DARWEN EAST DEVELOPMENT CORRIDOR (DEDC)

Strategic Outline Business Case

November 2017

Lancashire Enterprise Partnership

Document Control Sheet BPP 04 F8

Project:	DARWEN EAST DEVELOPMENT CORRIDOR
Client:	Blackburn with Darwen Borough Council
Project No:	
Document title:	Strategic Outline Business Case

Lancashire Enterprise Partnership

Contents

Executive Summary

Introduction
This Strategic Outline Business Case (SOBC) has been completed by Capita on behalf of Blackburn with Darwen Borough Council in regard to the proposed Darwen East Development Corridor improvements scheme. The scheme is seeking approval from the LEP and funding towards its £3.324m cost. In line with the LEP's Accountability Framework, this SOBC is required in order to seek approval and draw down funds.

Scheme Overview
There is a clear strategic need to deliver more housing and accelerate growth in Blackburn with Darwen and the wider Lancashire LEP region, as reflected in local, regional and national policy. In order to accelerate the delivery of new housing in Darwen and mitigate the impacts of the traffic associated with the delivery of new housing on allocated sites on the highway network, a package of measures is presented as the 'Darwen East Development Corridor' (DEDC).

Any requirement for the DEDC scheme costs to be fully met by developers would undermine the viability of housing developments and deter housing developers from delivering new housing within the borough. Ongoing engagement with housing developers indicates that infrastructure costs and requirements for significant offsite improvements to transport networks are key factors in the continuing year on year shortfall of housing completions against Core Strategy requirements due to the challenging local housing market conditions in Blackburn with Darwen.

Without the new link road and junction improvements included in the DEDC scheme the pace of housing delivery in East Darwen will be significantly impacted. Furthermore, the impact of the traffic generated by new housing developments would have a significant detrimental impact on the safe and efficient operation of the local highway network without the scheme, which could compromise the Council's growth agenda.

The DEDC will act as the catalyst for the development of Bailey's Field and Marsh House Lane development sites (allocated housing site 16/14) and help facilitate the delivery of other allocated housing sites in East Darwen by providing the key infrastructure required to bring these sites forward and to make them more attractive and viable to developers. Additionally, through the increased connectivity offered by the DEDC the local populace (both current and future) will be able to take advantage of improved links to employment in the wider region: along the M65 corridor, in Blackburn, Bolton, and further into Lancashire and the Manchester City Region.

Value for Money
The scheme will deliver significant journey-time saving benefits, amounting to a **PVB of £28.8m** (2010 Prices, discounted over 60 years, including costs of accidents).

The scheme also demonstrates 'Very High' value for money based on a traditional transport **BCR of 7.85** in its entirety. Individual BCRs for each scheme were produced and also indicate high value for money, exceeding both the Department for Transport (DfT) and LEP VfM funding criteria.

The scheme also has the potential to generate approximately **£0.55m per annum** of Gross Value Added (GVA) benefits averaged over a 60-year appraisal period (2010 prices, based on locally adjusted GVA values), which (in line with DfT guidance) have not been incorporated into the BCR but demonstrate the scheme's positive contribution to the wider economy.

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.

Introduction

Darwen is located to the south of Blackburn, East Lancashire and is the second largest settlement in the borough of Blackburn with Darwen. Darwen town centre is predominantly a market town, with small-scale retail development and community services. The town is characterised by a countryside setting, with views of the moors and Darwen Tower, and is located within the valley floor, framed by relatively steep hills to the east and west. The River Darwen runs through the town with the open river corridor on either side of the town centre.

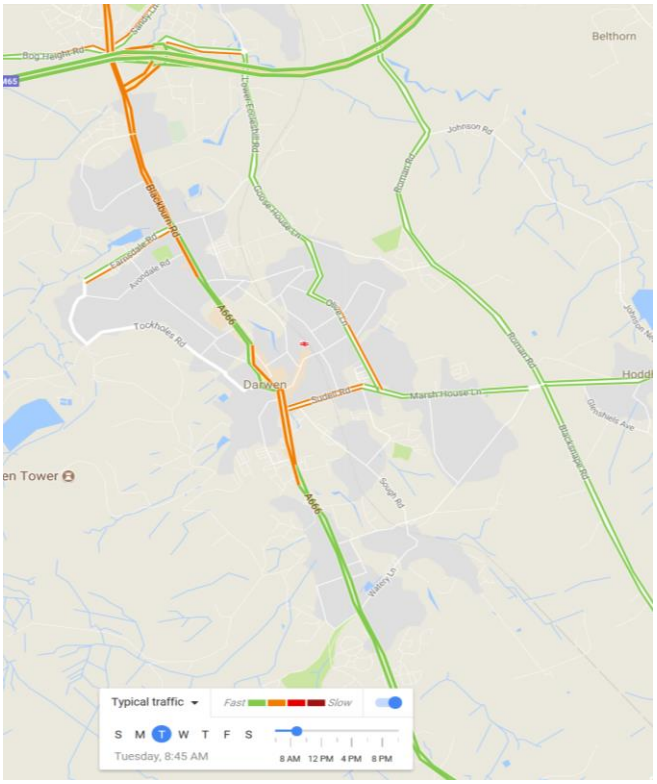
Darwen is part of the Blackburn with Darwen Unitary Authority, overseen by Blackburn with Darwen Borough Council (BwDBC). In order to accommodate the requirement for further housing in the borough, a number of sites have been identified within Darwen for potential development.

Part of the process in determining the suitability of the various identified sites involves an assessment of the surrounding highways network and the potential for connectivity, ensuring that there is sufficient capacity to accommodate the expected level of development.

The conclusions drawn from the *Transport Implications on the Local Highway Network (2013)* report which formed part of the evidence base toward the Blackburn with Darwen Local Plan identified that the existing highway network in the borough suffers from congestion in the AM and PM peak period on key corridors and junctions.

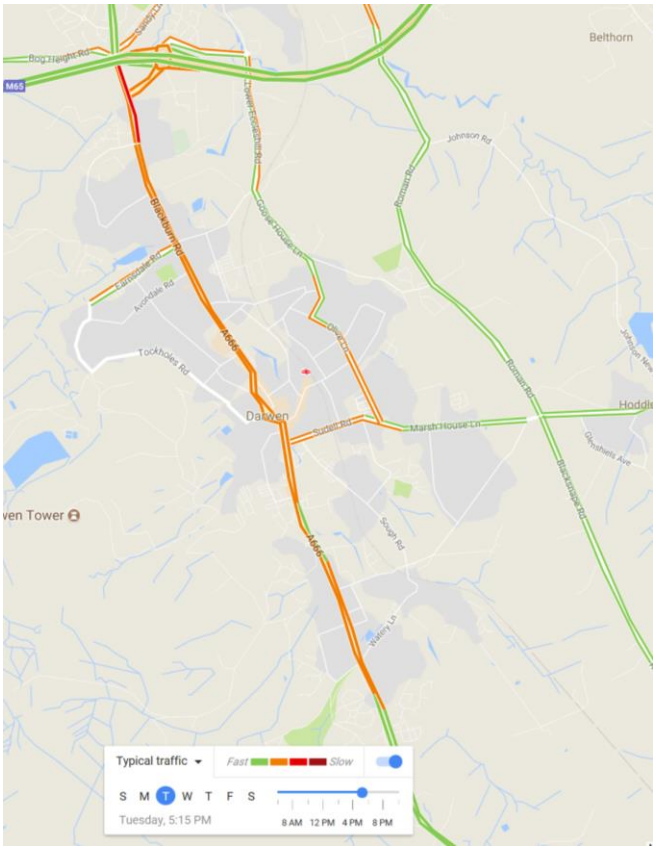
This congestion can be identified in the typical traffic speed plots derived from google maps presented overleaf.

AM Peak 08:45 Typical Traffic Conditions in Darwen



Source: Google

PM Peak 17:15 Typical Traffic Conditions in Darwen



Source: Google

Access to five of the seven allocated sites in Darwen, encompassing a potential 1,154 dwellings and the majority of the allocation for Darwen—from the main highway network (A666) is via a limited number of access points across the existing Blackburn–Darwen–Bolton–Manchester railway line. The current crossing points each have their own unique constraints, and the existing local highway network has a number of 'bottle neck' junctions that have been identified as requiring improvement in order to facilitate the proposed developments. The options proposed have also considered the existing constraints of the A666 and Blacksnape Road, as well as their interconnectivity.

In order to accelerate the delivery of new housing in Darwen and mitigate the impacts of the traffic associated with the delivery of new housing on allocated sites on the highway network, a package of measures is presented as the 'Darwen East Development Corridor' (DEDC).

Darwen East Development Corridor-Scheme Details

The DEDC package includes a number of improvements to the local highway network at the following locations:

- The A666 / Grimshaw Street junction;
- The A666 / Watery Lane junction;
- The Sough Road/ Grimshaw Street / Pole lane junction;
- The Priory Drive / Pole Lane junction;
- The Priory Drive / Marsh House Lane junction;
- At the East Darwen housing site allocation (16/14) between Priory Drive/ Marsh House Lane junction and Ivinson Road (to provide a new link road through the site);
- Ivinson Road / Oak Grove Junction;
- Oak Grove / Holden Fold Junction; and
- Improvements to Grimshaw Street and Watery Lane Bridges will be progressed independently of the DEDC major scheme via the Council's LTP.

A plan showing the route of the proposed DEDC scheme and details of the interventions at each of the locations identified above is provided in Appendix R.

Wider Strategic Context – Policy Review

The proposals are strongly aligned to various National, Regional and Local policies, helping to achieve both their immediate goals and contribute to longer-term aims. Details of these policies and the scheme's contributions are presented below.

NATIONAL POLICY

National Planning Policy Framework

The NPPF was released on 27th March 2012, replacing all previous planning policy guidance and was designed to be the primary source of national planning guidance in England.

Central to the NPPF is a "presumption in favour of sustainable development", which for planning means that:

- Local planning authorities should positively seek opportunities to meet the development needs of their area;
- Local Plans should meet objectively assessed needs, with sufficient flexibility to adapt to rapid change, unless:
  - any adverse impacts of doing so would significantly and demonstrably outweigh the benefits, when assessed against the policies in the Framework as a whole; or
  - specific policies in the Framework indicate development should be restricted.

The NPPF states: All developments that generate significant amounts of movement should be supported by a Transport Statement or Transport Assessment Plans and decisions should take into account whether:

- The opportunities for sustainable transport modes have been taken up depending on the nature and location of the site, to reduce the need for major transport infrastructure;
- Safe and suitable access to the site can be achieved for all people; and
- Improvements can be undertaken within the transport network that could effectively limit the significant impacts of the development.

Development should only be prevented or refused on transport grounds where the residual cumulative impacts of development are severe.

It further states that "Encouragement should be given to solutions which support reductions in greenhouse gas emissions and reduce congestion. In preparing Local Plans, local planning authorities should therefore support a pattern of development which, where reasonable to do so, facilitates the use of sustainable modes of transport."

Department for Transport: Single Departmental Plan 2015 to 2020

National Transport Policy, as demonstrated within the Department for Transport's 2015-2020 Single Department Plan, has the following vision: "…investing to make journeys better: simpler, faster and more reliable. Our plan will support jobs, enable business growth, and bring our country closer together".

The DEDC project contributes to the delivery of the key DfT objective within the Single Departmental Plan to "Boost Economic Growth and Opportunity",

through investing in infrastructure and increasing accessibility to a wider range of jobs in the northern part of Blackburn with Darwen and further afield, via improved linkages from South East Darwen to the M65 at Junctions 4 and 5. Local linkages between existing and future housing growth areas and Darwen Town Centre (for Darwen railway station and other key local facilities i.e. shopping, education and health) will also be strengthened by the DEDC project.

The project will also directly contribute to the DfT's target of boosting economic growth through the expansion of the availability of good quality family housing in the Darwen area.

Highways England

While it is not anticipated that the scheme will have a perceptible impact on the Strategic Route Network (SRN), DEDC highway interventions are expected to improve journeys along routes leading to and from the M65. The main aims of Highways England (HE), the responsible authority for the SRN, can be found at the following link:
https://www.gov.uk/government/organisations/highways-england/about

The DEDC scheme is considered to support a number of HE's key aims, including supporting economic growth, as well as ensuring a safe and free flowing network.

REGIONAL POLICY

Lancashire Strategic Economic Plan 2014

The Lancashire Strategic Economic Plan (SEP) sets out the growth ambitions for the next 10 years, with a focus on realising the potential of the whole of Lancashire. The SEP identifies key priorities and programmes which command local support and funding commitments.

In regards to East Lancashire, the SEP identifies that the M65 growth corridor is vital to the economy of the region, supporting approximately 80% of jobs in East Lancashire, and that targeted investment will enable sites and development opportunities within the M65 Growth Corridor to be realised.

It also identifies that providing high-quality housing is essential to support high value jobs, and that connectivity between housing and employment must be ensured to unlock the full potential of the region.

In this respect, the DEDC will ensure that any transport implications arising from the allocated development sites will be mitigated as far as possible, providing high-quality links to the M65 and the wider network as well as relieving local congestion. Through this, the DEDC will enable high-quality houses with strong connections to employment sites, boosting the region's

economy.

East Lancashire Highways & Transport Masterplan.

The East Lancashire Highways & Transport Masterplan was adopted in February 2014, and aims to align economic and transport objectives across East Lancashire. The Masterplan is designed around 5 core principles, all of which will be supported either directly or indirectly by the implementation of the proposed DEDC.

These five principles are:

- To support the economic development of the county and of East Lancashire specifically;
- to work to address deprivation;
- to promote community resilience;
- to increase healthy behaviour; and
- To reduce our carbon footprint.

The Masterplan identifies that BwD features high internal commuter journeys, with over 13,000 daily commuter journeys within the area. Survey data shows that individuals within the region commute for an average of 15 minutes, but the majority of these would be prepared to commute further and for longer than they currently do, identifying that wider connections and improved infrastructure could enhance employment opportunities.

The DEDC is specifically discussed in the Masterplan as infrastructure that will unlock land to enable the future development of new housing and improve access to local planned employment opportunities. Additionally, it is recognised that the scheme provides improved access to the M65, and creates a viable alternative to the congested A666.

LOCAL POLICY

The site has been long identified for development. It was a safeguarded site in the previous local plan and is identified as a housing land allocation in the Council's adopted (December 2015) Local Plan Part 2 within Policy 16/14. Key development considerations are to provide access from the north via Ivinson Road and from the south via Marsh House Lane, and the need for a vehicular link through the side to avoid adding to traffic through the Town Centre. The development of major road schemes is contained within Policy 45 of the Local Plan and as shown on the Adopted Policies Map. Information on the Local Plan can be accessed via the following weblink: http://www.blackburn.gov.uk/Pages/Local-Plan-Part-2-submission-documents.aspx

Blackburn with Darwen Core Strategy (2011)

The Blackburn with Darwen (BwD) Core Strategy sets out the priorities for the future planning and development of the Borough for the next 15 to 20 years: how much and what types of development there should be, where it should be focused, when it is likely to take place, and how it will be delivered.

The Core Strategy forms part of the statutory Local Development Plan.

The Core Strategy presents 11 Strategic Objectives. While the proposed DEDC will indirectly influence a number of these, the effects will be most pronounced when considering the following objectives:

- **D)** Improve the quality of the local environment and the Borough's physical setting;
- **E)** Increase levels of demand both for existing housing stock and for new development in inner urban areas;
- **F)** Minimise the Borough's environmental footprint; and
- **G)** Be ready for the effects of climate change.

The Core Strategy discusses the lack of cultural, physical and economic linkages to the regional centre of Manchester. The A666 through Darwen is noted as being a key link between the borough and Manchester, and Darwen specifically is described as a popular residential area for those commuting to Manchester.

Additionally, Policy CS1 states that connectivity will be improved through investment in strategic infrastructure to improve connections with other city regions.

The DEDC's infrastructure is clearly focused on Darwen, rather than the full extent of the A666 to Manchester, yet the improvements proposed have the potential to prevent a further build up of congestion on the A666.

Policy CS22: accessibility strategy states that new development should be located to minimise the need for travel, and in that regard should be focused on either the borough's transport hubs or along the accessibility corridors, such as the A666—which is also part of the Pennine Reach scheme. The development enabled through the implementation of the DEDC will therefore be well located to take advantage of this accessibility corridor and the potential for sustainable travel it offers.

Blackburn with Darwen Local Transport Plan 3 (2011-2021)

Blackburn with Darwen Borough Council's third Local Transport Plan (LTP3) is a long term strategic document covering the period 2011-2021, and is the key mechanism for articulating and delivering transport policy at a local level. The plan highlights a number of key issues within the borough to be

addressed over the lifespan of the plan, including:

- The borough's young population and its relationship to the growth of car use and road accidents;
- Peak time congestion and traffic levels;
- The impact on and the effects of the changing climate;
- Chronic health issues;
- Poor localised air quality and intrusive noise;
- Car dependence;
- The effects of long standing deprivation;
- The ongoing requirement to generate jobs, improve wage and skill levels; and
- The need to create sustainable communities through economic restructuring and regeneration.

The proposed DEDC will meet all five goals described within the LTP3:

- Support the Economy;
- Tackle Climate Change;
- Increase Safety and Security;
- Promote Equality of Opportunity; and
- Promote quality of life, health and the natural environment.

In 'supporting the economy', the DEDC will achieve all the associated objectives: reducing congestion and delay; improving the condition and attractiveness of the transport infrastructure; ensuring good accessibility for the new developments; working with partners to develop economic growth and bring forward new development, and increasing accessibility to employment.

The LTP3 priority is to: *Improve access to areas of regeneration and economic growth*. Part of achieving this comes through the "greater coordination of transport and land use planning", ensuring that the transport infrastructure is capable of fully supporting the expected growth in Darwen both in the current year and the future.

The DEDC supports the LTP's goal to 'tackle climate change' by helping to develop and maintain an efficient and sustainable transport system. The LTP3 Priority is to: *Reduce carbon emissions*; reduced delay and fuel consumption should improve emissions from vehicles, which should result in a corresponding improvement in air quality. Improved air quality brings better health; an improved environment and encourages physical activity by creating more walkable, enjoyable public space.

Through the implementation of the DEDC, a number of key junctions and bottlenecks will be redesigned to higher standards, reducing the likelihood of accidents at these sites, supporting the LTP Priority to 'Improve Road Safety'.

	The route of the DEDC has been chosen to maximise connectivity between the site allocations for housing and nearby areas of employment, as well as links to major transport infrastructure such as the M65 and A666, improving and creating access to Blackburn, Preston, Bolton and the Manchester City Region for employment and leisure. In doing so, the DEDC is aligned with the LTP3 Priority to 'Improve access to education and employment'. Through this analysis of key documents and policy, it is clear that there is a strong evidence base for the implementation of the DEDC; the proposed scheme is aligned with all the relevant local, regional and national policy, and will further the strategic aims for the Borough, County and Country.
1.2 Challenge or Opportunity to be addressed *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.*	**The Challenge: Infrastructure to Deliver Required Housing** A shortage of housing is not a localised issue. It is recognised nationally that there is a dire need for more housing to accommodate the growing population. To this end each Local Authority assesses their area in order to determine the most appropriate locations for further housing and employment. Their findings are published and adopted in the form of a Site Allocations and Development Management Policies DPD, as part of the statutory Local Development Plan. In Blackburn with Darwen, it is expected that there will be a net increase of 9,300 homes required to cover the current need. 291 potential sites have been identified across the borough to accommodate the required development. The majority of these potential development sites are located in inner urban areas, or urban areas with high levels of accessibility. Part of the assessment process in the identification of these sites is ensuring the transport implications of any development are fully understood, including the determination of future impacts on the highway network and the identification of any potential constraints that may make development unsuitable without mitigating action. To this end, analysis was undertaken by Capita in 2013, culminating in the publication of the report *Transport Implications on the Local Highway Network*. This report identified that the existing highway network in the region already experiences congestion in the AM period at specific junctions, and further identified those junctions approaching and exceeding capacity in future year scenarios—both with and without the identified Local Plan developments. The results of the network modeling undertaken showed that the existing highway network would struggle to accommodate the proposed levels of LDP development without increases in congestion or peak spreading, which would result in the congested period being prolonged. The potential issues are sufficiently severe as to make mitigation essential to enable the required development.

	Of all the housing sites identified, 7 are within the urban areas of Darwen. It is expected that this land will be able to accommodate approximately 1,154 dwellings, creating essential housing for the future of Darwen and the region. To support the delivery of these sites and mitigate the expected impacts of the associated increases in vehicular traffic a package of measures has been designed, including a new link road and various junction improvements. This package, entitled the 'Darwen East Development Corridor' (DEDC), will enable the future development of new housing in the vicinity (including 350 on the adjacent Baileys Field and Marsh House Lane sites), in addition to improving access to existing and planned employment opportunities. Without the delivery of DEDC the pace of housing delivery in East Darwen will be significantly impacted. The DEDC will improve local accessibility through the guaranteed provision of a link road through the Bailey's Field site. There would be no guarantee that the route would be delivered as a through route if delivered by developers who would be likely to develop in a piecemeal cul-de-sac approach resulting in a network of cul-de-sacs and leaving ransom strips. The provision of the through route created by the new link road would deliver journey time savings to some residents of the new housing developments and existing local residents by providing a quicker alternative route for traveling (by all modes) north towards Blackburn and south towards Bolton and the Manchester City Region. The proposed DEDC scheme is critical to accelerating economic and housing growth opportunities. This closely aligns with all current national and local government objectives and was a key factor in identifying the schemes included in Lancashire's Strategic Economic plan. The scheme design also includes quality infrastructure for pedestrians and cyclists improving local connectivity and permeability. The route also connects with the 'Weavers Wheel' cycle network. **The Impact of Not Progressing** A large proportion of the new dwellings to be delivered are intended for development by 2018/19. It is therefore critical to have adequate infrastructure in place to unlock the land required for development and to mitigate the impacts of this vital development on the local highway network. If the allocated sites were all developed without the DEDC scheme in place; the impact of the trips associated with over 1,000 new dwellings on the local network would result in severe congestion and peak spreading, resulting in economic losses, increased emissions and social consequences from a lack of connectivity to business, leisure and community facilities.

Additional trips would also be felt on parts of the local highway network and at specific junctions where significant queuing and traffic congestion is already known to occur. For example, modelling of existing conditions at the Sough Road/ Grimshaw Street/ Pole Lane junction is shown in Appendix D to be over capacity under existing conditions. Additional trips from proposed development will only exacerbate existing traffic congestion and result in further economic and social losses.

Any requirement for the DEDC scheme costs to be fully met by developers would undermine the viability of housing developments and deter housing developers from delivering new housing within the borough. Ongoing engagement with housing developers indicates that infrastructure costs and requirements for significant offsite improvements to transport networks are key factors in the continuing year on year shortfall of housing completions against Core Strategy requirements due to the challenging local housing market conditions in Darwen.

Without the link road and junction improvements included in the DEDC scheme the impact of the traffic generated by new housing developments would have a significant detrimental impact on the safe and efficient operation of the local highway network which could compromise the Council's growth agenda. Furthermore, without the link road, allocated housing site 16/14 (circa 350 houses) could not progress unless it came forward on a piecemeal basis over a significant timeframe.

The latest Annual Monitoring Report for Blackburn with Darwen Council states at paragraph 6.7 that *"The Core Strategy set an annual requirement of 530 during the period 2011-2016. Overall, including 2014-2015,* ***there has been a continuing year on year shortfall of housing completions against requirements owing to the challenges of local housing market conditions in Blackburn and Darwen; including in particular the impact on scheme viability****."*

The Wider Opportunities

The primary aim of the DEDC, and the purpose for which it is designed, is to facilitate the required housing and employment growth identified in the local and regional policy. However, the scheme also has potential for further wider-reaching benefits, that would be difficult or disproportional to assess within the scope of this FBC. Nevertheless, these potential benefits are briefly analysed under the headings below:

A666

The A666 is one of the key transport corridors linking BwD with Bolton, Manchester and the wider North-West region. The corridor passes through Darwen town centre along the valley floor, with multiple minor roads

providing localised connectivity and wider route options.

The A666 is currently operating at near-capacity, with various pedestrian crossing points and bus stops exacerbating the situation. With numerous sites allocated for further development through the emerging Land Allocations DPD there is a clear requirement to provide alternative routes through and around Darwen.

The DEDC could potentially alleviate the private vehicular demand for the A666, particularly in the vicinity of the town centre, by providing an alternative route specifically designed to incorporate current preferred routes while improving capacity through provision of a new link road and junction improvements.

The Link to the Greater Manchester City Region

The A666 is described in the BwD Core Strategy (2011) and the BwD Local Transport Plan as being a key route for people commuting into the Manchester City Region (MCR), notably from Darwen (although also from Blackburn and other outlying towns and villages).

Employment within the GM city region is forecast to increase by 166,000 by 2026 (BwD LTP3)—much of this in high-value employment sectors, including financial and business services—potentially creating an opportunity for the Blackburn with Darwen and Pennine Lancashire economy. The majority of this forecast employment (approximately 122,000 jobs) will be located within the Greater Manchester Urban Core, with 15,000 jobs likely to be positioned in the three districts bordering Pennine Lancashire (Bury, Bolton, Rochdale). According to census data (2011) only 17,000 Pennine Lancashire residents worked in Greater Manchester, which is no doubt restricted by the relatively poor transport links between the two areas. Although improvements for commuters to Manchester are largely focussed on rail capacity, frequency and journey-time, ensuring there is adequate capacity on the few major road routes and to local train stations is essential to complement these improvements. It should be noted that parallel Growth Deal 2 investment in upgrading the Blackburn to Manchester railway line is now complete, with half hourly all day rail services planned for introduction in May 2018.

Darwen AQMA Site

Transport is a major source of pollutant emissions from petrol, diesel and alternative fuel engines, principally carbon monoxide, oxides of nitrogen, un-burnt hydrocarbons and particulate matter. Emissions of these pollutants are regulated by European emissions standards, and the Climate Change Act (2008) requires a reduction in greenhouse gas emissions of 34% by 2020. Vehicle efficiency, alternative fuels and electric cars form elements of the

strategy to meet this target, in addition to low-carbon transport strategies.

Local authorities have a duty to review and assess local air quality under the UK Air Quality Strategy, in order to ensure that the National Air Quality Objectives will be achieved. Where the objectives are not likely to be achieved, the relevant authority must declare an Air Quality Management Area (AQMA), and devise a Local Air Quality Action Plan stating what measures will be taken to tackle the issue. The BwD LTP3 states that *"in order to help meet local and national targets the Council will work to reduce road traffic and traffic congestion which causes the buildup of harmful gases and particulates."*

In Darwen an AQMA exists along the A666 corridor between Robert Street and Wraith Street, within the town centre, and on the A666 at Earcroft. Recent monitoring has shown that improvements in the layout and traffic signaling at the junction of Sudell Road/A666 appear to have resulted in relevant exposure now being below the NO_2 AQS objective. The proposed DEDC would help to prevent an increase for demand on the A666 by providing a viable alternative route for some local traffic journeys, and this could help to prevent a return to previous levels of emissions within the AQMA.

The Evidence for the Implementation of the DEDC

The evidence base for the DEDC is largely contained within the following reports, produced by Capita on behalf of Blackburn with Darwen Borough Council.

Transport Implications on the Local Highway Network (2013)

This report was commissioned by BwD Borough Council to undertake a Transport Study for the borough in order to identify the impact of Local Plan land allocations on the local highway network.

The various sites were assessed against a number of accessibility criteria to determine which sites are located favourably for sustainable development. The likely impact of the development on the local highway was undertaken by assessing link capacities, and by using a strategic SATURN traffic model of the area to assess the impacts at junctions, in addition to quantifying any increases in delay on the local highway network.

The results identified junctions on the highway network operating within, approaching and over capacity in 2012 and each future year scenario—with and without additional Local Plan development. The results showed that the existing highway network would struggle to accommodate the proposed levels of Local Plan development without increases in congestion or peak spreading.

	It was concluded that impact arising from a new development which would result in junctions becoming over capacity (or worsening where already over capacity) would require some degree of mitigation. A number of mitigation measures were tested within the model, incorporating junction improvements and strategic schemes, such as the DEDC. Mitigation measures also were tested to assess whether they would alleviate AQMA areas. The study found that the level of congestion associated with the Local Plan land allocations would not be sufficiently mitigated by the then proposed measures. The study sought to identify and present further mitigation schemes to successfully enable the development of the Local Plan allocations. The report ultimately identified the Darwen Eastern Distributor Corridor as one of a number of recommended improvements. The scale of the improvements meant that the scheme would be unlikely to be deliverable through the LTP implementation plan, and the scheme should be submitted to Transport for Lancashire for inclusion within the East Lancashire Highways and Transport Masterplan. ***Darwen East Development Distributor Corridor Feasibility Assessment (2014)*** This document presents the initial assessment of proposals to create a Darwen East Development Corridor in order to mitigate the impacts of the potential Local Plan Allocations expected in the forthcoming revisions of the Local Plan. The initial feasibility study undertook a detailed review and strategic feasibility study of the DEDC to show the potential route of the corridor and set out a potential approach to implementation, based on current available information and prior studies. The corridor route layout options were assessed against a number of accessibility and technical criteria to determine a preferred option with indicative scheme construction cost estimates, as well as an implementation and delivery programme. From this assessment, a preferred option was identified to take further for more detailed assessment. A copy of the DEDC Feasibility Study is provided as Appendix A.
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*	The overarching aim of the DEDC is to: - Enable growth in Darwen through facilitating the development of housing and employment sites allocated in the Local Plan.

towards achieving the wider context set out in Section 1.1.	The issues that are intended to be addressed by the scheme can be summarised as follows: - A lack of quality affordable housing stock in Darwen; - A requirement to meet housing delivery targets; - A lack of convenient walking and cycling infrastructure in East Darwen; - Access to the development areas from A666 is via a limited number of railway crossings, each with unique constraints; - Congestion on the A666 is expected to increase due to LDP allocations; and - There are AQMA sites on the A666 in the vicinity of the town centre and at Earcroft close to Junction 4 of the M65. In considering the local policy context and the issues the scheme is intended to address, it is considered that the following objectives will sufficiently address these issues: - Assist the delivery of committed and allocated housing developments within East Darwen by the end of the current plan period (2026); - Reduce the number and severity of casualties on the local road network by the end of the current plan period; - Prevent a worsening of congestion on the local highway network as a consequence of new housing delivery to the end of the current plan period (2026); and - Prevent a worsening of air quality at the AQMA sites in Darwen as a consequence of new housing delivery to the end of the current plan period (2026). Through the achievement of these objectives, the DEDC will facilitate the wider aims of the LEP and the BwD Local Development Plan by delivering growth and helping to meet housing targets by acting as a catalyst to the delivery of much-needed high-quality housing at preferred sites and by improving access to local employment opportunities. There has been significant recent investment to improve public transport and cycling networks in the borough through the 'Pennine Reach' and 'Weavers Wheels' schemes. The unlocking of development sites cannot be achieved through provision for other modes although the scheme has been designed to ensure appropriate provision for pedestrians and cyclists and considers potential future use by public transport. The preferred solution for each junction is documented in the SOBC supporting documentation. (Appendix D - Options Modelling Report). Additionally, through the increased connectivity offered by the DEDC the local populace (both current and future) will be able to take advantage of

	improved links to employment in the wider region: along the M65 corridor, in Blackburn, Bolton, and further into Lancashire and the Manchester City Region. By helping to prevent a further buildup of emissions on the A666 the DEDC scheme has the potential to build on the work already carried out to improve the AQMA in Darwen furthering a cause to withdraw the AQMA status.
1.4 Achieving Success *Please describe how the success of the proposed scheme will be assessed and/or quantified.*	The outcomes from the scheme will be assessed and monitored as detailed in the monitoring and evaluation report provided as Appendix L. This will assess the performance of the scheme against the scheme objectives outlined above.
1.5 Delivery Constraints *Please describe any high level internal/external constraints or other factors that present a material risk to the delivery of this scheme.*	A full Risk Register is available in Appendix B. The key delivery constraints for the scheme are highlighted below: - Delays to gaining funding approval from the LEP. The majority of schemes have been designed with some ready for construction and as a result any delays to the release of funding will delay the realisation of the economic benefits to the corridor; and - Delivery of schemes within timeframe allocated however this has been mitigated through the development of a strong Management and Commercial case, presented within this document.
1.6 Stakeholders *Please outline the main stakeholder groups/organisations and their relevance or involvement in the developmenty of the scheme. Identify any specific requirements, constraints or conflicts between stakeholders.*	The main stakeholder groups affected by the scheme are: **Blackburn with Darwen Borough Council** The majority of interventions are located within Darwen and should significantly improve traffic movements in the East of the town. Blackburn with Darwen Borough Council officers have been actively involved in the development of the scheme and were actively involved in the stakeholder consultation for the Darwen East Development Corridor Strategy, contributing to the Problems and Issues workshop, Options Workshop and Strategy Presentation. Letters of support for the scheme are included in Appendix C. **Network Rail** Improvements to local bridges at Sough Road and Grimshaw Street have been presented to the public but are proposed for delivery outside the main DEDC scheme through the Council's LTP capital maintenance programme. As both bridges traverse the Blackburn to Manchester Railway, improvements to one or both bridges will require consultation with Network Rail. There has been no consultation on specific rail improvements, however representatives of Network Rail have been present at workshops related to other components of the East Lancashire Connectivity Study and are aware of the outcomes of the DEDC project. Specific consultation will take place with Network Rail once the detailed design stage has been completed in relation to the programming and method statements for the proposed improvements, with the necessary possessions being programmed at this

	stage. **Local Businesses and Residents** Works to the DEDC junctions may result in disruption to local businesses and residents due to delays and re-routing. However, a detailed consultation exercise has been undertaken with local businesses and residents. 51 responses were received from residents for the consultation exercise held on the 22nd and 23rd November 2016 at Darwen Academy and the Craven Heifer public house. Over 160 people attended to speak to representatives from the Council and developers regarding the highways and housing developments. Questions asked by members of the public and the responses given by the Council can be viewed via the project's information portal on the Council's website via: http://www.blackburn.gov.uk/Pages/Darwen-East-Development-Corridor.aspx A communications strategy is provided as Appendix I and a full breakdown of Stakeholder responses to consultation events can be found within the Appendix C addendum. This document details the specific concerns regarding housing development in the Darwen area, the loss of natural habitats, and effects of development in terms of pressure on local schools and on existing highways. However, there is also some support for the DEDC proposals, comments that the plans are positive and recognition that the main A666 is busy at peak times and is a "bottleneck". The consultation has also allowed residents' concerns to be fed into the final plans, and the Council's response to these issues is detailed within Appendix J: Public consultation summary. It can be concluded that there is some resistance to the project and wider housing development in the local area from local residents but it cannot be said that all respondents were negative in relation to the scheme. Letters of support have been received from local businesses groups approving of the scheme's aim to facilitate growth. These can be found in Appendix C.

1.7 Strategic Assessment of Alternative Option(s) (Number of options can be amended as required)

*The DfT's Early Assessment and Sifting Tool (EAST) can aid this process. EAST and guidance on using it can be found on the **DfT website**.*	Option 1	Option 2	Option 3 – Low Cost	Option 4 – Preferred
Option Name *Please insert the name by which the option is known*	Do Nothing	Do Minimum	Current proposed Darwen Eastern Development Corridor – low cost options.	Current proposed Darwen Eastern Development Corridor – high cost options
Infrastructure Type *Please provide if different from the proposed scheme.*	This option takes into account the existing highway network, and includes committed development and highway schemes.	This option incorporates the same committed development and highways schemes as Option 1, and also includes the aspirational development included within the DPD Land Allocations. This option does not include any additional highways improvements but assumes the build out of the Baileys Field and Marsh House lane sites in an ad-hoc with no through route.	This option incorporates the same parameters as Option 2, with the addition of the proposed DEDC link road scheme. The option includes the link road and the lowest cost possible option at each junction.	This option incorporates the same parameters as Option 2, with the addition of the proposed DEDC scheme. The option uses the preferred proposed improvement at each individual location.
Variation from Proposed Scheme *What are the key differences (characteristics) between the proposed scheme and this option? How is it different?*	This option incorporates already committed development and highway schemes in the area, in order to show a robust future scenario with no additional development.	This option assumes the Land Allocations set out in the DPD will have been developed. This will assume the land between Marsh House Lane and Ivinson Road is developed in an ad-hoc way with no through road with no further improvements undertaken on the local road network in the wider	This option incorporates the proposed scheme into the future scenario, but utilises the lowest cost possible option at each junction. For example, at the junction of Sough Road/Grimshaw Road, the low-cost option includes kerb realignment and changing priorities,	N/A as this is the proposed and preferred scheme.

*The DfT's Early Assessment and Sifting Tool (EAST) can aid this process. EAST and guidance on using it can be found on the **DfT website**.*	Option 1	Option 2	Option 3 – Low Cost	Option 4 – Preferred
		vicinity.	whereas the preferred high cost option is a full roundabout.	
Technical Assessment & Appraisal *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.*	In developing these options a number of assessments and appraisals have been undertaken, as reported in the documents *Transport Implications on the Local Highway Network and Darwen East Distributor Corridor Feasibility Assessment (Appendix A)* These include: Accessibility Assessment; Link Capacity Assessment; SATURN Network Modelling. A Feasibility Assessment, incorporating: Impact on Environment and Ecology; NMU Linkages and Severance; Impact on Existing Network Infrastructure; Construction Cost; Delivery Programme; and Buildability. Further assessment of each option presented here has been undertaken utilising JUNCTIONS 8 Modelling Software *as detailed in the DEDC Options Modelling Report (Appendix D)*, with further appraisal and assessment carried out following applicable DfT WebTAG guidance.			
Consultation *Please explain the extent of any stakeholder or wider consultation on the option and summarise the key findings.*	The Darwen East Development Corridor Strategy was developed in consultation with key stakeholders from Blackburn with Darwen Borough Council as well as representatives of relevant industry organisations. Throughout the consultation it was clear the need for intervention was required and a do nothing or do minimum approach was not appropriate.			
Indicative Cost (£M) & Economic Appraisal *Please provide indicative costs if known or provide information on the likely affordability against the headings 'high' 'medium' or 'low.'*	No capital expenditure but expected to negatively impact the economy as a result of a deteriorating transport network and relocation of	Limited cost, absorbed within the existing budget for operating the highways in the area.	Low cost options did not deliver benefits or mitigate the impacts of development.	£3.234m and economic appraisal as presented within this business case.

*The DfT's Early Assessment and Sifting Tool (EAST) can aid this process. EAST and guidance on using it can be found on the **DfT website**.*		Option 1	Option 2	Option 3 – Low Cost	Option 4 – Preferred
Also explain any economic appraisal undertaken, including benefit/cost analysis		residents and businesses away from the DEDC			
Impact against Strategic Objectives *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*	1) Assist the delivery of committed and allocated housing developments within East Darwen by the end of the current plan period (2026);	This option does not consider that this development will proceed. This option will not provide any additional measure in order to achieve this.	This option relies on developers to bring committed and allocated sites forward. This will require favourable market conditions.	This option includes the Link Road which should accelerate delivery of the Bailey's Field and Marsh House Lane sites but does not deliver sufficient additional capacity on the wider highway network.	This option should provide adequate capacity at each location to support long-term growth and future demands.
	2) Reduce the number and severity of casualties on the local road network by the end of the current plan period;	This option will not provide any additional measures in order to achieve this.	There are no road safety improvement schemes included within the do-minimum option.	There are no road safety improvement schemes included within the do-minimum option.	The preferred interventions have been shown through a COBALT assessment to deliver accident benefits through a reduction in the number of accidents.
	3) Prevent a worsening of congestion on the local highway network as a consequence of new housing delivery to the end of the current plan period (2026);	This option will not provide any additional measure in order to achieve this.	This option will provide a certain amount of additional infrastructure to facilitate the development of new houses. This new infrastructure will not create additional capacity at those locations that already (or are forecast to) exceed capacity.	This option will have some impact on reducing congestion, but is unlikely to provide long-term capacity.	This option should mitigate the impacts of the proposed development sites, as well as providing sufficient capacity to accommodate additional background growth into the future.

*The DfT's Early Assessment and Sifting Tool (EAST) can aid this process. EAST and guidance on using it can be found on the **DfT website**.*		Option 1	Option 2	Option 3 – Low Cost	Option 4 – Preferred
	4) Prevent a worsening of air quality at the AQMA sites in Darwen as a consequence of new housing delivery to the end of the current plan period (2026). 5)	This option will not provide any additional measure in order to achieve this.	This option will not provide any additional measure in order to achieve this.	The provision of the Link Road will offer some relief to the AQMA sites on the A666 but without the wider network improvements the alternative Northbound and Southbound routes are unlikely to be as attractive as in the preferred option.	Through provision of the link road and junction improvements on the local network new trips generated by the proposed development will have attractive alternative routes NB and SB which avoid the AQMA sites and should therefore help prevent any worsening of conditions in these locations.
Key Risks *Please identify the key technical, funding and delivery risks associated with this option.*		This option presents a significant risk of an already congested network becoming more congested and resulting in peak spreading. This would result in difficulties in accessing wider employment and have a detrimental effect on the economy of the area. It would also impact on the environment, potentially increasing emissions at the AQMA site and/or leading to the declaration of new ones.	This option only includes the bare minimum to enable the development of the East Darwen site at Bailey's Field, and does not include any further mitigation for development. Without this, there will be no alternative route to those existing and the congestion and associated issues will be exacerbated. The risk is potentially greater than that of Option 1: if the allocated development all goes ahead without a comprehensive scheme of improvements, the	This option incorporates a measure of mitigation required, but only the bare minimum to create additional capacity at each junction along the route. Although the option will reduce the impacts associated with the proposed development sites, it will not create the desired additional capacity for further background growth, and further improvements may be required in the near future. The risks therefore are	While it is expected that this option will fully mitigate the development sites and provide adequate capacity to support background growth, the option runs the risk of economic growth not matching expectations, leading to unforeseen changes in traffic growth.

*The DfT's Early Assessment and Sifting Tool (EAST) can aid this process. EAST and guidance on using it can be found on the **DfT website**.*	Option 1	Option 2	Option 3 – Low Cost	Option 4 – Preferred
		network could suffer considerably	similar to option 2, but also must include the risk of carrying out abortive work	
Rationale for Rejection *Please explain why this specific option has been rejected in favour of the proposed scheme.*	This option would have a significant detrimental effect on the economy and environment of Darwen and the surrounding region. It has therefore been rejected	This option could potentially have a significant detrimental effect on the economy and environment of Darwen and the surrounding region. It has therefore been rejected	This option does not provide the required capacity to facilitate all foreseen development in Darwen that may impact on the route. It has therefore been rejected	This is the proposed scheme.

Strategic Case Summary

There is a clear strategic need to deliver more housing and accelerate growth in Blackburn with Darwen and the wider Lancashire LEP region, as reflected in local, regional and national policy. In order to accelerate the delivery of new housing in Darwen and mitigate the impacts of the traffic associated with the delivery of new housing on allocated sites on the highway network, a package of measures is presented as the 'Darwen East Development Corridor' (DEDC).

The DEDC package includes the following improvements:

- Junction improvements at the junctions of the A666 with Grimshaw Street and Watery Lane;
- Junction Improvements at Sough Road/Grimshaw Street/Pole Lane;
- Junction Improvements at Pole Lane/Priory Drive;
- A new junction at Priory Drive/Marsh House Lane in order to facilitate a new Link Road;
- A new Link Road across the East Darwen Allocation Site between the above junction and Ivinson Road;
- Junction Improvements at Holden Fold/Oak Grove.

Any requirement for the DEDC scheme costs to be fully met by developers would undermine the viability of housing developments and deter housing developers from delivering new housing within the borough. Ongoing engagement with housing developers indicates that infrastructure costs and requirements for significant offsite improvements to transport networks are key factors in the continuing year on year shortfall of housing completions against Core Strategy requirements due to the challenging local housing market conditions in Blackburn with Darwen.

Without the new link road and junction improvements included in the DEDC scheme the impact of the traffic generated by new housing developments would have a significant detrimental impact on the safe and efficient operation of the local highway network which could compromise the Council's growth agenda.

A large proportion of these dwellings are intended for development by 2019, and it is therefore critical to have adequate infrastructure in place to mitigate the network impacts of this vital development. If the allocated sites were all developed the impact of the trips associated with over 1,000 new dwellings on the local network would result in severe congestion and peak spreading, resulting in economic losses, increased emissions and social consequences from a lack of connectivity to business, leisure and community facilities.

Additionally, through the increased connectivity offered by the DEDC the local populace (both current and future) will potentially be able to take advantage of improved links to employment in the wider region: along the M65 corridor, in Blackburn, Bolton, and further into Lancashire and the Manchester City Region.

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

Introduction

A Benefit Cost Appraisal and Gross Value Added (GVA) analysis have been undertaken to assess the economic benefits of the DEDC improvements. The Benefit Cost Appraisal and formulation of a Benefit-Cost Ratio will form the main focus of economic appraisal of the DEDC scheme in line with WebTAG guidance.

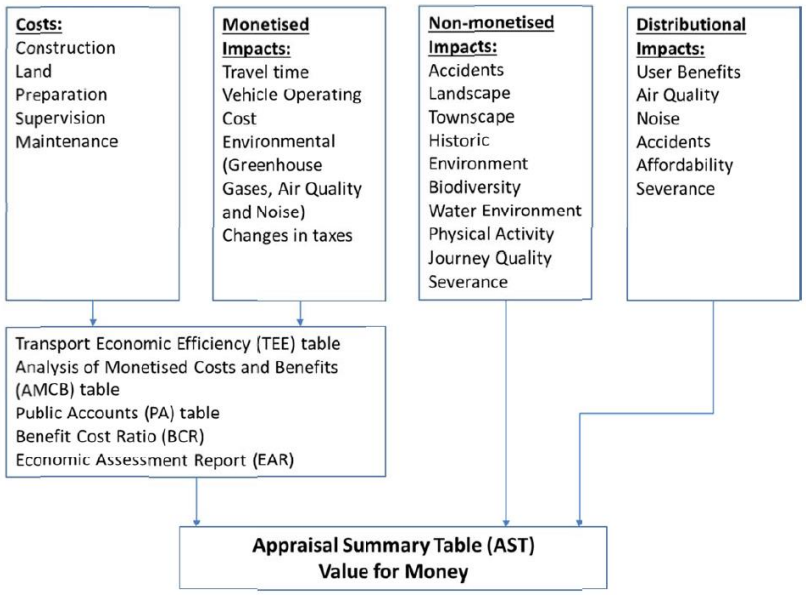
Whilst the calculation of Benefit Cost Ratios is the traditional approach to assessing the merit of transport schemes, GVA analysis seeks to complement standard transport appraisals where these have already been produced. GVA measures the total value of goods and services; i.e. economic activity. In its simplest terms, it is therefore GDP at a local/regional level, minus indirect taxation. 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 and the Lancashire SEP objectives.

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 modelling and economic appraisal methodology is detailed in the Appraisal Specification Report (ASR) which can be found in Appendix K.

Value for Money (VfM) Overview

Figure 1.1 overleaf shows the diagram which provides details of the methodology for the Value for Money assessment of the Darwen East Development Corridor scheme.

Figure 1.1 - Value for Money Assessment Process



The Value for Money assessment is a staged process which includes appraisal of the scheme's economic, environmental, social, distributional and fiscal impacts using qualitative, quantitative and monetised information.

It starts with analysis of monetised costs and benefits and calculation of the Benefit Cost Ratio of the Scheme. The next stage is to capture and analyse those impacts which cannot be monetised but can be presented as qualitative information. Finally, it looks at how the impacts of the scheme are distributed across different social groups - the Distributional Impacts Analysis. The monetised impacts are summed to construct an Initial Benefit Cost Ratio (Initial BCR) – that is the amount of benefit being bought for every £1.00 of cost.

Analysis of Monetised Impacts and Costs

The summary of the monetised information, along with the BCR, is presented in the standard Analysis of Monetised Costs and Benefits (AMCB) Table, part of the DEDC BCR Technical Note found in Appendix E.

The DfT WebTAG document TAG Guidance for the technical project manager (January 2014) suggests a flexible approach to economic appraisal to ensure time and resources spent on the development of a business case are proportionate to the size of the investment.

Having considered the nature of the scheme and its potential impacts on the economy, environment, and social well-being and taking into account

	lessons learnt from previous projects, it was agreed with Jacobs that the key benefits of the scheme are likely to be derived from providing access to development sites and a reduction in delays to traffic at the junctions to be improved. Calculation of benefits was based on the output from localised junction models built specifically for the purpose of supporting this Strategic Outline Business Case. The development of the traffic models and the various options tested for the scheme proposals in the identification of a preferred option is presented in the Options Appraisal Modelling Report (May 2017) attached as Appendix D. In relation to the proposed link road, benefits are based on a small number of existing trips and 50% of the trips associated with development on the Baileys Field site benefitting from the time savings offered through the provision of a through route. This is on the basis that the link road is intended to unlock land for development and not to provide significant additional capacity to the local highway network that would give rise to widespread redistribution or induced traffic. The following benefits and dis-benefits have been included in the economic assessment: • Travel time benefits • Accident cost benefits Estimation of the scheme costs include both the actual cost of the scheme during its construction as well as any changes in the capital cost of maintenance in future years. Base costs for construction, land / property, preparation / administration and supervision, including adjustment for risk have been estimated by Capita based on the latest scheme design. The maintenance cost estimate has been produced using the typical maintenance profiles, costs, durations and timings for new roads as per the DfT QUADRO manual (DMRB Volume 14 Sec 1 Part 2 Chapter 4). In line with WebTAG, an additional 3% Optimism Bias adjustment has been made for the purposes of economics modelling to take into account the stage of development the scheme is at and the tendency for scheme appraisers to be overly optimistic about scheme costs. The 3% uplift is recommended in TAG Unit A1.2 for Stage 3 of scheme appraisal e.g. post procurement. It should be noted that costs and benefits occur in different years

throughout the assessment period, e.g. the construction costs occur before the scheme opens, whilst the benefits occur over the DfT standard appraisal period of 60 years.

This means that the costs used in scheme appraisal differ from the outturn costs used for funding decisions. The appraisal costs are therefore discounted and converted to the DfT's standard present value year for appraisal (2010) to allow direct comparison with the monetised benefits.

The combination of having costs and benefits in a standard price base and discounted to a common year means that all costs and benefits in this Economic Case are in 2010 prices, discounted to 2010 (unless explicitly stated).

The results of the BCR assessment for each package of schemes is shown in Table 1.1 below, displaying the Present Value of Benefits (PVB), the Present Value of Costs (PVC) and Benefit Cost Ratios (BCR).

Table 1.1 – BCR 'Core' Scheme Assessment

Scheme	PVC	PVB	BCR
Link Road	£2,905,412	£5,357,049	1.84
Junction Improvements	£702,865	£23,398,160	33.29
Pre-works Contract	£55,418		
TOTAL	**£3,663,694**	**£28,755,209**	**7.85**

A BCR of 7.85 is observed for the whole DEDC scheme, and is considered to give 'Very High' value for money. A traditional BCR of greater than 2.0 is the threshold for the LEP to consider a scheme for funding, as set out in the "LEP Accountability Framework" (Lancashire Enterprise Partnership, September 2014).

The BCR of 1.84 associated with the Link Road is considered to provide 'medium' value for money. In addition to this, the link road and associated junctions are expected to bring additional, non-quantified benefits by unlocking previously inaccessible land for development.

PVB and BCR values presented for the scheme include an appraisal of accident rates at each junction between without-scheme and with-scheme scenarios using the DfTs COBALT Software. This was undertaken using default accident rates at each junction for each junction type.
WebTAG worksheets for the Core Scenario and sensitivity tests are provided in Appendix Q.

Analysis of Non-monetised impacts

The second stage of a Value for Money assessment builds on the initial monetised costs and benefits and considers qualitative and quantitative information on those impacts which cannot be monetised and how these contribute to the Value for Money of the scheme.

The impacts which are difficult to monetise but which have nevertheless been appraised using qualitative and quantitative information and given an overall qualitative assessment score. The various impacts appraised are listed below:

- Impacts on Landscape;
- Impacts on Townscape;
- Impacts on Historic Environment;
- Impacts on Physical Activity;
- Impacts on Journey Quality;
- Impacts on Severance; and
- Dependent Development Impacts.

The analysis of non-monetised impacts have been undertaken in accordance with the methodology recommended within the relevant WebTAG units and the results have been summarised within the AST in section 4.6 of this chapter. Details of the approach and results can be found in the **Environmental Impacts Appraisal Report** (December 2015) in Appendix F.

Analysis of Distributional Impacts

Finally to understand the impacts of the scheme on different social groups, including those which are potentially more vulnerable to the effects of transport the Distributional Impacts (DI) appraisal has been undertaken. The DI analysis is mandatory in the scheme appraisal process and as a minimum is required for the following five impacts: User Benefits, Noise, Air Quality, Accidents, and Personal Affordability.

Full details of the methodology and results for each DI impact are given within the **Social and Distributional Impacts Appraisal Report** (Updated May 2017) and included as Appendix G. The results of the DI Appraisal are also reported within the AST.

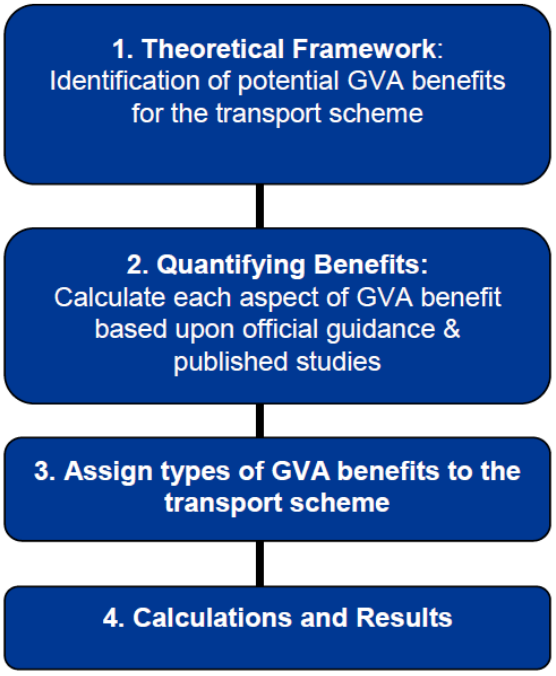
GVA Assessment

The GVA analysis seeks to complement standard transport appraisals. The wider economic impacts of the proposed transport schemes are particularly important to understand in terms of the potential benefits for the locality and the Government's economic growth agenda.

GVA measures the total value of goods and services; i.e. economic activity. In its simplest terms, it is therefore GDP at a local/regional level, minus indirect taxation.

The analysis of potential GVA benefits has been undertaken in the following stages, as summarised in Figure 1.2 below.

Figure 1.2 – Theoretical GVA Framework



Unlike standard transport appraisals, there is not a single methodology for estimating the impacts of a scheme on GVA, employment, or similar measures of the performance of the real economy. Methodologies often vary considerably across studies.

In this context, a bespoke methodology has been developed based on the above definition and consistent theoretical framework for assessing additional economic benefits. This ensures that the scheme is subject to a standard process and quantification of benefits; albeit using local variations in GVA per job, and local transport capacity constraints overcome.

Not all elements of GVA benefits are applicable for every type of scheme. The change as a result of accelerated development from infrastructure provision and increased network capacity was considered appropriate for the Darwen East Development Corridor and has subsequently been assessed.

The number of jobs generated by future employment opportunities has been determined using employment site allocations and an average value of jobs per hectare based on local information provided by Blackburn with Darwen Borough Council.

The annual benefits obtained in the GVA analysis have been forecast over a 60 year period to be consistent with the rest of the appraisal, and to ensure consistency with the BCR outputs derived for the highway improvements schemes, which already incorporate user benefits of the scheme.

The benefits over the 60 year period have been discounted using a 3.5% discount rate as defined in WebTAG. This is in line with Treasury Green Book guidance and is applicable to years 1 – 60 where appropriate.

Given an investment of £2.5m, this would be returned within 5 years of the scheme opening, based on an average return of £0.55m in GVA uplift per annum in discounted 2010 costs. However, this figure represents an average over the appraisal period of the scheme and given the profiling of benefits, may not be recouped for several years.

The GVA Analysis is presented in the **DEDC BCR Technical Note** (December 2015) found in **Appendix E**.

AMCB Table

The AMCB (Analysis of Monetised Costs and Benefits) table is an industry standard table published by the DfT for the presentation of all monetised impacts of a scheme considered sufficiently robust for inclusion in the Net Present Value (NPV) and Benefit Cost ratio (BCR).

Table 2.2 below summarises the outputs of the Benefit Cost Analysis for the DEDC Scheme Core Scenario as a whole.

Table 2.2 – AMCB Table

Noise	-
Air Quality	-
Greenhouse Gases	-
Journey Quality (Congestion)	-
Physical Activity	-
Infrastructure Maintenance	-£841,337
Accidents	£3,455,400
Economic Efficiency: Consumer Users (Commuting & Other)	£16,428,639
Economic Efficiency: Business Users and Providers	£8,871,170
Wider Public Finances (Indirect Taxation Revenues)	-
Present Value of Benefits (PVB)	£28,755,209
Present Value of Costs (PVC)	£3,663,694
Net Present Value (NPV)	£25,091,515
Benefit to Cost Ratio (BCR)	7.85

With a BCR of 7.85 the DEDC Improvements Scheme represents 'Very High' Value for Money (VfM) meeting the threshold for approval for funding from

	LEP as per the LEP Accountability Framework.
2.2 Economic Assumptions *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.*	**Overview** This section summarises the key assumptions supporting the Value for Money analysis. This includes the assumptions set out in WebTAG as well as further assumptions specific to the Darwen East Development Corridor scheme. **Transport Model, Time Periods and User Classes** The impacts of the proposed scheme are based on the differences between forecasts of the without-scheme and with-scheme scenarios. These forecasts have been developed using a spreadsheet model for the Darwen area. Localised junction models for each intervention proposed as part of the DEDC scheme were developed for the Base year 2015. Future traffic growth for the development of model forecasting scenarios was based on planning data from the relevant planning authorities together with national data from NTEM v7.2. The planning assumptions within NTEM have been adjusted by reducing the number of households and jobs based on data from the Blackburn with Darwen Borough Council, Local Plan Part 2, Site Allocations and Development Management Policies document (Modification Edition, May 2017) For the purposes of adjusting NTEM it was assumed that the housing employment sites identified in this document would account for all new households and jobs within the defined NTEM growth area. Model development and traffic forecasting have been carried out in line with WebTAG units for the modelling practitioner (Units M1-1, M1-2, M3-1 and M4. Full details of modelling and forecasting can be found in the **DEDC BCR Technical Note** found in Appendix E. As the primary purpose of the DEDC scheme is to improve access to development sites it is considered unlikely that there would be a significant variable demand responses that influence the economic case of the scheme. Therefore, the traffic model for the proposed scheme is a Fixed Demand Model covering the peak and inter-peak traffic periods and conditions. **Appraisal Period**

	In line with WebTAG guidance, the annual transport benefits for each scheme have been interpolated and projected over a 60-year appraisal period after the scheme opens, capturing the planned period of scheme development and implementation. The appraisal period covers from the scheme opening year of 2019 to the scheme design year, assumed to be 2026 as the final year of the plan period. **Benefits Capture and Annualisation** The benefits and dis-benefits captured in the assessment are not limited to those on the scheme itself. They include lower and higher levels of congestion, noise, air pollution, and greenhouse gas emissions on both the new road and existing roads across the full area of impact. However, the benefits of the DEDC scheme have been considered only at localised junctions where there will be a scheme intervention. It is considered likely that the development proposals will have additional benefits, but that it is not appropriate or proportionate to assess these; therefore the analysis potentially underestimates the benefits of the scheme, especially when considered in a wider context. Values of time for each user class, journey purpose and appraisal year have been sourced from the WebTAG Databook (DfT, July 2017, Table A1.3.2). Annual transport benefits were derived through the application of a peak hour to peak period factor (or average hour to peak period factor, where appropriate) and a working day to working year factor in line with WebTAG Unit A1-3 'User and Provider Impacts' section 9, 'Annualisation'. The peak hour to peak period factors have been calculated based on observed data at a selection of count locations within Darwen. Following examination of the traffic count data, it was not deemed appropriate to incorporate off peak or weekend benefits/dis-benefits within the economic assessment. This was due to the traffic volumes observed during off-peak periods and on the weekend, being significantly lower than those during the weekday peak and inter-peak periods. The data was therefore considered unrepresentative and for this reason off-peak and weekend benefits/dis-benefits have been excluded from the economic assessment.
2.3 Sensitivity & Risk Profile *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.*	The assessed scheme benefits are sensitive to change if the forecast increase in traffic growth and delay is not accurate. Explicitly modelled Local Plan site allocation traffic has been controlled to TEMPro NTEM core growth assumptions. Traffic volumes could change if the economic growth exceeds or does not match that defined by these core assumptions.

The appraisal period of junction improvements has been undertaken for a 60 year period. Benefit between two future forecast scenarios (2019 and 2026) has been interpolated to evenly distributed benefit between years. Between the final modelled year (2026) to the final appraisal year, expected benefits grow in line with forecast changes in Value of Time only.

There are no benefits calculated after the last appraisal year, in line with WebTAG guidance. It is expected that some schemes will continue to realise benefits after 60 years, in particular where modelling results have predicted considerable increases in capacity.

A number of sensitivity tests have been undertaken to assess how changes in economic, environment and social factors affect the economic impact of the proposed scheme. These include:

- Low Cost (Link Road Only) Option
- 30 year appraisal
- No Inter-peak Benefits
- Zero Growth
- Value of Time Sensitivity

Sensitivity Test variations on the whole scheme PVC, PVB and BCR are presented in Table 1.2 below.

Table 1.2 – Sensitivity Test Results

TEST	PVC	PVB	BCR
CORE	£3,663,694	£28,755,209	7.85
LOW COST	£2,905,412	£5,357,050	1.84
30 YEAR APPRAISAL	£3,195,472	£16,719,418	5.23
NO INTERPEAK BENEFITS	£3,663,694	£25,921,322	7.08
ZERO GROWTH	£3,663,694	£10,222,334	2.79
VoT SENSITIVITY	£3,663,694	£18,812,091	5.13

It can be seen from Table 1.2 above that for each of the sensitivity tests undertaken the whole package DEDC scheme is shown to offer value for money.

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 Darwen East Development Corridor Improvement Scheme appraisal demonstrates 'Very High' value for money, based on a traditional transport **BCR of 7.85** for the DEDC scheme as a whole. Individual BCR's for each scheme were produced and also indicate 'Very High' value for money at several locations.

The scheme will also generate additional GVA benefits for the local economy. A net GVA benefit over the appraisal period of approximately £0.55m per annum averaged over a 60-year appraisal period has been

	calculated based on locally adjusted GVA values (in 2010 discounted prices). Over the full 60 year assessment period, the total 2010 discounted benefits amount to £33.2m. The majority of the transport benefits as a result of the interventions are generated through a reduction in delay at key junctions along the DEDC. This has been estimated using industry standard modelling software based upon traffic surveys of each junction carried out in June 2015. The scheme is expected to have a neutral or negligible impact against the majority of social impacts. None of the individual schemes are expected to have a negative impact on accident rates, with a several interventions estimating a positive benefit. The changes in accident rates are monetized and included within the BCR calculation. The scheme is expected to have a negligible and therefore neutral impact on the majority of environmental impacts, with a slight adverse impact upon the townscape and landscape where the scheme cannot be integrated within the townscape and will result in the loss of Bailey's Field.

2.5 Appraisal Summary Table

N.B. This is a preliminary AST and should provide an overview of the impacts which must be developed during the Outline Business Case.

Appraisal Summary Table

Date produced:	8th October 2017

Contact:	
Name	Mike Cliffe
Organisation	BwDBC
Role	Promoter/Official

Name of scheme:	Darwen East Development Corridor (DEDC) Improvements Scheme
Description of scheme:	The DEDC is a package of measures including a number of improvements to existing junctions, as well as the creation of new junctions and a link road, required in order to facilitate the planned growth for Darwen detailed in the Local Plan and supporting documents. Previous studies have identified that the network in Darwen is already congested, and that further development without mitigation would have serious adverse consequences.

Impacts		Summary of key impacts	Assessment			
			Quantitative	Qualitative	Monetary £(NPV)	Distributional 7-pt scale/ vulnerable grp
Economy	Business users & transport providers	Studies have identified junctions on the highway network operating within, approaching and over capacity in 2012 and each future year scenario—with and without additional Local Plan development. The results of modeling undertaken have shown that the existing highway network would struggle to accommodate the proposed levels of Local Plan development without increases in congestion or peak spreading. The proposed schemes will reduce delay at key junctions throughout the corridor improving access to businesses and reducing overall travel time for all highway users	Value of journey time changes(£): £8.87m Net journey time changes (£): 0 to 2min: N/A; 2 to 5min: N/A; > 5min: N/A	-	£8,871,170	N/A
	Reliability impact on Business users	Reliability for business users and transport providers is expected to be positive due to increase in capacity and expected decrease in travel time variability and delays caused by incidents. However, no formal quantification of journey time reliability was undertaken.	N/A	Slight Benefit	N/A	
	Regeneration	Regenerative impact has been assessed as part of the GVA benefit analysis which considered increase in the employment as a result of the scheme. An estimate of 1469 jobs is expected to be accelerated by the scheme which demonstrates a positive impact of the scheme on regeneration.	1,469 Jobs	Large Beneficial	N/A	
	Wider Impacts	The scheme is expected to generate over £33m GVA benefits over 60 years through accelerated development and increase in productivity which shows that the DEDC will have positive wider impacts by strongly supporting local economic activity. This represents an annual average benefit of £0.554m to the Blackburn with Darwen economy. Approximately 1154 houses and 1469 jobs will be accelerated by the scheme.	1,154 New Houses	Large Beneficial	N/A	
Environmental	Noise	The DEDC is likely to have a negligible impact on noise, and therefore further assessment has not been carried out.	N/A	Neutral	N/A	N/A
	Air Quality	The DEDC is likely to have a negligible impact on Air Quality, and therefore further assessment has not been carried out.	N/A	Neutral	N/A	N/A
	Greenhouse gases	The DEDC is likely to have a negligible impact on Greenhouse Gasses, and therefore further assessment has not been carried out.	Change in non-traded carbon over 60y (CO2e): N/A Change in traded carbon over 60y (CO2e): N/A	Neutral	N/A	
	Landscape	The creation of new infrastructure—particularly over the open space of Bailey's Field—is likely to impact slightly on certain views into and across the area and cannot be completely integrated into the landscape.	N/A	Slight Adverse	N/A	
	Townscape	The scheme without mitigation would have a slight adverse effect on the townscape in the immediate vicinity of the link road and extension of Ivinson Road through the loss of Bailey's field and the introduction of new infrastructure in close proximity to dwellings.	N/A	Slight Adverse	N/A	
	Historic Environment	The DEDC is likely to have a negligible impact on the Historic Environment, and therefore further assessment has not been carried out.	N/A	Neutral	N/A	
	Biodiversity	An ECIA has been undertaken and found that there would be a neutral impact regarding most biodiversity on the site with a minor negative impact on species poor defunct hedgerows with trees, inundation vegetation, wet and dry ditch, ephemeral ponds and standing water and to amphibians.	N/A	Slight Adverse	N/A	
	Water Environment	N/A	N/A	N/A	N/A	
Social	Commuting and Other users	Studies have identified junctions on the highway network operating within, approaching and over capacity in 2012 and each future year scenario—with and without additional Local Plan development. The results of modeling undertaken have shown that the existing highway network would struggle to accommodate the proposed levels of Local Plan development without increases in congestion or peak spreading. The proposed schemes will reduce delay at key junctions throughout the corridor improving access to businesses and reducing overall travel time for all highway users	Value of journey time changes(£): £16.4 Net journey time changes (£): 0 to 2min: N/A; 2 to 5min: N/A; > 5min: N/A	-	£16,428,639	
	Reliability impact on Commuting and Other users	Reliability for commuting and other users is expected to be positive due to increase in capacity and expected decrease in travel time variability and delays caused by incidents. However, no formal quantification of journey time reliability was undertaken.	N/A	N/A	N/A	
	Physical activity	The DEDC is likely to have a negligible impact on Physical Activity, and therefore further assessment has not been carried out.	N/A	Neutral	N/A	
	Journey quality	The DEDC is likely to have a negligible impact on Journey Quality, and therefore further assessment has not been carried out.	N/A	Neutral	N/A	
	Accidents	The scheme is expected to reduce the number of accidents at a number of junctions. The impacts of the scheme on accidents have been quantified and included within the formulation of the BCR. The DI analysis suggests that the scheme will have a slight beneficial effect on Older People at the Sough Rd / Grimshaw St junction, and a slight beneficial effect on Older People, Pedestrians and Cyclists at Pole Lane / Priory Drive.	£3.5m value of accident savings.		£3,455,400	Pedestrians – Slight Benefit Cyclists – Slight Benefit
	Security	The DEDC is likely to have a negligible impact on Security, and therefore further assessment has not been carried out.	N/A	Neutral	N/A	N/A
	Access to services	The DEDC is likely to have a negligible impact on Access to Services, and therefore further assessment has not been carried out.	N/A	Neutral	N/A	N/A
	Affordability	The DEDC is likely to have a negligible impact on Affordability, and therefore further assessment has not been carried out.	N/A	Neutral	N/A	N/A
	Severance	The DEDC is likely to have a negligible impact on Severance, and therefore further assessment has not been carried out.	N/A	Neutral	N/A	N/A
	Option and non-use values	No Option and Non-use Assessment has been undertaken as part of this appraisal	N/A	N/A	N/A	
Public Accoun	Cost to Broad Transport Budget	The scheme is to be funded through a combination of Growth Deal and Local Transport Plan funds with a total cost of £3.324m.			£3,663,694	
	Indirect Tax Revenues	N/A		N/A	N/A	

Economic Case Summary

A Benefit Cost Appraisal and Gross Value Added (GVA) analysis have been undertaken to assess the economic benefits of the DEDC improvements.

The Value for Money (VfM) assessment is a staged process which includes appraisal of the scheme's economic, environmental, social, distributional and fiscal impacts using qualitative, quantitative and monetised information.

Calculation of benefits was based on the output from localised junction models built specifically for the purpose of supporting this Strategic Outline Business Case. The DEDC Improvements Scheme appraisal demonstrates 'very high' value for money—and meets the threshold for approval for funding from LEP as per the LEP Accountability Framework—based on a traditional transport **BCR of 7.85** for the DEDC scheme as a whole.

The GVA analysis seeks to complement standard transport appraisals. The wider economic impacts of the proposed transport schemes are particularly important to understand in terms of the potential benefits for the locality and the Government's economic growth agenda. GVA measures the total value of goods and services; i.e. economic activity. In its simplest terms, GVA is GDP at a local/regional level, minus indirect taxation.

A net GVA benefit over the appraisal period of approximately **£0.55m per annum** averaged over a 60-year appraisal period has been calculated based on locally adjusted GVA values (in 2010 discounted prices); therefore, given a Growth Deal investment of £2.5m, this would be returned within 5 years of the scheme opening. The net GVA benefit has been calculated based upon the acceleration of additional jobs and dwellings within Darwen.

Further qualitative and quantitative analysis has been undertaken on those environmental impacts which cannot be monetised and how these contribute to the Value for Money of the scheme. The scheme is expected to have a negligible and therefore neutral impact on the majority of environmental impacts, with a slight adverse impact upon the townscape and landscape where the scheme cannot be integrated within the townscape and will result in the loss of Bailey's Field.

Finally, in order to understand the impacts of the scheme on different social groups (including those which are potentially more vulnerable to the effects of transport) a Distributional Impacts (DI) appraisal has been undertaken. The DI analysis is mandatory in the scheme appraisal process and as a minimum is required for the following five impacts: User Benefits, Noise, Air Quality, Accidents, and Personal Affordability. The scheme is expected to have a neutral or negligible impact against the majority of social impacts. The change in accident rates are monetized and included within the BCR calculation. Over the full 60 year assessment period, the total 2010 discounted benefits amount to **£3.5m**.

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 Lancashire Growth Deal aims to realise the growth potential of the whole of Lancashire. Improving transport connectivity through new roads, improved junctions and public transport to support growth in jobs and homes is a key component of the growth deal. Using a combination of the tendered costs and C3 statutory undertakers estimates the total construction costs are estimated at £2.593m including a 10% allowance for risk. A detailed cost report is provided in Appendix N. Design and Supervision costs have been estimated at £0.696m for the programme. The split of costs for the project is summarised as follows: • Main contract: Construction of Link Road, DEDC junction improvements and safety measures, landscaping and highways resurfacing • Highways construction tender price: £1,883,988 • Pre works undertaken by BwDBC: £55,000 • Statutory Undertakers diversions: £418,384 • Professional fees including preparation, detailed design and surveys: £535,976 • Supervision fees: £160,000 • Construction risk @ 10%: £235,737 • Preparation / supervision risk @ 5%: £34,799 • Total Confirmed Cost: £3,323,884 The total confirmed cost is to be funded as follows: • Growth Deal 3 (LEP): £2,500,000 (75%) • BwDBC local contribution: £823,884 (25%) – £438,911 is capital invoicable (design and supervision fees). • Total Funding: £3,323,884 The Council notes the LEP Assurance Framework's stipulations around construction and preparation costs and the proposed dispensation in relation to the LEP funding covering costs which are classified as "Capital Invoicable". Design and supervision costs solely relating to the DEDC project will be included within the schemes Total Capital construction cost and will be identified within future monitoring reports and grant claims. Land cost for the project is nominal and therefore a value of this land has not been factored into the project, neither within the cost profile or within the cost/benefit analysis. It is therefore a "benefit in kind" to the project. A future section 106 contribution will be calculated based on proposed housing numbers for the site, and will be negotiated between the Council and future developers through the normal planning process. The Cabinet Member for Highways and Transport has already approved the Darwen East Development Corridor subject to the Lancashire Enterprise

<table>
<tr><td></td><td>Partnership securing Growth Deal funding of £2.5m from the Government and granting approval for Blackburn with Darwen to undertake the work.

Ongoing maintenance costs have been calculated using the DfT QUADRO manual and will be covered by BwDs ongoing maintenance budgets.</td></tr>
<tr><td>3.2 Financial Costs
Please provide details of the Whole Life Costs of the proposed scheme and a profile of the costs over the period shown.
See Scheme Costs Guidance</td><td>
<table>
<tr><td colspan="2">Whole Life Costs (£m)</td><td colspan="4"></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></td><td>£0.135</td><td>£0.800</td><td>£2.332</td><td>£0.057</td></tr>
</table>
</td></tr>
<tr><td>3.3 Financial Cost Allocation
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.</td><td>
<table>
<tr><td colspan="2">Local Growth Fund (WLC £m)</td><td colspan="4"></td></tr>
<tr><td>Profile</td><td></td><td></td><td>£0.500</td><td>£2.000</td><td></td></tr>
<tr><td colspan="2">Private Sector (WLC £m)</td><td colspan="4"></td></tr>
<tr><td>Profile</td><td></td><td></td><td>£0.000</td><td>£0.000</td><td></td></tr>
<tr><td colspan="2">Other Public Sector (WLC £m)</td><td colspan="4"></td></tr>
<tr><td>Profile</td><td></td><td>£0.135</td><td>£0.300</td><td>£0.332</td><td>£0.057</td></tr>
</table>
</td></tr>
<tr><td>3.4 Financial Risk
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.</td><td>A detailed risk register is provided in Appendix B. Risks have been assessed using a slight variation on the Highways Agency Risk Management Tool (HARM) (ME/LH to confirm).

A risk contingency of 10% has been allowed for all construction costs and 5% for all design and supervision costs. Key financial risks are summarised below:
- Transfer of or access to land;
- Ground Investigations;
- Diversion of Statutory Undertakers Equipment;
- Impact of national/international incident.

In line with the LEP's Accountability Framework any budget overspends must be covered by Blackburn with Darwen Borough Council's capital budget, and the financial case has been signed off by the Section 151 officer at the LCC on the above basis.</td></tr>
<tr><td>3.5 Financial Risk Management
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.</td><td>Risk associated with this scheme have been estimated at £0.271m.

The consideration of risk includes disputes and claims associated with procurement and environmental impact / mitigation.

Suppliers of the specialist components and services required have been consulted at pre-tender stage to help build up the works cost estimates.

Where appropriate these suppliers have provided a number of cost options depending on some of the unknown site conditions. The worst-case scenario options have been used in the works cost estimate.

A shortfall in funding is not expected but will be identified and addressed at the end of the tender stage if any shortfall exists.</td></tr>
<tr><td>3.6 Financial Accountability
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?</td><td>The overall scheme cost will be monitored by the Blackburn with Darwen / Capita Design Team and regularly reviewed in terms of finances by the Project Manager.

Regular liaison and cost reviews will take place with the scheme's main</td></tr>
</table>

	contractor and the Council's project team with technical input provided by the Council's strategic partner, Capita. The overall cost of the works will be reviewed and confirmed, with the works costs assessed every 4 weeks.

Financial Case Summary

The Lancashire Growth Deal aims to realise the growth potential of the whole of Lancashire. Improving transport connectivity through new roads, improved junctions and public transport to support growth in jobs and homes is a key component of the growth deal.

This FBC is looking for Growth Deal funding of £2.5m, accounting for 75% of the total scheme cost. The remaining funding (25%) will be provided by Blackburn with Darwen Capital Programme.

The overall scheme cost estimate is therefore £3.324m with an overall package BCR of 7.85.

In line with the LEP's Accountability Framework any budget overspends must be covered by Blackburn with Darwen Borough Council's capital budget, and the financial case has been signed off by the Section 151 officer on the above basis.

Risk associated with this scheme have been estimated at £0.271m. This is based on an initial analysis of the project risks as set out in the Risk Register based on scheme specific contributory factors related to cost and programme risk.

The overall scheme cost will be monitored by the Blackburn with Darwen / Capita Design Team and regularly reviewed in terms of finances by the Project Manager.

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 Darwen East Development Corridor has been assessed under the headings: - Procurement Strategy; - Identification of Risk; - Risk Allocation; and - Contract Management
4.2 *Procurement Str*ategy *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.*	Blackburn with Darwen Borough Council are mindful of the need to secure best quality and best value for money when developing the procurement strategy for the schemes within the DEDC study. Works within the individual schemes are largely contained within the footprint of the adopted highway with the exception of a new link road. The overall package of works is estimated to cost £3.324m. The scheme has been procured through the open market utilising the 'Chest' electronic procurement process as this was determined to be the most appropriate route and likely to represent the best value for money. The scheme has been procured under the terms of the New Engineering Contract (NEC). The procurement exercise has now been concluded and there is a preferred main contractor to deliver the scheme. An open procurement exercise yielded 10 tender returns which have been evaluated on a quality / price basis. The Council's Executive Board report on the 9th November 2017 will approve the main contractor and a letter of intent will be issued. Contract acceptance documentation will be issued on 31st January 2018 following confirmation of Full Approval from the LEP.
4.3 Identification of Risk *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.*	The risk management strategy is outlined in section 5.7. There is a detailed risk register (see Appendix B). Land acquisition details are provided as Appendix P.
4.4 Risk Allocation *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.*	Blackburn with Darwen Borough Council has been identified as the body best placed to manage the risks and deliver the project, given their close involvement in the development and delivery of the schemes. As such it will carry most of the risk. Where appropriate risks will be allocated to its delivery partner Capita. The Project Board has overall responsibility for governance and risk associated with the delivery of the scheme and will meet on a quarterly basis. The Project Executive is responsible for managing and overseeing the Risk Management Strategy and where appropriate agreeing and undertaking actions to mitigate key risks. The Project Manager is 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, includes arrangements for decision making and approvals, and information on roles and responsibilities such that responsibilities with regard to risk are well defined. In line with PRINCE2 principles a clear management, reporting and delivery structure is in place utilising the experienced design and operations teams within Blackburn with Darwen Borough Council.
4.5 Contract Management *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).*	The scheme has been procured under the terms of the ECC New Engineering Contract (NEC 3) Option B. Close working between the scheme designer and the direct works supervisor will ensure value for money and will enable a flexible approach to implementation as well as managing the allocation of sufficient resources. Performance against programme and cost will be monitored by the Project Manager and will be reported to the board at regular intervals. A provisional project programme is attached at Appendix H.

Commercial Case Summary

In order to secure high quality works and best value for money, the scheme has been procured through the open market utilising the 'Chest' electronic procurement process as this was deemed to be the most appropriate route and likely to represent the best value for money. The scheme has been procured on the basis of being under the terms of the ECC New Engineering Contract (NEC 3) Option B.

Blackburn with Darwen Borough Council has been identified as the body best placed to manage the risks and deliver the project, given their close involvement in the development and delivery of the schemes. As such it will carry most of the risk. Where appropriate risks will be allocated to its delivery partner Capita. Risk identification has been fully undertaken and a separate Risk Register attached (Appendix B).

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 Blackburn with Darwen Borough Council, 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

Blackburn with Darwen Borough Council has established a Project Board and Project Working Groups to support the delivery of schemes seeking Growth Deal funding. That Board will take ownership of this particular package of schemes, and also report progress to the LEP.

The Project Board consists of the Project Executive, Senior Users 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)	**Andrew Brown - Capita**	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	**BwD Growth and Development**	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	**BwD Growth and Development. Transport Strategy / Programmes and Highways Sections.**	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.

An organogram detailing the individuals undertaking each role within the Project Board is provided as Appendix M.

Blackburn with Darwen Borough Council have delivered a number of major transport projects costing over £5m in the last 5 years. A summary of these projects is provided below. Further details can be provided if required.

Pennine Reach – a £40m DfT funded capital scheme to provide quality bus infrastructure, technology and improved bus services across Pennine Lancashire. Completed in Spring 2017 the project included new roads and junctions, two new bus stations, bus shelters and customer information systems. Some delays and cost overruns due to the Blackburn bus station main contractor going out of business mid-project and a new contractor having to be appointed. Delays were also experienced due to unidentified and unchartered utilities.

Wainwright Way – an £11m DfT and Council funded scheme to deliver a new stretch of the Town Centre Orbital Route and open up new employment sites. Completed in Spring 2016 the project was complex and involved demolition of a listed building, demolition and replacement of a church, demolition of an older people's home and sensitive excavation and professional archaeology of a former Victorian churchyard with reburial of over 2000 sets of human remains. Estimating the numbers of remains within this unique project for the Borough proved difficult due to incomplete records and discovery of multiple burials in single plots. Archaeology and related costs increased and were borne by the Council.

M65 Junction 5 / Haslingden Rd Growth Corridor Pinch Point – a £5m joint project with DfT and Highways England (funded from LA and HE Pinch Point funding) the scheme enabled carriageway widening from M65 Jct 5 into Blackburn and also signalling and carriageway works on Jct 5 itself. The project involved land purchase and the use of sensitive traffic management techniques on a busy part of the Strategic Highway network. The scheme was completed on time and to budget.

5.2 Go/No-Go & Decision Milestones *Please describe any outstanding Go/No-Go processes and Decision Milestones in relation to the progression of the proposed scheme.*	The key go/no-go date for the scheme will follow the SOBC submission to the Transport for Lancashire committee on 20th November 2017, and then to the LEP in January 2018 when final approval will be sought.
5.3 Project Programme *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.*	An indicative programme for the delivery of the package of schemes within the Darwen East Development Corridor Improvements Scheme is appended at Appendix H. Key dates are as follows: - Business case submission: October 2017 - Procurement process for the works will be in Q2 2017/2018

	- Business case approval from TfL: November 2017 - Construction work begin: February 2018 - Completion of works: March 2019
5.4 Assurance and Approvals Plan *Please document any key assurance and approval milestones (including any independent assurance).*	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: • All decisions and activities comply with legal requirements; • The use of all funds is accounted for and reported; • Appropriate records of decisions and proceedings are published; and • The assurance framework is being adhered to. Given that Blackburn with Darwen Borough Council are the promoter and applicant for the scheme, an independent local audit of the business case work which guides investment decisions is also being carried out, by independent consultants, prior to the approval decision by the LEP. Blackburn with Darwen Borough Council and Capita have undertaken their own Gateway Reviews as follows: - Preliminary Gateway Review, 8th February 2017 - Detailed Design Gateway Review, 17th May 2017 Meeting minutes from Gateway Reviews undertaken to date are provided in Appendix O.
5.5 Communications & Stakeholder Management *Please explain how key stakeholders will be engaged throughout the delivery of the scheme, including details of proposed consultation events.*	The scheme's stakeholder Communications Strategy including Action Plan and Activity Report to support the communication and engagement process required for the delivery of the Darwen East Development Corridor work plan is included as a supporting document in Appendix I. The communications plan will broadly follow the timetable of the delivery of the scheme, with specific action plans developed at each stage (planning through to construction), enabling key audiences to be engaged with in a timely and effective manner. Key project milestones will be communicated more widely via the Council's website and the dedicated project portal: http://www.blackburn.gov.uk/Pages/Darwen-East-Development-Corridor.aspx
5.6 Programme / Project Reporting *Please describe the proposed reporting and approvals process. This must cover technical, financial, commercial and management elements.*	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. Interdisciplinary Review (IDR) meetings have been completed a preliminary, departure assessment and pre-tender stages. The IDR included a full cost, programme and risk review for the scheme to progress to the next stage. A schedule of future meeting dates as well as historic meeting minutes will be developed in line with the Project's Assurance Framework. Future meetings will include: - Project Team Meeting - Weekly

	- Project Board Meeting – Every 2 Works - Onsite Project Progress Meetings – Every 4 Weeks - NEC Risk Review Meetings – Every 4 Weeks (and as and when required under the contract)
5.7 Risk Management Strategy *Please describe the scope of the Risk Management Strategy for the proposed scheme. Include details of the key risks including organisational accountabilities.*	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, maintained and updated each month for individual schemes, once approved. The Project Board will have overall responsibility for governance and risk associated with the delivery of the scheme. The Project Executive will be responsible for managing and overseeing the Risk Management Strategy and, where appropriate, agreeing and undertaking actions to mitigate key risks. The Project Manager will 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, will include arrangements for decision making and approvals, and information on roles and responsibilities such that responsibilities with regard to risk will be well defined. Risk management activities and risk registers are already in place as part of ongoing Blackburn with Darwen Borough Council's 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 will be dependent upon the particular project phase. For example, engagement with statutory undertakers is already taking place to capture risks associated with potential disruption to their equipment at preliminary and detailed design stages. 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(s) 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. The latest scheme risk register is included as Appendix B.
5.8 Monitoring and Evaluation *Please summarise outline arrangements for monitoring and evaluating the performance of the proposed scheme.*	A requirement of the LEP Accountability Framework, and for reporting back to Government, is that each scheme will have a monitoring and evaluation plan produced prior to Full Approval being granted for a scheme. The success of the schemes will then be measured by the Growth Deal monitoring and evaluation indicators which have been selected for the scheme. The following metrics (as stated within the LEP's Monitoring and Evaluation Framework) will be assessed as part of the Monitoring and Evaluation of the DEDC scheme: • Expenditure (quarterly): scheme expenditure will be collected from the Council's CIVICA system, summarised and reported to the LEP

	quarterly. Expenditure will be split by the following categories: construction, professional fees • Funding breakdown (quarterly): identified through Council internal programme monitoring (LTP and capital projects) with split between the LEP and BwDBC contributions. Compared to SOBC split as shown in sections 3.2 and 3.3. • In-kind resources (quarterly): to be identified and reported to the LEP quarterly. • Housing unit starts (annual): measure reported to the Council's internal Growth Board, and then onto the LEP. • Housing units completed (annual): measure reported to the Council's internal Growth Board, and then onto the LEP. • Jobs connected to the intervention (annual): none connected with DEDC • Commercial floorspace constructed (annual): none connected with DEDC • Average daily traffic and by peak/non-peak periods (biannual) / Average AM and PM peak journey time on key routes (journey time measurement) – (biannual) / Day-to-day travel time variability (biannual): peak period traffic flows, manual classified count turning proportions at key highway intervention locations, TrafficMaster data along defined key routes within the DEDC study area. Statistics collated within M&E Plan updates and reported to LEP. • Accident rate (biannual) / Casualty rate (biannual): STATS19 collision data at highway intervention locations. Statistics collated within M&E Plan updates and reported to LEP. • Annual average daily and peak hour passenger boardings (biannual): none connected with DEDC • Pedestrian counts on new / existing routes: none connected with DEDC The results of the monitoring and evaluation exercise will be published on the LEP's website with development and air quality information being supplied by the relevant Council Departments. The Benefits Realisation, Monitoring and Evaluation Plan is included as a supporting document in Appendix L.
5.9 Project Management *Please summarise the overall approach for project management at this stage of the project.*	The project has been managed in line with the principles of PRINCE2, which has been used effectively on the Council's recent major transport projects. 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. To ensure consistency with the principles of PRINCE2, a defined organisation structure for the project management team has been agreed. In addition, the project has been divided into manageable and controllable stages. We have implemented our suite of project processes and delivery methodologies to support in the successful management and delivery of this project. We have adopted robust tools and systems to enable us to proactively manage the programme to deliver the project on time and on budget.

	We have developed a Project Execution Plan to ensure that all project team members and stakeholders are aware of the project structure, requirements and processes. It sets a clear route through the project and provides a benchmark upon which the programme will be measured against.

Management Case Summary

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

The Lancashire Local Enterprise Partnership (LEP) will adopt the corporate / programme management role.

Blackburn with Darwen Borough Council has established a Project Board and Project Working Groups to support the delivery of schemes seeking Growth Deal funding. The Board will take ownership of this particular package of schemes, and also report progress to the LEP. The Board will also have overall responsibility for governance and risk associated with the delivery of the scheme.

The Project Executive will be responsible for managing and overseeing the Risk Management Strategy and where appropriate agreeing and undertaking actions to mitigate key risks. The Project Manager will 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 key go/no-go date for the scheme will be the 20th November 2017 for the TfL board meeting and the 16th January 2018 for the LEP meeting when the scheme will seek full approval for funding for the Darwen East Development Corridor Growth Corridor.

As the accountable body for the LEP, LCC will provide the overall assurance role, in order to ensure that decisions and activities comply with legal requirements, the use of funds is accounted for and reported, that appropriate records of decisions and proceedings are published and that the assurance framework is being adhered to.

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, maintained and updated each month for individual schemes, once approved. A number of key risks (that could add significant cost or delay to the scheme) have already been identified as part of the appraisal process, along with possible mitigating measures.

Risk management activities and risk registers are already in place as part of ongoing Blackburn with Darwen Borough Council's scheme delivery work.

A Benefits Realisation, Monitoring and Development Plan has been developed to provide a framework for monitoring and evaluation, fulfilling the requirements of the LEP Accountability Framework and necessary for reporting to central government.

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

Lancashire
Enterprise Partnership

Appendix A – DEDC Feasibility Study

Appendix B – Risk Register

Appendix C – Stakeholder Letters of Support

Appendix D – Options Modelling Report

Appendix E – BCR Technical Note

Appendix F – Environmental Impact Assessment

Appendix G – Social and Distributional Impacts

Appendix H – Project Programme

Appendix I – Communications Strategy

Appendix J – Public Consultation Summary

Appendix K – Appraisal Specification Report

Appendix L – Monitoring and Evaluation Report

Appendix M – Governance Organogram

Appendix N – Cost Report

Appendix O – Gateway Review Minutes

Appendix P – Land Acquisition

Appendix Q – TAG Worksheets

Appendix R - Scheme Drawings