



## **The Economic Case for High Speed 2**

### **Next Steps and Future Updates**

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## The Economic Case for HS2 – Next Steps

### 1 Introduction

**1.1** A refreshed economic case for HS2 was published as part of the suite of documentation accompanying the outcome of the recent consultation. This updated the base year for demand modelling from 2007-08 to 2010-11 in order to take account of more recent passenger demand data. It also incorporated revised infrastructure costs, reflecting ongoing development work on the Y network, and new estimates of operating costs. The cost estimates for both infrastructure and operations continue to include significant allowances for risk and optimism bias.

**1.2** As usual with any economic assessment of this kind, the economic case for HS2 will continue to be reviewed and updated throughout the life of the project. As key milestones are reached, it will be important that the economic analysis reflects the latest development work on the scheme itself, as well as changing assumptions about external factors (such as forecasts of economic growth), revised appraisal guidance and new research or analysis into relevant issues.

### 2 Future Updates

**2.1** The key next step will be the publication of a revised economic case for the Y network (and the associated analysis for London to West Midlands) following the completion and submission of HS2 Ltd's advice on route and station options. In order to inform a full assessment of the Y network, the modelling suite has been updated to enable a more detailed analysis of shorter distance rail trips (the impact of released capacity) and access to and from different station locations north of Birmingham. The revised economic case will also include the latest economic growth forecasts published by the OBR in late March and to allow for this it is expected that it will be published in the early summer.

**2.2** Following the completion of this update to the economic case, HS2 Ltd and the Department for Transport intend to carry out further analysis to inform the Secretary of State's response to HS2 Ltd's advice on route options for Phase 2, which is expected to be announced in the autumn. In particular, the analysis informing the recent consultation outcome, including the uncertainty analysis published in the *HS2 Value for Money Statement*, has shown in detail the sensitivity of the economic case to certain key assumptions, notably:

- The approach taken to modelling market saturation;
- The assumptions and elasticities used to forecast future demand; and
- The approach taken to modelling fares growth and its interaction with passenger demand.

**2.3** In each case, HS2 Ltd and DfT will review current approaches and consider how these might be enhanced and improved to further inform future decisions as they are taken, including through testing a range of scenarios and assumptions rather than generating a 'point' BCR through a single approach. It may also

include using more innovative methodologies and new data, such as the dataset developed for the recent study on 'Revisiting the Elasticity Based Framework', details of which have been published today. An approach of this kind will be particularly important given the uncertainties associated both with existing demand forecasting methodologies, which have under-forecast levels of rail demand growth in the recent economic downturn, and with potential changes to the wider rail strategy, such as the Secretary of State's recently announced Command Paper which included an objective to bring above inflation fares increases to an end.

- 2.4** In addition, HS2 Ltd and its consultants have been preparing for publication two background technical documents, a *Model Development Report* and a *Demand and Appraisal Report*. These set out the basis for the analysis which fed into the Secretary of State's recent decisions. These are being published today, together with the associated demand and appraisal spreadsheets.
- 2.5** The process of preparing these documents has identified a small number of areas in the analytical framework where minor technical adjustments should be made, relating to factors including revenue calculations, rail and non-rail demand calculations and the service specifications used. In broad terms these adjustments would balance each other out, so that the overall impact on the central BCR assessment for HS2 would be roughly neutral. These adjustments will be incorporated into the update of the economic case published in the early summer.
- 2.6** A further technical adjustment will update the assumption made about the level at which background demand growth is capped. This assumption acts as a proxy for market saturation, allowing a consistent assessment to be made between HS2 and potential alternative schemes.
- 2.7** The demand cap level used in both the economic case for HS2 and the economic analysis of the strategic alternatives published in January this year was roughly 5 per cent higher than that used in the corresponding February 2011 analyses. While this does not affect the broader functioning of the modelling suite, if the cap is adjusted to reflect more precisely the previous level at which background demand was capped, the point at which the cap is reached for both HS2 and the alternatives is brought forward by two years. This leads in each case to a reduction in forecast benefits and revenues for all options.
- 2.8** Adjusting the cap year in this way would reduce the BCRs for both HS2 and the alternatives to HS2, including a new conventional speed line and enhancements to existing routes. For HS2, this modelling change would lead to a reduction in the BCR (excluding wider economic impacts) for the London to West Midlands scheme of approximately 0.2. The impact on the BCR for the full Y high speed rail network (excluding wider economic impacts) is estimated to be a reduction of between roughly 0.3 and 0.4.

- 2.9** As noted above, however, the cap year used as a proxy for market saturation has always been one of the key uncertainties associated with the economic case for HS2, and additional sensitivity tests have therefore always been carried out on this aspect of the analysis. The impacts of the adjustment described above lie well within the range of the sensitivity tests carried out to inform the Secretary of State's decision.
- 2.10** Furthermore, the cap level used, although marginally higher than in the February 2011 version of the economic case, still represents in total only an average increase of 0.5 rail trips over 100 miles per person per year over current levels. As noted above, future work will continue to consider the most robust potential approaches to handling market saturation effects prior to future decisions on HS2.
- 2.11** All of these issues will be addressed in the updated economic analysis published later this year and incorporating the new OBR forecasts of economic growth and HS2 Ltd's improved analysis of the services and travel patterns north of Birmingham.