

Department for Transport

Valuing Transport's Impact on the Natural Landscape

This note summarises DfT's current research project, which aims to develop transferable values for transport's impact on the natural landscape.

The impact of transport projects, such as new road schemes, on the natural landscape can be significant and is an important aspect of the Department's New Approach to Appraisal (NATA) transport appraisal system. NATA is the analytical value for money framework used to appraise the economic, environmental and social impacts of all transport proposals that require Department for Transport funding. In the light of the Eddington and Stern Reports, the Department is currently consulting on a variety of changes to NATA¹.

Landscape is included as one of the 10 Environmental sub-criteria within the NATA framework. A market for landscape impacts does not exist and landscape impacts, although real, are not priced. Within the published NATA appraisal framework, landscape impacts are currently assessed using a qualitative approach. Impacts are scored on a seven point scale from 'large negative' to 'large beneficial' based on the structured environmental capital approach for describing the landscape and the impact on it of a transport project. This approach is also used to assess impacts on biodiversity, built heritage, the water environment and townscape. Monetary values exist for some other environmental impacts, such as noise and carbon, and these have recently been included within NATA.

Study objectives and purpose

The current study aims to:

- Form a definition of 'landscape' with which to frame valuation work and consider the benefits derived from landscape, including visual amenity, recreation, tranquillity and cultural heritage, but excluding other sources of value such as biodiversity;
- Establish the drivers of the value of transport's impacts on landscape;
- Provide a methodology for transferring values across transport projects in England.

The study considers only impacts in England, and excludes urban townscapes. However, the study does consider urban fringe landscapes. It aims to value the impact of transport on the landscape, rather than develop values that can be attributable to the existence of an area of land per se.

¹ <http://www.dft.gov.uk/consultations/open/consulnatatrefresh/pdfnatatrefresh.pdf> p.29 for reference to landscape valuation.

By developing a set of values which can be used in a range of geographical (and so landscape) contexts and applied to different types of transport interventions, the NATA process would be better placed to account for the environmental impacts of policies, and to determine the appropriate levels of mitigation work that may be required.

The project is expected to complete early in 2009, depending on progress, and the output may include a set of monetary values to be applied to different types of transport projects in a variety of landscape contexts. It is envisaged that the methodology, if deemed robust and appropriate, will be integrated into the NATA guidance for appraisal of transport plans and programmes. However, this process would be likely to require a significant amount of work, so it is not expected that new appraisal guidance would coincide with the completion of the project.

Methodology

The project is split into 3 phases:

Phase 1 involved setting out the methodology to be used for developing transferable values. In this research stage, landscapes have been categorised into a number of groups with broadly common features, using Landscape Character Areas. A typology of transport schemes has been developed, based on their impact on landscape, and the issues surrounding public perceptions of landscape and transport's impacts on it have been examined. This stage has involved desk-based research and focus groups to examine individual's perceptions.

Phase 2 involves developing a stated preference questionnaire. Taking a selection of transport scheme – landscape type combinations, this will be tested and refined in an iterative process involving focus groups, cognitive interviews and a pilot survey. These will make use of case study scenarios relating to previous transport schemes. Sampling issues and the development of a suitable testing method will also be dealt with in this phase.

Phase 3 would entail the implementation of the main survey, to produce a set of transferable values and develop a methodology with which to use them. This stage would involve testing for the validity of results and the transferability of the values.