



East West Rail GRIP 4 Outline Business Case

Final Report – Non Technical Summary

July 2010



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Introduction

It has been a long held ambition of the local authorities along the former Oxford to Cambridge rail route to see this line re-opened for passenger traffic. The scheme to promote the reopening of this route is known as East-West Rail (EWR). It is recognised that, for practical reasons, the complete reopening of the line will have to be completed in a number of stages.

This business case report considers the western section of the EWR route linking Oxford, Milton Keynes, Aylesbury and Bedford. Future reports will consider the central and eastern sections of the route.

The western section of the EWR route is considered the most straightforward section to deliver as the entire track bed is still in place and parts of the route are still in use. However, most of the sections that are still in use have been reduced to single line working and low operating speeds.

Delivery of the western section of EWR will enable new train services between Oxford, Aylesbury, Bletchley, Milton Keynes and Bedford.

The western section of the EWR project will provide enhanced transport links between a number of areas where significant growth has been planned as part of the South East Plan and the East of England Plan.

With the abolition of Regional Spatial Strategies the level of planned and/or assumed growth is an issue that will need careful consideration during the forthcoming period leading up to a “programme entry” business case submission later in 2010.

Purpose of the Outline Business Case (OBC)

The purpose of the Outline Business Case (OBC) is to provide a robust and comprehensive assessment of the western section of EWR commensurate with the development of the scheme to GRIP4.

The approach to developing this business case has been to critically analyse and assess the scheme to ensure that we understand:

- The capital cost of the scheme, the risks associated with it and the dependencies that it may have on external factors;
- The operation of the EWR passenger services, what stations will be served, at what frequency and what rolling stock would be required;
- The benefits and impacts that will be generated by the scheme in terms of providing a return on the capital investment, the revenue generated by passenger services, the benefits to transport users and the level of support to the regional economies.

This assessment demonstrates to the project board, key stakeholders and funding partners the viability, affordability and deliverability of the project and provides a basis for decision on progression to the next stage of project development.

Project Context, Challenges and Objectives

The Growth Agenda and associated challenges

Significant growth is planned as part of the South East Plan and the East of England Plan. Locations where significant growth in both housing and employment numbers include Oxford, Didcot, Bicester, Aylesbury Vale, Milton Keynes and Bedford-Marston Vale.

In total approximately 100,000 additional homes and 100,000 additional jobs are planned to be delivered along the EWR corridor over the next 20 years. This represents a significant proportion of the planned growth in the South East and East of England Regions. It is recognised that with the new Government’s abolition of Regional Spatial Strategies, this view on planned growth may change.

Nevertheless, substantial growth would still be anticipated and delivering growth on any significant scale in a sustainable manner is going to be difficult without providing the supporting infrastructure to enable the planned development of housing and employment to be realised. A number of studies have been undertaken examining the challenges and developing transport proposals for the area in question. The need for rail intervention has been identified as a priority with existing rail infrastructure offering significant potential for improving accessibility and connectivity.

Challenges, Objectives and meeting Government Goals

A number of key challenges emerge that drive the need for a rail intervention for the area, and from which a number of specific objectives for any such intervention to meet, emerge. These objectives directly relate to mitigating forecast challenges and unlocking opportunities. Figure NTS.1 presents the challenges identified and the resulting objectives for an EWR scheme.

Figure NTS.1 – Challenges and Objectives

Challenges	Objectives
Transport infrastructure capacity inadequate to support planned growth	Enhance the capacity of the rail network to support planned growth
Significant worsening in network efficiency and resilience of highway network for car and PT (bus and coach)	Contribute to improving highway network efficiency and resilience through mode shift from highway to rail
PT infrastructure and services poorly configured to providing good access / links across E-W orbital growth arc	Improve access and links by rail within, to and from the E-W orbital growth arc
Lack of viable PT alternatives result in ongoing dominance of car as mode of choice with adverse climate, environmental and safety impacts	Affect mode shift from highway to rail to reduce emissions and improve the environment, quality of life and safety
Use of central London as key interchange location on the rail network contributing to crowding and congestion on trains, stations and LU network	Provide a better alternative for rail users to London for connecting between mainline radial rail routes
Limited utilisation and value to the rail industry being secured from the local rail infrastructure and assets in the study area	Improve utilisation and value to the rail industry derived from rail infrastructure, assets and services in the area
	Enhance the opportunity for, and efficiency and reliability of delivering freight by rail

It is important that these objectives are consistent with the Government’s overall goals for transport as expressed in Delivering a Sustainable Transport System (DaSTS). The key DaSTS goals that any rail intervention in this case will aim to contribute to are:

- Supporting economic growth in what is a designated national priority corridor for growth through enhancing the efficiency and utilisation of public transport infrastructure and services;
- Tackling climate change by minimising the potential adverse impacts of that growth by providing a more sustainable means of meeting associated travel demands; and

- Promoting equality of opportunity through improving inter and intra-regional public transport connectivity between areas of population and existing and planned foci for employment and services.

In addition, any rail intervention should also positively contribute to:

- Better safety, security and health by reducing the forecast adverse impact of highway traffic in these areas through a mode shift to rail; and
- Improve quality of life and promote a healthy natural environment by reducing the forecast adverse impact of highway traffic in these areas through a mode shift to rail.

Scheme Development and Descriptions

The GRIP 4 study

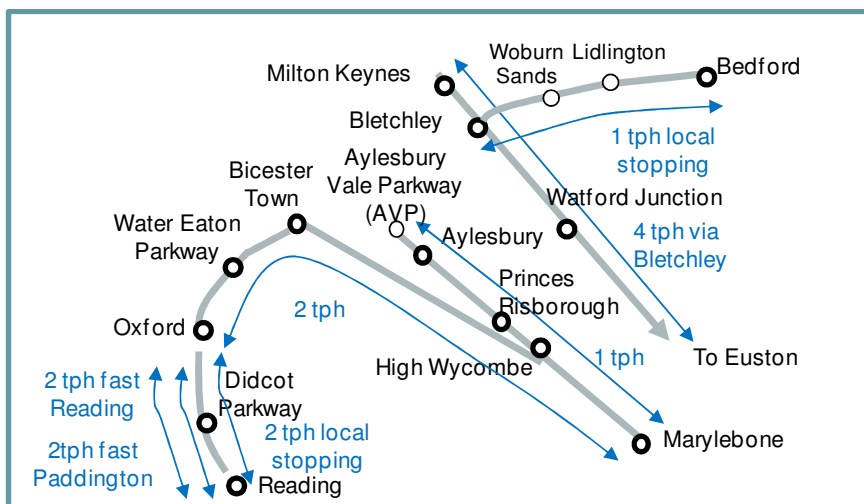
The Guide to Railway Investment Projects (GRIP) is Network Rail’s guide to the staged development of such schemes. It identifies a number of stages reflecting achievement of a level of design and cost / risk estimation to support investment decisions. EWR had previously completed GRIP 3 level of development in 2008, identifying a selection of options. The DfT and Network Rail issued a brief for a GRIP 4 level study to develop a single option. The brief reflected a desire that the western section of EWR, together with its associated infrastructure, be developed in such a way as to not constrain its potential utilisation and value in the medium to long term as part of the wider national passenger and freight network, while also delivering local/regional rail services in the shorter term, and integrating with Chiltern Evergreen proposals. Atkins was commissioned to undertake this study in November 2008 with the intention of completing a GRIP 4 EWR design and business case.

The GRIP 4 study established a feasible design to support EWR services and potential wider use of the railway for national passenger and freight services. This study has provided a robust basis for estimating scheme costs and for specifying service operational performance – all key inputs to the process of appraisal for EWR.

The future “without EWR” scenario – the “Do Minimum”

The Do Minimum (DM) describes the future situation that would exist in the absence of the western section of the EWR scheme and is the scenario against which the future introduction of an EWR scheme is appraised. This is shown graphically in Figure NTS.2 below.

Figure NTS.2 – Do Minimum Services



The following are a selection of the key train services in the EWR corridor that are assumed to be operating in the Do Minimum:

- 2 trains per hour Chiltern Railways Evergreen 3 Oxford - London Marylebone
- 1 train per hour Chiltern Railways Aylesbury Vale Parkway - London Marylebone
- 4 trains per hour London Midland Milton Keynes - London Euston
- 1 train per hour London Midland Bletchley - Bedford all stops
- 2 trains per hour Great Western Oxford - Reading local stopping
- 2 trains per hour Great Western Oxford - Reading fast
- 2 trains per hour Great Western Oxford – London Paddington fast

The Do Minimum also assumes that the following major projects and rail enhancement schemes are in place:

- London Crossrail
- Electrification of the Great Western Mail Line
- Thameslink Programme
- Reading Station re-modelling
- Oxford Station re-signalling
- Bletchley Station re-modelling

Option assessment and EWR scheme descriptions

An Option Assessment was undertaken to determine schemes to be developed and appraised in detail. The options were identified through discussion with key stakeholders including the DfT and Network Rail and assessed using a multi-criteria assessment framework, and assessed against the Do Minimum described above. Assessment results were then presented to, and agreed with the stakeholders.

The options assessment process identified two clearly better performing options for detailed consideration and it was agreed that these should be the main focus for further scheme refinement and scheme appraisal in the Outline Business Case:

- A **Core Scheme** and as a potential route to subsequently achieving a Preferred Scheme;
- A **Preferred Scheme** should deliverability and uncertainty issues be resolved

It is currently assumed that EWR could be implemented and services operational in 2017. The schemes are described below.

EWR schemes - train service specifications

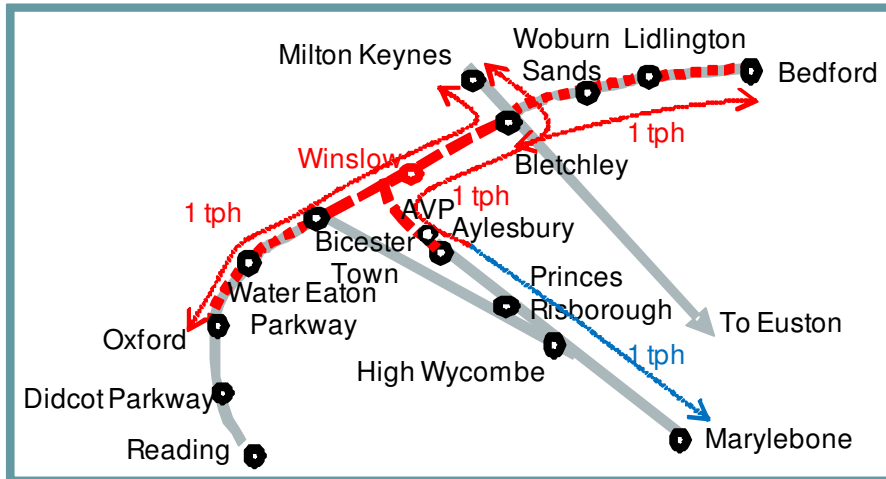
Both the Core and Preferred Schemes assume the introduction of new services between Milton Keynes and Oxford, Aylesbury and Milton Keynes and Bedford and Bletchley. The service between Aylesbury and Milton Keynes is assumed to be provided through an extension of a Chiltern Railways service between London Marylebone and Aylesbury Vale Parkway via High Wycombe, and hence be part of a of direct London to Milton Keynes service.

In the Preferred Scheme, the introduction of a number of rail enhancement projects elsewhere, including Oxford Area Resignalling and Crossrail (and its resultant re-casting of GWR services), are assumed to facilitate the extension of the Milton Keynes – Oxford and Bedford – Bletchley services on to Reading, substituting the Do Minimum local stopping service between Oxford and Reading in the process. This would increase the number of services operating between Bletchley and Oxford from 1 tph in the Core Scheme to 2 tph in the Preferred. Journeys between Bedford and Milton Keynes and Bedford and Aylesbury in both the Core and Preferred are via an enhanced interchange at Bletchley.

The EWR Core scheme

Figure NTS.3 below presents the services additional to the Do Minimum with red arrows. Services shown with blue arrows represent the portion of an EWR service that is replacing a service in the Do Minimum scenario.

Figure NTS.3 – The EWR Core Scheme – additional services introduced



Note: The figures are for illustrative purposes only. Only a selection of key stations are shown.

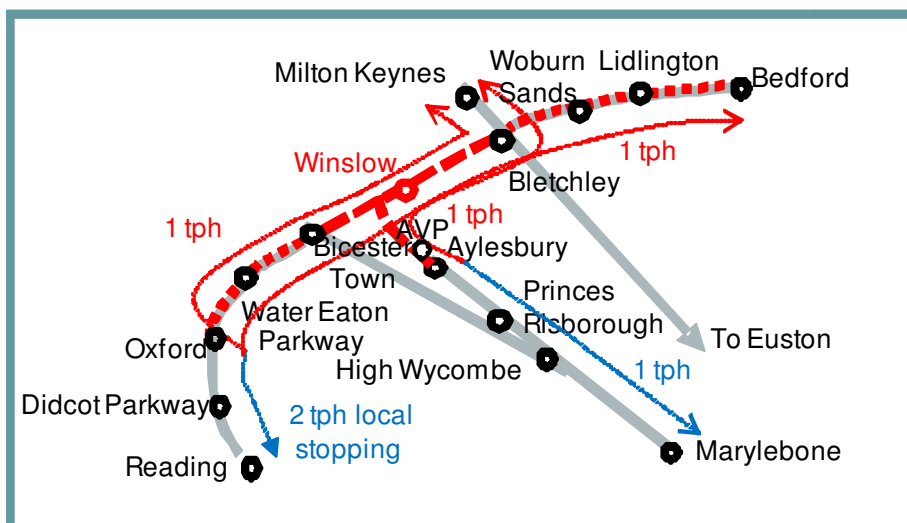
The following train services are assumed to be introduced, additionally, to those operating in the Do Minimum:

- 1 train per hour Oxford to Milton Keynes via Water Eaton Parkway, Bicester, Winslow and Bletchley (41 minutes)
- 1 train per hour Milton Keynes to London Marylebone via Bletchley, Winslow, Aylesbury and High Wycombe (88 minutes)
- 1 train per hour Bletchley to Bedford via Woburn Sands and Lidlington (21 minutes)

EWR Preferred scheme

Figure NTS.4 below presents the services additional to the Do Minimum in red arrows. Services arrows shown in blue represent the portion of an EWR service that is replacing a service in the Do Minimum scenario.

Figure NTS.4 – The EWR Preferred Scheme – additional services introduced



Note: The figures are for illustrative purposes only. Only a selection of key stations are shown.

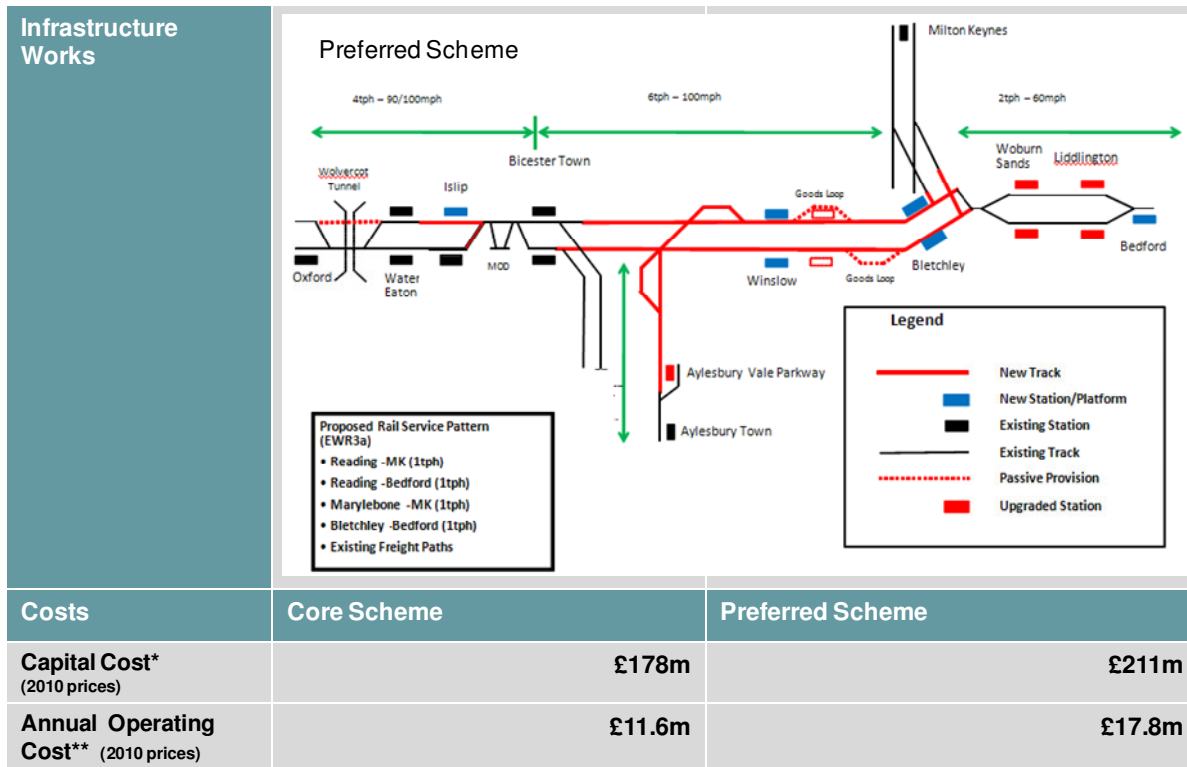
The following train services are assumed to be introduced with the Preferred Scheme, additionally at least partially, to those operating in the Do Minimum:

- 1 train per hour Reading to Milton Keynes via local stops and Didcot Parkway between Reading and Oxford and then Water Eaton Parkway, Bicester, Winslow and Bletchley (84 mins)
- 1 train per hour Milton Keynes to London Marylebone Bletchley, Winslow, Aylesbury and High Wycombe (88 mins)
- 1 train per hour Reading to Bedford via local stops and Didcot Parkway between Reading and Oxford and then Water Eaton Parkway, Bicester, Winslow, Bletchley, Woburn Sands and Liddington (106 mins)

EWR schemes – infrastructure works and estimated costs

The infrastructure requirements and estimated capital and operating costs for the Core and Preferred Schemes are summarised in Table NTS.1 below. The capital cost estimates include allowances for risk.

Table NTS.1 – Infrastructure Requirements and Costs Estimates for EWR Schemes



* Cost if built in 2010 - NOT the same as the Outturn level of funding that would be required . That would need to encompass inflation to and during the period when actual project spend would take place e.g. 2015-2017

** Cost covers rolling stock lease, train and station operating costs, and rail industry access charges – costs are net of any savings through substitution of services by EWR services

The key additional infrastructure works required in the Preferred scheme shown above, in comparison to the Core scheme, is the doubling of the existing single track section between Islip and Bicester MOD and associated works. This adds around £33M to the capital cost estimate but is necessary to secure operation of a 2 tph EWR service between Bletchley and Oxford in comparison with 1 tph operating in the Core scheme.

Assumptions on the provision of new stations

The majority of benefits in business cases of this type rely significantly on reduction in journey times between locations. Stops between locations will increase journey times and therefore reduce the benefits achievable by EWR as measured by time savings. The amount of change will depend on the number of additional stops and the number of individuals wishing to use the service at those additional stops. At the same time, revenue will either increase or decrease depending on the relative time savings/loss to customers on the route. Also, developer contributions are likely to increase if additional stops are well located in relation to developments, though the cost of providing the stations also needs to be accounted for. This can affect the net cost to government reflected in the Benefit to Cost Ratio (BCR) calculation.

The relative movement between these factors will influence the BCRs. This will provide a tangible way of understanding the trade-off between fewer stations and faster journey times versus the inclusion of additional stations with increased capital costs and reduced benefits due to slower journey times but with additional 3rd Party contributions

Thus far the specification of the Core and Preferred schemes has in fact assumed one new station, notionally located at Winslow, on the basis that Winslow is already a sizeable settlement that would generate custom for EWR and that a site for a station has been protected for many years, is the subject of a Local Plan allocation and is reserved as part of an existing outline planning permission. During the further development of the business case leading up to programme entry it will be necessary to demonstrate the strength of case for the proposed new stations at Winslow and at Newton Longville.

EWR schemes – journey time performance

A key requirement for EWR to be successful (and generate a robust business case) will be that it offers attractive comparative journey time performance to the road based alternatives, in particular the car. As can be seen from the sample of journeys presented in Table NTS.2, EWR services associated with the schemes under consideration, present very competitive journey times compared to those currently achievable by car. Additionally car journey times would be expected to worsen over time as a consequence of increased congestion, further improving the relative competitiveness of EWR services. The table does not cover all journeys that could be made and for which there would be a journey time improvement via EWR services e.g. Bletchley – Bicester Town.

Table NTS.2 – Comparison of Example Journey Times

Location A	Location B	Existing Car*	Do Minimum Rail	EWR Core	EWR Preferred
Milton Keynes	Oxford	70 ~ 90 mins	82 mins, 1 tph (via Coventry)	41 mins, 1 tph	
	Bedford	30 ~ 40 mins	54~85 mins, 1 tph	39 mins, 1 tph (1 I/C at Bletchley)	
	Aylesbury	35 ~ 45 mins	(via London)	33 mins, 1 tph	
Bedford	High Wycombe	55 ~ 75 mins	(via London)	58 mins, 1 tph	
	Oxford	100 ~ 130 mins	(via London)	66 ~ 70 mins, 1 tph (1 I/C at Bletchley)	61 mins, 1 tph
	Aylesbury	55 ~ 65 mins	(via London)	58 mins, 1 tph (1 I/C at Bletchley)	
Winslow	High Wycombe	65 ~ 85 mins	(via London)	83 mins, 1 tph (1 I/C at Bletchley)	
	Oxford	50 ~ 60 mins	-	27 mins, 1 tph	27 mins, 2 tph
	Milton Keynes	25 ~ 35 mins	-	14 mins, 2 tph	
	Bedford	45 ~ 55 mins	-	46 mins, 1 tph (1 I/C at Bletchley)	41 mins, 1 tph
	High Wycombe	45 ~ 55 mins	-	44 mins, 1 tph	
	London	100 ~ 130 mins	-	70 ~ 73 mins, 1 tph	

I/C = Interchange

* Car times reflect existing journey time range – future year journey times would be expected to be longer reflecting increases in congestion

Scheme Appraisal and OBC Analysis

Scope and approach

A demand and revenue forecasting model was developed that complies with the DfT's requirements for forecasting rail schemes. The outputs of this model provide the key demand, revenue and change in time and distance inputs to the economic appraisal, which has been undertaken in a fashion compliant with the DfT's guidance for rail investment projects seeking Government funding. In addition, the OBC has captured analysis with respect to four of the five areas identified in HM Treasury and Office of Government Commerce (OGC) guidance on business cases, namely:

- Strategic Case – focused on demonstration of a clear need for intervention and alignment with strategic policy objectives
- Value for Money (VfM) Case – focused on assessment against the Government's New Approach to Appraisal (NATA) framework including economic cost benefit analysis and identification of the economic benefit to cost ratio (BCR)
- Financial Case – focused in the OBC on identification of potential funding sources and levels of funding required
- Delivery Case – focused on identifying the potential delivery process and indicative programme

The fifth area, the Commercial Case, has not been addressed in the OBC, reflecting the fact that this is an area where work is presently at a very preliminary stage.

Growth and funding scenarios

The Central Case scenario

Funding for the implementation phase is recognised as being primarily sourced through public sector finance. To that end it is essential that the project can demonstrate a robust business case fully in compliance with the Department for Transport (DfT) guidelines. These require use of the Department's growth forecasts (TEMPRO) when modelling new transport projects. A Central Case scenario (used for both Core and Preferred scheme appraisal) has therefore been used based on the national growth figures compiled by the DfT and regularly updated to reflect the most recent trends within the economy. These figures are disaggregated to district level, but do not necessarily reflect target growth proposed for specific areas according to Regional Spatial Strategies¹, Local Plans and Local Development Frameworks (LDFs). For the purposes of forecasting, growth in rail demand is also capped at year 2025 in line with DfT guidance. Both the Core and Preferred schemes under the Central Case growth scenario also assume 100% public sector funding, which for DfT economic cost benefit analysis purposes is a "worst case". A series of sensitivity tests have been undertaken on the basis of the Central Case scenario and these are discussed later.

The Planned Growth scenario

The preferred funding strategy aims to obtain 3rd Party contributions from private developers in respect of those developments which would benefit from the operation of services and potentially new stations on the western section of EWR. This recognises that a key driver for EWR is supporting and encouraging economic growth and developments locally. The extent to which growth might take place out with TEMPRO forecasts is uncertain and the quantum of the 3rd Party contributions is difficult to assess, given the uncertainty surrounding long term development trends and variations between LDFs.

¹ The coalition government has announced that they intend to abolish RSS's. The ongoing business case work will continue whilst, at the same time, consideration will be given to the scale of growth that will emerge post RSS and that can be supported by East West Rail.

In this context, an alternative Planned Growth scenario to the Central Case was also developed to better reflect the potential relationship between the scheme and developing LDFs. This assumes the provision of a further new station at Newton Longville serving a major proposed development nearby. In this Scenario a notional level of 3rd Party contributions towards the cost of EWR has also been assumed to have been secured along the route. The Planned Growth scenario offers an alternative basis for appraisal that better reflects the aims and objectives of the planning authorities for EWR and land-use development along the corridor it is to serve.

The ultimate business case assessment that will be developed through to programme entry in the autumn will reflect a potential range of 3rd Party contributions further informed by discussions with the relevant planning authorities.

Exclusions from the economic cost benefit analysis presented

The scope of the cost benefit analysis and calculation of economic Benefit to Cost Ratios (BCRs) has been constrained to only including those costs and benefits which can be quantified and monetised with a high degree of confidence. The BCRs presented have been limited to including local and regional transport user benefits with respect to journey time reductions, and associated environmental impacts, such as emissions and reductions in accidents, as a consequence of transfers in journeys from car to rail.

Two key areas of potential additional benefit have been excluded from the BCR calculations. The first is potential benefits associated with national passenger or freight services using the EWR infrastructure. At present it is not possible to specify with any confidence what services might use the infrastructure though some analysis has been undertaken to indicate the potential for benefits in this respect for Cross Country services, by way of example.

The second area is that of wider impacts of EWR with respect to improving local and regional gross domestic product (GDP) through improvements in labour market connectivity and productivity, and potential development and property value uplifts. At present, these have not been assessed in detail or quantified in a sufficiently rigorous manner to be included in the calculation of BCRs.

The exclusion of these potential benefits suggests that the BCRs currently presented in the OBC are undervaluing the overall economic case for EWR.

Appraisal and Business Case analysis results

Summary

Table NTS.3 below presents a summary of the appraisal and business case analysis of the Core and Preferred schemes

Table NTS.3 – Summary of Central Case Appraisal and Business Case Analysis

Appraisal Aspect	Core Scheme	Preferred Scheme
Capital Cost (@ 2010 prices)	£178m	£211m
Indicative Level of Outturn Funding Required (assumed to be in years 2015-2017)	£200m-£250m	£240m-£300m
Net Annual Operating Cost (@ 2010 prices)	£11.6m	£17.8m
Additional rail demand (2021 annual forecast)	1.79m	2.58m
Car trips removed (2021 annual forecast)	1.02m	1.47m
All monetised economic benefits (2002 prices PV* – discounted over 60 year operating period*)	£508m	£682m
Net Rail Rev Impact – revenue minus operating costs (2002 prices PV* – discounted over 60 year operating period*)	£32m	£51m
BCR* (*cost to Government – assumes schemes are 100% Government funded)	4.94	6.30
Strategic Fit – against National, Regional and Local Policies	✓✓	✓✓✓
Meeting specified objectives that address identified challenges	✓✓	✓✓✓
Meeting funding criteria	✓✓✓	✓✓✓
Dependency risk (score) – reliance on other projects	9	19
Technical feasibility established – design confidence	Yes	Mostly
Operational feasibility risk – confidence on delivery of specified timetable and interfaces with other services	Limited	Significant
Stakeholder support – reflecting Stakeholder engagement	✓✓✓	✓✓✓

* PV = Present Value; is the result of an accounting method that sums financial cashflows over an agreed future year period, having discounted them to reflect their value in a present year. This allows cashflows in the future to be compared like for like. In line with DfT guidance, for EWR the agreed period is 60 years of operation and the present year used is 2002.

From Table NTS.3 it is clear that the Core and Preferred schemes deliver very strong appraisal and overall business case performance. Both schemes generate very attractive BCRs in excess of 4:1. This is exceptional for rail schemes and significantly exceeds the DfT's current "good" value for money BCR threshold of 2:1. In addition, this is with the exclusion of potentially sizable national rail passenger and freight service benefits and wider economic benefits. It is also assuming the "worst case" assumption of the scheme being 100% public sector funded. Neither the Core nor Preferred EWR schemes are anticipated to generate any major adverse environmental impacts that might counter-balance the economic benefits.

Equally encouraging is that the scheme is forecast to have a positive impact on net rail industry revenue overall; revenues minus operating costs for all train operators. EWR is forecast to generate in excess of £30m (present value in 2002 prices) for the Core and £50m for the Preferred scheme over a 60-year operating period. This is an important consideration with respect to securing DfT funding for rail schemes and also indicates that there may be a possibility of securing a revenue-based contribution towards the capital cost of the project.

The EWR Core and Preferred schemes demonstrate excellent strategic policy fit and meet the specified objectives for intervention aimed at addressing key challenges. This reflects the improvements in public transport connectivity between key locations that the schemes establish and the increase in rail demand and revenue and the associated transfer of journeys from car to rail that they are forecast to generate.

A review of funding sources has been undertaken and suggests that EWR has the potential to meet the funding criteria and consequently demonstrate value and secure contributions from a number of sources. This reflects the breadth of and scale of benefits the scheme is forecast to deliver. At this point in time however a firm view on a potential funding package has yet to be formulated.

Based on the capital cost estimates and adopting a range of possible inflation rates, the outturn funding requirement is currently viewed as ranging from £200M to £250M for the Core scheme and £240M to £300M for the Preferred Scheme, with funding assumed to be required to support spend in years 2013/14-2016/17. Whether this level of funding is deemed “affordable” is yet to be established and will be subject to the funding model to be adopted and the evolving picture with respect to public finances and investment priorities.

An assessment of deliverability of the appraised EWR schemes highlights the challenges that the Preferred scheme in particular poses given its higher cost (reduced affordability), lower level of design and operational development, and the high level of dependency risk reflecting its reliance on the completion of other rail proposals still at the planning stage in some cases. These deliverability risks could be significantly mitigated if the scheme is viewed as a potential follow-on EWR phase, building on prior implementation of the Core scheme.

An indicative high level forward programme and stage gate schedule has been prepared and this suggests that delivery of EWR for operation of services in 2017 is possible. However, the programme highlights that it is critical that a commitment to EWR in DfT Rail’s forward investment programme is secured in the first instance.

An initial consideration of EWR delivery models suggests that a number of routes could be adopted and should be the subject of detailed assessment. Replicating the approach being adopted for Evergreen 3 could be considered given the emergence of the Core and Preferred schemes, which are underpinned by delivery of benefits associated with effective integration with Chiltern Railways operations and services.

Scenario and sensitivity tests

Under the Planned Growth scenario described previously, the case for EWR might be expected to improve from that presented in the Central Case, as a consequence of an element of 3rd Party funding being secured. Numerous sensitivity tests around the Central Case appraisal of both the Core and Preferred schemes have also been carried out. These explore the sensitivity and robustness of the economic case in a number of respects including lower growth assumptions, competition from bus services in the EWR corridor, and increases in scheme cost. These demonstrate that the Core and Preferred EWR schemes continue to present good economic value for money even when adopting adverse and pessimistic assumptions.

Assessment of alternatives – the Next Best scheme

As stated previously, the Core and Preferred schemes were identified through a detailed option assessment exercise. In addition, a Next Best scheme was also identified at that stage as the appropriate alternative to consider as part of the detailed OBC appraisal process.

The Next Best scheme largely replicates the Core scheme, but with the service from Milton Keynes terminating at Aylesbury rather than continuing on to High Wycombe and London. This option avoids any operational integration with Chiltern Railways and therefore introduces less dependency risk. However, it does as a consequence involve a higher capital cost reflecting the need for turn-back facilities at Aylesbury otherwise not required. It also fails to provide the direct rail travel opportunities south of Aylesbury afforded by the Core scheme. The estimated capital costs is £191M and the estimated operating annual net operating costs is £8.7M (2010 prices).

The Next Best scheme is forecast to generate lower demand, revenue and benefits when compared to the Core scheme. Nevertheless, the scheme still offers positive net rail revenue and a good BCR exceeding 3:1.

Examining the scheme's overall performance in meeting DaSTS goals, it is very similar to the Core scheme reflecting the largely common alignment, infrastructure and service provision. Areas of difference reflect the scheme's lower demand, revenue and economic benefit performance noted previously. When assessed against policy and strategy and the rail intervention objectives, it is clear that the Next Best scheme does not perform as well as the Core scheme, and is not an attractive alternative overall, although it is a potentially viable and deliverable scheme.

Next Steps

In order to progress EWR, and in particular address requirements to secure the necessary Government commitment to make delivery of the scheme possible, a number of tasks need to be progressed:

- Respond to DfT/stakeholder responses and requests for further analysis
- Design development – establish the performance and cost implications of minimising single track operation of the scheme
- Address a number of key areas to secure “Programme Entry”
 - Strategic Case – update to reflect any revisions to transport policy and goals, and planned growth and development following abolition of Regional Spatial Strategies
 - Value for Money Case – update forecasting and appraisal as necessary to reflect revised views on growth / development, more detailed design, operational and timetable analysis and any associated cost and benefit implications
 - Financial and Funding Case
 - Undertake a detailed quantified risk analysis and update cost estimates and estimates of outturn funding requirements accordingly
 - Establish a likely funding model supported by the key stakeholders, including establishing the current potential for 3rd Party and local contributions
 - Delivery Case
 - Establish the preferred management and delivery model for the scheme and develop an initial detailed project plan to scheme delivery
 - Identify the preferred statutory powers and planning process to be pursued with respect to EWR
 - Commercial Case – establish a preferred procurement and contractual model for the scheme
 - Secure a view on public support for the scheme
- Ongoing lobbying / maximising stakeholder and political support

It is anticipated that completing these tasks will facilitate delivery of a comprehensive “Programme Entry” submission to Government later this year.

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