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# Newbury Railway Station Improvement and Interchange Enhancement Scheme

Appraisal Specification Report (May 2018)

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## 1. Introduction

1.1 The Berkshire Local Transport Body (BLTB) is responsible for the management of the major transport scheme funding for the Thames Valley Berkshire Local Enterprise Partnership (TVB LEP) area. West Berkshire Council (WBC) and Great Western Railway (GWR) Limited are jointly promoting a scheme to improve multi-modal interchange at Newbury Railway Station, including the upgrade of station buildings and facilities. The scheme has been granted Programme Entry Stage, and is subject to the submission of a satisfactory business case before it can formally receive full funding approval from the BLTB.

### *Purpose of report*

1.2 The purpose of this Appraisal Specification Report (ASR) is to identify appropriate methodologies for the various elements of appraisal required for the Major Scheme Business Case (MSBC). It will provide a basis and reference for the work undertaken and ensure that all parties, including the TVB LEP's independent transport assessors, are aware of the methods, assumptions, timescales and risks.

1.3 The methodologies outlined in this report are consistent with the Transport Appraisal Process as stated in Section 2.12.2 of the Department for Transport's Transport Appraisal Guidance (TAG).

- Proposed approach to modelling and forecasting;
- The proposed methodology for assessing each of the sub-impacts presented within the AST;
- Proposed level of design or specification which will inform the cost estimation, and how better cost information will be obtained; and,

1.4 In accordance with the TAG requirements, an Appraisal Specification Summary Table is included at the end of this ASR at section 5.

### *Scheme location and description*

1.5 Newbury Station is located in West Berkshire within the Thames Valley Berkshire LEP area. The station is well located within the town centre. The location is shown in Figure 1.0

1.6 Many changes have either happened or are planned in the coming few years at and around the station. The first major change has been the new footbridge and the introduction of lifts (due to be operational at the end of August 2018). This new footbridge has been necessary to deliver the electrification of the line as the existing footbridge did not provide the required clearance. The new footbridge is at the other end of the station buildings to the existing footbridge which is now closed. The crossing point has therefore moved further west.

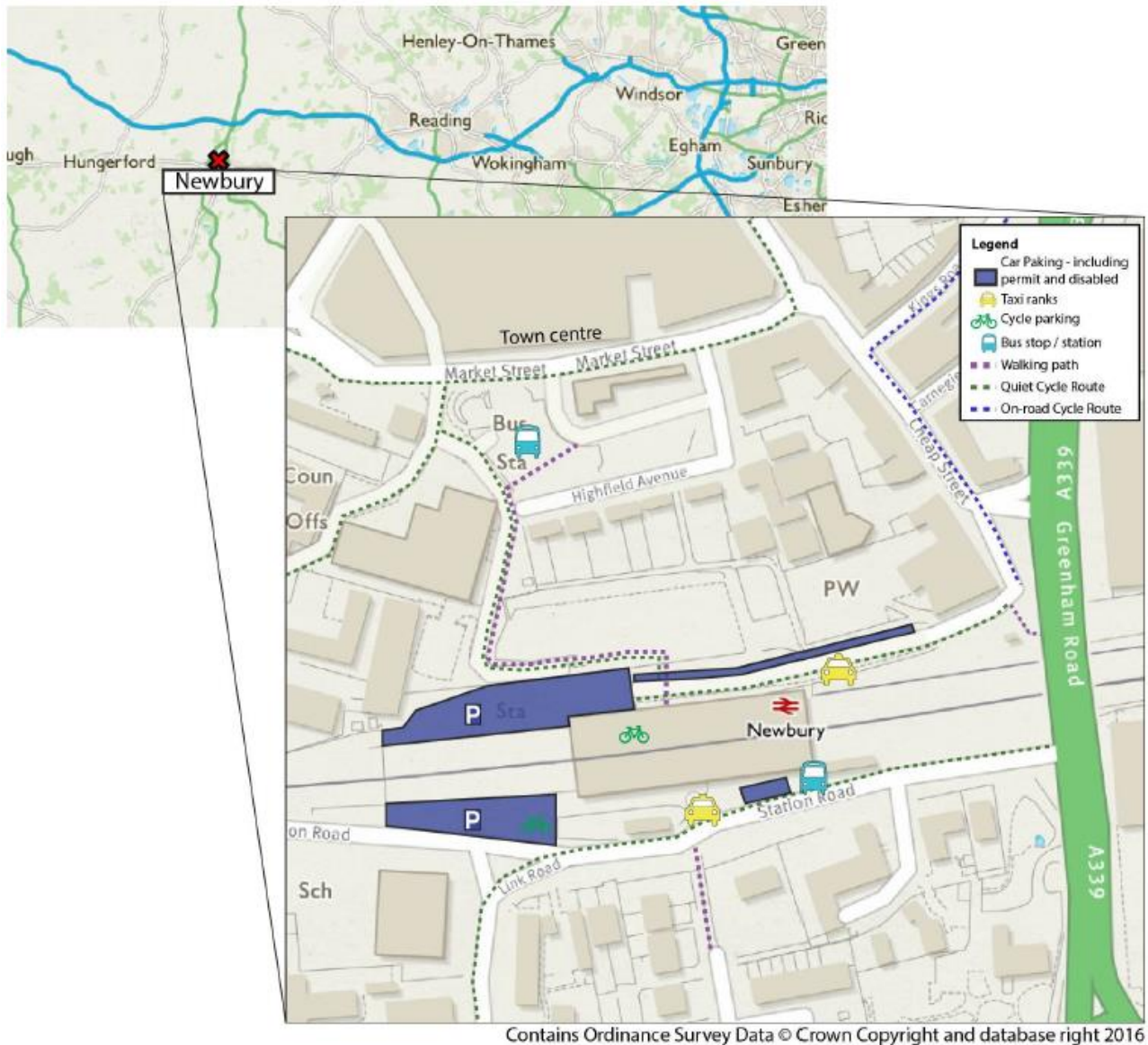
1.7 The electrification of the line is another improvement that will be delivered in early 2019 and will benefit passengers and see the introduction of new trains which will have more seats than is currently the case.

1.8 A mixed use development immediately to the north of the station has received planning permission and is due to commence on site in the Autumn of 2018. This development (known as the Market Street development) will deliver 232 dwellings, a multi-storey car park, some retail provision, a new walkway and cycle

route linking the town to the rail station and a new forecourt area serving the north of the rail station.

1.9 It is these improvements outlined above and the challenges and issues that Newbury station faces (see section 3) that has led West Berkshire Council (WBC) and Great Western Railway (GWR) to work together to develop this scheme which is the subject of this ASR and for which a funding contribution is sought from the TVB LEP. When delivered, this jointly promoted scheme will work with the other developments and improvements to complete the masterplan of improvements to the wider station area.

Figure 1.0 Newbury Rail Station Location Map



1.10 The station fabric and buildings at Newbury are out-dated and in need of change to incorporate the revised location of the on-station footbridge and lifts and pedestrian and cycle corridor from the north to be provided through the Market Street development. Great Western Railway has designed a package of improvements to the station to meet the needs of travellers in the future. This element of the scheme will deliver:

- New ticket hall / office;
- New cycle hub;
- New cycle parking
- New retail space;
- Waiting room refurbishment;
- New 2 storey office (business start-up) development;
- Relocated gateline;
- New canopy; and
- New refurbished toilets.

1.11 The area to the south of the station will be improved by WBC in the following ways:

- Creation of small forecourt area with simple landscaping feature
- Increased bus interchange facilities to accommodate 3 buses
- New retaining structure to enable widened footway
- Revised parking and taxi areas
- New parking areas created
- 10 minute waiting zone introduced
- Creation of 20 mph zone
- Introduction of simple drainage features

1.12 These improvements to the south side of the station will create a welcoming waiting, boarding, and alighting environment that encourages people to travel by bus and rail in preference to the private car. This interchange will also help to deliver sustainable travel links to the Sandford Park development (up to 1,500 dwellings) by reducing journey times to the station by bus and improving the environment for pedestrians and cyclists.

1.13 Alongside the strands of this project focusing on the improvements to the station buildings and creating an attractive interchange area, there has been a group investigating the flooding issues at the station. Thames Water, Network Rail, GWR and WBC have been working together to understand why the station regularly suffers from severe flooding. The group has carried out detailed investigations and developed some short, medium and longer term solutions. The short term measures have been delivered and the progress is underway with the medium term solutions. This will help to ensure that the improvements made under this LEP supported scheme are less likely to be damaged by a flooding incident.

## 2. Objectives of the Scheme

2.1 Four main objectives have been defined to directly address the key problems and issues identified by the project, and to guide the desired outcomes. They have been developed to align with the local policies of WBC as co-scheme promoter, the TVB LEP Strategic Economic Plan, and the Government's national planning and transport policies.

2.2 Table 2.0 below outlines the desired outcome for each of the four objectives for the project.

**Table 2.0 Scheme Objectives**

Objective	Desired Outcomes
1) Encourage sustainable access and improve passenger interchange and facilities.	<p>Increase in the number of passengers choosing sustainable modes of travel to access the station.</p> <p>Improve the interchange arrangements outside the south entrance.</p> <p>Improved bus interchange on Station Road to encourage bus travel to the station.</p> <p>Improve Vodafone bus stop facilities.</p> <p>Increase the number of secure cycle parking and CCTV at the station.</p> <p>Assist in supporting sustainable travel from major housing developments in the Newbury area.</p>
2) With the Market Street development and northern station building, create a vibrant and attractive gateway to Newbury town centre.	<p>Create a clearly defined pedestrian and cycle route from the north entrance, through the Market Street development to connect with the town centre</p> <p>Provide clear and direct access between bus stops on Market Street with the station.</p> <p>Reduce potential conflict between users outside the north entrance to the station.</p>
3) Modernise and replace the station's buildings (south side) to help meet future demand for rail travel and improve customer waiting and retail provision and introduce business start-up units.	<p>Enhance the visual quality of the station area through the rejuvenation and replacement of station buildings.</p> <p>Relocate the ticket office and platform entrance/gatelines closer to the new platform footbridge.</p> <p>Enhanced cafe and retail facilities within the station.</p> <p>Delivery of a cycle hub within the station.</p> <p>Relocate Network Rail maintenance compound away from the car park on the south side of the station.</p> <p>Meet the anticipated higher demand for car parking as a result of passenger growth.</p> <p>Achieve improved passenger satisfaction levels with station facilities.</p>
4) Investigate the impact of flooding on the station and users of the station and help contribute to any solutions	<p>Clear links with Project Group seeking to address the flooding issues in this area.</p> <p>Improved surface water drainage in and around the station</p>

where possible.	area. Provide greater resilience to withstand future extreme rainfall episodes.
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### 3. Challenges and Issues

3.1 The need for improvements at Newbury Rail Station has been talked about for a number of years and consultation has taken place in connection with this and a leaflet produced to help to lobby for these improvements. We are now in a period where some of these improvements have started to be delivered (new passenger bridge and lifts) and many more are planned.

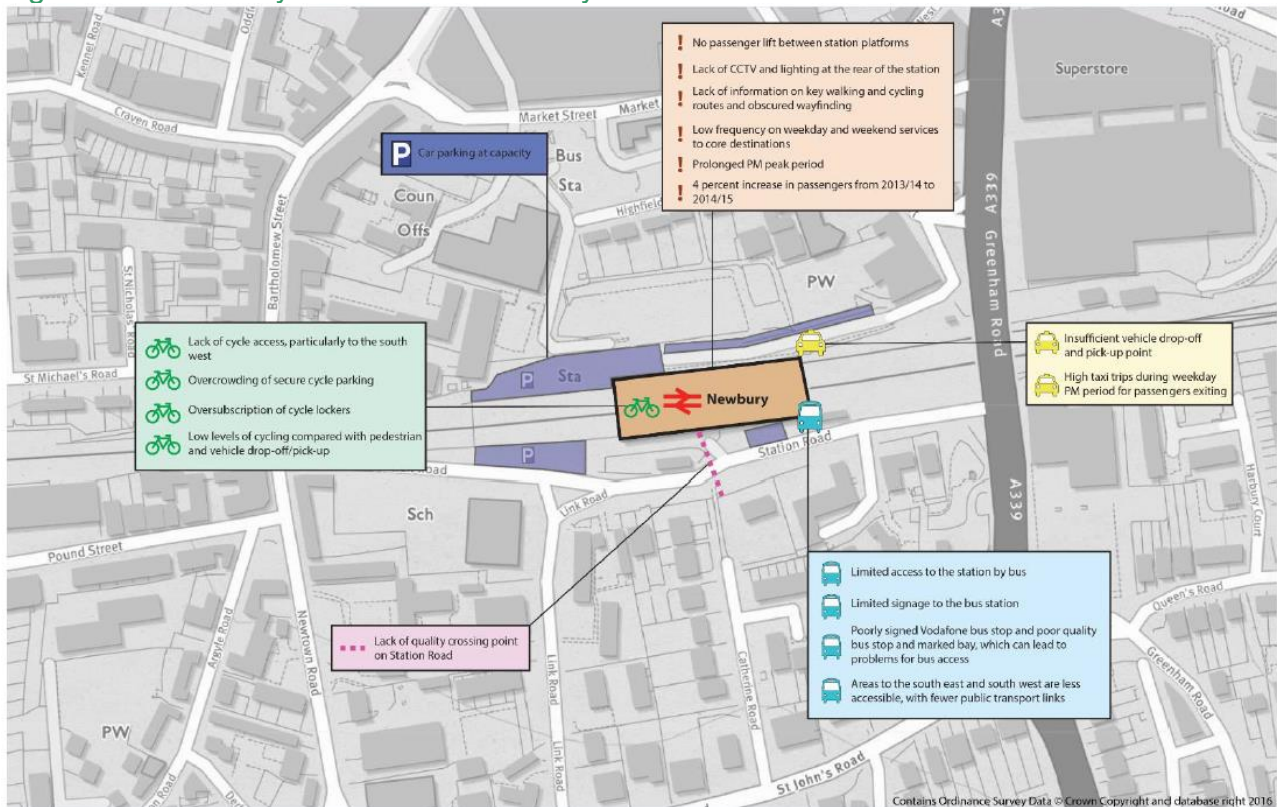
3.2 Table 3.0 below provides a summary of the main issues facing passengers using Newbury Station. Many have been identified through the work that was carried out on the Station Travel Plan in 2016. Most of the issues are then displayed in Figure 3.0 (taken from the Travel Plan work).

Table 3.0 Issues Summary Table

Issue identified	Opportunities for addressing the issue
<b>No passenger lift</b> between station platforms	This is being addressed through the introduction of a new footbridge (in place) with lifts to be operational at the end of August 2018
<b>Car parking</b> at capacity	A new multi storey car park with additional capacity is being funded as part of the station improvement scheme and delivered via the Market Street development.
<b>Limited access to the station by bus</b> , limited availability of buses, need for improved signage	The existing bus station will be relocated further away from the rail station. The scheme being promoted creates improved access for buses at the south side of the station to allow for direct access. Improved overall signage is part of the scheme.
The <b>Vodafone bus stop</b> is not clearly signed and doesn't have a good quality bus stop or marked bay, which can lead to problems for bus access	This will be addressed by the scheme to create an attractive interchange area at the south side of the station.
Lack of <b>CCTV and lighting</b> at the rear of the station	CCTV and improved lighting is part of the LEP supported scheme.
Lack of <b>cycle access</b> to the station, particularly to the south west	Routes to the station will be looked at as part of the ongoing work on the Station Travel Plan and opportunities to improve these will be sought.
Overcrowding of secure <b>cycle parking</b>	Additional funding has been awarded through the Cycle Rail Fund for up to 400 new cycle parking spaces.
Oversubscription of <b>cycle lockers</b>	The creation of a cycle hub and the more secure cycle parking this provides will help to address this.
Lack of quality pedestrian <b>crossing point</b> on Station Road	This is addressed through the scheme for the south side of the station.
Insufficient designated vehicle <b>drop-off and pick-up point</b>	A formal waiting area for drop off / pick up will be created at the south of the station. The Market Street scheme also improves this on the north side of the station
Lack of <b>information</b> on key walking and cycling routes and obscured <b>wayfinding</b> to the town	Wayfinding to the town centre and transport links will be improved and clear information provided

centre	for walking and cycling routes.
<b>Areas to the south east and south west</b> of Newbury are less accessible, due to their more rural locations and fewer public transport links	The public transport links that serve these areas will look to be improved by being able to directly link with interchange created on the south side of the station. Cycle links will also look to be improved as new development happens to the south of the town.
<b>Significant amount of taxi trips generated in the weekday PM period</b> (concentrated between 1500-2000) for passengers exiting the station	A more organised arrangement of the highway area to the south side of the station and the work being delivered on the north side of the station will improve the arrangements for those accessing taxis. The presence and signing of better bus links will also help to address any crowding of or waiting for taxis.
<b>Cyclists</b> do not represent significant movements in comparison with pedestrians, and private vehicle drop offs/pick ups	Significantly improved facilities for cyclists at the station through the creation of a cycle hub and new cycle parking, along with opportunities to create better routes to the station should help to address this and assist with congestion and air quality issues in the local area.
<b>Waiting rooms</b> are not well used and lack facilities	Waiting room planned to be part of a wider concourse area with retail provision (coffee bar) to make it more attractive and improve security.
<b>Disabled toilet facilities</b> are combined with <b>baby changing facilities</b>	These will have separate provision as part of the scheme
<b>Café and retail provision</b> is small and limited	Improved retail provision planned as part of the scheme
<b>Gatelines</b> are not in a good location (north side of station) and cause congestion issues on platform in busy periods.	This will be addressed by the scheme as new locations proposed for the gatelines

Figure 3.0 Summary of issues at Newbury Rail Station





3.3 The scheme proposed is extremely positive in the way that it helps to address many of the issues identified in Table 3.0. The following section discusses the ways in which the scheme will be assessed to demonstrate the benefits that it will bring.

## 4. Appraisal Methodology

4.1 This section sets out the ways in which various aspects of the scheme will be assessed within the Full Business Case. It discusses the approach and the guidance it will follow /and covers economic appraisal, environmental impacts, social impacts and public accounts impacts.

### *Economic Appraisal*

4.2 The economic appraisal is being developed in a proportionate manner and to be consistent with DfT's guidance set out in WebTAG, which aligns with HM Treasury's Green Book guidance. Our approach is informed by our extensive experience of developing station investment funding cases encompassing a wide range of enhancements to stations and their local area.

4.3 Scheme options have been prepared and assessed with a resulting preferred option being developed, as will be described in the Strategic Case. The scheme will be implemented by 2021.

### *Scheme Costs*

4.4 For the economic appraisal the cost inputs will encompass:

- Capital cost estimates provided by WBC's cost advisors
- Capital cost expenditure profile provided by WBC's cost advisors
- Change in station operating costs advised by GWR, who operate the station
- Change in car park operating costs advised by GWR

As a station project the appropriate Optimism Bias uplift will be between 4% and 51% (TAG A1.2).

### *Scheme Benefits*

4.5 The benefits for the scheme can be categorised as financial or socio-economic, which encompasses environmental impacts. These may be quantifiable or qualitative benefits and all are presented in the Economic Case and the AST. Our assessment of benefits will be consistent with industry practice and a pragmatic treatment of the data available. No demand modelling is being undertaken as part of the appraisal.

4.6 The table below sets out the benefit streams we anticipate capturing, subject to finalisation of the preferred scheme, availability of data and materiality of impact. The impacts for the natural environment have been scoped out due to the urban nature of the scheme location.

Table 4.1: Summary of benefit streams for economic appraisal:

Benefit	Delivered by	Beneficiaries	Guidance*
Station user experience	Improved facilities, e.g. waiting areas, toilets, retail offer	Station users	TAG A5-3 rail appraisal, TAG A4-1 social impact appraisal, PDFH Section 8.1
	Improved security, e.g. informal surveillance, cycle hubs	Station users	TAG A4-1 social impact appraisal, PDFH Section 8.1
	Reduced delay/congestion, e.g. additional gatelines, TVMs	Station users	TAG A5-3 rail appraisal
Interchange experience	Improved facilities and environment, e.g. landscaped seating, additional bus stops, cycle hubs	Pedestrian, cyclist and bus users who access the station	TAG A4-1 social impact appraisal
Safety	Reduction in accidents due to redesigned local environment and reduced station pinch-points	Station users and local general public	COBALT (TAG Data Book)
Car park revenue	Increased car park capacity and demand	SFO/DfT	-
Station rental revenue	Increased retail and business units	SFO/DfT	-
Rail fare revenue	Increased rail demand due to station improvements	SFO/DfT	TAG A5-3 rail appraisal, PDFH Section 8.1
Environmental externalities	Mode shift to rail due to station improvements	Society	TAG A5-4 marginal external costs
Employment	Provision of start-up business units	Employees	(A wider impact, not for inclusion in benefit:cost ratio)

\*The latest versions of the TAG units will be used (with forthcoming changes incorporated where appropriate, e.g. use of PDFH v6.0 as per TAG unit 5.3 rail appraisal, forthcoming changes, May 2018)

4.7 The data sources we have identified to use for the benefits forecasting include:

- ORR station entries and exits data (including interchangers and disaggregation by ticket type)

- Rail passenger yield and average trip distance
- Car parking surveys
- Cycle parking surveys
- Pedestrian counts
- Bus user counts
- Station slips, trips and falls records
- STATS 19 accident reports
- Local employment data

4.8 Supporting this data we have requested the business case analysis for the funding submissions for specific elements of the station's package of works, e.g. GWR's bids to National Station Improvement Programme and Station Commercial Projects Facility, ATOC funding for cycling improvements.

4.9 Additionally, GWR has provided WBC with passenger growth forecasts for Newbury Station which we will apply.

### Appraisal assumptions

4.10 The appraisal will be consistent with WebTAG with appraisal parameters taken from the TAG Data Book, e.g. discount rate, discount and price base year. We propose to use a 30 year appraisal period reflecting the nature of the enhancements to the station and its surroundings. The rule of a half will be applied to new users.

### Environmental Impacts

4.11 An assessment of environmental impacts consistent with WebTAG guidance will be undertaken to determine how the scheme will affect the environmental indicators set out in the Appraisal Summary Table.

4.12 The following topics and methodologies to be considered are:

- Noise, Air Quality and Greenhouse Gases - Although the scheme does not include significant changes to the redistribution of traffic on the local highway network, an examination of these topics will be undertaken to determine the potential impacts arising from the potential for car journeys to the station to be made by other modes.
- Townscape and Heritage of Historic Resources - A desktop study of these two topics will be undertaken to understand the baseline position and to qualitatively assess the impact of the scheme. Professional planning and conservation advice will be sought where appropriate.
- Water Environment - A qualitative assessment primarily involving the surface water flooding strategy developed for the Station Road area will be undertaken.

4.13 Given that the scheme is wholly within an urban setting, it is recognised that the Landscape and Biodiversity topics do not need to be applied to this scheme.

### Social Impacts

4.14 Social impact assessments consistent with WebTAG guidance will also be undertaken to determine how the scheme will affect the social impacts indicators outlined in the Appraisal Summary Table.

4.15 A qualitative assessment of each of the specified indicators will be undertaken where appropriate. This will discuss the expected impact of the scheme on all strands of the population, and will be supplemented by quantitative data relevant to the particular social impact (as specified in the ASST and outlined in paragraph 4.16 below). It should be noted that for some of the specified impacts; it is considered that there will be no change from the existing situation.

4.16 The following topics and methodologies to be considered are;

- Commuting & Other Uses:
- Physical activity; this will include application of the HEAT tool where appropriate.
- Accidents: The assessment will look at the 60 month collision data for the local highway network within the area covered by the scheme and will examine the slip, trips and falls data collected by the train operator within the station itself.
- Security: Improvements will be subject to a design review/audit in terms of safety.

4.17 In terms of the Affordability indicator; the delivery of the scheme will not affect the cost of rail travel fares, nor will it influence the cost of car parking at the station.

## **Public Accounts Impacts**

4.18 The implications of the Newbury Railway Station Improvement and Interchange Enhancement Scheme on the public accounts will be set out in terms of the draw on public funding of the delivery of the scheme, any new operational and maintenance costs and changes in tax revenues.

4.19 The tax adjustment factor and market price adjustments will be incorporated into the economic appraisal of the scheme and the calculation of the BCR consistent with WebTAG guidance.

4.20 The split of the cost of the scheme will be made clear in the financial case in terms of which funding streams are a draw on the public purse. The cost information is based on the draft designs which have moved on in detail from the initial design work undertaken at the option appraisal and initial feasibility stages. Cost estimates will be refined as more detailed work takes place as the scheme progresses. In addition any new or alternative funding streams that can be drawn upon to help deliver the scheme will be used in order to reduce the cost to the public purse. The LEP will be kept informed of progress in relation to these elements and any other ways in which the value for money of the scheme can be improved.

## **5. Appraisal Specification Summary Table**

5.1 The Appraisal Specification Summary Table (ASST) is included below and provides information of the general approach to appraisal of the scheme.

Table 5.0 Appraisal Specification Summary Table - Newbury Station Interchange & Improvements Project

Impacts	Sub-impacts	Estimated Impact	Level of uncertainty	Proposed proportionate appraisal methodology	Reference to evidence and rationale in support of proposed methodology	Type of Assessment Output (Quantitative/ Qualitative/ Monetary/ Distributional)
<b>Economy</b>	Business users & transport providers	<b>Positive</b>	<b>Medium</b>	Rail, station & on-street car parking revenue. Increased retail & business units.	WebTAG guidance and past experience based on size and scope of project.	Quantitative / Monetary
	Reliability impact on Commuting and Other users	<b>Slight positive</b>	<b>Medium</b>	Qualitative professional judgement	TAG A5-3 rail appraisal	Qualitative
	Regeneration	<b>Slight positive</b>	<b>Medium</b>	Qualitative professional judgement	WebTAG guidance and past experience based on size and scope of project	Qualitative
	Wider Impacts	<b>Not assessed</b>	<b>Not assessed</b>	<b>Not assessed</b>	<b>Not assessed</b>	<b>Not assessed</b>
<b>Environmental</b>	Noise	<b>Assumed neutral</b>	<b>Low</b>	Qualitative professional judgement (and HW externalities estimate)	No significant change in traffic flows or speeds are expected as a result of the scheme	Qualitative
	Air Quality	<b>Assumed neutral</b>	<b>Low</b>	Qualitative professional judgement (and HW externalities estimate)	No significant change in traffic flows or speeds are expected as a result of the scheme	Qualitative
	Greenhouse gases	<b>Assumed neutral</b>	<b>Low</b>	Qualitative professional judgement (and HW externalities estimate)	No significant change in traffic flows or speeds are expected as a result of the scheme	Qualitative
	Landscape	<b>Not assessed</b>	<b>Not assessed</b>	<b>Not assessed</b>	<b>Not assessed</b>	<b>Not assessed</b>
	Townscape	<b>Slightly positive</b>	<b>Medium</b>	Qualitative professional judgement	WebTAG guidance and past experience based on size and scope of project	Qualitative
	Heritage of Historic resources	<b>Slightly positive</b>	<b>Low</b>	Qualitative professional judgement	WebTAG guidance and past experience based on size and scope of project	Qualitative
	Biodiversity	<b>Not assessed</b>	<b>Not assessed</b>	<b>Not assessed</b>	<b>Not assessed</b>	<b>Not assessed</b>
	Water Environment	<b>Slight positive</b>	<b>Medium</b>	Flooding working group study	Development of surface water flooding strategy agreed with WBC, NR and Thames Water	Qualitative
<b>Social</b>	Commuting and Other users	<b>Positive</b>	<b>Medium</b>	Rail, station & on-street car parking revenue. Increased retail & business units.	WebTAG guidance and past experience based on size and scope of project.	Quantitative / Monetary

	Reliability impact on Commuting and Other users	<b>Slight positive</b>	<b>Low</b>	<b>Qualitative professional judgement</b>	<b>WebTAG guidance and past experience based on size and scope of project</b>	Qualitative
	Physical activity	<b>Slight positive</b>	<b>Medium</b>	<b>Qualitative prof. judgement + application of HEAT</b>	<b>WebTAG guidance and past experience based on size and scope of project</b>	Qualitative
	Journey quality	<b>Positive</b>	<b>Medium</b>	<b>Qualitative professional judgement</b>	<b>WebTAG guidance and past experience based on size and scope of project</b>	Quantified/Monetary
	Accidents	<b>Slight positive</b>	<b>Medium</b>	<b>COBALT (TAG Data Book) Station slips/falls data</b>	<b>WebTAG guidance</b>	Quantitative / Monetary
	Security	<b>Slight positive</b>	<b>Low</b>	<b>Design review/audit</b>	<b>TAG A4-1 social impact appraisal, PDFH section 8.1</b>	Qualitative
	Access to services	<b>Slight positive</b>	<b>Low</b>	<b>Qualitative professional judgement</b>	<b>WebTAG guidance and past experience based on size and scope of project</b>	Qualitative
	Affordability	<b>Neutral</b>	<b>Low</b>	<b>Qualitative professional judgement</b>	<b>WebTAG guidance and past experience based on size and scope of project</b>	Qualitative
	Severance	<b>Neutral</b>	<b>Low</b>	<b>Qualitative professional judgement</b>	<b>No change from existing situation</b>	Qualitative
	Option values	<b>Neutral</b>	<b>Low</b>	<b>Qualitative professional judgement</b>	<b>No change from existing situation</b>	Qualitative
<b>Public Accounts</b>	Cost to Broad Transport Budget	<b>Moderate negative</b>	<b>Medium</b>	<b>Cost to public purse</b>	<b>WebTAG guidance</b>	Quantitative Monetary
	Indirect Tax Revenues	<b>Slight negative</b>	<b>Medium</b>	<b>Tax revenue changes (for example as a result of modal change from car to rail)</b>	<b>WebTAG guidance</b>	Quantitative Monetary