Local Highways Maintenance Challenge Fund

Application Form

The level of information provided should be proportionate to the size and complexity of the scheme proposed. As a guide, for a small scheme we would suggest around 10 to 15 pages including annexes would be appropriate and for a larger scheme, 15 to 30 pages.

A separate application form should be completed for each scheme up to a maximum or one large bid and one small bid for each local highway authority.

Applicant Information

Local authority name(s): Kent County Council

Bid Manager Name and position: Alan Casson, Resurfacing Manager – Highways, Transportation and Waste, Kent County Council

Contact telephone number: 03000 413563 Email address: alan.casson@kent.gov.uk

Postal address: Highways, Transportation and Waste, Invicta House, First Floor, County Hall, Maidstone, Kent, ME14 1XX

When authorities submit a bid for funding to the Department, as part of the Government’s commitment to greater openness in the public sector under the Freedom of Information Act 2000 and the Environmental Information Regulations 2004, they must also publish a version excluding any commercially sensitive information on their own website within two working days of submitting the final bid to the Department. The Department reserves the right to deem the business case as non-compliant if this is not adhered to.

Please specify the weblink where this bid will be published: http://www.kent.gov.uk/about-the-council/strategies-and-policies/transport-and-highways-policies
SECTION A - Scheme description and funding profile

A1. Scheme name: Major Renewal of Carriageways in Kent

A2. Headline description:

Please enter a brief description of the proposed scheme.
A major programme of carriageway resurfacing schemes upon Kent’s Major Strategic, Other Strategic and Locally Important network. This programme includes forty six major reconstruction and strengthening schemes that cannot be funded through the planned Capital Maintenance Block Grants. These schemes support economic growth, reduce the cost of reactive maintenance, reduce congestion and help journey times.

A3. Geographical area:

Please provide a short description of area covered by the bid.
A variety of sites across Kent – see attached plan – Appendix 1.
OS Grid Reference: N/A
Postcode: N/A
Please append a map showing the location (and route) of the proposed scheme, existing transport infrastructure and other points of particular interest to the bid e.g. development sites, areas of existing employment, constraints etc.

A4. Type of bid (please tick relevant box):

Small project bids (requiring DfT funding of between £5m and £20m)

- Major maintenance, strengthening or renewal of bridges, tunnels, retaining walls or other structures
- Major maintenance or renewal of carriageways (roads)
- Major maintenance or renewal of footways or cycleways
- Major maintenance or renewal of drainage assets
- Upgrade of Street Lighting

Large project bids (requiring DfT funding of between £20m plus)

- Major maintenance, strengthening or renewal of bridges, tunnels, retaining walls or other structures
- Major maintenance or renewal of carriageways (roads)
- Major maintenance or renewal of footways or cycleways
- Major maintenance or renewal of drainage assets
- Upgrade of Street Lighting
SECTION B – The Business Case

B1. The Scheme – Summary/History

Please select what the scheme is trying to achieve (this will need to be supported by short evidence in the Business Case).

Through the annual asset condition assessment of the network, we have identified a package of major schemes that are needed to improve the condition of the primary road network. This package includes three major schemes linked to existing DfT pinch-point funded projects, five large reconstruction schemes and 38 carriageway strengthening schemes. These schemes are on our Major Strategic, Other Strategic and Locally Important network of roads, which are vital to the movement of people whilst maintaining and growing Kent’s economy.

The Authority allocates all its Capital Maintenance Block Funding to finance such essential highway maintenance.

Kent considers itself to be an exemplar in the effective and efficient management of the highway network which follows asset management principles. For many years it has focused on preventative maintenance to extend the life of the infrastructure. As such, it has improved the overall condition of the network, reduced the backlog of maintenance and improved customer and political satisfaction. The intention is to continue this approach now that DfT has provided funding certainty. Despite this, the Authority still finds it increasingly difficult to resource larger reconstruction/strengthening schemes, as such we seek funding from the Challenge Fund.

A major reconstruction scheme can typically cost around £1-1.5m per kilometre, in practice this means that only a fraction of such schemes can be funded each year. In the meantime, we continue to incur reactive repair costs. This does not represent good asset management approach nor value for money for the people of Kent, it places revenue cost pressures upon the Authority and its taxpayers.

B2. The Strategic Case (Maximum 650 words)

One of Kent’s strategic themes is supporting independence and opportunity, a key vision and approach supporting this is to help businesses increase economic growth and deliver new jobs across the whole county, by ensuring the physical, social, cultural and environmental infrastructure is protected, we can make Kent an attractive place to live and work.

Kent is the gateway to Europe, close to London, has numerous motorways running through it, together with ports and the Channel Tunnel. KCC’s roads are used by most, if not all, of its residents and those who travel to or through the county, much of this traffic is on Kent’s principle network. Improving the condition of these roads will improve road safety, reduce congestion, facilitate growth in Kent’s economy, and encourage further inward investment in the county.
Our economic approach is reaping benefits such as keeping network deterioration and our maintenance backlog under control whilst improving customer perception. It does mean that we are finding it increasingly difficult to resource schemes that involve major reconstruction and strengthening of the major network. This application seeks to secure sufficient funding to address a number of priority sites on the network that either requires complete reconstruction or strengthening.

Sites include three major schemes to complement existing DfT pinch-point funded projects. Value for Money analyses and plans showing scheme extents and diversions for these schemes are attached in Appendices 2 to 7. These schemes will help to further unlock growth potential in areas being targeted by pinch-point projects.

We have also identified a number of sites requiring full reconstruction or strengthening using Kent’s Asset Management System, known as Gateway. This includes five large reconstruction schemes, four of which have also been the subject of detailed pavement assessments to identify the cause of failures and possible solutions. The remaining 38 sites require strengthening and resurfacing.

All these sites are beyond preventative or cost effective forms of maintenance, however intervening now will significantly reduce the ongoing maintenance costs of these roads. A list of proposed sites in this package, together with extents, estimates and Benefit Cost Ratio analyses are attached in Appendix 8.

Plans for the five large reconstruction schemes are attached in Appendices 9 to 14.

This analysis clearly shows the economic case for intervening now rather than continuing to make numerous reactive repairs.

**B3. The Financial Case – Project Costs**

**Table A: Funding profile (Nominal terms)**

<table>
<thead>
<tr>
<th>£000s</th>
<th>2015-16</th>
<th>2016-17</th>
<th>2017-18</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>DfT Funding Sought</strong></td>
<td>9,722.8</td>
<td>8,000</td>
<td></td>
<td>17,722.8</td>
</tr>
<tr>
<td><strong>LA Contribution</strong></td>
<td>2,000</td>
<td></td>
<td></td>
<td>2,000</td>
</tr>
<tr>
<td><strong>Other Third Party Funding</strong></td>
<td>169.7</td>
<td></td>
<td></td>
<td>169.7</td>
</tr>
</tbody>
</table>

The schemes included in this application will be completed in 2016 with many completed in 2015. We are contributing £2m plus a Section 106 contribution relating to one site of £169.7k, which represents a total contribution of 11%.

In 2015/16, we have allocated £21.45m of our Capital Maintenance Block Funding of £27.2m to carriageway maintenance, which equates to 76%. Majority of this allocation will be spent on preventative treatments to continue our asset management based approach to highway maintenance.

**B4. The Financial Case - Local Contribution / Third Party Funding**

Please provide information on the following points (where applicable):
a) The non-DfT contribution may include funding from organisations other than the scheme promoter. Please provide details of all non-DfT funding contributions to the scheme costs. This should include evidence to show how any third party contributions are being secured, the level of commitment and when they will become available.

It has been confirmed by all necessary parties that £169.7k of s106 funds linked to a new Lidl major distribution centre can be used to contribute to the cost of reconstructing Crete Hall Road in Northfleet.

b) Where the contribution is from external sources, please provide a letter confirming the body’s commitment to contribute to the cost of the scheme. The Department is unlikely to fund any scheme where significant financial contributions from other sources have not been secured or appear to be at risk.

Written confirmation from Lidl and Gravesham Borough Council is attached in Appendices 15 and 16.

Have you appended a letter(s) to support this case?  Yes  No  N/A

c) Please list any other funding applications you have made for this scheme or variants thereof and the outcome of these applications, including any reasons for rejection.
N/A

B5. The Financial Case – Affordability and Financial Risk

This section should provide a narrative setting out how you will mitigate any financial risks associated with the scheme (you should refer to the Risk Register – see Section B10).

Please provide evidence on the following points (where applicable):

a) What risk allowance has been applied to the project cost?

Sufficient contingency has been allowed in price estimates. One major scheme estimated at £2.5m, will be tendered as part of a related pinch point funded project. All other works will either be undertaken using Kent’s existing resurfacing contract or using existing contractual arrangements for pinchpoint-funded schemes that are underway. Our experience of these contracts and contractors and their performance gives us price confidence.

How will cost overruns be dealt with?

The authority does not envisage any overruns on these projects within the programme due to the use of existing contracts which provide sufficient cost certainty. Majority of these works involve either full reconstruction or strengthening in sections along their lengths, and so cannot be more precisely estimated until detailed design work is completed.

The Resurfacing Contact is largely based on priced bill items and we work closely with the provider to secure cost certainty so far as that is possible. A 15% contingency has been included in cost estimates, which we have found from experience to be realistic in schemes that involve reconstruction or strengthening which can change during delivery.

This contingency allowance is limited to reconstruction and strengthening schemes given the uncertainty around ground conditions. Coring and pre-works investigations during the design phase and unforeseen ground conditions discovered during excavation can vary the price. Our experience is that any such changes are typically no more that 15%.
b) What are the main risks to project delivery timescales and what impact this will have on cost?

The main risks to the delivery of this package of schemes are the availability of engineering and project management resource and the availability of roadspace. Our consultancy provider is prepared to secure sufficient resource to complement KCC in-house project management and design staff, Kent is also included within the SE7 framework agreement. There is confidence these consultants will be able to assist us to deliver these works.

We have already liaised with our Roadworks Team to minimise roadspace risk, but any such risk will not affect cost, it would only impact on delivery timescales. KCC will issue Section 58 notices at the appropriate time to ensure utility works do not take place following completion of our works.

B6. The Economic Case – Value for Money

This application consists of 46 carriageway reconstruction and strengthening schemes upon Kent’s Major Strategic, Other Strategic and Locally Important network. This includes three major schemes costing around £5.6m to complement existing DfT pinch-point funded projects. Detailed Value for Money analyses and plans showing scheme extents and diversions for these schemes are attached in Appendices 2 to 7. These schemes will help to further unlock growth potential in areas being targeted by pinch-point projects.

Also included are five large reconstruction schemes, four of which have also been the subject of detailed pavement assessments to identify the cause of failures and possible solutions. The remaining 38 sites require strengthening and resurfacing. A robust Benefit Cost Ratio analysis of these schemes is attached in Appendix 8, together with plans for the five large reconstruction schemes in Appendices 9 to 14.

a) If available for smaller scheme bids, promoters should provide an estimate of the Benefit Cost Ratio (BCR) of the scheme.

b) For larger schemes costing £20 million or more we would expect the bid to include a BCR and this should align with WebTAG - https://www.gov.uk/transport-analysis-guidance-webtag

Where a BCR is provided please provide separate reporting in the form of an Annex to the bid to enable scrutiny of the data and assumptions used in deriving that BCR. This should include:
- A description of the key risks and uncertainties in the data and assumptions and the impact these have on the BCR;
- Key assumptions including (but not limited to): detail of the data used to support the analysis, appraisal period, forecast years, level of optimism bias applied; and
- A description of the modelling approach used to forecast the impact of the scheme and evidence to demonstrate that it is fit-for-purpose.

c) Please provide the following data which may form a key part of our assessment:

<table>
<thead>
<tr>
<th>Description</th>
<th>Refer to attached appendices.</th>
</tr>
</thead>
<tbody>
<tr>
<td>À description of the do-minimum situation (i.e. what would happen without Challenge Fund investment).</td>
<td>Refer to attached appendices.</td>
</tr>
<tr>
<td>Details of significant monetised and non-monetised costs.</td>
<td>Refer to attached appendices.</td>
</tr>
<tr>
<td>Monetised costs and benefits of the scheme (quantified where possible)</td>
<td>Refer to attached appendices.</td>
</tr>
<tr>
<td>---</td>
<td>---</td>
</tr>
<tr>
<td>Length of scheme (km)</td>
<td>Refer to attached appendices.</td>
</tr>
<tr>
<td>Number of vehicles on affected section (AADT in vehicles and if possible split by vehicle type) – to include details of data (age etc.) supporting this estimate.</td>
<td>Refer to attached appendices.</td>
</tr>
</tbody>
</table>

**d) Other VfM information where relevant - depending on type of scheme bid:**

<table>
<thead>
<tr>
<th>Details of required restrictions/closures if funding not provided (e.g. type of restrictions; timing/duration of restrictions; etc.)</th>
<th>Refer to attached appendices.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Length of any diversion route, if closure is required (over and above existing route) (km)</td>
<td>Refer to attached appendices.</td>
</tr>
<tr>
<td>Regularity/duration of closures due to flooding: (e.g. number of closures per year; average length of closure (hrs); etc.)</td>
<td>Refer to attached appendices.</td>
</tr>
<tr>
<td>Number and severity of accidents: both for the do minimum and the forecast impact of the scheme (e.g. existing number of accidents and/or accident rate; forecast number of accidents and or accident rate with and without the scheme)</td>
<td>Refer to attached appendices.</td>
</tr>
<tr>
<td>Number of existing cyclists; forecasts of cycling usage with and without the scheme (and if available length of journey)</td>
<td>Refer to attached appendices.</td>
</tr>
</tbody>
</table>

**B7. The Commercial Case**

This section should set out the procurement strategy that will be used to select a contractor and, importantly for this fund, set out the timescales involved in the procurement process to show that delivery can proceed quickly.

What is the preferred procurement route for the scheme? For example, if it is proposed to use existing framework agreements or contracts, the contract must be appropriate in terms of scale and scope.

It is intended that two of the three pinchpoint-funded schemes be delivered as extensions to the schemes that are already underway. The current providers have confirmed that they can resource this additional work during the summer of 2015. The contract for the third pinch point funded scheme has not yet been tendered and our intention would be to include this additional scheme in that tender. A statement of contractor capacity to deliver these works is attached in Appendix 17.

The remaining schemes will be delivered using Kent’s existing Resurfacing Contract which started in July 2014 and runs through to June 2016, with the option to extend for a further two years (on a one plus one year basis) based on their performance and achieving value for money. This contract is the product of this authority’s strategic intent to drive down costs, increase deliverability and maximise the commercial choices available to us. We deliver almost all of our resurfacing through this external contract, separate to our existing Term Maintenance Contract, to maximise delivery capacity and achieve competitive market prices. Based on their delivery of 2014/15 resurfacing programme, we have every confidence in our provider’s ability to deliver these schemes and to the cost we have estimated. Detailed discussions with our provider have already been held and they have confirmed that they can deliver the schemes in
B8. Management Case - Delivery

Deliverability is one of the essential criteria for this Fund and as such any bid should set out any necessary statutory procedures that are needed before it can be constructed.

a) An outline project plan (typically in Gantt chart form) with milestones should be included as an annex, covering the period from submission of the bid to scheme completion. The definition of the key milestones should be clear and explained. The critical path should be identifiable and any contingency periods, key dependencies (internal or external) should be explained.

Has a project plan been appended to your bid?  Yes  No

A project plan in Gantt Chart form is attached in Appendix 19. We are confident that these schemes will be delivered by the end of 2016. We anticipate that around two thirds of the schemes can be completed during 2015.

b) Please summarise any lessons your authority has learned from the experience of delivering other DfT funded programmes (such as pinch point schemes, local majors, Local Sustainable Transport Fund, and Better Bus Areas) and what would be different on this project as a result.

The Authority is delivering DfT funded schemes, which include pinchpoint-funded and LSTF schemes. Kent Schemes are delivered to time, this is enabled through early tactical decisions being taken that ensure value for money is achieved through appropriate open procurement routes. Strategic decision-making means that flexibility is pre-empted to deliver appropriate additional programmes of work, i.e. we are able to respond quickly when additional resource opportunities arise. Existing Major Schemes Contractors have been engaged from the outset, with appropriate OJEU limits and contract durations set in anticipation of additional funding.

KCC’s Term Maintenance Contract and Consultant are also fully utilised, particularly in delivery of LSTF schemes. Flexible additional resource is secured from the Term Maintenance Contractor, through direct labour and local supply chains, wider utilisation of Kent’s Resurfacing Contract has delivered additional maintenance to spend extra funding allocated through 14/15 Pothole Fund, Bellwin and Severe Weather Grants. The authority has considerable experience managing and delivering resurfacing schemes of this nature to time, cost and quality requirements.

B9. Management Case – Governance

Please name who is responsible for delivering the scheme, the roles (Project Manager, SRO etc.) and set out the responsibilities of those involved and how key decisions are/will be made. An organogram may be useful here. This may be attached as an Annex.

See Appendix 20. As most of these schemes will be delivered using existing mechanisms for managing resurfacing works, there is no need for any key/political decisions. However this bid does have the support of the Authority’s Cabinet through a presentation given on 2nd February. Regular updates will be provided to the Highways Cabinet Committee. The Project Manager will regularly issue updates on progress to Highway, Transportation and Waste’s (HTW) Divisional Management Team which consists of the Director of HTW, together with Heads of Service. The
Divisional Management Team will monitor progress and costs, and updates will be periodically published on our website.

We also issue County Member with a list of major maintenance schemes in their divisions for the year ahead, and will include these sites in this list should funding be awarded. Resurfacing works are also reported to twelve Joint Transportation Boards that meet four times each year, these Boards consists of both County Members and Borough Councillors and consider matters relating to highways, parking and transportation.

**B10. Management Case - Risk Management**

A risk register covering the top 5 (maximum) specific risks to this scheme should be attached as an annex including, if relevant and in the top 5, financial, delivery, commercial and stakeholder issues.

Has a risk register been appended to your bid?  
- [ ] Yes  
- [ ] No

A Risk Register is attached in Appendix 21.

**SECTION C – Monitoring, Evaluation and Benefits Realisation**

**C1. Benefits Realisation**

Please provide details on the profile of benefits, and of baseline benefits and benefit ownership. This should be proportionate to the size of the proposed scheme.

The benefits are principally economic. Investing these funds now in the main roads proposed in this application will significantly reduce the ongoing capital renewal and revenue maintenance costs of these roads. For every pound invested in our five large reconstruction schemes, we will realise £2.67 of benefit, as set out in Appendix 8. In addition, every pound invested in the selected strengthening schemes will deliver a benefit of £5.56. Reconstructing Star Lane (Broadstairs), Dowding Way (Tunbridge Wells) and The Broadway (Maidstone) will complement existing pinchpoint-funded projects and further unlock growth potential in those areas.

We typically spend around £15-20m each year on resurfacing, surface dressing and micro-surfacing our roads. To achieve value for money prioritisation is based on a balance of economic ranking and Member/community needs. During the last three years we have treated over 900km of road, around 11% of our network. Majority of this spend has been on preventative treatments (such as surface dressing and micro surfacing) to extend the life of carriageways at the right time before they fail, and thin surfacing to prevent deterioration and more expensive work later. This approach has resulted in an increase in the condition of our main roads as recorded in our National Indicator returns in recent years and a reduction in our maintenance backlog, see tables attached in Appendix 22.


Carefully prioritising our finite resource to achieve maximum effect has also been noticed by the people of Kent. Our annual satisfaction survey of County Councillors, Parish Councils and
residents showed a significant increase in satisfaction around carriageway condition – see third table in Appendix 22.

C2. Monitoring and Evaluation

Evaluation is an essential part of scheme development and should be considered and built into the planning of a scheme from the earliest stages. Evaluating the outcomes and impacts of schemes is important to show if a scheme has been successful.

Please set out how you plan to measure and report on the benefits identified in Section C1, alongside any other outcomes and impacts of the scheme

The Project Manager will regularly issue updates on progress to Highway, Transportation and Waste’s (HTW) Divisional Management Team which consists of the Director of HTW, together with Heads of Service. The Divisional Management Team will monitor progress and costs, and updates will be periodically published on our website.

In addition, we implement a number of commercial and other practices to ensure that resurfacing schemes are delivered to cost, time and quality requirements. These include:

- All sites are cored prior to design.
- Utility plans are obtained and where necessary Ground Penetrating Radar systems are used.
- Full and detailed liaison with Roadworks Coordinators, utility companies, bus companies and local businesses is carried out to minimise disruption.
- Advanced information boards are deployed and information letters distributed to affected companies and residents.
- We use a treatment matrix to ensure that the correct treatment is selected.
- Site locations are supervised at all times by KCC engineers.
- All sites are reviewed prior to the end of guarantee period.
- Where necessary, defect notices are issued to ensure that problems are resolved.
- We also have a programme of randomly reviewing older sites to check on material performance over a longer period of time.

A fuller evaluation for large schemes may also be required depending on their size and type.

SECTION D: Declarations

D1. Senior Responsible Owner Declaration

As Senior Responsible Owner for [scheme name] I hereby submit this request for approval to DfT on behalf of [name of authority] and confirm that I have the necessary authority to do so.

I confirm that [name of authority] will have all the necessary powers in place to ensure the planned timescales in the application can be realised.

Name: Behdad Haratbar

Position: Head of Service for Programmed Works, Highways, Transportation & Waste

Signed:
D2. Section 151 Officer Declaration

As Section 151 Officer for [name of authority] I declare that the scheme cost estimates quoted in this bid are accurate to the best of my knowledge and that [name of authority]

- has allocated sufficient budget to deliver this scheme on the basis of its proposed funding contribution
- will allocate sufficient staff and other necessary resources to deliver this scheme on time and on budget
- accepts responsibility for meeting any costs over and above the DfT contribution requested, including potential cost overruns and the underwriting of any funding contributions expected from third parties
- accepts responsibility for meeting any ongoing revenue requirements in relation to the scheme
- accepts that no further increase in DfT funding will be considered beyond the maximum contribution requested
- has the necessary governance / assurance arrangements in place
- has identified a procurement strategy that is legally compliant and is likely to achieve the best value for money outcome
- will ensure that a robust and effective stakeholder and communications plan is put in place

Name: Keith Abbott (Deputy s151 officer for KCC)  Signed: [Signature]

Submission of bids:

The deadline for bid submission is 5pm, 9 February 2015

An electronic copy only of the bid including any supporting material should be submitted to:

roadmaintenance@dft.gsi.gov.uk copying in steve.berry@dft.gsi.gov.uk