

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: Bolton Council

Bid Manager Name and position: Mark Rowles – Principal Engineer, Structures and Estate Development

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

Contact telephone number: 01204 338936

Email address: mark.rowles@bolton.gov.uk

Postal address: 3rd Floor
Paderborn House
Bolton
BI1 1UA

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: Mike Purcell

Contact telephone number: 0161 244 1121

Email address: Mike.Purcell@tfgm.com

Postal address: 2 Piccadilly Place
Manchester M1 3BG

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: www.bolton.gov.uk/highways/

SECTION A – Description of works

A1. Project name: Daisy Hill Station Bridge – Bridge Deck Replacement

A2. Headline description:

Proposed start date December 2020

Estimated Completion date April 2021

Brief description

Daisy Hill Station Bridge is on the B5235 Leigh Road which forms an important and busy commuter route that helps to alleviate surrounding highway/cross boundary congestion between Bolton and Wigan by linking the MRN/KRN routes A58 and A577.

The bridge deck has come to the end of its lifespan with independent assessments concluding that the bridge edge beams load capacity is less than Dead load and all the deck plates are rated at Dead Load only.

A re-decking scheme is necessary to remove the current Health and Safety risks and to avoid the weight restriction or closure that is due to be implemented. Any highway restrictions imposed over the bridge will have a severely detrimental effect on the surrounding MRN/KRN in Bolton and Wigan, while also affecting Network Rail commuters. The highway diversion routes would put HGV traffic onto local residential roads that are not suitable for this purpose. Local bus routes 516, 517 and school bus services will be affected.

A3. Geographic area:

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

Leigh Road forms an important and busy commuter route that helps to alleviate surrounding highway/cross boundary congestion between Bolton and Wigan by linking the MRN/KRN routes A58 and A577

OS Grid Reference: **SD 6580 0480**

Postcode: **BL5 2JZ**

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.

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
<i>DfT Funding Sought</i>	2,500	<i>DfT funding not available in 2020-21</i>
<i>LA Contribution</i>	250	
<i>Other Third Party Funding</i>	250	

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.
**Bolton Council and Network Rail will both fund equal amounts towards the promoted scheme in lieu of being in the position to undertake a Bridgeguard 3 agreement.
LC/TP contributions will be made available upon funding award.**
- 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).

N/A

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).

The B5235 Leigh Road forms an important and busy commuter route that helps to alleviate surrounding highway/cross boundary congestion between Bolton and Wigan by linking the MRN/KRN routes A58 and A577.

The bridge has two spans with the central pier providing the access to Daisy Hill Rail Station and the very busy commuter rail line between Southport and Manchester City Centre, therefore further easing traffic congestion by providing an alternate mode of transport to the highway. The bridge deck has come to the end of its lifespan and a re-decking scheme is necessary to remove the current Health and Safety risks and to avoid the weight restriction or closure that is due to be implemented. Any highway restrictions imposed over the bridge will have a severely detrimental effect on the surrounding MRN/KRN in Bolton and Wigan, while also affecting Network Rail commuters. The highway diversion routes would put HGV traffic onto local residential roads that are not suitable for this purpose. Leigh Road is on bus routes 516 and 517.

The restriction/closing of the B5235 Leigh Road will not help alleviate the negative traffic impact in Atherton and Westhoughton that will be generated during construction, if the Westhoughton Bypass works go ahead as planned, or will it help to provide growth demand that will be introduced by nearby developments planned as part of the existing housing sites and the GMSF local to the MRN/ KRN.

Therefore, the proposed Daisy Hill Station Bridge scheme benefits Bolton, Wigan and Network Rail by providing safe and unrestricted use of the important B5235 link road.

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

Bolton Council have installed barriers to prevent accidental wheel loading to the footway as the South Span Edge Beams have an assessed capacity of Less than Dead Load.

The deck plates for the whole of the structure have been assessed as Dead Load only.

The carriageway currently has no weight restriction imposed on it retaining substantial risk until Network Rail insitu testing is completed and an appropriate weight limit or complete closure is implemented.

At present Bolton Council have inadequate funding available through their annual Highways Maintenance Block Funding grant to undertake the refurbishment that is required to achieve a desired 40t load capacity, needed to ensure that no weight restriction is applied to the bridge and Leigh Road.

The current results obtained from the Bolton Council and Network Rail independent assessments show that the capacity of the:

South Span Edge Beams is – Less Than Dead load

T Stiffeners throughout the structure in their most corroded state is – Less than Dead Load

Steel Deck Plates throughout the structure is – Dead Load only

A Level 2 assessment of the deck plates was subsequently undertaken by Network Rail to try and improve the results for the deck plates. The result of the Level 2 finite element assessment remained at - Dead Load only. Final insitu testing currently being concluded.

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

- **Option 1: Network Rail continue to monitor and evaluate the structure to hopefully achieve an acceptable loading. Bolton Council keep temporary accidental wheel load measures in place during monitoring (Very High Risk remains, acceptable results highly unlikely). The most likely scenario is that the bridge would need to be closed or at best a 3.5t weight restriction put in place.**
- **Option 2: Undertake extensive steelwork repairs throughout the structure to try and achieve 40/44t capacity. This option will still require track possessions and major road closures and may not achieve the required loading, no scope for increased headroom, no guarantee of extending design life.**
- **Option 3: Full deck replacement to provide 40/44t capacity (precast concrete beams) This option offers 40/44t capacity, H4A Parapet, 120yr design life and guarantees the increased headroom required for future OLE.**
- **Option 4: Full deck replacement to provide 40/44t capacity (steel beam and concrete composite) This option offers H4A Parapet, 40/44t capacity, 120yr design life. The deck is likely to be deeper in section and more expensive than option 3. The potential for providing increased headroom for future OLE is less likely to be achieved.**

It is proposed Option 3 is selected as it offers

- **Best Value for money when compared to life span achieved**
- **120 year design life for deck**
- **Guaranteed 40/44t capacity**
- **Guaranteed H4a Parapet**
- **Improved footway width when temporary measures are removed**
- **Improved headroom for future OLE**
- **Low future maintenance**
- **More slender deck than Option 4**
- **Includes waterproofing of new deck**
- **Removal of High Health and Safety Risk ensuring safe and continued use of the highway**

d) What are the expected benefits / outcomes?

The bridge deck replacement scheme would remove current Health and Safety risk and continue to alleviate cross boundary traffic congestion on the busy MRN/KRN routes A58 and A577 and provide access to Daisy Hill Rail Station for train users.

It would also help with the impact in Atherton and Westhoughton that will be generated during construction if the Westhoughton Bypass works go ahead as planned. And would also provide growth demand that will be introduced by nearby developments planned as part of the existing housing sites and the GMSF local to the MRN/ KRN.

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)?

There is no alternate solution available if funding is not secured to replace the bridge deck. A 3.5t weight restriction or complete closure is the most probable outcome if the deck is not replaced. This would create a diversion that would be routed via A58 (Wigan Rd/Cricketers Way/Park Rd) - Wearish Lane - Hindley Road - Hartford Road.

Hartford and Hindley road is residential and the A58 is MRN/KRN. The diversion route would pass through multiple junctions, a commercial centre and cross the boundary between Wigan and Bolton. Wearish Lane already has a history of issues with residents unhappy about the number of HGVs that use this route.

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

The proposed Daisy Hill Station Bridge scheme benefits Bolton, Wigan and Network Rail by providing safe and unrestricted use of the important B5235 link road and maintaining access to the very busy commuter rail line between Southport and Manchester.

It would help to alleviate future negative traffic impact in Atherton and Westhoughton that will be generated during construction if the Westhoughton Bypass works go ahead as planned. And would also provide growth demand that will be introduced by nearby developments planned as part of the existing housing sites and the GMSF local to the MRN/ KRN. By avoiding a complete closure or the more likely 3.5t weight restriction, the heightened highway risks of diverting HGVs and higher volumes of traffic through residential areas would be avoided. A survey procured to calculate the impact that closure of Leigh Road would have on the surrounding KRN shows the A58 in Westhouhton would have significantly increased traffic volumes at the busy junction and commercial area between Mill Street and Wigan Road of, 59% increase East Bound and 82% increase West Bound.

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

Rail Track possessions booked for certain scheme elements (The available pre-programmed track possession dates are already reflected in the projects proposed start and end dates removing uncertainty of delivery)

Statutory Undertakers Plant – temporary diversions

SECTION C: Declarations

C1. Senior Responsible Owner Declaration

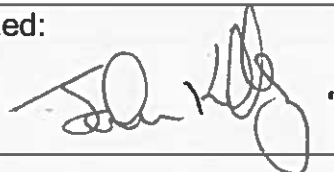
As Senior Responsible Owner for *Daisy Hill Station Bridge – Bridge Deck Replacement* I hereby submit this request for approval to DfT on behalf of *Bolton Council* and confirm that I have the necessary authority to do so.

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

Name: John Kelly

Signed:

Position: Assistant Director Highways and Engineering



C2. Section 151 Officer Declaration

As Section 151 Officer for *Bolton Council* I declare that the scheme cost estimates quoted in this bid are accurate to the best of my knowledge and that *Bolton 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: Sue Johnson

Signed:

Jane Pollard Deputy SISI



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

Challenge Fund Toolkit

Scheme Name	Daisy Hill Station Bridge - Bridge Deck Replacement
Scheme Promoter	Bolton Council

Scheme Details

Scheme Opening Year	2021	Appraisal period: 30 years
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If you are bidding for multiple schemes please fill out a proforma for each scheme. Blue indicates data needs to be added.

SCHEME COST (£1000s)

Financial Year	2019	2020	2021	2022	2023	Totals:
DfT Funding Sought	2,500	-	-	-	-	2,500
LA Contribution	250	-	-	-	-	250
Other Third Party Funding	250	-	-	-	-	250
Total	3,000	-	-	-	-	3,000

All Schemes

Input Data	Specific Data	Units	Other Supporting Data / Information (either input directly or provide reference to supporting information reported elsewhere)
Length of Scheme	0.3	(Km)	Excluding diversion route
Number of vehicles on affected section (split by vehicle type if possible)	17600	(Total vehicles - AADT)	All vehicular data provided is dated 14/11/2016 and is shown as Bolton and Wigan Cross Boundary data.
Cars	15200	(Cars - AADT)	value left from traffic count data, all motors less OGV/LGV
LGV	1900	(LGV - AADT)	LGV on traffic count assume all vehicles over 3.5t
HGV	500	(HGV - AADT)	OGV on traffic count assume all vehicles over 7.5t
PSV		(PSV - AADT)	specific data split not available
Average Speed on Route	48	(Km/h)	30mph (off peak, no restriction)
Type of Road		(Motorway, Trunk, Principle or Minor)	Non Principal Class 2 (Could not input the data into specific data box)

Other salient information for the VFM Case	<p>The B5235 Leigh Road forms an important and busy commuter route that helps to alleviate surrounding highway/cross boundary congestion between Bolton and Wigan by linking the MRN/KRN routes A58 and A577.</p> <p>The bridge has two spans with the central pier providing the access to Daisy Hill Rail Station and the very busy commuter rail line between Southport and Manchester City Centre, therefore further easing traffic congestion by providing an alternate mode of transport to the highway.</p> <p>The bridge deck has come to the end of its lifespan and a re-decking scheme is necessary to remove the current Health and Safety risks and to avoid the weight restriction or closure that is due to be implemented. Any highway restrictions imposed over the bridge will have a severely detrimental effect on the surrounding MRN/KRN in Bolton and Wigan, while also affecting Network Rail commuters. The highway diversion routes would put HGV traffic onto local residential roads that are not suitable for this purpose. Leigh Road is on bus routes 516 and 517.</p> <p>The restriction/closing of the B5235 Leigh Road will not alleviate the negative traffic impact in Atherton and Westhoughton that will be generated during construction if the Westhoughton Bypass works go ahead as planned. Or, provide growth demand that will be introduced by nearby developments planned as part of the existing housing sites and the GMSF local to the MRN/ KRN.</p> <p>Therefore, the proposed Daisy Hill Station Bridge scheme benefits Bolton, Wigan and Network Rail by providing safe and unrestricted use of the important B5235 link road and access to the busy rail route.</p>
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Carriageways

SCANNER CATEGORY	Proportion of the road	Average RCI Number	Other Supporting Data / Information (either input directly or provide reference to supporting information reported elsewhere)
Red	0%	0	
Amber	100%	61.85	Carriageway over the bridge Deck is Amber as it was not addressed when Leigh Road was last maintained.
Green	0%	0	81% of Leigh Road falls into the green category as a whole. The proposed diversion route also falls into the green category.

Cycleways

Input Data	Specific Data	Units	Other Supporting Data / Information (either input directly or provide reference to supporting information reported elsewhere)
Number of Cyclists	52	Cyclists/day	data: 14/11/2016 Wigan Cross Boundary

Diversion

Input Data	Data	Units	Other Supporting Data / Information (either input directly or provide reference to supporting information reported elsewhere)
Please give information about the diversion Route	A58 (Wigan Rd/Cricketers Way/Park Rd) - Wearish Lane - Hindley Road - Hartford Road. Hartford and Hindley road is residential and the A58 is MRN/KRN. The diversion route would pass through multiple junctions, a commercial centre and also cross boundary between Wigan and Bolton. Wearish Lane already has a history of issues with residents unhappy about the number of HGVs that use this route.		
Length of any diversion route, if closure is required (over and above existing route)	5.6	km	An alternate diversion is through Atherton, via Platt Lane, North Road and the MRN/KRN A577 Wigan Road with an increased distance to the diversion proposed to 7.6 km. However, Platt Lane will be closed when the Westhoughton Bypass scheme is carried out.
Average extra time per vehicle on diversion route (over and above existing route)	10	mins	10mins with no traffic delays/off peak. Although this will guide traffic through a residential area and onto the busy A58 junctions. 82% extra traffic volume West Bound and 59% East Bound on the A58 Cricketers Way will be created by a closure. Peak time traffic on this already congested route plus the expected extra traffic will create long delays/grid lock on the A58 and surrounding MRN/KRN.

Note: there is no need to conduct any additional new modelling. Please use whatever existing route mapping tools currently available.

Bridges

Input Data	Specific Data	Units	Other Supporting Data / Information (either input directly or provide reference to supporting information reported elsewhere)
Please give information about any current or planned weight restriction	The bridge is currently undergoing final physical monitoring and testing by Network Rail in an attempt to raise the assessed capacity results above dead load only. Both the Bolton Council and Network Rail independent assessments and further finite analysis assessment results rate the bridge edge beams capacity at less than dead load and all of the bridge deck plates at dead load only. At present Bolton Council has installed accidental wheel load prevention to the footways to provide some protection to the edge beams. Bolton Council and Network Rail are waiting on the final testing results to determine the extent of the pending highway restriction or if a full closure of the bridge is necessary. The imposition of a 3.5t weight restriction is the most likely outcome if a reconstruction scheme is not carried out.		
What year is this restriction due to come into place (if preexisting please put 2018)	2019		Late 2019, early 2020, final test result will determine the extent of the restriction or if a full closure is required.
Number of days per year the restriction is in effect	365		Any restriction or closure will be permanent until the bridge deck can be replaced
What vehicle class does the restriction apply to?			
Cars	yes		Pending restrictions potentially apply to all vehicle designations depending on the outcome of the final Network Rail insitu testing attempt to raise assessment capacity findings above dead load only.
LGV	yes		"
HGV	yes		"
PSV	yes		"

Flooding

Input Data	Specific Data	Units	Other Supporting Data / Information (either input directly or provide reference to supporting information reported elsewhere)
Number of closures due to flooding per year	None	(number of closures/year)	
(Average) Duration of closure due to flooding	None	(duration of closure - hrs)	