



Department for Transport

DfT commissioned the authoring team of the [Optimism Bias Study](#) to investigate the existence and magnitude of optimism bias (OB) in capital cost forecasts of rail projects. OB uplifts are periodically updated to adjust to an increased sample of completed projects, the ever changing business environment and to include changes in Network Rail's forecasting procedures.

Optimism Bias is defined as a comparison of the cost estimates made at various stages of the project and the final cost outturn. Given this comparison excludes from cost estimates, the contingency allowance that has been made, it does not follow that for an example an Optimism Bias level of 20% means that costs have been underforecast by 20%.

The observed escalations in the research suggest overall the currently applied uplifts and contingencies result in reasonably accurate cost estimates, with only a 7% average escalation across GRIP stages (see section 6.1 of the report).

The research findings offer evidence supporting updating the existing OB values in the Department's appraisal guidance (WebTAG). The Department's appraisal guidance on capital cost OB for rail projects will be adjusted to the recommended values from this research, updated values are expected to be included in the November 2016 release of WebTAG.

The projects included in this analysis do not include the CP5 projects ("Hendy Schemes"). This is because, to estimate OB uplifts, projects need to be completed in order to have a final outturn value to analyse earlier estimates against. CP5 schemes have not been completed yet. OB uplifts are periodically researched and we plan to keep our guidance in line with the best available evidence. In guidance we plan to state that for large or complicated projects, such as those similar to CP5 enhancement projects, those undertaking appraisal work should contact the Department and use better evidence where it is available. Further detail will be available in the November WebTAG update.

HS2 follows a different approach to that in WebTAG, where outturn cost information and detailed risk registers feed into extensive Quantified Risk Assessments thus replacing percentage uplifts. Therefore this change in guidance will not affect the Phase 1 HS2 business case.