

Stratford-on-Avon District Council

**Stratford-upon-Avon -
Honeybourne rail reinstatement:
indicative funding appraisal**

Version 1.1

Version 1.1 | 2 April 2019

This report takes into account the particular instructions and requirements of our client.

It is not intended for and should not be relied upon by any third party and no responsibility is undertaken to any third party.

Job number 264368-00

Ove Arup & Partners Ltd
13 Fitzroy Street
London
W1T 4BQ
United Kingdom
www.arup.com

ARUP

Document Verification

Job title		Stratford-upon-Avon - Honeybourne rail reinstatement: indicative funding appraisal		Job number		264368-00	
Document title		Version 1.1		File reference			
Document ref							
Revision	Date	Filename					
Draft 1	21 Jan 2019	Description	First draft				
			Prepared by	Checked by	Approved by		
		Name	Victor Lanel	Tim Ashwin			
		Signature					
Draft 2	31 Jan 2019	Filename					
		Description	Second draft – release				
			Prepared by	Checked by	Approved by		
		Name	Victor Lanel	Tim Ashwin	Andrew Jenkins		
		Signature					
Version 1.0	7 Mar 2019	Filename					
		Description	Final report				
			Prepared by	Checked by	Approved by		
		Name	Victor Lanel	Tim Ashwin	Andrew Jenkins		
		Signature					
Version 1.1	2 Apr 2019	Filename					
		Description	Updated final report				
			Prepared by	Checked by	Approved by		
		Name	Tim Ashwin				
		Signature					
Issue Document Verification with Document							<input checked="" type="checkbox"/>

Contents

	Page	
1	Executive summary	2
1.1	Introduction	2
1.2	Potential funding sources appraisal	3
1.3	Funding scenarios	6
2	Introduction	9
2.1	Project brief	9
2.2	Project background	9
2.3	Approach	10
2.4	Stakeholder consultations	12
2.5	Report structure	12
3	Key inputs and assumptions	13
3.1	Overview	13
3.2	Appraisal period	13
3.3	Infrastructure works	13
3.4	Train services	14
3.5	Long Marston Airfield Garden Village development	14
3.6	Passenger demand and revenues	15
3.7	Project costs	16
3.8	Summary project funding requirement	17
4	Potential funding sources appraisal	19
4.1	Introduction	19
4.2	Infrastructure user charges levied on TOC	20
4.3	Station-related revenues	22
4.4	Housing Infrastructure Fund contribution or equivalent	24
4.5	Developer contributions	26
4.6	Business rates contribution	29
4.7	Council tax precept	31
5	Funding scenarios	33
5.1	Introduction	33
5.2	Central Case scenario	34
5.3	Upside Scenario A – plus Council Tax precept	36
5.4	Upside Scenario B – no operating costs (or fares revenue)	38
5.5	Downside Scenario – no S106 contribution	40
5.6	Sensitivity tests	41
5.7	Summary	43

Important notice

This report has been prepared specifically for and under the instructions and requirements of Stratford-on-Avon District Council (“our client”) in connection with the indicative funding appraisal for the Stratford to Honeybourne rail link.

This report is prepared for use and reliance by our client only. No third party is entitled to rely on any of the figures contained within this report unless and until they and we sign a reliance letter in a form agreed by us. We do not in any circumstances accept any duty, responsibility or liability to any third party whatsoever (including retail investors whether by bond issue or otherwise) who has relied on this report in circumstances where they and we have not signed a reliance letter in a form agreed by us. Accordingly, we disclaim all liability of whatever nature (including in negligence) to any third party other than to our client or to any third party with who we have agreed a reliance letter (and such liability is subject always to the terms of our agreement with our client and the reliance letter with the third party).

In preparing this report we have relied on information provided by others and we do not accept responsibility for the content, including the accuracy and completeness, of such information. In no circumstances do we accept liability in relation to information used by us which has been provided by others.

We emphasise that the forward-looking projections, forecasts, or estimates are based upon interpretations or assessments of available information at the time of writing. The realisation of the prospective financial information is dependent upon the continued validity of the assumptions on which it is based. Actual events frequently do not occur as expected, and the differences may be material. For this reason, we accept no responsibility for the realisation of any projection, forecast, opinion or estimate.

Findings are time-sensitive and relevant only to current conditions at the time of writing. We will not be under any obligation to update the report to address changes in facts or circumstances that occur after the date of our report that might materially affect the contents of the report or any of the conclusions set forth therein.

No person other than our client and any party to who reliance has been expressly permitted by us pursuant to a reliance letter may copy (in whole or in part), use or rely on the contents of this report without our prior written permission. Any copying or use of this report (in whole or in part) by any party whatsoever shall be accompanied by or incorporate this notice at all times.

We accept no responsibility for, and have not authorised, the contents of any report, prospectus, supplementary prospectus, listing particulars, supplementary listing particulars, presentation or other document or communication in respect of the sale, acquisition, offering or transfer of any shares or securities or interest in them, whether on the primary or secondary market or otherwise, which uses, includes or incorporates any report, deliverable or information, or any element thereof, prepared by us under or in connection with this agreement.

Arup, 2 April 2019

1 Executive summary

1.1 Introduction

Arup has carried out an indicative funding appraisal relating to the proposed reinstatement of the Stratford-upon-Avon to Honeybourne rail link (which we refer to as “the project”). This work has been commissioned by Stratford-on-Avon District Council on behalf of itself plus seven other funding partners. The other funding partners are:

- The Cotswold Line Promotion Group;
- Gloucestershire County Council;
- Great Western Railway;
- Stratford Rail Transport Group;
- West Midlands Trains;
- West Oxfordshire District Council; and
- Wychavon District Council

The appraisal involves investigation and quantitative analysis of a number of potential funding sources. The appraisal is intended to support the ongoing investigation of the rail link and the improvements in public transport connectivity this will provide.

A number of assumptions have been applied to inform this appraisal. Project scope, costs, train service patterns and passenger demand figures are derived principally from the business case study completed by Arup in 2012¹, although adjustments to such assumptions have been applied where appropriate (see chapter 3 for full details). Funding calculations have been applied over a standard 30-year appraisal period from 2020 to 2049. We have also undertaken consultations with a number of stakeholders, details of which are provided in Appendix A.

The assessment of the project’s funding requirements takes into account both construction costs, and the future operation of the new link. As well as factoring-in the costs for maintaining the link and operating the trains, we have also taken into account the additional passenger revenues generated, which will partially cover the project’s operational costs.

A summary of the project’s funding requirements is provided in Table 1.

¹ “Stratford to Honeybourne Railway Reinstatement – Business Case Study”, Arup, 25 September 2012

Table 1: Stratford – Honeybourne rail link – estimated funding requirements

Project funding requirement (2020 – 2049), £m	Current prices		Present values (discounted)	
Project costs				
Construction cost (incl. optimism bias)	£111.3m		£93.3m	
Operational cost (up to 2049)	£118.2m		£61.3m	
Total costs	£229.5m		£154.6m	
Funding requirement	Low Case	High Case	Low Case	High Case
<i>Minus</i> Additional passenger revenues	£87.3m	£111.5m	£43.9m	£54.9m
Total funding requirement	£142.3m	£118.0m	£110.7m	£99.6m

1.2 Potential funding sources appraisal

Six potential funding sources have been identified. We have analysed the level of funding each source could generate over the 30-year appraisal period (2020-2049).

A viability appraisal has also been undertaken, with each potential funding source assessed against the following criteria: certainty of income; justification and rationale; acceptability to stakeholders; and practicality and deliverability. (For full details please see chapter 4).

The results of our appraisal of the six potential funding sources are summarised in Table 2.

Table 2: Stratford – Honeybourne rail link – potential funding sources

Infrastructure user charges levied on TOC	Viability appraisal	Funding potential (30yr PVs) ²	Conclusion
Infrastructure user charges levied on TOC	<p>This involves track access charges being levied on TOCs running trains along the new link.</p> <p>Such charges are, in theory, a means for raising significant amounts of revenue. However, train operations between Stratford and Honeybourne would in practice require public subsidy to make them viable, i.e. there is no material profit made by market operators. As such, any TOC charge would ultimately be covered by the public sector.</p> <p>Therefore, user charges levied on TOCs are not considered a valid funding source for the project.</p>	n/a	Non-viable as funding source
Station-related revenues	<p>This comprises additional revenues that could be generated from new station retail facilities, an increase in the hourly rate for car parking at Stratford station, and advertising billboards.</p>	Low case: £0.7m	Retain as funding source

² Discount rate: 3.5% p.a.; totals based on a 30-year appraisal period (2020 – 2049)

Infrastructure user charges levied on TOC	Viability appraisal	Funding potential (30yr PVs) ²	Conclusion
	<p>The logic and rationale for utilising such revenues to help fund the new link is sound, although the level of funding would be fairly small relative to the overall costs of the project.</p> <p>Car parking tariff increases present the most significant revenue stream, however raising such charges also has the potential to be challenged or objected to by residents.</p>	High case: £3.4m	
HIF contribution or equivalent	<p>This assumes that funding from the Housing Infrastructure Fund (HIF) or equivalent is secured to support the proposed Garden Village development at Long Marston (3,500 homes), and that a share of such funding is allocated towards the new rail link.</p> <p>We consider there is definitely potential for this type of funding to be used, given the project would provide a completely new and direct connection to the Garden Village. This source of funding would be dependent on the UK government providing future opportunities for such bids to be made.</p> <p>Any such funding would require a comprehensive business case that demonstrates the absolute necessity for the rail link to support the new development, as well as clear evidence of the net economic benefit of the project over the long term.</p>	Low case: £7.9m High case: £13.8m	Retain as funding source
Developer contributions	<p>This relates to contributions from developers, relating to two key locations: Long Marston Airfield Garden Village (3,500 homes) and Meon Vale (500 homes). Funding could be captured through Community Infrastructure Levy (CIL) payments although it is understood that this project is not specified in the current Infrastructure Delivery Plan (IDP). It also assumes a financial contribution from the Long Marston Airfield Garden Village developer of between £8.5m and £17m (based on a previous statement made by the developer when promoting the site).³</p> <p>In the longer term there is the possibility of further development south of Stratford-upon-</p>	Low case: £7.4m High case: £14.8m	Retain as funding source (discount S106 from “downside” scenario)⁴

³ Long Marston Airfield Garden Village - Expression of Interest (July 2016), Cala Homes Limited

⁴ See section 5.5

Infrastructure user charges levied on TOC	Viability appraisal	Funding potential (30yr PVs) ²	Conclusion
	<p>Avon being identified in future Local Plans which could bolster such contributions.</p> <p>High quality public transport typically increases market demand for residential and business locations, and it is common practice for developer contributions to be used to fund improvements. However, we understand there is currently a funding shortfall around Long Marston Airfield for highway improvements, with pressure for a greater share of the infrastructure budget committed by the developer to be used to resolve this. This could inhibit the opportunity for putting their financial contribution towards the new rail link.</p>		
Business rates contribution	<p>This involves capturing the increase in business rate revenues following implementation of the new rail link. For existing businesses (mainly in Stratford), this is based on growth in rateable values above a defined baseline, with the incremental revenue designated to the project. For new businesses (principally at Long Marston Airfield), it involves retention of a pre-defined percentage of total rates revenues.</p> <p>Increased business rates revenues are a potentially attractive source of funding for the new rail link. The incremental approach has the advantage of capturing a share of the market's uplift in business values, whilst avoiding any "new" levies or direct rates rise. However, there is uncertainty about the extent of funding that will actually materialise – particularly, the increase in rateable values on existing businesses. Implementing mechanisms to capture the funds may also be complex to set up.</p>	<p>Low case: £8.1m</p> <p>High case: £16.4m</p>	Retain as funding source
Council tax precept	<p>This involves a supplement on the standard council tax payment, applied to all dwellings within Stratford-upon-Avon and Long Marston. The so-called "precept" is levied for specific purpose – in this case the new rail link – and allocated directly to the agency responsible for delivering the project.</p> <p>A council tax precept would provide a predictable source of revenue, which could make a meaningful funding contribution to the project. However, whilst a precept could be justified on the grounds of the widespread benefits of the project, e.g. better connectivity</p>	<p>Low case: £4.9m</p> <p>High case: £9.9m</p>	Retain for "upside" scenario only

Infrastructure user charges levied on TOC	Viability appraisal	Funding potential (30yr PVs) ²	Conclusion
	and reduced congestion, in practice there have been few precedents of precepts being used in this way. Conflicting demands are already being placed on constrained local authority funds, and there is also risk that such a precept would be seen as by local residents as discriminating against non-rail users.		

1.3 Funding scenarios

Central Case scenario

Our appraisal of funding scenarios involves different combinations of the above funding sources, and how these compare to the project's costs. For our Central Case scenario, we have analysed the impact of what we regard as the four most plausible funding sources: station-related revenues, HIF contribution or equivalent, developer contributions (CIL & S106) and capturing incremental rises in business rate takings.

We consider that accessing such funding sources, whilst not straightforward, could be achievable if the project were to gain sufficient support and buy-in from the relevant stakeholders – principally local authorities sponsoring the project, but also UK central government (DfT, HM Treasury) as well as local residents, businesses and the developer market.

A breakdown of the Central Case funding scenario is provided in Table 3.

Table 3: Combined project funding relative to project costs (Central Case scenario)

Project funding and costs, £m	Present Values (discounted)	
Potential Funding	<i>Low Case</i>	<i>High Case</i>
Station-related Revenue Streams	0.7	3.4
HIF contribution or equivalent	7.9	13.8
Developer contributions (S106 / CIL)	7.4	14.8
Business rates contributions	8.1	16.4
Sub-total – 4 x identified sources	24.2	48.5
Fares retention	43.9	54.9
Total funding	68.1	103.5
Project Costs	<i>Low Case</i>	<i>High Case</i>
CAPEX incl. optimism bias	93.3	93.3
OPEX	61.3	61.3
Total costs	154.6	154.6
Summary	<i>Low Case</i>	<i>Low Case</i>
% funding need met	44%	67%
Residual funding gap	86.5	51.1

As shown above, we estimate a combined contribution (in PV terms) of between £24m (low case) and £49m (high case) from these four sources. When combined with the additional fares revenue that the project would generate (covering a substantial part of train operating costs), the funding potential would be considerable – equating (in PV terms) to between £68m (low case) and £104m (high case) in total.

Nevertheless, this would still only cover part of the overall project’s funding requirement, which we estimate to be around £155m (in PV terms); further public-sector funding would be needed to cover the remaining costs. Such funds would need to be made from the outset to cover construction costs, in particular given that much of the additional funding identified would accrue over the long term, once construction is complete.

Alternative funding scenarios

Three alternative funding scenarios have also been appraised. “Upside” scenarios reflect more optimistic assumptions; the “downside” scenario reflects more pessimistic assumptions:

- Upside Scenario A, involving utilisation of a council tax precept as a fifth additional funding source, in addition to the four sources already applied.
- Upside Scenario B involving removal any operating cost – with the assumption such costs covered by central government through the operating franchise – although this scenario also discounts additional fares as a source of funding.
- The downside scenario, which assumes (unlike the central case) that the financial contribution relating to Long Marston Airfield Garden Village does not materialise.

The results are summarised in Table 4.

Table 4: Combined project funding relative to project costs (alternative scenarios)

Project funding and costs, £m	Present values (discounted)	
Upside scenario A - plus council tax	<i>Low Case</i>	<i>High Case</i>
Total funding	73.0	113.3
Total costs	154.6	154.6
% funding need met	47%	73%
Residual funding Gap	81.5	41.2
Upside scenario B - no opex (or fares)	<i>Low Case</i>	<i>High Case</i>
Total funding	24.2	48.5
Total costs	93.3	93.3
% funding need met	26%	52%
Residual funding Gap	69.1	44.7
Downside scenario - no S106 contribution from Long Marston	<i>Low Case</i>	<i>High Case</i>
Total funding	62.0	91.3
Total costs	154.6	154.6
% funding need met	40%	59%
Residual funding Gap	92.6	63.3

As shown in the table above, the first upside scenario (A) provides between £5m (low case) and £10m (high case) of additional funding in PV terms. Upside scenario B involves removal of operating costs, which more than offsets not having the additional rail fares revenue, making this scenario the closest in terms of meeting the funding need in absolute terms. However, in both upside scenarios (A and B) a funding gap still remains, therefore significant public funding would still be needed.

Under the downside scenario, removal of the financial contribution from Long Marston Airfield leads to a reduction in funding provision of between £8.5m (low case) and £17m (high case), thereby widening of the funding gap.

In addition to the three variant scenarios described above, two downside sensitivity tests have been undertaken. The first test, analysing the impact of no intrinsic year-on-year passenger demand growth, leads to reduction in funding (vs. the Central Case) of between £7m (low case) and £18m (high case) as the intrinsic growth in passenger fares is foregone. The second test shows the impact of an escalation in construction costs of 50% which leads to substantial growth in the residual funding gap of almost £50m in PV terms.

Summary

In summary, a number of potential funding sources exist that could feasibly be utilised to support the project. Accessing and applying such funding would require strong stakeholder support, a coherent proposal for delivering the project, a clear articulation of the benefits and a robust business case underpinning the project proposals. The level of contribution, whilst hard to predict exactly, could be significant – with the four sources identified in the central case scenario providing between £24m and £49m in PV (discounted) terms.

However, the scale of capital investment needed for the project is substantial. There remains a significant shortfall in the funding that would be needed to fully cover the project's costs. The extent of funding accessed through the sources identified in this study would only be likely to cover between ca. 25% and 50% of construction cost (in PV terms), and ongoing operation of train services would require further subsidy.

2 Introduction

2.1 Project brief

Arup has been commissioned to carry out an indicative funding appraisal relating to the proposed reinstatement of the rail link between Stratford-upon-Avon and Honeybourne. This work has been commissioned by Stratford-on-Avon District Council on behalf of itself plus seven other funding partners. The other funding partners are:

- The Cotswold Line Promotion Group;
- Gloucestershire County Council;
- Great Western Railway;
- Stratford Rail Transport Group;
- West Midlands Trains;
- West Oxfordshire District Council; and
- Wychavon District Council

This involves investigation and quantitative analysis of a number of potential funding sources. It is intended that the appraisal will support the ongoing investigation of the rail link and the improvements in public transport connectivity this will provide.

The proposed reinstatement involves a 14.5 km route that has been closed to passenger trains since 1969, although it remained open for freight until 1976. Most of the former line is now a public footpath and cycle way, with the track removed. A 4.8 km section of operational rail infrastructure remains in place at the southern end of the route, connecting it to the Cotswold Line at Honeybourne station, although this is only used for empty rolling-stock movements to and from the rail facility at Long Marston Depot.

Reopening the rail link would enable a new direct rail service to be provided, connecting Stratford-upon-Avon with locations to the east and west via the Cotswold Line. The new link would also serve Long Marston Airfield where a major new “Garden Village” residential development is planned.

This study provides a viability assessment and quantitative analysis of funding potential from various sources, and how these compare to the costs for the rail link. This will give an indication as to whether the project may be financially viable, based on the funding sources identified.

2.2 Project background

Stratford-upon-Avon, with an estimated population of 30,000 people, is an important regional centre and one of the UK’s most prominent tourist destinations. Since 1969, the town’s station has been a terminus on the national

passenger rail network, with regular services to / from Birmingham via the North Warwickshire Line, and services to / from Leamington Spa on the Chiltern Main Line, with a small number of direct services to / from London. A new parkway railway station was built and opened in 2013 adjacent to the A46 trunk road. In the period 2017-18, passengers entries and exits totalled 92,782 at Stratford Parkway (+14% on the previous year), while 1,042,068 passenger journeys started or ended at Stratford-upon Avon's main station (+0.5% on the previous year).

Prior to 1969, Stratford-upon-Avon was a through station with services travelling through to Honeybourne and linking to the Cotswold line, thereby providing direct services to Oxford and Worcester. Up until the early 1960s, this route formed part of the Great Western Railway's network, with through services from Birmingham to Cheltenham and Bristol.

Reinstatement of the link between Stratford-upon-Avon and Honeybourne warrants serious consideration. Stratford-upon-Avon faces significant challenges relating to road congestion and access to the town centre, particularly during peak tourist periods. In addition, several new development schemes are taking place along the line proposed for reinstatement, including the Long Marston Airfield Garden Village. Much as the new developments will contribute to Stratford's economic development and allow local businesses to access wider pools of labour, these developments' full potential will not be achieved without efficient public transport connections.

The project has also attracted significant stakeholder support. This was reflected in the Stratford Area Transport Strategy (SATS) consultation, 2017,⁵ which produced 136 responses stating that the Stratford-upon-Avon to Honeybourne railway line should be reinstated and that further feasibility work should be carried out to establish the viability of the line. The adopted strategy included the following statement: "The reinstatement of the Stratford to Honeybourne railway line presents a potential, longer term opportunity to improve rail connectivity with locations including London and the Thames Valley which might deliver economic benefits to the local area".⁶

In this context, Arup was commissioned by the Stratford District Council to identify and evaluate potential sources of funding and to make an estimation of the funding levels the respective sources could generate in order to reinstate the rail link between Stratford and Honeybourne, whilst also serving the new development at the Long Marston Airfield.

2.3 Approach

Six types of funding have been identified, which could be utilised to help pay for reinstatement and operation of rail services between Stratford and Honeybourne. These are:

⁵ <https://www.stratford.gov.uk/planning-regeneration/transport-and-infrastructure-planning.cfm>

⁶ Statement extracted from Stratford-upon-Avon Area Transport Strategy, May 2018 (<https://www.stratford.gov.uk/doc/206646/name/Adopted%20Stratford%20Area%20Transport%20Strategy.pdf>), p.23

- Infrastructure user charges levied on TOC
- Commercial revenues from station facilities
- Housing Infrastructure Fund contribution or equivalent
- Developer contributions
- Business rates contribution
- Council tax precept

Each of the above potential funding sources has been assessed in two key areas:

- Firstly, a quantitative analysis of the level of funding each potential source could generate.
- Secondly, their potential viability. Using a simple RAG (Red / Amber / Green) evaluation matrix, each funding source has been evaluated in relation to certainty of income, justification and rationale, appeal to stakeholders and ease of implementation.

An analysis is then made of combined funding scenarios – taking the most plausible combinations of individual funding sources and comparing these to the funding requirement, i.e. net costs, for delivering the rail link. A “high case” and “low case” are provided for each, as well as a number of potential “downside” sensitivities.

We note that central government funding (via the Department for Transport) has not been included in the scope of this study. Accessing such funding would require an updated business case analysis that fulfils the requirements of the DfT’s RNEP process⁷. This would require evidence that the project delivers value for money, with economic benefits significantly higher than costs incurred for any DfT contribution.

Government policy statements have indicated that the UK government may consider supporting the ongoing operation of new rail services after their first three years of services, subject to their affordability and demonstration of a benefit-cost ratio of at least 1.5.

In light of the fact that previous business case appraisals showed positive results for the project in terms of value for money, the funding partners may wish to explore the development of an updated business case appraisal to support a bid for central government funding. The funding sources identified in this study could help reduce the “ask” (i.e. amount of capital funding needed), making the project potentially more attractive for the DfT to support.

⁷ Department for Transport (2018). *Rail network enhancements pipeline*, <https://www.gov.uk/government/publications/rail-network-enhancements-pipeline>

2.4 Stakeholder consultations

To support the analysis of potential funding sources – in particular, the viability appraisal as described above – consultations with the following stakeholders have been undertaken as part of this study:

- Stratford-on-Avon District Council – David Buckland
- Stratforward Business Improvement District – Joseph Baconnet
- Cala Group Ltd. – Michael Emett
- Rail Alliance (Long Marston) – Paul Alliott
- Shakespeare Line Promotion Group – Fraser Pithie
- Shakespeare’s England – Helen Peters

Summaries of the content of each discussion are presented in Appendix A.

2.5 Report structure

The remainder of this report is set out under the following sections:

- Section 3: Key inputs and assumptions: this includes a description of the project, and the sources of input data and analysis used for the appraisal.
- Section 4: Potential funding sources appraisal: each of the six potential funding sources is appraised in terms of its overall funding potential, as well as its potential viability.
- Section 5: Funding scenarios: this presents what we regard as the most plausible funding scenarios, based on specific combinations of individual funding sources presented in Section 4. It also provides the results of upside and downside sensitivity tests applied to the appraisal model.

3 Key inputs and assumptions

3.1 Overview

The appraisal of funding presented in this document relates to the proposed reinstatement of the Stratford to Honeybourne link as part of the UK national rail network, which we refer to as “the project”.

The definition of the project is based mainly on assumptions detailed in the business case study completed by Arup in 2012⁸. Key inputs include the scope of the project works, the specification and operation of future train services, passenger demand, fares revenues and project costs. However, certain elements of the 2012 appraisal have been revised with additional inputs, which are explained in the sections that follow.

Input factors have been varied in a number of key areas in order to determine “low case” (conservative) and “high case” (optimistic) scenarios, which inform the subsequent appraisal of the respective funding sources.

3.2 Appraisal period

This appraisal is based on the 30-year period from 2020 - 2049. No costs, revenues or other funding after 2049 are considered in any calculation.

3.3 Infrastructure works

The project involves delivery of a heavy rail link connecting southwards from the existing station at Stratford-upon-Avon through to the Cotswold Line (London – Oxford – Worcester) at Honeybourne. Project works would involve:

- Construction of new rail infrastructure, with operating speed of up to 75 mph. Mainly configured in single track formation from Stratford to Milcote, and with sections of double track from Milcote to Honeybourne (thereby allowing trains to pass each other).
- A new railway station at Long Marston, serving the Garden Village. Note that it is assumed this would be a small local station and would not be staffed.
- Upgrading the short section of pre-existing track between Long Marston and Honeybourne, with the connection into the Depot preserved.
- Construction / upgrading of tracks at Honeybourne, with two connecting spurs enabling trains from Stratford to continue without having to change direction, either east towards Oxford or west towards Evesham.

⁸ The Arup 2012 report assumed that demand on the new link in its opening year would equate to between 245,000 single trips (low case) and 256,000 annual trips (high case). (Source: “Stratford to Honeybourne Railway Reinstatement – Business Case Study”, Arup, 25 September 2012)

- Repositioning of the existing footpath and cycleway (the ‘Greenway’) between Stratford and Milcote Lane, east of the railway.

3.4 Train services

Upon opening, it is assumed that through passenger services would operate along the route on a half-hourly basis in either direction throughout the day (from 6:00 am until 11:00pm). It is assumed that the service pattern will comprise hourly Stratford-upon-Avon to Oxford services and hourly Leamington Spa to Worcester services. This is based on the service specification defined as “Option 1” in Arup’s 2012 business case report.⁹

It has not been assumed in this appraisal that any other passenger train services will operate along the route, nor any freight services.

3.5 Long Marston Airfield Garden Village development

The project scope includes a new station to serve the major residential development proposed at Long Marston Airfield. The development aims to deliver 3,500 new homes, with the site developed as a “Garden Village” providing high-quality, affordable housing whilst minimising adverse impacts on the local transport network. One of the key facets of the Garden Village proposals is £120m of proposed investment in transport infrastructure – of which a significant portion has been earmarked for rail investment (see section 4.5 where this is analysed in detail).¹⁰ The District Council has stated that reopening the railway line is not a prerequisite for the developing the Garden Village. However, both the Council and CALA Homes acknowledge that it has the potential to be a key additional benefit for the development, which could add significant value.¹¹

The assumed timescale for build-out of housing at Long Marston Airfield is as follows¹²:

Year	2023	2028	2033	2038
Total Homes	400	1500	2500	3500

This informs the forecast of additional demand expected to arise for rail services to / from the new station serving Long Marston Airfield (see section 3.6).

⁹ “Stratford to Honeybourne Railway Reinstatement – Business Case Study”, Arup, 25 September 2012: chapter 5.

¹⁰ “Long Marston Garden Village – Expression of Interest”, July 2016 (Cala Homes) (<https://www.cala.co.uk/land-and-planning/planning-applications/long-marston-airfield/document-library>)

¹¹ *Ibid*, page 15

¹² “Planning Statement: Long Marston Airfield Garden Village”, June 2018 (Cala Homes)

3.6 Passenger demand and revenues

Passenger demand figures have been derived principally from the business case study completed by Arup in 2012¹³. An adjustment to the 2012 figures has been applied to account for the increased scale of proposed development at Long Marston Airfield - now assumed to reach 3,500 homes by the year 2038 (see section 3.5) compared to the 500 homes originally assumed in the Arup basis. On this basis, we assume that in its opening year (2027) the new link will generate demand of 250,270 single trips.

We note the above figures have been adjusted for abstraction, i.e. any trips involving passengers switching from other rail routes onto the Stratford – Honeybourne link are deduced from the new demand totals.

It is assumed demand will then grow annually, at a rate of between 2.2% p.a. (low case) and 5.0% p.a. (high case) up to 2040. Coupled with growing numbers of travellers to / from Long Marston as the Garden Village expands (see previous section), demand by 2040 is expected to reach around 426,000 (in the low case) and 585,000 (in the high case).¹⁴ Demand is assumed to remain flat thereafter.

We note that the Arup 2012 report assumed under a “high case” scenario that demand would grow by 6% p.a. However, rail demand growth at Stratford-upon-Avon has slowed in recent years¹⁵ – reflecting wider trends on the UK rail network. For this reason, we have adopted 5% annual growth for the high case.

Fare revenues have also been derived from Arup’s 2012 report, which broke down demand and associated average fare by key passenger flows. Adjustments have been applied to align with the revised demand projections detailed above. Table 5 summarises the passenger demand (new trips only) and associated revenue.

Table 5: Stratford – Honeybourne rail link –demand and revenue profile

Annual demand and revenue (current prices)	2027 (opening year)	2030	2035	2040
Low case				
New demand (single trips)	250,270	289,133	353,767	425,831
Additional fares revenue (£)	£2.6m	£3.0m	£3.6m	£4.3m
High case				
New demand (single trips)	250,270	312,919	432,516	585,155
Additional fares revenue (£)	£2.6m	£3.2m	£4.4m	£6.0m

¹³ The Arup 2012 report assumed that demand on the new link in its opening year would equate to between 245,000 single trips (low case) and 256,000 annual trips (high case). [add source]

¹⁴ We note that the Arup 2012 assumed, under the “high case”. (Source: “Stratford to Honeybourne Railway Reinstatement – Business Case Study”, Arup, 25 September 2012)

¹⁵ ORR station usage time series data shows passenger growth at Stratford-upon-Avon station show that over the five-year period between 2013/14 and 2017/18, passenger entries and exits increased by only 5.6% in total. See ORR estimates of station usage (see spreadsheet: “Station usage 2017-18 time series”) - <http://orr.gov.uk/statistics/published-stats/station-usage-estimates>

3.7 Project costs

3.7.1 Construction costs

Based on the cost estimation provided in Arup's 2012 business case report¹⁶ (discussed previously), construction costs are estimated to total £111.3m (current prices). It is assumed costs are spread evenly over five years, from the start of 2021 until the end of 2026. We note that reinstatement of the railway would be complex from an engineering perspective; in particular the section of route south of Stratford station which would require construction of a cutting plus a dive-under at Evesham Place roundabout. Detailed re-appraisal and validation of cost estimates would be needed prior to further progression of the project.

3.7.2 Infrastructure maintenance costs

As a newly constructed railway, it is expected that maintenance costs will be comparatively low for the forecast period (up to 2049), without any necessity for significant lifecycle maintenance activity. Nevertheless, an allowance has been made for routine maintenance activities, at a benchmark rate of £10,000 per track km per annum¹⁷, plus £30,000 per annum¹⁸ operating and maintenance costs for the new station at Long Marston. This equates to an annual total for the 14.5km of track along the route plus the new station of £175,000 per annum.

3.7.3 Train operating costs

Services are assumed to begin from 2027 onwards. Operating costs have been derived from the Arup 2012 report.¹⁹ Based on the half-hourly train services outlined in section 3.4, operating costs equate to £4.8m p.a.²⁰ in 2027, increasing to £5.0m p.a. by 2040, and remaining constant thereafter.

3.7.4 Capacity enhancement of North Cotswold Line

An important underlying assumption for commencement of train services in 2027 is further capacity upgrading of the North Cotswold Line between Oxford and Worcester. Current track capacity would be insufficient for Stratford-Honeybourne services to complete the portions of their journey beyond Honeybourne (to / from either Oxford or Worcester), due to two lengthy sections

¹⁶ "Stratford to Honeybourne Railway Reinstatement – Business Case Study", Arup, 25 September 2012

¹⁷ Source: Arup industry benchmark.

¹⁸ Source: *ibid*

¹⁹ "Stratford to Honeybourne Railway Reinstatement – Business Case Study", Arup, 25 September 2012

²⁰ Arup 2012 report, section 6.4 (adjusted to current prices). To avoid double-counting, charges raised on the TOC to cover infrastructure maintenance costs (see section 3.7.2) are excluded from these figures. TOC charges are discussed as a potential funding source in section 4.1 of this report.

of single track on the Cotswold Line (one of which is to the east of Honeybourne, the other to the west).²¹

A business case is being developed by the North Cotswolds Line Taskforce²² relating to partial re-doubling of remaining single-track sections plus signalling upgrades. Subject to further progression of the proposals and securing of development funding, it is envisaged that these upgrades would be completed by 2027. The remit of the North Cotswolds Line Taskforce includes consideration of the reinstatement of Stratford – Honeybourne – Oxford services. It is however important to note that the ability of the upgraded route to accommodate the Stratford-Honeybourne services, in addition to extra services directly between Oxford and Worcester, has not been directly validated. Additional analysis is confirm whether the upgraded capacity would be sufficient, or whether further interventions would be required.

Nevertheless, in light of the progression of the Taskforce’s current business case, it is assumed for this study that the enhanced North Cotswolds Line would provide sufficient capacity. Therefore, the entry into service of services from Stratford to Honeybourne and beyond is assumed to be 2027 (as outlined in section 3.7.3 above).

3.8 Summary project funding requirement

The year-by-year funding requirement for the project is illustrated in Table 6. This shows the £111.3m capital cost spread over the period 2022-26. The project would also require subsidy in the initial operational period, with costs around £2.6m in excess of revenues in 2027, although this declines as passenger numbers grow. In the low case annual operating subsidy reduces to £1.0m by 2040, while in the high case the subsidy falls to well below zero as revenues exceed costs.

Table 6: Annual project funding requirement

Funding requirement (current prices) (£m)	2022	2023	2024	2025	2026	2027	2030	2035	2040
Low case									
Construction costs	22.3	22.3	22.3	22.3	22.3				
Infra. maintenance						0.2	0.2	0.2	0.2
Train operating cost						4.9	4.9	5.1	5.1
Minus fares uplift						-2.6	-3.0	-3.6	-4.3
Project funding requirement	22.3	22.3	22.3	22.3	22.3	2.6	2.2	1.7	1.0
High case									
Construction costs	22.3	22.3	22.3	22.3	22.3				
Infra. maintenance						0.2	0.2	0.2	0.2
Train operating cost						4.9	4.9	5.1	5.1
Extra fares revenue						-2.6	-3.2	-4.4	-6.0
Annual net funding requirement	22.3	22.3	22.3	22.3	22.3	2.6	2.0	0.9	-0.7*

²¹ See Network Rail’s “Western Route Study” (<https://cdn.networkrail.co.uk/wp-content/uploads/2016/11/Western-Route-Study-Final-1.pdf>)

²² North Cotswold Line Task Force Board is an independent body whose details are publicised on the Worcestershire County Council website. See: <http://worcestershire.moderngov.co.uk/mgCommitteeMailingList.aspx?ID=502>

* Denotes operating surplus, i.e. fares revenues exceed operating costs

The project's overall funding requirement over the full appraisal period, 2020-2049, is set out in Table 7.

Table 7: Stratford – Honeybourne rail link – estimated funding requirements

Project funding requirement (2020 – 2049), £m	Current prices		Present values (discounted)	
	Low Case	High Case	Low Case	High Case
Project costs				
Construction cost (incl. optimism bias)		£111.3m		£93.3m
Operational cost (up to 2049)		£118.2m		£61.3m
Total costs		£229.5m		£154.6m
Funding requirement	Low Case	High Case	Low Case	High Case
<i>Minus</i> Additional passenger revenues	£87.3m	£111.5m	£43.9m	£54.9m
Total funding requirement	£142.3m	£118.0m	£110.7m	£99.6m

4 Potential funding sources appraisal

4.1 Introduction

We set out in this section of the report our analysis of the following six potential sources of funding that have been identified for the project:

- Infrastructure user charges levied on TOC
- Commercial revenues from station facilities
- Housing Infrastructure Fund contribution or equivalent
- Developer contributions
- Business rates contribution
- Council tax precept

We have analysed the level of funding each source could generate. The total funding amount has been calculated over the 30-year appraisal period referenced in section 3.2. As well as giving visibility of the full calculation inputs and assumptions in current prices, the computed totals have been presented as present value (PV) terms, i.e. discounted over time. This is intended to give a more realistic valuation of the funding that will accrue in each case, by reflecting the fact that cashflows accruing further in to the future have intrinsically lower value, compared to more “up front” sources – noting that this principle also applies to costs.

Each of the funding sources has also been subject to a viability appraisal, with a qualitative appraisal against the following four criteria:

- Certainty of income
- Justification and rationale
- Acceptability to stakeholders
- Practicality and deliverability

A Red – Amber – Green evaluation matrix has been used to analyse how viable or practicable each respective funding source is relative to the above criteria.

Finally, a summary view is provided of each funding source.

4.2 Infrastructure user charges levied on TOC

4.2.1 Funding potential

Infrastructure user charges levied on TOC	
Description	<p>Usage charges levied on train operating companies running services along the route (also referred to as track access charges).</p> <p>Can be divided into two categories:</p> <ul style="list-style-type: none"> Operational cost recovery charges, of which three types of charge are assumed to apply: <ul style="list-style-type: none"> Fixed Track Access Charge (FTAC): levied per train movement, used to recover costs for asset lifecycle maintenance and renewal. Variable Track Access Charge (VTAC): levied per train-km, to recover direct day-to-day routine costs for operating trains on the infrastructure. Station Access Charge (SAC): levied per station call charge, to recover station running costs. Infrastructure Recovery Charge (IRC): a per train movement charge, specifically designed to recover historical investment costs for network enhancements.
Case studies / precedents	<p>Operational cost recovery charges: established framework used across mainline UK rail network.</p> <p>Infrastructure Recovery Charge:</p> <ul style="list-style-type: none"> High Speed One: fixed charge per train minute, levied on every service running on the line. Heathrow Spur: proposed by Heathrow Airport Limited in 2015 for Crossrail services running on its airport rail infrastructure, charged per train km. (Note: ORR has blocked implementation of the Heathrow charge).
Calculation inputs	<p>Operational cost recovery charges:</p> <ul style="list-style-type: none"> FTAC: £4.20 per train movement * 24,820 scheduled train movements per annum VTAC: £0.06 per train km * 359,890 scheduled train km per annum SAC: £1.98 per station call * 24,820 scheduled station calls per annum <p>IRC, based on share (“x%”) of the £111.3m capital investment to be recovered via charge = $x\% * £111.3m$, comprising:</p> <ul style="list-style-type: none"> Annual depreciation amount, based on 70-year asset life = $(x\% * £111.3m) / 70$ (assuming flat line depreciation) Interest payment on residual capital at 4.75% (historical cost of capital for Network Rail)
Funding potential	<p>Operational cost recovery charges:</p> <ul style="list-style-type: none"> Combined revenue from FTAC, VTAC and SAC would total £175,000 per annum. Fully covers infrastructure maintenance costs However, does not present any funding source due to train operation already requiring subsidy. This means the public

Infrastructure user charges levied on TOC	
	<p>sector, rather than the market, would cover this cost as an addition to the subsidy already paid to the TOC to keep the train service operational.</p> <p>IRC:</p> <ul style="list-style-type: none"> • Formulated based on the capital investment it needs to recover. • Covering the full capital cost (£111.3m) via the charge would lead to an annual charge of £6.8m in 2027 (current prices), declining to £5.9m by 2040 (current prices), and falling to zero after 70 years • Reducing this to cover part of the capital cost would lead to a proportionate reduction in the annual charge. e.g. If only £71.3m was recovered through the charge (with £40m covered through other sources), annual charge in 2027 would be £4.4m, falling to £3.8m by 2040 • The IRC would not, in this case, present any new funding source from the market, due to TOCs already requiring subsidy to operate services on the route (rather than making any profit that could be tapped into for funding purposes).

4.2.2 Viability appraisal

Parameter	Appraisal	
Certainty of income	Pre-defined charges computed using a cost-recovery rather than a demand-based formula. High degree of certainty, assuming the line remains fully operational.	
Justification and rationale	Already subsidised operation (as opposed to profitable operation) means charges ultimately passed back to public sector. No “new” funds generated.	
Acceptability to stakeholders	Unlikely to be supported as a legitimate funding mechanism, given train operations would already require subsidy to cover the shortfall in revenues versus costs (prior to levying any additional charge).	
Practicality and deliverability	Operational cost recovery charges already exist as a standard mechanism (used by Network Rail). IRC charge used on High Speed One infrastructure (and was proposed, but not implemented, on Heathrow Spur). Charging structure, price setting and cost efficiencies would require regulatory approval by the ORR.	

4.2.3 Summary

Overall, infrastructure usage charges levied on TOCs could, in theory, be a mechanism for raising significant amounts of revenue. However, train operations between Stratford and Honeybourne would already require public subsidy to make them viable, i.e. there is no material profit made by market operators. Therefore, any charge levied on the TOC would, ultimately, be covered by the public sector. As such, infrastructure user charges levied on TOCs are not considered a valid source of funding for reinstatement of the new link.

4.3 Station-related revenues

4.3.1 Funding potential

Station-related revenues			
Description	<p>Commercial revenues could be generated from new or existing station facilities, following on from delivery of the project and the additional passenger demand generated. The following three types of commercial revenue are assumed:</p> <ul style="list-style-type: none"> • Retail rents: a new retail facility at Stratford-upon-Avon station would have the capacity of generating a regular stream of income that could be directly earmarked to the project. • Car parking: an increase in the hourly rate for car parking at Stratford-upon-Avon station is assumed, with the incremental parking revenues directly designated to the project. We note that the new car parking at the Long Marston Airfield train station, comprising of c. 50 places, would remain free to encourage the use of public transport instead of private cars to commute to Stratford-upon-Avon or Honeybourne. • Advertising: installation of two new advertising billboards at both Stratford-upon-Avon and Long Marston stations. 		
Case studies / precedents	All three types of commercial facility described above are commonplace across the UK rail network, and used by Network Rail, Train Operating Companies, local authorities and other public entities to raise revenue.		
Calculation inputs	<ul style="list-style-type: none"> • Retail rents: retail space of approx. 50 sqm * £292²³ average annual rent per square metre. • Car parking: increased parking charge at Stratford-upon-Avon station of between £0.50 per hour (low case) and £1.25 per hour (high case), on top of the current rate of £1.25 per hour. There are 107 parking spaces, with an assumed occupancy rate per space during operational hours (06:00 until 23:00) of 30%. Under the low case scenario, it is also assumed that 75% of car parking spaces at Stratford-upon-Avon remain occupied by car rental company Hertz (as is currently the case). Under the high case scenario, it is assumed that Hertz vacate the spaces and free them up for full usage by rail passengers. • Advertising: £100 per week for a standard three-by-six metre advertising billboard * four billboard in total. 		
Funding potential		Low case	High case
	Retail rents		
	Revenue p.a. (current prices)	£14.6k	£14.6k
	Funding total (present value)	£0.2m	£0.2m
	Car parking charge increase		
	Additional revenue p.a. (current prices)	£24.9k	£249.0k
	Funding total (present value)	£0.3m	£3.0m
	Advertising		
	Revenue p.a. (current prices)	£20.8k	£20.8k
Funding total (present value)	£0.2m	£0.2m	
TOTAL			
Funding total (present value)	£0.7m	£3.4m	

²³ CoStar analysis of retail space rents within a 500m radius around the Stratford station.

4.3.2 Viability appraisal

Parameter	Appraisal	
Certainty of income	Although new retail at Stratford station would require some initial investment, the other two commercial revenue sources would require limited cost to implement. Revenues will depend to some extent on market trends, however a reasonable level of stability is expected with the likelihood of positive trends, assuming general passenger demand continues to grow. For both retail and advertising facilities, some operating costs will be incurred, however the majority of revenue could be designated as funding for the reinstatement.	
Justification and rationale	Retail facilities provide amenity benefits to travellers, as well as contributing to the local economy. Advertising is straightforward to implement and occupies otherwise unused space within station facilities to generate income. Increased car parking charges would be consistent with current efforts to reduce congestion in central Stratford increasing costs of car travel as well as encouraging usage of the recently opened Stratford Parkway station.	
Acceptability to stakeholders	Improved retail facilities are likely to be viewed positively by rail users, TOCs and local business groups. Higher car parking charges may however be opposed in some quarters.	
Practicality and deliverability	All three commercial revenue sources are in widespread use across the UK rail network and should be straightforward to implement.	

4.3.3 Summary

There is sound logic and rationale for commercial revenues from station facilities to be used as a funding source for the line reinstatement. In general, revenues may be subject to some variability depending on market trends, although a reasonable degree of stability is expected given that rail passenger demand is expected to continue growing steadily. Car parking tariff increases present the most significant potential funding source, however raising such charges also has the potential to be challenged or objected to by residents and the level of increase that can practicably made is subject to some uncertainty. Overall, the level of funding that could be raised through these sources is likely to be comparatively small in scope relative to the cost for delivering the project.

4.4 Housing Infrastructure Fund contribution or equivalent

4.4.1 Funding potential

Commercial revenues from station facilities			
Description	To support the Long Marston Airfield Garden Village development, it is assumed that a further successful bid, in addition to that submitted for highway improvements, is made to the UK Government for funding via the Housing Infrastructure Fund (HIF) or equivalent, to provide rail-based infrastructure for the 3,500 new homes at the site and other potential sites in the area.		
Case studies / precedents	Current development projects bidding for HIF money to provide supporting rail infrastructure: <ul style="list-style-type: none"> - Meridian Water, Enfield: 10,000 new homes - Isle of Dogs / Royal Docks, London: 16,500 new homes - London Riverside, Barking: 12,500 new homes - Old Oak / Park Royal, London: 16,500 new homes 		
Calculation inputs	Benchmark average HIF funding amount per new home: ca. £17,500 (based on previous bids ²⁴), applied to 3,500 new homes at Long Marston Airfield. Proportion of HIF funding applied to new rail link: <ul style="list-style-type: none"> - 20% (low case) = £3,500 per home - 35% (high case) = £6,125 per home 		
Funding potential		Low case	High case
	Funding total (current prices)	£12.2m	£21.4m
	Funding total (present value)	£7.9m	£13.8m

4.4.2 Viability appraisal

Parameter	Appraisal	
Certainty of income	Assuming a successful bid, the agreed amount of HIF (or equivalent) funding would be provided in full by the UK government for delivery of the infrastructure. Once secured, funds must be used within a fixed timeframe.	
Justification and rationale	Using HIF (or equivalent) would require evidence that the rail link forms an essential component of the Garden Village and other housing developments in the area. Presently, rail connectivity is being promoted by the site developer as desirable but not essential and is not a requirement of the District Council; a stronger argument plus supporting evidence would be needed in order to access funds.	
Acceptability to stakeholders	It is likely that utilisation of HIF (or equivalent) to help fund the project would be strongly favoured by the majority of stakeholders, particularly given that this would help mitigate the effects of the Garden Village on the local road network. Acceptability for central government would require a robust and comprehensive business case and evidence of the necessity of the	

²⁴ This figure is based on confidential data from housing projects Arup has contributed to.

Parameter	Appraisal	
	project for the sustainability credentials of the Garden Village and other potential development in the area.	
Practicality and deliverability	As noted above, access to HIF funding would require the development of a comprehensive business case. This would need to include evidence that the rail link is indispensable for the Garden Village, and also that it delivers a net benefit in economic terms.	

4.4.3 Summary

There may be potential for HIF or a similar housing-oriented central government funding source to be used as a means to fund the new rail link, given that it would provide a direct, mainline rail linkage to / from the new Garden Village development at Long Marston Airfield.

However, any such funding requires a comprehensive business case that demonstrates the absolute necessity for the rail link to support the new development. A stronger argument is needed for Long Marston Airfield, also supported by clear evidence of the net economic benefit of the project over the long term, in order for the HIF or equivalent to be a viable funding option.

4.5 Developer contributions

4.5.1 Funding potential

Commercial revenues from station facilities	
Description	<p>There are two key locations proposed for major development which would benefit from a new Stratford – Honeybourne rail link:</p> <ul style="list-style-type: none"> • Long Marston Airfield: 3,500 homes planned (as discussed previously) • Long Marston Depot / Meon Vale: potential for an additional 500 homes <p>There are two types of developer charges that could be applied:</p> <ul style="list-style-type: none"> • Community Infrastructure Levy (CIL): a planning charge imposed on developers to help local authorities develop and maintain infrastructure. The CIL rates as determined by Stratford-on-Avon District Council are as follows: <ul style="list-style-type: none"> - <i>Residential property:</i> £0/sqm at Long Marston Airfield Garden Village; £150/sqm at Long Marston Depot / Meon Vale - <i>Retail property:</i> £10/sqm at Long Marston Garden Village;²⁵ • Developer financial contribution (e.g. Section 106 payments, Unilateral Undertaking or similar): mechanism imposed on developers to mitigate specific impacts of a new development identified by the local authority. In the case of Long Marston Airfield, £120 million has been made available by developer Cala Homes for mitigation of the development’s impacts²⁶. However, reinstatement of railway is not necessarily required for this purpose, assuming other forms of high quality public transport are provided in accordance with Proposal LMA in the District Council’s adopted Core Strategy.
Case studies / precedents	<ul style="list-style-type: none"> • Developer financial contribution (e.g. S106 or similar): numerous examples of different characteristics, and varying size and scale ranging from train service upgrades (e.g. Esk valley rail line, Yorkshire) to local station improvements (e.g. St. Neots rail station footbridge), as well as proposals for new rail routes (e.g. Watford – Croxley proposed link) • CIL: Crossrail (London), Bristol Metro stations at Henbury and Filton (proposed)
Calculation inputs	<ul style="list-style-type: none"> • CIL: calculation-based rates outlined above, multiplied by floorspace of new developments, phased over time. Assumption that between 25% (low case) and 50% (high case) of CIL income allocated directly to the project. • Developer financial contribution (e.g. S106 or similar): Cala Homes’ original EOI document for the Garden Village identified £17m (= £12.1m in present value terms) (ca. 27% out the total £120m) being allocated to the rail link. Subsequently, costs for other infrastructure (principally extensive highway works) have increased, and the more recent Supplementary Planning Document has identified 47% of allocated S106 payments (£56m) already allocated to other non-rail projects (schools, road improvements,

²⁵ Source: <https://www.stratford.gov.uk/doc/206777/name/CIL%20Map%20Boundaries.pdf>

²⁶ Planning Statement: Long Marston Airfield Garden Village (June 2018)

	etc.). On this basis, it is assumed in the low case that only half of the £17m (= £8.5m) (=£6.1m in present value terms) is allocated towards the rail link, while in the high case we assumed the full £17m (=£12.2m in present value terms).		
Funding potential (Present Values)		Low case	High case
	<i>CIL</i>		
	Long Marston Airfield (present value)	£14.6k	£29.2k
	Long Marston Depot/Meon Vale (present value)	£1.3m	£2.7m
	<i>Developer financial contributions</i>		
	Long Marston Airfield (present value)	£6.1m	£12.2m
	<i>TOTAL</i>		
	Funding total (present value)	£7.4m	£14.8m

4.5.2 Viability appraisal

Parameter	Appraisal
Certainty of income	Agreement on levels of contribution secured as part of the planning permission process for the respective developments. Committed funds then released as delivery proceeds. However, any commercially-delivered development is susceptible to market conditions which can in some cases result in delay or non-delivery.
Justification and rationale	The Long Marston Airfield development is expected to accommodate around 5,500 new residents by 2032, adding significant pressure to the transport network. Better public transport linkages, particularly the new rail link would mitigate such effects. Furthermore, the Garden Village vision for the site emphasises sustainability, within which public transport has an important role. Additional housing development at Long Marston Depot/Meon Vale would be close to a reinstated railway and could contribute to the project.
Acceptability to stakeholders	High quality rail transport typically increases the attractiveness and potentially the market demand for residential and business locations, and therefore private developers are likely to support allocation of a significant share of levies towards the new rail link. However, this may be more challenging to justify where there is a need to fund highway improvements (as is presently the case for Long Marston Airfield), which developer contributions could help to recover. Avoidance of adverse local road conditions is likely to be given higher priority, whereas the rail link (as discussed previously) may be seen more as desirable than as indispensable.
Practicality and deliverability	Developer contributions are well established and common practice for major new developments that require supporting transport upgrades to mitigate their effects.

4.5.3 Summary

High quality public transport typically increases market demand for residential and business locations, and it is common practice for developer contributions to

be used to fund improvements. However, we understand that there is currently a significant funding shortfall relating to Long Marston Airfield to provide the necessary highway improvements, with pressure for a greater share of the financial contribution (e.g. S106 or Unilateral Undertaking) committed by the developer to be used to resolve this. This could potentially inhibit the opportunity for putting the major financial contribution proposed by the developer towards the new rail link.

4.6 Business rates contribution

4.6.1 Funding potential

Commercial revenues from station facilities			
Description	<p>High quality rail transport typically increases the attractiveness and market demand for business locations. Two separate but complementary mechanisms exist that could recoup value created for businesses from the new rail link:</p> <ul style="list-style-type: none"> • Business rate increment (existing businesses): this option relies on above-average growth in rateable values. It involves retaining the incremental increase in business rate receipts over time, above a baseline level, and designating these to the project. • Business rate retention (new businesses): this involves the retention of a pre-defined percentage of total rates revenues generated by new businesses – principally at Long Marston Airfield. <p>Note that another business rate option, involving a supplement on existing business rates, e.g. a £0.02 supplement added to each pound payable, has not been analysed for this project. This approach is only likely to be viable in locations where market demand significantly outstrips supply, and where there is sustained growth in property values. In the UK, there are few examples of this outside London.</p>		
Case studies / precedents	<ul style="list-style-type: none"> • Business rate increment: Battersea – Nine Elms development • Business rate retention: Crossrail 		
Calculation inputs	<ul style="list-style-type: none"> • Business rate increment: This analysis assumes that rateable values for businesses in Stratford-upon-Avon will increase by between 2.5% (low case) and 5% (high case) post implementation of the project, compared to current rates. It is assumed that 25% of the above increase is retained and designated to the project, taking into consideration the national ave. business rates collection rate of 83%²⁷ • Business rate retention: For new businesses (mainly at Long Marston Airfield), it is assumed that between 15% (low case) and 30% (high case) of the total business rates take is retained and allocated specifically to the project. 		
Funding potential		Low case	High case
	<i>Business rates increment</i>		
	Uplift in rates takings (per annum), current prices	£326k (2027), increasing to £421k (2040)	£652k (2027), increasing to £843k (2040)
	Funding total (present value)	£4.8m	£9.5m
	<i>Business rates retention</i>		
	Annual takings (retained amount), current prices	£164k (2027), increasing to £333k (2040)	£335k (2027), increasing to £681k (2040)
	Funding total (present value)	£3.4m	£6.9m
	TOTAL		
Funding total (present value)	£8.1m	£16.4m	

²⁷ National historic data from 2013 to 2016. Available at:
<https://www.gov.uk/government/statistics/national-non-domestic-rates-collected-by-councils-in-england-2016-to-2017>

4.6.2 Viability appraisal

Parameter	Appraisal	
Certainty of income	Business rates increment dependent on an uplift in rateable values over time, versus a pre-agreed baseline. Hard to predict accurately. Retention of share of business rates from new businesses slightly more straightforward, but dependent on development at Long Marston Airfield (inclusive of resident businesses) being built.	
Justification and rationale	Sound justification for increment or retention approach, given that rise in rates reflective of intrinsic value placed by the market (via property values) on better rail connectivity. Benefits to businesses include ease of access for customers, better connectivity to the labour market, as well as improved profile of the town by making Stratford a through station on the national rail network.	
Acceptability to stakeholders	Likely to be supported by business owners if it helps deliver better rail connectivity; unlike a business rates supplement, the incremental approach avoids existing business owners having to pay any “new” tax.	
Practicality and deliverability	Business rates increment potentially less straightforward to implement than other funding approaches. Potential increase hard to predict (see above), and baseline would need to be agreed as well as financial mechanism to capture and ringfence relevant funds, Share of rates takings on new businesses likely to be more straightforward.	

4.6.3 Summary

Increased business rates revenues are a potentially attractive source of funding for the new rail link. For existing businesses, utilising growth in rateable values has the advantage of capturing increased property values for businesses benefitting from the new link. At the same time, this avoids the need to impose any direct increase in specific rates. For new businesses – particularly at Long Marston Airfield – additional income will accrue to the local authority from an expanded base of commercial activity that can help pay for the rail link as a key part of the enabling infrastructure. However, there is uncertainty about the extent of funding that will materialise – particularly, the level of increase in rateable values on existing businesses. Implementation of mechanisms to capture the said funds may also be complex to set up. Notwithstanding this, incremental growth in business rates is one of the most viable approaches to support funding of the new link.

4.7 Council tax precept

4.7.1 Funding potential

Commercial revenues from station facilities			
Description	<p>A supplement on the standard council tax payment, applied to all dwellings within a given area. So-called “precept” is levied for specific purpose – in this case the new rail link – and allocated directly to the agency responsible for delivering the project.</p> <p>For residences in Stratford-upon-Avon, the precept would be payable at a lower rate (with residents benefitting from reduced congestion and better rail connectivity); for new residences at Long Marston Airfield and potentially at Long Marston Depot / Meon Vale, a higher precept is assumed as residents would benefit from a new mainline rail link that does not currently exist.</p>		
Case studies / precedents	<ul style="list-style-type: none"> London 2012 Olympics: £20 p.a. annual precept on Band D properties (2006/07 – 2016/17)²⁸ West Midlands Combined Authority: proposed £10.88 precept on Band D properties to fund cycling and public transport infrastructure – but rejected by CA members²⁹ Crossrail 2 (London): one of several proposed funding sources³⁰ 		
Calculation inputs	<ul style="list-style-type: none"> Average precept for Stratford-upon-Avon dwellings of between £5 (low case) and £10 (high case) per annum. Total 59,293 dwellings³¹ eligible, with 2.5% residential vacancy rate³² applied. Average precept for new dwellings at Long Marston Airfield and Long Marston Depot / Meon Vale of between £25 (low case) and £50 (high case) p.a. Total 4,000 dwellings eligible.³³ 		
Funding potential	Council tax precept	Low case	High case
	<i>Existing properties</i>		
	Annual total (current prices)	£305k (2027), increasing to £341k (2040)	£610k (2027), increasing to £682k (2040)
	Funding total (present value)	£4.0m	£8.0m
	<i>New properties</i>		
	Annual total (current prices)	£42.7k (2027), increasing to £94.7k (2040)	£85.6k (2027), increasing to £189.4k (2040)
	Funding total (present value)	£1.0m	£1.9m
	TOTAL		
	Funding total (present value)	£4.9m	£9.9m

28

https://www.london.gov.uk/sites/default/files/gla_migrate_files_destination/MD1348%20DCMS%20Precept%20Funding%20Agreement%20PDF.pdf

²⁹ <https://governance.wmca.org.uk/documents/s1102/Report.pdf>

³⁰ <https://www.londonfirst.co.uk/sites/default/files/documents/2018-07/PayingForCrossrail2.pdf>

³¹ Dwelling stock estimates by local authority district: 2001 – 2017. ONS, available at:

https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/710193/LT_125.xls

³² Stratford-on-Avon Strategic Housing Market Assessment, GL Hearn (January 2013):

<https://www.stratford.gov.uk/doc/205809/name/ED436%20Strategic%20Housing%20Market%20Assessment%20Update%20GL%20Hearn%20Jan%202013.pdf>

³³ At all locations, it is assumed that the council tax collection rate equals the average for England of 97%: <https://www.gov.uk/government/statistics/collection-rates-for-council-tax-and-non-domestic-rates-in-england-2016-to-2017>

4.7.2 Viability appraisal

Parameter	Appraisal
Certainty of income	Once implemented, this would form a stable and predictable source of funds. The majority of funding would come from existing Stratford residents that are already council tax payers. Accrual of income from new development would be subject to completion and occupancy of the new dwellings.
Justification and rationale	It could be argued all residents of Stratford (as well as Long Marston) would benefit from the reduced congestion and improved connectivity of the new link to a greater or lesser extent. Furthermore, for future residents of Long Marston or the Canal Quarter, being provided with a new rail link would arguably increase the attractiveness of their development area and as such the inherent value of their properties. However, in either case (for existing and future residents), applying a blanket tax precept on residents could be regarded as discriminatory for private individuals that do not use rail services or are not affected by transport congestion day-by-day. Arguably, the new rail link is also more an economically desirable rather than socially necessary; as such, it may provide a weaker argument for council tax funding compared to, say, adult social care or other community needs.
Acceptability to stakeholders	While many within the Stratford area as well as Long Marston would doubtless benefit directly and indirectly from the new link, a council tax precept could face strong opposition. There are few precedents for precepts being utilised for major transport infrastructure projects. As noted above, a precept being put to such use could be particularly contentious when such precepts are more often implemented in order to support local community needs such as social care or other public services.
Practicality and deliverability	Potentially complex to implement. Would require cross party support and potentially parliamentary approval.

4.7.3 Summary

A council tax precept would provide a predictable source of revenue, which could make a meaningful funding contribution to the project. However, whilst a precept could be justified on the grounds of the widespread benefits of the project, e.g. better connectivity and reduced congestion, in practice there have been few precedents of precepts being used in this way. With conflicting demands already being placed on constrained local authority funds, as well as the risk of a precept being seen as discriminating against non-users or non-beneficiaries of the rail link, it is considered less likely a council tax precept could be viable as a funding source.

5 Funding scenarios

5.1 Introduction

This chapter presents our evaluation of possible funding scenarios, involving varying combinations of the different funding sources. In each case, total funding from the respective sources is compared to the cost for delivering the project. From the high “low case” and “high case” projections of funding potential, the funding gap under each scenario is identified, with a comparison of the figures in both current (2019) prices and in discounted terms (as a present value).

In three of the four scenarios (all apart from Upside Scenario B), it is assumed that the project will be required to cover operating costs for the services once the link is built; however, it is also assumed in these three scenarios that all incremental fares revenue generated by the project will be captured and used to cover such operating costs.

The following four funding scenarios have been analysed on this basis:

- Central Case Scenario – combining funding from station-related revenues, HIF contribution or equivalent, developer contributions (Section 106 and CIL payments) and business rates contributions. We consider this to be the most likely and plausible combination of potential funding sources.
- Upside Scenario A – this scenario assumes application of the four funding sources identified in the Central Case, plus using the Council Tax precept as an additional funding source.
- Upside Scenario B – whilst applying the same four main funding sources as the Central Case, this scenario assumes that once the infrastructure is built, no ongoing operating costs will need to be covered, i.e. train operations and infrastructure maintenance will be covered elsewhere. It is assumed the project will not be required to draw on train fares to cover operating costs, therefore fares revenues are also excluded.
- Downside Scenario – this scenario assumes the expected S106 contribution from the Long Marston developer (£8.5m in the low case or £17m in the high case) does not materialise, due to the said funds being used to cover overrunning costs for road network upgrades.

We have also undertaken the following two sensitivity tests, which have been applied to the central case funding scenario described above:

- Sensitivity test 1: no incremental passenger growth. Year-on-year growth remains at 0% (although new trips generated by the Long Marston development are still counted).
- Sensitivity test 2: capital investment costs increase by +50%.

The results of each scenario, plus the sensitivity tests, are set out in full in the sections that follow.

5.2 Central Case scenario

5.2.1 Overview

The Central Case scenario assumes the following four sources of funding are captured and used to help pay for the project:

- Station-related revenues, comprising advertising revenue from station billboards, car park charge increases and new station retail (see Section 4.3).
- Funding relating to proposed new residential developments in the Long Marston area (Garden Village and Meon Vale) including:
 - HIF contribution or equivalent (see Section 4.4);
 - Developer contributions (Section 106 and CIL payments) (see Section 4.5).
- Business rates contributions, capturing of a share of the incremental growth in business rates takings growth post project implementation. This includes both existing businesses in Stratford-upon-Avon, and new businesses at Long Marston Airfield (see Section 4.6).

We consider this to be the most likely and plausible combination of potential funding sources.

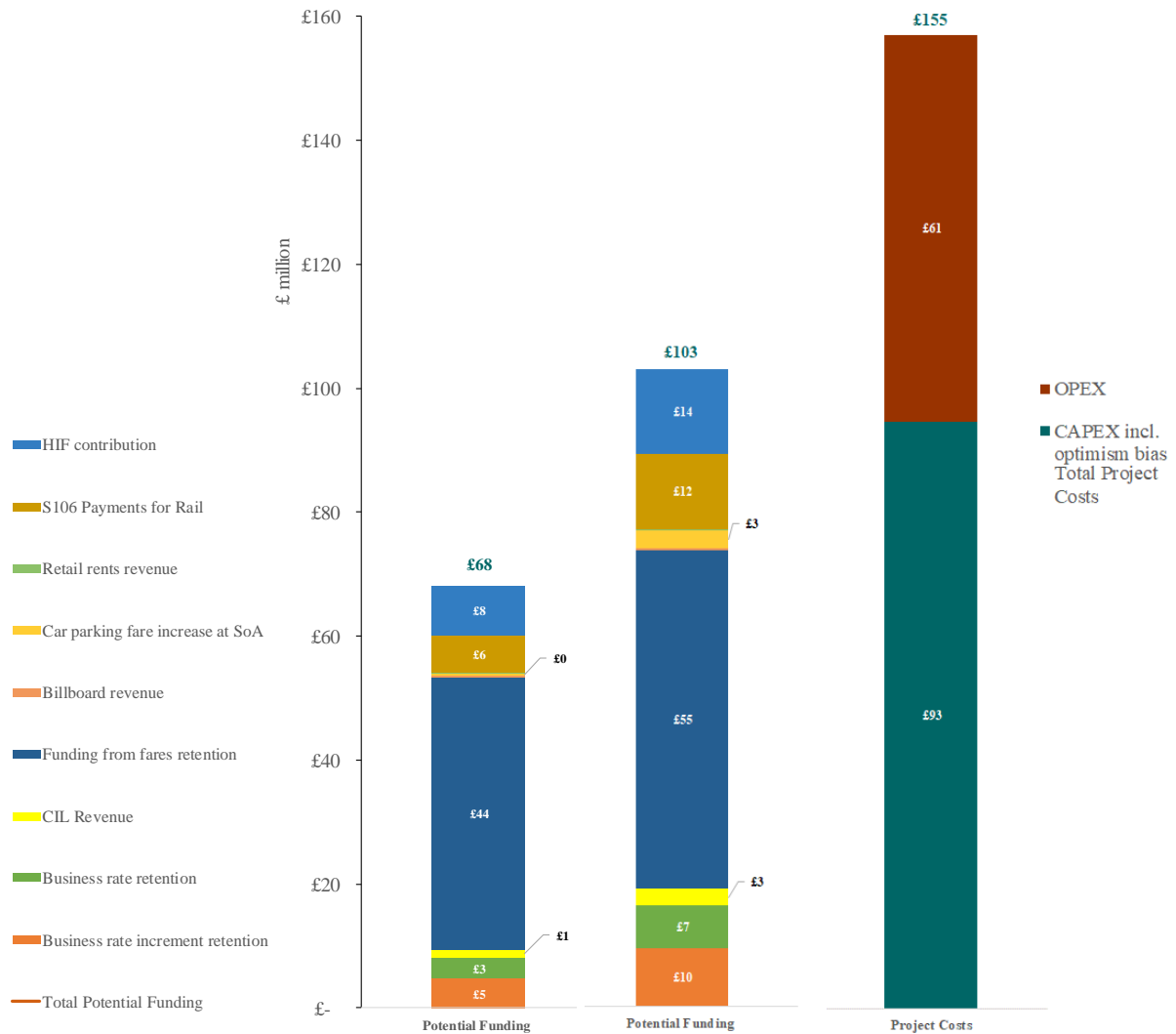
5.2.2 Results

The results of the Central Case funding scenario are shown in Table 8 / Figure 1.

Table 8: Central Case funding scenario – results

Project funding and costs, £m	Current prices		Present values (discounted)	
	<i>Low Case</i>	<i>High Case</i>	<i>Low Case</i>	<i>High Case</i>
Potential Funding				
Station-related Revenue Streams	1.4	6.5	0.7	3.4
HIF contribution or equivalent	12.2	21.4	7.9	13.8
Developer contributions (S106 / CIL)	10.2	20.5	7.4	14.8
Business rates contributions	16.2	32.8	8.1	16.4
<i>Sub-total - designated funding sources</i>	40.1	81.2	24.2	48.5
Fares retention	87.3	111.5	43.9	54.9
Total funding	127.4	192.8	68.1	103.5
Project Costs				
CAPEX incl. optimism bias	111.3	111.3	93.3	93.3
OPEX	118.2	118.2	61.3	61.3
Total costs	229.5	229.5	154.6	154.6
Summary				
% funding need met	55%	84%	44%	67%
<i>Residual funding gap</i>	102.2	36.8	86.5	51.1

Figure 1: Central case funding scenario – results (present values)



5.2.3 Conclusion

The selected funding sources identified in the Central Case will provide, in real terms (current prices) a combined contribution (in PV terms) of between £24m (low case) and £49m (high case). Combined with additional rail fares, this leads to a total funding amount of between £68m (low case) and £103m (high case). However, construction and subsequent operation of the rail link (up to 2049) will cost, in PV terms, £155m, resulting in a shortfall of between £51m and £87m.

Overall, the sources identified have the potential to generate a significant amount of funding, but this only partially covers the amount needed for the project. A substantial volume of further funding would be required to deliver the project.

5.3 Upside Scenario A – plus Council Tax precept

5.3.1 Overview

Upside Scenario A assumes the same four sources of funding apply as in the Central Case, as well as assuming additional fares revenues are retained (see section 5.2.1).

In addition, it also assumes that a council tax precept, as described in section 4.7, is implemented and the funds allocated to the project.

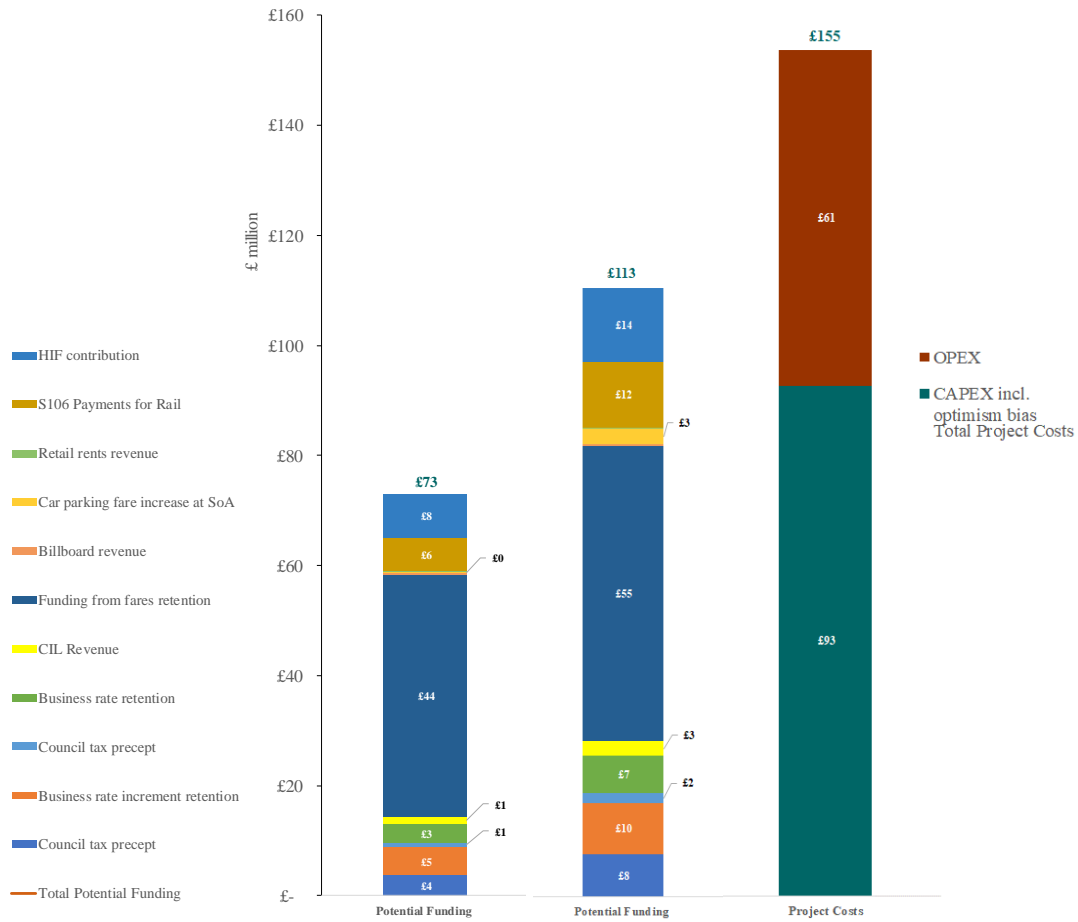
5.3.2 Results

The results of the Upside Scenario A are shown in the table below and the figure overleaf.

Table 9: Upside Scenario A – results

Project funding and costs, £m	Current prices		Present values (discounted)	
	Low Case	High Case	Low Case	High Case
Potential Funding				
Station-related Revenue Streams	1.4	6.5	0.7	3.4
HIF contribution or equivalent	12.2	21.4	7.9	13.8
Developer contributions (S106 / CIL)	10.2	20.5	7.4	14.8
Business rates contributions	16.2	32.8	8.1	16.4
+ Council tax precept	9.6	19.2	4.9	9.9
Sub-total - designated funding sources	49.7	100.5	29.1	58.4
Fares retention	87.3	111.5	43.9	54.9
Total funding	137.0	212.0	73.0	113.3
Project Costs				
CAPEX incl. optimism bias	111.3	111.3	93.3	93.3
OPEX	118.2	118.2	61.3	61.3
Total costs	229.5	229.5	154.6	154.6
Summary				
% funding need met	60%	92%	47%	73%
Residual funding gap	92.6	17.6	81.5	41.2

Figure 2: Upside Scenario A – results (present values)



5.3.3 Conclusion

While the addition of a council tax precept as an additional funding source further increases the availability of funding for the project, a significant funding gap remains.

5.4 Upside Scenario B – no operating costs (or fares revenue)

5.4.1 Overview

Whilst applying the same four main funding sources as the Central Case, Upside Scenario B assumes that once the infrastructure is built, no ongoing operating costs will need to be covered. This means that no train operations or infrastructure maintenance will be incurred. However, it is assumed the project will not be able to draw on train fares to cover operating costs, therefore fares revenues are also excluded.

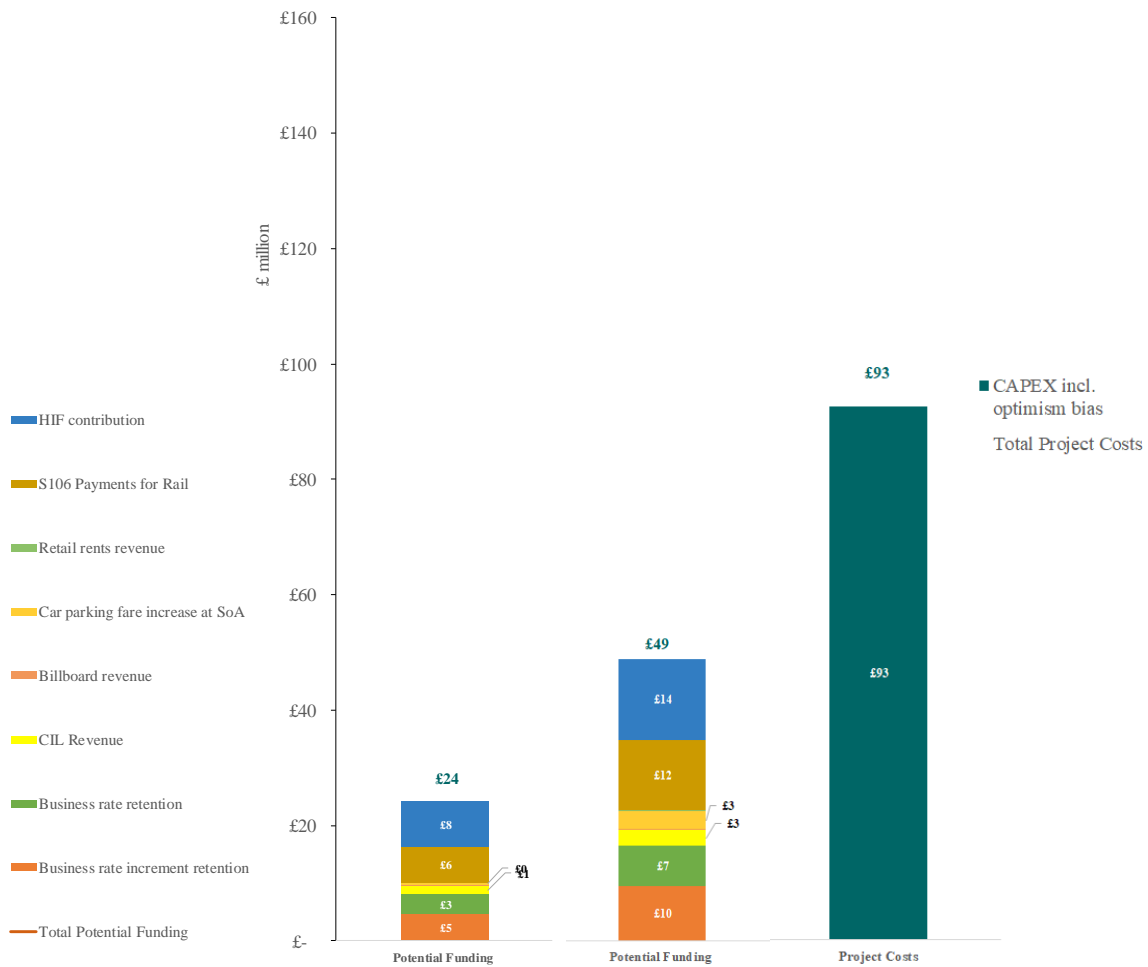
5.4.2 Results

The results of the Upside Scenario B are shown in the table and the figure overleaf.

Table 10: Upside Scenario B – results

Project funding and costs, £m	Current prices		Present values (discounted)	
	Low Case	High Case	Low Case	High Case
Potential Funding				
Station-related Revenue Streams	1.4	6.5	0.7	3.4
HIF contribution or equivalent	12.2	21.4	7.9	13.8
Developer contributions (S106 / CIL)	10.2	20.5	7.4	14.8
Business rates contributions	16.2	32.8	8.1	16.4
Sub-total - designated funding sources	40.1	81.2	24.2	48.5
Fares retention	0.0	0.0	0.0	0.0
Total funding	40.1	81.2	24.2	48.5
Project Costs				
CAPEX incl. optimism bias	111.3	111.3	93.3	93.3
OPEX	0.0	0.0	0.0	0.0
Total costs	111.3	111.3	93.3	93.3
Summary				
% funding need met	36%	73%	26%	52%
Residual funding gap	71.2	30.1	69.1	44.7

Figure 3: Upside Scenario B – results (present values)



5.4.3 Conclusion

Upside Scenario B, by excluding operational costs, further reduces the overall funding gap. This is because the cost saving exceeds the revenue generated by passenger fares, resulting in a saving in net terms if operation and maintenance of the link is excluded from the funding appraisal. However, the remaining funding sources – most of which will only accrue over the long term – still only cover part of the upfront construction cost for the project. As a result, while this upside scenario leads to the smallest funding gap of all the scenarios in absolute terms – of between £45m and £69m in PV terms – this is still a considerable shortfall and is only slightly lower than the Central Case scenario.

5.5 Downside Scenario – no S106 contribution

5.5.1 Overview

This scenario assumes the expected S106 contribution from the Long Marston Airfield developer (£8.5m in the low case or £17m in the high case) does not materialise, due to the said funds being used to cover overrunning costs for road network upgrades.

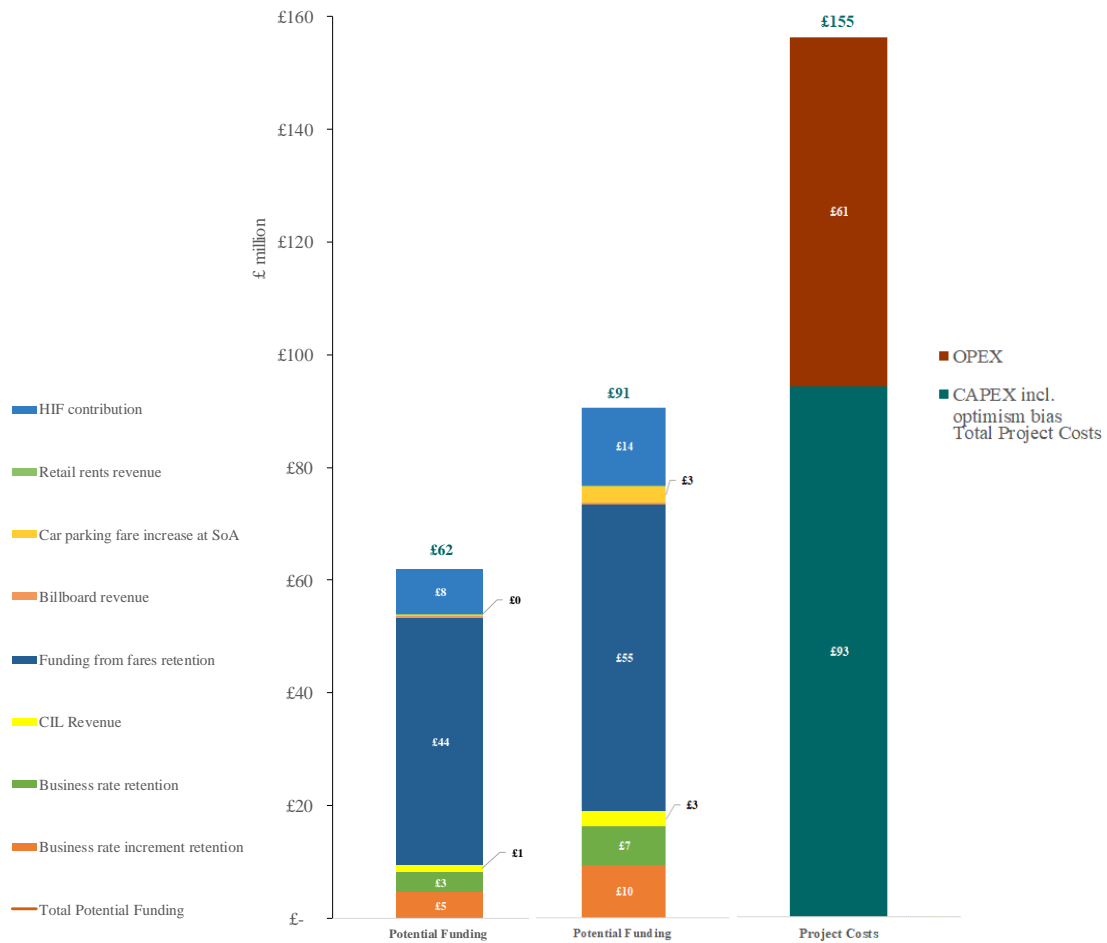
5.5.2 Results

The results of the downside scenario are shown in the table and the figure overleaf

Table 11: Downside Scenario – results

Project funding and costs, £m	Current prices		Present values (discounted)	
	Low Case	High Case	Low Case	High Case
Potential Funding				
Station-related Revenue Streams	1.4	6.5	0.7	3.4
HIF contribution or equivalent	12.2	21.4	7.9	13.8
Developer contributions (S106 / CIL)	1.7	3.5	1.3	2.7
Business rates contributions	16.2	32.8	8.1	16.4
Sub-total - designated funding sources	31.6	64.2	18.1	36.4
Fares retention	87.3	111.5	43.9	54.9
Total funding	118.9	175.8	62.0	91.3
Project Costs				
CAPEX incl. optimism bias	111.3	111.3	93.3	93.3
OPEX	118.2	118.2	61.3	61.3
Total costs	229.5	229.5	154.6	154.6
Summary				
% funding need met	52%	77%	40%	59%
Residual funding gap	110.7	53.8	92.6	63.3

Figure 4: Downside Scenario – results (present values)



5.5.3 Conclusion

The removal of the S106 contribution from Long Marston Airfield further widens the funding gap for the project. For any such scenario to be avoided, the partner local authorities would need to work with the developer to ensure in-principle support for the rail link and the related contribution is retained, to mitigate the chance of this scenario materialising .

5.6 Sensitivity tests

The following two downside sensitivity tests have been undertaken:

- Sensitivity test 1: no incremental passenger growth. Year-on-year growth remains at 0% (although new trips generated by the Long Marston development are still counted).
- Sensitivity test 2: capital investment costs increase by +50%.

The results of the above sensitivity tests are shown in the tables overleaf.

Table 12: Results – Sensitivity 1 (no incremental passenger growth)

Project funding and costs, £m	Current prices		Present values (discounted)	
	Low Case	High Case	Low Case	High Case
Potential Funding				
Station-related Revenue Streams	1.4	6.5	0.7	3.4
HIF contribution or equivalent	12.2	21.4	7.9	13.8
Developer contributions (S106 / CIL)	10.2	20.5	7.4	14.8
Business rates contributions	16.2	32.8	8.1	16.4
Sub-total - designated funding sources	40.1	81.2	24.2	48.5
Fares retention	72.4 (no year-on-year growth)	72.4 (no year-on-year growth)	37.1 (no year-on-year growth)	37.1 (no year-on-year growth)
Total funding	112.5	153.6	61.3	85.6
Project Costs	<i>Low Case</i>	<i>High Case</i>	<i>Low Case</i>	<i>High Case</i>
CAPEX incl. optimism bias	111.3	111.3	93.3	93.3
OPEX	118.2	118.2	61.3	61.3
Total costs	229.5	229.5	154.6	154.6
Summary	<i>Low Case</i>	<i>Low Case</i>	<i>Low Case</i>	<i>Low Case</i>
% funding need met	49%	67%	40%	55%
Residual funding gap	117.1	75.9	93.3	69.0

Table 13: Results – Sensitivity 2 (construction cost increase + 50%)

Project funding and costs, £m	Current prices		Present values (discounted)	
	Low Case	High Case	Low Case	High Case
Potential Funding				
Station-related Revenue Streams	1.4	6.5	0.7	3.4
HIF contribution or equivalent	12.2	21.4	7.9	13.8
Developer contributions (S106 / CIL)	10.2	20.5	7.4	14.8
Business rates contributions	16.2	32.8	8.1	16.4
Sub-total - designated funding sources	40.1	81.2	24.2	48.5
Fares retention	87.3	111.5	43.9	54.9
Total funding	127.4	192.8	68.1	103.5
Project Costs	<i>Low Case</i>	<i>High Case</i>	<i>Low Case</i>	<i>High Case</i>
CAPEX incl. optimism bias	167.0 (+50% higher)	167.0 (+50% higher)	139.9 (+50% higher)	139.9 (+50% higher)
OPEX	118.2	118.2	61.3	61.3
Total costs	285.2	285.2	201.2	201.2
Summary	<i>Low Case</i>	<i>Low Case</i>	<i>Low Case</i>	<i>Low Case</i>
% funding need met	45%	68%	34%	51%
Residual funding gap	157.8	92.4	133.1	97.7

The first sensitivity test, analysing the impact of no intrinsic year-on-year passenger demand growth, leads to reduction in funding (vs. the Central Case) of

between £7m (low case) and £18m (high case) as the intrinsic growth in passenger fares is foregone. The second test shows the impact of an escalation in construction costs of 50% which leads to substantial growth in the residual funding gap of almost £50m in PV terms.

Overall, both sensitivity tests illustrate the intrinsic risk associated with the project, which is principally due to the scale of capital investment cost involved, relative to the modest revenues the project can directly generate. This makes the project sensitive to cost escalations or lower than expected revenue growth, which would further widen the already substantial funding gap for the scheme.

5.7 Summary

A number of potential funding sources exist that could feasibly be utilised to support the project. Accessing and applying such funding would require strong stakeholder support, a coherent proposal for delivering the project, a clear articulation of the benefits and a robust business case underpinning the project proposals. The level of contribution, whilst hard to predict exactly, could be significant – with the four sources identified in the central case scenario providing between £24m and £49m in PV (discounted) terms.

However, the scale of capital investment needed for the project is substantial. There remains a significant shortfall in the funding that would be needed to fully cover the project's costs. The extent of funding accessed through the sources identified in this study would only be likely to cover between ca. 25% and 50% of construction cost (in PV terms), and ongoing operation of train services would require further subsidy.

Appendix A: discussions with stakeholders

Telephone Interview notes

[20.09.2018] Interview with David Buckland, Executive Director, and Paul Harris, Planning Policy Officer, Stratford District Council

Inter-urban connectivity

David Buckland (DB) emphasised the importance for Stratford's economy to be well connected, particularly to London – noting this is currently a key area of focus for both district and county authorities. Journey times are currently slow, with interchanges generally needed to reach London and many other destinations. Improvements on current services could bring significant local benefits.

Scope of study

DB specified the importance of determining the most affordable and proportionate solution to tackle connectivity challenges between Long Marston Airfield and Stratford is. This includes investigating whether reinstating a heavy-rail solution would be the most appropriate approach, noting other approaches could be much cheaper, e.g. light rail where there would be no need for level crossing avoidance (which is expensive).

DB and Paul Harris (PH) suggested procurement of a rail or light rail could take place through the local authority in order to keep closer control of costs.

Housing development and financial contributions

DB noted that the development at Long Marston Airfield may not have a substantial bearing on whether or not the rail link is financially viable. It was noted that Cala's financial contribution to local infrastructure developments through their proposed development at Long Marston Airfield is not yet a requirement but a voluntary contribution to mitigate the impact of Long Marston Airfield Garden Village onto the local transport infrastructure, especially the local roads network. Were no transport capacity improvements going to happen between Stratford and Long Marston, then the Garden Village project could not take place.

The proposed development at Meon Vale (next to Long Marston) has received planning permission.

Local business context

DB clarified the role and nature of the local business improvement district (Stratforward). Mainly composed of retailers, the goal of Stratforward is to promote the town and bring in as many visitors as possible. According to David Buckland, although the retail sector is struggling in the UK, it is surviving in Stratford thanks to visitors. However, DB believes any increase in business rates

would be highly controversial to implement and would only represent a small contribution towards the rail line reinstatement.

Many international visitors also come to Stratford, however many of them (3-4 million a year) come in tour buses, spending only a limited amount of time (and money) in the town.

Local population

Because the existing local population at Stratford-on-Avon would also directly benefit from the proposed transport infrastructure improvements (e.g. through seeing their roads relieved from a share of traffic), there is a case for residents to contribute to the costs of reinstating the line.

[18.10.2018] Interview with Michael Emmett, Strategic Land Director for Cala Group Ltd, in charge of the Long Marston Airfield Garden Village (LMA) development

Infrastructure development contribution

The Long Marston Airfield project is at a pivotal stage – some uncertainty as to whether the project will happen at all.

Michael Emmett (ME) took over as project director a few months ago. View that Cala may have previously over-stated the level of financial contribution that could realistically be offered to support the rail reinstatement.

The key issue at present is that the investments in road improvements are far more expensive than originally expected – thereby limiting the scope for any residual funding to be kept for rail. Road improvements (especially the bypass) are an absolute priority for Warwickshire County Council.

Cala has made available a £120m infrastructure investment package. Initially budgeted at £40m, the road improvement works could take up to 100% of that package.

Other elements of the infrastructure package are already agreed upon, such as schools.

Cala and local authorities are currently researching alternative funding options for the road investments in order to ensure the project actually obtains planning permission.

Importance of rail connectivity at LMA

Although ME sees public transport as an important aspect of the development, he does not believe a rail station at LMA would substantially benefit Cala's project (in the short / medium term) compared to road capacity improvements.

Transport options at LMA

ME firmly believes the cycleway between LMA and Stratford should remain in place, as it is used extensively.

ME considers other solutions such as light-rail and/or autonomous-bus systems could be appropriate in the wider physical / geographic context of Stratford upon Avon and the LMA.

[19.10.2018] *Interview with Fraser Pithie, Shakespeare Line Promotion Group*

Fraser Pithie (FP) believes that for local businesses to agree to contribute to rail reinstatement through business rates, the Warwickshire LEP would have to contribute equally.

The Shakespeare Line Promotion Group has reviewed its position regarding a rail reinstatement (18 months ago): it is no longer acceptable to support the reinstatement if no clear economic benefits are identified. The Group has identified that 90% rail users and 94% local businesses would like an economic impact study of the reopening to be conducted.

- FP considers that the economic benefits of the rail reinstatement were not well articulated in the 2012 business case report.
- FP believes the probability of achieving a 12% growth in rail demand at SoA is a given.
- FP is pleased that capacity enhancement works will take place at Leamington Spa in 2024, which will help rail connectivity to Stratford more generally.

[19.10.2018] *Interview with Joseph Baconnet, Director of the Stratford BID*

Local businesses' perspective on transport in SoA

- JB believes a link between Stratford upon Avon and Honeybourne would not be viable, however it continues to be proposed as a potential solution.
- Rail connections to / from Stratford are often unreliable and not sufficiently frequent, hence less used: there exists subconsciously a culture of not using rail.
- JB believes very few people use rail to commute
- JB is concerned that Stratford feels increasingly isolated from London
 - The rate and type of growth in Stratford's economy would be different were it better connected to London.
- Better connectivity from Long Marston would also benefit the economy and open up jobs.
 - Local businesses in Stratford struggle to access labour
 - Hence it is crucial that the future population at Long Marston have a reliable commuting option to and from Stratford.

Upgrading of existing connections (through Leamington Spa to London)

- JB believes it is a priority – local economy is highly dependent visitors originating in London area
 - When the Leamington Spa rail service was disrupted, one shop in Stratford observed a 3% drop in sales.
- Upgrade of existing services is important, given the local road infrastructure is operating at capacity and congestion is high.

Stratford - Honeybourne rail reinstatement

- As things stand currently, Long Marston Garden Village will be a settlement that is entirely dependent on car transport.
- Providing Stratford with a regular through service to London, however, would contribute to a changing perception of local residents with regards to rail in the region.

Feasibility of funding reinstatement through supplement on business rates

- Unlikely business would be willing to pay any business rates supplement.
- Local businesses already pay for the BID
- If businesses would pay a supplement on their business rates, they would probably also expect free parking in Stratford to be provided to improved road access in parallel.

Alternative transport options to LMA (e.g. autonomous bus system)

JB suggested it would first be necessary to demonstrate there would actually be sufficient demand to and from Long Marston for an alternative / innovative solution, and that it would be viable.

[24.10.2018] Interview with Paul Alliott, Engineering Director at Rail Alliance, managing and operating the Long Marston Rail Depot

Current use of Long Marston train facility

- Long Marston (LM) train depot is used to repair wagons, test trains and as a training facility as well.
- The rail line between Honeybourne and Long Marston is still in place and is used regularly for manoeuvring trains in to / out of the site.

Public transport at LMA / SoA

- Rail Alliance would be in support of public transport solutions developed around Long Marston and the Garden Village. However, it could have an

impact on the freedom of movement of rolling stock that Rail Alliance regularly needs. It would be impossible to fit their current schedule of train manoeuvres on and off the branch, if frequent passenger services were operating up and down the line.

- If day services were reinstated on the line, Rail Alliance would have to operate its train movements by night which would increase its costs.
- With passenger services being reinstated, higher quality track would also need to be provided which would in turn be likely to lead to higher track access charges – a further cost increase for Rail Alliance
- Public transport is not directly relevant to Rail Alliance’s business operation, as its workforce is mostly from local locations not connected to the rail network.
- The level crossing above Station Road that would be necessary if the line were to be reinstated would also disrupt Rail Alliance’s operations

Technical aspects of PT enhancements along the ancient Honeybourne – SoA link

- Any kind of transport system going forward (including a gated autonomous bus system) would require track realignment
- Overall, PA considers that heavy rail solutions would definitely not be feasible (from either an economic or a technical perspective)

Other developments taking place around LM

- Meon Vale: in second phase of housing; more to come

[30.10.2018] Interview with Helen Peters, Chief Executive at Shakespeare’s England

- Current rail connectivity to / from Stratford is not good
- Chiltern franchise is working on improving frequency from Stratford to London Marylebone – and an upgraded service is expected from May 2019

Tourists’ use of train

- Rail is not the best option currently for tourists to come to Stratford from London
- Only 6% of tourists come to Stratford by train compared with a 10-12% UK average.

Tourists’ transport mode

- Currently the most commonly used transport mode for tourists is coach travel.
 - This type of tourist is not likely to switch to train.

- Impact of rail improvements on tourism won't be felt before at least a couple of years
- However, tourists coming from London to visit Stratford just for the day could benefit significantly from better rail connectivity, so this market is worth targeting.

General rail connectivity in SoA

- Current train service from SoA to Birmingham takes around an hour; this could be improved by having regular non-stop trains that do not stop at every single station.
- Current poor / slow transport connectivity does not help employers access the labour they need, e.g. from the Birmingham labour market.
- In general, the priority should be on improving service frequency and quality between Stratford and London

This page has been left intentionally blank