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Report C3/2

Rail/Road Strategies & External Scenarios

Prepared for Rail Research UK
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Project C3: Role of Rail in Integrated Transport Policies

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Executive Summary

This report is prepared as part of the RRUK project "The Role of Rail in Integrated Transport Policies". This project seeks to shed light on the appropriateness of alternative future rail strategies by modelling their impacts. The current report seeks to identify alternative strategies and external scenarios to model. The first few chapters identify and review a varied range of government and industry visions relating to the future of rail transport in the UK. The rest of the report discusses external factors that will influence the future of rail transport, identifies a number of possible strategies that might be applied to rail and road transport in the UK, presents and discusses evidence as to the likely nature of such strategies and discusses issues relating to how the impacts of such strategies might be modelled.

In the review presented in chapters 2-4 of the report, attention is paid in turn to:

- national strategies for rail (primarily relating to longer distance intercity and provincial transport);
- specific issues in the case of transport in London;
- strategies for the metropolitan areas and from the multi modal studies; and,
- issues pertaining to freight strategy.

Information for this section of the report has been obtained from documents such as the 'Ten Year Plan' (DETR, 2000) and 'Everyone's Railway - The Wider Case for Rail' (SRA, 2003c) as well as from evidence taken from ATOC (2000a, 2000b & 2000c), the European Rail Research Advisory Council (2002), the Rail Forum (2003a, 2003b & 2003c), Friends of the Earth (FoE, 2002) and Goodwin (2003). The primary purpose of this review is to establish the background and context against which any modelling of possible alternative transport scenarios will have to take place.

It is clear from the documents examined that there is a wide range of views on future rail strategy. Until recently, government policy was heavy investment in rail to provide the capacity for continued fast growth in demand. Some argued that even this investment was not enough. For instance, CFIT sees a strong case for the progressive development of a new high speed rail network in Great Britain, as does the Rail Forum. TfL, not surprisingly, argues the case for heavy investment in the rail system in the London area, where most rail trips start or end. The PTEs and the multi modal studies want to see radical improvements to local services, with station or line reopenings, clockface timetables and better integration with other modes. On the other hand, under pressure from rising costs, growth targets have been abandoned and there is a counter argument from some commentators that investment should be diverted to roads, and that lesser used rail services should be pruned. On pricing policy, the RPC regards rail fares as too high and too complicated, whilst the SRA and others are arguing that rail users should bear a share of the cost increases that have befallen the railways in recent years. For freight, the key issues are the provision of adequate track capacity, clearances for higher containers and interchange facilities. On the pricing side, the issue of track access charges and the arrangements for financial assistance where justified are important issues.

The rest of this report, which outlines possible strategies that might be applied to rail and road transport and discusses the approach to how such strategies might be modelled, starts by identifying 'external scenarios' which will be considered along with a reference base

scenario in any such modelling exercise. These external scenarios are based on two scenarios developed in the DTI Foresight programme, and are defined as 'local stewardship' and 'world markets'. They are established as likely opposite ends of a potential spectrum, with GDP growth ranging from 1.25% per annum to 3.5 % per annum, compared with a reference case of 2.5 % p.a.

This is followed by consideration of various technological developments that are likely to affect rail transport and competing modes over the forecast period. Whilst in the short to medium term the need for increased demand management on road and air offers opportunities for rail, in the longer term, technological development, particularly in road transport, offers considerable threats. New technology offers the possibility of much cleaner vehicles and of increased infrastructure capacity and performance without major additional infrastructure; rail must respond with similar developments, and above all reduce costs, to remain competitive. Another technological development, the implications of which are not currently clear, is virtual mobility. Whilst it may substitute for transport in some cases, it appears also to have the potential to generate more transport demand as well.

We then present the groups of road and rail strategies envisaged for testing against the background of the three scenarios - the reference base, 'local stewardship' and 'world markets'. Three groups of strategies are set out for road transport, as follows:

- Reference case consistent with the Ten Year Plan;
- A Demand Management approach; and,
- Significant Road Investment.

Similarly three sets of strategies are established and discussed for rail transport:

- Reference case consistent with the Ten Year Plan (but taking account of the cuts in investment that have followed the big cost increases in the last few years);
- Significant Rail Rationalisation, including bus substitution of lesser used services and increased fares where there seems to be an economic case for doing so; and,
- Freight & Passenger Upgrade, including investment in improved capacity and rolling stock, a high frequency regular interval service linking main urban centres, improved integration with bus and investment and grant aid to make rail freight more competitive with road.

In practice it is likely that variants of the rail strategies will need to be tested, although not necessarily against all scenarios. For passenger services, it is likely that we will concentrate on a case study of the East Coast Main Line and associated routes in North East England, where we can draw on previous work at ITS. Freight modelling is likely to take place at the national level.

We then consider how these sets of strategies for each mode can be investigated in the light of the three alternative scenarios. Given three sets of road strategies, three sets of rail strategies and three scenarios, there are 27 potential combinations that may need to be examined. In practice, not all of these combinations will make sense. From the point of view of testing alternative rail strategies, we would see the reference case scenario with each of the three road scenarios as the starting point. The obvious combinations to test then would be the world markets/high road investment scenario and the local stewardship/demand management one. This makes a total of five scenarios against which the alternative rail scenarios would be tested.

The remainder of the report reviews existing evidence which may cast light on the assumptions regarding generalised costs of road use which may accompany each of the road strategies. The four principal sources examined in this review are:

1. TRG & Macdonald (2003), *The Impacts of Future Scenarios on Integrated Transport Policies*;
2. CfIT, *Paying for Road Use: Technical Report*;
3. Glaister and Graham (2003), *Transport Pricing and Investment in England*;
4. RAC (2002), *Motoring Towards 2050*.

Relevant findings from each of these sources are presented in turn. Whilst in this project we will model the impact of alternative scenarios and strategies for rail, we will need to draw on these sources for the impacts of alternative strategies on roads.

In the final chapter, we comment on the implications of this report for the modelling requirements of the project. Clearly, models will need to look up to 30 years ahead and be able to examine radical changes, for instance to rail route structures and to competition. A separate report will examine alternative approaches to modelling these strategies and scenarios and put forward recommendations for the later stages of the project.