
The Railway Consultancy Ltd.

Specialists in Planning, Economics and Management

Summer 2003

Consultancy at Centre of National Railcard Debate

The Railway Consultancy Ltd recently carried out a study into the benefits of a National Railcard, which was widely covered in the railway press. The study was jointly commissioned by Railfuture, an independent organization that campaigns for a better rail network, and the Rail Passenger Council (RPC), the statutory watchdog for the rail industry.

The Consultancy made use of its demand forecasting expertise to carry out the analysis. The report also showed that introducing the national railcard would be generally beneficial to all parties within the rail industry. Passengers, Train Operating Companies, the Government and the environment could all potentially benefit from the scheme. The study showed that the introduction of the card would generate 15% extra off-peak passenger miles and £60 million additional profits for the industry by filling off-peak spare capacity. The national average subsidy per passenger mile would fall from 7.3p to 6.7p, easing the burden on the taxpayer.

The national railcard would also encourage fewer journeys to be made by car, implying less

congestion, pollution and accidents. The value of these benefits was quantified in the report.

Douglas Medrisch, one of the report's authors, said: "Once people buy the card, they will calculate the

cost of rail tickets as the reduced price they pay at the ticket window, much like a car driver who calculates his costs as the price of petrol used rather than taking into account the overall costs."

The report was well received by rail users groups, and it is believed that the case for such a national railcard has now been established.

Latest Developments

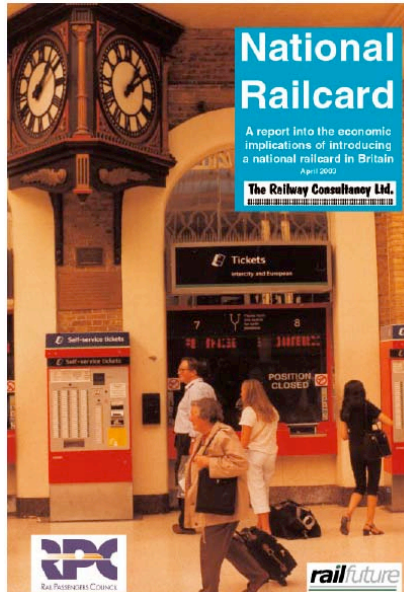
The SRA expressed its interest in the development of a National Railcard in the conclusions of the 2003 Fares Review, with the main aim of encouraging travellers to shift from using road to rail transport.

The transport secretary, Alistair Darling, has asked the SRA and the

rail industry to work together to develop a national discount rail card to encourage more people to travel by train.

The Railway Consultancy Ltd is involved in work to develop the national railcard further.

The report is available from www.railfuture.org.uk



The Railway Consultancy Ltd

Managing Director: Nigel G Harris. **Director:** David McIntosh.

Finance & Admin Manager: Alison Harris. **Senior Analysts:** Ties van Ark, Luke Ripley.

Analysts: Douglas Medrisch, Andrew Tucker, Sven-Jöran Schrader, Dan Smart.

First Floor, South Tower, Crystal Palace Railway Station, London, SE19 2AZ

Tel: +44 20 8676 0395 **Fax:** +44 20 8778 7439 **e-mail:** info@railcons.com **Website:** www.railcons.com

Registered Office: 43a Palace Square, Crystal Palace, London SE19 2LT **Registered in England & Wales no.:** 3270536

Company News

It is now a year since we moved in to our new offices and much has changed in the railway industry. The changes have affected many of the key players, and hence the Consultancy. Railtrack has turned into Network Rail, and are still a key customer of ours through our support of their Access Rights Database.

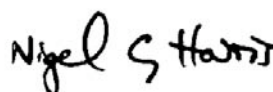
Similarly, in London, the long-running battle about ownership of the tube has eventually come to an end, with the Mayor expected to take control on 15th July. The potential difference for us, however, is that whilst Network Rail are making cuts to expenditure, London's Underground needs more money which it now has available through the PPP process. Planning work for improved underground services looks likely to increase, as does work on improving London's commuter rail network.

The Strategic Rail Authority's budget problems in December, however, led to the suspension of grants for the Rail Passenger Partnership and Rail Freight Grant schemes, which particularly affect the regions. Unfortunately, we were working (mostly in the North West) on half a dozen projects looking for support

under these schemes, and work on nearly all has been suspended.

However, we have continued to work with train operators on day-to-day problems, where we gain great satisfaction from actually being able to assist them in delivering real improvements for passengers and freight customers to enjoy. Whilst these processes all too often seem to take far too long, we hope to be able to announce further achievements over the coming months.

The reduction in overall activity caused by recent industry problems has enabled us to improve some of our internal systems – for instance, our website. We have therefore emerged better prepared to meet the needs of our clients, and so we look forward to hearing from you.



Nigel G Harris
Managing Director

Project News

Alfred McAlpine Slate Ltd

Alfred McAlpine Slate own several slate quarries in North Wales. The new Aggregates Levy means that crushed slate waste has become competitive as an alternative to quarried aggregate fill much further from North Wales than was formerly the case.

Alfred McAlpine believe that they could sell up to 2m tonnes of material each year in the Midlands and North West of England and wish to move this from Blaenau Ffestiniog by rail. The Railway Consultancy has been engaged by McAlpine to provide advice on rail operational planning and terminal selection plus preferred operator selection and freight grant application procedures. A preferred operator, Freightliner Heavy Haul, has been selected and detailed discussions with Network Rail and the Welsh Assembly Government are progressing in order to identify the infrastructure enhancements required to accommodate this new traffic. Those that follow *Modern Railways* or *RAIL* magazines will know that some test runs of the preferred locomotive and wagon formation have taken place on the Conwy Valley line. Outline Freight Facilities Grant and Track Access Grant applications have been submitted to the SRA.

South Coast Multi-Modal Study



Hastings Station

The South Coast Multi-Modal Study (SCMMS) has made several recommendations on new or upgraded rail services in the Hastings Borough area. The Railway Consultancy was commissioned to review the SCMMS report's recommendations and proposals put forward by Hastings Borough Council. A detailed timetable planning exercise was undertaken to validate the SCMMS proposals and consider the operational feasibility of the Council's proposed Ore-Bexhill 'Metro' service. The Consultancy's work highlighted that the proposed SCMMS timetable structure was not capable of reliable delivery without expensive infrastructure enhancements and an amended timetable structure was identified that could be delivered at less cost and still deliver a large part of the 'Metro' scheme.

Mock-Up Capacity Simulation for SWT Refurbished Class 455

As part of the process of establishing the project business case for the refurbishment of South West Trains' Class 455 inner-suburban units, The Railway Consultancy Ltd with its prior experience of boarding, alighting and station stop studies were commissioned by SWT to analyse the effect that the refurbished units would have on capacity and station stop times.



A mock-up Class 455 EMU vehicle was built at Alstom's Eastleigh depot to examine design options.

Using a full-scale mock-up built at Alstom's Eastleigh depot and 90 non-railway staff to act as passengers, a test program was designed and undertaken to simulate a peak commuter environment at a typical rush hour station.

The outcome of the various timed trials undertaken in controlled conditions were compared against a large quantity of data on vehicle alighting and boarding times for existing rolling stock already held by The Railway Consultancy Ltd.

The results showed with precision the effects that various vehicle design changes, such as door width, had on passenger movement rates and hence station stop times. It was shown that the previous model used by London Underground to estimate passenger movement times was not applicable in these circumstances, and a number of specific recommendations were made.

As a result of this work SWT were able to quantify the benefits of a number of different design options for the refurbished Class 455 vehicles. Work by The Railway Consultancy Ltd confirmed that the new design should contain more standing and circulating space around the doors, vestibules and corridors, and wider doors so that passengers can alight and board quicker.

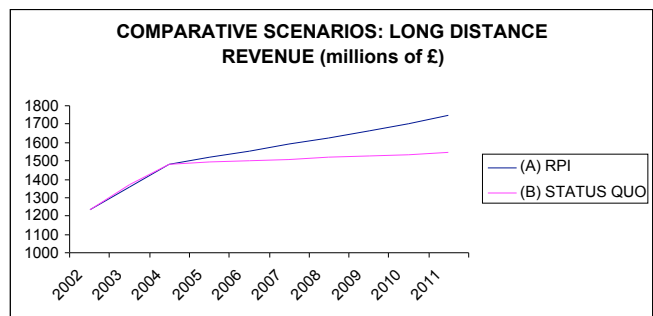
More Rail Freight in Wales?

Further to our previous work for Flintshire County Council on the development of rail services in North East Wales, it now seems less likely that the Shotton chord (linking the North Wales main line with the Wrexham-Bidston line) will be built in the short term.

However, there are a number of opportunities for developing rail freight over the existing network, and planning has continued for various potential customers with some flows entirely new to rail. International rail traffic from Poland and Italy is now more competitive, since the resumption of normal services through the Channel Tunnel and the change by UPM/Shotton Paper to the use of waste paper feedstock has opened up opportunities for new inwards rail flows. These are being developed with EWS and the Welsh Assembly and may start by the end of the year.

Fares Consultation Research

In September 2002, The Rail Passengers Council commissioned the Railway Consultancy Ltd to prepare a fares policy research report aimed to underpin their response to the Strategic Rail Authority's Fares Consultation Paper. Our report explained the detailed economics of rail regulation, analysed the problems linked with the current fares structure and finally produced 10-year forecasts of patronage and revenues assuming different regulatory regimes.



A fares elasticity model was designed for this purpose that, unlike many other studies, took into account both the short term and long term effects of fares changes. This meant that we were able to show that current fares policy in the long distance market is hindering revenues and patronage. The graph (above) shows the results for revenue in the Inter-city market, where status quo represents the assumption that current fares policy be maintained and RPI assumes a neutral fares policy (ticket prices rising with inflation). The model can be modified to show the characteristics of any market.

Planning Freight Railways

“Planning Freight Railways” is a new book being prepared by Nigel G. Harris. It will provide details of the main aspects of planning freight railways in 2003. The book will be of interest to all those seeking to know more about rail freight’s potential for development.

Although the book will be priced at £30, we can offer a special price of £25 to any orders received (with a cheque made payable to 'A & N Harris' at our address on the front of this newsletter) before the expected publication date of 30th September 2003. E-mail pfr@railcons.com for more details.

2nd Regional Rail Conference

Douglas Medrisch will be presenting a paper about the national railcard at the Second Regional Rail Conference, which is being held at the UMIST Conference Centre, Manchester on the 11th September 2003.

Website Re-vamped

The Consultancy’s website has been redesigned and upgraded. The new format is more user friendly, and the site contains details of many projects we have worked on. Why not see for yourself at www.railcons.com?

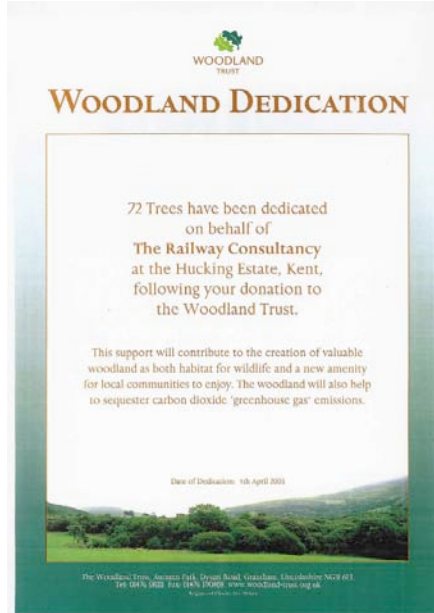
Staff E-Mail Addresses

Staff can be contacted using firstname.lastname@railcons.com

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Reducing Our Environmental Impact



The Railway Consultancy Ltd has calculated approximately how much carbon dioxide is produced to provide company business travel in the course of a typical year. Consultancy staff derived a method to calculate the number of trees required to process this quantity of carbon dioxide in the atmosphere to balance our impact on the environment, and this number were planted on our behalf by the Woodland Trust at the Hucking Estate, Kent in April this year.

This is just part of our environmental policy at the Railway Consultancy Ltd, which includes minimising waste and maximising recycling

(particularly paper products, plastic and printer cartridges). We widely use recycled paper for our activities. The Consultancy encourages the use of public transport (especially rail) wherever possible for business travel and does not own or operate any company cars.

Recent developments in Operational Simulation

We have been developing our operational simulation program TRAKATTK following work last Summer with Chiltern Railways on the Evergreen route modernization project. We have added functionality to the program and refined some of the assumptions made by TRAKATTK, while keeping it easy to use. For instance, the simulation is now able to simulate line gradients and TRAKATTK can also indicate train lateness by displaying the trains on screen in differing colours.

Whilst day-to-day improvements in the railway at the local level are needed to improve levels of punctuality and reliability, TRAKATTK is precisely the sort of cost-effective tool that can be used to analyse options for infrastructure and timetable changes that can make a quick impact.

IIR Conferences

IIR is an international provider of training and conferences. For several years they have run two "Essentials of the UK Rail Industry" training seminars. In early 2002 we were approached in order to provide a Course Leader, and David McIntosh has fulfilled this role twice in 2002 and again on 2nd & 3rd July 2003 with a further course planned for 19th & 20th November.

Other course speakers include Journalist Christian Wolmar, Commentator Roger Ford, Director General of the Railway Forum Adrian Lyons and lawyer Chris Jackson, partner with Burges Salmon.

Course participants are drawn from a wide range of organisations worldwide, such as foreign railways, government departments, train operators, Network Rail, Rail Safety, ATOC, ROSCOs, Contractors etc.