

Local Highways Maintenance Challenge Fund



Department
for Transport

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 of one large bid and one small bid for each local highway authority.

Applicant Information

Local authority name(s)*: Devon County Council

**If the bid is a joint proposal, please enter the names of all participating local authorities and specify the lead authority*

Bid Manager Name and position: Joe Deasy

Name and position of officer with day to day responsibility for delivering the proposed scheme.

Contact telephone number: 07967 691071 **Email address:**
joe.deasy@devon.gov.uk

Postal address: Devon County Council
County Hall
Topsham Road
Exeter
Devon
EX2 4QD

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:

<https://new.devon.gov.uk/roadsandtransport/maintaining-roads/highways-funding/additional-funding-201415/>

SECTION A - Scheme description and funding profile

A1. Scheme name: Lighting the road ahead: Street lighting improvements in Devon

A2. Headline description:

Please enter a brief description of the proposed scheme (in no more than 50 words)
To provide replacement street lighting on all main roads throughout Devon taking advantage of modern innovation in lighting design and thereby improving the asset condition , reducing maintenance and energy costs and the associated carbon emissions.

A3. Geographical area:

Please provide a short description of area covered by the bid (in no more than 50 words)
The scheme includes all main roads within the County of Devon where Street lighting is provided.

For administrative purposes the grid reference and post code of County Hall is provided

OS Grid Reference: **OS 292994,091628**

Postcode: **EX2 4QD**

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

A5. Equality Analysis

Has any Equality Analysis been undertaken in line with the Equality Duty? x Yes No

SECTION B – The Business Case

B1. The Scheme – Summary/History (Maximum 200 words)

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

Devon is making good progress on the delivery of its street lighting policy, which focusses on reducing energy costs and carbon emissions. The policy has enabled the introduction of part night lighting in residential roads. To enable community support, the policy provides for a balanced approach, with main routes through communities remaining lit all night.

This bid provides an ‘invest to save’ opportunity to enable the energy saving policy to be delivered on main roads in Devon.

The introduction of LED lighting will reduce energy costs by over £1m per annum and reduce carbon usage by 60% on over a third of the County’s street Lights. In addition, higher quality lighting will be provided contributing to improved road safety and reducing the fear of crime. The scheme will also provide a cost effective programme to renew over 5000 older street lighting columns which are approaching the end of their life. A further benefit will be reduced costs associated with planned and reactive maintenance in the forthcoming years.

B2. The Strategic Case (Maximum 650 words)

The recently refreshed Devon County Council strategic plan aims to promote a future Devon for service users and communities where they are resilient, prosperous, healthy, connected and safe. Maintaining a safe , sustainable and cost effective street lighting provision contributes to all the above service aims.

Devon has over £10 Billion in highway assets and in common with other highway authorities a gap has emerged between the amount of funding available and the funding required to maintain all asset components in a steady state. The estimated backlog for carriageway maintenance alone is currently £750m. The highway asset strategy has focused on maintaining road surface condition on priority routes in a steady state and this has affected the ability to keep pace with many other asset components including street lighting.

Devon has over 75,000 Street Lights and is implementing a policy of ensuring savings in energy are actively pursued to reduce carbon emissions and to ensure lighting is cost effective and sustainable. Street lighting accounts for over one third of the Councils carbon emissions and there is growing pressure on revenue budgets which fund annual energy charges.

A large proportion of the lighting columns are approaching the end of their life with a third of the stock now over 30 years old.

LED technology and value for money of implementation have improved significantly in the last five years and now it is opportune to look at possibilities for an invest to save initiative in this area. The Council is committed to reducing its financial liability, however due to other priorities, we are unable to afford to take out further borrowing to support this project at this time. This reduces the options available to progress a scheme of this magnitude.

In addition to introducing LED lighting it is proposed to replace over 5000 older columns. Efficiencies and good customer service can be achieved by combining both asset interventions in the same project.

The scheme is a continuation of the County Council's policy to reduce energy consumption and carbon emissions which began in 2009. The first phase was to convert mainly residential street lighting to part-night operation, with lighting switching off between 00.30 and 05.30. Lighting on designated A and B roads were left lit all-night due to the heavier and faster traffic volumes with a view to a future programme of part-night operation or dimming where possible. The conversion of these mainly higher wattage lanterns will result in a significant reduction in energy consumption and carbon emissions.

The conversion of existing lighting to an LED source will not only reduce energy consumption, but the 'white light' provision gives excellent colour rendition properties and can be better controlled to reduce light intrusion and light pollution generally. Improved night time visibility contributes to the safety of all highway users. In addition improved lighting has a positive impact on fear of crime .

Reduction in energy consumption will have an associated reduction in carbon emissions. The implementation of the scheme will result in a 60% reduction. Supporting evidence summarising scheme costs and benefits are included in annex 1

In taking forward this scheme alternative options were considered which include a do minimum position; and a larger programme including residential areas. The council is in the process of delivering part night lighting across residential areas and therefore the efficiency gains associated with conversion of these areas is considerably lower than main roads where the policy has been for lights to remain lit all night.

The scheme will provide direct benefit to all highway users using the main road network for business and leisure journeys.

If funding is not secured feedback on the proposal will be assessed with a view to a further scheme bid. There is a requirement to reduce emissions and energy costs so there is a need to continue to explore avenues to achieve the scheme objectives. The council is already considering a larger annual column replacement programme to address the increase in the ageing profile of older lighting columns.

Before preparing a scheme proposal for submission, bid promoters should ensure they understand the financial implications of developing the scheme (including any implications for future resource spend and ongoing costs relating to maintaining and operating the asset), and the need to secure and underwrite any necessary funding outside the Department's maximum contribution.

Please complete the following tables. **Figures should be entered in £000s** (i.e. £10,000 = 10).

Table A: Funding profile (Nominal terms)

£000s	2015-16	2016-17	2017-18	Total
<i>DfT Funding Sought</i>	1,221	5,079	3,962	10,262
<i>LA Contribution</i>	344	1,433	1,117	2,894
<i>Other Third Party Funding</i>				

Notes:

1) *Department for Transport funding must not go beyond 2017-18 financial year.*

2) *A minimum local contribution of 10% (local authority and/or third party) of the project costs is required.*

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.
- 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.

Have you appended a letter(s) to support this case? Yes No x 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 (maximum 300 words)

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 ensure that in the risk register that you have not included any risks associated with ongoing operational costs and have used the P50 value.

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

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

Each element of the costs of the scheme have been worked up and a risk rating applied which calculates a contingency. Account has also been taken of general and construction inflation

b) How will cost overruns be dealt with?

Scheme delivery and progress, actual and projected costs, will be reported and monitored monthly. This will involve a member of the highways asset management team, accountant and relevant engineers designing and supervising delivery of the scheme. Management action will be taken where possible however if additional funding is required, it will be sourced from the Local Authority Funding.

c) What are the main risks to project delivery timescales and what impact this will have on cost?

The quantitative risk register is provided in annexe 2. The main five risks have been identified, valued and included in the estimated costs. Time contingency has been built into the planned procurement and delivery timeline. In the unlikely event of time and cost overruns, on top of those allowed for and that management action cannot fully resolve, DfT funding can be applied first and Local Authority funding applied, if required on any increased costs.

B6. The Economic Case – Value for Money

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

An appraisal summary table is attached in appendix 3. This identifies a BCR of 2.56 for the proposed 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:**

Note this material should be provided even if a BCR estimate has been supplied (unless already covered in a VfM Annex).

A description of the do-minimum situation (i.e. what would happen without Challenge Fund

The do minimum situation assumes that operational costs associated with energy and maintenance and renewal of lighting

investment).	components continue at current values. The details of these costs have been calculated over a 60 year period.
Details of significant monetised and non-monetised costs and benefits of the scheme (quantified where possible)	The benefits have been identified using the MOSLAR methodology. The main benefits are large savings in ongoing operating costs, large savings in Green House Gas emissions and moderate benefits in accident reduction and fear of crime. Details of the costs and benefits are provided in an appraisal summary table in annex 3. The benefits and costs have been converted to 2010 values using a GDP deflator.
Length of scheme (km)	N/a
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.	N/a
d) Other VfM information where relevant - depending on type of scheme bid:	n/a
Details of required restrictions/closures if funding not provided (e.g. type of restrictions; timing/duration of restrictions; etc.)	
Length of any diversion route, if closure is required (over and above existing route) (km)	
Regularity/duration of closures due to flooding: (e.g. number of closures per year; average length of closure (hrs); etc.)	
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)	
Number of existing cyclists; forecasts of cycling usage with and without the scheme (and if available length of journey)	

B7. The Commercial Case (maximum 300 words)

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.

The procurement strategy for the street light columns and lantern replacement will consist of carrying out an OJEU level competitive exercise as set out in the Procurement Contract Regulations 2006 (or 2014 if implemented soon). The exact route to market will be determined following an analysis of the supply market, number of suppliers available and the complexity of the requirements. It is anticipated that either a Restricted or Open process will be adopted.

Devon will explore with colleagues on the South West Alliance of Highway Authorities, the collaborative procurement of LED lighting based on work already completed by Gloucestershire County Council.

In order to be able to deliver the scheme quickly through either route we will develop detail specification that has no ambiguity for the suppliers – this will reduce the potential pre and post tender clarification.

Using the “Most Economically Advantageous Tender” methodology to evaluate the submissions we will identify the best positioned supplier to meet our requirements, timescales and budget constraints.

In addition, working with our neighbouring authorities we will investigate any opportunities for joint procurement in the main column replacement, the exchange or retro fit of the lanterns, any controlling equipment and the installation/maintenance programmes. The intention will be to reduce the delivery of this programme by using common standards and specification that will reduce the implementation time and the ongoing maintenance cost.

The procurement will be led by a team consisting of members from different departments who will have interest in delivering this project successfully.

****It is the promoting authority’s responsibility to decide whether or not their scheme proposal is lawful; and the extent of any new legal powers that need to be sought. Scheme promoters should ensure that any project complies with the Public Contracts Regulations as well as European Union State Aid rules, and should be prepared to provide the Department with confirmation of this, if required. An assurance that a strategy is in place that is legally compliant is likely to achieve the best value for money outcomes is required from your Section 151 Officer below.***

B8. Management Case - Delivery (maximum 300 words – for b)

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?

xYes No

See annex 4

- 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.

Devon has an outstanding reputation for delivery on externally funded projects and has developed an understanding and empathy with the explicit requirements of DfT in respect of timeliness, probity, adaptability within clear boundaries and evidenced delivery

The A380 South Devon Link Road is a £110m project with £76m of DfT funding. Devon is currently in the final year of a 3 year works programme which is fully expected to be completed ahead of schedule. The project team have managed a number of difficult constraints including physical and ecological. Devon have worked closely with the DfT and managed their cashflow to enable early release of DfT grant.

Schemes with Local Pinch Point Fund contributions totalling in excess of £7m are currently under construction or already completed. Projects include Roundswell Roundabout (A39 Barnstaple), Tithebarn Link Road (Exeter) and Decoy Link Road (Newton Abbot).

In addition to these projects Devon are also facilitating the £5.7m improvements to the A38 Drumbridges junction on behalf of the Highways Agency.

Ensuring consistency of design and treatment along routes is seen as a key learning outcome, with the authority re-invited by DfT to advise on future strategies for the rural networks.

Devon's success is built on a commitment to deliver. Experience in dealing with challenging ecological issues, understanding statutory process and managing stakeholders coupled with an expertise in contract and risk management has developed a reputation for completing projects on programme and on budget.

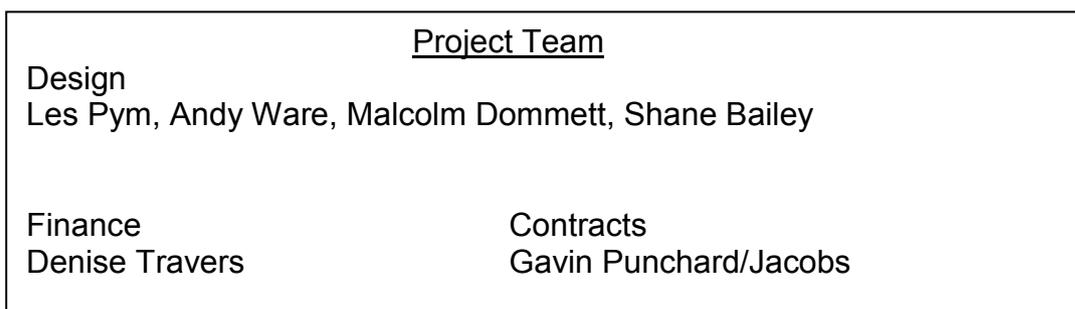
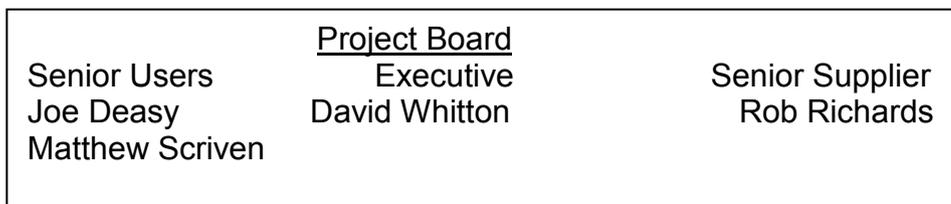
Devon has developed a business model that provides flexibility to manage fluctuations in work load to ensure that local and national priorities are met. Core delivery is through experienced in house staff with other key resources and specialist knowledge available through private sector partners.

In house staff have experience in implementing major lighting projects such as the introduction of part-night lighting in residential areas. LED design methods are currently used by in-house staff on highway improvement schemes and new highway developments.

Key learning points include the importance of realistic design and delivery timescales in achieving successful results and early consultation and communication with stakeholders.

B9. Management Case – Governance (maximum 300 words)

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.



The Project Board is responsible for the owning the business case for the project and accountable for the overall success of the project. The Executive is the person who will need to ensure the project delivers the required outcomes to achieve the business case.

The senior supplier is responsible for commissioning the services or for external suppliers who will be delivering products and services to be used and deployed by the project. The Senior Supplier will need to turn the requirements of the projects into products and services and must work closely with the project manager. The senior user ensures the outcomes of the project are fit for purpose, realistic and will meet the terms of the project business case.

The project manager leads the project team and is responsible for running the project on a day to day basis. He monitors and controls progress, risks and finances and updates the project board on progress against the project plan and any issues arising.

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.

Please ensure that in the risk register cost that you have not included any risks associated with ongoing operational costs and have used the P50 value.

Has a risk register been appended to your bid? **See annex 2**

xYes No

SECTION C – Monitoring, Evaluation and Benefits Realisation

C1. Benefits Realisation (maximum 250 words)

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 profile quickly shows positive returns rising steadily over the 60 year evaluation period. The main benefit is the saving in annual energy costs. This benefit realises a payback on the scheme investment within 10 years. The maintenance benefits rise to reflect the longer lifecycle and lower repair demand of the renewed components in comparison with the ongoing baseline of basic maintenance. This is in addition to the benefits arising from reduced carbon use and reduced fear of crime. Data is included in annexe 1 to show the profile of benefits related to the maintenance elements.

The baseline benefits are based on a do minimum scenario of continuing the current maintenance regime of ad-hoc maintenance to minimum requirements including replacement of components at six- yearly frequency.

Highway users are the primary beneficiaries of the benefits through improved lighting quality contributing to road safety and reduced fear of crime. Reduced operating costs will benefit users in the provision of a more cost effective Council service. Reduced carbon emissions will be a global benefit.

C2. Monitoring and Evaluation (maximum 250 words)

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

Energy saving and carbon reduction will be measured annually and compared to baseline do-minimum values.

Age profile of street lighting components will be measured and this information will inform the asset strategy on future renewal decisions

The number of complaints related to street lighting from members of the public will be monitored. It is expected that these will be reduced.

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 Lighting the road ahead: Street lighting improvements in Devon I hereby submit this request for approval to DfT on behalf of Devon County Council and confirm that I have the necessary authority to do so.

I confirm that Devon County Council will have all the necessary powers in place to ensure the planned timescales in the application can be realised.

Name:

D WHITTON

Signed:

D Whetton

Position:

Head of Highway Capital & Waste

D2. Section 151 Officer Declaration

As Section 151 Officer for Devon County Council I declare that the scheme cost estimates quoted in this bid are accurate to the best of my knowledge and that Devon County Council

- 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:

A. SINCLAIR

Signed:

A Sinclair

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