

A682 Centenary Way Viaduct Refurbishment

Strategic Outline Business Case

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Executive Summary

Introduction:

This report presents the Strategic Outline Business Case (SOBC) for the A682 Centenary Way Viaduct Refurbishment scheme. The scheme, which is being promoted by Lancashire County Council, is seeking Full Approval from the Lancashire Local Enterprise Partnership (LEP) and funding via the Local Growth Deal.

In line with LEP's Accountability Framework, a proportionate approach to the development of the Transport Business Case has been applied. Given scheme costs are less than £5m an Outline/Full Business Case will not be required, instead the scheme only requires a Strategic Outline Business Case to seek Full Approval.

Scheme Overview:

The A682 Centenary Way viaduct provides the most direct route from the M65 to a number of key development sites in Burnley. The viaduct has recently been assessed as having a capacity of zero tonnes and consequently a restriction on abnormal load vehicles using the viaduct has been implemented. Without significant works to the structure a restriction on all HGVs will be required.

The proposed scheme is a refurbishment of the existing structure, replacing bearings, coping units and the expansion joint, this will enable the viaduct to be reopened to abnormal loads vehicles and more importantly preventing the need to introduce further restrictions. It is estimated that the total cost of the scheme, allowing for design, preparation and supervision is £1.65m (2015 prices, undiscounted).

A Benefit Cost Appraisal (BCA) and Gross Value Added (GVA) assessment has been undertaken to calculate the economic benefits of the A682 Centenary Way Viaduct Refurbishment scheme.

The BCA 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 as well as the Vehicle Operating Cost savings and Marginal External Cost savings.

The A682 Centenary Way Viaduct Refurbishment scheme is expected to deliver £7.3m of benefits (2010 prices, discounted over 60 years). The scheme therefore has a Benefit to Cost Ratio (BCR) of 5.2 and is subsequently expected to deliver 'Very High' Value for Money, thus meeting the LEP's Accountability Framework requirements.

The scheme is forecast to generate an additional £4.8m of GVA for the local economy over a 60 year assessment period as a result of productivity benefits.

The scheme will be procured through a two stage quality and then price, New Competitive Tender process. Contractors will be appointed using a NEC3 Option A contract.

The project will be managed in line with the principles of PRINCE2.

The project specific governance is based on established and operating governance arrangements for schemes currently being delivered by LCC, adapted to reflect the specific requirements of devolved Local Major Scheme governance.

The success of the scheme and the associated benefits will be measured against a set of identified metrics and reported through the Growth Deal monitoring and evaluation strategy.

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1 Strategic Case

The strategic case helps to determine the need for a scheme. It must demonstrate the case for change, presenting a clear rationale for making an investment against the strategic objectives of the organisation proposing it and other relevant Government objectives. It provides important evidence and sets out robust assumptions at an early stage in the development of a business case and explains how various options have been sifted and distilled into a preferred scheme.

1.1 Strategic Context

Please explain the wider strategic context for the proposed scheme by describing the aims and objectives of the promoting organisation. Consider what is driving the need for change at a strategic level, including external factors such as new legislation, technology.

Scheme Overview:

The Centenary Way Viaduct is located in Burnley, Lancashire and carries the A682 (Centenary Way) over various unclassified roads, car parks, private land, footways and the Leeds -Liverpool Canal, a plan showing the location of the viaduct is included in **Appendix A**. Refurbishment of the viaduct is required to remove the existing restriction on abnormal loads and to prevent the implementation of a further restriction to all HGVs.

The viaduct is a seven span continuous viaduct of overall length 193.1m and a total width of 21.9m.

In 1995, a principal bridge inspection identified numerous defects associated with the structure, in particular, that the sliding bearings supporting the bridge superstructure on the intermediate piers had seized up.

In 2004, the County procured specialised instruments (data loggers, strain gauges, displacement transducers and electro levels) to confirm the site observations and monitor the effect on the movement of the viaduct as a result of the seized bearings. This was undertaken for a four year period and confirmed the long term onerous effect on the bridge sub-structure. In 2011, a further principal bridge and confined spaces inspection indicated further deterioration of the bridge structure and found some areas now require immediate intervention.

The current cost of the monitoring and inspection work is £1k p.a. irrespective of undertaking actual maintenance work. Maintenance works currently required to keep the bridge safe to users at its current capacity are estimated at £200k. This figure will increase the longer the bridge goes without maintenance.

A restriction on abnormal loads (Construction and Use vehicles) was put in place in January 2014 following the monitoring.

The bridge currently has an assessed capacity of zero tonnes.

Supporting Economic Growth:

Burnley has experienced significant positive change over recent years, in part founded on its resolute manufacturing base which has retained a reputation for excellence, has diversified and continues to be the bedrock of the local economy. The existence for the first time of a centrally located higher education offer provided by the University of Central Lancashire (UCLan) and the University College of Football Business (UCFB) based at the town's football club has transformed the outlook for young people and created tangible opportunities that have brought short term and will bring longer term benefits. Most recently, and bucking the national trend of town centre retail decline, River Island and WH Smith have signed up to new long-term leases within the town's Charter Walk shopping centre and Next has opened a new 20,000 sq ft store. This all serves to underscore why the independent think tank 'Centre for Cities' recently identified Burnley as being "*surprisingly resilient*" to the recent recession and economic downturn in its *Cities Outlook 2013* report.

With a population of 74,000, Burnley acts as the primary service centre for a wider hinterland of over 300,000. It is vital that the town maintains an effective town centre road network supporting its employment, service, retail and leisure uses. A new University Technical College opened in June 2013; this college, for 900 students from across East Lancashire, specialises in sectors significant to the Burnley and wider Lancashire economy including, engineering and construction, supporting advanced manufacturing employers within the aerospace supply chain, the nuclear industry, and green utilities and technologies. The University Technical College forms the first phase of a long-term priority development of the Weavers Triangle, a 3.9 hectare site set within the historic mill and canal core of Burnley town centre. Subsequent phases are set to include residential, leisure, retail and office opportunities. Planning permission for further work within Weaver Triangle (Sandygate Mill complex) was granted early in February 2013, and a programme of public realm improvements part-funded by European Regional Development Fund (ERDF) commenced in 2014.

The Centenary Way viaduct is an integral part of the town centre road network, supporting movement into, out of and around Burnley. All development outlined above relies on this network and lies within 350 metres of the viaduct. The viaduct's failure would therefore have serious implications for the town centre's economic performance and potential, and could deter new businesses from choosing to re-locate to the area.

Centenary Way also provides access to employment sites north of the town centre. The lack of eastbound exit and westbound entry slip roads at M65 Junction 11 means that traffic heading west from these employment sites need to pass around Burnley town centre, including using Centenary Way. This is particularly the case for businesses based

at and near the Heasandford Industrial Estate. Four of Lancashire's Priority 150 businesses are located at Heasandford, all in advanced manufacturing and engineering and linked to either aerospace or automotive industries. These are high growth businesses with hundreds of employees, many of whom use Centenary Way to access employment.

More significantly, Aircelle, one of the aerospace companies based at Heasandford and part of the French high technology Safran group, is looking to develop an Aerospace Supplier Park adjacent to its existing operations. Independent economic analysis suggests the Park could support close to 350 jobs. Being a supplier park, it is inevitable that it will require regular use of the existing road network to fulfil its primary function. Given the site's location it can be assumed that many trips to and from the Supplier Park would use Centenary Way or routes that, should the Centenary Way viaduct require further restrictions, would become congested. Consequently, restrictions on the viaduct could act as an economic brake on the success of the Supplier Park.

Burnley is one of two key economic drivers in East Lancashire and one of Lancashire County Council's (LCC) three key priority growth locations. The Burnley Pendle Growth Corridor connects Burnley town centre, existing principal employment sites and future strategic employment sites with the M65. The strategic employment sites across Burnley, include Burnley Bridge, Weaver's Triangle, the Aerospace Supply Park, and other developments such as the UCLan Knowledge Zone in Burnley town centre. Many of these development sites lie in close proximity to the M65 and/or require effective access to and from it. The Burnley / Pendle Growth Corridor package of schemes is being progressed separately to the A682 Centenary Way Viaduct Scheme.

Policy Alignment:

A fully repaired Centenary Way viaduct will be essential to gaining the maximum benefit from the Burnley / Pendle Growth Corridor improvements as well as supporting existing businesses and the town centre.

The works to the viaduct are also essential to prevent long term restrictions and to achieve the following LTP priorities;

- Improving access into areas of economic growth and regeneration – This would be achieved by retaining good links between the identified employment areas of Burnley, which is attracting advanced manufacturing and engineering companies associated with Preston's Enterprise Zone, and the M65 corridor.
- Improving peoples quality of life and safety of vulnerable road users – This would be achieved by retaining suitable routes for large vehicles, avoiding retail areas and areas with high

	<p>pedestrian demand</p> <ul style="list-style-type: none"> • Maintenance of assets so that they remain fit for purpose. <p>The refurbishment of Centenary Way Viaduct also aligns with several priorities and objectives outlined in Lancashire’s Strategic Economic Plan (SEP). For example:</p> <ul style="list-style-type: none"> • Establishing Lancashire as the natural home for high growth companies, with a clear focus on maximising our competitive economic strengths, and a strong private sector business-base to underpin the future prosperity of Lancashire; and • Creating the right conditions for business and investor growth. <p>The Centenary Way Viaduct Refurbishment scheme is not part of the Burnley-Pendle Growth Corridor (BPGC) strategy, but by maintaining the existing network in the centre of Burnley it is an essential partner to the BPGC strategy. The BPGC strategy targets junction improvements and other transport improvements to release additional site capacity and enable quicker movement of goods, services and people through this key economic corridor. The project will improve a number of pinch points on the local road network including A646/A679 junction in Rose Grove and various junctions in Burnley town centre.</p>
<p>1.2 Challenge or Opportunity to be addressed</p> <p><i>Please describe the key characteristics of the challenge to be addressed and the opportunity presented. Provide an overview of the evidence supporting this and the impact of not progressing the proposed scheme.</i></p>	<p>Opportunity to be addressed by the scheme</p> <p>As mentioned in Section 1.1 the bridge currently has an assessed capacity of zero tonnes and is closed to abnormal loads. Without major intervention at this stage a further weight restriction limiting the use of the bridge by HGVs will be required. The Opportunity presented by the scheme is to prevent further deterioration of the viaduct and restore the route to its full capacity, thus alleviating pressure on surrounding alternative routes and supporting the development of the Burnley / Pendle Growth corridor and the LTP objectives.</p> <p>Significant positive impacts of the scheme</p> <ul style="list-style-type: none"> • Remove existing restriction on abnormal loads using the viaduct. Approximately 230 abnormal loads use the viaduct each year which currently have to use alternate routes. • Securing a key link road into Burnley town centre. Restrictions on the viaduct would be a barrier to economic growth and job creation. • Maintaining the longevity of the structure. • Prevent escalation of costs required for future maintenance (the estimated cost of replacing the viaduct is £16m). • Support other schemes in the Burnley / Pendle Growth Corridor. • Support LTP objectives.

	<p>Significant negative impacts of the scheme</p> <ul style="list-style-type: none"> • Disruption to Burnley Town centre during the works <p>Impact of not progressing the Scheme</p> <p>The County Council would undertake minor maintenance work to parts of the structure to ensure that it does not deteriorate further. High cost items of work that would not be undertaken include replacement of bridge bearings, the main contributing factor to the current zero tonnes capacity.</p> <p>The Council would need to undertake a regular risk assessment for vehicle containment under the existing parapet system. If the bearings are not replaced, a restriction of HGVs would be introduced. Any abnormal loads application would be rejected thereby limiting renewal of infrastructure in Burnley.</p> <p>Using the Atkins Bridge Availability Performance Indicator, if an 18 tonne weight restriction were imposed as a long term measure on the Centenary Way Viaduct, the bridge achieves a score of '4.5'. If a 7.5 tonnes weight restriction were imposed as a long term measure then the bridge achieves a score of '0' on the Atkins Availability Performance Index. A score of less than 40 is considered 'Very Poor Availability – the structure is causing major / severe loss of availability on the route'.</p> <p>The precast coping units are considered to be a safety hazard to pedestrians / vehicles passing below the viaduct as there is potential for areas of concrete to fall from the units. Consequently, upgrading may comprise provision of protective safety barriers, or, modifications to the structure.</p> <p>The County Council has imposed a bridge monitoring status on the structure in accordance to the DfT guide BD79/06 – Management of Sub-Standard Highway Structures. If the maintenance scheme isn't undertaken now then the condition of the bridge will deteriorate further and the required repair work would become more severe. In addition, the asset would continue to depreciate at a quicker rate if repair work isn't undertaken.</p> <p>As mentioned in Section 1.1 Burnley has potential for significant economic growth with planned developments such as an Aerospace Supplier Park and continued investment from retailers in the town centre. However, should the viaduct have further restrictions placed upon it limiting use by HGVs the scale of these developments may be reduced due to the reduced accessibility for goods and services.</p>
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<p>1.3 Strategic Objectives Please present the SMART (specific, measurable, achievable, realistic and time-bound) objectives that will resolve the challenge or opportunity identified in Section 1.2 and explain how these contribute towards achieving the wider context set out in Section 1.1.</p>	<p>The principle aim of the scheme is to repair the viaduct to ensure it is capable of carrying all types of vehicle and consequently provides a key link to existing and proposed development sites.</p> <p>The scheme subsequently has the following strategic objectives:</p> <ul style="list-style-type: none"> • Reduce the number of abnormal loads having to use routes through the town centre. • Retain the best route connecting the M65 corridor with areas of employment, economic growth and regeneration in Burnley. • Improve the quality of life for residents affected by alternative routing of abnormal loads. • Prevent further restrictions to the use of viaduct, which would cause congestion on alternative routes. • Remove the need for ongoing monitoring, inspections and emergency maintenance.
<p>1.4 Achieving Success <i>Please describe how the success of the proposed scheme will be assessed and/or quantified.</i></p>	<p>Reporting on the success of the scheme and the associated benefits will be through the Growth Deal monitoring, implementation and reporting arrangements.</p> <p>The scheme will be considered a success if:</p> <ul style="list-style-type: none"> • Abnormal loads return to previous route avoiding the town centre. This will be assessed by continued monitoring of abnormal load movements. • Unrestricted vehicular access will assist in local regeneration assessed by monitoring of abnormal loads accessing developing/expanding employment sites • If there is a significant reduction in the current annual monitoring costs on the viaduct (currently £1k p.a.). <p>Further details on the Monitoring and Evaluation strategy for the scheme and metrics selected to assess the scheme's success are contained within Section 5.8.</p>
<p>1.5 Delivery Constraints <i>Please describe any high level internal/external constraints or other factors that present a material risk to the delivery of this scheme.</i></p>	<p>A full Risk Register is available in Appendix B.</p> <p>The key delivery Constraints for the scheme are highlighted below:</p> <ul style="list-style-type: none"> • Gaining funding approval from the LEP • The programme to deliver the scheme on site in 2015/16 is very short. • The procurement of the bearings needed, the bearings to be replaced are bespoke and there are a limited number of specialist suppliers. • Land – The land beneath the bridge is in the ownership of 15 land owners. Obtaining agreements to work beneath the bridge with all these owners may be a problem. Some existing deeds

	<p>grant access to the bridge for maintenance purposes. Initial discussions with the land owners have been very positive and it is thought agreements for access will be reached. A last resort for access issues would be to serve notice using the Highways Act to carry out the works.</p>
<p>1.6 Stakeholders <i>Please outline the main stakeholder groups/organisations and their relevance or involvement in the development of the scheme. Identify any specific requirements, constraints or conflicts between stakeholders.</i></p>	<p>The main stakeholder groups affected by the scheme are:</p> <p>Burnley Borough Council – as the viaduct is located within Burnley town centre, Burnley Borough Council have an interest in ensuring the viaduct is repaired to ensure a key route is maintained. A letter of support for the scheme was provided on 14/11/14, see Appendix C.</p> <p>County Councillors – As local representatives they will be a point of contact for local residents near the scheme. Consultation has been limited, however, indications are councillors strongly support the scheme.</p> <p>Canal & Rivers Trust - The viaduct crosses the Leeds-Liverpool canal and some of the ground required to work on is owned by the Canal & Rivers Trust. A letter of support for the scheme is included in Appendix C.</p> <p>Local Businesses and Shops close to the bridge and the town centre – Works to the viaduct may result in disruption to business due to delays and re-routing, however, stakeholders are likely to approve of the scheme.</p> <p>Local Bus Station – Burnley bus station is located in close proximity to the scheme. Works to viaduct may impact on local services and/or access to the station.</p> <p>Abnormal Loads Operators – Abnormal loads operators will be the users most likely to see an improvement following the implementation of the scheme.</p> <p>Land Owners beneath the bridge – As works will be carried out beneath the bridge it will be important to communicate with land owners to organise the use of land for works.</p> <p>The communication and stakeholder management strategy for the scheme is outlined in Section 5.5.</p>

1.7 Strategic Assessment of Alternative Options

	Option 1	Option 2	Option 3 (Proposed Scheme)	Option 4	
Option Name <i>Please insert the name by which the option is known</i>	Do Nothing	Minor Maintenance	Major Refurbishment	Bridge replacement	
Infrastructure Type <i>Please provide if different from the proposed scheme.</i>	N/A	Bridge	Bridge	Bridge	
Variation from Proposed Scheme <i>What are the key differences (characteristics) between the proposed scheme and this option? How is it different?</i>	Continued monitoring of bridge viaduct. Management of permitted traffic loading.	Works to maintain current condition. Regular risk assessments and monitoring.	Proposed Scheme	Replace viaduct with entirely new structure	
Technical Assessment & Appraisal <i>Please describe the level of technical appraisal or assessment undertaken – including previous studies and relevant data – to assess this option, including application of the Early Assessment and Sifting Tool.</i>	2011 principal bridge inspection confirmed rate of deterioration Atkins Structures Management Planning Toolkit has been used to assess the viaduct's current and potential future capacities and to model the required maintenance for each option.				
Consultation <i>Please explain the extent of any stakeholder or wider consultation on the option and summarise the key findings.</i>	The following have been consulted regarding the preferred proposals: - Burnley Borough Council - Abnormal Loads Operators - Canal and Rivers Trust - County Councillors	The following have been consulted regarding the preferred proposals: - Burnley Borough Council - Abnormal Loads Operators - Canal and Rivers Trust - County Councillors	The following have been consulted regarding the preferred proposals: - Burnley Borough Council - Abnormal Loads Operators - Canal and Rivers Trust - County Councillors The above stakeholders have been consulted regarding this scheme. Letters of support have been received from Burnley Borough Council and Canal and Rivers Trust	The following have been consulted regarding the preferred proposals: - Burnley Borough Council - Abnormal Loads Operators - Canal and Rivers Trust - County Councillors Same benefits as preferred option but with greater cost and disruption.	
Indicative Cost (£M) & Economic Appraisal <i>Please provide indicative costs if known or provide information on the likely affordability against the headings 'high' 'medium' or 'low.' Also explain any economic appraisal undertaken, including benefit/cost analysis</i>	£1k annum monitoring costs	£200k costs to make safe spalling edge units £1k per annum monitoring costs.	£1.65m Significant reduction in £1k per annum monitoring costs. An economic assessment of this option has been undertaken which suggests that the scheme could deliver High Value for Money	£16m (Atkins Structures Management Planning Toolkit)	
Impact against Strategic Objectives <i>Please describe how this option delivers against the strategic objectives set out in Section 1.3. Make reference to the outputs of the Early Assessment and Sifting Tool process.</i>	Reduce the number of abnormal loads having to use routes through the town centre.	The restriction on abnormal loads vehicles using the viaduct would continue.	The restriction on abnormal loads vehicles using the viaduct would continue.	The restriction on abnormal loads vehicles using the viaduct would be lifted.	The restriction on abnormal loads vehicles using the viaduct would be lifted.
	Retain the best route connecting the M65 corridor with areas of employment, economic growth and regeneration in Burnley.	The best route connecting the M65 corridor with areas of employment and growth in Burnley would be lost for HGVs and abnormal loads.	The best route connecting the M65 corridor with areas of employment and growth in Burnley would continue to be unavailable for abnormal loads.	The best route connecting M65 corridor with areas of employment, economic growth and regeneration Burnley would be maintained for all vehicles.	The best route connecting M65 corridor with areas of employment, economic growth and regeneration Burnley would be maintained for all vehicles. However, impacts during construction would be significant.
	Improve the quality of life for residents affected by alternative routing of abnormal loads.	The additional HGVs being rerouted would lead to a worsening in quality of life for residents affected by the alternate route.	The restriction on abnormal loads vehicles using the viaduct would continue.	With all weight restrictions lifted the quality of life for residents on the alternate route would be improved.	With all weight restrictions lifted the quality of life for residents on the alternate route would be improved. However, impacts during construction would be significant.

		Option 1	Option 2	Option 3 (Proposed Scheme)	Option 4
	Prevent further restrictions to the use of viaduct, which would cause congestion on alternative routes.	A further restriction on HGVs would be required, leading to more vehicles re-routing through the town centre.	In the short term prevents further restrictions on the use of viaduct being implemented. In the long term the restrictions from Option 1 would still need to be imposed.	Prevents further restrictions on the use of viaduct being implemented	Prevents further restrictions on the use of viaduct being implemented
	Remove the need for ongoing monitoring, inspections and emergency maintenance	The need for monitoring and inspections work would continue.	The need for monitoring and inspections work would continue.	Would remove the need for ongoing monitoring, inspections and emergency maintenance, which currently £200k per annum.	Would remove the need for ongoing monitoring, inspections and emergency maintenance, which currently £200k per annum.
Key Risks <i>Please identify the key technical, funding and delivery risks associated with this option.</i>		Ongoing monitoring and maintenance costs.	Still could lead to further restrictions in the future. Ongoing in monitoring and maintenance costs.	Procurement, design and installation of replacement bearings which are bespoke.	No guarantee that replacement bridge can be constructed without significant further expenditure on land. Significant risk of costs escalating.
Rationale for Rejection/Selection <i>Please explain why this specific option has been rejected in favour of the proposed scheme/selected as the proposed scheme.</i>		This option has been rejected for the following reasons: <ul style="list-style-type: none"> - The safety of the general public. - The loss of route would cause severe congestion on alternative routes. - It would have negative effects on development in the Burnley / Pendle Growth Corridor. 	This option has been rejected as it would have negative effects on development in the Burnley / Pendle Growth Corridor.	Proposed Scheme This option has been selected as the proposed scheme as it has a strong fit with the scheme objectives. In addition, this option has a much lower cost than option 4 and is subsequently likely to offer better VFM.	This option has been rejected due to the increased expenditure over option 3 and increased disruption during works. It is unlikely to offer VFM.

Strategic Case Summary

The A682 Centenary Way Viaduct Refurbishment scheme will ensure access is maintained for all vehicles to key development sites in Burnley. Subsequently, the scheme will support economic growth at these sites.

The scheme has a strong strategic fit with local policy aspirations contained within Lancashire's Strategic Economic Plan and Local Transport Plan. In addition, the scheme will help support the proposed plans for the Burnley / Pendle Growth Corridor.

A set of strategic objectives have been defined for the scheme. This enabled a fair assessment of a number of options to be undertaken. The best performing option was subsequently identified as the proposed scheme.

The main stakeholder groups affected by the scheme have been identified and subsequent engagement has taken place with key landowners in close proximity to the viaduct. Burnley Borough Council and the Canal and Rivers Trust have both 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.

2 Economic Case

The Economic Case assesses options to identify all their impacts and the resulting value for money. This is a key requirement in fulfilment with HM Treasury's requirement for appraisal. In line with HM Treasury's appraisal requirements, the impacts considered are not limited to those directly impacting on the measured economy, nor to those which can be monetised. The economic, environmental, social and distributional impacts of a proposal are all examined, using qualitative, quantitative and monetised information. In assessing value for money, all of these are consolidated to determine the extent to which a proposal's benefits outweigh its costs.

2.1 Value for Money

Please describe to what extent the proposed scheme has been assessed in terms of value for money. Also explain how this will be developed through the Outline Business Case to provide accurate benefit-cost ratio information.

Where applicable, please include details of all options that have been appraised.

VfM should also include reference to the proposed scheme's economic, social, environmental and public accounts impact. (in line with the DfT's Transport Appraisal Framework)

[The Transport Appraisal Process](#)

A Benefit Cost Appraisal (BCA) and Gross Value Added (GVA) analysis have been undertaken to assess the economic benefits of the Centenary Way Viaduct refurbishment.

Whilst BCA is the traditional approach to assessing the merit of transport schemes, GVA analysis seeks to complement standard transport appraisals where these have already been produced. The wider economic impacts of the proposed transport schemes are particularly important to understand in terms of the potential benefits for the locality, and in the context of supporting the funding bid for the scheme as well as the Government's economic growth agenda.

In line with the LEP's Accountability Framework a proportionate approach has been adopted for the assessment of the economic benefits of the scheme.

The BCA assessment has subsequently been undertaken using a spreadsheet based tool that has been developed in line with WebTAG principles. This methodology uses journey time and distance savings with the number of effected vehicles to estimate potential Journey Time savings, Vehicle Operating Cost savings and Marginal External Costs (including Accident benefits).

Scheme benefits have been derived from analysis of the existing traffic flows in the vicinity of the scheme, utilising observed traffic flows provided by Lancashire County Council.

Reviewing the provided traffic count information and possible Do Minimum re-routing scenarios highlighted that HGVs using the Centenary Way viaduct were not all likely to follow the same route through Burnley. Two possible routes were identified:

- Route A where traffic would leave or enter the A682 at the Yorkshire street roundabout; and
- Route B where traffic would continue north-south using the A682.

Each of these routes would require a different length of diversion route

The Strat-e-gis software package, which allows the interrogation of traffic data supplied by Trafficmaster plc, was used to analyse average travel times for each route during selected time periods. Travel time benefits were calculated from the change between the DM and DS scenarios using WebTAG Values of Time.

Additional Marginal External Cost (MEC) benefits such as air quality, noise, congestion, infrastructure and accident costs have been calculated using the change in vehicle kilometres saved between the DM and DS scenario, utilising the methodology outlined in WebTAG Unit A5.4 'Marginal External Costs'.

Scheme costs have been adjusted for risk and optimism bias and then rebased to 2010 prices and discounted to 2010 to provide a Present Value of Costs (PVC) as summarised below:

Cost	Value
Construction and Design Costs	£1,650,000
Risk Allowance (from Risk Register)	£71,500
Risk adjusted scheme cost	£1,721,500
Optimism Bias (6%)	£103,290
Risk adjusted scheme cost (including Optimism Bias)	£1,824,790
PVC (2010 prices, discounted to 2010)	£1,420,578

Full details of this assessment are provided in the Centenary Way GVA & BCA Technical Note contained in **Appendix D**.

The results of this BCA assessment are summarised below:

Benefits	Centenary Way Refurbishment
Noise	£9,372
Air Quality	£192
Greenhouse Gases	£27,520
Journey Quality (Congestion)	£971,708
Physical Activity	£0
Infrastructure Maintenance	£5,655
Accidents	£487,318
Economic Efficiency: Consumer Users (Commuting & Other)	£3,107,887
Economic Efficiency: Business Users and Providers	£2,846,369
Wider Public Finances (Indirect Taxation Revenues)	-£119,043
Present Value of Benefits (PVB)	£7,336,978
Present Value of Costs (PVC)	£1,420,578
Net Present Value (NPV)	£5,916,400
Benefit to Cost Ratio (BCR)	5.2

	<p>With a BCR of 5.2 the A682 Centenary Way Viaduct Refurbishment represents 'Very High' Value for Money (VfM) meeting the threshold for approval for funding from LEP as per the LEP Accountability Framework.</p> <p>The above BCR calculation does not account for bridge maintenance or monitoring cost savings as a result of the scheme. It is expected that the scheme would result in a saving of £1000 per year in monitoring costs.</p> <p>In addition to these transport benefits the scheme could also benefit the local economy with an average return of £80,475 in GVA Uplift per annum (in discounted 2010 costs), leading to a total GVA Uplift benefit of £4.8m over the 60 year assessment period.</p>
<p>2.2 Economic Assumptions <i>Please describe any economic assumptions made or that will be made as part of future appraisal work and the development of the Outline Business Case.</i></p>	<p>The following assumptions have been made to assess the economic benefits of this scheme:</p> <ul style="list-style-type: none"> • LCC Bridges Design Team has recommended that the HGV ban is implemented immediately in order to safeguard the structure. Benefits have consequently been attributed from 2016 onwards. • In the Do Minimum Scenario all HGVs are restricted from using the Centenary Way Viaduct. • All HGVs currently using the viaduct are following one of two routes. • Traffic Growth and Growth in Delay has been estimated using Road Traffic Forecast 2013 values for North West other Urban Roads. • Optimism Bias has been included as per guidance in TAG Unit A1.2, Optimism Bias uplift has been assumed at 6% in accordance with a fixed link at Stage 3.
<p>2.3 Sensitivity & Risk Profile <i>If applicable, please describe how changes in economic, environmental and social factors could affect the impact of the proposed scheme in terms of its benefit and costs.</i></p>	<p>The assessed scheme benefits are sensitive to change if the forecast increase in traffic growth and delay is not accurate. Traffic volumes could change if the economic growth of Burnley either exceeds or does not reach the predicted targets for the North West.</p> <p>Two sensitivity tests have been undertaken. The first test looked at the impact of zero traffic growth; this had little effect on the overall scheme BCR (reducing it from 5.2 to 5.1). The reason the reduction in the BCR is very small is because Road Transport Forecasts (RTF13) actually forecast a reduction in HGVs for a number of years in the future before forecasting an increase in HGVs. The second sensitivity test looked at the added impact of zero growth in delay. The resultant BCR was 4.5; however this still represents 'very high' value for money.</p>

2.4 Value for Money Statement

Using the Appraisal Summary Table (AST) (see section 2.5), please include a summary of the conclusions from the Value for Money assessment. The statement should provide a concise summary of the proposed scheme's economic, environmental, social and public accounts impact.

The A682 Centenary Way Viaduct Refurbishment is expected to deliver £7.3m of benefits (2010 prices, discounted). The scheme is expected to cost £1.5m (2010 prices, discounted) and therefore has a BCR of 5.2 and is expected to deliver 'Very High' Value for Money.

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 forecast to generate an additional £4.8m of GVA for the local economy over a 60 year assessment period as a result of productivity benefits.

The scheme is also expected to generate Noise, Air Quality and Greenhouse Gases benefits while also having a slight beneficial impact on Townscape, Historic Environment and the Water Environment.

Finally, the scheme is expected to have a neutral impact against most social impacts. However, the scheme is expected to generate Accident benefits due to a reduction in vehicle kilometres and a benefit in Journey Quality due to travellers using less congested roads.

The key risks for the scheme are that economic growth does not match expectations leading to a change in traffic growth and growth in delay.

2.5 Preliminary Appraisal Summary Table

Appraisal Summary Table		Date produced:	March 2015	Contact:			
Name of scheme:		A682 Centenary Way Viaduct Refurbishment		Name	David Griffiths		
Description of scheme:		Refurbishment of seven span continuous bridge which carries A682 principal road through the centre of Burnley by replacing bearings, coping units and the expansion joint of the existing structure		Organisation	Lancashire County Council		
				Role	Scheme promoter		
Impacts		Summary of key impacts		Assessment			
				Quantitative	Qualitative	Monetary £(NPV)	Distributional 7-pt scale/vulnerable grp
Economy	Business users & transport providers	Currently the viaduct has restrictions in place for abnormal loads which need to be diverted via other available routes, however due to the deterioration of the bridge it is likely a restriction on all HGVs would be required if the viaduct was not refurbished. The viaduct provides the most direct route through Burnley so there are potential journey time and distance savings available if the viaduct is open to all traffic and HGVs are not forced onto the longer diversion route. Although not currently used by local bus routes the viaduct is located next to the bus station and forms the most direct link between it and Burnley Manchester Road rail station.				£2,846,369	
	Reliability impact on Business users	Centenary Way Viaduct is part of a key route linking local advanced manufacturing and engineering firms, as well as the Heasandford Industrial Estate, with the M65 and national motorway network. If HGV restrictions were introduced the diversion route to reach key development sites would involve using more congested roads in Burnley town centre leading to less reliable journey times.			Slight Beneficial		
	Regeneration	Access for employees to existing or future jobs will not be affected by the scheme. However, the scheme could have positive impacts for business activity via changes in travel conditions such as costs of access to customers and costs of access to supplies.			Slight Beneficial		
	Wider Impacts	Retention of the highway link is crucial to Burnley's continued economic growth. Many of Burnley's local businesses need to have good links with the Enterprise Zones near Preston. A GVA assessment has been undertaken to examine the potential impact that the scheme could have in the case that HGV use of the viaduct was restricted.				GVA uplift of £4.8m over 60 years	
Environmental	Noise	Maintaining Centenary Way as an abnormal load route prevents very large vehicles being routed through Burnley town centre where there are more pedestrians and properties. Noise benefits have been monetised as part of the Marginal External Costs (MECs) calculation.				£9,372	
	Air Quality	The diversion route proposed for HGVs is longer than using the Centenary Way Viaduct currently; this will increase the output from the HGVs travelling the route. Air Quality benefits have been monetised as part of the MECs calculation.				£192	
	Greenhouse gases	The diversion route proposed for HGVs is longer than using the Centenary Way Viaduct currently; this will increase the output from the HGVs travelling the route. Greenhouse Gases benefits have been monetised as part of the MECs calculation.				£27,520	
	Landscape	The scheme is unlikely to have any effect on landscape.			Neutral		
	Townscape	The structure of the viaduct is visually dominant in the Weavers Triangle area and to the south of the town centre. The structure's continuing deterioration will have a negative impact on the Townscape of the area. As such the refurbishment of the viaduct is likely to have a positive effect on townscape, improving the quality of the structure and how it fits in the area.			Slight Beneficial		
	Historic Environment	The structure of the viaduct is visually dominant in the Weavers Triangle. This is a key area for Burnley's industrial heritage, containing one of the finest surviving Victorian industrial landscapes in the country. Therefore the scheme is likely to restore or enhance the sense of place of the historic environment of the area.			Slight Beneficial		
	Biodiversity	The scheme is unlikely to have any effect on biodiversity.			Neutral		
	Water Environment	The viaduct passes over the Leeds Liverpool canal which is at risk of pollution from surface run-off as the waterproofing of the viaduct deteriorates over time. If this issue is not addressed it is likely that the water environment will degrade in the vicinity of the scheme.			Slight Beneficial		
Social	Commuting and Other users	Currently the viaduct has restrictions in place for abnormal loads which need to be diverted via other available routes, however due to the deterioration of the bridge it is likely a restriction on all HGVs would be required if the viaduct was not refurbished. The viaduct provides the most direct route through Burnley so there are potential journey time and distance savings available if the viaduct is open to all traffic and HGVs are not forced onto the longer diversion route. Although not currently used by local bus routes the viaduct is located next to the bus station and forms the most direct link between it and Burnley Manchester Road rail station.				£3,107,887	
	Reliability impact on Commuting and Other users	If HGV restrictions were introduced the diversion route to reach key development sites would involve using more congested roads in Burnley town centre leading to less reliable journey times.			Slight Beneficial		
	Physical activity	It is unlikely that the scheme will lead to a change in the numbers of people walking or cycling or the distance that people already walking or cycling travel.			Neutral		
	Journey quality	Journey Quality has been estimated as part of the MEC calculation; It is likely the scheme will result in a reduction in driver stress for HGV drivers.				£971,708	
	Accidents	Accident benefits have been estimated as part of the MEC calculation using the change in expected vehicle kilometres due to the scheme. As the diversion route is longer than the direct route using Centenary Way there are potential accident benefits generated as a result of being able to keep Centenary Way Viaduct open to all traffic.				£487,318	
	Security	The scheme is unlikely to have an impact on Security.			Neutral		
	Access to services	The scheme is unlikely to have an impact on Access to Services as the scheme is unlikely to affect the availability and physical accessibility of public transport.			Neutral		
	Affordability	The scheme is not expected to have an impact on parking charges, car fuel and non-fuel operating costs, road user charges, public transport fares or concession availability.			Neutral		
	Severance	The scheme is unlikely to have any impact on severance as it is not expected to affect pedestrian movements.			Neutral		
	Option and non-use values	It is unlikely that the implementation of the scheme will change the availability of public transport services within Burnley.			Neutral		
Public Accounts	Cost to Broad Transport Budget	Scheme costs have been estimated at £1.65m (2014 prices). However, the current cost of the monitoring and inspection work is £1k p.a. irrespective of undertaking actual maintenance work. Maintenance works currently required to keep the bridge safe to users and at its current capacity are estimated at £200k. This figure will increase the longer the bridge goes without maintenance				£1,420,578	
	Indirect Tax Revenues	Indirect taxes have been estimated as part of the BCA assessment.				-£119,043	

N.B All monetary benefits have been calculated for a 60 year appraisal period in 2010 prices, discounted to 2010.

In line with the LEP's Accountability Framework, the Senior Responsible Owner (SRO) for the Centenary Way Viaduct Refurbishment Scheme (Tom Mercer) has confirmed that the above AST is true and accurate.

Economic Case Summary

A Benefit Cost Appraisal (BCA) and Gross Value Added (GVA) assessment has been undertaken to calculate the economic benefits of the A682 Centenary Way Viaduct Refurbishment scheme.

The BCA 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 as well as the Vehicle Operating Cost savings and Marginal External Cost savings.

The A682 Centenary Way Viaduct Refurbishment scheme is expected to deliver £7.3m of benefits (2010 prices, discounted). The scheme is expected to cost £1.4m (2010 prices, discounted). The scheme therefore has a BCR of 5.2 and is subsequently expected to deliver 'Very High' Value for Money.

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 forecast to generate an additional £4.8m of GVA for the local economy over a 60 year assessment period as a result of productivity benefits.

The scheme is also expected to generate Noise, Air Quality and Greenhouse Gases benefits while also having a slight beneficial impact on Townscape, Historic Environment and the Water Environment.

Finally, the scheme is expected to have a neutral impact against most social impacts. However, the scheme is expected to generate Accident benefits due to a reduction in vehicle kilometres and a benefit in Journey Quality due to travellers using less congested roads.

3 Financial Case

The Financial Case concentrates on the affordability of the proposal and its funding arrangements.

It presents the financial profile of the proposed scheme and any associated risks. It determines the project costs per year and over its lifespan.

3.1 Affordability Assessment

Please explain how the affordability of the proposed scheme has been assessed.

The majority of the scheme will be funded via the Lancashire Growth Deal (see Section 3.3 for further details).

The Lancashire Growth Deal aims to realise the growth potential of the whole of Lancashire, building on key local economic assets including the universities and colleges, the Lancashire Advanced Engineering & Manufacturing Enterprise Zone, the Preston and South Ribble Lancashire City Deal, and the high value business clusters in Central and East Lancashire.

Improving transport connectivity through new roads, motorway junction and rail improvements, to support growth in jobs and homes particularly in Preston, East Lancashire, and Blackpool and the Fylde coast is a key component of the growth deal.

The remaining funding will be provided by LCC Bridges Design Team Capital Programme.

Following the submission of tenders a works cost of £1.45m has been agreed with a contractor. This includes a contingency budget of £63k within the tender price. Design and Supervision costs not funded from the LEP have been estimated at £200k for the scheme. The overall scheme cost estimate is £1.65m in market prices.

The scheme is funded on the following basis:

- 90% of construction works costs (£1.300m) – LEP Growth Fund. The Cabinet Member for Highways and Transport has already approved the Burnley/Pendle Growth deal (East Lancashire Highways and Transport Masterplan Burnley-Pendle Growth Corridor Investment Programme – Ref: 4969 dated approved 18/07/2014). All of this is currently subject to the Lancashire Enterprise Partnership securing Growth Deal funding from the Government and granting approval for LCC to undertake the work.
- 10% of the construction works cost and all design and supervision costs (£0.350m) – Funded from the Environment Directorate's approved Capital Programme.

In line with the LEP's Accountability Framework any budget overspends must be covered by LCC's Bridges Design budget. A signed letter from

	<p>the Section 151 Officer for Lancashire County Council confirming this commitment is included in Appendix E.</p> <p>The LEP's Accountability framework states that 'the Lancashire Enterprise Partnership will consider funding exceptional structural maintenance schemes including bridges, tunnels, retaining walls and culverts with a minimum cost threshold of £2m .' It is acknowledged that the Centenary Viaduct Refurbishment scheme costs are now less than this minimum cost threshold. However, Dave Colbert (LCC) has confirmed that Centenary Way was one of the original Local Transport Body schemes which was prioritised before the transition to the Local Growth Fund process. Consequently, the £2m minimum cost threshold is not applicable to this scheme.</p>																																										
<p>3.2 Financial Costs <i>Please provide details of the Whole Life Costs of the proposed scheme and a profile of the costs over the period shown.</i> See Scheme Costs Guidance</p>	<table border="1"> <tr> <td colspan="2">Whole Life Costs</td> <td></td> <td></td> <td></td> <td></td> </tr> <tr> <td>Year</td> <td>2015/16</td> <td>2016/17</td> <td>2017/18</td> <td>2018/19</td> <td>>2019</td> </tr> <tr> <td>Profile</td> <td>£1.65m</td> <td>-</td> <td>-</td> <td>-</td> <td>-</td> </tr> </table>	Whole Life Costs						Year	2015/16	2016/17	2017/18	2018/19	>2019	Profile	£1.65m	-	-	-	-																								
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Year	2015/16	2016/17	2017/18	2018/19	>2019																																						
Profile	£1.65m	-	-	-	-																																						
<p>3.3 Financial Cost Allocation <i>Please illustrate how the Whole Life Costs (WLC) will be allocated between the organisations involved in the delivery of the proposed scheme. Also provide a cost profile of the costs allocated to each organisation over the period shown.</i></p>	<table border="1"> <tr> <td colspan="2">Local Growth Fund (WLC)</td> <td></td> <td></td> <td></td> <td></td> </tr> <tr> <td>Profile</td> <td>£1.3m</td> <td>-</td> <td>-</td> <td>-</td> <td>-</td> </tr> <tr> <td colspan="2">Private Sector (WLC £m)</td> <td></td> <td></td> <td></td> <td></td> </tr> <tr> <td>Profile</td> <td>-</td> <td>-</td> <td>-</td> <td>-</td> <td>-</td> </tr> <tr> <td colspan="2">Other Public Sector (WLC)</td> <td></td> <td></td> <td></td> <td></td> </tr> <tr> <td>LCC Works</td> <td>£150k</td> <td>-</td> <td>-</td> <td>-</td> <td>-</td> </tr> <tr> <td>LCC Design</td> <td>£200k</td> <td></td> <td></td> <td></td> <td></td> </tr> </table>	Local Growth Fund (WLC)						Profile	£1.3m	-	-	-	-	Private Sector (WLC £m)						Profile	-	-	-	-	-	Other Public Sector (WLC)						LCC Works	£150k	-	-	-	-	LCC Design	£200k				
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LCC Design	£200k																																										
<p>3.4 Financial Risk <i>Please provide details of any financial risks associated with the delivery of the proposed scheme. Explain how these have been assessed and quantified. Have funds been committed? Identify any known shortfall in funding and provide evidence of how this shortfall will be addressed.</i></p>	<p>A detailed risk register is provided in Appendix B. Risks have been assessed using a slight variation on the Highways Agency Risk Management (HARM) Tool. A QRA figure of £71.5k has been calculated.</p> <p>Key financial risks are summarised below:</p> <ul style="list-style-type: none"> • Unavailability of bearings. • Impact of national/international Incident. 																																										
<p>3.5 Financial Risk Management <i>Please provide details of any risk allowance or contingency built into the Whole Life Costs of the project. Explain the rationale for the level of risk/contingency allocated and how this will be managed.</i></p>	<p>Risks associated with this scheme have been estimated at £71.5k. This is a broad assumption based on an initial analysis of project risks as set out in the Risk Register based on scheme specific contributory factors related to cost and programme risk.</p> <p>These include disputes and claims associated with procurement and environmental impact / mitigation</p> <p>Suppliers of the specialist components and services required have been consulted at pre tender stage to help build up the works cost estimate. Where appropriate these suppliers have provided a number of cost options depending on some of the unknown site conditions. The worst</p>																																										

	<p>case scenario options have been used in the works cost estimate.</p> <p>A shortfall in funding is not expected but will be identified and addressed at the end of the tender stage if any shortfall exists.</p>
<p>3.6 Financial Accountability <i>Please explain who will be responsible for managing the finances of the project. What arrangements are in place to ensure diligent financial management is in place?</i></p>	<p>The overall scheme costs will be monitored by the LCC Bridges Design Team.</p> <p>The scheme is being procured using NEC3 Option A competitive tender. Once the Tenders are received the overall cost of the works will be reviewed and confirmed. Under the terms of the contract the works costs will be assessed every 4 weeks.</p>

Financial Case Summary

The overall cost of the scheme is estimated at £1.65m.

Risks associated with this scheme have been estimated at £71.5k based on the quantification of the Risk Register but this has not been included in the scheme cost estimate. Any expenditure above the estimated costs will be covered by LCC's Bridges Design budget.

The majority of the scheme will be funded by the Local Growth deal (£1.3m), with additional funding coming from the LCC Works team (£150k) and the LCC Design team (£200k).

4 Commercial Case

The Commercial Case provides evidence on the commercial viability of the proposed scheme and the procurement strategy. It should clearly set out the financial implications of the procurement strategy. It presents evidence on risk allocation alongside implementation timescales and details of the capability and skills of the delivery team.

4.1 Commercial Viability

Please outline the approach taken to assess commercial viability.

The Commercial Viability of the scheme has been assessed under the following headings:

- Procurement Strategy;
- Identification of Risk;
- Risk Allocation; and
- Contract Management.

4.2 Procurement Strategy

Please summarise potential procurement options available (e.g. partnership, framework, new competitive tender). Details of the intended procurement strategy and the rationale behind selecting it should be provided.

LCC are mindful given the complexity of the construction works involved of the need to secure best quality and best value tenders for the scheme.

A Two stage Quality and then Price, New Competitive Tender process has been chosen for securing the services of a contractor.

Stage 1 – A Pre-Qualification Questionnaire (PQQ) will be used to produce a shortlist of prospective tenderers. The PQQ will assess tenderers ability to deliver the scheme based on Contractor Acceptability, Compliance with EC and UK Legislation, Quality Assurance, Economic and Financial Standing, Track Record, Business Capacity and Capability, Only Tenderers who successfully pass all the requirements of the PQQ will be invited to tender.

Stage 2 – The shortlist of tenderers from stage 1 will be asked to submit a price for delivering the scheme. The Tender will be awarded based on lowest price.

The chosen form of contract is NEC3, Option A, Priced Contract with Activity Schedule.

NEC3, Option C, Target Cost with Activity Schedule was considered in the early stages of the scheme development as there were a large number of unknowns constituting high risk to both Client and Contractor. As detailed design has progressed these risks have been reduced so Option A has become the more appropriate choice. Option A means that the remaining risk is transferred to the contractor.

<p>4.3 Identification of Risk <i>Please outline the main commercial risks associated with the scheme (e.g. at-risk funding (capital and revenue)) and what strategy is in place to monitor and review these risks.</i></p>	<p>The project would be undertaken by the contractor appointed using an NEC3 Option A.</p> <p>Given that tender prices have now been received Commercial Risks have been minimised.</p> <p>A proposed Risk Management Strategy is provided in Section 5.7.</p>
<p>4.4 Risk Allocation <i>Please describe how the risks identified in section 4.3 will be apportioned and shared to demonstrate that risks are allocated to the organisation / body best placed to manage them to ensure cost effective delivery.</i></p>	<p>The project would be managed using NEC3 Option A contract</p> <p>This form of contract means that project risks are transferred to the contractor. The contractor would also take on the risk of programme overrun on the basis of a target date-of-completion contract.</p>
<p>4.5 Contract Management <i>Please explain the contractual arrangements for delivering the proposed scheme. A high level overview of the implementation timescales should be included (append MS Project Programme, if preferred).</i></p>	<p>The project would be undertaken by the contractor appointed using a new competitive tender two stage process Quality and Price NEC3 Option A.</p> <p>The stated objective of the NEC is to stimulate good management. The principles upon which it is based are that foresight applied collaboratively mitigates problems and shrinks risk and that a clear division of function and responsibility helps accountability and motivates people to play their part. The contract places particular emphasis on the importance of planning/programming and a transparent and collaborative approach to risk management.</p> <p>The Option A: Activity Schedule establishes a lump sum price for a range of activities according to the defined activity schedule set out in the tender documentation.</p> <p>As stated in the Financial Case, any cost overruns will be the responsibility of the LCC Capital Bridge Design Team Budget.</p> <p>However, this form of contract means that risk is transferred to the contractor. The contractor would take on the risk of programme overrun on the basis of a target date-of-completion contract.</p> <p>The contract length is stated in the contract documents. The proposed Contractor has given no indication that the contract length specified in the Contract is a risk. Delay of completion is also mitigated through the inclusion within the Contract of secondary option clause X7 – Delay Damages.</p> <p>As per the outline programme included in Appendix F, the contract is expected to run from Tender Award (w/e 20th April 15) to the conclusion of works (w/e 14th December 15). As soon as the contractors have been appointed (following funding approval) the</p>

	<p>contract duration will be confirmed.</p> <p>Established approval processes are in place via the Project Board / Project Sponsor (decision making, etc.). The project tolerances would be approved by the Project Executive. If these tolerances are exceeded, an exception report will be raised by the Project Manager. If there is a prediction that any one tolerance is to be exceeded; this will be raised as an issue to the executive board for discussion.</p>
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Commercial Case Summary

The scheme will be procured through a two stage quality and then price, New Competitive Tender process.

Contractors will be appointed using a NEC3 Option A contract. The Option A: Activity Schedule establishes a lump sum price for a range of activities according to the defined activity schedule set out in the tender documentation. This form of contract means that risk is transferred to the contractor. The contractor would also take on the risk of programme overrun on the basis of a target date-of-completion contract.

Established approval processes are in place via the Project Board / Project Sponsor.

5 Management Case

The Management Case assesses whether a proposal is deliverable by reviewing the project planning, governance structure, risk management plan, communication and stakeholder management. The Management Case should be clearly defined, concise and sufficiently robust to enable cost-effective delivery.

5.1 Governance

Please describe the Project Governance arrangements in relation to the Project Team; Project Sponsor/Project Manager; Project Board/Executive and their suitability to the role based on previous programmes of work.

A project specific governance structure has been created based on established and operating governance arrangements for schemes currently being delivered by LCC, adapted to reflect the specific requirements of devolved Local Major Scheme governance. The governance structure includes the following levels of management.

Corporate / Programme Management

The Lancashire Local Enterprise Partnership (LEP) will adopt the corporate / programme management role. The LEP is a creative collaboration of leaders from business, universities and local councils, who direct economic growth and drive job creation.

Lancashire's LEP is led by a Board of 16 directors who contribute a wide range of expertise. The majority are from the private sector, representing major employers and small and medium enterprises, while the public sector is represented by experts from higher education and political leaders from local authorities.

Project Board

The County Council has established a Project Board and Project Working Group to support delivery of other schemes seeking Growth Deal funding, that Board will also take ownership of this particular scheme.

The Project Board consists of the Project Executive, Senior User and Senior Supplier. Representatives for each role have been selected based upon their previous project experience. The makeup of the project board and their responsibilities are described below.

Role	Representative	Responsibility
Project Executive (Senior Responsible Owner)	Phil Barrett	Will have overall responsibility for delivering the scheme. Ensures that the project / programme meets its objectives, delivers the projected benefits, maintains its business focus and is well managed with clear authority, context and control of risk.
Senior Users	LCC Asset Group – Tom Mercer	Work with the Project Executive and Project Board to ensure that the specification for the scheme will meet the needs of its users within the constraints of the business case.
Senior Suppliers	LCC Bridges Design Team- David Leung Principal Contractor (appointed after procurement)	Agree a design and work programme with the Project Board which minimises environmental impact, inconvenience to residents and road user impacts. Accountable for the quality of products delivered by the supply chain and has the authority to commit or acquire the necessary supplier resources.

A Project Manager for the Scheme will be drawn from the LCC Bridges design team. The Project Manager will provide the interface between the Project Board via the Project Executive and the Team Managers. The Project Manager will be the single point of contact for the day to day management of the scheme.

5.2 Go/No-Go & Decision Milestones <i>Please describe any outstanding Go/No-Go processes and Decision Milestones in relation to the progression of the proposed scheme.</i>	The key go/no-go date for the scheme will be the 21 st April 2015 LEP meeting when the scheme will seek full approval for funding from the Local Growth deal.
5.3 Project Programme <i>Please set out an indicative delivery programme, including key milestones. Any programme / project dependencies should be referenced. If applicable, please explain how the programme is aligned to relevant delivery strategies and plans.</i>	An indicative delivery programme is provided in Appendix F . Some key dates are shown below (all dates are week commencing): 16/02/2015 Tenders returned 20/04/2015 Approval decision 20/04/2015 Tender awarded (following full approval from LEP) 20/07/2015 Start of work on site (TBC) 28/09/2015 Works on North Deck completed (TBC) 07/12/2015 Works on South Deck completed (TBC) 14/12/2015 Site cleared and open to traffic (TBC) At this stage the proposed programme once tender has been awarded is likely to change on review by the contractor. Some key risks that could impact the delivery programme are outlined

	<p>below:</p> <ul style="list-style-type: none"> • Changes in staff at outside bodies. • Design errors • Unavailability of bespoke bearings. <p>The Centenary Way Viaduct Refurbishment scheme is not dependent on any other schemes, however, it is complementary to the BPGC project as outlined in Section 1.1.</p>
<p>5.4 Assurance and Approvals Plan <i>Please document any key assurance and approval milestones (including any independent assurance).</i></p>	<p>An overall framework has been adopted at the Corporate / Programme Management level which defines an assurance role to oversee the governance and working arrangements of the LEP. The framework sets out that, as the accountable body for the LEP, LCC provide the overall assurance role. The purpose of this role is to ensure that:</p> <ul style="list-style-type: none"> • <i>all decisions and activities comply with legal requirements;</i> • <i>the use of all funds is accounted for and reported;</i> • <i>appropriate records of decisions and proceedings are published; and</i> • <i>the assurance framework is being adhered to.</i> <p>Given that LCC are the promoter and applicant for the scheme, an independent local audit of the business case work which guides investment decisions will also be carried out prior to the approval decision by the LEP.</p> <p>Project-level assurance roles would be in place to provide the Project Board and LEP respectively with independent guidance and advice with regard to all matters related to the status of the scheme.</p>
<p>5.5 Communications & Stakeholder Management <i>Please explain how key stakeholders will be engaged throughout the delivery of the scheme, including details of proposed consultation events.</i></p>	<p>The County Council will develop a communications strategy to inform local businesses, residents, transport operators and other stakeholders on proposed works and progress.</p> <p>Quarterly progress updates will be made available on the County Council's website. The Canal and River Trust will be consulted over any potential impacts on the Leeds & Liverpool Canal.</p> <p>Briefing reports will be undertaken for Local Members throughout the duration of the project to ensure that Members are aware of progress and can feedback to their constituents.</p> <p>Press releases will be carried out through the Corporate Communications Team using local press and radio. Leaflets with information on the scheme will be delivered in advance of the works to inform those affected on the programme. A site notice board will also be installed to provide regular updates.</p>

	<p>Some aspects of the scheme, such as the replacement copings / fascias will be subject to consultation. However the majority of the works consultation would be employed through the preparation of the proposed scheme phases to ensure comprehensive public participation.</p> <p>As the construction phases of the programme are implemented, contact with stakeholders and the public would be increased to ensure they are fully informed of project timescales, any possible disruption to local activities, and possible visits to the sites to view construction activities.</p> <p>The construction phase of project delivery can have a significant impact on the relationship with the local community and their early impressions of the scheme. Many stakeholders will have contact with other opinion formers and influencers so it will be vital to keep stakeholders informed and to be as open as possible with communications. This engagement would continue throughout the delivery phases.</p> <p>It will be important to ensure all temporary traffic management and construction works are phased to minimise adverse impacts on the journeys of local residents and others.</p>
<p>5.6 Programme / Project Reporting <i>Please describe the proposed reporting and approvals process. This must cover technical, financial, commercial and management elements.</i></p>	<p>The Project Executive will report to the Project Board according to a defined and regular programme of meetings. During these meetings, key highlights, risks, programme and the financial position of the project will be discussed. The Project Executive will be supported by the Project Manager at these meetings as appropriate. Any corrective actions or decisions will be agreed by the Project Board and cascaded to Team Leaders via the Project Manager.</p>
<p>5.7 Risk Management Strategy <i>Please describe the scope of the Risk Management Strategy for the proposed scheme. Include details of the key risks including organisational accountabilities.</i></p>	<p>Risks associated with the overall delivery of the LEP's investment programme will be managed according to the overall monitoring responsibilities set out in the LEP's Accountability Framework. This framework requires risk registers to be produced and maintained for individual schemes once approved.</p> <p>A risk register highlighting the key risks to scheme cost and programme is presented in Appendix B.</p> <p>The Project Board would have overall responsibility for governance and risk associated with the delivery of the scheme. The Project Executive would be responsible for managing and overseeing the Risk Management Strategy and where appropriate agreeing and undertaking actions to mitigate key risks. The Project Manager would be responsible for maintaining and updating a Quantified Risk Register and undertaking actions to mitigate the risks that do not require escalation to the Project Executive. The project governance structure, as outlined in Section 5.1,</p>

	<p>would include arrangements for decision making and approvals, and information on roles and responsibilities such that responsibilities with regard to risk will be well defined.</p> <p>Risk management activities and risk registers are already in place as part of ongoing LCC scheme delivery work. These are informed by regular meetings and risk workshops which are aligned to key programme design and delivery phases. The membership of these meetings will vary and would be dependent upon the particular project phase. For example, engagement with bearing manufacturers has already taken place to capture risks at preliminary and detailed design stages.</p> <p>These risk workshops would draw up and review risk registers to identify the range and extent of risks that could adversely affect the delivery of the scheme. These sessions would identify the likelihood of each risk occurring and the relative quantifiable impact in terms of cost and programme. The risk register will be maintained throughout the project as a live document and reviewed on an ongoing basis. The most significant risks will have Risk Management Plans developed. Risks can also be identified at any time outside of these formal lines of communication and should be highlighted to the project manager if this occurs.</p> <p>The key risks (that could add significant cost or delay to the scheme) are shown below with possible mitigating measures:</p> <ul style="list-style-type: none"> • Unavailability of Bearings. • Impact of national/international incidents. <p>Full details of identified risks and proposed mitigation are presented in the Risk Register in Appendix B.</p>
<p>5.8 Monitoring and Evaluation <i>Please summarise outline arrangements for monitoring and evaluating the performance of the proposed scheme.</i></p>	<p>A requirement of the LEP Accountability Framework is that each scheme will have an evaluation plan produced prior to Full Approval.</p> <p>The success of the scheme will then be measured by the Growth Deal monitoring and evaluation indicators which have been selected for the scheme.</p> <p>The following metrics will be assessed as part of the Monitoring and Evaluation of the scheme:</p> <ul style="list-style-type: none"> • Total length of road resurfaced • Type of service improvement • Average daily traffic flow by peak/non-peak periods • Economically vital transport routes secured • Bridges Repaired

	<p>Information on the amount of resurfacing, number of bridges repaired and the securing of economically vital transport routes will be collected as part of on-going financial monitoring of Lancashire County Council's Transport Asset Management Plan.</p> <p>Traffic counts will be undertaken on an annual basis (as a minimum) at four locations on the network (two on Centenary Way, Church Street, and Westgate). These will be classified by vehicle type, to allow the amount of Heavy Goods Vehicles to be reported. The location of these counts is identified on a plan included in Appendix G.</p> <p>As per the logic model in Appendix H, the success of the scheme will be measured against whether it has managed to safeguard a strategic route into, through and out of Burnley by avoiding the impositions of restrictions (weight limits) on the route that would inhibit economic development.</p> <p>In addition, the condition of Centenary Way Viaduct will be monitored on a regular basis as part of Lancashire's rolling programme of Principal Bridge Inspections.</p> <p>The results of the monitoring and evaluation exercise will be published on the LEP's website.</p>
<p>5.9 Project Management <i>Please summarise the overall approach for project management at this stage of the project.</i></p>	<p>The project will be managed in line with the principles of PRINCE2.</p> <p>PRINCE2 is a de facto process-based method for effective project management. Used extensively by the UK Government, PRINCE2 is also widely recognised and used in the private sector, both in the UK and internationally.</p> <p>To ensure consistency with the principles of PRINCE2, a defined organisation structure for the project management team will be agreed. In addition, the project will be divided into manageable and controllable stages.</p>

Management Case Summary

The project will be managed in line with the principles of PRINCE2.

A project specific governance structure has been created. This structure is based on established and operating governance arrangements for schemes currently being delivered by LCC, adapted to reflect the specific requirements of devolved Local Major Scheme governance.

An indicative delivery programme for the scheme has been created. The key go/no-go date for the scheme will be the LEP meeting on the 21st April 2015, at which the scheme will seek Full Approval for Growth Deal funding.

Risks associated with the overall delivery of the LEP's investment programme will be managed according to the overall monitoring responsibilities set out in the LEP's Governance and Accountability Assurance Framework.

The success of the scheme and the associated benefits will be measured against a set of identified metrics and reported through the Growth Deal monitoring and evaluation strategy.

Appendix A – Scheme Location Plan

Appendix B – Risk Register

Appendix C – Letters of Support

Appendix D – BCA and GVA Assessment Technical Note

Appendix E – Letter from Section 151 Officer

Appendix F – Delivery Programme

Appendix G – Location of Proposed Annual Traffic Counts

Appendix H – Centenary Way Logic Model