

A review of the Environmental Capital Approach in the New Approach to Transport Appraisal

The New Approach to Appraisal (NATA) is the Government's method of appraising the impacts and benefits of transport schemes. In 2007 the Department of Transport (DfT) announced a review of NATA, the NATA Refresh. A key theme in this review was the valuation of the environmental impacts of transport schemes. Currently, NATA uses the Environmental Capital Approach (ECA), to help value possible impacts on landscape, biodiversity, heritage of historic resources and water environment.

The aim of this research was to examine the use of the ECA in NATA and make recommendations as to how the Transport Analysis Guidance web site (WebTAG) might be amended to improve the application and effectiveness of ECA.

What was done

The research involved the following activities:

- A literature review.
- Interviews with practitioners.
- Analysis of the relationship between transport appraisal, Strategic Environmental Assessment/Sustainability Appraisal, Environmental Impact Assessment and the Highways Agency's Design Manual for Roads and Bridges.
- Analysis of a set of Appraisal Summary Table (AST) worksheets.
- Recommendations to enhance WebTAG guidance on ECA.
- Conclusions regarding other issues and opportunities.
- Dissemination seminar to discuss findings with key stakeholders.

Results

Literature Review

The literature review failed to discover articles that dealt with the environmental capital approach in general or the appraisal of

biodiversity or landscape within NATA. Instead, the review found that research into landscape and biodiversity in a transport context tends to focus on the assessment process rather than appraisal. The assessment foundations on which appraisal should be based do not fully report on who is affected, why it matters and how significant the effects are judged to be. This leaves these issues to be decided by the practitioner carrying out the appraisal.

Practitioner Survey

The practitioner survey revealed that difficulties with ECA were being experienced. The following aspects were reported by practitioners as requiring attention:

- Too many elements contributing to importance.
- Confusion between substitutability and mitigation.
- Assumptions on standard mitigation
- impact scoring.
- Duplication in the worksheets.

A review of the Environmental Capital Approach in the New Approach to Transport Appraisal

Review of other appraisal and assessment guidance

The approach to appraisal adopted in Wales and Scotland differs in having two levels of appraisal in recognition of the different stages of scheme development. The approach to ECA and worksheets also varies, with a more flexible approach being taken than in England. However the introduction of greater flexibility operates against the desire for consistency in order to judge schemes on an equal basis.

The review of AST worksheets

The review of worksheets identified numerous issues that suggest difficulties in understanding ECA, practical issues in its application or difficulties in understanding/applying NATA guidance. These issues comprise:

- Importance, rarity and scale are often seen to be interchangeable leading to lack of clarity or duplication in the reporting.
- Supporting statements for scale, importance and trend can add meaning and help justify the otherwise one or two word entry.
- Inconsistent approach to environmental capital between landscape and biodiversity as exemplified by the different prominence given to substitution.
- Mitigation measures often described alongside the impact entry.
- The basis on which the overall score is derived can be difficult to follow especially where long worksheets are provided.

Conclusions and recommendations

ECA is seen to be a viable method, but one that is currently constrained by weak guidance and a strong reliance upon professional judgement that potentially may lead to a lack of consistency, repeatability and robustness in the results.

In practice, there appears to be a difficulty in differentiating between the assessment that is undertaken to identify and consider the impacts, and the appraisal which has the role of communicating key information in a standard manner to decision makers.

Current ECA guidance in WebTAG is presented in a manner that causes difficulties for practitioners and leads to duplication. Thus some revision and simplification of the guidance is called for.

The report sets out a series of recommendations that focus upon the workings of ECA at the operational and strategic levels as well as changes that could be made to WebTAG as part of the NATA Refresh process.

Natural England's viewpoint

Natural England supports the findings of the research. ECA provides a robust methodology for informing the appraisal of transport impacts on the natural environment, but its application would be greatly improved by:

- Amendments to the WebTAG guidance.
- Increasing the use and availability of common environmental datasets.
- Audited worksheets.

Selected references

Countryside Agency and Scottish Natural Heritage. 2002. *Landscape character assessment: guidance for England and Scotland*. Countryside Agency and Scottish Natural Heritage, Wetherby.

DCLG. 2006. *Environmental Impact Assessment: A guide to good practice and procedures*. Department for Communities and Local Government: London, 96pp.

Defra. 2007a. *An introductory guide to valuing ecosystem services*. Department for Environment, Food and Rural Affairs, December 2007.

DfT. 2007. The NATA Refresh: Reviewing the New Approach to Appraisal, retrieved from URL: www.dft.gov.uk/consultations/closed/consultatarefresh. [Accessed October 2008].

Eftc in association with Accent MR, ADAS and TRL. 2007. *Valuing Transport's Impact on the Natural Landscape: Phase 1 Progress Report*.

A review of the Environmental Capital Approach in the New Approach to Transport Appraisal

Submitted to the Department for Transport, January 2007.

Further information

For the full details of the research covered by this information note see Natural England Research Report NERR016 - *A review of the Environmental Capital Approach in the New Approach to Transport Appraisal*.

Contact us

Natural England Research Reports and the Research Information Notes are available to download from the Natural England website: URL: www.naturalengland.org.uk.

For information on other Natural England publications contact the Natural England Enquiry Service on 0845 600 3078 or e-mail enquiries@naturalengland.org.uk.

Keywords

Transport, appraisal, environmental capital, environmental valuation, landscape, biodiversity, roads.

Report authors

Paul Tomlinson, Daniel Rapson, Robert Beaumont and Clare Harmer (TRL Limited), Keith Rowe (ADAS) and Allan Provins (Eftec).