South East Local Enterprise Partnership Transport Business Case

Project Overview

Project Name

Maidstone Integrated Transport Package (MITP)

Project Type

Road

Federal Board Area

Kent & Medway

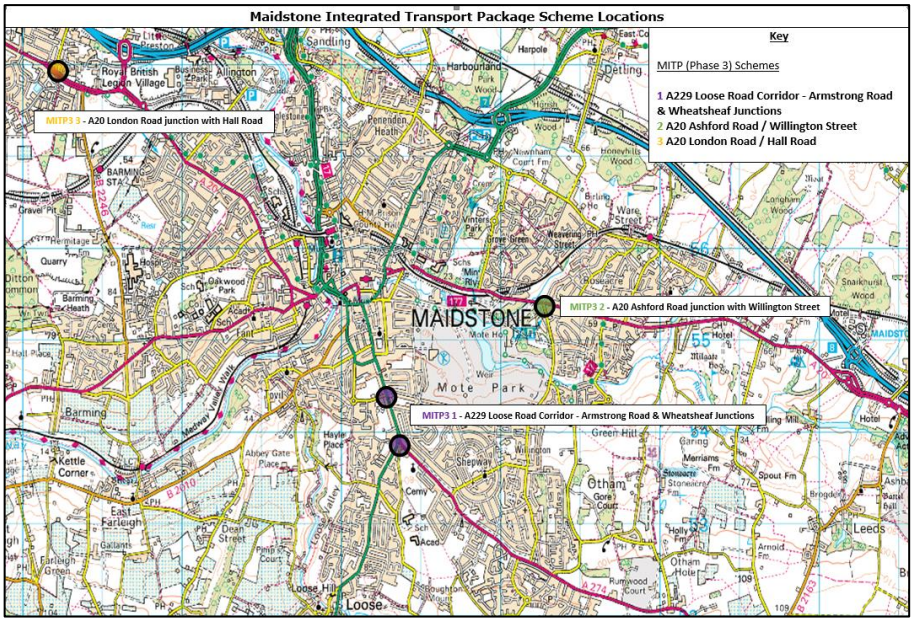
Lead County Council/Unitary Authority

Kent County Council (KCC)

Development Location

The MITP relates to a number of road network corridors or junction locations in and around Maidstone which were identified for improvement within the adopted Maidstone Local Plan. The corridor/junction locations included within this MITP (Phase 3) business case submission are set out and shown in the location plan below:

- A229 Loose Road Corridor;
- A20 Ashford Rd/Willington St; and
- A20 London Rd/Hall Rd/Mills Rd.



Project Summary

The MITP aims to reduce congestion and ease traffic movements through the town. The scheme's purpose is to help to fulfil the strategic aims of delivering the SELEP housing and employment growth targets, delivering the Maidstone Borough Council Transport Strategy and Local Plan.

The package is made up of a number of key corridor/junction locations which are forecast to suffer from congestion and delay and have been identified for improvement. This business case represents Phase 3 of the overall MITP and is comprised of the following component schemes:

- A229 Loose Rd Corridor – Improvements to Armstrong Rd and Wheatsheaf junctions:
- A20 Ashford Rd/Willington St – Updated scheme proposals for junction improvement;
- A20 London Rd/Hall Rd/Mills Rd – Junction improvement;

It should be noted that this template provides an overview of the A229 Loose Rd corridor component scheme only. The A20 Ashford Rd/Willington St and A20 London Rd/Hall Rd/Mills Rd component schemes are detailed in individual business case reports which are contained in **Appendix E**.

Delivery Partners

Partner	Nature of involvement (financial, operational etc.)
KCC (Lead Applicant)	Operational
Maidstone Borough Council (MBC)	Operational
Tonbridge & Malling Borough Council (T&MBC)	Operational
Local Developers	Financial

Promoting body

KCC

Senior Responsible Owner (SRO)

Russell Boorman - Senior Major Capital Programme Project Manager

Kent County Council

1st Floor, Invicta House,

Maidstone, ME14 1XX

Russell.boorman@kent.gov.uk Tel: 03000 413538

Total project value and funding sources

The total project value is currently estimated at £8.49m. This has been developed by an independent cost consult, based in Kent and confident in understanding the current supplier demand and costs to provide a robust estimate. Additional funding of £2.29m has been secured via Sec106 agreements which represents 27% match funding for this project.

Funding source	Amount (£)	Constraints, dependencies or risks
S106 Agreements	£2.29m	Funding has been identified and secured
SELEP	£6.2m	Approval of Business Case
Total project value	***£8.49m***	

SELEP funding request, including type (LGF, GPF etc.)

LGF Funding of £6.2m is sought from SELEP to help deliver the package of improvements identified.

Exemptions

As the proposed funding request does not exceed £8m and the proposal does not present high risk, exemption from completing Gate4 and 5 is sought.

Start date

Construction is intended to commence in 2020.

Project development stage

Following the approval of the SELEP Business Case for A20 Coldharbour Roundabout that included forward design for the remainder of the Maidstone Integrated Transport Package. Significant design work, including investigatory surveys, such as, geotechnical, environmental and topographical have been undertaken to produce a more robust detailed design mitigating the need for design changes whilst improving the delivery timescales. Stakeholder engagement has been undertaken with the improvements being raised at the Maidstone Joint Transportation Board meeting. All detailed design is currently being progressed via the Medway Framework Contract utilising separate consultants to ensure resource capability and achieves the desired timescales for delivery.

Project development stages completed to date			
Task	Description	Outputs achieved	Timescale
Feasibility/outline design, modelling and engagement	Initial design and engagement	Significant details gathered for detailed design.	Completed December 2018

Project development stages to be completed		
Task	Description	Timescale
Detailed Design and further engagement	Project design and further stakeholder engagement	2019
Detailed Design	Detailed design of scheme	2019
Procurement	Tender	2019
Completion of work	Scheme delivery	2020/21
Monitoring and Evaluation	Measuring the benefits	2022 and 2026

Proposed completion of outputs

Completion is envisaged in 2020/21, to be followed by monitoring.

Kent County Council have a successful track record of delivering major transport schemes within the county, the most recent being the Maidstone Bridges Gyratory project, completed in March 2017. The scheme was designed to reduce congestion, improve journey time reliability and support economic growth. The total value of the scheme was £5.74m which £4.6m was funded by LGF. The project, within the heart of a busy county town, was successfully delivered on time and to budget whilst maintaining access for local businesses and commuters alike.

Strategic Case

Scope / Scheme Description

The A229 Loose Corridor component scheme comprises of proposed capacity improvements at two key junctions on the A229 Loose Rd to the south of Maidstone town centre.

The junction improvement schemes comprise the following:

A229/Armstrong Rd Junction - The proposed scheme comprises the addition of entry lanes at the A229 (N) and Park View arms to create additional capacity at the junction.

A229/A274 Wheatsheaf Junction – the proposals comprise the conversion of an existing 4-arm signal controlled junction to a 3 arm priority roundabout arrangement. The improvement involves the closure of the Cranbourne Avenue arm of the existing junction.

The proposed scheme drawings are included in **Appendix F**.

The scheme descriptions and strategic context of the other component schemes are detailed in their individual business case reports which are contained in **Appendix E**.

Location Description

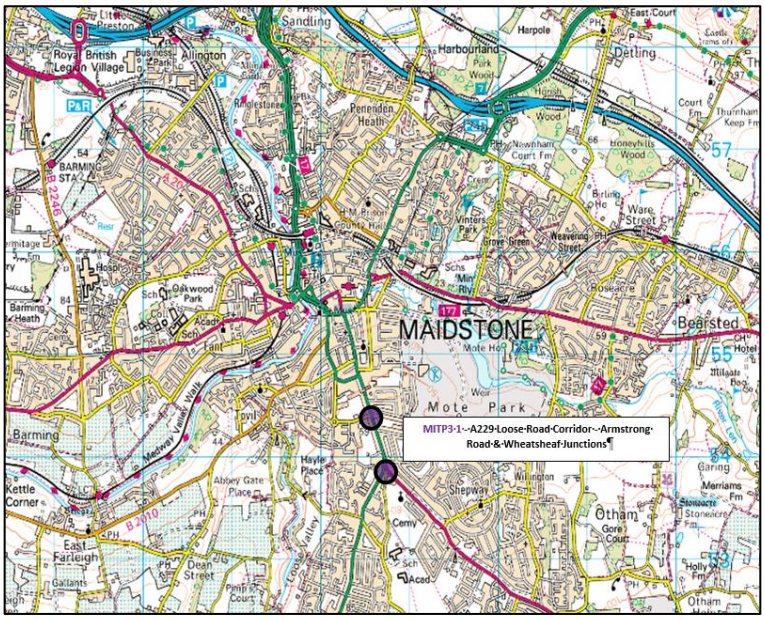
The A229 Loose Corridor component scheme is located in the south of Maidstone. Maidstone is located in mid-Kent and is the county town of Kent. It has the largest population of all Kent districts with a population of 167,700 (2017 mid-year population estimates, published by the Office for National Statistics June 2018). Maidstone has a lower than average employment rate however the borough has a low wage economy which has led to out commuting for higher paid work.

Maidstone is located approximately 3km south of the M20 motorway therefore is well served by the strategic highway network having local access to four M20 motorway junctions; junction 5 via the A20 to the north-west, junction 6 via the A229 to the north, junction 7 via the A249 to the north-east and junction 8 via the A20 to the east. These roads converge in the centre of Maidstone, forming the town centre gyratory system.

The River Medway runs north to south through the town centre. There is one crossing point in the town centre by way of a gyratory including two bridges, where the A20, A26 and A229 meet. Congestion is frequent along the main radial approaches to Maidstone during both the AM and PM peak periods.

The A229 is a major road linking Rochester and Chatham in Medway to the north of Maidstone, and heads south through the town centre and on for approximately 30km until it meets the A21 just north of Hurst Green in East Sussex. It is an important link between the M2 at junction 3 and the M20 at junction 6.

The junctions that make up this component scheme are located between approximately 1km and 2km to the south Maidstone town centre. It is at the Wheatsheaf junction that the A229 converges with another major route, the A274, to head north into the town centre. The locations of the junctions are shown in the figure below:



A229 Component Scheme Location Plan

Policy Context

National Transport Priorities

National Planning Policy Framework (NPPF) 2018 – highlights the purposes of the planning system to contribute to sustainable development and highlights the three overarching objectives of planning system:

a) **an economic objective** – to help build a strong, responsive and competitive economy, by ensuring that sufficient land of the right types is available in the right places and at the right time to support growth, innovation and improved productivity; and by identifying and coordinating the provision of infrastructure;

b) **a social objective** – to support strong, vibrant and healthy communities, by ensuring that a sufficient number and range of homes can be provided to meet the needs of present and future generations; and by fostering a well-designed and safe built environment, with accessible services and open spaces that reflect current and future needs and support communities' health, social and cultural well-being; and

c) **an environmental objective** – to contribute to protecting and enhancing our natural, built and historic environment; including making effective use of land, helping to improve biodiversity, using natural resources prudently, minimising waste and pollution, and mitigating and adapting to climate change, including moving to a low carbon economy.

Chapter 6 of the NPPF focuses on 'building a strong, competitive economy' and identifies that policies should 'seek to address potential barriers to investment, such as inadequate infrastructure, services or housing, or a poor environment'.

Chapter 9 of the NPPF concerns 'promoting sustainable transport' and states that 'transport issues should be considered from the earliest stages of plan-making and development proposals, so that…..opportunities from existing or proposed transport infrastructure, and

changing transport technology and usage, are realised – for example in relation to the scale, location or density of development that can be accommodated'.

The NPPF identifies the importance in early identifying infrastructure that should be improved in order to enable development, this view is supported by the Maidstone Borough Local Plan which identifies two of the junctions on the A229 Loose Corridor and therefore the scheme which is the subject of this Business Case.

Regional Transport Priorities

South East LEP: Growth Deal and Strategic Economic Plan 2014 – emphasises the importance of 'investment in our transport growth corridors/ areas.' This is alongside the 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 an additional role to play.

Published in March 2014, the SELEP Strategic Economic Plan (SEP) sets out the investment strategy for the area. This document includes the SELEP bid for Local Growth Fund, the primary source of funding for this project.

A component element of this is the Kent and Medway Growth Deal which sets out plans for the public and private sectors intent 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.

Local Transport Priorities

Local Transport Plan 4 (LTP4): Delivering Growth without Gridlock 2016-2031 – highlights that there is increasing congestion in town centres (including Maidstone) and 'growth across the county will be constrained unless we invest in increasing capacity or can reduce demand on the network.'

The overarching ambition of LTP 4 is *'To deliver safe and effective transport, ensuring that all Kent's communities and businesses benefit, the environment is enhanced and economic growth is supported.'* This ambition will be realised through five overarching policies;

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**:** Provide and promote active travel choices for all members of the community to encourage good health and wellbeing, and implement measures to improve local air quality.

The A229/ A274 corridor capacity improvements are identified in LTP 4 as transport priorities for Maidstone.

Maidstone Borough Local Plan, 2017 – the Local Plan has identified improvements to the existing highway network at the following locations:

- capacity improvements at the A229/A274 Wheatsheaf junction; and
- highway improvements at Boughton Lane and at the junction of Boughton Lane and the A229 Loose Road and have been identified as a key improvement.

In summary, the scheme aligns with the policy outlined above as it aims to provide improvements to existing infrastructure in order to enable the planned development within the region and supporting growth of the local economy.

Need for Intervention

Maidstone suffers traffic congestion on major radial routes during the peak periods. The network is dominated by such routes and potential for traffic to move between them is limited. There are 'hotspots' wherever traffic converges.

The highway network in Maidstone is operating at or over capacity during peak periods. Delays are prone to rapid escalation when problems arise at hotspots and from any other interruption to traffic flow. This is exacerbated by incidents on the M20; the impact from which rapidly affects the whole town. Traffic searches out alternative routes in such cases, often using inappropriate roads.

The road network to the south of Maidstone town centre, in particular, currently observes severe peak hour congestion and delay which is anticipated to be exacerbated by planned growth in the area as part of the adopted Local Plan up to 2031. The traffic problems in this area were recognised within the Examination of the adopted Local Plan following which the Inspector recommended an early review of the Plan to allow further investigation of potential transport mitigation in this area.

Largely as a result of the traffic congestion issues in the town, the entire urban conurbation of Maidstone is covered by an Air Quality Management Area (AQMA), which incorporates the two junctions on the A229 corridor which are identified for improvement as part of the MITP Phase 3. The AQMA was declared in 2008 following a review of air quality in the town which identified that the A229 Loose Rd/A274 Sutton Rd (Wheatsheaf) junction specifically had

exceedances of the nitrogen dioxide (NO_2) and particulates (PM_{10}) annual mean objectives due to emissions from road traffic.

Sources of Funding

£2.25m of S106 funding has been identified and is secured.

Impact of Non-Intervention (Do nothing)

The housing growth identified within the adopted Local Plan, with over 2,600 additional homes allocated to the south of east of the town centre as part of policy SP 3. The planned growth and associated traffic movements on top of the existing congested nature of the network are anticipated to cause significant additional delay and unreliability of journey times for road users.

Furthermore, the anticipated increase in vehicular trips will worsen the already poor air quality in a designated AQMA.

Objectives of Intervention

Project Objectives (add as required)

Objective 1: Reduced travel time along A229 corridor

Objective 2: Improved journey time reliability

Objective 3: Non-worsening of current air quality issues

Problems or opportunities the project is seeking to address (add as required)

Problem / Opportunity 1: Road user delay

Problem / Opportunity 2: Unpredictable journey time

Problem / Opportunity 3: Poor air quality

	Problems / opportunities identified in Need for Intervention section		
	Problem / Opportunity 1	Problem / Opportunity 2	Problem / Opportunity 3
Objective 1	✓✓✓	✓✓✓	✓✓
Objective 2	✓✓✓	✓✓✓	✓✓
Objective 3	✓	✓	✓✓✓

Constraints

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

- KCC committee approval;
- Statutory procedures must be completed in time for works procurement, construction preparation, and the main works; and
- LGF funding allocation granted by SELEP.

The locations for improvement are anticipated to be delivered within the highway boundary or Kent County Council owned land. Some third-party land may be required but this will be reviewed as the designs progress. Planning permission is unlikely to be required as the council already hold permitted development rights for the areas within the highway boundary.

Scheme Dependencies

None identified.

Scheme Benefits (including wider economic benefits)

The A229 Corridor component scheme is anticipated to derive the following benefits:

- Enable planned housing and employment growth;
- Journey time savings;
- Improved journey time reliability;
- Reduced rat-running on unsuitable routes;
- Non-worsening of existing air quality issues in locality;

Key Risks

The Management Case provides a risk register for the proposed schemes, with associated mitigation and residual risk ratings. Those risks with a residual score of 10 or greater are:

- Delays to the project pre-works;
- Delays and disruption during construction works;
- Utilities;
- General scope creep;
- Detailed design changes;
- Ground conditions;
- Materials prices; and
- Private ownership and consent issues.

Economic Case

Options Assessment

The A229 is a key radial route to the south of Maidstone town centre and there are limited alternative route options through this part of the town. The A229 suffers from severe congestion in the peak periods and significant traffic throughout the day. Historically a number of alternative arrangements have been proposed and assessed for the junction of the A229 with the A274, locally known as the Wheatsheaf junction. The operation of this junction and the adjacent A229/Armstrong Road junction are closely linked.

In September 2016, Amey undertook a feasibility study on the A229 Loose Road corridor, known as 'Maidstone Integrated Transport Phase 2'. This study was commissioned to investigate and develop solutions that have the potential for improving capacity along the A229.

A number of improvement options were investigated to establish their potential to deliver improvements in the traffic flow along the corridor, each option considered one particular area or section along the route.

Armstrong Road:

Option 1A

This option aimed to provide a dedicated right turn lane for the traffic turning into Armstrong Road from Loose Road all within the existing highway boundary. It is achieved by relocating the pedestrian crossing to the southern side of the junction allowing the northern central island to be reduced in size to accommodate a right turn lane.

Option 1B

This option provides an additional northbound lane on the approach to and through the junction that, whilst providing additional capacity, will reduce the occurrences upstream of lane swapping due to the lane 2 currently being a dedicated right turn into Park Way. Two traffic lanes will therefore be able to proceed northbound unhindered. This option combined with option 1A to provide n overall improvement in the north-south movements at this junction.

Option 2

There is adequate verge to widen Park Way to allow a 2-lane stop line to be introduced. This will provide approximately 30m additional storage for vehicles. Widening will improve the immediate capacity and may help reduce the required green time that could be redistributed to other phases.

Option 3

Consideration was given to a roundabout at this location. The layout was designed to generally satisfy geometric design standards whilst minimising land take. Pedestrian crossing points would need careful consideration and may need to be generally sited away from the roundabout and signal controlled for safety and operational reasons.

A229 Loose Road junction with A274 Sutton Road 'Wheatsheaf':

Option 4

An additional nearside northbound lane on the Loose Road approach to the junction will create approximately 150m of additional storage for northbound traffic as well as provide lane continuity through the junction. It required a large amount of third-party land from at least 20 properties on the west side of Loose Road, impacting on private gardens and accesses.

Option 5

The Sutton Road junction is a particularly difficult site to develop a roundabout solution without significant impact on the adjacent properties. It was also assumed that the demolition of the Wheatsheaf public house is unlikely to be seen as a viable option. A drawing identifying a roundabout would be possible at this location whilst retaining the Wheatsheaf but with some land acquisition from the adjacent properties was produced. This will require the closure of Cranbourne Avenue to ensure capacity benefits are realised.

Careful consideration was given to each option assessing a variety of aspects, including the impact on surrounding environment, required third party land take, identified capacity benefits, deliverability and cost. Options were also viewed by the local Members in terms of Political support for the recommended proposals. This has derived the options identified in this Business Case as delivering good value for money and strong capacity benefits.

Preferred Option

The preferred option which has been assessed here is for a roundabout to replace the existing signal controlled junction of the A229 with the A274 (Wheatsheaf junction). This is to be accompanied by improvements to the adjacent signalised junction at A229/Armstrong Road.

Assessment Approach

The Loose Road Corridor project comprises of improvements to two key junctions:

A229/Armstrong Road junction, and

A229/A274 Wheatsheaf junction.

Historically a number of alternative arrangements have been proposed and assessed for the A229/A274 Wheatsheaf junction. The proposed roundabout junction represents the preferred option, which has emerged as part of the Loose Road Corridor improvements.

The two junctions have been assessed using standard junction modelling software based on the existing junction layout (Do Nothing) and proposed junction format (Do Something). The difference in junction delay for the existing and the proposed junctions has been used to determine the potential benefits, as travel time saving, for each junction improvement. The combined travel time benefits have been used to represent the net benefit for the Loose Road Corridor project.

The appraisal is based on weekday peak hour travel time savings only and makes no allowance for any forecast increase in value of time.

Economic Appraisal Inputs

The Key appraisal inputs are summarised below.

Appraisal Inputs	Details
Demand	Peak hour travel time saving
Non-user benefits	na
Revenue	na
Capital Costs	£2.61m (for the two junction improvements)
Renewal Costs	na
Operating Costs	na

Economic Appraisal Assumptions and Results

Thekey appraisal assumptions and the outcome of the appraisal are summarised in the following tables. The appraisal pro-formas are included in **Appendix F**.

Appraisal Assumptions	Details
WebTAG version	WebTAG Data Book November 2018
Opening Year, Final Modelled Year and Appraisal Duration	Opening year 2021. Final modelled year 2032 Appraisal duration 15 years.
Price Base/GDP Deflator	Price Base 2010 GDP Deflator based on WebTAG databook (November 2018)
Real Growth (i.e. above CPI or below)	0
Optimism Bias	15%
Discounting	As per WebTAG at a rate of 3.5% per year for 30 years and 3.0% thereafter
Market Prices	Costs converted to market prices using indirect tax correction factor (1.19)

	£m PV (2010)
Costs	
Capital Costs	£2.38
Benefits	
Journey Time Benefits	£17.38
Appraisal	
Present Value of Costs (PVC)	£2.38
Present Value of Benefits (PVB)	£17.38
Net Present Value (NPV)	£15.00
Benefit Cost Ratio (BCR)	7.30

Sensitivity Tests

The BCR is based on estimates of vehicle delay at the A229/Armstrong Road and A229/Wheatsheaf junctions and current scheme costs for the two schemes which form the Loose Road Corridor component scheme.

Sensitivity tests were carried out to assess the impact of variation in the level of estimated benefits and possible change in costs. The tests were as follows:

Test 1 Costs increase by 10%

Test 2 Costs increase by 20%

Test 3 Costs increase by 20% and Benefits decrease by 20% (representing Wheatsheaf junction benefits).

	£m PV (2010)
Sensitivity Test 1	*Costs increase by 10%*
Present Value of Costs (PVC)	£2.62
Present Value of Benefits (PVB)	£17.38
Net Present Value (NPV)	£14.76
Benefit Cost Ratio (BCR)	6.64

	£m PV (2010)
Sensitivity Test 2	*Costs increase by 20%*
Present Value of Costs (PVC)	£2.86
Present Value of Benefits (PVB)	£17.38
Net Present Value (NPV)	£14.52
Benefit Cost Ratio (BCR)	6.08

	£m PV (2010)
Sensitivity Test 3	*Costs increase by 20% & Benefits by 10%*
Present Value of Costs (PVC)	£2.86
Present Value of Benefits (PVB)	£13.91
Net Present Value (NPV)	£11.05
Benefit Cost Ratio (BCR)	4.87

Environmental Impacts

A formal assessment of environmental impacts has not been carried out at this stage.

Environmental Impact	Assessment
Noise	Neutral
Air Quality	Moderate Beneficial
Greenhouse Gases	Moderate Beneficial
Landscape	Neutral
Townscape	Neutral
Heritage	Neutral
Biodiversity	Neutral
Water Environment	Neutral

Social Impacts

A detailed assessment of social impacts has not been carried out at this stage.

Social Impact	Assessment
Accidents	Neutral
Physical Activity	neutral
Security	neutral
Severance	neutral
Journey Quality	Slight Beneficial
Option values and non-use values	neutral
Accessibility	neutral
Personal Affordability	neutral
Accidents	Slight Beneficial

Distributional Impacts

Not assessed.

Wider Impacts

Not assessed.

Value for Money

The proposed A229 component scheme is forecast to be successful. When specifically considering value for money, the scheme generates an initial BCR of 7.30 which, as per the DfT Value for Money Framework, is categorised as high value for money.

A qualitative appraisal of environmental and social impacts of the scheme which range from neutral to slight beneficial impacts.

Based upon the individual economic appraisals of the other component schemes (contained in **Appendix E**) the overall Maidstone ITP Phase 3 package of schemes generate a range of BCR's from 2.65 to 7.30. It is therefore considered that the overall MITP Phase 3 scheme will represent high VfM.

Commercial Case

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 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 public 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 contactor.

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 contact. 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 Option

The preferred procurement route is to externally procure through an open tender route to encourage competition and drive value for money. This option has been selected even though the construction value of the scheme is less than £2.5m and is below the OJEU scheme value threshold.

Currently the construction industry is facing a resurgence in the industry. Discussions with the supply chain leaders indicate that highway projects are starting to increase in numbers and the market is becoming more competitive. The value of works currently being promoted is substantial and would be highly sought after by the supply chain. This allows KCC the opportunity to achieve greater economies and to drive the economies through the contract, demonstrate that value for money has been obtained.

Risks for KCC are the possibility that the size of the contract will only attract a limited number of suppliers. Early discussions indicate that there is interest in contracts of this nature.

Preferred Procurement and Contracting Strategy

This contract will promote early contractor involvement and allow greater time to plan future work, and offer greater opportunity to provide value engineering solutions. Current values of Major Project schemes are circa £5m which is a substantial incentive to suppliers to bid competitively.

Reports are presented to the Strategic Commissioning Board to demonstrate the preferred procurement route. A further report is delivered to the Procurement Board once PQQ's have been carried out highlighting the next stage of ITT.

All documents are entered onto the procurement portal for ease of access and transfer of details. An award report is taken back to the Procurement Board once the evaluation has been carried out, with the scoring and weighting identified with a recommendation of the preferred bidder. The Director or Corporate Director then signs off the award report and the contract is awarded accordingly.

Procurement Experience

Previous experience has been gained by successfully procuring Local Growth Funded projects, M20 J4 and Maidstone Bridges Gyratory. These followed the county council's approach to "Spending the Councils' Money".

Competition Issues

None identified.

Human Resource Issues

None identified.

Risk and Mitigation

It is expected that many of the design risks will only be able to be resolved through rigorous design and review processes. Once the design options are clear and scope of land acquisition, planning requirements, environmental requirements and statutory services issues are fully identified, the primary risks will be related to construction. There is potential for transferring these risks through the construction procurement process. This will be explored further as the scheme progresses.

The following table shows how risk will be apportioned in the design, build and operational phases of the scheme.

Risk Category	Potential Allocation			Notes
	Public	Private	Shared	
Design risk	x			Detailed design will be developed and will be issued to Contractor. Design risk is therefore apportioned to the public sector.
Construction and development risk			x	
Financing risks	x			
Legislative risks	x			
Other project risks			x	

Maximising Social Value

Social value will be brought to the scheme through the procurement process by ensuring that the contractor undertakes the following:

Economic Well-being

•Employment or training opportunities

•Apprenticeships

•Work experience placements

•Employing a local workforce

Environment Well-being

•Reducing impact on the environment

•Engagement with schools to promote sustainability

•Ethical supply chain, including supporting SMEs

Social Well-being

•Helping disadvantaged people to access employment or training

•Supporting community projects

•Charitable donations

Financial Case

Total project value and funding sources

The value and funding sources associated with the overall MITP programme are set out below:

Scheme	Amount (£000)		
	SELEP LGF	S106	Total
Coldharbour Roundabout	2,700 (secured)	816	3,516
A20 Ashford Rd/Willington St	2,000	0	2,000
A229 Loose Rd Corridor	2,000	618	2,618
A20/Hall Rd/Mills Rd	2,200	1,300	3,500
Total	**8,900**	**2,734**	**11,634**

The value and funding sources associated with the A229 Corridor component scheme are set out below. The full component scheme cost breakdown is provided in **Appendix G**.

Funding source	Amount (£000)							
	17/18	18/19	19/20	20/21	21/22	22/23	23/24	24/25
SELEP LGF			565	1,435				
S106				618				
Total project value			**565**	**2,053**				

Further sources of additional alternative funding are also still being investigated.

SELEP funding request, including type (LGF, GPF etc.)

The amount of funding sought to deliver the A229 Corridor component scheme is £2.528m. This together with the A20 Ashford Rd/Willington St and A20 London Rd/Hall Rd/Mills Rd component schemes equate to a total SELEP LGF funding request of £6.2m.

Costs by type

Cost type	Expenditure Forecast							
	17/18 £000	18/19 £000	19/20 £000	20/21 £000	21/22 £000	22/23 £000	23/24 £000	24/25 £000
Capital			436	1,574				
Non-capital								
QRA			95	333				
Monitoring and Evaluation								
Total funding requirement			565	2,053				
Inflation			17	163				

QRA

Quantified risk has been calculated by KCC's independent cost consultant and equates to approx. 16% of the total scheme cost.

Funding Commitment

Signed assurance relating to expenditure and programme delivery is included as **Appendix A**.

Risk and Constraints

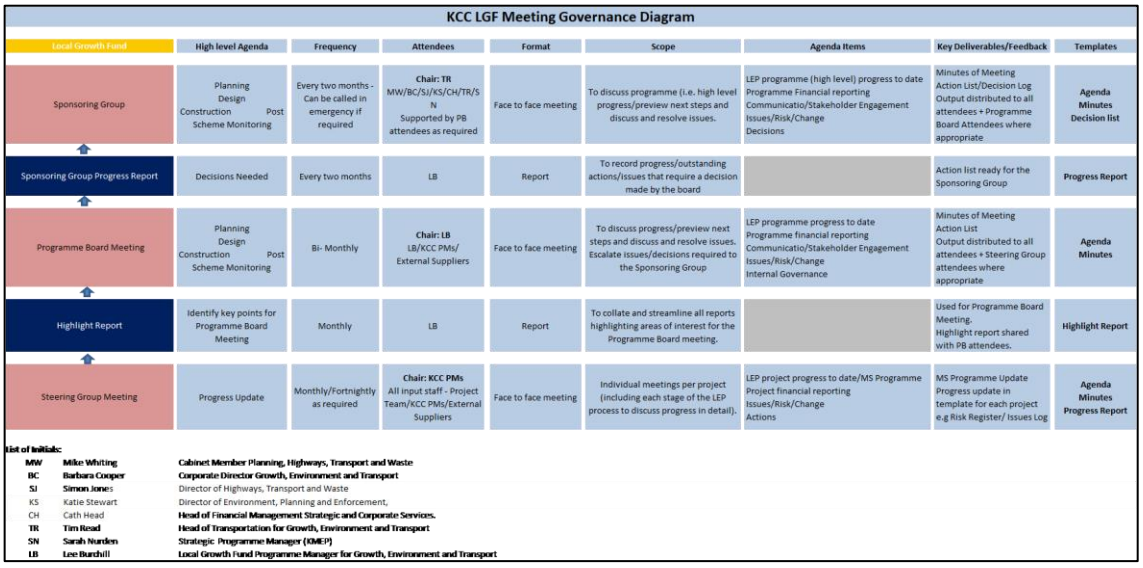
None identified.

Management Case

Governance

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

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



KCC LGF Meeting Governance Diagram

Local Growth Fund	High level Agenda	Frequency	Attendees	Format	Scope	Agenda Items	Key Deliverables/Feedback	Templates
Sponsoring Group	Planning Design Construction Post Scheme Monitoring	Every two months - Can be called in emergency if required	**Chair: TR** MW/BC/SJ/KS/CH/TR/SN Supported by PB attendees as required	Face to face meeting	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 Communicatio/Stakeholder Engagement Issues/Risk/Change Decisions	Minutes of Meeting Action List/Decision Log Output distributed to all attendees + Programme Board Attendees where appropriate	**Agenda Minutes Decision list**
Sponsoring Group Progress Report	Decisions Needed	Every two months	LB	Report	To record progress/outstanding actions/issues that require a decision made by the board		Action list ready for the Sponsoring Group	**Progress Report**
Programme Board Meeting	Planning Design Construction Post Scheme Monitoring	Bi- Monthly	**Chair: LB** LB/KCC PMs/ External Suppliers	Face to face meeting	To discuss progress/preview next steps and discuss and resolve issues. Escalate issues/decisions required to the Sponsoring Group	LEP programme progress to date Programme financial reporting Communicatio/Stakeholder Engagement Issues/Risk/Change Internal Governance	Minutes of Meeting Action List Output distributed to all attendees + Steering Group attendees where appropriate	**Agenda Minutes**
Highlight Report	Identify key points for Programme Board Meeting	Monthly	LB	Report	To collate and streamline all reports highlighting areas of interest for the Programme Board meeting.		Used for Programme Board Meeting. Highlight report shared with PB attendees.	**Highlight Report**
Steering Group Meeting	Progress Update	Monthly/Fortnightly as required	**Chair: KCC PMs** All input staff - Project Team/KCC PMs/External Suppliers	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 e.g Risk Register/ Issues Log	**Agenda Minutes Progress Report**

List of Initials:

MW	**Mike Whiting**	**Cabinet Member Planning, Highways, Transport and Waste**
BC	**Barbara Cooper**	**Corporate Director Growth, Environment and Transport**
SJ	**Simon Jones**	Director of Highways, Transport and Waste
KS	Katie Stewart	Director of Environment, Planning and Enforcement,
CH	Cath Head	**Head of Financial Management Strategic and Corporate Services.**
TR	**Tim Read**	**Head of Transportation for Growth, Environment and Transport**
SN	**Sarah Nurden**	**Strategic Programme Manager (KMEP)**
LB	**Lee Burchill**	**Local Growth Fund Programme Manager for Growth, Environment and Transport**

KCC Project Governance Structure

Approvals and Escalation Procedures

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 progress on the scheme. 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 comprise 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 LCC 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 Sponsors, KCC PMs, External Consultant and 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 the 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.

Sponsoring Group (SG) Meeting

The SG meeting is held monthly and chaired by Tim Read (KCC Head of Transportation). Attendees are Barbara Cooper (Corporate Director), Simon Jones (Director of Highways, Transportation and Waste) and Lee Burchill Local Growth Fund Programme Manager. The meeting discusses high-level programme progress to date, financial progress, next steps and closes out any actions from the escalation report. 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).

Project Management

Kent County Council's Major Capital Programme Team will deliver the Maidstone Integrated Transport Package. Senior Project Manager, Russell Boorman, is managing the schemes with the assistance of Project Officer, Isla Britchford. There is resilience within the team for further assistance is required, from the other six Project Managers. A detailed team structure can be seen in **Appendix G** identifying named individuals.

Key Stakeholders

Kent County Council carry out engagement with the local community and stakeholders. The A229 requires third-party land and therefore all engagement has been confidential. The local County Members/Borough Members have been party to the plans and invited to pass comment. They are supportive of the scheme and updates have been provided at the Maidstone Joint Transportation Board. A consultation plan has been formulated and includes the next stages of engagement, this will include business briefings, public engagement and Member briefings. Feedback will be collated accordingly and used to adjust the design where necessary.

Stakeholder Engagement

Stakeholder engagement will be undertaken throughout a scheme's lifecycle. This includes carrying out Member Briefings, Business Briefings, public engagement and transport operator engagement. Specific sessions will be held to enable the public to view the plans, meet the project team and raise questions. A dedicated email address for each scheme has been generated to enable queries to be dealt with in a timely manner. Schemes also have their own website that includes 'frequently asked questions', and details of why we are doing the scheme and benefits that will be achieved. When the schemes are being constructed, a Public Liaison Officer will be used to regularly update stakeholders with programme and progress. A

Newsletter is also distributed to local residents/businesses to keep them abreast of the progress being made with the scheme. KCC are now using social media to disseminate messages in ‘real-time’ and therefore Twitter pages are set up and managed for this purpose.

Equality Impact

An Equality Impact Assessment (EqIA) has not been completed to date. However, a screening assessment has been completed and a full EqIA will follow. Any results of feedback can then be included in the design process moving forward.

Risk Management Strategy

Project risk is managed as an on-going process as part of the scheme governance structure, as set out in previously in 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 Project Manager 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 meeting. Required mitigation measures are discussed and agreed at the PM meeting and actioned by the KCC Project Manager as appropriate.

An example scheme risk register is shown in the Figure below.

RISK REGISTER

Project Title: Example 1

Project Manager: Mr Smith

Date of Last Review: [illegible]

H High / M Medium / L Low

Total Risk Allowance: 0

Risk Closed

Risk Number	Risk Description	Date Logged	[illegible]	[illegible]	[illegible]	Nature of Impact (Commercial/Programme/H&S)	Action to be taken (Mitigation)	By When	By Who	[illegible]	[illegible]	[illegible]	Progress	Residual Cost Allowance in Project Estimate	Risk amended this review?
01	[illegible]	[illegible]	L	L	L	[illegible]	[illegible]	[illegible]		L	L	L			

Example Risk Register

Work Programme

A detailed project plan has been developed for the first phase of the project identifying the key design, procurement and construction milestones and interdependencies. Issues on the critical path for this first phase are the topographical surveys and CCTV of the drainage system.

A consultant, with associated suitable staff, has been appointed to undertake the first phase with regular progress updates provided to Kent County Council.

A detailed plan for later works has yet to be developed but a 32 week construction period, with an 18 week lead in period, is assumed.

Previous Project Experience

KCC have a successful track record of delivering major transport schemes within the county, the most recent of which were the Local Growth funded:

The Maidstone Bridges Gyratory project, completed in March 2017, was designed to reduce congestion, improve journey time reliability and support economic growth. A complex project within the heart of a busy county town was successfully delivered on time and to budget

whilst maintaining access for local businesses and commuters alike. The total value of the scheme was £5.74m of which £4.6m was funded by LGF.

M20 Junction 4 Eastern Overbridge Widening was implemented to reduce congestion and support local housing growth in the surrounding area. Completed in January 2017, this was a £5m LGF scheme delivered on time and within budget.

Westwood Relief Strategy, Poorhole Lane Widening was a 'Local Pinch Point' funded scheme that has seen the reduction in congestion at the highly trafficked location near the Westwood Cross shopping centre in Thanet. The £5m project was successfully completed in June 2015 within budget despite being a challenging construction scheme due to the amount of utility diversions required and large number of fibre optic cables requiring a close working relationship with a diverse range of companies.

North Farm Improvements, also funded through 'Local Pinch Point' was completed in October 2015 on budget but delayed due to very complex utility diversions and lack of co-operation from Statutory Undertakers. KCC has mitigated this risk on subsequent projects of a similar nature by engaging a dedicated Statutory Undertaker Co-Ordinator. With a total project cost of £7.35m, the scheme was delivered to reduce congestion, improve journey time reliability and benefit the air quality in a busy business area.

The East Kent Access 2 scheme objectives were to unlock the development potential of the area, attract inward investment and maximise job opportunities for local people. The scheme was successfully delivered within budget and ahead of programme (May 2012) through the adoption of a robust management. The total value of the scheme was £87.0m of which £81.25m was funded by Central Government and was awarded a regional Institution of Civil Engineers (ICE) Excellence Award.

Monitoring and Evaluation

At this stage it is not deemed necessary to outline a full methodology but to suggest a standard advisory series of monitoring and evaluation tasks. The following tasks will commence after implementation of the scheme in question.

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 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.

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

Benefits Realisation Plan

Tracking of the scheme benefits will be a key element in understanding the success of a specific intervention and the final value realised from public expenditure. The realisation of benefits is inherently linked to the Monitoring and Evaluation plan.

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.

To determine whether the scheme benefits are being realised, the outputs and outcomes have been converted into measurable indicators of scheme benefits; these are set out in the table below.

Scheme benefit indictors

Objective	Indicator
Reduced travel time along A229 corridor	Car journey times
Improved journey time reliability	Travel time variability
Non-worsening of current air quality issues	AQMA Monitoring

KCC will conduct a full evaluation of the impact of the scheme in the period after it is completed.

Scheme benefits monitoring measures

Measures	Monitoring	Benefit Realisation	Comments
Growth (housing, jobs)	Not measured directly – part of wider LGF package	Realisation involves other schemes, including non-transport (e.g. development)	Ongoing dialogue with related developers and monitoring of Housing completions on key housing sites.
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 and Local Plan management.
Journey Time reliability	Average vehicle journey times through corridor	KCC to review traffic signal operation to ensure optimum operation	Historic journey time data available for comparison with observed data
Air Quality improvement in scheme location	Nitrogen Dioxide	District Council/KCC	Ongoing as part of District Council Air Quality reviews

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 journey times and air quality. Any unexpected effects of the scheme will be reported upon and, where appropriate, remedial measures and a delivery mechanism identified.

Declarations

Has any director/partner ever been disqualified from being a company director under the Company Directors Disqualification Act (1986) or ever been the proprietor, partner or director of a business that has been subject to an investigation (completed, current or pending) undertaken under the Companies, Financial Services or Banking Acts?

[Yes/No]

Has any director/partner ever been bankrupt or subject to an arrangement with creditors or ever been the proprietor, partner or director of a business subject to any formal insolvency procedure such as receivership, liquidation, or administration, or subject to an arrangement with its creditors

[Yes/No]

Has any director/partner ever been the proprietor, partner or director of a business that has been requested to repay a grant under any government scheme?

[Yes/No]

[If the answer is "yes" to any of these questions please give details on a separate sheet of paper of the person(s) and business(es) and details of the circumstances. This does not necessarily affect your chances of being awarded SELEP funding.]

I am content for information supplied here to be stored electronically and shared in confidence with other public sector bodies, who may be involved in considering the business case.

I understand that if I give information that is incorrect or incomplete, funding may be withheld or reclaimed and action taken against me. I declare that the information I have given on this form is correct and complete. I also declare that, except as otherwise stated on this form, I have not started the project which forms the basis of this application and no expenditure has been committed or defrayed on it. I understand that any offer may be publicised by means of a press release giving brief details of the project and the grant amount.

Signature of Applicant

Print Full Name

Designation

Date

Appendix A - Funding Commitment

Draft S151 Officer Letter to support Business Case submission

Dear Colleague

In submitting this project Business Case, I confirm on behalf of *[Insert name of County or Unitary Authority]* that:

- The information presented in this Business Case is accurate and correct as at the time of writing.
- The funding has been identified to deliver the project and project benefits, as specified within the Business Case. Where sufficient funding has not been identified to deliver the project, this risk has been identified within the Business Case and brought to the attention of the SELEP Secretariat through the SELEP quarterly reporting process.
- The risk assessment included in the project Business Case identifies all substantial project risks known at the time of Business Case submission.
- The delivery body has considered the public-sector equality duty and has had regard to the requirements under s.149 of the Equality Act 2010 throughout their decision-making process. This should include the development of an Equality Impact Assessment which will remain as a live document through the projects development and delivery stages.
- The delivery body has access to the skills, expertise and resource to support the delivery of the project
- Adequate revenue budget has been or will be allocated to support the post scheme completion monitoring and benefit realisation reporting
- The project will be delivered under the conditions in the signed LGF Service Level Agreement with the SELEP Accountable Body.

I note that the Business Case will be made available on the SELEP website one month in advance of the funding decision being taken, subject to the removal of those parts of the Business Case which are commercially sensitive and confidential as agreed with the SELEP Accountable Body.

Yours Sincerely,

SRO (Director Level) ……

S151 Officer ……

Appendix B - Risk Management Strategy

Description of Risk	Impact of Risk	Risk Owner	Risk Manager	Likelihood of occurrence (Very Low/ Low/Med/ High/ Very High) (1/2/3/4/5) *	Impact (Very Low/ Low/ Med/ High/ Very High) (1/2/3/4/5) **	Risk Rating	Risk Mitigation	Residual Likelihood/Impact Scores
				[e.g. Medium 3]	[e.g. Very Low 1]	[Likelihood of occurrence multiplied by Impact]		

* Likelihood of occurrence scale: Very Low (1) more than 1 chance in 1000; Low (2) more than 1 chance in 100; Medium (3) more than 1 chance in 50; High (4) more than 1 chance in 25; Very High (5) more than 1 chance in 10.

** Impact scale: Very Low (1) likely that impact could be resolved within 2 days; Low (2) potential for a few days' delay; Medium (3) potential for significant delay; High (4) potential for many weeks' delay; Very High (5) potential for many months' delay.

Appendix C - Maidstone Integrated Transport Package Programme


ID
Task Mode
Task Name
Duration
Start
Finish
1 A20 London Road/Hall Road 697 days? Tue 31/07/18 Wed 31/03/21
2 Design 260 days? Mon 06/08/18 Fri 02/08/19
3 Procurement 102 days? Mon 12/08/19 Tue 31/12/19
4 Construction 153 days? Mon 02/03/20 Wed 30/09/20
5 A229 Loose Road Corridor 697 days? Tue 31/07/18 Wed 31/03/21
6 Design 284 days? Tue 31/07/18 Fri 30/08/19
7 Procurement 87 days? Mon 02/09/19 Tue 31/12/19
8 Construction 235 days? Mon 06/04/20 Fri 26/02/21
9 A20 Ashford Road 673 days? Mon 03/09/18 Wed 31/03/21
10 Design 260 days? Mon 03/09/18 Fri 30/08/19
11 Planning 110 days? Mon 02/09/19 Fri 31/01/20
12 Procurement 85 days? Mon 03/02/20 Fri 29/05/20
13 Construction 218 days? Mon 01/06/20 Wed 31/03/21
Project: Project1
Date: Tue 12/03/19
Task
Split
Milestone
Summary
Project Summary
External Tasks
External Milestone
Inactive Task
Inactive Milestone
Inactive Summary
Manual Task
Duration-only
Manual Summary Rollup
Manual Summary
Start-only
Finish-only
Deadline
Progress
Page 1

Appendix D – Monitoring and Evaluation Metrics

Category	Key Performance Indicators	Description
High-level outcomes	Jobs connected to intervention (permanent, paid FTE)	*[Add description where relevant to describe how the relevant KPIs will be used to monitor the outcomes]*
	Commercial floorspace planned - please state sqm and class	
	Commercial floorspace constructed to date - please state sqm and class	
	Housing unit starts (forecast over lifetime)	
	Housing unit starts (to date)	
	Housing units completed (forecast over lifetime)	
	Housing units completed (to date)	
Transport (outputs)	Total planned length of resurfaced roads (km)	
	Total completed length of resurfaced roads (km)	
	Total planned length of newly built roads (km)	
	Total completed length of newly built roads (km)	
	Total planned length of new cycle ways (km)	
	Total completed length of new cycle ways (km)	
	Type of service improvement	
Land, Property and Flood Protection (outputs)	Anticipated area of site reclaimed, (re)developed or assembled (ha)	
	Actual area of site reclaimed, (re)developed or assembled (ha)	
	Length of cabling/piping planned (km) - Please state if electricity, water, sewage, gas, telephone or fibre optic	
	Length of cabling/piping completed (km) - Please state if electricity, water, sewage, gas, telephone or fibre optic	
	Anticipated area of land experiencing a reduction in flooding likelihood (ha)	
	Actual area of land experiencing a reduction in flooding likelihood (ha)	
	Follow-on investment at site (£m) - Please state whether Local Authority, Other Public Sector, Private Sector or Third Sector	
	Anticipated commercial floorspace refurbished - please state sqm and class	
	Actual commercial floorspace refurbished - please state sqm and class	
	Anticipated commercial floorspace occupied - please state sqm and class	
	Actual commercial floorspace occupied - please state sqm and class	

Category	Key Performance Indicators	Description
	Commercial rental values (£/sqm per month, by class)	
	Anticipated number of enterprises receiving non-financial support (#, by type of support)	
	Actual number of enterprises receiving non-financial support (#, by type of support)	
	Anticipated number of new enterprises supported	
Business, Support, Innovation and Broadband (outputs)	Actual number of new enterprises supported	
	Anticipated number of potential entrepreneurs assisted to be enterprise ready	
	Actual number of potential entrepreneurs assisted to be enterprise ready	
	Anticipated number of enterprises receiving grant support	
	Actual number of enterprises receiving grant support	
	Anticipated number of enterprises receiving financial support other than grants	
	Actual number of enterprises receiving financial support other than grants	
	Anticipated no. of additional businesses with broadband access of at least 30mbps	
	Actual no. of additional businesses with broadband access of at least 30mbps	
	Financial return on access to finance schemes (%)	

Appendix E – Business Cases

Appendix F – Appraisal Pro-forma

Public Accounts (PA) Table

	ALL MODES		ROAD	BUS and COACH	RAIL	OTHER
Local Government Funding	TOTAL		INFRA STRUCTURE			
Revenue						
Operating Costs						
Investment Costs	822000		822000			
Developer and Other Contributions						
Grant/Subsidy Payments						
NET IMPACT	822000	*(7)*	822000			
Central Government Funding: Transport						
Revenue						
Operating costs						
Investment Costs						
Developer and Other Contributions	-822000		-822000			
Grant/Subsidy Payments	2240264		2240264			
NET IMPACT	1418264	*(8)*	1418264			
Central Government Funding: Non-Transport						
Indirect Tax Revenues		*(9)*				
TOTALS						
Broad Transport Budget	2240264	*(10) = (7) + (8)*				
Wider Public Finances		*(11) = (9)*				

Notes: Costs appear as positive numbers, while revenues and 'Developer and Other Contributions' appear as negative numbers.
All entries are discounted present values in 2010 prices and values.

Economic Efficiency of the Transport System (TEE)

Non-business: Commuting	ALL MODES		ROAD	BUS and COACH	RAIL	OTHER
User benefits	TOTAL		Private Cars and LGVs	Passengers	Passengers	
Travel time	16,339,578.200		16,339,578.200			
Vehicle operating costs						
User charges						
During Construction & Maintenance						
NET NON-BUSINESS BENEFITS: COMMUTING	16,339,578.200	*(1a)*	16,513,403.500			

Non-business: Other	ALL MODES		ROAD	BUS and COACH	RAIL	OTHER
User benefits	TOTAL		Private Cars and LGVs	Passengers	Passengers	
Travel time						
Vehicle operating costs						
User charges						
During Construction & Maintenance						
NET NON-BUSINESS BENEFITS: OTHER		*(1b)*				

Business							
User benefits			Goods Vehicles	Business Cars & LGVs	Passengers	Freight	Passengers
Travel time	1,042,951.800		1,042,951.800				
Vehicle operating costs							
User charges							
During Construction & Maintenance							
Subtotal	1,042,951.800	*(2)*	1,042,951.800				
Private sector provider impacts						Freight	Passengers
Revenue							
Operating costs							
Investment costs	822000						
Grant/subsidy							
Subtotal	822000	*(3)*					
Other business impacts							
Developer contributions	-822000	*(4)*					
NET BUSINESS IMPACT	1042951.8	*(5) = (2) + (3) + (4)*					

TOTAL		
Present Value of Transport Economic Efficiency Benefits (TEE)	17,382,530.000	*(6) = (1a) + (1b) + (5)*

Notes: Benefits appear as positive numbers, while costs appear as negative numbers.
All entries are discounted present values, in 2010 prices and values

Analysis of Monetised Costs and Benefits

Noise		*(12)*
Local Air Quality		*(13)*
Greenhouse Gases		*(14)*
Journey Quality		*(15)*
Physical Activity		*(16)*
Accidents		*(17)*
Economic Efficiency: Consumer Users (Commuting)	16,513,403.500	*(1a)*
Economic Efficiency: Consumer Users (Other)		*(1b)*
Economic Efficiency: Business Users and Providers	869,126.500	*(5)*
Wider Public Finances (Indirect Taxation Revenues)		*- (11) - sign changed from PA table, as PA table represents costs, not benefits*
Present Value of Benefits (see notes) (PVB)	17382530	*(PVB) = (12) + (13) + (14) + (15) + (16) + (17) + (1a) + (1b) + (5) - (11)*
Broad Transport Budget	2240263	*(10)*
Present Value of Costs (see notes) (PVC)	2240263	*(PVC) = (10)*
OVERALL IMPACTS		
Net Present Value (NPV)	15142267	NPV=PVB-PVC
Benefit to Cost Ratio (BCR)	7.76	BCR=PVB/PVC

Note : This table includes costs and benefits which are regularly or occasionally presented in monetised form in transport appraisals, together with some where monetisation is in prospect. There may also be other significant costs and benefits, some of which cannot be presented in monetised form. Where this is the case, the analysis presented above does NOT provide a good measure of value for money and should not be used as the sole basis for decisions.

Appendix G – Project Management Team