



Expression of Interest Form: 2020/21 proposals

This form is for proposals over £5 million to be funded by DfT in 2020/21.

The closing date for Expressions of Interest is **31 October 2019**.

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

Applicant Information

Local authority name: Lancashire County Council

Manager Name and position: David Hurford – Bridges and Structures Manager

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

Contact telephone number: 01772 534667 **Email address:** david.hurford@lancashire.gov.uk

Postal address:

Lancashire County Council
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Lancashire
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Combined Authorities

N/A

If the proposal 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 Co-ordinator for CA proposals:

Contact telephone number:

Email address:

Postal address:

Postcode

SECTION A – Description of works

A1. Name of proposal: A601(M) – Major Maintenance

A2. Geographic area:

Please provide information about the location of the proposal (in no more than 50 words)

The A601(M) is a 1.3 mile (2.1km) Special Road in Lancashire, linking M6 junction 35 to the A6 north-east of Carnforth. The route provides access to the Truck Haven located on the junction of the A601(M) and A6, as well as Carnforth itself. The A601(M) also forms part of the official M6 motorway diversion route between junctions 35 and 36. Parts of central Carnforth has been designated as an Air Quality Management Area (AQMA).

OS Grid Reference: **350901:470059 to 350880:471944**

Postcode: **LA5 9NG**

You might wish to append a map showing the location (and route) of the proposal, existing transport infrastructure and other points of particular interest.

Plan attached

A3. Description of existing problems and how the proposal would address them. Please set out which other options have been considered:

(free text)

An Options Assessment Report (OAR) has been undertaken which outlines the possible options for the future of the A601(M) route and structures within its extents. It describes the process of analysing the transport and maintenance challenges, defines the scheme objectives and identifies and assesses potential interventions to tackle these challenges.

Background

The A601(M) is a 1.3 mile (2.1km) Special Road in Lancashire, linking M6 junction 35 to the A6 north-east of Carnforth. The following structures on the A601 (M) have current maintenance issues - Brewers Barn West, Brewers Barn East, Higher North Road and Elpha bridges.

Highway maintenance budgets are reducing, highway authorities can no longer maintain all their assets to the same standard or carry out cyclic activities at the same frequency as in the past. The reducing budgets require management of aging assets and management of risk, in order to provide a safe and as reliable highway asset network as resources will allow.

Current and future situation

The A601(M) is a key road from M6 junction 35, linking the M6 to the A6, providing access to the Truck Haven located on the junction of the A601(M) and A6, as well as Carnforth itself. The A601(M) also forms part of the official M6 motorway diversion route between junctions 35 and 36. Parts of central Carnforth has been designated as an Air Quality Management Area (AQMA).

There are no significant congestion issues identified along the A601(M), with the existing capacity of the road catering for the current levels of traffic. Nether Beck, which runs over Higher North Road also operates well within the capacity of the road.

Committed developments in and around Carnforth have been identified to help inform the potential future traffic demand growth, along with TEMPro growth figures. Assessment shows that the capacity of the A601(M) will be sufficient to accommodate future demand.

Need for intervention

If these assets are left to further deteriorate, access along the A601(M) and Nether Beck (over Higher North Road bridge) will have to be constrained through weight and/or lane restrictions, which will significantly impact HGVs particularly along the A601(M) accessing Truck Haven (as well as part of the M6 diversionary route) and could cause non-HGV traffic to divert via Carnforth itself (central area designated as an AQMA).

Scheme objectives have been identified to assist in the sifting of options and identification of preferred options for consideration within the Strategic Outline Business Case:

- To facilitate lower life costs and reduce public sector expenditure.
- Secure the best solution for the long-term management and safety of the structures along the route.
- To not prejudice/preclude future development

Generating and initial sifting

The potential six options for A601(M) were developed. Consideration has been given to the temporary infrastructure measures and monitoring, the level of repair/refurbishment to each bridge, the retention or removal (despecialisation) of M status of A601(M), the potential requirement for weight or traffic restrictions and proposals for road-space reallocation.

The sifting assessment considers the most suitable options for further consideration, using a multi-criteria assessment matrix. A spreadsheet matrix has been used for the long-list sifting, using a combination of project objectives, WebTAG and EAST criteria to ensure the most suitable decision is made regarding the future of the A601(M) route. The study area site observations and issues were used to inform the sifting process, along with indicative capital costs and level of maintenance burden.

The best scoring options as Options 3, 4 and 5. Scoring has not been based purely on capital expenditure alone. Option 3 proposes to undertake major repairs and refurbishment to all the bridges (except Brewer Barn West widening), including resurfacing the entire route and removing the M status (despecialisation) of the A601(M).

Options 4 and 5 are two of the more expensive options and both include removal of M status (despecialisation) and major repairs to Brewer Barn West and East bridges, along with Elpha Bridge.

The options also include the removal of Higher North Road Bridge and Brewer Barn West widening, as well as the installation of an at-grade crossing (circa £1.2m), which increases the capital expenditure over Options 2 and 3.

However, the key determining element involves the proposals to either retain the dual carriageway (Option 5) or reallocate carriageway space to facilitate improved footpath/bridleway links and consequently reduce the A601(M) to a single carriageway road (Option 4). As there is little difference between Options 4 and 5, it was concluded that both should be taken through for further assessment, along with Option 3, which provides a suitably different proposal.

The Do Minimum Scenario (Option 1) was considered as part of the further assessment.

Option 1 involves continued monitoring of bridges and management of permitted traffic loading implemented by introducing permanent weight restrictions and permanent physical measures such as reduction in number of lanes.

Option development and assessment

The short-listed options were further developed with regards to capital cost and maintenance requirements, as well as assessed in terms of high-level environmental considerations. Capital costs have been developed and informed by the condition reports following PBI bridge surveys and engineering judgement. All costs are assumed to be at 2019 prices.

A601(M) short-listed options	Capital costs (years 1/2)	Capital costs (year 20)	Capital costs Total
Option 1	£ 1.6m	£ 8.5m	£ 10.1m
Option 3	£ 6.3m	£ 0.0m	£ 6.3m
Option 4	£ 7.4m	£ 0.0m	£ 7.4m
Option 5	£ 7.5m	£ 0.0m	£ 7.5m

Option 3 provides the most cost-effective option in terms of capital costs, with Option 1 the most expensive capital expenditure. However, consideration of capital costs alone will not determine the most suitable option to facilitate lower life costs and reduce public sector expenditure, as well as secure the best solution for the long term management and the safety of the structures. Maintenance and renewal considerations, along with impacts on traffic/users and the environment, as well as delivery of scheme objectives are also key to determining the most suitable option for the A601(M).

A601(M) short-listed options	Maintenance & renewal costs (years 1-20)	Maintenance & renewal costs (years 20-60)*	Maintenance and renewal total (60 years*)
Option 1	£ 3.1m	£ 4.4m	£ 7.5m
Option 3	£ 1.0m	£ 4.8m	£ 5.8m
Option 4	£ 0.7m	£ 2.5m	£ 3.2m
Option 5	£ 1.0m	£ 3.3m	£ 4.3m

* 60-year costs do not include for growth and are undiscounted

Maintenance and renewal costs have been considered over a 60-year period (undiscounted). Option 4 provides the most cost-effective option in terms of maintenance expenditure. This is due to the reduced maintenance and renewal requirements for Higher North Road bridge, as a result of the removal of the bridge. Another saving is a consequence of the road reallocation of the A601(M) from a dual carriageway to a single carriageway road, which has lower renewal and maintenance requirements.

Findings and Next steps

Option 1 would have the most impact on traffic and the environment, with the reassignment of vehicles following the implementation of weight restrictions and reduction in remaining capacity as a result of lane restrictions. It is also the most expensive of the options, in terms of capital expenditure, due to temporary interventions, ongoing monitoring and the cost increased related to the deferred works, as well as the ongoing maintenance burden due to retention of the special road status.

Option 3 maintains all the current access arrangements, therefore having limited impact on traffic and the environment, including the capacity of the A601(M). The despecialisation reduces the maintenance requirements and therefore ongoing expenditure. However, the retention of Higher North Road bridge does require ongoing maintenance and renewal expenditure when compared to its removal and replacement with an at-grade junction. The retention also has implications on the location of access associated with opportunities for future development.

Option 4 maintains all access arrangements, with an alternative access for Nether Beck, via an at-grade junction. This alternative access will have limited impact on traffic, in terms of reassignment. However, the introduction of the road space reallocation to a single carriageway and a footway/cycleway will change the way the A601(M) currently operates, in terms of capacity, which could have implications on further future development opportunities, as well as more significantly the use of the A601(M) as the SRN diversionary route for M6 motorway (between junction 35 and 36).

The despecialisation and the removal of Higher North Road bridge reduces the maintenance requirements and therefore ongoing expenditure. The road space reallocation also reduces the maintenance requirements, when compared to a dual-carriageway. Option 5 maintains all access arrangements, with an alternative access for Nether Beck, via an at-grade junction. This alternative access will have limited impact on traffic, in terms of reassignment and existing capacity of the A601(M) will be maintained due to the retention of the dual carriageway, which has the potential to benefit further future development opportunities, as well as the use of the A601(M) as the SRN diversionary route for M6 motorway (between junction 35 and 36). The despecialisation and the removal of Higher North Road bridge reduces the maintenance requirements and therefore ongoing expenditure.

Conclusion

The proposed scheme (Option 5) includes refurbishment and repair of bridge structures (Brewers Barn West, Brewers Barn East and Elpha), the removal of Brewers Barn West (widening) bridge and the removal and replacement of Higher North Road bridge with an at-grade junction at Nether Beck. To facilitate the installation of the at-grade junction, the preferred scheme also proposes to despecialise the road. This will also benefit the ongoing maintenance burden by reducing standard requirements the road has to be maintained to when compared to a M status road. The A601(M) will also be fully resurfaced as a result of these works.

SECTION B – The Business Case

B1. The Financial Case – Project Costs and Profile

Please indicate the anticipated cost of the proposal in the table below. **Figures should be entered in £000s** (i.e. £10,000 = 10).

It is proposed that the scheme is funded on the following basis:

- 90% (£7.395m) of construction works costs (£8.165m total works cost) from the DfT Maintenance Challenge Fund
- 10% (£850k) of the construction works cost (£8.165m total works cost) and all design (£0.5m) and preparation/supervision costs (£0.5m) making a total LA Contribution of £1.850m – Funded from the LCC Capital Programme.

Funding profile (Nominal terms)

£000s	2020-21	2021-22
<i>DfT Funding Sought</i>	£7395	<i>DfT funding is not available in 2021-22</i>
<i>LA Contribution</i>	£1550	£300
<i>Other Third Party Funding</i>		

Notes:

- 1) *Department for Transport funding will be granted in the 2020-21 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 additional funding is proposed please state what this is expected to be.*

B2. Timetable

Proposed start date 01/01/2020_____

Estimated completion date 31/12/2022_____

B3. Strategic Case and Economic Case

The rationale for making the investment, evidence of the existing situation and why the asset 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.**

(free text)

Strategic Case

The A601(M) Refurbishment scheme will ensure key strategic and local access is maintained for all vehicles between the strategic road network (M6) and wider Carnforth as a hub for the north Lancaster district and south Cumbria.

The scheme has a good strategic fit with policy aspirations contained within Lancashire's Strategic Economic Plan and Local Transport Plan. In addition, the scheme will help support the unlocking of potential development sites to assist in the delivery of Lancaster's housing allocation.

A set of strategic objectives have been defined for the scheme, along with development of a multi-criteria assessment matrix (including EAST categories). This enabled a fair assessment of a number of options to be undertaken. The best performing option was subsequently identified as the proposed scheme (option 5).

The main stakeholder groups affected by the scheme have been identified and subsequent engagement will take place. Lancaster City Council have indicated their support for the scheme. A communication and stakeholder management strategy has been developed in order to keep local businesses, residents, transport operators and other stakeholders informed on proposed works and progress.

The key risks associated with the delivery of the scheme have been documented and where appropriate suitable mitigation measures identified.

Economic Case Summary

A Cost Benefit Appraisal (CBA) assessment has been undertaken to calculate the economic benefits of the A601(M) Refurbishment scheme.

The CBA assessment has been undertaken using a spreadsheet-based tool which has been developed in line with the principles contained within the DfT's Transport Appraisal Guidance. The journey time and distance savings generated by the scheme have been used to calculate the journey time benefits.

The A601(M) Refurbishment scheme is expected to deliver £26.9m of benefits (2010 prices, discounted). The scheme is expected to cost £8.1m (2010 prices, discounted). The scheme therefore has a BCR of 3.3 and is subsequently expected to deliver 'high' Value for Money.

In addition to the transport benefits, when accounting for potential land value uplift, the BCR increases to 5.0 which represents a 'very high' VfM.

The majority of the transport benefits produced by the scheme are journey time savings generated by HGVs being able to use the most direct route. In addition, the scheme is likely to have a slight beneficial impact on Reliability and Regeneration.

The scheme is expected to generate accident benefits due to a reduction in vehicle kilometres.

The scheme is expected to have a neutral impact against most of the social impacts, as detailed in the AST.

LCC is not currently in a position to fund the continued long-term maintenance of the structures along the A601(M) from its annual Bridges Capital Programme currently set at £2.5m per annum. It would attempt to undertake temporary maintenance work to parts of the A601(M) to ensure that it does not deteriorate further. However, the nature of the works presently required are such that this maintenance would does not form a cost-effective solution.

SECTION C: Declarations

C. Senior Responsible Owner Declaration

As Senior Responsible Owner for A601(M) – Major Maintenance I hereby submit this request for approval to DfT on behalf of Lancashire County Council and confirm that I have the necessary authority to do so.

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

Name:
Mike Kirby

Position:
Director of Strategy and Performance

Signed:

A handwritten signature in black ink, appearing to read 'MK', enclosed within a large, loopy oval shape. A long horizontal line extends from the right side of the signature.

Submission of Expression of Interest:

The deadline for the Expression of Interest submission is 5pm on **31 October 2019**

Successful proposals for EOIs in Tranche 2B are to be funded by DfT in 2020/21.

An electronic copy of the EOI should be submitted to:

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