

Local Highways Maintenance Challenge Fund



Department
for Transport

Application Form (for Tranche 2A)

The level of information provided should be proportionate to the size and complexity of the scheme proposed. Note that DfT funding is a maximum of £5 million per scheme. An individual local authority may apply only for one scheme.

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

Applicant Information

Local authority names: *Bristol City Council & Bath & North East Somerset Council*

Lead Local authority name: *Bristol City Council*

Bid Manager Name and position: *Shaun Taylor - Highway Maintenance Manager*

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

Contact telephone number: *01179222404*

Email address: *shaun.taylor@bristol.gov.uk*

Postal address: *Bristol City Council,
Highway Maintenance Manager
City Hall,
PO Box 3176,
Bristol
BS3 9FS*

Bath & North East Somerset Council Bid Contact

Bid Manager Name and position: *Craig Jackson – Highway Maintenance & Drainage Manager*

Contact telephone number: *01225 394269*

Email address: *craig_jackson@bathnes.gov.uk*

Postal address: *Bath & North East Somerset Council
Lewis House
Manvers Street
Bath
BA1 1JG*

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: Emma Blackham

Contact telephone number: 01454864115

Email address: Emma.blackham@southglos.gov.uk

Postal address: Strategic Transport Policy Manager
South Gloucestershire Council (on behalf of WECA)
Department of Environment & Community Services
PO Box 299
Bristol
BS15 0DR

When authorities submit a bid for funding to the Department, as part of the Government's commitment to greater openness in the public sector under the Freedom of Information Act 2000 and the Environmental Information Regulations 2004, they must also publish a version excluding any commercially sensitive information on their own website within two working days of submitting the final bid to the Department. The Department reserves the right to deem the business case as non-compliant if this is not adhered to.

Please specify the weblink where this bid will be published:

West of England: <https://travelwest.info/projects/local-highways-maintenance-challenge-fund>

Bristol City Council: <https://www.bristol.gov.uk/streets-travel/local-highways-maintenance-challenge-fund>

B&NES Council: <http://www.bathnes.gov.uk/services/streets-and-highway-maintenance/roadworks/major-transport-schemes>

SECTION A - Scheme description

A1. Scheme name: A4 and A4174 Strategic Routes Scheme

A2. Headline description:

Please enter a brief description of the proposed scheme and its timetable including the completion date (in no more than 50 words)

Maintenance and enhancement works along the A4 from Keynsham Bypass, Bath Road, A4174 linking to new South Bristol Link Road and Bristol Airport. This route connects a large housing development and two business parks. Work will commence on site in June 2017 and complete by end of March 2018.

A3. Geographical area:

Please provide a short description of area covered by the bid (in no more than 50 words)

The A4 and A4174 Corridors provide the major transport link within South Bristol. The route is part of the Strategic Road network, as well as providing a major link from M4/M5 Interchange, Bath and its surrounding areas to the Airport. Sites along this route have previously been highlighted within JLTP.

Appendix A3.1 - the route and the planned works incorporated.



OS Grid Reference:

Broadmead Roundabout: 366533, 168285 (ST 66533 68285)

South Bristol Link Junction: 357876, 168511 (ST 57876 68511)

Postcode:

BS31 BS4 BS14 BS13

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 on land use, planning etc.

Appendix A3.1 - the route and the planned works incorporated.

[Weblink to Story Map](http://arcg.is/2nL8eQ5) (<http://arcg.is/2nL8eQ5>)

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

Small project bids (requiring DfT funding of **up to £5 million**)

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

SECTION B – The Business Case

B1. The Financial Case – Project Costs and Profile

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

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

Table A: Funding profile (Nominal terms)

£000s	2017-18		Total
	Bristol City	Bath & North East Somerset	
<i>DfT Funding Sought</i>	£3,000	£2,000	£5,000
<i>LA Contribution</i>	£725	£500	£1,225
<i>Other Third Party Funding</i>	(S106 (Hengrove Park)) £143		£143
<i>Total</i>	£3,868	£2,500	£6,368

Notes:

1) Department for Transport funding is only for the 2017-18 financial year.

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

Appendix B1.1 - outline project costings

Appendix B1.2 - outline project programme

B2 Local Contribution / Third Party Funding

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

- a) The non-DfT contribution may include funding from organisations other than the scheme promoter. Please provide details of all non-DfT funding contributions to the scheme costs. This should include evidence to show how any third party contributions are being secured, the level of commitment and when they will become available.

This confirms that BC and B&NES Councils would be supporting the bid by a contribution of 27% of the total funding required to deliver this project.

BCC: Internal Capital Investment

BCC: Section 106 Funds (Hengrove Park)

B&NES: Structural Maintenance Block Capital Funding

- b) Where the contribution is from external sources, please provide a letter confirming the body's commitment to contribute to the cost of the scheme. The Department is unlikely to fund any scheme where significant financial contributions from other sources have not been secured or appear to be at risk.

Have you appended a letter(s) to support this case? Yes No N/A

Appendix B2.1 – £725,000 - Highway Infrastructure Planned Maintenance and Structural Investment Fund under the Capital Programme (PL10 - Page 3)

Appendix B2.2 – S106 extract (Lakeshore scheme at Imperial Park by Urban Splash)

Appendix B2.3 – B&NES Local Contribution Letter

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 (e.g. through the Access Fund or similar competition).

Previous Funding Application made under Tranche 1 of Highway Maintenance Challenge Fund for A4 Keynsham Bypass

Appendix B2.4 – Keynsham By-Pass Tranche 1 bid

B3. Strategic Case (Maximum 50 words for each section a) to g)

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 the scheme 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 your scheme? (Describe economic, environmental, social problems or opportunities which will be addressed by the scheme).

This highway corridor, a key economic route between Bath and Bristol, linking employment with housing, and the main route to Bristol Airport, is in poor condition. Structural infrastructure serving Brislington Brook, a rapid response catchment area, is in poor condition will be addressed further strengthening the resilience of the network.

Appendix B3.1- Flood Risk Assessment

Appendix B3.2 - HEAT Assessment

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

The carriageway surface has reached the end of its serviceable life and requires replacement. The various structures have exceeded their design life and are need of capital investment to minimise the risk of structural failures, which would result network closures, increased congestion and flooding.

Appendix B3.3 - Core Results at various locations along route.

Appendix B3.4 - Inspection Reports for structures along route.

Appendix B3.5 - Condition Data for Carriageways along route.

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

Preventative treatments were considered however the life expectancy is shorter and road noise is an issue as the route passes in close proximity to residential properties in a number of locations. The current asset management strategy restricts maintenance to short sections each year creating constant traffic disruption to business.

d) What are the expected benefits / outcomes?

The bid route will be a fully fit for purpose carriageway in a crucial economic area, able to support the development and projected traffic over the next 20 years without any major maintenance interventions. Whole life costs will be minimised and significant economic growth in the area will be supported.

e) Please provide information on the geographical areas that will benefit from your scheme.

South Bristol (as stated in the JLTP) contains large areas of unemployment and deprivation. Callington Road Link / Bath Road Improvements will improve access by all modes and enhance employment opportunities, by improving access to jobs and potentially encouraging new business into the area.

Appendix B3.6 and [webmap](#) shows the areas that will benefit directly from this 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)?

If funding is not secured for this scheme then the current managed decline of the A4 & A4174 will be continued which in whole life terms is a more expensive option in the long term, but is the only affordable scenario open to the Councils.

g) What is the impact of the scheme?

The scheme will deliver sustained economic growth and wider access to employment including sustainable transport options. This is especially important in South Bristol (10% most deprived areas in UK) where car ownership is low and access to jobs can only be provided through sustainable travel modes.

B4. Affordability and Financial Risk (maximum 50 words for each of a) to c)

What is your Authority's most recent total outturn annual capital spending on highways maintenance?

BCC

(Year 2016/17) £5,986 figures should be entered in £000s (i.e. £10,000 = 10)

B&NES

(Year 2016/17) £4,323 figures should be entered in £000s (i.e. £10,000 = 10)

Combined

(Year 2016/17) £10,309 figures should be entered in £000s (i.e. £10,000 = 10)

What is the DfT contribution sought as a % and that annual total 48.501 % (to 3 decimal places)

This section should provide a narrative setting out how you will mitigate any financial risks associated with the scheme

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

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

15% Contingency is built into the project cost.

b) How will cost overruns be dealt with?

Recognising the shift in responsibilities we (BC & B&NES Council's) will work with WECA on any cost overruns.

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

1. Early notice of funding from DfT & full transfer on receipt from WECA.
2. Prolonged periods of poor weather affect the ability to complete the work to programme.
3. Co-ordination of unknown works from developer-led schemes outside of NRWSA.

These risks will primarily affect the ability to deliver the scheme to the stated programme rather than the overall cost of the scheme. However the governance structure for the project includes a dedicated project board to ensure risk mitigation measures are instigated in a timely manner.

Appendix B4.1 – Project Team Organogram

B5. Equality Analysis

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

Appendix B5.1 for Equality Relevance Check Analysis

B6. Value for Money

a) For all scheme bids, promoters should provide, where available, an estimate of the Benefit Cost Ratio (BCR) of the scheme.

Where a BCR is provided please be aware that DfT may wish to scrutinise the data and assumptions used in deriving that BCR.

The A4 and A4174 Airport Road Scheme has been assessed to have a **BCR of 7.9**, based on transport related benefits (road surface improvements, works to structures, accidents, public transport and walk / cycle), using a 25 year evaluation period.

Further detail is provided below.

A Technical Note ('DfT Maintenance Challenge Fund 2017, A4 and A4174 Airport Road Scheme, Value for Money', March 2017) documents the analysis carried out. This is provided as an Annex to this application. (Appendix B6.2)

Appendix B6.1 VfM proforma & associated documents

b) Please provide the following data will form a key part of our assessment:

Note this material should be provided even if a BCR estimate has been supplied and has also to be entered and returned as an MS Excel file in the VfM Annex MS Excel file).

A description of the do-minimum situation (i.e. what would happen without Challenge Fund investment).	<i>For structures, the do minimum situation for the subways and footbridges would be to ultimately close them to pedestrians and cyclists resulting in using the existing congested network to provide appropriate diversion routes, which would have cost and safety issues. The do minimum situation for culverts would be partial or total failure and obstruction of the watercourse which would contravene the drainage and waterways acts and may result in flooding onto</i>
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the Network or surrounding areas. Ultimately; failure of any culvert or bridge would result in the closure of the Network with resultant diversion and congestion.

For carriageway condition, the current managed decline of the A4 & A4174 will be continued which in whole life terms is a more expensive option in the long term, but is the only affordable scenario open to the Councils. This would result in a gradual worsening of carriageway condition with impacts of increased vehicle operating costs, journey times and accident rates.

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

Value for Money evaluation

Summary information relating to the calculation of monetised impacts of the scheme are below. The Technical Note ('DfT Maintenance Challenge Fund 2017, A4 and A4174 Airport Road Scheme, Value for Money', March 2017) documents the analysis carried out in more detail. This technical note is provided as an Annex to this application.

Costs

The present value of scheme capital costs are £5.19m (2010 prices). A 15% optimism bias has been applied in the cost benefit assessment since there is high cost certainty with the scheme ready for implementation in the current year. The present value of DM maintenance costs are £0.74m (2010 prices) which relates to ongoing reactive maintenance.

Benefits

Scheme benefits have been calculated (2010 prices), considering:

- Vehicle speed and operating cost benefits from improvements to the road surface – the estimated net pavement resurfacing benefit is £16.4m over 25 years (2010 prices), with around 64% resulting from reduced vehicle operating cost (the remainder being time related).*
- Accident benefits from improved road surface – the monetised accident reduction benefits in the opening year (2017) is £185,192, with overall accident reduction benefits discounted over 25 years being £3.8m (2010 prices).*
- Benefits from works to structures were identified, primarily as journey time savings, through avoiding the potential for route closures due to structure failures if they are not maintained. These were assessed to be £13.7m (2010 prices).*
- Cycling benefits have been calculated (by BCC) using the HEAT tool for the Callington Rd cycle scheme. For the replacement of equipment at the A4 Bath Road pedestrian / cycle crossing, benefits were calculated using the DfT Active Modes Toolkit. These were assessed as £0.6m (2010 prices).*
- PT user benefits were calculated in relation to the improved bus stop facilities using WebTAG Table M3.2.1 values applied to the number of boarding passengers extracted from the GBATS strategic transport model. These were assessed as £0.6m (2010 prices).*

The total present value of benefits over 25 years is £35.1m (2010 prices).

Cost Benefit Assessment

Costs and benefits associated with the scheme have been used to undertake a cost benefit analysis, bringing together benefits from the items listed above.

Scheme costs are summarised as follows:

Public Accounts	(£'000)
Investment costs	£5,191
Operating costs (reduced maintenance)	-£741
Broad Transport Budget	£4,450

2010 values and prices

The cost benefit analyses is summarised as follows:

Analysis of Monetised Costs and Benefits	(£'000)
Cycling Benefits	£593
Accidents	£3,824
Works to structures	£13,727
Pavement Condition	£16,433
PT user benefits	£560
Broad Transport Budget	£4,450
Present Value of Benefits (PVB)	£35,137
Net Present Value (NPV)	£30,687
Benefit Cost Ratio (BCR)	7.90

2010 values and prices

The assessment indicates the scheme represents a very high value for money with a **BCR of 7.9**. Full AMCB and Public Accounts tables are provided in the Technical Note (Annex).

Length of scheme (km)

10.5km

Number of vehicles on affected section (Average Annual Daily Traffic in vehicles and if possible split by vehicle type) – to include details of data (age etc.) supporting this estimate.

The table below shows AADT estimates for each section of route.

	Cars Mcycle	Taxis Coaches	Buses	Light Goods Vehicles	All HGVs	All Motor Vehicles
A4 Keynsham Bypass	20,732	2,078		1,101	148	24,059
A4174 Keynsham	29,103	2,917		1,545	208	33,773
A4 Bath Rd (B&NES)	28,488	2,855		1,512	203	33,059
Durley Hill, Keynsham	14,178	1,421		753	101	16,453
B3116 Bath Rd	14,261	1,429		757	102	16,549
Broadmead Lane, Keynsham	5,958	597		316	43	6,914
A4174 Hengrove Way	15,391	116		3,731	696	19,934
A4174 Callington Road	13,882	108		2,177	616	16,784
A4 Bath Rd (BCC)	29,102	322		6,016	1,167	36,608

c) Other VfM information where relevant - depending on type of scheme bid:

Details of required restrictions/closures if funding not provided (e.g. type of restrictions; timing/duration of restrictions; etc.)

Ultimately, failure of any culvert or bridge would result in the closure of the road network with resultant diversion and congestion.

Without funding for works to culverts there would be a possibility of partial or total failure and obstruction of the watercourse which would contravene the drainage and waterways acts and may result in flooding onto the road

	<p><i>network or surrounding areas.</i></p> <p><i>If funding not obtained the subways and footbridges may need to be closed to pedestrians and cyclists resulting in using the existing congested network to provide appropriate diversion routes, which would have cost and safety issues.</i></p> <p><i>If the equipment is not replaced at the A4 Bath Road pedestrian / cycle crossing, it is likely it would need to be closed due to the increasing occurrence of equipment faults.</i></p>
Length of any diversion route, if closure is required (over and above existing route) (km)	<i>Diversion routes vary between 1 and 3km further than the existing A4 / A4174 routes, however these are on inferior lower capacity local roads which would results in much longer travel times and resultant congestion.</i>
Regularity/duration of closures due to flooding: (e.g. number of closures per year; average length of closure (hrs); etc.)	<i>Not assessed</i>
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)	<p><i>5 years' data are used (01-01-2012 to 31-12-2016)</i></p> <p><i>DM</i></p> <p><i>Total Accidents: 28.6 per yr</i></p> <p><i>Slight Accidents: 23.6 per yr</i></p> <p><i>Serious Accidents: 4.6 per yr</i></p> <p><i>Fatal Accidents: 0.4 per yr</i></p> <p><i>Accident Rate - 0.30 PIA/MVKm</i></p> <p><i>DS</i></p> <p><i>Total Accidents: 25.74 per yr</i></p> <p><i>Slight Accidents: 21.24 per yr</i></p> <p><i>Serious Accidents: 4.14 per yr</i></p> <p><i>Fatal Accidents: 0.36 per yr</i></p> <p><i>Accident Rate - 0.27 PIA/MVKm</i></p>
Number of existing cyclists; forecasts of cycling usage with and without the scheme (and if available length of journey)	<i>70 additional regular cyclists due to the scheme. Average cycling journey length is calculated as 5.77km.</i>

B7. The Commercial Case

This section categorizes 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 **BCC**
- Council Contractor **B&NES**
- 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.*

B8. Delivery (maximum 50 words for a) and 100 words for b)

a) Are any statutory procedures required to deliver the project, if yes please provide details below;

Yes No

Details of statutory procedure (50 words maximum)

Both authorities will use Traffic Management for the main works. The Keynsham bypass will be contra-flow; however we will need closures of sections along the whole route. Night working will occur on road closures to reduce impact on congestion. These will need Temporary Traffic Regulation Orders to enable the works.

b) Please summarise any lessons your authority has learned from the experience of delivering other DfT funded programmes (such as Challenge Fund tranche 1, pinch point schemes, local majors, Local Sustainable Transport Fund, Better Bus Areas) and what would be different on this project as a result.

In recent years BC and B&NES Councils, a part of the WoE has successfully delivered:

LSTF West: Promoting sustainable transport in WoE area;

Cycle City;

Better By Bus Area / Greater Bristol Bus Network;

Metrobus;

Challenge Fund Tranche 1

These projects have involved working in Partnership with a wide range of stakeholders, with joint risk & change management.

A critical lesson learned from previous projects is the importance of joint project governance.

A stakeholder communications plan that involves early stakeholder consultation and involvement is a key element in ensuring community and user benefits.

Appendix B8.1 A403 Challenge Fund Lessons Learnt

B9. Stakeholder Support (maximum 50 words for a) and 100 words for b)

a) Does this proposal have the support of the Local MP(s);

Yes No

Name of MP(s) and Constituency (***Appendix B9.1***)

1 Karin Smyth MP - Bristol South

2 Kerry McCarthy MP - Bristol East

3 Mr Rees-Mogg MP - North East Somerset

b) List other stakeholders supporting the Scheme: (***Appendix B9.2***)

1. First Group

2. **West of England Local Enterprise Partnership (WE LEP)**
3. **Councillor Graham Morris & Councillor Steve Jones**
4. **Imperial Business Park**
5. **Cater Business Park Traders Group Ltd**
6. **South Bristol Business**
7. **Motorline Toyota and Infiniti Bristol**
8. **TasteTech**

SECTION C: Declarations

C1. Senior Responsible Owner Declaration

As Senior Responsible Owner for *A4 and A4174 Airport Road Scheme* I hereby submit this request for approval to DfT on behalf of *Bristol City Council* and confirm that I have the necessary authority to do so.

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

Name: **Peter Mann**

Signed:

Position: **Service Director Place - Transport**



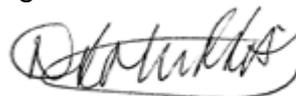
C2. Section 151 Officer Declaration

As Section 151 Officer for *Bristol City Council* I declare that the scheme cost estimates quoted in this bid are accurate to the best of my knowledge and that *Bristol City 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:
Denise Murray

Signed:



Submission of bids:

The deadline for bid submission is 5pm on:

31 March 2017 for Challenge Fund Tranche 2A (2017/18 funding)

An electronic copy only of the bid including any supporting material should be submitted to:

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

Local Highways Maintenance Challenge Fund



Department
for Transport

C2. Addendum - Section 151 Officer Declaration for Bath & North East Somerset Council in conjunction with Bristol City Council on Joint Bid

As Section 151 Officer for Bath & North East Somerset Council I declare that the scheme cost estimates quoted in this bid are accurate to the best of my knowledge and that Bath & North East Somerset 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:

Andrew Rothery
Head of Management Accounts
Delegated S151

Signed:

A handwritten signature in black ink, appearing to be 'AR'.