Local Highways Maintenance Challenge Fund

Department for Transport

Application Form: bids for funding in 2019/20

The level of information provided on this form should be proportionate to the size and complexity of the works proposed. An Excel data proforma should also be completed.

Note that DfT funding is a maximum of £5 million per project for bids in 2019-20. An individual local highway authority may apply to bid for only one scheme. Funding will be provided in 2019/20, but it is recognised that construction may go into 2020/21 as well. The closing date for bids is 31 October 2019.

For schemes submitted by a Combined Authority for component authorities a separate application form should be completed for each scheme, then the CA should rank them in order of preference.

Applicant Information

Local authority name: City of Bradford Metropolitan District Council

Bid Manager Name and position: Richard Gelder Highway Services Manager

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

Contact telephone number: 01274 437603 **Email address:** richard.gelder@bradford.gov.uk

Postal address: 4th Floor Britannia House
Hall Ings
Bradford
West Yorkshire BD1 1HX **Postcode**

Combined Authorities

If the bid is from a local highway authority within a Combined Authority, please specify the contact and ensure that the Combined Authority has submitted a Combined Authority Application Ranking Form.

Name and position of Combined Authority Bid Co-ordinator:

Contact telephone number: **Email address:**

Postal address:

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, the local highway authority 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.

Please specify the weblink where this bid will be published:
https://www.bradford.gov.uk/transport-and-travel/major-highways-schemes

SECTION A – Description of works

A1. Project name: Structural Maintenance of Key Routes

A2. Headline description:

Proposed start date _____2020_____

Estimated Completion date ___Q4 2023_____

Brief description

The strategy set out in this proposal will improve the reliability of the carriageway and retaining wall structures on the A644 Brighouse and Denholme Road, B6145 Thornton Road/Cemetery Road, B6429 Manywells Brow, C583 Allerton Lane which would otherwise suffer particular social, environmental and economic risks should they be unexpectedly disrupted through structural failure.

The works involve essential retaining wall and carriageway reconstruction and resurfacing works including some realignment.

The proposed works compliment the previously implemented longer term resilience retaining wall strengthening works to main district routes along and across the Pennine ridge to the west of the district.

A3. Geographic area:

Please provide a short description of the location referred to in the bid (in no more than 50 words)

West of Bradford City Centre lies the Pennine Ridge which is traversed by classified distributer roads. The classified routes bid for serve towns and villages of Queensbury, Thornton, Allerton and Cullingworth.

OS Grid Reference: **See Appendix A3 location and route plan**
Postcode: **See Appendix A3 location and route plan**

You might wish to append a map showing the location (and route) of the proposed project, existing transport infrastructure and other points of particular interest to the bid. **See Appendix A3 location and route plan**

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

DfT funding of **up to £5 million in 2019/20**

Structural maintenance, strengthening or renewal of bridges, viaducts, retaining walls or other key structures, footbridge or cycle bridge renewal
☒

Major maintenance, full depth reconstruction of carriageways, structural maintenance of tunnels
☐

Resurfacing of carriageways including improvements to footways or cycleways that are within the highway boundary
☐

Renewal of gullies and replacement of drainage assets
☐

SECTION B – The Business Case

B1. The Financial Case – Project Costs and Profile

Before preparing a proposal for submission, bid promoters should ensure they understand the financial implications of developing the project (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 table below. **Figures should be entered in £000s** (i.e. £10,000 = 10).

Funding profile (Nominal terms)

£000s	***2019-20***	***2020-21***
DfT Funding Sought	*4,500*	*DfT funding not available in 2020-21*
LA Contribution	*500*	
Other Third Party Funding	*0*	

Notes:
1) Department for Transport funding will be granted in the 2019-20 financial year but local highway authorities may carry that funding over to following financial years if necessary.
2) There is no specific amount for a local contribution by the local authority and/or a third party but if this is proposed please state what this is expected to be.

B2. Local Contribution / Third Party Funding

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

a) The non-DfT contribution may include funding from the local authority or a third party. This should include evidence to show how any third party contributions are being secured, the level of commitment and when they will become available.
No third party funding
b) Please list any other funding applications you have made for this project or variants of it and the outcome of these applications, including any reasons for rejection (e.g. applications made through any similar competition).
No previous application

B3. Strategic Case (sections (a) to (g) below)

This section should **briefly** set out the rationale for making the investment and evidence of the existing situation, set out the history of the asset and why it is needs to be repaired or renewed. It should also include how it fits into the overall asset management strategy for the authority **and why it cannot be funded through the annual Highways Maintenance Block Funding grant.**

a) What are the current problems to be addressed by the proposed works? (Describe economic, environmental, social problems or opportunities which will be addressed by the scheme).

Bradford has a significant length and surface area of 'engineered' roads negotiating the topography of the Pennine hills to the west of the district. The steep valleys intersected with small watercourses and centuries of property development along the roadside have produced a network of constrained roads supported by bridges and retaining walls along pre 19th century alignments.

The retaining walls are in general of stone construction with a high proportion of those being dry stone reflecting the local availability of these materials at time of construction. The vast majority of dry stone retaining walls are over 100 years old and have served the transport infrastructure well through their life. Masonry faced walls and their aesthetic appearance form an essential part of Bradfords pennine heritage. Like any other structure retaining walls have a finite life before significant maintenance works or replacement is required. Timely maintenance interventions can prolong the service life of walls as with other structures.

Access to local residential, industrial and manufacturing sites is generally provided by minor roads diverting from the Strategic Route Network (SRN) and distributer roads. The highway infrastructure relies on many kilometres of wall supporting roads on valley sides. Bradford are responsible for approximately 120km of structural walling on the highway network.

Unplanned and reactive maintenance, particularly when the structure has been allowed to deteriorate into a gross state of disrepair or even impending collapse are usually expensive and disruptive to the normal operation of the transport network. These failures often happen at times of severe weather (heavy rain or low temperatures) which have become more significant in recent times.

Between 1990 and 2010 asset data was collected proactively on all Classified and many significant unclassified routes. The gathered condition information has allowed Bradford to prioritise and plan wall strengthening works. The LTP funding for the Primary Route Network until 2010 permitted Bradford to bring the vast majority of its arterial route walling condition up to be safe and fit for purpose. The 2015 Challenge bid funded the last of the significant PRN routes and 2 Principal routes up to a similar standard. Other critical structures have been tackled individually or in small clusters however greater economies of scale can be achieved through design and procurement of 'routes'. A further advantage to route based procurement is the ability to plan and deliver with minimal disruption to the travelling public on the network.

The current priority routes are:

- A644 Queensbury to Denholme – this route links the A647 Bradford to Halifax and the A629 Halifax to Keighley both routes have been previously structurally upgraded and will provide resilient links to the Communities. Both structural and carriageway works required.
- B6145 Bradford to Denholme via Thornton – this radial route links Bradford city centre ring road and the A644/A629 much of the structural upgrading of the walls has already been undertaken.
- B6429 Denholme to Bingley via Cullingworth – this route links the A629 with the Aire Valley the route from Cullingworth to Bingley has already been significantly structurally strengthened it is intended to upgrade the Cullingworth to A629 section to further consolidate the 2018 Additional Local Highways Maintenance Funding
- C583 Queensbury to Allerton via Thornton – Busy rural route linking A644 – B6145 – B6144 crossing steep valleys, some adhoc works have been carried out however there remains significant lengths of walling and carriageway works to be done. Housing developments in the Thornton and Allerton area have increased useage of this route.

Of the above routes and the respective stock of walls a number are considered to be in critical condition. These walls been prioritised to focus on those of a particular high priority due to their location on primary distributer and local distributer roads leading to urban centres within the area, or between main centres (and the absence of convenient diversion routes). There are significant economic and environmental disbenefits experienced when a structure fails, as the temporary traffic management required is unplanned and may not be co-ordinated with other works on the network. This causes delays and queuing traffic and can exacerbate local air quality problems.

Our wall strengthening strategy has to date been a combination of route and critical condition wherever possible combining schemes to achieve economies of scale. Our route strategy has been to tackle the Primary and Principal Route Network first. Specific funding for PRN strengthening works was available up to 2010 and the 2015 Challenge fund has funded the outstanding A629 PRN walls. The Local Transport Plan annual settlement during the 2001-2011 period allowed for us to plan and execute works approaching £2m per year plus the PRN specific funding. Since 2011 we have had reduced annual settlements to the extent we currently receive around £900k - £1m. This reduced level of capital funding has been used on a safety and essential basis predominantly working on bridge assets, retaining walls are currently excluded from the DfT Highway Maintenance Capital Block Funding. The 2018 Additional Local Highways Maintenance Funding has primed our walling programme with critical structures across the district.

The 2019 Challenge bid is our first opportunity for a 'special' bid for funding to proactively approach the walling stock on the identified priority routes. The cost of stabilising these walls is estimated to be £5m, a sum way beyond the current available funds of the local authority. Were any one of these walls to fail it would have significant social, economic and environmental impact with a repair cost well above planned works.

Overall, the strengthening and maintenance of these walls at key strategic locations is of substantial benefit. It will reduce the risk to highway users, reduce major disruption (lane restrictions and emergency wall collapses causing road closures/ traffic restrictions) and will ensure continued use of all routes including abnormal load routes and bus routes.

Implementation of the scheme will prevent further deterioration of these structures and preclude potentially more costly strengthening / reconstruction costs at a later date.

The wall strengthening scheme will provide not only benefits to the local areas, communities and businesses, but also to the wider Bradford and West Yorkshire community. It is therefore vital to strengthen these walls to reduce congestion, improve public safety and help maintain the vibrant economy of West Yorkshire as a whole by ensuring the continued use of all routes

b) Why the asset is in need of urgent funding?

DfT Highway Maintenance Capital Block funding has reduced in real terms over the past decade by over a half. Work on Highway Structures including bridges and walls has been safety and essential based for nearly 10 years. This methodology does not allow for 'stitch in time' repairs or a fully planned asset management programme. Year on year asset depreciation is in the order of £4-6m so we are operating in a state of managed decline. Stock improvements were achieved during the 2001-2011 period but stagnation and decline is the direction of travel for the current asset condition.

The biggest impact on the highway asset over the past 10 years was the December 2015 floods which has focussed resources but the damage is now rectified. It is fortunate that further collapse through natural deterioration has been limited partly due to the general stock condition and partly through interim measures across the district. There are many unaddressed structural issues

throughout Bradford, this backlog across the district will take a number of years to clear and will absorb the annual maintenance block without tackling any of the proactive planned works such as that proposed here.

Inevitably some of the identified bid structures on the routes will cease to function and need 'reactive' interim measures and potential road closures, with associated cost and disruption. There are presently temporary concrete barriers deployed on B6145, B6429 and temporary repairs were carried out to C583 the A644 is undergoing monitoring.

The cost of stabilising the walls and associated carriageway on these priority routes is estimated to be £5m, were any one of these walls to fail it would have significant social, economic and environmental impact with a repair cost well above planned works.

Do Nothing and deal with as reactive is how the wall stock is being managed presently. The classified network of roads is essential to the functioning of the district and as such the highway assets therein need to be proactively maintained. Without a capital injection the wall stock will not be able to be managed proactively.

Reactive maintenance consists of carrying out corrective remedial works once loss of performance has occurred i.e. failure or significant risk of failure. This is not economic nor is it an effective policy for long-term stewardship of a major asset. It has a number of drawbacks compared to planned maintenance; e.g.

- There is a greater risk to operational efficiency and safety;
- It is not possible to effectively budget or plan for maintenance;
- Maintenance is likely to be more disruptive and costly;
- It can allow deterioration to spread more widely;
- The asset condition worsens and maintenance demand is increased in the long term; and
- There is a risk of disruption to Gas, Electric, Water, telephone services etc.

Interim mitigation measures can be applied in two categories:

- those that reduce the load on the structure; and
- those that strengthen the structure.

The first restricts vehicular loading on the structure with the associated traffic implications for the route, the latter involves expenditure to temporarily support the structure. In both cases there can be a major local impact on statutory undertaker's equipment in order to divert services away from the affected area, leading to additional expenditure and disruption to traffic.

c) What options have been considered and why have alternatives have been rejected?

There are limited options in terms of routes and their availability it is not a long term viable solution to close a classified road. Long term road closure on the routes is therefore rejected repair is the only solution.

Walls are in the main simple structures not necessitating overly complex repair solutions. Where complex elements are identified options appraisal during detail design will review available methods and recommend appropriate solutions.

Usually a localised approach to maintenance is the only current cost effective solution due to budget constraints; our programme aims to safeguard against another section of the same wall collapsing in the immediate future. This removes the need for further expenditure and disruption. Having planned rather than reactive maintenance (most of which is carried out in an emergency situation) reduces the risk to public safety and is generally more cost effective to implement.

d) What are the expected benefits / outcomes?

The expected outcomes are that the strengthened walls should only require minimal intervention works during the 120year design life. By tackling routes there are expected benefits from economies of scale in both cost and disruption for both short term and long term.

Reactive interventions and potential closures should be avoided in the short term.

By injecting capital monies into the specific bid routes and structures the highway structures asset management and the DfT Capital block will not be used and can be redeployed to clear some of the outstanding backlog. In clearing some of the backlog there should be an improvement in the overall stock condition which will have the benefit of freeing expenditure on interim safety measures across the district.

f) What will happen if funding for this scheme is not secured? Would an alternative (lower cost) solution be implemented (if yes, please describe this alternative and how it differs from the proposed scheme)?

Should funding not be made available, the current programme of inspections and reactive maintenance, as set out above, would have to continue, with expensive remedial works being undertaken, with resulting disruption, should failures occur. As the cost of reactive maintenance is higher, it reduces the overall capacity of the authorities to carry out work.

g) What are the economic, environmental and social impacts of completing this project?

Each reactive repair involves the implementation of lane closures and signal control that causes severe disruption to traffic on the network. If the funds were available to carry out remedial works to all the full length of a wall at one time it would significantly reduce the overall disruption to traffic. Several sections of wall could be worked on simultaneously and the overall cost would be reduced; works would be continuous resulting in overall reduction in duration; and the overall environmental impact of carbon emissions due to standing traffic would be decreased.

The availability of DfT Challenge Funding provides an opportunity to break into the cycle of decay and make a difference as to how walls are managed in the future. The injection of additional funds will allow the worst affected walls to be rebuilt and others to be maintained insitu, thereby avoiding much of the disruption associated with reconstruction. This will bring real benefits to the community including:

- Improvements in public safety;
- Better, and therefore more economic use of resources;
- Planned rather than unplanned work on the highway;
- Reduction in highway disruption;
- Avoidance of loss of amenity to those who are dependent on critical routes;
- Preservation of the appearance of the built environment within the borough.

B4. Equality Analysis

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

B5. The Commercial Case

This section categorises the procurement strategy that will be used to appoint 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.

Framework contract ☐

Direct labour ☐

Competitive tender ☒

**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 and is likely to achieve the best value for money outcomes is required from your Section 151 Officer below.*

B6. Delivery of project

Are any statutory procedures, such as planning permission, required to deliver the project? If yes please provide details below;

☐ Yes ☒ No

Details of statutory procedures before works can commence

None

SECTION C: Declarations

C1. Senior Responsible Owner Declaration	
As Senior Responsible Owner for Structural Maintenance of Key Routes I hereby submit this request for approval to DfT on behalf of City of Bradford Metropolitan District Council and confirm that I have the necessary authority to do so. I confirm that City of Bradford Metropolitan District Council will have all the necessary powers in place to ensure the planned timescales in the application can be realised.	
Name: Steve Hartley	Signed:
Position: Strategic Director for Place	

C2. Section 151 Officer Declaration	
As Section 151 Officer for City of Bradford Metropolitan District Council I declare that the scheme cost estimates quoted in this bid are accurate to the best of my knowledge and that City of Bradford Metropolitan District 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: CHRIS CHAPMAN	Signed:

Submission of bids:

The deadline for bid submission is 5pm on **31 October 2019**
Successful bids for Challenge Fund Tranche 2B are to be funded in 2019/20.
An electronic copy only of the bid including any supporting material should be submitted to:

roadmaintenance@dft.gov.uk copying in Paul.O'Hara@dft.gov.uk