

# 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)\*:** Telford & Wrekin Council

**Bid Manager Name and position:**

Amanda Roberts, Group Manager – Highways Management Services

**Contact telephone number:** 01952 384659

**Email address:** [Amanda.roberts@telford.gov.uk](mailto:Amanda.roberts@telford.gov.uk)

**Postal address:** Darby House  
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Telford  
TF3 4JA

**Please specify the weblink where this bid will be published:** [www.telford.gov.uk/HMCF2015](http://www.telford.gov.uk/HMCF2015)

## **SECTION A - Scheme description and funding profile**

**A1. Scheme name:** Illuminated Assets Upgrade Project

### **A2. Headline description:**

The primary project purpose is to upgrade illuminated assets and reduce running costs in order to fund wider maintenance activity.

Activities include upgrading street lights to LED and replacing concrete columns/wooden poles, upgrading feeder pillars, de-illuminating signs or upgrading to LED and tracing and mapping the private cable network.

### **A3. Geographical area:**

This project covers illuminated assets across the Borough of Telford & Wrekin.

**OS Grid Reference:** 369941, 309107

**Postcode:** TF3 4JA

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

### **A5. Equality Analysis**

Has any Equality Analysis been undertaken in line with the Equality Duty? **x Yes**

## **SECTION B – The Business Case**

### **B1. The Scheme – Summary/History**

Illuminated assets (IAs) have quantifiable and controllable running costs in relation to energy. We aim to reduce that cost by upgrading rather than switching off our IAs. This will in turn improve the streetscape, reduce carbon emissions and maintenance costs. The ongoing revenue savings realized by this project will be reinvested into wider highways asset management activity.

These aims will be achieved by:

- Introduction of lower energy technology plus dimming and trimming for street lighting assets that have not yet been upgraded .
- De-illumination or removal of illuminated signs and bollards where feasible and installation of LED units where illumination is required (2166 signs & 901 bollards)
- Replacement of 2014 concrete columns and 795 wooden poles whilst upgrading the lanterns
- Tracing and mapping of the Council's private cable network which is a legacy from the development of Telford. Full asset records do not exist. Once mapped an asset management plan for the cable network will be developed

In addition our TAMP will be revised. It will incorporate strategies that prevent this widespread asset upgrade leading to 'same-rate deterioration' problems similar to those caused by the wholesale introduction of these assets when the New Town was developed.

### **B2. The Strategic Case (Maximum 650 words).**

#### **Why the asset is in need of urgent funding?**

In the 1960s and 70s the development of the New Town of Telford incorporated the town-wide introduction of new highways assets, including streetlights, signs and bollards. These numerous assets have deteriorated at the same rate with some nearing the end of, or even exceeding their design life. Telford is now part way through a second large-scale expansion with increasingly more assets being introduced. A newly revised guide for developers ensures low energy technology for newly installed illuminated assets, but there is an increasing contrast in asset condition and standards between the 'old' New Town and the newly developed areas and this, combined with the fact that older assets have high energy and maintenance costs means that they are now in urgent need of funding.

During the development of the New Town, an extensive private cable network (PCN) was introduced, specifically in the estates to the south of the Town. Records of this network survived in the form of a list of streets. As this asset ages, we are experiencing an increasing number of PCN related problems. Tracing and mapping the PCN will enable us to develop an asset upgrade strategy, thereby reducing outages and associated inconvenience and cost.

#### **What options have been considered and why have alternatives have been rejected?**

##### **Option1: Do Nothing**

For the reasons stated above, this is not a viable option

### Option 2: Invest to Save (Prudential Borrowing)

Since 2012 the Council has invested £1.025m in lower energy technology with a further £1.05m set aside for 15/16 and 16/17 (match funding for this project). The programme started with higher energy assets that gave the highest savings levels and to date has saved in the region of £114k. The Council will continue to invest as long as there is a viable business case. However, there is a point at which the business case cannot be made for prudential borrowing due to the cost of servicing the loan combined with increasingly long payback periods. Therefore Prudential Borrowing is not an option for funding the whole of this project but is being put forward as match funding.

### **What are the expected benefits / outcomes?**

#### Expected Quantifiable benefits:

- reduced energy usage and costs
- carbon reduction
- reduced maintenance costs
- increased streetscape parity between the old and new areas of Telford

#### Possible or Unquantifiable Benefits

- reduced crime and fear of crime
- improved residential values
- reduced collisions or injury severity
- improved community pride and personal wellbeing

#### Geographical Areas

The scheme will cover all areas of the borough and no areas will be impacted adversely.

#### If Funding is Not Secured

To date we have invested £1.025m of Prudential borrowing into street lighting energy reduction plus £600k of LTP funding into signing upgrades and de-illumination (£200k per year). This investment has led to energy savings and we would look to continue to invest over future years. However, at the current rate of investment it would take us over 30 years to complete the project, by which time the Phase 1 assets would require replacement. The proposed scheme would accelerate delivery so the upgrades are completed by 2018 rather than 2051. In addition there is an ongoing LTP funded project to replace older columns and this will continue, although the optimum time to replace the remainder is at the time of upgrading the lanterns.

### **What is the impact of the scheme?**

- Improved assets and better asset knowledge
- Lower energy usage and lower carbon emissions
- Reduction in sign clutter
- Improved streetscape
- Reduced asset maintenance costs
- Ongoing savings (other than those associated to the Invest to Save project) to be invested into the maintenance of other highway assets.

#### Additional Information

Telford & Wrekin has submitted a second Challenge bid (Telford Town Centre Connectivity Package). This incorporates upgrades to specific illuminated assets. Should both bids be successful the street lighting elements will be removed from the Town Centre package to avoid duplication of funding.

### B3. The Financial Case – Project Costs

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

<b>£000s</b>	<b>2015-16</b>	<b>2016-17</b>	<b>2017-18</b>	<b>Total</b>
<i>DfT Funding Sought</i>	5,135	5,835	6,163	<b>17,133</b>
<i>LA Contribution</i>	1,493	835	507	<b>2,835</b>
<i>Other Third Party Funding</i>				
<b>Total</b>	<b>6,628</b>	<b>6,670</b>	<b>6,670</b>	<b>19,968</b>

**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

- 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.**

A total of £1.12m of non-DfT contributions is made up as follows:

£1.05 (LA: Prudential Borrowing) has been made available through an existing street lighting invest to save project

£0.07m (LA: Prudential Borrowing) from 'Everyday Telford - Pride in Your Community' Programme which is an investment programme focusing on issues of importance to local residents

- 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 his 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.

## 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).

Although high cost, this project is essentially a low risk one for the following reasons:

- The main element of the project is replacing lanterns on existing columns. There is no major civil engineering element to the project and the only 3<sup>rd</sup> party risk is where connections are required to be carried out by Western Power Distribution (the DNO). The project risk register (appended) shows that the top 5 risks to this project are low cost risks, such as lead in times for equipment to be delivered. Consequently a low risk allowance has been applied to project costs. Much of our mitigation strategy is around strong project management and governance.

*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?  
**10%**
- b) How will cost overruns be dealt with?  
**Any overruns will be met by the Council**
- c) What are the main risks to project delivery timescales and what impact this will have on cost?  
**The main risks to project delivery timescales, as identified in the risk register are:**

Risk	Impact on cost	Mitigated?
Excessive procurement timescales	Nil	Y
Excessive lead in times for equipment delivery	Nil	Y
Delayed release of DfT signing guidance leading to delay in start of signing element of project	Nil	N
Slow progress by the contractor	Nil	Y
Changes to Senior Management affecting decision making timescales	Nil	Y
Higher than anticipated level of DNO connections	Minimal increase	Y

## 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.**

The estimated BCR for this scheme is 1.58

This is based on a scheme life of 20 years with the following benefits:

- energy cost savings
- carbon cost savings estimated using DEFRA Shadow Price of Carbon figures
- estimated maintenance savings

The benefit of re-investing cashable savings into wider maintenance has not been taken into account as the outcome of this investment could not easily be quantified

**b) 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 investment).**

The Council would continue to invest in the region of £325k per year into Invest to Save projects, with the occasional injection of additional funding. With this level of funding it would take 30 years to upgrade all the assets to low energy technology.  
 LTP funding would be used for column upgrades and the rationalisation of illuminated signs and bollards, and to replace parts of the private cable network as they failed, but again this would take over 30 years to achieve.  
 One off funding (such as the Pride in Your Community project which is contributing £70k towards this bid) will continue to become available but this will be ad-hoc funding that cannot be relied upon when planning long term maintenance and upgrade of our assets.  
 Our street lighting management contract is due to be re-let in 2016 and we aim to include clauses relating to demonstrating ongoing cashable efficiencies and investment in low energy products.

**Details of significant monetised and non-monetised costs and benefits of the scheme (quantified where possible)**

- Monetised Costs:
- Street lighting lantern upgrades  
**£14,697k**
  - Wooden and concrete column upgrades  
**£2,911k**
  - Cable Network Tracing and mapping  
**£110k**
  - Feeder pillar replacements  
**£577k**
  - Illuminated signs and bollards review and upgrade, de-illumination or removal)  
**£904k**
  - Column testing prior to lantern upgrades  
**£169k**
  - Design, procurement, CDM, delivery etc (fees)  
**£600k**
- Monetised Benefits:
- Carbon Savings\*  
**£7,674k**
  - Energy Savings\*  
**£16,589k**
  - Maintenance Savings\*  
**£7,290k**

	*Inflation applied
<b>Length of scheme (km)</b>	
<b>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.</b>	n/a
<b>c) Other VfM information where relevant - depending on type of scheme bid:</b>	
<b>Details of required restrictions/closures if funding not provided (e.g. type of restrictions; timing/duration of restrictions; etc.)</b>	n/a
<b>Length of any diversion route, if closure is required (over and above existing route) (km)</b>	n/a
<b>Regularity/duration of closures due to flooding: (e.g. number of closures per year; average length of closure (hrs); etc.)</b>	n/a
<b>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)</b>	n/a
<b>Number of existing cyclists; forecasts of cycling usage with and without the scheme (and if available length of journey)</b>	n/a

**B7. The Commercial Case (maximum 300 words)**

**What is the preferred procurement route for the scheme?**

In essence this project is about supplying and installing replacement equipment for existing illuminated assets. It requires a specialist contractor, but due to the relatively simple nature of this project, existing framework contracts are considered unsuitable and over complex with the potential of adding an unnecessary link into the supply chain. Therefore, the preferred procurement route is through a bespoke OJEU procurement process. This has been built into our project plan.



Through good procurement we will seek to

- secure value for money and efficient use of project resources
- ensure risks are properly considered and apportioned as part of the procurement and contract award process
- provide a procurement strategy that minimises risk to overall delivery of the programme
- use procurement as an opportunity to support the local economy, in particular working with service providers and contractors to provide opportunities for apprenticeships

It is proposed that a standard procurement will be undertaken using NEC3. favoured as this will incentivise the contractor to deliver the lowest outturn cost.

Consideration was given to delivering this project through our existing term street lighting maintenance contract. However, following advice from our procurement officer we have concluded that this is not the best option for two main reasons:

- The existing contract expires in April 2016 and would not give the consistency that this project requires
- The existing contract will not give the same efficiencies as a bespoke contract

Two elements will not be separately procured:

Due to the extent of their local knowledge which will reduce timescales, the Private Cable Network element of this contract will be delivered through the current contractor.

Column testing will be carried out under an existing contract.

*\*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 –)**

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?

x Yes  No

- 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.

Telford & Wrekin Council has significant experience of delivering other DfT funded programmes including:

LSTF Large Project – Telford Box Road (£6.1m)  
LSTF Key Component projects including £1m LSTF revenue extension  
Local Pinch Point Funding – Malinslee Roundabout (£1.1m)  
HA Pinch Point Funding – Forge Roundabout (£2.2m)

Key elements to these projects including good communication plans to liaise with businesses & residents on planned works as well as other key stakeholders. Strong governance through the Telford Town Centre Board has also played a crucial role in the delivery of the scheme and this model will be continued into the Illuminated Asset Upgrade Project.

In addition a key lesson around the difficulty in trying to control third parties including statutory undertakers has direct relevance to this project. As such this has been factored into the programme.

### **B9. Management Case – Governance**

There will be a simple project governance structure with a high level project board, a project manager and project delivery team.

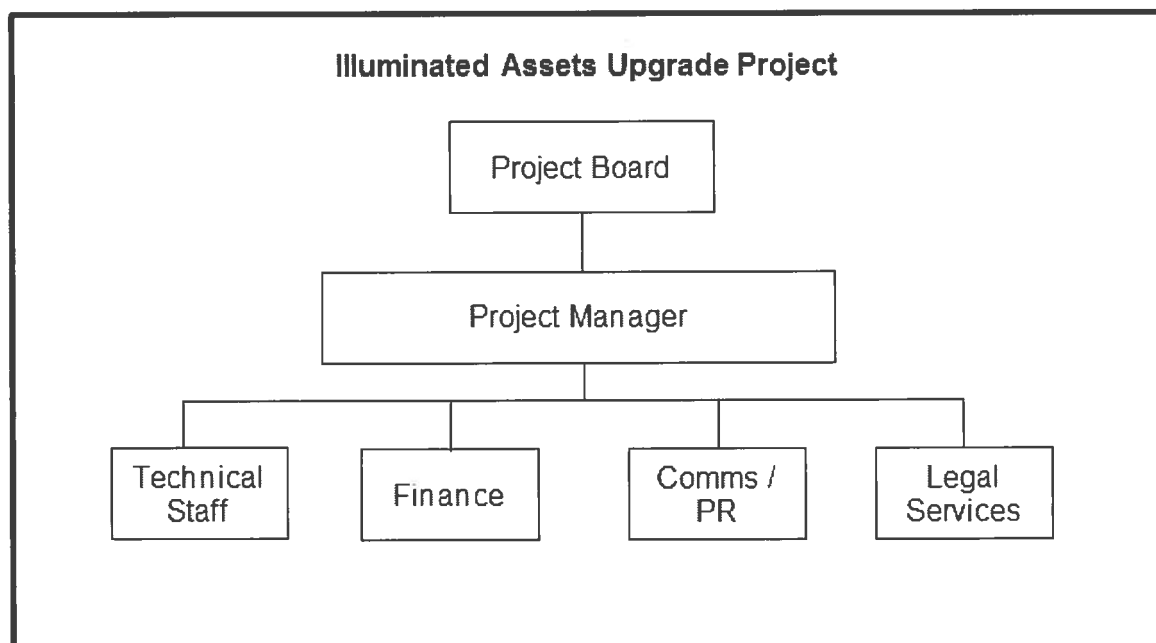
The project board will be formed with the remit of making key decisions such as

- authorising work stages and changes
- approving the completion of key deliverables.

The board will comprise the following:

Angie Astley – Assistant Director – Customer, Care and Neighbourhood Services  
Keith Harris – Senior Responsible Officer  
Dave Hanley – Service Delivery Manager – Highways & Neighbourhood Management  
Julia Copus – Finance Manager

The Project Manager will take key decisions to the board, but is not designated a key decision maker.



The table below outlines key members of the Large Project team who will be involved in the delivery of the project.

Name	Job Title	Project / Technical Role
Keith Harris	Service Delivery Manager – Transport & Highway Development	Senior Responsible Owner
Dave Hanley	Service Delivery Manager – Highway & Neighbourhood Management	SDM Responsible for illuminated assets
Amanda Roberts	Group Manager – Highway Management	Project Manager
Steve Hollins	Group Manager – Engineering Services	Managing Design Teams and CDM
Simon Taylor	CDMC	Ensuring project is delivered in line with CDM regulations
Lee Barnard	Traffic Management Group Manager	Ensuring all traffic orders are in place and responsible for agreeing co-ordination of work on the highway
Ian Ross	Solicitor	Providing highways legal advice
Paul Martin	Solicitor	Providing contract legal advice
Nigel Newman	Communications Manager	Managing external communication and PR for the project
Dainy Runton	Capital and Infrastructure Accountancy Team Leader	Leading financial management and reporting for the project
Adam Brookes	Traffic Officer	Technical Specialist – traffic management
Heidie Coombs	Street Lighting Technician	Technical Specialist – street lighting

### **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?

Yes  No

## **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 benefit owners for this project will be the two technical specialists.

<b>Objectives</b>	<b>Measure</b>	<b>Timescale</b>
Reduction in energy use	Data provided in the Meter Administrator's monthly report	Baseline data to be taken from the end of year report for 14/15.. Progress to be measured monthly and reported annually.
Reduction in carbon	Data provided in the Meter Administrator's monthly report	Baseline data to be taken from the end of year report for 14/15.. Progress to be measured monthly and reported annually.
Reduction in annual maintenance costs	Internal financial monitoring	Baseline data will be taken from the 2014/15 outturn report and reductions will be reported annually.
Increase in public satisfaction with street lighting	NHT survey	Baseline data will be taken from the 2014 survey. Progress will be reported annually.
Improved community pride and wellbeing	Resident surveys	Surveys (in a sample of project areas) to be carried out before and 3 months after installation. For work completed in the summer this might be stretched to 6months. To be reported annually.

## **C2. Monitoring and Evaluation**

We plan to evaluate this scheme on an ongoing basis as outlined below:

Monthly energy and carbon use statements are provided by our meter administrator (Power Data Associates). This will make the task of measuring reductions relatively simple but will rely on timely updating of our asset inventory.

The Council's internal systems for financial monitoring will provide monthly data on ad-hoc maintenance costs. These will be reported annually though as historically we receive more requests for maintenance in the Winter months than the Summer.

The Council participates in the annual NHT survey and this will provide both baseline data and an annual view of whether or not satisfaction is increasing. In addition, random sampling of residents in areas where lighting has been improved will give an indication of the extent to which the upgraded lighting has improved community pride and increased sense of wellbeing.

## SECTION D: Declarations

### **D1. Senior Responsible Owner Declaration**

As Senior Responsible Owner for Illuminated Assets Upgrade Project I hereby submit this request for approval to DfT on behalf of Telford and Wrekin Council and confirm that I have the necessary authority to do so.

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

Name: **KEITH HARRIS**

Signed:

Position: **SDM - TRANSPORT + HIGHWAY DEVT.**



### **D2. Section 151 Officer Declaration**

As Section 151 Officer for Telford and Wrekin Council I declare that the scheme cost estimates quoted in this bid are accurate to the best of my knowledge and that Telford and Wrekin 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:  
Kenneth Clarke

Signed:



### **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](mailto:roadmaintenance@dft.gsi.gov.uk) copying in [steve.berry@dft.gsi.gov.uk](mailto:steve.berry@dft.gsi.gov.uk)

