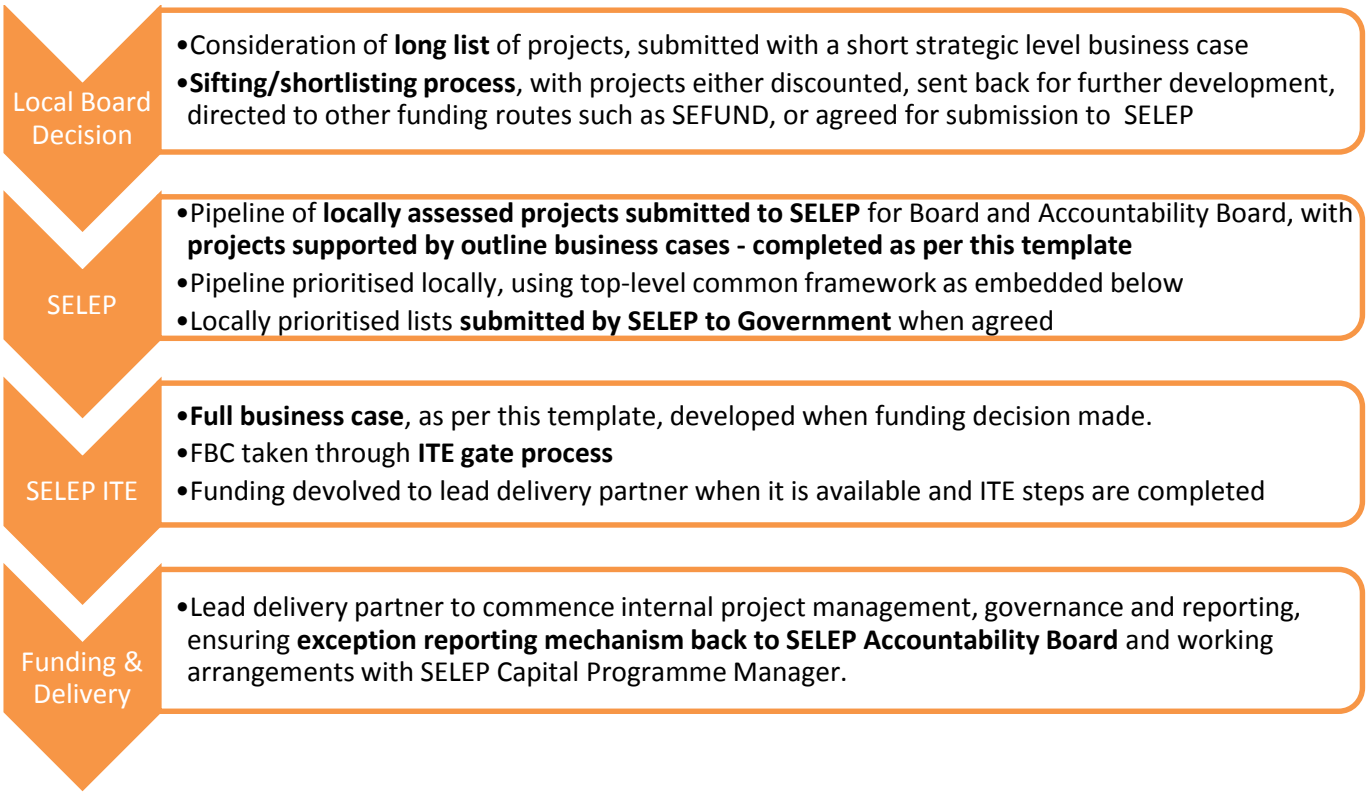
Capital Project Business Case A127 Essential Bridge & Highway Maintenance

The template
This document provides the template for non-transport project business cases for funding which is made available through the South East Local Enterprise Partnership. It is therefore designed to satisfy all SELEP governance processes, approvals by the Strategic Board, the Accountability Board and also the requirements of the Independent Technical Evaluation process where applied.

Please note that this template is for guidance purposes only and should be completed in accordance with the guidelines laid down in the HM Treasury's Green Book. https://www.gov.uk/government/publications/the-green-book-appraisal-and-evaluation-in-central-governent

The process
This document forms the initial SELEP part of a normal project development process. The four steps in the process are defined below in simplified terms. Note – this does not illustrate background work undertaken locally, such as evidence base development, baselining and local management of the project pool and reflects the working reality of submitting funding bids to Government.



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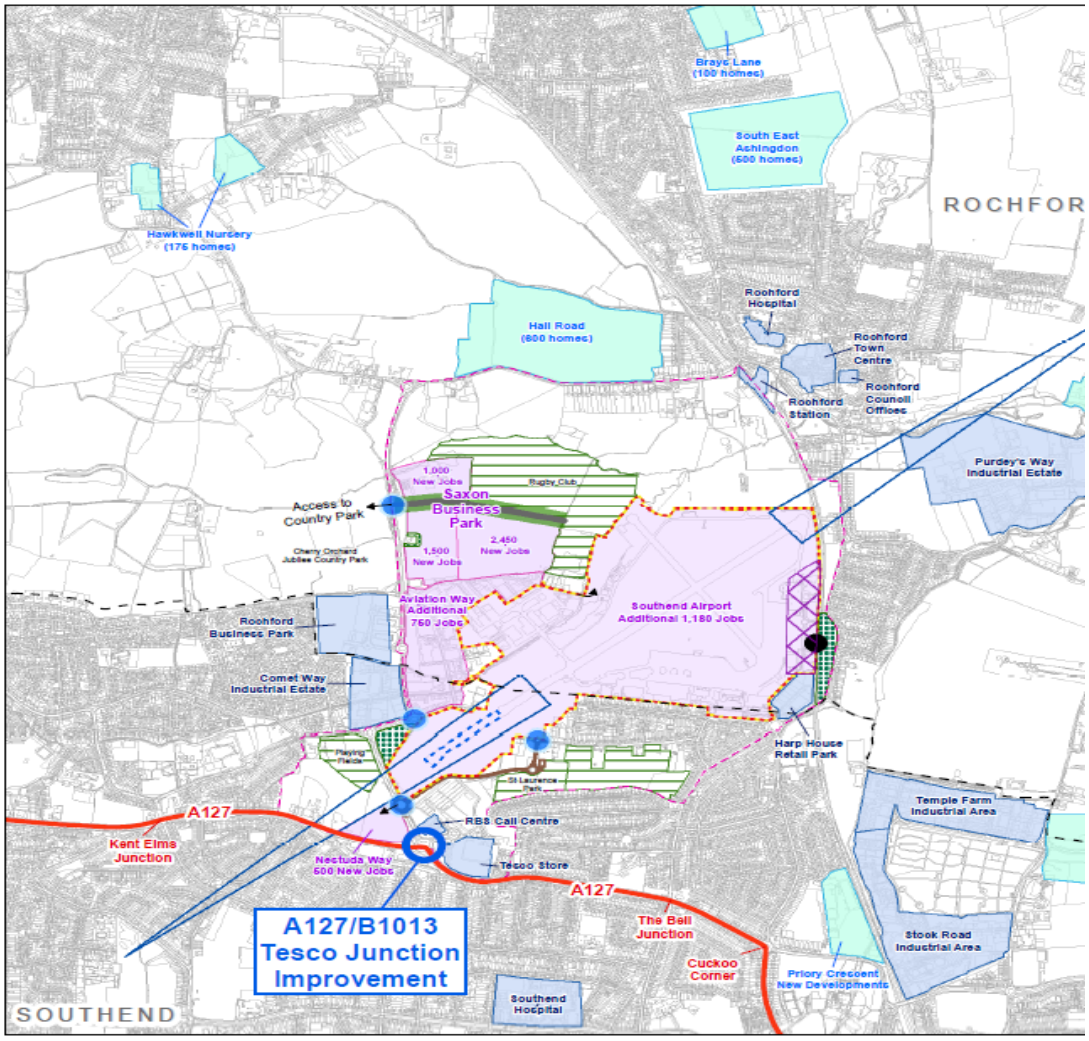
Applicants for funding for non-transport projects should complete the blue sections only	Applicants for funding for transport projects should complete both the blue and the orange sections

1. PROJECT SUMMARY	
1.1. Project name	**Southend Central Area Growth Point (Phase 1)**
1.2. Project type	*Maintenance Scheme*
1.3. Location	**Southend on Sea**
1.4. Local authority area and postcode location	**Southend on Sea Borough Council** **Southend Central Area (Victoria Avenue)**
1.5. Description	**Introduction** This proportionate business case has been developed using DfT's business case template for Local Authority Major schemes Application for Full Approval. This business case is considerate of the scheme costs and complexities and is for seeking £0.3m funding for year 16/17, £0.3m funding for 17/8 and £0.4m for 18/19 and will be further developed for drawing down the majority of the funding for 2018/19 – 2020/21 years funding. The requested funding will focus £0.2m on further surveys/investigations on the A127 and £0.8m supporting the replacement footbridge for A127 Kent Elms Junction Improvement scheme in which the business case (approved at 10th June Accountably Board) identified £0.8m from this project. Rather than repeating the A127 Kent Elms business case for the £0.8m funding element, this document will refer to the A127 Kent Elms business case and supporting documents where relevant. **Description** The A127 is an aging corridor (originally opened in 1924), but one that is a vitally important primary route for the Thames Gateway South Essex (TGSE) area which connects the M25, Basildon and Southend (including London Southend Airport). Both Essex County Council and Southend Borough Council have the stated ambition to make the County of Essex the location of choice for business and where innovation brings prosperity. • To maintain and grow, the Essex economy depends on the efficient movement of people, goods and information, via effective and reliable transport and communications networks to provide access to markets and suppliers. It is therefore essential that we develop and maintain the infrastructure that enables our residents to travel and our businesses to grow; and • Our support to employment and entrepreneurship across our economy is focused on ensuring a ready supply of development land, new housing and the coordinated provision of appropriate infrastructure.

The investment in this corridor is essential for the delivery of this ambition.



Plan showing JAAP area including A127 Major Junctions

Further investigation / surveys are needed to priorities the level of maintenance work required on the A127 route. This application for further funding will allow us to undertake further surveys which will then lead to option generation later in the process.

This application will also support a new pedestrian footbridge at A127 Kent Elms Junction Improvement. Refer to approved Business Case for A127 Kent Elms Junction Improvement for scheme details and economic case.

Public Consultation on the Highway and Footbridge options commenced on 21st March 2016 until 30th April. This included an online consultation questionnaire launched via the Bettersouthend website http://www.bettersouthend.com/and supported with an event on 11th April held at a local Primary School (Eastwood Primary School) at 2-4pm for parents of pupils and 4-8pm for general public.

A copy of the consultation report is contained within Appendix 8. Around 95% of respondents felt a footbridge is required at the junction with 41% in support of Option 2, footbridge with steps and 1:12 ramps.

	 **A127 Kent Elms Junction Improvement – final scheme including Option 2 footbridge**
1.6. Lead applicant	Southend on Sea Borough Council
1.7. Total project value	£8.00m
1.8. SELEP funding request, including type (e.g. LGF, GPF etc.)	LGF £0.3m 16/17, £0.3m funding for 17/18, £0.4m for 18/19. The remaining £0.6m profiled for 18/19 will be subject to a further business case submission once a review of the surveys are complete.
1.9. Rationale for SELEP request	The South East LEP Strategic Economic Plan identifies the A127 as a key corridor for growth. The A127 links London with Basildon and Southend and Rochford. In Basildon, the A127 corridor is home to one of the largest single concentrations of advanced manufacturing companies in the South of England. It makes substantial contributions to the prosperity of the SELEP area and offers considerable growth prospects. London Southend Airport, now with scheduled air services to Europe and hub airports for onward global travel, and planned business parks, will prove attractive to a wide range of global companies and offers capacity for at least 4,200 additional jobs up to 2021 and a further 3,180 post 2021. Southend and Rochford have agreed the Joint Area Action Plan (JAAP) to unlock these opportunities and the Council has appointed Henry Boot as their development partner. To enable growth in Thames Gateway South Essex the A127 requires substantial improvement and a higher level of maintenance. The 'A127 Corridor for Growth Economic Plan', approved by Cabinet, sets out the rationale and supporting evidence in detail. The A127 Corridor for Growth package is a partnership project between Essex County Council and Southend-on-Sea Borough Council. The Southend element includes A127 Kent Elms and A127 The Bell junction improvements, and A127 Essential Bridge and Highway Maintenance package. Elements of the A127 Corridor for Growth package have been designated as a "retained" scheme which, subject to the approval of the business case, will be supported by the Local Growth Fund.

Earlier modelling undertaken indicated significant congestion on the A127 without improvements schemes at the Kent Elms, Tesco and Bell junctions.

The A127/A1015 Kent Elms junction improvement works are programmed to commence construction in November 2016. Southend have improved the A127 on an incremental basis focusing on a junction one at a time. The scheme to be implemented is shown in Appendix 1 which includes the approximate location of the new pedestrian footbridge.

Without the improvements, the completed improvements at A127 Progress Road, A127/B1013 Tesco Roundabout, and A127/A1159 Cuckoo Corner will not fully maximise their intended benefits. This will have ongoing consequences for securing investment in Southend.

This intervention will demonstrate a strong commitment to provide the infrastructure needed to support the employment and housing numbers. The modelling has been based on 2021 projections of traffic growth and whilst this is predicated on full development, it is considered that this is the most credible position to adopt at present given the urgency around boosting economic growth. Whilst the development will be phased over the JAAP period, it must be recognised that in order to encourage the investment and increase the viability of the sites a clear, funded, route for infrastructure development must be put forward to support the JAAP developments and further economic growth.

The overall programme in invest in the A127 corridor to support the delivery of growth for Southend and airport business parks is to complete the A127/A1015 Kent Elms Junction Improvement in 16/17 followed by the completion of the A127 Bell Junction Improvement in 18/19 and supported by the A127 Essential Bridge and Highway Maintenance package of measures due for completion in 20/21.

Failure mode	Options	Future deterioration	Network impact
Transverse cracking	Do nothing	Water ingress through cracks causes leaching and settlement of subgrade. Debris ingress causes additional stresses as CBM base expands and contracts leading to spalling and faulting. Increased frequency of cracks (<4m apart) causes instability as road base 'blocks' get smaller	Disruption from reactive repairs to address spalling and potholes around cracks within 2-5 years. Severe safety implications of roadbase instability would require carriageway closure within 5-15 years Dependent on subgrade and roadbase condition. Full reconstruction would then be required.
Rutting	Do nothing	Ruts get deeper and affect binder course Load bearing capacity of surface courses is reduced leading to	Where structural rutting is found there may be annual traffic disruption from reactive maintenance within 2-5 years.

			deeper structural failure. Where associated with wheel track cracking structural failure will have already occurred leading to rapid deterioration of the surface through further subsidence, crazing and potholes.	Within 5-10 years deep ruts will cause safety impacts increasing risk to turning traffic and cyclists particularly at junctions. At this stage the only option will be wearing course and binder course replacement.

1.10. Other funding sources	Nil
1.11. Delivery partners	**Partner** / **Nature and/or value of involvement (financial, operational etc.)** Gaist — Technical support including condition surveys, preparation of the economic case, Asset Information Management Plan, development of the investment model, and government accounts. —
1.12. Start date	April 2015
1.13. Practical completion date	March 2021
1.14. Project development stage	~~*Inception,*~~ *option selection,* ~~*feasibility, detailed design, implementation*~~
1.15. Proposed completion of outputs	The new footbridge works will be completed in 2017. A127 maintenance package 2021.
1.16. Links to other SELEP projects, if applicable	A127 Corridor Package of measures (Essex). Within the boundary of Southend, A127 The Bell Junction and A127 Essential Bridge, Highway Maintenance package and London Southend Airport Business Park (ABP) – Phase 1 Infrastructure (Business case approved). The outline planning application for the business park site seeking detailed consent for the phase 1 infrastructure works was approved by Rochford District Council in February 2016, together with the sign off by the SELEP Accountability Board for £3.2m to unlock the new site by early development of the access infrastructure. A further application to the new round of Growth Funding for the Airport Business Park has been prepared and is being prioritised by the South Essex Growth Partnership. The scheme supports the more effective operation of recent junction improvements at A127/A1159 Cuckoo Corner, A127 Progress Road, A127/B1013 Tesco Roundabout, and A127/A13 Victoria Gateway.

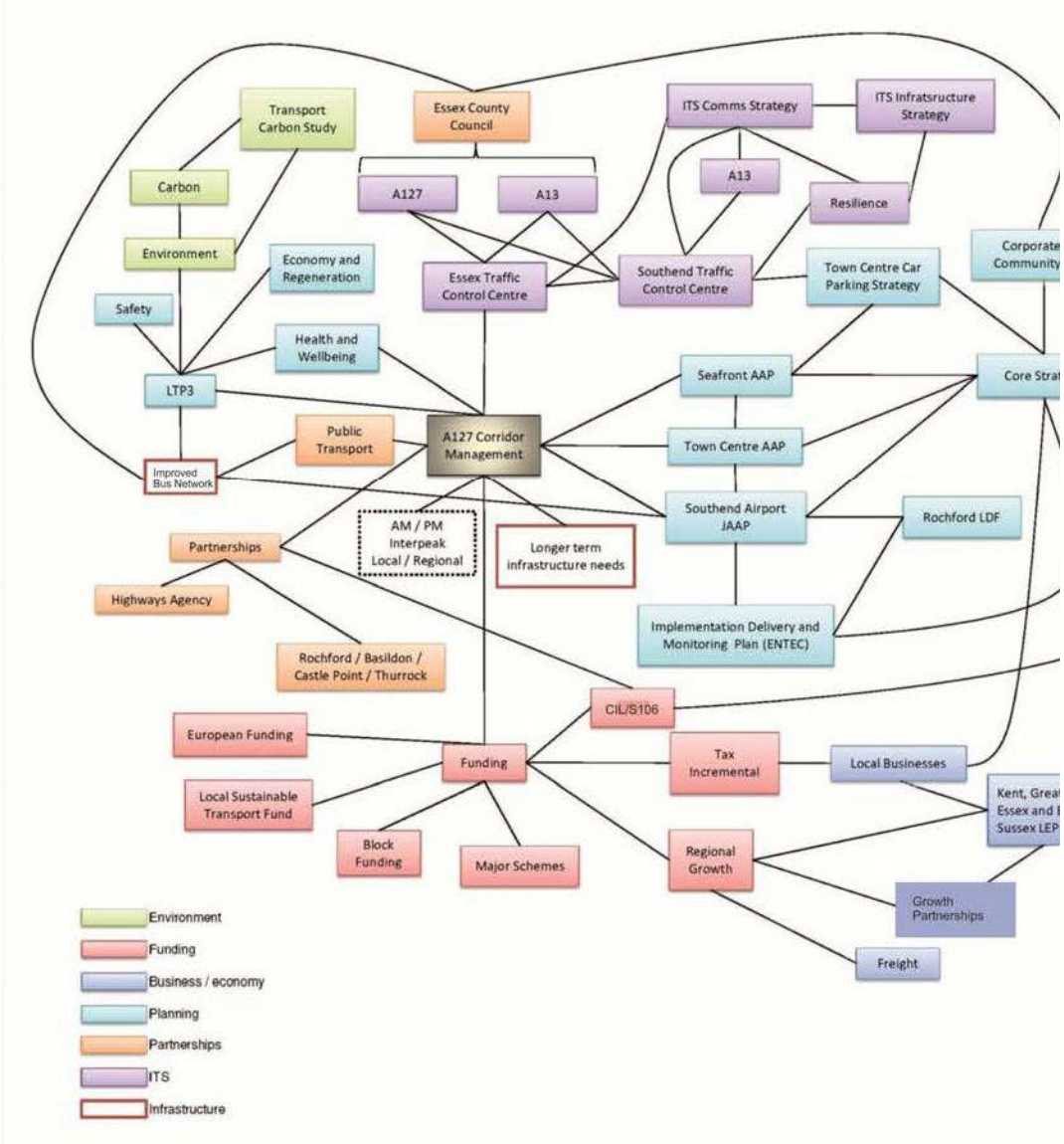
2. STRATEGIC CASE

The strategic case determines whether the scheme presents a robust case for change, and how it contributes to delivery of the SEP and SELEP's wider policy and strategic objectives.

2.1. Challenge or opportunity to be addressed

Introduction

The Council has a long standing strategic priority to address capacity issues, accessibility and journey time reliability along the A127 corridor. As identified in LTP3, the A127 is one of two routes into the Town Centre with the A127 being the strategic freight corridor into the town and principal access to London Southend Airport (LSA) and Rochford. The following figure below provides a diagrammatic representation of the importance of the A127, not just to the movement of people and goods, but to wider planning, the environment, transport planning, business and the economy, partnership working, and intelligent transport systems. It is vital to the economy and well-being of Southend.



Successful improvements to the A127 route, in terms of journey time savings and reliability, have been carried out incrementally as funding has been applied for and granted. The "Better Southend" schemes at A127 Progress Road, A127/A1159 Cuckoo Corner and A127/A13 Victoria Gateway were accepted for grant funding on the basis that they were required to support delivery of employment and housing, particularly at the A127 Progress Road Business Park, the London Southend Airport (LSA) area (Saxon Business Park), Town Centre and Shoeburyness. We recently completed improvements to A127 / B1013 Tesco Junction Improvement which was granted Pinch Point funding. The

A127 Progress Road and A127/A1159 Cuckoo Corner schemes delivered journey time savings of up to 15 minutes in the peak and significantly reduced queuing, and were a catalyst to Stobart's investment in LSA of c£150m.

Further improvements to the A127 are needed at A127/A1015 Kent Elms and The Bell Junctions, as well as A127 Essential Bridge and Maintenance improvements as an integral part of the access improvements supporting the delivery of Business Park employment in areas adjacent to LSA, and provision of new housing in Rochford.

Policy context and compliance

South East LEP Strategic Economic Plan identifies the A127 as a key corridor for growth. As the vital strategic link between London, the M25, Basildon, Southend and Rochford that carries commuters, leisure traffic, and freight it is critical to the functioning of the economy of south Essex.

London Southend Airport and the new adjacent business park developments is a key employment area with a major focus on growth in the Thames Gateway South Essex area and is heavily reliant on the efficient functioning of the A127.

Plans for LSA involve releasing further land for business development (Airport (Saxon) Business Park), providing improved access to employment, supporting development in and around the airport, and within Southend itself. LSA and planned business parks, will prove attractive to a wide range of global companies and offers capacity for at least 4,200 additional jobs up to 2021 and a further 3,180 post 2021.

Southend and Rochford Councils have adopted the London Southend Airport and Environs Joint Area Action Plan (JAAP) to unlock these opportunities. As a further boost to occupier interest, the Airport Business Park is one of the intended locations for a MedTech Campus. This is being proposed by Anglia Ruskin University in partnership with local government including SBC, central government, the NHS, private healthcare providers and the healthcare industry. The Southend Central Area (including Victoria Avenue) will be regenerated as a new quarter for offices and mixed use, including the City Deal secured Growth Hub. Comprehensive redevelopment plans for Basildon Town Centre are well advanced, including the relocation of South Essex College's Basildon Campus to the Town Centre.

Realising much of the growth depends upon resolving the key transport barrier to sustainable growth; addressing the significant reliability and resilience issues along the A127. At peak periods, the A127 carries traffic volumes which exceed those on many urban motorways elsewhere in the UK. Data shows the busiest sections of the route carried in excess of 70,000 vehicles (Average Annual Daily Flow) in 2011, which is in excess of the design capacity of a dual carriageway. With DfT's National Transport Model forecasting traffic can be expected to grow by over 40% by 2040, the adverse impact on Southend's economy could be significant if improvements are not made in the short, medium and long term.

Investment in this corridor is wholly compliant with the aspirations of the Economic Plan for Essex and the Economic Plan for Southend that will update and incorporate the Greater Essex Integrated County Strategy and the ECC Economic Growth Strategy. The package of improvement proposed supports the delivery of both the Southend and Essex Local Transport Plan, and has the support of partner authorities.

Furthermore, improving the A127 would support delivery of the growth aspirations of the South East Strategic Economic Plan, and contribute to the national economy as it recovers from the longest recession in living memory.

The improvement will support not only delivery of employment in the JAAP area, but more widely in Southend with over **16,000 new jobs** as shown by the following table:

Sector	Number of jobs
Production including manufacturing	788
Distribution, transport, accommodation and food	11,429
Financial and insurance activities	183
Public administration, education, health	183
Other services and household activities	4,108
Total	**16,690**

The GVA impact to Southend's economy is estimated to be **£4.51bn** over a 60 year period (ref to A127 Corridor for Growth in Appendix 4). Further details of the role of the A127 in delivering economic growth in Southend and Greater Essex can be found in *A127 – Corridor for Growth* which accompanies this submission in Appendix 4.

2.2. Description of project aims and SMART objectives

Please outline primary aims and objectives

Please present the SMART (specific, measurable, achievable, realistic and time- bound) benefits and outcomes on the local economy that will arise following delivery of the scheme in terms of numbers of jobs, new homes, GVA).

GVA impact - £4.51bn over a 60 year period.
Jobs – 16,690 across the Borough by 2031?

National / Regional Objectives	Local Objectives	Scheme Objectives ✓✓✓ = high, ✓✓ = medium, ✓ = low
Releasing new investment Investing in our growth corridors and growth sites Boosting our productivity	A thriving and sustainable local economy in the Borough	✓✓✓ The scheme will enable delivery of area actions plans throughout the Borough, particularly the JAAP and development around the airport. It will ensure the A127 freight corridor, essential to the functioning of the economy, will remain open and not be subject to catastrophic failure leading to full closure for long periods of time or long periods

			for reactive repair maintenance.
		Minimise environmental impact, promote sustainability for a greener Borough	✓✓✓ Freer flowing traffic along the A127 will deliver positive environmental benefits. A well maintained A127 using suitable sustainable materials will ensure the environmental impact of maintenance is minimised. Improved lighting infrastructure will reduce energy consumption and light pollution. Improved drainage will reduce the risk of contamination to watercourses and water table.
		A safer Borough	✓✓✓ A well maintained A127, using up-to-date methods and materials, will reduce the potential for road traffic accidents for all users. Improved reliable lighting will improve the perceived level of safety.
	Improving our skills	Reduce inequalities in health and wellbeing, and a more accessible Borough	✓ A well maintained A127 will ensures that the A127 route provides safe and efficient accessibility options for all road users. Also provides more reliable journey times providing assurance to major employers in the borough including Southend Airport and JAAP business parks.
	Building more homes	A thriving and sustainable local economy in the Borough	✓✓✓ A well maintained A127 will ensure the economy of Southend can deliver employment growth, and that the demand for labour can be met by an increasing, appropriately qualified, labour force that can be accommodated in the Borough.

There are a number of both direct and indirect objectives of this scheme. These are set out below:

- Objective 1 - Reduce reactive maintenance
- Objective 2 - Improve public perception
- Objective 3 - Deliver a financially sustainable scheme package which limits long-term maintenance liability
- Objective 4 - Deliver scheme to the programme
- Objective 5 - Maintain or improve the local environment around the scheme

The Economics of Road Maintenance Report (Gould et al 2013) produced by Transport Research Laboratory (TRL) on behalf of RAC Foundation and the Association of Directors of Environment, Economy, Planning & Transport (ADEPT) suggests that timely treatment of assets can keep them in a good state of repair and reduce or delay further degradation. While this incurs earlier costs it can avoid greater costs in the future and therefore reduce net present costs to the highway authority. It also implies that planned maintenance regimes may:

- Reduce accident rates;
- Reduce wear and tear on vehicles;
- increase journey times/ improve journey reliability;
- Decrease noise and vibration for adjacent properties;
- Decrease fuel consumption and emissions;
- Reduce creations of spray and dust;
- Greater impact of interventions by others;
- Reduced risk of asset failure; and
- Improved accessibility for all types of road users.

It is clear that investment in road maintenance can improve a number of factors which be measured in both a quantitative and qualitative terms.

Carriageways and footways: a detailed visual survey of both carriageway and footway surface (Carriageway and Footway Treatment Surveys) was undertaken in both 2014 and 2015 by Gaist Solutions Ltd to assist in identifying treatment options. With two consecutive years' worth of data and corresponding video imagery from both years it has been possible to detect where deterioration is occurring most rapidly.

On the carriageway the survey has highlighted a number of areas where surface distresses are indicative of **structural failures** particularly with the prevalence of transverse reflective cracking. In other locations **rutting** is a significant problem, in particular at the junctions of Carnarvon Road, Rochford Road (The Bell) and the Prince Avenue slip road.

In many locations where reflective cracking has been identified it is possible that these may due to thermal shrinkage of the concrete (CBM) roadbase. However, there is also a possibility that some cracking may be caused by localised movement and settlement of the subgrade. This cannot be ascertained without further investigation of cores and a high resolution GPR survey that will provide insight into the locations of voids, high subgrade moisture levels and degradation of roadbase and subbase materials.

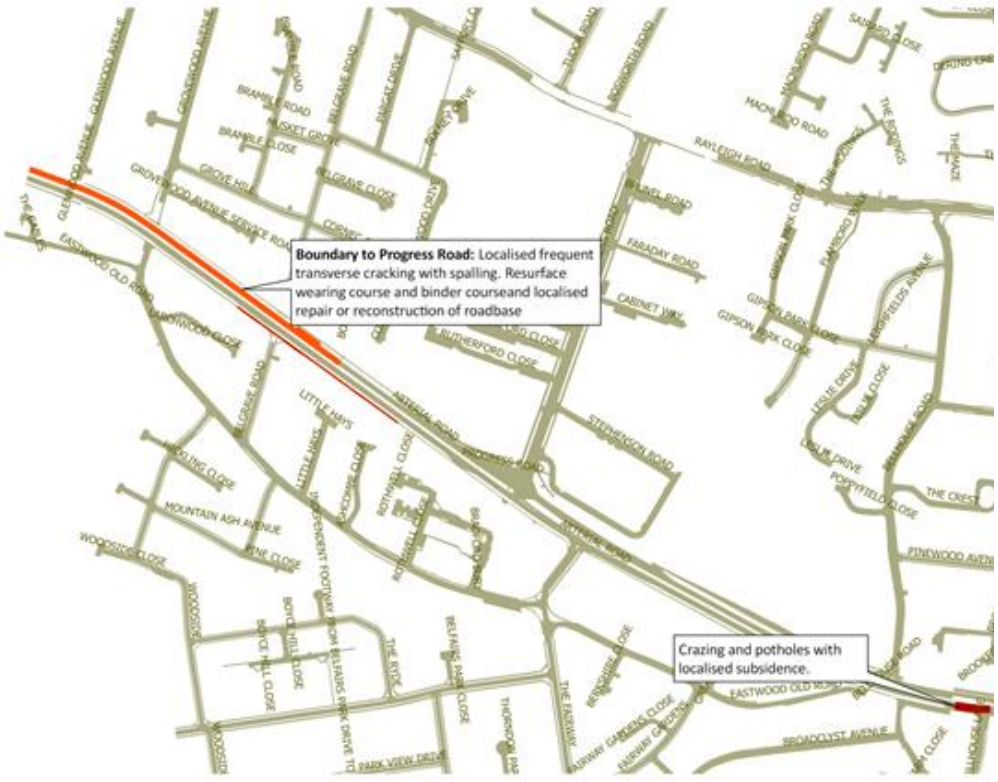
Additionally, in order to determine the overall strength of the roadbase a Falling Weight Deflectograph survey will provide important information in determining the extent of reconstruction that will be required.

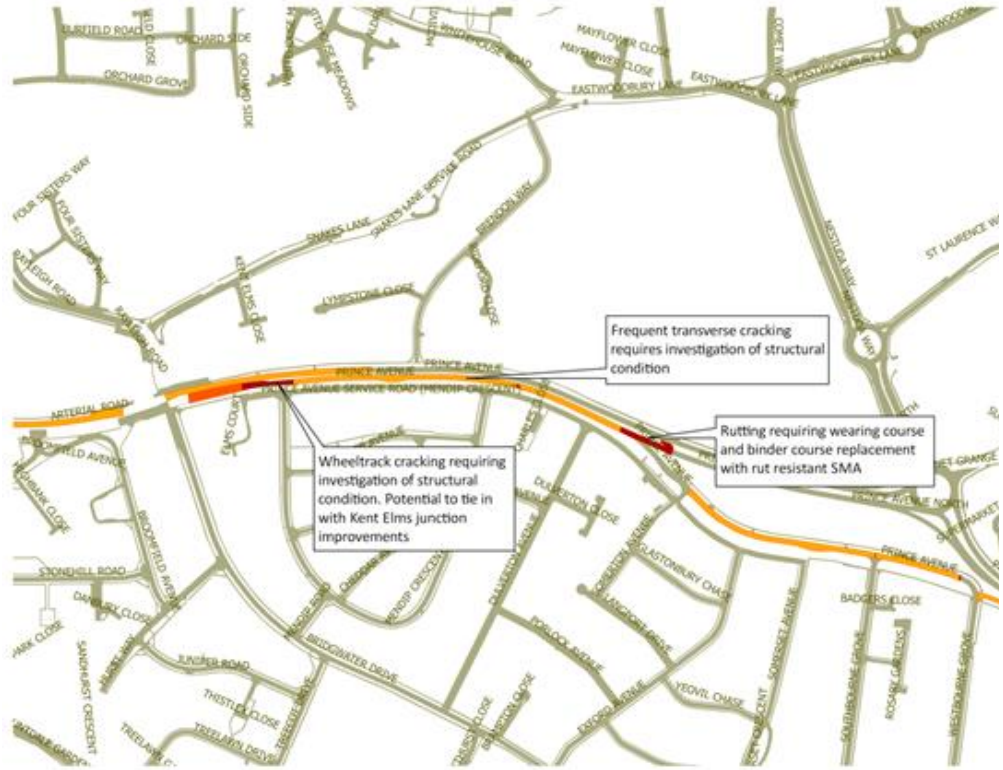
It is therefore proposed that further structural condition surveys are undertaken throughout 2015/16 and 2016/17 to establish the baseline condition and inform the need for more extensive reconstruction.

Gaist Solutions has been commissioned to develop forecasts of condition and investment requirements using deterioration models calibrated on condition data and pavement age estimates. The A127 will be modelled alongside the whole of Southend's network and this will support the value for money assessment as part of the emerging asset investment strategy for Southend's carriageways and footways. This will inform the development of the programme of works for 2018/19 to 2020/21.

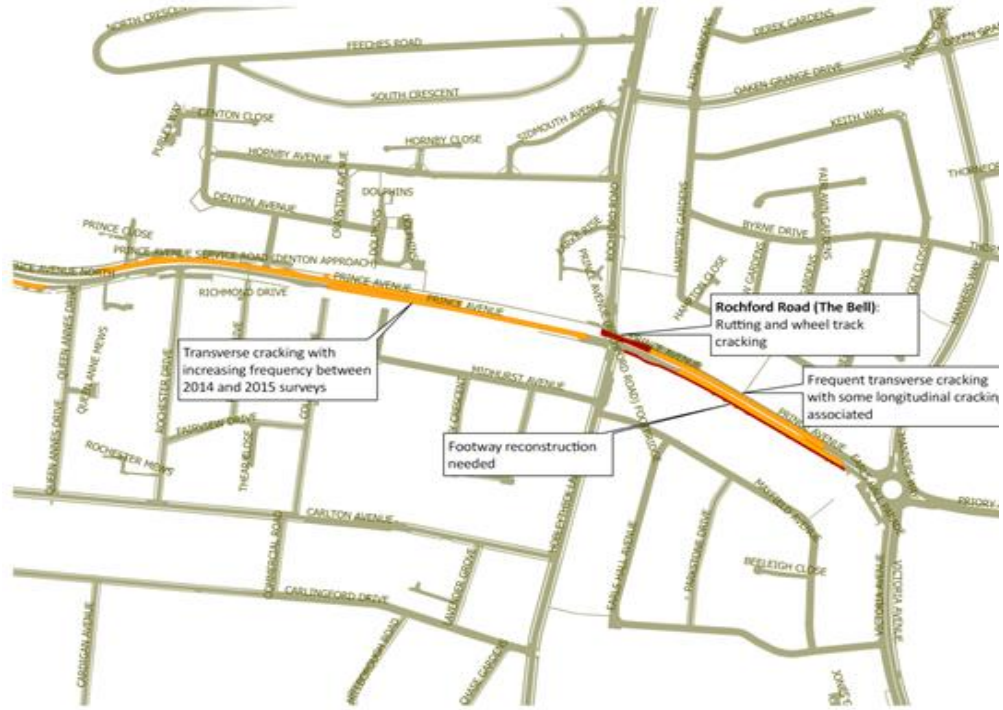
On the basis of existing data the following priorities has been identified:

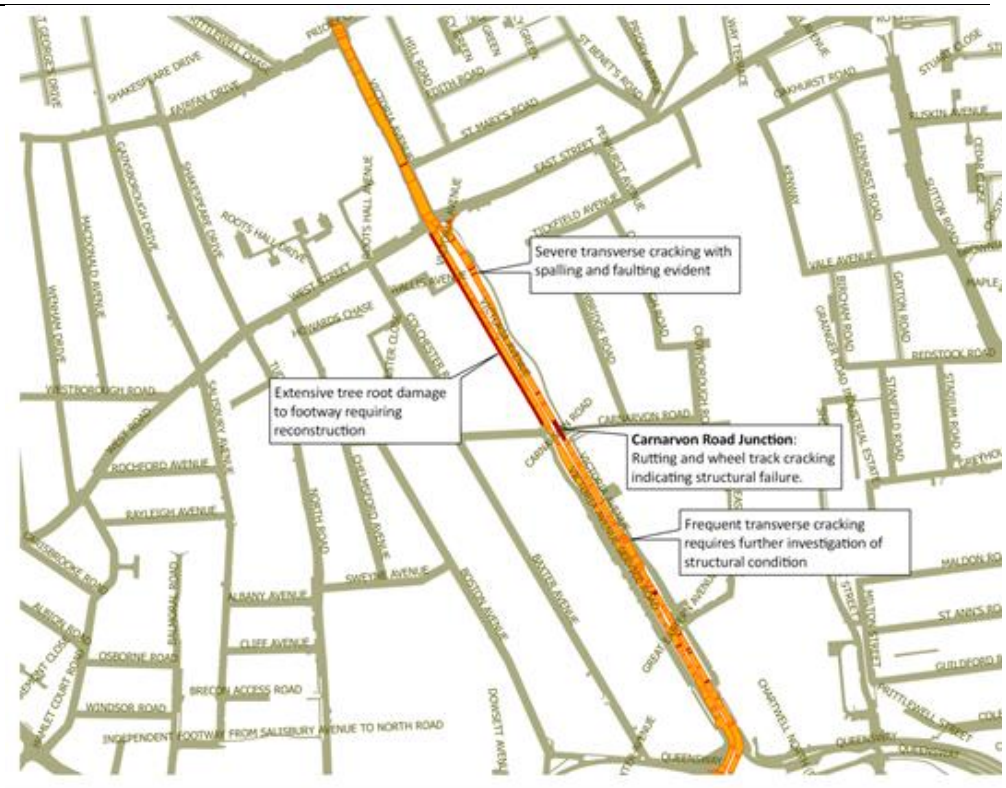
- Eastbound carriageway from Boundary to Progress Road junction – **transverse cracking** is particularly intense on the east bound section from the Boundary towards the Progress Road junction (prior to the A127 junction improvement works) and evidence indicates that the structural condition is deteriorating rapidly with **significant spalling** and severe impacts on ride quality. In 2015/16 resurfacing of the wearing and binder course along this section was completed.





- A127/A1158 Prince Avenue junction – there was evidence of significant **rutting** which was address within the A127/B1013 Tesco Junction Improvement works.
- Rochford Road junction (The Bell) – there is evidence of **structural failure including rutting and wheeltrack cracking as well as extensive problems with failed reinstatements**. It is proposed that carriageway partial or full reconstruction is undertaken alongside the capacity improvements programmed for 2018/19. Further structural condition data will be required to determine the appropriate treatment.





- **Street lighting:** it is proposed to undertake a **complete renewal of street lighting ducting and control gear along the route**. This will be programmed for 2018/19 to 2017/18.
- **Drainage:** further connectivity and CCTV surveys are required to investigate the condition of drainage including culverts and carrier pipes. As indicated above, there are indications that structural failure may be linked to high subgrade moisture levels and redesign of drainage may be required in these locations alongside reconstruction of the carriageway.
- **Safety Barrier:** further surveys are required to investigate the condition of the existing safety barrier and replacement/upgrade as necessary.
- **A127 Kent Elms new footbridge:** the existing footbridge requires to be removed due to additional lanes east and westbound on the A127 at Kent Elms Junction.

2.3. Strategic fit (for example, with the SEP)

Please detail the SELEP and local objectives/strategies/work programmes/ services which the investment will support

The South East LEP's Strategic Economic Plan (SEP) set the following growth objectives to 2021:

- Generate 200,000 private sector jobs, an average of 20,000 a year or an increase of 11.4% since 2011;
- Complete 100,000 new homes, increasing the annual rate of completions by over 50% compared to recent years.

The SEP identified its key growth sectors as advanced manufacturing, logistics and life sciences / med tech. These accounted to for 5.7% of total SE LEP employment, 4.2% of SE LEP businesses and 12.2% of the LEP's total GVA.

It recognised that delays on major routes in the LEP area had detrimental impacts on business costs and efficiency. The SEP focuses on the development of 12 growth corridors across the LEP area. One of these is the A127 London-Basildon-Southend Corridor and

	would unlock capacity to support the accelerated delivery of housing and employment. The SEP makes reference to the fact that London Southend Airport, now with scheduled air services to Europe and hub airports for onward global travel, and its neighbouring business park, is proving attractive to a wide range of global companies and offers capacity for at least 4,200 additional jobs up to 2021 and a further 3,180 post 2021. It refers to the fact that one of Anglia Ruskin University's Med Tech campuses is being developed in Southend. The SEP states: *"The A127 Corridor is vital to the economic growth of the SELEP area, connecting London to the manufacturing hub of Basildon, and to Rochford, Southend, London Southend Airport and surrounding employment areas."* At a more local level Southend Borough Council and Essex County Council have developed a joint "A127 Corridor for Growth" economic plan to identify, plan and coordinate investment decisions and manage the asset. This is primarily to establish the conditions, in transport terms, to unlock growth in the key locations of Southend, Rochford and Basildon will see nationally significant growth in the advanced manufacturing and medical technologies sectors.
2.4. Planning policy context and permissions	Southend-on-Sea's Core Strategy (2007) states that improvements to transport infrastructure and services will be sought to secure a 'step change' in provision that will be necessary to unlock key development sites for employment led regeneration and growth of Southend. This particularly includes improving the A127/A1159 east-west strategic transport and freight corridor including junction improvements at A127 Progress Road, A127/A1015 Kent Elms, A127 The Bell, A127/A1159 Cuckoo Corner, Sutton Road, Fairfax Drive, East/West Street and A127/A13 Victoria Gateway. Some of these improvements have been delivered, but Kent Elms and The Bell junctions in particular form a key pinch point where improvements would make the A127 within the Southend boundary operate more effectively by providing increased capacity and reducing congestion and associated delays. The Core Strategy is supported by a suite of daughter documents, of which, two are particularly relevant: Southend Airport and Environs Joint Area Action Plan (JAAP - 2014) and the Southend Central Area Action Plan (SCAAP). Although the JAAP's focus in the immediate area around the airport, it recognises that the location's attractiveness for investment is partly based on its proximity to the A127 which provides a strategic link to Essex, London and beyond. However, there are issues of congestion and delays with the route that need to be addressed if it not to be seen as a barrier to investment in the area. This is particularly important for the LEP prioritised sectors that have indicated a willingness to locate in JAAP area business parks, but could conceivably be put off by concerns related o being able to access the wider labour market, and getting their products to customers. Similarly, the SCAAP has a focus on development on the immediate area, but it too is linked to the far end of the A127 which will be the main route for visitors to Southend arriving by road based transport. An A127 that does not work well, subjecting travellers to delays and congestion, will be a significant barrier to enticing people to Southend, irrespective of the attractiveness and inducements of the developed central area.

	Following completion of land negotiations for the small area of land at Tops Fireplaces car park planning approval will be required for areas of land being transferred from retail use to Highway. Any new bridge does not require planning permission as it will be within the Highway.
2.5. Delivery constraints	*High level constraints or other factored which may present a material risk to delivery* Main constraints relation to the new footbridge are: <u>Relocation of utilities</u> Discussion with Utility Undertakers are at an advanced stage and the design has been amended, where practical, to minimise diversion works. The physical works to relocate those apparatus still impacted by the scheme will commence in May in collaboration with SBC's Lot 2 New Works Term Contractor. <u>Traffic Regulation Orders</u> Road space for scheme implementation has been booked. For any necessary Temporary and Traffic Regulation Orders the Chief Executive and Corporate Director for Place, have delegated authority. Traffic Regulation Orders are not deemed necessary for the options. <u>Public Consultation</u> Public Consultation on the Highway bridge options for A127 Kent Elms Junction Improvement commenced on 21st March 2016 until end of April 2016. This included an online consultation questionnaire launched via the Bettersouthend website and supported with an event on 11th April held at a local Primary School (Eastwood Primary School) on 2-4pm for parents of pupils and 4-8pm for general public. The event was well attended and approximately 95% of respondents requested a new footbridge. The consultation report is attached to this report.
2.6. Scheme dependencies	*Please provide details of any related or dependent activities that if not resolved to a satisfactory conclusion would mean that the full economic benefits of the scheme would not be realised.* Benefits realisation from the scheme will only be fully realised if the package of A127 schemes (Tesco Roundabout, A127 Kent Elms, A127 The Bell Junction, and A127 Maintenance Package) can be delivered.
2.7. Scope of scheme and scalability	*Please summarise what the scope of the scheme is. Provide details of whether there is the potential to reduce the projects costs but still achieve the desired outcomes.* Refer to A127 Kent Elms Business Case.
2.8. Options if funding is not secured	*Please summarise what would happen if the funding for the scheme was not secured - would an alternative solution be implemented and if so please identify how it differs from the proposed scheme.* *Is doing nothing an option?*

	The potential impact of not undertaking maintenance is severe for the local economy. If maintenance is not carried out and the road fails leading to full closure, the impact would be: • Significant adverse impact on Southend's GVA and productivity as a consequence of businesses being unable to perform their activities. • Significant adverse impact on the leisure sector which plays a major role in Southend's economy. • Significant adverse impact on the business sector which plays a major role in Southend's economy and future economic growth. • Resilience – there are no realistic alternative routes to the A127 to access Southend so diversions would not work effectively. The A13 is a congested, mainly lower speed public transport corridor. The A130 is not a realistic diversionary route for east-west traffic flows. Refer to A127 Kent Elms for new footbridge element. The results of the public consultation was highly in favour of a new footbridge with approximately 95% of respondents indicating a footbridge is required.

3. ECONOMIC CASE

The economic case determines whether the scheme demonstrates value for money. It presents evidence on the impact of the scheme on the economy as well as its environmental, social and spatial impacts. For projects requesting over £5m of SELEP directed funding, a full economic appraisal should be undertaken and supplied alongside this application form.

3.1. Impact Assessment

Please provide a description of the impact assessment of the scheme with some narrative as to why other options have been discounted.

Refer to Kent Elms Business Case for new footbridge element

Existing evidence on economic impacts

Guidance and evidence contained within WebTAG is limited in relation to the appraisal of traffic impacts and economic costs of maintenance schemes. Indeed, available programs such as QUADRO that are often used to estimate traffic impacts of road works are not appropriate for use in urban contexts such as this.

At this stage it is useful to draw on the experience of appraisal of other maintenance schemes where network impacts have been estimated. These are typically undertaken for structures schemes where there is a clear condition based mandate for the imposition of traffic restrictions or full closure.

As indicated in the table above, **without intervention it is highly likely that some emergency closures** would be required where the roadbase has become unstable and therefore in these instances structures schemes may provide a valid comparison.

A YouGov survey (AIA, 2013) showed that poor condition local roads were costing Small and Medium-sized Enterprises (SMEs) in England and Wales approximately £5bn each year through operational inefficiencies, production delays, raw material and end product delivery delays, and vehicle repair costs, among other factors. The Confederation of British Industry (CBI) found that "94 per cent of business leaders surveyed cited road surface quality as a key concern".

Qualitative assessment of benefits

The scheme could achieve user benefits, assessed qualitatively, in respect of the following:

- Economic prosperity and efficiency –
  - User travel time delay and distance cost efficiency savings, associated with less reactive unplanned maintenance disruption and traffic diversion;
  - User journey reliability improvements;
  - Regeneration of the local economy by improving labour access to opportunities, attractiveness for business activity and number of visitors;
  - Wider economy benefits from business agglomeration, increased output and income tax revenues;
- Environment –
  - Decongestion benefits in terms of noise; local air quality; greenhouse gases; landscape; townscape; and heritage;
  - Biodiversity; and water;
- Social well-being –
  - Accidents; and physical activity;
  - Journey quality;

	○ Value for non-users; affordable travel; security; access to opportunities and door-to-door options; and severance. Taking each of the above qualitative assessments of user benefit items together, it is likely that when the BCR is calculated it will, in all likelihood, underestimate the benefits of the scheme.
3.2. Outputs	*Identify jobs, floor space and housing starts connected to the intervention, quantify the outputs in tabular format and provide a short narrative for each theme (i.e. jobs/homes/floorspace) explaining how the project will support the number identified.* ***Please describe the methodology used for calculating jobs and homes numbers.*** *Homes* **SHLAA Update 2014** **Potential Housing Supply in Southend on Sea** The NPPF requires planning authorities to be able to demonstrate a five year supply of housing plus an additional 5%. The Core Strategy phased housing requirement for the next 5 year period (2013 to 2018) is 1,570. An additional 5% would equate to 1,649. The implementation of all outstanding residential planning permissions would result in an additional 2,033 net additional dwellings, of which 1,608 are predicted to be delivered in the next five years, which falls slightly short of the 5 year housing supply target + 5% of 1,649. However, past performance and delivery of windfall sites indicates that a windfall allowance of 402 can be applied to the housing delivery in Southend for the next 5 year period, resulting in a supply of 2,010 net additional dwellings, providing sufficient supply of housing to meet the targets. This information demonstrates that Southend has a good supply of readily available housing sites to meet a five year housing supply and beyond. According to the above results a 6.4 year housing land supply can be demonstrated for Southend. [2,010/ (1570/5) = 6.4]. Applying the 5% buffer to the housing target results in a 6.09 year housing land supply [2,010/ (1649/5) = 6.09] **Summary of 15-year Dwelling Provision** | | To date 2001/2014 | 5 Year Supply 2014/2019 | 10 Year Supply 2014/2024 | 15 Year Supply 2014/2029 | |---|---|---|---|---| | Completions | 4,237 | | | | | Outstanding Planning Permissions | | 553 | 582 | 582 | | SHLAA Sites with Planning Permission | | 1055 | 1451 | 1451 | | SHLAA Sites without Planning Permission | | 0 | 966 | 2106 | | Windfall (small sites) | | 402 | 892 | 1807 | | | | | | | | **Total Completions/Projection for period** | **4,237** | **2010** | **4304** | **6359** | | Target for period* | 4310 | 1570 | 3090 | 4590 | | minus overprovision 2001/2013 | N/A | -73 | -73 | -73 | | Number of dwellings left to achieve phased target | | 1643 | 3163 | 4663 | | | | | | | | Cumulative overprovision/ shortfall | -73 | 367 | 1141 | 1696 | Southend Core Strategy states:

Policy CP1: Employment Generating Development

Provision is made for not less than 6,500 net additional jobs by 2011, and not less than 13,000 net additional jobs by 2021, distributed[6] as follows:

.	2001-2021	Per Annum
Town Centre and Central Area	6,500	325
Shoeburyness*	1,500	75
Seafront**	750	37.5
Priority Urban Areas***	2,750	137.5
Intensification****	1,500	75
TOTAL	13,000	650

* Further detailed guidance into development in Shoeburyness will be provided in the "Shoeburyness SPD".
** 'Seafront': subject to the safeguarding of the biodiversity importance of the foreshore
*** Priority Urban Areas these comprise the District Centres of Westcliff and Leigh, the Southchurch Road shopping area and the West Road/Ness Road shopping area in Shoebury, together with the town's main industrial estates/employment areas as identified on the Key Diagram and listed at paragraph 2.4. Those Priority Areas falling within the boundaries of proposed Area Action Plans and Supplementary Planning Documents provide a jobs contribution towards these areas rather that the 'Priority Urban Areas' category.
**** In broad terms, intensification takes into account the modern forms of working such as home working and 'hot desking' as well as small scale employment generating mixed use development within the community.

The proposed Junction Improvement works will support the JAAP and in the short term support unlocking Phase 1 of the development scheme for the Airport Business Park which could deliver the following outputs (as reported within the Southend Airport Business Park Phase 1 Business case):

	16/17	17/18	18/19	19/20	20/21	Totals
Commercial floorspace (sqm)		2,348	10,268	3,852	5,943	22,410
Gross Jobs (non-construction) (with 10% running void)		141	356	231	357	1,084
Net Additional Jobs (non-construction)		98	237	160	247	742
Net Additional GVA (non-construction) (discounted over 10 year period)						£372m

3.3. Wider benefits

Please describe below any wider economic benefits that the scheme will achieved that will help to contribute to the overall value for money of the scheme.

Ensuring the A127 remains open for use by delivering this programme of essential and urgent maintenance will mean necessary journeys will continue to take place whether

	they are for business and commuting, or for social and domestic reasons, without restriction or impediment. Any absence of significant maintenance improvements means the road will continue to deteriorate, and any failure leading to emergency closure will have a significant and long term adverse impact on business and residents of Southend. There is no real viable alternative to the A127 for journeys – the A13 is severely congested – and hence the levels of resilience offered by the route are low.
3.4. Standards	*Provide details of anticipated standards (such as BREEAM) that the project will achieve.* TD 9/93 Highway Link Design, TD 27/05 Cross Sections and Headrooms TD 50/04 The Geometric Layout of Signal Controlled Junctions and Signalised Roundabouts TA 57/87 Roadside Features TA 90/05 The Geometric Design of Pedestrian, Cycle and Equestrian Routes HD 33/06 Surface and Sub-surface Drainage Systems for Highways HA 102/00 Spacing of Road Gullies HA 40/01 Determination of Pipe Bedding Combinations for Drainage Works BD 29/04 Design Criteria for Footbridges HD 24/06 Traffic Assessment IAN 73/06 Rev 1 HD 26/06 Pavement Design HD 39/16 Footway and Cycleway Design HD 19/15 Road Safety Audit LTN 1/95 LTN 2/95 The SuDS Manual
3.5. Value for money assessment	**Value for Money** Refer to A127 Kent Elms Business Case for vfm for new footbridge element. The BCR for the scheme has not yet been calculated; it would be pre-emptive to undertake a value for money appraisal without having conducted surveys to fully understand the nature of the problem and investigate further the extent and best solution to types of maintenance needed. A value for money appraisal can be undertaken following the development of deterioration models for carriageways and footways. The deterioration models for the carriageways are in turn dependent on obtaining more detailed knowledge of the structural condition and residual life of the pavement following further investigation. These deterioration models will be critical to the development of preferred options for other locations. In advance of development of deterioration models, the table below sets out the broad options that can be assessed for different scenarios and the future implications. Timescales are only provided to give an indication of the issues that will need to be considered in options appraisal.

Table of Prevalent carriageway failure modes on A127, options and network impacts

Failure mode	Options	Future deterioration	Network impact
Transverse cracking	Do nothing	Water ingress through cracks causes leaching and settlement of subgrade. Debris ingress causes additional stresses as CBM base expands and contracts leading to spalling and faulting. Increased frequency of cracks (<4m apart) causes instability as road base 'blocks' get smaller	Disruption from reactive repairs to address spalling and potholes around cracks within 2-5 years. Severe safety implications of roadbase instability would require carriageway closure within 5-15 years Dependent on subgrade and roadbase condition. Full reconstruction would then be required.
	Crack seal	Cracks will continue to emerge in between sealed cracks leading instability as above. Where localised settlement causes movement of the pavement the seal will be largely ineffective.	Severe safety implications of roadbase instability would require carriageway closure within 5-15 years dependent on subgrade and roadbase condition. Full reconstruction would then be required.
	Plane and resurface wearing course and binder course with localised reconstruction and crack sealing of the roadbase	Dependent on the condition of remaining CBM roadbase Improved load transfer to roadbase should prevent rapid deterioration. Risk that reflective cracking begins to appear relatively rapidly.	Lane closures for resurfacing works Reflective cracks begin to appear 10-15 years after treatment Resurfacing or reconstruction required 15-25 years dependent on subgrade and roadbase condition
	Plane and resurface wearing course and binder course	The reinforcement grid would assist in absorbing stresses around cracks in the roadbase preventing	Lane closure for resurfacing roads Resurfacing or reconstruction required

		with reinforcement grid	propagation of cracks to the surface	after 20-25 years dependent on subgrade and roadbase condition
		Full reconstruction of roadbase and subbase with drainage redesign		Full carriageway closure for reconstruction and drainage works Wearing course resurfacing with binder course patching requiring lane closures after 20-25 years Full reconstruction required again after 35-50 years
	Rutting	Do nothing	Ruts get deeper and affect binder course Load bearing capacity of surface courses is reduced leading to deeper structural failure. Where associated with wheel track cracking structural failure will have already occurred leading to rapid deterioration of the surface through further subsidence, crazing and potholes.	Where structural rutting is found there may be annual traffic disruption from reactive maintenance within 2-5 years. Within 5-10 years deep ruts will cause safety impacts increasing risk to turning traffic and cyclists particularly at junctions. At this stage the only option will be wearing course and binder course replacement.
		Plane and resurface with fibre reinforced SMA	Surfacing should provide resistance to rutting in future	Lane closures for resurfacing works Resurface after 15-25 years dependent on roadbase condition
		Reconstruction where rutting is associated with structural failure (e.g. wheel track	Surfacing should provide resistance to rutting in future	Full closure for reconstruction works Wearing course resurfacing with binder course patching requiring

	cracking present)		lane closures after 20-25 years Full reconstruction required again after 35-50 years

Although timescales are only indicative it is immediately apparent that the structural condition of the roadbase is likely to be fundamental to understanding the economic impacts of various treatment options.

Existing evidence on economic impacts
Guidance and evidence contained within WebTAG is limited in relation to the appraisal of traffic impacts and economic costs of maintenance schemes. Indeed, available programs such as QUADRO that are often used to estimate traffic impacts of road works are not appropriate for use in urban contexts such as this.

At this stage it is useful to draw on the experience of appraisal of other maintenance schemes where network impacts have been estimated. These are typically undertaken for structures schemes where there is a clear condition based mandate for the imposition of traffic restrictions or full closure.

As indicated in the table above, **without intervention it is highly likely that some emergency closures** would be required where the roadbase has become unstable and therefore in these instances structures schemes may provide a valid comparison.

A YouGov survey (AIA, 2013) showed that poor condition local roads were costing Small and Medium-sized Enterprises (SMEs) in England and Wales approximately £5bn each year through operational inefficiencies, production delays, raw material and end product delivery delays, and vehicle repair costs, among other factors. The Confederation of British Industry (CBI) found that "94 per cent of business leaders surveyed cited road surface quality as a key concern".

Typical BCRs for such schemes range between 10 and 40 (see, for example, the Greater Manchester Retaining Walls Maintenance Scheme). Most of these examples come from roads carrying AADF of 20,000 - 40,000 where diversion routes are typically available with additional travel time of 10-60 minutes. In the case of A127 traffic flows exceed 70,000 AADF with no appropriate diversion route to the north or south of the corridor. Coupled with the close link to the growth prospects in the London Southend Airport business park and impacts on tourism, it is clear that even with lower relative risks of such an event occurring BCRs will be likely to be within this range.

Initially £0.4M is required for the Boundary to Progress Road scheme to be undertaken in 2015/16. In this particular case it is clear that the frequency of localised cracking indicates that widespread structural failure has taken place although the detailed design of the scheme will be informed by GPR and FWD surveys. It is recommended that this scheme is progressed prior to completion of a full Value for Money appraisal for the remainder of the programme.

Overall approach to VfM assessment
There are many complications involved in determining the wider social and economic value for money for a maintenance scheme and it is necessary to complete a number of stages before a WebTAG based assessment can be applied. In particular the

	following issues need to be accounted for in considering the approach to VfM assessment: • **The need for a probabilistic approach to modelling failure and network risks**. The wide variance in deterioration rates and random nature of failures means that the use of mean times to failure as a method of forecasting future traffic impacts may yield misleading results when identifying a preferred option and would undermine the value of any detailed traffic appraisal. An alternative approach would focus on simulation of failure risk (e.g. Monte Carlo simulation) and would be more useful for the purposes of identifying a preferred option. However, in practical terms this would require broader estimates of traffic impacts as inputs. The recommended approach would therefore be to produce traffic delay estimates for a sample of 'Do minimum' outcomes as described in Table 2.2 on each individual stretch (indicated by the scheme locations described above) and use these as a basis for producing transport user benefit outputs in accordance with TAG Unit A1.1 (by applying appropriate VOT parameters etc.). These could be applied through a MC simulation. • **The lack of quantitative evidence of the impacts of poor road condition on the wider economy**. These would need to take into account factors such as travel time uncertainty, vehicle operating costs and the contribution of the general appearance of the public realm to local business competitiveness. Certainly we would expect the declining condition of the A127 to have a significant impact on occupancy rates in London Southend Airport however, quantifying this would require studies into demand elasticities, discrete choice models etc. that are not available. In relation to the latter point, DfT has commissioned a study under the umbrella of HMEP to enable the quantification of road user impacts of road condition and maintenance (e.g. vehicle operating costs and traffic delays) which builds on a recent study undertaken by Transport Scotland. The release date for this study and the associated toolkit is unknown but it may coincide with the timing of further appraisal work. If this is the case then it may be possible to consider the use of parameters from this study in supporting the appraisal. However, these will not extend to enabling estimates of GVA for maintenance schemes.
3.6. Transport scheme assessment	Refer to A127 Kent Elms Business Case
3.7. Assumptions	Refer to A127 Kent Elms Business Case
3.8. Sensitivity tests	Refer to A127 Kent Elms Business Case
3.9. Appraisal summary **Refer to A127 Kent Elms Business Case** *Provide positive and negative impacts of the scheme in the table below. Please adhere to WebTAG guidance.*	
3.10. Transport value for money statement – **Refer to A127 Kent Elms Business Case**	
3.11. Value for money summary - **Refer to A127 Kent Elms Business Case** *Please identify the category of VfM based on Benefit Cost Ratio (BCR) of the scheme using monetised impacts in line with WebTAG guidance.* *VfM assessment should take into account qualitative and quantitative impacts in 2 stages:* *I) Construct 'adjusted' BCR*	

II) Take into account all impacts that could not be monetised

VfM statement report should include:

I) VfM category
II) PV of benefits, costs and range around BCR
III) Summary of assessed benefits and costs, including assumptions that influenced the results
IV) Assessment of non-monetised impact
V) Key risks, sensitivities and uncertainties

4. COMMERCIAL CASE

The commercial case determines whether the scheme is commercially viable. It presents evidence on risk allocation and transfer, contract timescales, implementation timescales and details of the capability and skills of the team delivering the project.

4.1. Procurement	*Please provide details of the procurement route and strategy that will be used for the project. This should include details of the procurement mechanism to be used, details of whether it is an existing framework and contract, the timescales associated with the procurements and details of other routes that were considered for delivery and reasons why these were rejected.* Southend-on-Sea has let all Highways contracts into five "Lots" which divide the work into distinct areas; Planned and Reactive Maintenance; New Works; Traffic system Control, Traffic system Maintenance and Resurfacing. The procurement process has complied with OJEU with the new contracts based on the HMEP/NEC3 Term Service Contract commenced on 1st April 2015 for initially 7 years. These works will be procured this framework. Refer to A127 Kent Elms Business Case.
4.2. Commercial dependencies	None
4.3. Commercial sustainability	*Please can you identify how the project will be commercially sustainable? Will the project require on going revenue support? If so how will this be funded?* None
4.4. Compatibility with State Aid rules	*State aid declaration – N/A*
4.5. Commercial viability	*Please provide:* 1. *Evidence to show the risk allocation and transfer between the promoter and contractor and timescales identified in procurement and/or contract management strategy* The works will be in accordance with Eastern Highways Alliance Framework 2 NEC3 2013 Option B and Term Services Contract with Term contractors.

5. FINANCIAL CASE

*To be completed in conjunction with the spreadsheet in **Part B***

5.1. Total project cost and basis for estimates	£8.0m Refer to A127 Kent Elms for new footbridge element.
5.2. Total SELEP funding request	£1.0m LGF £0.3m 16/17, £0.3m funding for 17/18, £0.4m for 18/19. The remaining £0.6m profiled for 18/19 will be subject to a further business case submission once a review of the surveys are complete.
5.3. Summary Financial Profile	The table below shows the financial projections for the A127 maintenance programme spent to date and profile going forward. For details of inflation and QRA see Kent Elms Business Case. Inflation has not been included in 16/17 surveys. These will be complete in 16/17.

Year	Local Growth Fund allocation	Proposal
2015/16	£0.4m	• Resurface and localised reconstruction on eastbound carriageway from Boundary to Progress Road junction. • Commence core testing, GPR and FWD surveys.
2016/17	£0.3m	• Core testing, GPR and FWD surveys (£0.02m). • Drainage connectivity and CCTV surveys (£0.180m). • Supporting New footbridge at A127 Kent Elms (£0.1m).
2017/18	£0.3m	• Supporting New footbridge at A127 Kent Elms
2018/19	£1.0m	• Supporting New footbridge at A127 Kent Elms • The Bell (Rochford Road junction) carriageway reconstruction. • Drainage improvements.
2019/20	£3.0m	• Carriageway and footway reconstruction works and drainage improvements.
2020/21	£3.0m	• Carriageway and footway reconstruction works and drainage improvements.

5.4. Is any of the SELEP contribution recoverable?	*If this is the case, please insert a simple table laid out as above which indicates the repayment profile to cover the period of repayments* No.
5.5. Cost overruns	*Please describe how cost overruns will be met by other funding sources given that SELEP contributions will be capped at the offer awarded* Refer to A127 Kent Elms business case for new footbridge element.
5.6. Delivery timescales	*What are the main risks associated with the delivery timescales of the project? Please identify how this will impact on the cost of the project* See Risk Register in Appendix 7 and refer to A127 Kent Elms Business Case
5.7. Financial risk management	*Identify key risks to the scheme funding and any mitigations* See Risk Register in Appendix 7 and refer to A127 Kent Elms Business Case
5.8. Alternative funding mechanisms	*If loan funding is requested how will it be repaid?* *Do you anticipate that the total value of the investment will be repaid? If not, how much will be repaid?* *N/A*

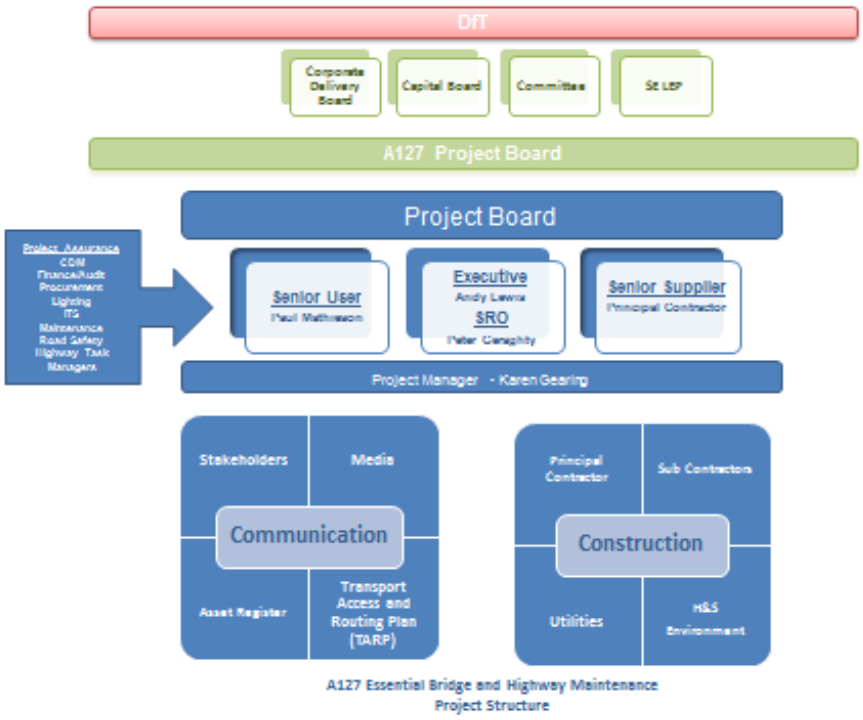
6. DELIVERY/MANAGEMENT CASE

The management case determines whether the scheme is achievable. It provides evidence of project planning, governance structure, risk management, communications and stakeholder management, benefits realisation and assurance.

6.1. Project management

Please provide details of who will be responsible for delivering the scheme and the different roles and responsibilities they will play. Please also detail the governance structure for the project identifying how key decisions have or will be made, how the scheme will be monitored and details of the contract management arrangements. Please provide an organogram if available.

The project will be based upon PRINCE2 methodology with the Project Manager and Senior User PRINCE2 Practitioners. The organisation chart shows the governance structure that is underway for all A127 Projects.



A127 Essential Bridge and Highway Maintenance Project Structure

Southend-on-Sea Borough Council has a track record in delivering projects on time and within budget. The "Better Southend" projects, including the A127 Progress Road Junction Improvement, the A127/A1159 Cuckoo Corner Junction Improvement, A127/A13 Victoria Gateway and City Beach improvements and more recently the A127/B1013 Tesco Junction Improvement were all completed on time and within budget.

Andy Lewis – Corporate Director Enterprise, Tourism and the Environment – Executive

Andy will be ultimately responsible for the programme and ensure that all elements are correctly focussed on achieving their aims, objectives and outcomes, and reports to the Corporate Delivery Board. Andy has been the Corporate Director and Executive for all previous "Better Southend" projects. Andy's strong Executive support for this project and his experience will ensure A127 Kent Elms is completed on time and to budget

	Dr Peter Geraghty – Head of Planning and Transport – Senior Responsible Owner Peter is the Head of Service responsible for managing the strategic planning and transport functions. Peter will oversee the budgetary requirements and approve the resourcing and investment. Peter undertake the SRO role for the A127 Kent Elms Junction Improvement. **Paul Mathieson – Senior User/Senior Supplier – Chartered Civil Engineer and PRINCE2 Practitioner** Paul is responsible for the quality of the elements as delivered by the Project Manager and the team. Paul is responsible for ensuring alignment with strategic transport and planning policy and scheme objectives, co-ordination with other authorities and achieving value for money and delivering the benefits. **Principle Contractor – TBA - Senior Supplier** During the major construction stage the Principle Contractor will undertake the Senior Supplier Role and attend Project Board meetings. **Justin Styles – Design Coordinator & Principal Designer (CDM)** Justin will be responsible directing design resources to ensure the Design stage and Tender Stage is completed on time and to quality. Provide Project Assurance support and undertake the role of Principle Designer under the CDM 2015 regulations. Justin will also provide supervision in Chief support during the Construction Stage. **Karen Gearing – Project Manager – Chartered Civil Engineer and PRINCE2 Practitioner** Karen will be responsible for the project management of the Project, ensuring that the project is aligned with the project objectives, and that the appropriate monitoring is implemented to assess progress on the outputs and monitor the outcomes. Karen was responsible for delivering three of the "Better Southend" major schemes valued at £15m. Project Board meetings will be held regularly, which will consider project status against deliverables and cost, as well as reviewing the Risk Register and any exception reports and necessary actions. **Other Key Staff –** The Council's Community Engagement officer, Ashley Dalton, is the stakeholder Team Leader. Ashley lead on the 2013 consultation process for the A127 corridor and is leading on the consultation process for A127 Kent Elms along with the support of Michael Sargood from our Media Department who will also support this project.
6.2. How will outputs be monitored?	Improved Journey Times: Journey time monitoring has been carried out and recorded as a baseline figure prior to the implementation of the works on the A127 including the A127 Kent Elms and A127 Bell schemes – this data will be compared to post construction monitoring figures and the predicted journey time savings. The A127 corridor is under SCOOT control and part of the Essex wide ANPR camera system that records real time journey data. A127 post evaluation report will be generated to summarise the above monitoring. Safety: The number of accidents on the A127 in the three years pre construction will be compared to the three year post construction to provide a direct measure of the safety benefits of the scheme.

Environment:
There are no Air Quality Management Areas in the Southend Unitary Authority area and there are no plans to monitor pollution levels related to the scheme. However, this will be taken forward as part of a route management strategy being developed with Essex County Council.

Accessibility:
Increases in accessibility may be a marginal benefit to the scheme i.e. slightly lower bus journey times improving access to key services. As this benefit is likely to be small there are no plans to directly monitor this, but data will be collected in future as part of the new bus AVL system that connects all the buses via GPS to a central management system. The AVL system will be able to interact directly with the traffic signal controller to ensure that late running buses are given an advantage through the junction.

Integration:
A community engagement officer has been appointed to manage the consultation process throughout the scheme delivery and ensure that issues of cohesion and severance are fully explored and the benefits of the scheme realised.

6.3. Milestones

Please identify the key milestones and projects stages relating to the delivery of this project in the table below. Please ensure a Gantt chart has been attached to this application form, clearly identifying the milestones for the project, the key construction stages, the critical path and all interdependencies.

Project milestone		**Indicative date**
Completion of surveys		March 2017
Completion of new footbridge		Summer 2017

6.4. Stakeholder management & governance

Please provide a summary of the stakeholder management plan for the scheme. Include any governance arrangements which will materially impact on the delivery of the scheme.

Provide brief description of how key statutory stakeholders will be managed and engaged, in line with Communication and Stakeholder Management Strategy.

In broad terms consider: supplier, owner, customer, competitor, employee, regulator, partner and management. Specifically consider: local authorities, the Highways Agency, statutory consultees, landowners, transport operators, local residents, utility companies, train operating companies, external campaigns, etc.

Identify champion, supporter, neutral, critic, opponent and blocker

Define stakeholder's involvement (response, accountable, consulted, support, informed)

Stakeholder engagement commenced in spring 2012 for the A127 including Kent Elms, Bell and Tesco Junction Improvements. The live engagement and consultation plan contained in Appendix 8 identifies stakeholder mapping, stakeholder analysis matrix, engagement types, strategies and action plan and was further developed to take on board lessons learnt from the A127/B1013 Tesco Junction Improvement and

	will be updated to take on board lesson learnt for A127 Kent Elms Junction Improvement. The A127 Essential Bridge and Highway Maintenance Engagement and Consultation Plan will be further developed once the outcome of the surveys have been established and implementation plan produced which will take into consideration and be coordinated/imbedded within the TARP to minimise disruption to traffic and residents and other works around the borough. The principles of the Better Southend Transport Access Routeing Plan (TARP) will also be adopted, which seeks to minimise disruption and delay to road users. Investigation and consultation will continue during the design and construction process to determine the best way to maintain access to the businesses, residents and the town during the construction of the works. For new footbridge element refer to Kent Elms consultation plan contained in Appendix 8.
6.5. Organisation track record	*Please briefly describe the track record of the organisation in delivering schemes of this type, including whether they were completed to time and budget.* The Council has successfully delivered the following DfT / government funded projects: • A127 Progress Road Junction Improvement £4.7m (HCA & SBC funded) A127/A1159 Cuckoo Corner Junction Improvement £5m (DfT & SBC funded) A127/A13 Victoria Gateway £6.7m (HCA & SBC funded) City Beach £6.7m (HCA &SBC funded). Collectively they were winners of the RTPI National Awards in 2011 for the Public Realm category. • The Council carried out Better Bus Area schemes during 2012/13 – 2013/14 funded by DfT. The main lesson learned was to consult the bus user groups, particularly elderly and disabled users, other road users and the bus companies before implementing any changes. Public involvement enabled participants to rightly claim that their contribution made a positive difference. Other lessons learned were; the need to monitor and evaluate progress throughout the implementation period. On completion, annually report on outcomes highlighting any key outcomes. • DfT's Local Pinch Point Fund for Southend's £4.7m A127/B1013 Tesco Junction Improvement scheme was completed on time and to budget. It has been a success as the Communications Plan included early contractor involvement and early public consultations. This project utilised PRINCE2 methodology, which has ensured good time management, control and organisation of the project.
6.6. Assurance	*Please provide s151 Officer confirmation that adequate assurance systems are in place* *Specify where the business case is subject to ITE assessment* Gate 1
6.7. Monitoring and evaluation	*Please explain how you will monitor and evaluate the project, referring to the use of key performance indicators as appropriate.*

The table below provides a summary of the proposed measurement and thresholds of acceptability that will be used to evaluate the benefits of the scheme.

Monitoring Indicator	Measurement	Threshold
Journey times	Improved Journey times	Reduction in journey time within 3 year period compared with pre implementation
Safety benefits	Recorded no. of incidents of damage due to poor condition of the road surface	Reduced number of claims within up to 3 year period post 20/21 completion compared with existing data
Safety benefits	Recorded no. of incidents of damage due to flooding of the road surface	Reduced number of claims within up to 3 year period post 20/21 completion compared with existing data
Maintenance benefits	Amount of money spent carrying out reactive maintenance	Reduction in spend on reactive maintenance within the A127 study area

Southend Borough Council will conduct a full evaluation of the impact of the scheme in the period after it is completed. The Council will prepare evaluation reports 3 years and five years after scheme opening, using the information to be collected as set out above to gauge the impact of the scheme, and assess the success in meeting the scheme objectives. Unexpected effects of the scheme will be reported upon and, where appropriate, remedial measures identified.

7. RISK ANALYSIS

Refer to project risk register in Appendix 7

8. DECLARATIONS

8.1.	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?	*NA*
8.2.	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	*NA*

	procedure such as receivership, liquidation, or administration, or subject to an arrangement with its creditors	
8.3.	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?	*NA*

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.

8.4. Signature of Applicant	Paul Mathieson
8.5. Print Full Name	Paul Mathieson
8.6. Designation	Group Manager Major Projects and Strategic Transport Policy
8.7. Date	2.8.16