



Job completed!

Whilst we have carried out a considerable amount of planning work over the last decade for new or upgraded stations, project completion always brings great pleasure and job satisfaction to Railway Consultancy staff, who enjoy being able to contribute positively to the railway.

Liverpool South Parkway (as it is now known) opened to the public with the start of the June timetable. This is a project with which we have had a long association. In 1996-1997, as sub-consultants to Allott & Lomax (since taken over by Babbie and then Jacobs), we carried out a demand assessment using MVA's TRIPS modelling suite. A couple of years later, we were invited to assist the client, Merseytravel with a re-appraisal of the project, taking into account the likely increase in demand associated with the increase in traffic through the airport.

Working with Merseytravel, we attempted to secure Rail Passenger Partnership funding from the Strategic Rail Authority, but this proved difficult. Excluding Virgin West Coast services (which pass through without stopping), the station may be served by as many as six other train operators, each of whom wanted to ensure that any costs attributable to them would exceed any increase in revenue; such parochialism is an inevitable consequence of the fragmentation of the railways. Eventually, when control of the Merseyrail Electric franchise passed to the PTE, construction of the station became a political requirement, and so work has been able to be completed. Whilst delays to the project have led to real price increases in the cost of steel, and new DDA standards, we are glad to see the station open

for business and contributing to the railway in the 21st century. We wish it every success.



New Railway: A 2005-built 'Desiro' train arriving at the brand new Liverpool South Parkway station

The scheme has comprised the demolition of the existing Merseyrail station at Garston (used by about 1000 passengers per day) and the construction of a replacement a few hundred metres away near Allerton station, junction of the lines from Liverpool to London and Manchester Piccadilly. Allerton station, however had fallen somewhat into disrepair, and patronage of the poorly served and unstaffed station was under 100 passengers per day. Allerton has been completely refurbished, and the space between the stations developed for car-parking and to provide bus interchange. This latter includes not only normal local services but also a shuttle to Liverpool (John Lennon) Airport, 2 miles away.

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Why Does it Take So Long?

One of the problems with being railway planning consultants is that projects seem to take far too long to reach fruition. So it is with great pleasure that we can report this month not only on the opening of Liverpool South Parkway (see front page story) but also the new platform 6 at Marylebone. This is the first deliverable of the second phase of Project Evergreen, with which we were glad to provide operational simulation support using our TRAKATTK software back in 2002. It has therefore taken even Chiltern, widely regarded as one of the most dynamic TOCs, four years to get this far.

Why is this? Some of the project span may be seen as necessary. Acquiring land needs time for negotiation, whilst the construction of major physical assets normally takes many months. Some time may even be seen as customer-focussed: passengers like to be able to book tickets on specific trains three months in advance.

But what of the rest? The complications of a modern democracy (including consultation, environmental assessment and the procurement process) certainly restrict the railways' ability to invest and adapt for the future; to be fair, similar restrictions also apply to other major transport infrastructure, such as roads and airports. As can be seen on page 3, we have been working with the Department for Transport and its predecessors since early 2004 on plans for the West Anglia corridor to Stansted. This is for a project whose Public Inquiry may be in 2008 and whose opening of a second runway may not occur until 2016.

Clearly, for such important decisions, the right 'homework' needs to be done. But political delays are

perhaps unnecessary. Work is now actually starting on the extension of the East London Line, including to serve us here in Crystal Palace in 2010. But I carried out detailed operational simulation on this (not just general planning work) over 10 years ago – indeed I had an article on it published in 1995*. In the meanwhile, we have been working on the master option of a possible high-speed North-South Link (reported in our last newsletter) for three years, with little sign of even generic decisions about technology or numbers of routes having been made. Britain needs top level guidance on an appropriate framework for transport policy and balancing economic, social safety and environmental objectives – and it needs it now.



Platform 6 at London Marylebone, opened in May 2006

*Harris, N.G and Dean, S.J 'Simulation Pays Off at the Planning Stage', *Developing Metros*, 1995, pp17-18.

Nigel G Harris

Nigel G Harris, Managing Director

Project News

Norwegian State Railways (NSB) Strategic Timetable Development

NSB is currently in the process of drawing up a new strategic timetable for the years after 2012, when significant infrastructure improvements currently being made in the Oslo area (designed to address the competitive position of the railways) should have been completed. Over the last five years, domestic air services have attacked the longer-distance rail markets but demand remains strong in the Greater Oslo area. Indeed, this has led to a number of operating problems, especially on the core section between Oslo Sentralstasjon and Drammen.

The Railway Consultancy was therefore invited to make a presentation to one of a set of brainstorming sessions, on the subject of station stop management. This was of sufficient interest to NSB management that we were asked back to work with them on this issue. A number of station stop surveys were carried out, with analysis comparing achieved performance in Oslo with other urban railways of which we had experience. Not only were we able to identify a number of implementable changes to operational practice, but we were also able to make recommendations about the specification of new rolling stock appropriate for this corridor. Finally, our views were canvassed on a wider range of railway planning issues across the rest of NSB's straggling network.

West Anglia Route Study

In December 2003, the Government published a White Paper on Aviation, which gave direction as to which airports were to be developed; amongst these was Stansted. Since its link to the national rail network in 1991, rail traffic to/from Stansted has risen strongly, and around one-quarter of air passengers now access the airport by rail. However, the West Anglia rail network is congested, and whilst a number of previous studies had identified options for improving matters, the demise of Railtrack had meant that progress had not been made.



A West Anglia Great Northern service leaving Angel Road, showing the space available for further tracks if required

With the new impetus from the Aviation White Paper, however, the Strategic Rail Authority was keen to engage with British Airports Authority (the then owners of Stansted) to agree a way forward. The Railway Consultancy was therefore commissioned to provide an overview of the key issues and options raised in previous work, options which included the possibilities of multiple-tracking part of the route and/or grade separation at junctions. The Consultancy is continuing to give advice to the Department for Transport (which has taken over the SRA's role) on the development of the West Anglia rail network for all users, including important commuter flows as well as airport traffic. Our work has included the high-level assessment of both demand forecasts and operational plans - and the interaction between the two.

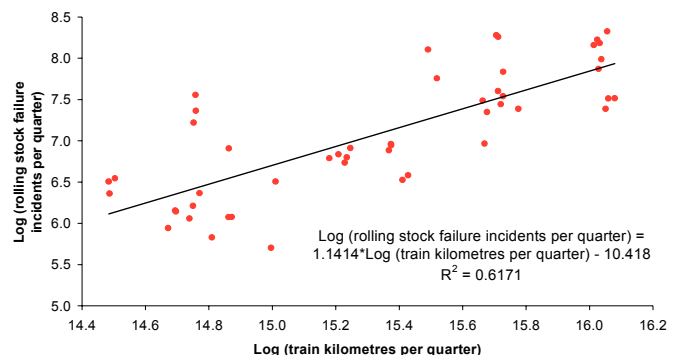
Parliamentary Evidence

As one of a small number of specialist consultancies, we are honoured to have been invited to give evidence to the Transport Select Committee's investigation into rail franchising.

Train Service Performance Modelling

Train punctuality in Britain is a high-profile issue politically. Unfortunately, following the Hatfield accident of 2000, performance levels were particularly poor, although they gradually rose to more acceptable levels during the SRA's existence. With Network Rail taking responsibility for detailed day-to-day issues under the Railways Act 2005, though, the Government family wanted to investigate ways of retaining some understanding of the factors which underlie rail performance.

The Railway Consultancy was therefore commissioned, as sub-consultants to Frontier Economics, to advise on the possibility of using existing railway performance statistics from the TRUST system to provide high-level guidance on policy options. Following a brainstorm of possible influencing factors, data was obtained from the SRA covering the period 2001-4. This enabled Frontier to carry out regression analyses of potentially-explanatory variables against the number of delays, number of trains delayed, and total delay minutes. Our roles in the project were in terms of interpreting the data, advising of known biases, and ensuring that statistical conclusions were plausible in railway operating terms.



Example output showing the relationship between train service performance and rolling stock failure rates

The project examined, by way of case studies, the impacts on performance of delays caused by rolling stock, drivers, network congestion and station overcrowding. In all cases, statistically-significant relationships were found against at least one of the measures of delay. The work gave confidence to the Department for Transport that such a statistical approach was indeed capable of providing answers about the impact on railway performance of key policy questions.

Training and Development: Advanced Courses in Railway Management, Railway Economics and Railway Planning

Once again, this Autumn, our Managing Director, Dr Nigel G Harris will be running three advanced courses in Railway Management, Railway Economics and Railway Planning, at the University of Newcastle upon Tyne. These courses seek to provide participants with a coherent understanding of the rail industry; gain an appreciation of modelling techniques, management processes and key concepts concerning safety, economics and design; develop a diverse range of subject-specific and transferable skills; and to encourage attendees to process complex issues in a logical and objective manner. For further details about these courses, please consult the University's website:

www.ncl.ac.uk/cpd/railways

or ring them on 0191-222-7439.

... And finally...



As consultants, we are prepared to go to Hell and back for our clients (!), in this case, NSB (see page 2).

Project Updates:

Developments in the Rail Freight Market

We continue to provide advice and assistance to the Welsh Development Agency on potential railfreight projects in North Wales, including costing a rail distribution plan for a new pulp mill, conversion of road-borne supplies to rail (for UPM Shotton Paper) and potential rail studies for the Toyota Engine plant. We have also facilitated a round table discussion for interested parties concerning a potential multi-modal terminal development on part of the former Corus site at Shotton.

LUL Train Service Modelling

From as early as 1996 the Consultancy has repeatedly been involved in providing planning and modelling support to London Underground (LUL) on the extension of the Piccadilly Line to Heathrow Terminal 5. With construction work on the extension nearing completion it was now time to think in more detail about how the three Piccadilly Line stations at Heathrow Airport are best to be served, and we were asked to develop and test various possible service options. Due to the layout of the Terminal 5 extension it will not be possible in future for all Piccadilly Line trains to serve all stations at Heathrow; instead, trains will only be able to serve either Terminals 1-3 and 5 or Terminals 1-3 and 4.

Therefore, we developed a number of service options comprising both through services, with varying proportions of trains going either to Terminal 4 or straight through to Terminal 5, but also shuttle service options, where all trains from central London go to Terminal 5 and a dedicated shuttle provides the connection to Terminal 4 from Hatton Cross or Northfields stations.

LUL's own Train Service Model (TSM) operational simulation tool was then used to test the operability of the different service proposals and their impact on passenger waiting times, journey times and on-train crowding. Detailed recommendations could be made to LUL regarding the preferred option, which will hopefully be implemented after the opening of the extension in 2008. Apart from this more comprehensive project we continue to use our expertise in service planning and operational simulations to help LUL with routine timetable improvements, recently for the Bakerloo, Central and Northern lines.

Metro Benchmarking

We continue to assist the Railway Technology Strategy Centre at Imperial College London (www.rtsc.org.uk) in their benchmarking work with the CoMET and Nova international groups of metros. Following a number of passenger falls on stairs and escalators, and bearing disability legislation in mind, this year we carried out a case study on 'the Safe Movement of Passengers in Stations'. A number of recommendations were made to the constituent metros at the presentation at the annual meeting of the group, which was held in Buenos Aires.