

Appendix 11: OBC Land Modelling – Methodology Paper

Old Oak West OBC | Version 2: Revised December 2023

OPDC
OLD OAK AND
PARK ROYAL
DEVELOPMENT
CORPORATION



Homes
England



Department
for Transport



Department for Levelling Up,
Housing & Communities



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1. Introduction

1.1

The purpose of this note is to explain the different modelling assumptions in relation to land that will appear throughout the OBC, confirm the recommended sources of data, and define a set of land modelling principles for the purpose of OBC financial and economic modelling.

2. OBC land modelling principles

- The land assumptions are indicative for the purpose of reaching a decision on the three key OBC asks and are included without prejudice. Recognising that land values will change over time and until the point of consolidation and/or drawdown, none of the figures included in the OBC represent proposed values for the purpose of an acquisition.
- All sites should be valued on a transparent, consistent, and relative basis. This means cost and value inputs, and where applicable scheme assumptions, should be comparable across each scenario.
- Optionality is key. It is recognised that different land consolidation and commercial structure solutions may apply to different land parcels in practice. It is imperative that flexibility is retained in the commercial structure. However, at the OBC stage, simplified assumptions have been made on the commercial structure for indicative purposes.

3. Financial Case land modelling approach

Financial Case land inputs

3.1

The financial model will be used to provide a high-level view of the scale of funding requirements and indicative financial returns.

3.2

For any given scheme scenario, the funding requirement is strongly interlinked with the assumptions made around the timing and structure of returns to landowners, as well as the commercial structure adopted with the private sector.

3.3

The financial model is built around the following land assumptions, which are subject to confirmation through the appropriate governance routes:

- If required for a given scenario, any private sector land is acquired by the public sector via commercial negotiation or a Compulsory Purchase Order (CPO). The **private land acquisition costs are based on a Property Cost Estimate (PCE)**.
- Publicly owned land is assumed to be made available for development and drawn down by private sector partner(s) over time. This would be in accordance with assumed operational land release timeframes, overarching programme drivers and market absorption rates.
- It is assumed no immediate transfer of land between the public sector occurs, and no transfer of public sector land to the private sector occurs until such a time as agreed conditions are met.
- Public land is to be recognised as an asset that is contributed to the project, which has a value and opportunity cost to current landowners. Land will be treated as fungible across ownership boundaries for the purposes of the OBC.

3.4

The Commercial Case will identify the land consolidation and commercial structure options, including the ability to provide optionality in terms of apportionment and timing of financial returns for public sector stakeholders. Different sensitivities within the Financial Case will explore the extent to which project performance is improved through more participative and patient capital approaches to partnering with the private sector. The financial model will test the following options around exit for land pooling partners:

- Early land payment to landowners at drawdown of land by the developer as soon as sites are available for development.
- ‘Central’ scenario partially defers land payments to facilitate early investment in infrastructure and also assumes staged drawdown payments during the delivery of each phase.
- Deferred land payment model where land receipts are paid at practical completion of the last building of each phase.

Recommended sources of data for the Financial Case land inputs

3.5

PCEs for private sector land will be based on advice provided by Deloitte. The PCE is the estimated compensation due to each affected private interest pursuant to a confirmed CPO. This is broken down into different heads of claim, dependent on the nature of the affected interest. The heads of claim typically comprise the value of land taken, disturbance, statutory loss payments and professional fees in dealing with the claim.

3.6

RLVs will be calculated through the financial model. This is based on the value of the land in its new use (the Gross Development Value or GDV) less the expected development costs (including fees) and a minimum required profit. For each scenario, including the Business as Usual (BAU), RLVs will be based on value inputs provided by Deloitte and cost inputs provided by Mott MacDonald, with third-party reliance to all stakeholders. Values across all scenarios will reflect the significant value uplift that will arise from the land use change that is enabled through the delivery of the Old Oak Common station and Crossrail projects, plus any further value uplift driven by the additional land assembled in the comprehensive scenario.

4. Economic Case land modelling approach

4.1

For the Economic Case land value inputs will be required to inform both benefits (the numerator of the BCR) and public sector costs and receipts (the denominator of the BCR), as set out below.

Benefits (numerator of the BCR)

4.2

The primary monetised benefit for the Value for Money (VfM) assessment within the Economic Case is the Land Value Uplift (LVU) from the residential and commercial development on site at Old Oak West, in line with the Green Book (2022) and DHLUC Appraisal Guide (2023). LVU is the difference between the new residential and commercial uses and the value of the land in its previous current use. **LVU acts as a proxy for the increase in social value.** The LVU will be calculated for all land use changes on sites within the red line boundary of the site, across the shortlisted options. The BCR numerator requires the following land value inputs:

- The value of land in its **existing economic use value** (EEUV) before development occurs. Importantly, this is not the same as the commercial value of the land and is not the same as an Economic Use Value (EUV) as defined by the RICS. The existing economic use value for the public and privately owned land is as follows:
 - For the HS2 sites, two possible EEUVs will be considered in the economic appraisal based on discussions across the project team and the Economics T&F group. This includes 1) assuming a zero-value given they are vacant construction sites when put into the project and there is no active business use and 2) one based on the nearest productive use if these sites were in economic use using the land values available through the Valuation Office Agency (VOA). The core analysis will use 2) – the most conservative.
 - For the Network Rail sites in active use, the EEUV is based on the nearest productive use. This is based on information provided by Network Rail on the value of the nearest productive use and, where no information is available, the land values available through the VOA.
 - For privately acquired sites, the EEUV is based on the Deloitte PCE, adjusted to remove hope value (including a future change in use or compensation payments) and excluding Stamp Duty Land Tax (SDLT).
- The **future use value** of the land once redeveloped is based on the RLVs outturned by the financial model. In line with standard economic appraisal, adjustments are made to convert affordable housing to market values (to remove the impact of affordable housing requirements on prices) and exclude tax transfers such as SDLT.

Public sector costs and receipts (denominator of the BCR)

4.3

The denominator of the BCR includes all public sector costs and receipts, including those relating to land. Importantly, the land inputs for the public sector owned land will be the same across all options where the land is developed. The following and value inputs are required within the costs and receipts:

- The **private land acquisition costs**, either via commercial negotiation or a CPO. This is based on the Deloitte PCE excluding SDLT.
- The **entry value** of the public sector land (the HS2 and Network Rail sites) to take account of the value of the land as an input into the project. This should be entered as a cost in Year 1 of the appraisal. The entry value of public sector land should reflect the best estimate of the value of the land if it was sold today, including hope value. The entry value should reflect any reasonable adjustments, via applying an appropriate discount rate, for factors that would impact on the value of that land. The entry value has been assessed for the public land as follows:
 - For the HS2 sites, the entry value is based on the land receipt outturned by the financial model in the BAU. The discounted land receipt is then used to proxy the land value given its intuitive that the value of the HS2 land would not be any lower than the land receipts in the BAU option.
 - For the Network Rail sites, on the basis that the sites would not be brought forward for development in a 'Business as Usual' scenario, the entry value will be equivalent to the value of the nearest productive use.

- The **public sector disposal receipts** from developing and disposing of the publicly owned land (HS2 and Network rail sites) and the privately acquired land (which is then later disposed). This is based on the profiled disposal receipts in the financial model from the sale of the land.

5. Summary of land inputs, source, and use

5.1

This table summarises the land modelling methodology for the Financial Case:

Table 1 Land modelling methodology for the Financial Case

Ref	Land input	Source	Comments
FC1	Private land assembly cost	Deloitte PCE	OPDC total land assembly budget
FC2	Public sector disposal receipts	RLVs outturned by HE financial model	Outputs dependent upon commercial scenario tested.
FC3	Public land costs	HS2 sites: GE appraisals (2023) indexed to date of land draw down NR: VOA indexed to date of land draw down	Input is indicative to acknowledge the cost of the public sector inputting land into the commercial structure, indexed to land draw down date

5.2

This table summarises the land modelling methodology for the Economic Case:

Table 2 Land modelling methodology for the Economic Case

Ref	Land input	Source	Comments
EC1	EEUV – HS2 sites	HS2 VOA indexed	Economic Case testing VOA or zero
	EEUV – NR sites	NR VOA indexed	-
	EEUV – private land	Deloitte PCE	Indicative property value, adjusted to remove hope value
EC2	Future use value – public and private land	RLVs outturned by HE financial model	Adjusted to remove affordable housing and SDLT
EC3	Entry value – HS2 sites	Land receipt outturned by HE financial model in the BAU	-
	Entry value – Network Rail sites	NR VOA indexed	-
EC4	Acquisition costs – private land	Deloitte PCE	Indicative property value
EC5	Public sector disposal receipts	RLVs outturned by HE financial model	Profiled with the sale of land