. This strategy will take into account the functioning of the urban extension of Southborough, and the longer distance movements accessing Tunbridge Wells.

## **5 Financial Case**

### **5.1 Overview**

The Financial Case for the A26 improvements gives an breakdown of the expected project cost components and the time profile for the transport investment. It considers if these capital costs are affordable from public accounts at the times when the costs will arise. It also identifies where contributions of anticipated funding will be obtained, to meet the scheme costs and it assesses the breakdown of funds between available sources and by year and considers how secure these funds are likely to be. Finally, it reviews the risks associated with the scheme investment and examines possible mitigation.

### **5.2 Stepped approach**

This funding bid, for the A26 London Road/Speldhurst Road/Yew Tree Road scheme, has been stepped, to cover not only the initial 2015/16 costs of the junction improvement, but also subsequent costs of complementary transport improvements within the surrounding corridor, on A26 through Southborough and linking A264 Royal Tunbridge Wells with A21 Tonbridge.

It is considered that these wider A26 corridor improvements will be needed, for three reasons, as follows:

- First, to resolve identified existing problem issues at other locations in the A26 corridor, particularly those associated with:

Frontage access movements and parking for schools, shops, homes and businesses;

Highway constrictions and the prioritised facilities for different transport modes, which, within limited available corridor capacity, inevitably work against each other;

Competing user demands from cars, buses, cyclists and pedestrians, which exceed the infrastructure capacity and experience delays at busy times;

Safety conflicts and peak congestion at route intersections;

Variable and unreliable journey times along the corridor; and

Underuse of traffic management, control and information technology.

- Second, to handle the easing effects of the A26 London Road/Speldhurst Road/Yew Tree Road junction scheme on A26 upstream and downstream travel patterns, flow volumes and delays.
- Third, to create a coherent and resilient A26 transport corridor, fit to handle future travel demands and development plans (e.g. Tunbridge Wells BC Core Strategy), efficiently, economically, safely and sustainably.

The proposed breakdown of the total £2.05m stepped funding bid (including direct LGF, external public sector and private contributions), is as follows:

- £0.85m in 2015/16; and
- £1.20m in 2016/17.

The current scheme transport business case addresses the first of the above strands of funding for 2015/16.

It is proposed that a separate transport business case will be prepared for the second strand of funding for 2016/17, once detailed evidence of the need for and the optimum design of, a complementary corridor scheme solution has been established.

### 5.3 Project Costs

**Table 3 – Wider scheme costs**

	<b>Items</b>	<b>Cost</b>
Phase 1 (2015/16 ask to LEP)	A26/Speldhurst Rd/Yew Tree Road Junction  Wider corridor demand management and congestion relief – study work and outline design	£850,,000
Phase 2 (later ask)	Detailed design and delivery	£1,200,000
Total		£2,050,000

The breakdown for phase 1 is summarised in Table 4. The full breakdown is given as Appendix D.

**Table 4 - Summary breakdown (2015 prices)**

Main works	£505,000.00
Fees etc.	£197,315.59
Contingency/Risk	£140,000.00
<b>Total</b>	<b>£842,315.59</b>

## 5.4 Project Funding

**Table 5 – Project funding**

	<b>Amount (£m)</b>
LGF Funding – phase 1	0.85
LGF Funding – phase 2	0.95
Developer funding	0.25
<b>Total</b>	<b>2.05</b>

The developer funding will become available after the complete corridor improvements. At this point, the A26 corridor should be able to provide a reasonable level of service for current traffic flows; and allow more accelerated growth including evolving Southborough as a development hub; particularly a community hub developing the Royal Victoria Hall.

## 5.5 Risks/leverage

Should scheme costs escalate delivery will be hindered, most likely with a delivery including a reduced level of service which doesn't lock-in the benefits of the junction improvements at Yew Tree Rd/Speldhurst Rd.

The scheme is dependent on the SELEP funding with developer funding allowing further growth but not the specific delivery of the key improvements.

## **6 Commercial Case**

### **6.1 Overview**

The Commercial Case for the A26 London Road/Speldhurst Road/Yew Tree Road junction improvement scheme provides evidence that the proposed investment can be procured, implemented and operated in a viable and sustainable way. The aim is to achieve best value during the process, by engaging with the commercial market.

### **6.2 Expected Outcomes from the Commercial Strategy**

The outcomes which the commercial strategy must deliver are to:

- Confirm that procedures are available to procure the scheme successfully;
- Check that available / allocated capital funds will cover contractor and construction costs;
- Verify that risk allowance is sufficient;
- Ensure that arrangements have been made to handle cost overruns;

### **6.3 Scheme Procurement Strategy**

#### *Procurement Options*

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

#### Full OJEU tender

This option is required for schemes with an estimated value of over £4,322,012.

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.

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)

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. If the scope of a specific scheme is different from the item coverage within the HTMC contract a new rate can be negotiated.

#### *Preferred Procurement Option*

The preferred procurement route for the A26 improvements is the existing HTMC contract. This option has been selected as the value of the scheme, £2.05m, is less than the OJEU scheme value threshold.

## 6.4 Commercial Risk Assessment

**Table 6** shows the commercial risk assessment

**Table 6 – Scheme Commercial Risk Assessment**

Qualitative Commercial Risk Assessment										
Scheme Commercial Risk Item	Likelihood of Risk Arising (✓)			Impact Severity (✓)			Predicted Effect on Scheme Procurement, Delivery & Operation (✓)			Immediate Bearer of Risk and Suggested Mitigation
	Low	Medium	High	Slight	Moderate	Severe	Slight	Moderate	Severe	
Scheme construction is delayed and costs increase, owing to unexpected engineering difficulties.		✓				✓		✓		Kent CC, as scheme promoter, bears the risk. Ensure that scheme development, design, procurement and construction procedures are sufficiently robust to minimise likelihood of construction difficulties.

## **7 Management Case**

### **7.1 Overview**

The Management Case outlines how the proposed scheme and its intended outcomes will be delivered successfully. It gives assurances that the scheme content, programme, resources, impacts, problems, affected groups and decision makers, will all be handled appropriately, to ensure that the scheme is ultimately successful. It also covers monitoring of the scheme.

### **7.2 Approach to Scheme Development and Delivery**

Although not fully defined at this stage, the project is likely to be managed in house by PRINCE2 trained and experienced Kent County Council staff, using a well-established governance structure, which has been successfully applied to deliver other transport improvement schemes.

### **7.3 Evidence of Previously Successful Scheme Management Strategy**

KCC have a successful track record of delivering major transport schemes within the county. The most recent of which were the East Kent Access Phase 2 (EKA2) and Sittingbourne Northern Relief Road schemes (SNRR).

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 **Figure 9**.

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 A26 improvements. The total value of the scheme was £87.0m of which £81.25m was funded by Central Government.

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



**KEY**

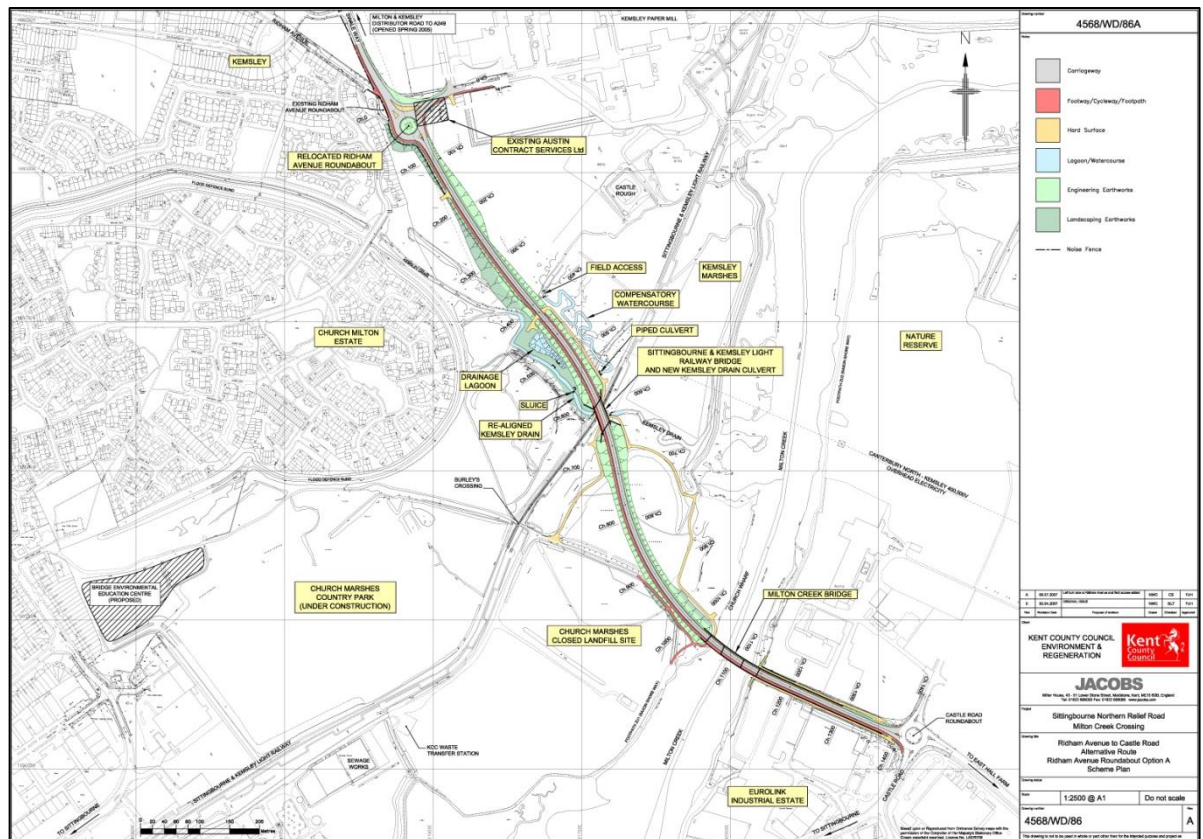
- Phase 1A & 1B (completed 2004)
- Phase 1C (Completed 2007)
- Phase 2 (Completed May)

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The delivered scheme is shown in Figure 10 below:



**Figure 10 – SNRR Scheme Layout**



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 Thames Gateway (Kent) 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.

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

## 7.4 Key Project Work Stages and Tasks

The key stages identified are:

Initial scheme design / Outline Business Case

Feasibility work

Land Acquisition

Consultation

Committee Approval

Detailed design / Full Business Case

Acquisition of statutory powers

Procurement

Environmental surveys

Start/end of construction

Monitoring

## 7.5 Project delivery and Approvals Programme

**Figure 11** shows the project delivery programme (phase 1)

Business Case: 31/ January/ 2014
Feasibility: Phase 1 01/11/2014 to 16/01/15
Land Transfers 15/02/2015 to 18/09/2015
Outline Design Phase 1: 17/02/2015 to 31/05/2015
C2 & C3 Enquiries Phase 1: 17/02/15 to 31/05/2015
Report Phase 1 scheme to JTB 01/04/2015 to 20/04/2015
Detailed Design Phase 1: 21/06/2015 to 18/09/2015
Procurement Phase 1: 18/09/15 to 28/10/2015
ConstructionPhase 1: 11/01/2016 to 29/04/2016
Feasability Phase 2: 23/02/2015 to 29/05/2015
Outline design Phase 2: 20/07/2015 to 28/08/2015
C2 & C3 Enquiries Phase 2: 20/07/2015 to 28/08/2015
Report Phase 2 scheme to JTB 01/12/2015 to 20/12/2015
Detailed design Phase 2: 11/01/2016 to 25/03/2016
Procurement Phase 2: 04/04/2016 to 13/05/2016
Construction pahse 2: 16/05/2016 to 30/09/2016

**Figure 11 – Project delivery programme**

## 7.6 Project Governance, Roles and Responsibilities

KCC have set up a clear and robust structure to provide accountability and an effectual decision making process for the management of the LEP funded schemes. Each scheme will have a designated project manager (Darren Hickman for A26 improvements) who will be an appropriately trained and experienced member of KCC staff.

**Figure 12** provides an outline of the overall governance structure implemented to manage the delivery of each scheme.

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*

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*

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.

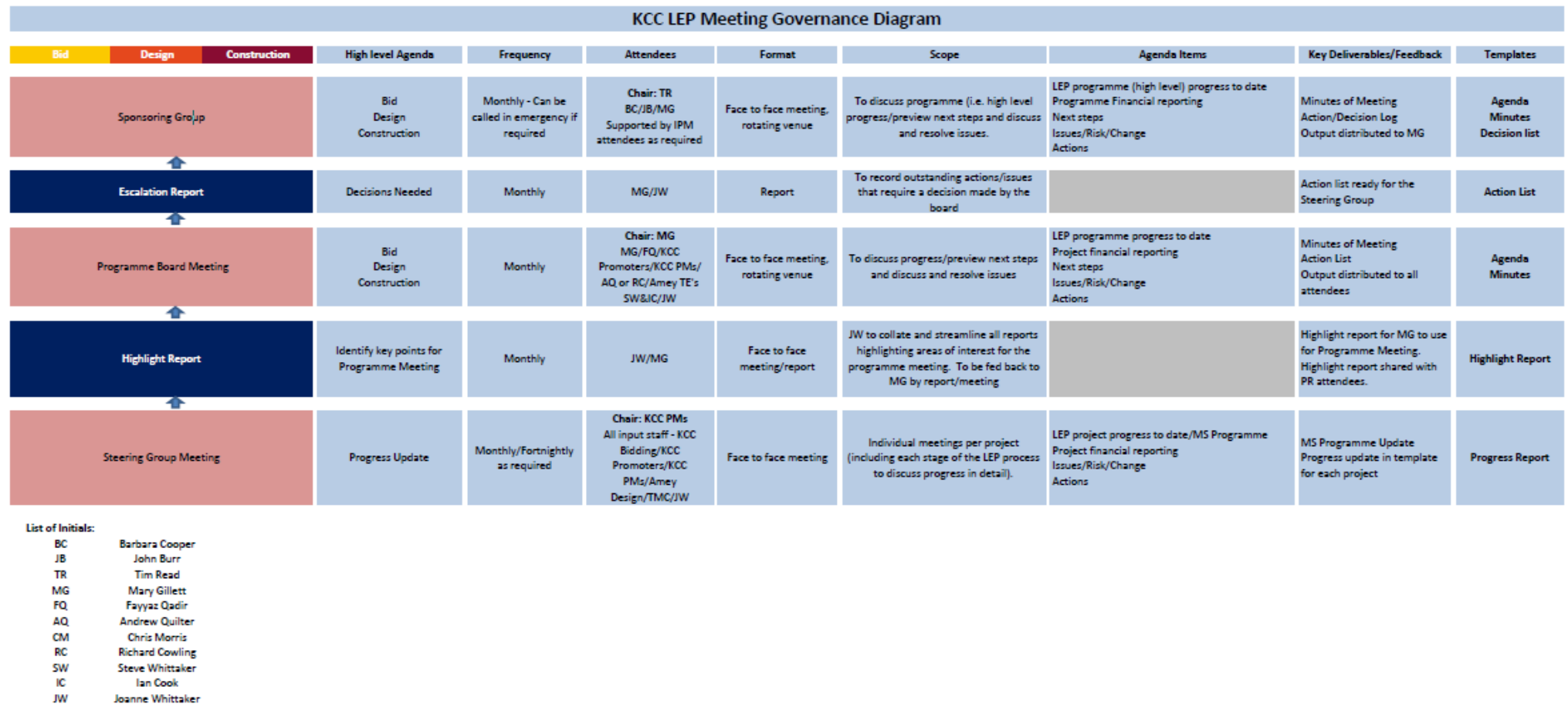
#### *Programme Board (PB) Meeting*

The PB meeting is held monthly and is chaired by the KCC LEP 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*

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.

**Figure 12 – KCC Project Governance Structure**



### *Sponsoring Group (SG) Meeting*

The SG is held monthly and will be chaired by Tim Read (KCC Head of Transportation). Attendees are Barbara Cooper (Corporate Director), John Burr (Director of Highways, Transportation and Waste), Tim Read and Mary Gillett (KCC Major Projects Planning Manager). 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 Mary Gillett 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).

## **7.7 Communication and Stakeholder Management Strategy**

**Figure 13** shows the engagement approach to be used for various different stakeholders and interest groups. As mentioned consultation is a key milestone in the programme.

**Figure 13 – Stakeholder Management Plan**

Itemise Stakeholders to be Handled in Accordance with Interest / Influence Matrix		
Stakeholder Influence	High	<u>To be Passively Monitored:</u>  <u>To be Actively Engaged and Managed:</u> SELEP / DfT TWBC Southborough Town Council
	Low	<u>To be Passively Conciliated:</u> Local population  <u>To be Actively Informed:</u> Local businesses Environmental Agency Bus Operators
Low		High
Stakeholder Interest		

## 7.8 Project Risk Management and Contingency Plan

### 7.8.1 Risk Management Strategy

Project risk is managed as an on-going process as part of the scheme governance structure, as set out in section 7.2 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.

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.

An example scheme risk register is shown in **Figure 14** below:

**Figure 14 – Project Delivery Programme**

RISK REGISTER												
Project Title: Example 1												
Project Manager: Mr Smith												
Date of Last Review: 28/02/2016												
Risk Number	Risk Description	Date Logged	Residual Impact	Residual Probability	Residual Priority	Nature of Impact (Commercial/Programme/R&E)	Action to be taken (Mitigation)	By When	By When	Residual Impact	Residual Probability	Residual Priority
01	Example 1: Risk register for example project	01/01/16	L	L	L	Example 1: Risk register for example project	Example 1: Risk register for example project	01/01/16	01/01/16	L	L	L

**Table 7** shows a summary of the project risk assessment. This includes aspects from all elements of the business case, and also adds 'operational' and 'scheme performance' elements.

**Table 7 – Project Risk Assessment**

Project Risk Management Strategy						
Risk Category	Risk Description	Likelihood of Risk Arising (Score 1-5)	Severity of Impact (Score 1-5)	Risk Score = Likelihood x Impact Severity	Proposed Risk Mitigation and Contingency Action	Estimated Mitigation and Contingency Cost (£)
Scheme Transport Business Case Approval for DfT-defined 'larger' scheme (>£5m)	SELEP / DfT requires more quantified evidence for Economic Case Value for Money, rather than qualitative assessment	2	4	8	Assemble as much available evidence of scheme VfM before submitting Jan 2015 'lighter touch' TBC draft.	£5.0k
Project Cost	Cost Escalation	2	4	8	Optimism bias has accounted for this	
Funding	Not forthcoming	1	5	5	Ongoing discussions with funding bodies, MBC and SELEP	
Scheme performance	Downstream capacity erodes benefits	2	3	6	Phase 2 improvements will mitigate this	
<p><u>Key to Risk-Likelihood and Impact-Severity Scoring Categories:</u></p> <p>Very Low 1.0; Low 2.0; Moderate 3.0; High 4.0; Very High 5.0;</p>						

## 7.9 Project Assurance

A signed Section 151 officer letter is provided as **Appendix G**.

## 7.10 Scheme Monitoring

KCC are committed to monitoring, evaluating and reporting the scheme post-opening. Data surveys undertaken before the scheme will be repeated.

In addition pre-opening data for Accidents and Air Quality is available and can also be repeated post-opening.

It is important for a congestion relief scheme to compare traffic flows so that the changes in delay are put into context. **Table 8** shows the scheme monitoring plan.

The acceptability will be judged on the predictions supporting the economic case and on delivering the scheme objectives.

**Table 8 – Scheme Monitoring, Evaluation and Benefits Realisation Plan**

Expected Benefit	Measure	Owner	Outcome/impacts	Review timescale	Review Method
Travel-time improvement	Journey-time Queue surveys	KCC		One and five year post-opening	
New housing	Completions	TWBC	Delivery of local plan		On-going Housing monitoring
Accidents	KSI	KCC			On-going Accident Monitoring
Air Quality	Nitrogen Dioxide	TWBC			On-going measurements
n/a	Traffic Flows	KCC		One and five year post-opening	



## **8 Conclusion**

### **8.1 Conclusions**

The scheme provides an affordable and deliverable scheme that can overcome the existing problem of congestion at the junction of the A26 London Rd/Yew Tree Rd /Speldhurst Rd, and assist in providing a sufficient network to deliver the Tunbridge Wells Local Plan.

The scheme is worthwhile from a 'value for money' standpoint.

### **8.2 Recommended Next Steps**

The development and delivery of the scheme, as the first phase of improving the A26 corridor, should be approved and should proceed.

The wider A26 corridor work to 'lock-in-benefits' should also be further developed.

### **8.3 Value for Money Statement**

The 'value for money' statement in this report suggests a 'high' value for money. This should be revisited if scheme costs escalate.

### **8.4 Funding Recommendation**

The funding requirement from SELEP for the first phase incorporating the junction improvements should be released to KCC. This is £0.85m

In addition, as the additional funding locks in these benefits demonstrated for the A26/Yew Tree Rd/Speldhurst Rd junction, the basis for releasing the balance of the funding £0.95m has been established.

## **Appendix A   Scheme Layout**

## **Appendix B   Linsig Report**

## **Appendix C   AST**

## **Appendix D   Cost Breakdown**

## **Appendix E Preferred Option selection**

## Appendix F Inputs for time-savings

The inputs for time-savings based on the LINSIG results are:

AM flows								
		A26S	Speldhurst	A26N	Yew Tree	Bus Lane		
		Destination						
	Origin	A	B	C	D	E	Tot.	
A26S		A	0	137	402	81	0	620
Speldhurst		B	182	0	142	21	0	345
A26N		C	604	86	0	274	0	964
Yew Tree		D	8	1	254	0	0	263
Bus Lane		E	0	0	20	0	0	20
		Tot.	794	224	818	376	0	2212
PM flows								
		A26S	Speldhurst	A26N	Yew Tree	Bus Lane		
		Destination						
	Origin	A	B	C	D	E	Tot.	
A26S		A	0	96	540	61	0	697
Speldhurst		B	146	0	169	12	0	327
A26N		C	545	134	0	252	0	931
Yew Tree		D	76	13	229	0	0	318
Bus Lane		E	0	0	14	0	0	14
		Tot.	767	243	952	325	0	2287
AM savings								
		A26S	Speldhurst	A26N	Yew Tree	Bus Lane		
		Destination						
	Origin	A	B	C	D	E	Tot.	
A26S		A	0	-11	-13	-16	0	
Speldhurst		B	183	0	170	171	0	
A26N		C	-2	-5	0	28	0	
Yew Tree		D	103	108	113	0	0	
Bus Lane		E	0	0	-5	0	0	
		Tot.						
PM savings								
		A26S	Speldhurst	A26N	Yew Tree	Bus Lane		
		Destination						
	Origin	A	B	C	D	E	Tot.	
A26S		A	0	-9	-14	0	0	
Speldhurst		B	185	0	174	190	0	
A26N		C	-6	14	0	25	0	
Yew Tree		D	201	228	209	0	0	
Bus Lane		E	0	0	-22	0	0	
		Tot.						

## **Appendix G S151 Officer Letter**