

<b>Scheme Name:</b>	Blackburn to Manchester Rail Scheme	Appendix A
<b>Scheme Description:</b>	The Blackburn to Manchester Rail Corridor Improvements Scheme will deliver a half-hourly service between Blackburn and Manchester throughout the day through the addition of 7 journeys between these stations each day Monday – Saturday. This increased service level will cater for the current demand and improve the economic relationship between East Lancashire and Greater Manchester. In order to deliver a robust half hourly service throughout the day an extension to the passing loop (double track) at Darwen is required. The project, as identified by Network Rail, is to extend the double track section known as the Darwen loop to run from approximately 19 miles 440 yards to approximately 21 miles 440 yards on the Bolton to Blackburn Line, with associated works at structures along that part of the route. In addition, the scheme includes enhancement works at selected stations on the line (including stations north of Blackburn).	

The purpose of this review is to examine the evidence base for the above scheme in order to identify any gaps. Additional work can then be undertaken on the scheme to ensure the business case for the scheme is comprehensive, which will limit the risk of future challenges.

The criteria used for the assessment is based upon the DfT document, 'The Transport Business Cases' (January 2013).

The review which has been undertaken is based upon:  
The Blackburn to Manchester Rail Scheme Outline Business Case (December 2014)

A RAG analysis has been undertaken to highlight areas where there appears to be insufficient evidence to demonstrate that the scheme has followed DfT best practice for the development of a major scheme. Recommendations have been included on work which could be undertaken to strengthen the business case for the scheme.

<b>KEY</b>	
<span style="color: green;">■</span>	= Sound evidence base
<span style="color: orange;">■</span>	= Some additional work required
<span style="color: red;">■</span>	= Information Missing

Business Case	Criteria	Evidence	RAG Analysis	Recommendations
STRATEGIC	Existing arrangements for the provision of services	<p><b>Include a description of the current situation</b> Detailed description of the route is included in the section 2.2 of the GRIP 3 Interim Option Selection Report, Bolton to Blackburn Capacity Improvements, Issue 01 dated 17<sup>th</sup> December 2012. GRIP report is attached as Appendix O of the December 2014 Outline Business Case. The information provided describes the layout between Bolton and Blackburn including speed profiles, gradients and signalling control.</p> <p><b>Can services be better utilised, or are more fundamental changes required?</b> The current service levels reflect the infrastructure constraints and timetable pathing opportunities between Manchester Victoria, Bolton and Blackburn. Any changes to the current timetable is likely to have a knock on effect to other services out with Bolton/Blackburn route. Any increase to services on the route is likely to increase levels of train delay as identified in a number of modelling investigations.</p> <p><b>What are the constraints?</b> Details of existing constraints on the Blackburn to Manchester line are set out in Chapter 3.8 of the Outline Business Case under the following 5 headings: a) Service Frequency - the potential to increase the service frequency is prevented by the existence of a predominantly single line track between Bolton and Blackburn. b) Train Capacity - as of December 2011, the Bolton corridor was understood to be the most crowded route in Greater Manchester, with 45% of 0800-0859 peak services exceeding total capacity. c) Service performance - The service between Blackburn and Manchester is one of Northern Rail's most popular; however it is also one of the worst performing. The single line sections of the track contribute to reactionary delays, while trains await access to the single line. In addition, the poor quality rolling stock of the line also contributes to daily delays and disruption and it struggles with accelerating on hilly inclines giving slow journey times. There are also speed restrictions on the approaches to the automatic open crossing on the single line section between Bromley Cross and Entwistle. d) Station facilities - Many of the stations along the line are of poor quality and create a negative image of rail in the borough. e) Rail Growth - Rail growth across the North West is expected over the coming years to support economic growth and prosperity in line with The Long Term Rail Strategy for the North of England (2014). However, a growth in rail passenger numbers in East Lancashire is constrained by the insufficient service to Manchester.</p>		
	Problem Identification	<p><b>How have the problems been identified?</b> <b>Provide quantification of the extent of the problems</b> Various investigations and modelling studies have been undertaken which have followed three distinct stages. In stage 1 Sinclair Knight Merz were commissioned in 1999 to carry out a pre-feasibility study for the development of a rapid transport system. The study conclusions also recognised the benefits in heavy rail improvements. During phase 2 Posford Rail Ltd conducted a feasibility study in 2002 with a focus on introducing an all day half hourly service. It was concluded a half hourly service could be introduced but it would not be reliable and a number of infrastructure recommendations were made. In 2003 VST York Ltd were commissioned to undertake a timetable study specifically focused on service enhancements. The findings concluded technically a half-hourly service could operate but the single line sections would compromise reliability. Progressive analysis was carried out by Edin Business Analysis in 2004, Faber Maunsell in 2007 and Arup in 2009. Arup concluded: a half hourly service, based on the 2008 timetabling rules, could operate but not reliably. A solution was identified which was to extend the length of Darwen loop by approximately 1 mile in each direction to reduce reactionary delays (it was recognised this may introduce a performance risk caused by the timetabling margins when leaving and entering the single line sections), and convert Turton ACOL to a Manually Controlled Barrier - Closed Circuit Television to improve the line speed and rolling stock would need to increase from three to five units. In 2010 Darwen and District Borough Council initiated phase 3 by commissioning Network Rail to develop a half hourly inter peak service from GRIP 1 to 3.</p> <p>The main problems are identified within the main OBC document (Chapter 3.8), under the following sub-headings: (a) Service Frequency, (b) Train Capacity, (c) Service Performance, (d) Station Facilities, (e) Rail Growth. The issues are then categorised as either social or economic issues. The problems and issues have been quantified to some extent, for example, issues regarding train capacity (45% of AM peak services exceed total capacity).</p> <p>Further details of the problems are included within Chapter 2 of the 'Business Case Report (Mott MacDonald, November 2014).</p>		
	The need for investment	<p><b>Why is the scheme needed now?</b> It is reported that single line sections of track are acting as a capacity constraint on the future development of the service and the economic prosperity of Pennine Lancashire. Chapter 3.4.2 of the Outline Business Case indicates that across the north, rail use is growing much more strongly than other transport modes. Between 2003/04 and 2012/13, station footfall in Blackburn alone rose by around 57%. The need for the scheme has also been supported by local MPs, who identified that the increase in train passenger numbers, despite the less than satisfactory service, highlights that even with minor improvements, there would be benefits to the economy.</p> <p>The conclusion of Chapter 3 outlines the rationale for investment, in that investing in the scheme would address key issues for Blackburn with Darwen, linking to the major employment centre of Manchester and helping to reduce the reliance on the private car, whilst also supporting the wider Lancashire Enterprise Partnership area in terms of growth and regeneration benefits.</p> <p>A benefit of delivering the scheme now is that it has been identified already that the construction phase could be accommodated in an already agreed possession therefore reducing disruption to passengers and cost.</p>		
	Impact of scheme not being delivered	<p><b>Impact on transport network, economy, future development, other schemes etc.</b> The Wider Benefits Report (Mott MacDonald, November 2012) outlines the positive impact that the scheme could have on the economy, the movement of labour and the housing market. A refreshed business case was developed in November 2014 taking account of changes to WebTAG guidance in 2014.</p> <p>Figure 3.10 of the OBC document indicates the operational, social, economic and environmental benefits of implementing the scheme. Were the scheme not implemented, it is considered that the problems that the scheme seeks to rectify would remain.</p>		Whilst the scheme benefits have been indicated within Chapter 3 of the OBC, no text is provided detailing the impacts of not implementing the scheme (e.g. traffic congestion worsens / rail facilities deteriorate).
	Study Area / affected population	<p><b>Include a plan showing the scheme location.</b> Figure 3.2 contains a plan showing the geographical location of the scheme. A Scheme Drawing is contained within Appendix A.</p> <p><b>Provide a description / plan of targeted population.</b> The characteristics of the population of the local communities of each station on the line are outlined within Chapter 3.7.2. However, no info provided on the catchment area of each station.</p>		Business Case needs to emphasise what schemes, jobs, major employers, schools and leisure facilities are within the catchments of the actual scheme proposals; particularly linked to key sites that unlock growth linked to the LEP's key priority growth sectors.
	Scheme Objectives	<p><b>What are the aims of the proposed scheme, and how do they address all the problems identified?</b> Formalised study objectives have been provided in Chapter 3.11. The scheme objectives have been derived following the development of the three Local Transport Plans dating back to 2001 and the development of the Community Rail Partnership Action Plan for the Clitheroe line dating back to 2006/07. Table 3.3 indicates the strategic fit between the objectives and identified problems.</p>		
	Strategic Fit (e.g. DfT's business plan and wider government objectives)	<p><b>How does the scheme contribute to key objectives, including wider transport and government objectives?</b> Table 3.3 indicates the strategic fit between the scheme objectives and local / regional policies. Chapter 3.13 provides further detail on the strategic fit between the scheme and different National, Regional and Local policies.</p>		
	Option Identification	<p><b>How were potential options identified? Evidence that alternative options (covering a range of different modes) were considered.</b> Chapter 2.1 of the OBC provides details on how the potential options were identified. The development of options was broken down into three stages. Stage 1 included a review of multi-modal options and three options were hence considered: 1) Delivery of a rapid transport system, 2) Improvements to bus services and highways, and 3) Improvements to the rail service.</p> <p>During Stage 2 of the process, a focus was placed on options to improve the rail connection between Pennine Lancashire and Manchester, e.g. increasing the length of double track sections between Bolton and Blackburn and improving line speeds.</p> <p>During stage 3 of the process, options to extend the double track sections of the Blackburn to Bolton rail line were considered, identifying four suitable locations.</p>		
	Early Assessment and Sifting	<p><b>Methodology for sifting options</b> The ARUP timetable study provided the background for GRIP 1 and 2. An appraisal study was undertaken by Mott MacDonald on behalf of Network Rail which considered a range of infrastructure interventions. The process to identify the preferred solution from a number of options was Network Rail's GRIP process.</p>		
	Identification of short listed options	<p><b>How were the potential options shortlisted?</b> At GRIP stage 2 nine options were identified which had been derived from the stage 1 and 2 feasibility work that Blackburn with Darwen Council had previously commissioned. A tenth was added after discussions at the Pennine Lancashire Rail Projects Board. At GRIP 3 five options were selected for further appraisal based on their contribution to improving the level of reactionary delays. The performance data used was from an unidentified 14 week period in 2011. It has not been possible therefore to confirm if the data was fully representative of the annual level of delay.</p> <p><b>What were the other shortlisted options?</b> At GRIP 3 the other shortlisted options were: 1. Extend Darwen loop approximately 1 mile in each direction and increase the line speed to 60 mph. 2. Raise the line speed over Turton level crossing to 60 mph. 3. Raise the present Darwen loop speed to 60 mph. 4. Raise the line speed to 60 mph between 23m 0c and 24m 08c (single line section north of Darwen to Blackburn Bolton Junction).</p>		It is recommended the performance data used in the GRIP analysis is confirmed by Network Rail that it characterises the annualised level of delay.
	Consideration given to the economic, environmental and social benefits of the possible approaches	<p><b>What are the high-level strategic and operational benefits envisaged? How do they link to the objectives of the scheme?</b> A full economic appraisal has been undertaken, as indicated in Chapter 4. Information on and quantification of the operational benefits are stated in the OBC, within Chapter 4.4.4. The Wider Economic Benefits for Clitheroe Line Improvement Study (November 2014) quantifies the wider benefits to the economy (e.g. agglomeration and labour supply) using WITA software.</p> <p>The Clitheroe-Manchester Rail - Wider benefits Report (Mott MacDonald, November 2012) quantifies the likely social benefits (e.g. on housing, employment, developments).</p> <p>Figure 3.10 of the OBC summarises the Operational, Social, Economic and Environmental Benefits associated with the scheme although it is not clear how some of these benefits have been derived and whether or not there is any supporting evidence.</p>		Provide clarification on how the Social, Economic and Environmental Benefits quoted in Figure 3.10 have been derived.
	Consultation / stakeholder engagement	<p><b>Provide details of any consultation events or stakeholder engagement that has taken place / is planned?</b> <b>Who was consulted?</b> <b>Include consultation results where available.</b></p> <p>Figure 3.11 in the OBC summarises the groups that were consulted as part of the scheme development. The groups included Local MPs, Local Transport Plan stakeholders, Rail Industry stakeholders and the Public. Consultation with Local MPs, Jack Straw MP (Blackburn) and Jake Berry MP (Rossendale &amp; Darwen) revealed their support and backing for the scheme. Chapter 13 of the OBC also indicates that since the commissioning of the Posford Study in 2002 the scheme has ensured full rail industry consultation from infrastructure management organisations and the DfT to regional transport bodies and train operating companies, for example, SRA, Network Rail, Rail Track, First North Western, Northern Rail and the NWRA.</p> <p>In terms of public consultation, Chapter 3.13.1 (c, iii) of the OBC indicates that during the past 14 years, various public workshops, seminars, drop-in information sessions have taken place and Action Plans have been developed to ensure meaningful public engagement to help develop the scheme alongside wider transport priorities for the borough.</p> <p>Additionally Chapter 3.13.1 states that consultation with the general public and stakeholders will continue with information shared through Community Rail Lancashire and the Councils website. Prior to the commencement of works at Darwen, a public consultation will be arranged to ensure all local interested parties are fully aware of the timescales and affect this will have on the rail line in the interim (bus replacement) and long term (enhanced connectivity).</p>		Include further details on the public consultation event which will be scheduled.
Preferred Option	<p><b>How was the preferred option identified? Reasons why it was the preferred option.</b> Selection of the preferred option was in two phases at GRIP stage 3. The first phase identified the performance impact of the options by undertaking RailSys timetable modelling. As highlighted previously the data used cannot be confirmed as representative of the annual level of delays. The second phase was to review the most cost effective interventions from the first phase. The recommended solution, based upon cost, operating requirements and client approval, is to extend Darwen loop by 1,420 yards at its Southern end and 1,200 yards at its Northern end. The GRIP 3 AFC was estimated at £13,815,909. In April 2014 Blackburn with Darwen Councils Executive Board approved contractual arrangements with Network Rail on an emerging price basis of £13,354,466 (including Residual Factors, Risk and Contingency) to develop the proposal from GRIP 4 to GRIP 8. In 2012 Mott MacDonald were appointed to refresh the business case which has resulted in the December 2014 Outline Business Case.</p>			
Traffic Modelling work undertaken	<p><b>Details of any traffic modelling work which has been undertaken.</b> RailSys timetable modelling was undertaken at GRIP stage 2. Performance was benchmarked using historical data. Each infrastructure intervention was modelled and compared with the baseline to measure the respective performance benefits.</p> <p><b>Results of modelling work</b> As a result of the scheme over 335,000 vehicle kilometres annually are forecast to be removed from the highway network, rising to 424,000 in 2032 and onwards. This results in benefits being provided in a number of other areas of the appraisal, particularly around road decongestion and safety, together with associated carbon benefits; each of which are key objectives of local and national policy.</p> <p><b>Has the need for any further traffic modelling work been identified?</b> Since the GRIP 2 modelling results performance of the route has deteriorated significantly. This is likely to mean the Darwen loop performance benefits have changed over time. To accurately monitor the scheme benefits it should be compared with analysis that is reflective of current performance. To achieve this will require fresh modelling using updated performance data.</p>		It is recommended consideration is given to modelling with refreshed performance data. Journey time reliability benefits associated with the scheme have not been monetised, but could be to enhance the case.	
Level of public support considered?	<p><b>What are the attitudes of key groups (e.g. the general public, residents, businesses and wider stakeholders) to the proposed scheme?</b> Information on public consultation is provided above within the Consultation / Stakeholder Engagement section. This ultimately summarises that prior to the commencement of works at Darwen, a public consultation will be arranged to ensure all local interested parties are fully aware of the timescales and affect this will have on the rail line in the interim (bus replacement) and long term (enhanced connectivity).</p>		Obtain letters of support from local MPs and other key stakeholders to append to Business Case.	
Key risks and constraints identified?	<p><b>What are the main risks associated with delivering the scheme?</b> No evidence of a project Risk Register exists, however the following key risks have been identified: Northern Rails objection to the engineering blockade may result in a delay in the construction phase delaying the project and increasing the cost. It is understood NR have recently responded to Northern Rails concerns and await confirmation of the objection will be withdrawn. Timetable development has only been robustly applied between Blackburn and Bolton. Additional paths existed to extend the service to Manchester Victoria but are currently regular. Paths have therefore been assumed between Manchester Victoria and Bolton based on the recasting of the December 2016. Timetable mitigation is strategic approach and will be taken by the cross industry Steering Group and the recasting of the December 2016 timetable.</p> <p><b>Include a Risk Register containing appropriate mitigation measures.</b> A Quantitative Cost Risk Analysis (QORA) workshop was held on 28th January 2014. The risk register for the project was expanded and updated in a brainstormed session. Evaluation was conducted using Monte Carlo analysis in which 10,000 simulations were conducted using @Risk software. However a project risk register has not been included as part of the OBC documentation.</p>		Produce a project Risk Register complete with mitigation measures for inclusion within the Outline Business Case.	
Connectivity with other schemes assessed?	<p><b>How does the scheme impact on other planned schemes?</b> The OBC document (Chapter 3.13.1, (e)) indicates that the delivery of an extension to Darwen Loop is phased to coincide with the development of the Farnmouth Tunnel electrification works as part of the wider North West electrification programme. By delivering the infrastructure works during an existing blockade for the line, pre- and build costs become more efficient, track unit rate efficiencies are realised and a reduction in Network Rail management costs is achieved by aligning with contractor to avoid man marking.</p> <p><b>What is the overall level of impact in combination with other connected schemes?</b> The scheme is designed to provide an uplift in the public transport offer for the region and is therefore complimentary to investment in other local rail and bus schemes including Pennine Reach which has been awarded funding. Section 4.3.2 of the OBC discusses the relevant rail schemes which have been incorporated within the economic appraisal of the Blackburn- Manchester Rail Scheme.</p>		Quantified evidence of the impact on other planned schemes (e.g. Farnmouth Tunnel electrification) should be included.	

	Outline approach to assessing value for money.	Evidence of any VIM assessment which has already been undertaken. Full details of the economic appraisal process is contained in a dedicated report 'Clitheroe Line Improvement Study – Business Case Report' produced in November 2014 by Mott MacDonald.		
	Consideration of economic, environmental, social and distributional impacts.	Qualitative / Quantitative assessment of the likely impact of the scheme Section 4.6 of the OBC summarises the Environmental and Social Impacts of the scheme. A preliminary environmental impact appraisal has been undertaken which provides an initial overview of the potential environmental effects (both beneficial and adverse) associated with the scheme. The full preliminary environmental appraisal is included in Appendix E of the OBC.  This Social Impact appraisal has addressed the eight social impact areas outlined in TAG Unit 4.1. The report has followed a qualitative approach, assigning an assessment score on a seven point scale of beneficial, neutral and adverse for each impact area. The appraisal has found that the scheme will deliver broadly beneficial impacts.  The Distributional Impact appraisal has addressed eight DI areas outlined in TAG Unit 4.2. The report has followed a quantitative and qualitative approach, assigning an assessment score on a seven point scale of beneficial, neutral and adverse for each impact area. Overall, the appraisal has found that the scheme will deliver moderate beneficial impacts for accessibility and user benefit categories.  Wider benefits Report (Mott MacDonald, November 2012) quantifies the likely social benefits (e.g. on housing, employment, developments).		
ECONOMIC	Appraisal Summary Table	Has an AST been produced? AST included in Appendix F.		Distributional Impacts column needs updating to include results of the scheme's DI assessment (e.g. The 'Commuting and Other Users' row should contain the User Benefits assessment score).  The 'Cost to Broad Transport Budget' row should be entered as a negative figure.  AST should fit on one page.
	BCR	Details of any economic appraisal work which has already been undertaken. Provide an indication of the likely VIM (using relevant schemes to benchmark where appropriate) where VIM assessment not been completed yet. The economic appraisal of the scheme incorporates a 'core economic appraisal' of expected scheme impacts across a range of measures, using best available estimates of the quantified impact of the scheme on each measure (in practice, all being related to the estimated demand impact), and a 'wider impacts' assessment (using DfT's 'WITA' methodology) to determine the further impact of the demand changes on economic output measures, reflecting mainly the benefits to the regional economy of the closer integration of labour with workplaces brought about by enhanced transport links.  The scheme Benefit to Cost Ratio (BCR) is reported as being 2.55, however this figure includes the wider economic benefits (calculated using WITA). The BCR without the wider economic benefits included is 1.67. This is the figure which should be reported.  Details of the inclusion of Optimism Bias Adjustments are included in sections 4.4.3 of the OBC. Optimism Bias has currently been included at 6% on the track infrastructure costs. However the scheme is currently at GRIP 3 and therefore is not yet at 'Stage 3'. Therefore OB should be included at 40%. In addition, some bridge work is detailed within the cost definition, but it is unclear what optimism bias level has been applied to this cost element as Bridges are key risk items.		BCR should be presented consistently with and without economic benefits throughout the Outline Business Case.  Optimism Bias figure should be adjusted accordingly for a scheme at WebTAG Level 4 (18%), and then at webTAG Level 5 (6%) for the Full Business Case submission.
FINANCIAL	Scheme Cost	Please provide as much detail as possible, including scheme development costs, itemised construction costs, running costs, maintenance costs and range cost estimates. The financial case of the OBC states that the capital cost of the scheme is £13.679 million with additional revenue costs to December 2019 of £1.489 million.  Infrastructure Capital scheme costs are provided in Network Rail's document '117353 Blackburn to Manchester Capacity Enhancement' of 6 February 2014. This sets out an Emerging Cost estimate to the sponsor, Blackburn with Darwen Borough Council, for delivery of the scheme. The cost covers all remaining elements of delivery of the scheme, i.e. GRIP stages 4 to 8 inclusive, and includes Construction costs, Delivery costs, allowance for risk and sponsor contributions to Network Rail / Industry fee funds. This document has not been provided as part of the OBC and therefore no review has been undertaken on the accuracy of the scheme costs.  How were the scheme costs calculated? The OBC states that GRIP stages 1 – 3, provided scheme option costing sufficient to allow Option Selection (and subsequently, in GRIP stage 3 AIP, costing sufficient to allow Fixed or Emerging Cost prices to be committed to the sponsor for delivery).  Details of the assessment of Risk Adjustments and Optimism Bias Adjustments are included in sections 5.5 and 5.6 respectively. Optimism Bias has not been included in the scheme costs. However, the level of optimism bias should be updated in the Economic Case.  The operating and mobilisation costs have been calculated on a per vehicle mileage or train basis as appropriate. The estimate includes variable track access based on vehicle type and per mileage; capacity charge calculated on train mileage basis based on service group; additional station access charges, increased diesel fuel and maintenance costs based on vehicle mileage; train crew costs to operate the service along with mobilisation costs for service introduction. Northern Rails submission has been reduced by Mott MacDonald, by pro rating the train mileage, on the assumption the service is an extension of the already planned and priced Manchester Victoria to Bolton service. Train crew resources have been based on train mileage which is not the normal approach when calculating this resource. It is normally calculated by a depot, or in some cases a link, turn average multiplied by a spare ratio. It has also been assumed recruitment costs for the additional train crew will commence from mid 2016. Normally it takes one year to train a driver therefore the recruitment strategy needs to be better understood. Northern Rail mobilisation costs have been estimated at £220,457 in year 2016/17 with annual running costs at £153,611 in year 2016/17, £555,630 in 2017/18, £560,193 in year 2018/19 and £565,440 in year 2019/20. Although the OBC does not identify how the service will be funded beyond 2019/20 it is understood confirmation has been received from DfT and Rail North the service will be funded as part of the future franchise baseline specification, for the next Northern Franchise.		It is recommended service mobilisation and train crew numbers and availability is monitored. This is to ensure the resource levels are reflective of the additional service level and sufficient for service introduction.  Operating costs for the OBC were pro-rated between Blackburn and Bolton, however it is now understood the service will be fully funded between Manchester and Blackburn as part of the baseline for the next franchise.
	Funding Arrangements	Detail the funding sources and values which have been outlined. Outline any potential risks to securing funding. Preferred funding arrangements are included within section 5.8 of the OBC. Scheme will be joint funded by BwDBC and LGF contribution as illustrated below:  Competitive LGF £3.400m LGF £9.000m Local capital contribution £1.179m Local capital contribution LCC £0.100m Local revenue contribution BwDBC £1.489m Total: £15.169m  A signed letter from the Section 151 Officer for BwDBC is included in Appendix I.		
	Key Risks	Please provide a risk register including mitigation measures. Has any sensitivity analysis been undertaken? What are the results? The infrastructure capital scheme cost is inclusive of uplift for the findings from a Quantitative Cost Risk Analysis (QCRA) workshop held on 28th January 2014. Evaluation was conducted using Monte Carlo analysis in which 10,000 simulations were conducted using @Risk software. The mean level of risk exposure was identified at £913,000, with the 80% confidence level assessed at £1.14m (the latter figure being included within the emerging cost schedule).		
COMMERCIAL	Is there a robust contracting and procurement strategy?	Outline the intended procurement strategy. How was the proposed procurement approach developed? The project is intended to be delivered through Network Rail's Control Period 5 panel framework. The contractor to be used is VolkerRail with civil engineering works delivered by Buckingham Group contracting.  Have Local Authority contributions been secured? A signed letter from the Section 151 Officer for BwDBC is included in Appendix I.  Have preparation costs been budgeted for? Section 6.2 of the OBC states that Development services will be managed on an emerging cost basis with a default cap of 10% (which is subject to prior agreement between parties) of the project value. It is assumed that the scheme preparation costs will be met by BwDBC (given that LGF money cannot be used for this purpose), however this is not clearly stated in the Commercial Case of the OBC.  Have any third party funding arrangements been secured? Preferred funding arrangements are included within section 5.8 of the OBC. Scheme will be joint funded by BwDBC and LGF contribution.  Include details of any other potential funding risks. Project risk will be allocated and managed in accordance with the Network Rail Procurement and Supply Chain Strategy which is contained within Appendix K of the OBC.		Confirm who will be responsible for the scheme preparation costs and update financial and commercial case accordingly.  Have the scheme preparation costs been included within the scheme costs? Have monitoring and evaluation costs been included within the scheme costs?
	Key risks and constraints identified?	What are the main risks associated with delivering and implementing the scheme? Include a Risk Register containing appropriate mitigation measures. A Quantitative Cost Risk Analysis (QCRA) workshop was held in Square One, Manchester on 28th January 2014 with the objective of reviewing the risk exposure and proposing a contingency figure for the Bolton to Blackburn project. However, no project risk register has been included in the Outliner Business Case		Append scheme Risk Register (covering project risks) to Business Case.  If one doesn't already exist then a risk workshop should be programmed in the short term to ensure that the delivery team map the key risks of the project moving through the major scheme project lifecycle, attribute owners, actions and a monitoring plan for reporting these to the Project Board as part of the scheme Governance.
	Delivery Programme	Please include indicative timescales for Scheme Development / Design / Procurement / Construction A detailed scheme delivery programme has been developed in conjunction with Network Rail and is included within Appendix J. The key dates are:  GRIP 4: Single option development which was scheduled to commence on 19th September 2014 and be completed by 9th April 2015; GRIP 5: Detailed design which was scheduled to commence on 19th September 2014 and be completed by 24th June 2015; GRIP 6: Construction, Test and Commission. Pre blockade construction to commence on 19th September 2014 and be completed on 16th July 2015. Blockade construction works are scheduled to commence on 16th July 2015 until blockade hand back planned for 14th August 2015. GRIP 7 and 8: Scheme hand back and project close out to be completed between 14th August and 15th October.  The new service is scheduled to be introduced at the December 2016 timetable change which includes a recast of the industry timetable based on the North of England infrastructure improvements.  The December 2014 Outline Business case describes the final commission in November 2015 not October 2015 as per the delivery plan. This, it is explained in the Outline Business Case, is, caused by a signalling risk changing the delivery programme. Discussions with Network Rail confirmed the November reference is only for billing arrangements and for any outstanding paperwork remaining to be completed. It has been advised the Scheme Signalling Plan has continued to be developed as GRIP 4 is closed out. NR have advised the plan is relatively risk free and will be submitted to the approving body (MSRP) on Tuesday 27th January.		Reason why the scheme construction is completed by October 2015 yet the timetable changes don't take place until December 2016 is confirmed, but risk to delivery potentially slipping to 2017. TL require to be notified of any potential change in draw-down of funds and their profile.  Business Case acknowledged that the scheme delivery programme will require further work now that Network Rail have addressed the signalling record risk issue that was identified in October 2014. NR have confirmed they are seeking approval from MSRP on 27th January 2015.  It is recommended the current scheme delivery plan and Northern Rails objection to the possession arrangements is presented to the January 2015 Project Board. This is to ensure any risks to the current arrangements are transparent and managed.
MANAGEMENT	Governance / Assurance work	Who is in charge? What is the allocation of roles and responsibilities? Is there a Project Board? What control measures will be put in place to ensure the scheme development process is managed suitably? Has a SGAR been undertaken / scheduled? The Blackburn to Manchester Rail Scheme has a governance and assurance structure consisting of a Project Board, a Project Delivery Team and a Client and Stakeholder Management sub-group. The Project Board is responsible for: sanctioning and approving any material change to the scope of the project, approving any change request which could result in an increase in cost or the extension of the programme, manage all press and public relations matters, submission of all reports to LEP and TL and the submission of all payment requests from LEP. The Project Delivery Team are accountable for the periodic reports and the provision of suitable personnel to the Project Board as and when required. The client and stakeholder management sub-group will directly manage all internal and external communications.  Governance arrangements - Section 7.2 of the Business Case sets out the personnel to be included in both the project board and project delivery team and describes the frequency of meetings (project board = every 4 weeks) and project delivery team = every 4 weeks). Representatives from appropriate organisations have been included (e.g. Network Rail, Northern, LCC, TGM, BwDBC).  Assurance - A full assurance plan has been produced (see Appendix M) which sets out the project parties associated with each element of the scheme including the communication strategy, meeting and reporting procedures and change management procedure. Dashboard reports on key issues to be presented to project board. Quarterly Monitoring Reports (QMR) will be provided to the LEP to cover progress and finances. There is no evidence how the governance arrangements will link with the Farnmouth electrification project which the Darwen loop extension is sharing possession arrangements with. The same Project Manager is responsible for both schemes which should ensure both projects are managed in an integrated way. NR have advised the Darwen loop and Farnmouth tunnel works have been planned independently to reduce this type of risk.		It is recommended the governance arrangements between the two projects, Darwen loop and Farnmouth tunnel, are formalised. This is to ensure no risks develop which may affect the other project and if they do suitable mitigations are put in place.
	Evidence of similar projects that have been successful.	Provide details of similar projects and their success/failure. Table 5.5 in the Business Case Report (Appendix N) provides passenger growth indications following service frequency increases on other lines in the UK.		Were these scheme delivered on programme and within budget? What other metrics have been used to monitor and evaluate the success of these schemes?
	Who is the client / sponsor?	Include details of the client / sponsor of the scheme. The assurance plan contained within Appendix M states that the partnership between BwDBC and Network Rail forms the Client and Project Board. The scheme will be funded via the Local Growth Fund (LGF) and BwDBC.		
	Fall back Plans	Do alternative schemes exist? Although a number of options were identified at GRIP stages 2 and 3, the Darwen loop extension was considered the only viable solution in terms of cost and/or performance benefits.  Is there a lower cost alternative? Alternative options were considered as part of the GRIPPOS report. However, the Outline Business Case does not present any info on alternative options other than to say that 'the only alternative for the purposes of the economic appraisal is the 'DoNothing' option'. Would expect to see Next Best / Low Cost options included within the business case. Has any economic assessment been undertaken on the alternative options?		DfT requires a 'fully worked up' low cost alternative option to be identified (TAG Unit A5.3 Rail Appraisal). A low cost alternative option should therefore be identified and included in the business case, in a proportionate manner.
	Arrangements for monitoring and evaluating the intervention.	What will constitute success for the project, and how will it be measured? Appendix P contains the Monitoring and Evaluation plan report for the Blackburn to Manchester Rail Scheme. The plan details the metrics to be collected and the timing of the data collection. The sponsor has chosen to monitor the following metrics in addition to the Core metrics: • Day to day travel time variability • Average annual CO2 emissions • Annual average daily and peak hour passenger boardings • Mode share  The Business Case states that BwDBC is aware that the costs of Monitoring and Evaluation cannot be included within the scheme costs and that an estimation of £10 - £15k to cover the costs each year will be allocated from LTP3.		