

**SOUTH EAST ENGLAND REGIONAL ASSEMBLY  
REGIONAL TRANSPORT BOARD**

Date: 16 April 2007

Subject: **Nichols and the National Audit Office Reports**

Report of: Regional Planner  
South East England Regional Assembly

**It is recommended that the Board:**

1. Welcomes the recommendations of the Nichols and National Audit Office reports and requests the secretariat ensure that they are taken into account as part of the Board's work on refreshing the regional programme;
2. Call on the Secretary of State to ensure that future Regional Funding Allocations take a more realistic approach to inflationary impacts, noting the conclusion of both reports that construction price inflation is twice the allowance for inflation assumed by the Treasury;
3. Requests the secretariat to work with the Highways Agency to ensure an appropriate level of monitoring information for their schemes is available to future Board meetings.

**Purpose of Report:**

To highlight the implications arising from the Nichols report and the National Audit Office (NAO) report into the financial management of major road schemes.

**Key Issues:**

The NAO report, investigated cost increases in Highways Agency (HA) and Local Transport Authority schemes, critiquing estimating, management and monitoring processes used by the Department for Transport and the HA. The Nichols report builds on these findings, and recommends that the DfT and HA adopt a more progressive approach, in particular with regards to 'whole-life costing' and ensures that the investment programme reacts to monitoring data. The Secretary of State for Transport has supported the findings of both reports. The proposed changes in the monitoring regime will ensure that the Board is better informed of progress with delivering the regional programme. In addition the proposal to amend the procedures for scheme development appraisal will impact on the way in the Board frames its advice to Government.

## **I. Background**

- 1.1 Significant cost over runs in the cost of road improvements on the Highway Agency's (HA) strategic road network prompted the National Audit Office (NAO) to conduct an investigation into road prices and the management of the Targeted Programme of Improvements (TPI). The TPI was adopted in 1998 as part of the Government's White Paper 'A New Deal for Transport: Better for Everyone'. The TPI sets Government's priorities for improving the strategic road network. Building upon the work of the NAO, the Secretary of State commissioned the Nichols Group to undertake an assessment of the process management undertaken by the Highways Agency for scheme delivery.

## **2. Estimating and monitoring the costs of building roads in England': National Audit Office**

- 2.1 The NAO report is principally a quantitative analysis of the cost increases incurred during the preparation and delivery of major road schemes.
- 2.2 Its findings show that by September 2006 36 (of 103) schemes in the TPI had been completed and that, after adjustments for changes in estimating methodology, the schemes' final cost was 6% more than the approved cost estimate. However, the report suggests that the scale of the problem is becoming more acute. The current cost estimates for schemes remaining in the TPI show an increase of 5% on the approved estimates. Once the potential for further increases in costs arising as part of the normal scheme development process is taken into account, it is forecast that the final cost of the schemes could be as much as 27% higher than the approved estimates.
- 2.3 Reviewing the performance of major schemes promoted by Local Transport Authorities (LTAs) the report identifies a similar concern to that expressed in respect of the TPI. Most recent estimates suggest that the final cost of schemes being delivered by the LTAs will be of the order of 31% higher than the current approved estimate.
- 2.4 The report notes cost increases affecting the TPI and LTAs have, to date, been largely absorbed by the DfT; the principle management tool being to defer other schemes in the forward programme. However it is clear that such an approach to programme management is no longer acceptable.
- 2.5 The Assembly's work on implementation would support such a view. The delivery of infrastructure in a timely manner is a pre-requisite for enabling planned growth. The public sector must collectively work to ensure that the forward programme of investment is robust and deliverable if it is to provide the required confidence to the private sector.
- 2.6 The NAO report identifies the most significant factors leading to an increase in scheme costs are Construction Price Inflation (48% of cost increases) and land costs (26% of cost increases). Other factors identified in the report include design and preparatory work, control over which is to some extent

outside the HA's or LTA's direct control (e.g. costs arising out of changes agreed through the planning process).

- 2.7 However, the report is equally clear that the initial evaluation of scheme costs has been inadequate. Given that it is this initial evaluation which forms the basis of the cost estimate approved for an individual scheme it is not surprising that significant increases in costs have been recorded.
- 2.8 The introduction of 'optimism bias' is meant to take account of the greater degree of uncertainty with cost estimates associated with schemes in the earliest stages of development. It is arguable that the schemes examined by the NAO report would not have optimism bias applied to their original cost estimates as they are in effect legacy schemes. One could therefore argue that the potential for significant increases in cost estimates should reduce over time. However, the NAO report serves to emphasise the importance of improving the monitoring of scheme progress and having a more effective management regime to deal with cost increases beyond those which might be reasonably be expected.

### **3. Review of Highways Agency's Major Roads Programme: Nichols Group**

- 3.1 The Nichols report builds upon the quantitative analysis undertaken by the NAO by critically analysing the management of the TPI.
- 3.2 The report reaches similar conclusions as to those made by the National Audit Office. It supports the view that approximately 50% of the increase in the cost of schemes is a result of Construction Price Inflation (CPI) being approximately twice the Retail Price Index (RPI) figure assumed by the Treasury. The remaining increase is said to be divided equally between inadequate initial estimates and scheme delay. As Board members will be aware the latter factor in effect creates a 'double whammy' on the budget; a delay in a scheme, for whatever reason, will lead to an increase in cost due to the fact that CPI is greater than RPI.
- 3.3 Nichols is particularly critical of the way in which the TPI is currently managed, stating that "the TPI is not a 'programme', in the sense of being a number of projects managed as an integrated group to achieve a defined goal". Nichols does however recognise that the HA's strategic capabilities has been affected by a failure to replace senior managers who have left the Agency. While the HA may have met its ministerial targets for the last two years, Nichols questions the longevity of the current system and ultimately whether best value is being achieved.
- 3.4 In terms of scheme management, Nichols suggests the following improvements:  
  
Improved programme management
  - 3.4.1 Nichols suggests that the TPI should be restructured through a 'stage by stage' investment management process. Such an approach would involve

individual schemes going through a series of defined development stages, with funding for each scheme being released on an incremental basis to enable progress through the next stage (the so-called 'life-cycle' process – see below). Nichols suggests that a full funding commitment would not be given until time as the cost estimates have been confirmed immediately prior to construction.

#### Life-cycle scheme development

3.4.2 Nichols suggests scheme development appraisals should be focused around four key stages;

- 'Requirements definition' (formulation of initial proposal)
- 'Development' (proposal development)
- 'Construction'
- 'Operations' (post construction)

#### Cost estimation

3.4.3 Nichols suggests that the HA's cost estimation could be improved if a process similar to Network Rail's GRIP process is adopted. Such an approach would ensure common definitions and terminology are used in the appraisal process. It is also suggested that scheme costs are monitored frequently, with the cost for each stage monitored against a "plausible minimum" and "plausible maximum" cost. As part of this, Nichols suggests that inflation costs should be based on a price index that truly reflects the cost of construction price inflation, and to ensure this is applied in both the short and long term (beyond 2010).

#### Other suggestions

3.4.4 Nichols suggests that the HA establish stronger in-house commercial management capability, improved information systems and better use of contract cost data now available under HA's partnering form of contracts.

## **4. Discussion**

4.1 There are implications for the work of this Board arising from the two reports. Firstly, there is a need to take greater account of the impact of the difference between CPI and RPI in estimating the cost of schemes. The Board has highlighted its concerns on this point previously. The publication of the two reports provides further evidence in support of the Board's argument to Government that the sums identified as part of the Regional Funding Allocation process represent a cut in real terms of the funds available for investment.

4.2 Secondly, there is a need to improve the quality of the monitoring information available to decision makers. The Board now receives regular information from Local Transport Authorities on progress with schemes in the regional programme of investment. The HA's ability to providing

monitoring information was limited while the reviews were underway. However now that they have concluded it is hoped that this gap in the monitoring regime will be addressed.

- 4.3 Both reports emphasise the importance of improving the quality of the initial cost estimation. In particular it is important that scheme promoters make use of optimism bias to ensure that initial cost estimates incorporate an appropriate allowance for uncertainties. This point is particularly relevant to the forthcoming refresh of the regional programme.
- 4.4 Finally the suggestion that funding for schemes should be made available on an incremental basis should be welcomed. A key concern of many authorities has been the lack of funding to support the development of schemes to a stage at which they are ready to start construction. Adopting the life-cycle scheme development approach could potentially address this concern in part by making it easier to secure funds in a timely manner to bring forward schemes that have been identified as being part of the regional programme.

## **5. Next Steps**

- 5.1 The approach advocated by the NAO and Nichols reports appear to represent a significant step forward in tightening up on the development and management of the regional programme of investment. The upcoming refresh of the regional programme provides the opportunity for the Board to embrace the key recommendations as part of the Board's work. The reports also provide additional support for the arguments that the Board have been pursuing at a national level in respect of the funding available at the regional level.

**James Renwick**  
**Regional Planner**

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Contact: James Renwick, Regional Planner  
T: 01483 555205 E: jamesrenwick@southeast-ra.gov.uk