

# 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:** Nottinghamshire County Council

**Bid Manager Name and position:** Gary Wood – Group Manager Highways and Transport

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

**Contact telephone number:** 0115 977 4270

**Email address:** [gary.wood@nottscc.gov.uk](mailto:gary.wood@nottscc.gov.uk)

**Postal address:**

Nottinghamshire County Council  
County Hall  
West Bridgford  
Nottingham  
NG2 7QP

### **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:** N/A

**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.nottinghamshire.gov.uk/transport/roads/dft-funding>

## **SECTION A – Description of works**

**A1. Project name: Resilient River Crossing Route Maintenance - Nottinghamshire**

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

Maintenance of sections on the County's Major Road Network (MRN) and Resilient Network where they approach and / or cross critical bridges and provide direct links to the Strategic Trunk Road Network. These sections form an 'Eastern Loop' which unofficially completes the existing Nottingham Ring Road (**Maps 01 & 02**)

**Proposed start date: March 2020 (Drainage and minor asset works)**

**Estimated Completion date: September 2020**

### **Brief description**

Resurfacing and structural works on sections of the A6097 between Lowdham Roundabout and the A46 Fosse Road, including drainage repairs, footway resurfacing and asset data collection.

Major survey and future-proofing repairs to Gunthorpe Bridge including joint renewal, anti-carbonation coating, parapet repairs, iron fencing replacement and patch repairs to areas of blown concrete.

Joint renewal on Lady Bay Bridge plus mechanical cleaning and anti-corrosion painting including the cantilever walkway, safety fencing upgrade and brickwork repairs.

BridgeCAT surveys on both bridges, provided by GAIST.

Resurfacing sections on the A612 between Burton Joyce and Lowdham Roundabout.

Resurfacing sections on the A6211 Radcliffe Road and Lady Bay Bridge in West Bridgford.

Resurfacing the A60 Loughborough Road / Wilford Lane junction, south of Trent Bridge.

### A3. Geographic area:

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

Four sites to the south and east of Nottingham: Eastern section is from Burton Joyce to Lowdham, Gunthorpe and the A46 Trunk Road. Southern sites include Lady Bay Bridge and its southern approach plus the A60 Loughborough Road, Wilford Lane junction on the southern approach to Trent Bridge.

OS Grid Reference: **Map 04**

Gunthorpe Bridge: 468077-343685

Lady Bay Bridge: 458454-338734

Postcode:

Gunthorpe = NG14 7ES

Lady Bay = NG2 3HQ

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)**

<b>£000s</b>	<b>2019-20</b>	<b>2020-21</b>
<i>DfT Funding Sought</i>	<b>4921</b>	<i>DfT funding not available in 2020-21</i>
<i>LA Contribution</i>	<b>250 (subject to reconfiguring existing NCC Capital funding)</b>	
<i>Other Third Party Funding</i>	-	

#### *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.  
***NCC will recommend reconfiguring its capital programme to provide a £250k contribution should the bid be successful***
- 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). Nil

### **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).**

Nottinghamshire County Council has, along with contributions from the Department for Transport, Developers and the Local Enterprise Partnership D2N2, undertaken a portfolio of improvement works which seeks to ensure the safe, efficient movement of traffic through, around, into and out of the City of Nottingham. These works are either complete or due to commence over the next 3 to 4 years. They include the City Council's completed Daleside Road widening and Bus Route (ULEV)\* lane, in consultation with the County Council and funded by D2N2, the Gedling Access Road (GAR) and the six proposed junction improvements on the A614 / A6097 corridor (**Map 06**) all of which are designed to improve traffic movement along Local Authority roads to the east of the Nottingham Ring Road.

The A614/A6097 route, including Gunthorpe Bridge, was designated part of the Major Road Network in 2018, a middle tier of the country's busiest and most economically important local authority 'A' roads, sitting between the Strategic Trunk Road Network and the rest of the local road network. The A614 / A6097 route, along with the A46, forms part of the 'East-West Growth Corridor (South)' which in turn is one part of the County Councils Place Department 'Growth Corridors Strategy'. These proposed improvements, along with the imminent construction of the Gedling Access Road are priorities in this same strategy. The total cost estimate for the works is in the region of £22m. On top of the £18m allocation from the DfT the remaining funding for the project will be coming from the County Council, section 106 contributions from proposed developments along the route.

The opportunity presented by this Challenge Fund bid therefore is to enable the County Council to undertake major maintenance works as a single integrated project on those corridors which have been identified as requiring significant investment and are integral to the resilience of the 'Eastern Loop' (**Map 02**) As these routes are likely to have increased traffic usage as a result of the above improvements, these works are vital to ensure the routes remain fit for purpose for the long-term and to provide a platform for future improvements.

\*Ultra-Low Emission Vehicle.

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

The application of Asset Management Principles means a full toolbox of treatments, ranging from preventative to reconstructive, should be utilised in order to execute a balanced risk-based approach to highway maintenance. This falls in line with the recommendations contained in the HMEP Highways Infrastructure Asset Management Guidance and the Pothole Review from 2013.

This bid contains a mixture of roads at the end of their useful life and some which are deteriorating rapidly due to use and material characteristics. Using the Gaist condition breakdown it can be seen that most of the carriageway on these sites is mid-life with 60-65% at grade 3 or worse (ranging from serviceable to structurally impaired)

Improvements to the road network and increased regeneration / development is likely to increase traffic use on A612 & A6097. The main work on the Gedling Access Road is due to commence in early 2020 and the A614/A6097 junction improvements have approval in principle and is currently awaiting sign-off on the business case from the Department for Transport.

Plans are proposed by the DfT for improvements to the A46 Newark Relief Road as traffic regularly backs up along the northbound approach to Farndon roundabout, as well as along the route of the relief road itself. This contributes to increased traffic usage of the A6097 Gunthorpe Bridge route, which is also likely to carry greater traffic levels once construction on the relief road begins.

Major housing developments are already well underway in Radcliffe on Trent, Bingham and Newton leading to increased use of the Gunthorpe Bridge route. There will also be substantial development on the land adjacent to the Gedling Access Road, which is providing significant regeneration of an ex colliery site. Taking action now to restore and maintain the existing routes which connect all these improvement sites together provides a holistic approach to the economic regeneration of the area and the connectivity of Resilient Routes to the wider Major Road Network and Strategic Trunk Road Network.

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

£50,000 worth of patching was undertaken on the A6097 at Gunthorpe to stabilise the pavement until a more permanent solution could be found. Countywide commitments with annual budgets prevent the wholesale resurfacing of these key sections at one time, hence the very worst sections have already been dealt with in the short-term.

In the case of the A6011 Lady Bay Bridge, the costs of undertaking these works piece meal out of the capital budget would exceed £3,000,000.00 due to the repeated closure of this strategic route which includes Nottingham Forest & Notts County football clubs, Trent Bridge County cricket ground, National water sports centre and the Motorpoint Arena. There would also be a major impact on the public and local businesses through repeated year on year disruption through closures and progress deterioration between works resulting in greater interventions.

In the case of the A6097 / A612 Gunthorpe and Lowdham, the cost to bring the carriageways up to an 'as new' condition, is £3,254,933.00 proposed by the service renewal report to be spent on the integrated reconstruction / resurfacing and associated infrastructure maintenance. The costs of undertaking these works piece meal out of the capital budget would exceed £6,000,000 due to the repeated closure of this strategic route and progress deterioration between works resulting in greater interventions. This figure also includes for reactive maintenance that would be required in the intervening years as well as potential insurance claims costs. There would also be a major impact on the public and local businesses through repeated year on year disruption through closures.

Daytime works are not feasible due to the Resilient / Strategic nature of these routes. Gunthorpe, for example, represents the only River Trent crossing point between West Bridgford and Newark on Trent, which are some 30km apart, and can only be closed in extreme circumstances (flooding, accidents, major embankment failure etc)



**d) What are the expected benefits / outcomes?**

To bring the sections described in the bid up to a standard which will see them have an extended lifecycle that drastically reduces the number of reactive maintenance visits and extreme event closures in the future as traffic management arrangements are highly sensitive on these routes and day time closures are out of the question. Night time closures allow for a multi-disciplinary approach (several functions on site at the same time) improving productivity and reducing overall project duration.

Whilst the UK's Trunk Road Network forms the strategic route backbone nationally, Nottinghamshire County Council has the maintenance responsibility for a number of routes and structures (**Map 03**) that are considered to be Resilient and/or critical as part of the Authority's adoption of the Risk-Based Principles contained in 'Well-Managed Highway Infrastructure – A Code of Practice', published in October 2016 and implemented in October 2018. As a result of a comprehensive review of Carriageway, Footway and Cycleway hierarchies, using traffic-count & flow data, address data, proximity of key services and links to the Strategic Trunk Road Network, a Resilient Network was identified in Nottinghamshire which includes all the roads and bridges described in Section 'A' of this form and is the underlying basis for this Challenge Fund bid.

This network needs to be resilient, not only for continuous free-flowing and efficient use but also to ensure it is maintained in the best possible condition so that its continued availability is secured and the likelihood of it being subjected to numerous reactive maintenance visits in the medium to long-term is dramatically reduced.

The methodology is in line with the County Council's Asset Management Strategy which is detailed in Section 18 of the Highway Infrastructure Asset Management Plan:

<https://www.nottinghamshire.gov.uk/media/107839/highwayinfrastructureassetmanagementplan.pdf>

Proposals are being considered for improving pedestrian/cycle crossings of the River Trent as part of potential funding from DfT's Transforming Cities Fund. This may include either widening the existing footway on the west elevation of Lady Bay Bridge or construct a new footway / cycleway on the east side of the bridge and so have access across the river on both sides. Maintenance of these routes and structures helps to facilitate sustainable transport proposals such as these.

**Significant innovations / processes and other benefits relating to this project:**

**Considerate Constructors Ultra Site** standards will be applied. In partnership with Tarmac, Nottinghamshire is the only Local Highway Authority to be awarded this status.

**Solar Road Studs** – potential for savings to be made in street lighting phased turn offs.

**Hi-Brite road markings** – Additional durability and higher luminance.

**Rubber in Asphalt Technology** – Environmental Initiative.

**EMA Binder course** – strength and flexibility.

**Basalt Geotextile** – stronger both lateral and Longitudinal. As strong as steel mesh.

**Zero Landfill** – all materials to be recycled.

**Localism Agenda** - in place for all contractors used.

**Low Temperature Asphalt** – reduction in carbon footprint & CO2 emissions.

**Cold applied High Friction Surfacing** – improved durability and environmental emissions.

Use of Innovative **BridgeCAT** system.

Full asset management capture of drainage systems, road structural data and associated highway structures & assets.

Vehicle Safety Cam technology for improved on-site safety from incursions.

Proven track record of delivering schemes on time and to budget – A38/A617 DfT Challenge Fund scheme & A634 DfT Safer Roads Fund scheme.



**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)?**

Without Challenge Funding the future maintenance of these routes would consist of reactive, cosmetic repairs due to budgetary constraints whereas with the funding, structural repairs can be initiated, increasing useful life. Concentration of annual capital expenditure on these sites will result in significantly less investment on the remainder of the network.

It's highly likely that a single section/junction/structure would be treated each year or every other year depending upon deterioration rate compared with countywide requirements and available finance. It is anticipated that increased traffic use along these routes, brought about by housing developments and improved transport links is highly likely to increase the rate of deterioration.

There is currently a programme of future works on sites along these resilient corridors which will be dealt with in priority order based upon those sites which have reached the end of their useful life. Other works would include implementing preventative maintenance where necessary to arrest the decline of other routes which will slow down the rate of deterioration. The routes included in this bid have been identified as being at a point whereby preventative works are only likely to be a short-term fix. Challenge Funding will enable the County Council to future-proof the network based on anticipated increased demand (whole-life costs)

As part of the County Council's ongoing maintenance plans for its Resilient Network, numerous large-scale schemes have already been completed or are proposed on sections which form part of the corridors included in this bid. They are chiefly along those routes that either contribute to the completion of an eastern orbital route around the city of Nottingham, connecting to the existing Ring Road or they lie along those routes which provide links to some of the county's critical river bridges.

### **Completed**

(see **Map 05** for reference)

**A:** A6211 Arno Vale Road (Phase 1) – Resurfacing completed in 2018/19. Along with Thackerays Lane and Gedling Road, Arno Vale Road provides a link between the northern end of Nottingham Ring Road and what will be the north-western end of the Gedling Access Road.

**B:** A612 Nottingham Road, Burton Joyce (Phase 1) – Resurfacing completed in 2017/18.

**C:** A612 / A6097 Lowdham Roundabout – Resurfacing completed in 2018/19.

**D:** A6097 Epperstone By-Pass – Surface Dressing – Scheme completed 2019/20. Epperstone By-Pass is north of Lowdham Roundabout. This scheme was undertaken to prevent this 3.5km stretch of road from deteriorating into a condition similar to the A6097 through Gunthorpe.

**E:** A6011 Radcliffe Road, West Bridgford – Structural Patching – Scheme completed 2018/19. Radcliffe Road is the main route into Nottingham City from the A52 Gamston Roundabout and links both Lady Bay and Trent Bridges.

**F:** A60 Loughborough Road, West Bridgford (city-bound) – Resurfacing completed in 2018/19. From Wilford Lane junction to north end of County Hall. Main route into Nottingham City from the south.

**F:** A60 Loughborough Road, West Bridgford (southbound) – Resurfacing completed in 2019/20. Includes major junction on south side of Trent Bridge, southwards towards Wilford Lane.

### **Proposed:**

(See **Map 05** for reference)

**G:** A6211 Thackerays Lane, Woodthorpe – From A60 to Arno Vale Road, including Roundabout. Provisionally programmed for 2021/22.

**H:** A6211 Arno Vale Road (Phase 2) – From surfacing joint at School to Gedling Road.

**J:** A6211 Gedling Road, Arnold – From Arno Vale Road to Mapperley Plains (to tie-in with Gedling Access Road works once completed)

**K:** A612 Nottingham Road, Burton Joyce (Phase 2) – From Woodside Road to Station Road.

**L:** A6097 Epperstone By-Pass - North of Lowdham.

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

The County Council, along with the D2N2 Local Enterprise Partnership, Developers and the DfT is funding a raft of improvements along these key corridors in order to encourage economic regeneration in the form of commercial and domestic development and also to improve journey times and safety. The impact of this project will be to restore and protect the carriageways and structures which form key sections along these routes to ensure they are capable of carrying the increased activity which will be a notable outcome of increased regeneration and economic development. From an environmental perspective, the use of recycled rubber, innovative white lining and preventative maintenance techniques as well as materials fit for purpose and designed for longevity and heavy use, including 'Tencate' geotechnical membranes will reduce the likelihood of standing traffic during future works or reactive maintenance. The prime consideration being to keep traffic moving at all times.

**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

## **SECTION C: Declarations**

### **C1. Senior Responsible Owner Declaration**

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

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

Name: **Gary Wood**

Signed:

Position: **Group Manager Highways**



### **C2. Section 151 Officer Declaration**

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

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

Name:  
**Nigel Stevenson**

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](mailto:roadmaintenance@dft.gov.uk) copying in [Paul.O'Hara@dft.gov.uk](mailto:Paul.O'Hara@dft.gov.uk)