

East London Line Opens

This newsletter must begin with the news that the East London Line has been extended to Crystal Palace, the station at which the Railway Consultancy is based. New track and platforms had been built during the Winter, and trial running began in February, but it was Sunday 23rd May on which the line officially opened to the public.

London Overground (who had taken over from Southern as station operator here last September) distributed free Travelcards on the first day, whilst they had also invested heavily in balloons to mark the occasion!



Crystal Palace station on ELLX Opening Day

Works completed here so far include a new centre platform in which the 15-minute frequency ELLX services from Dalston Junction can reverse. It's good to see best-practice being implemented downstairs – centre reversing platforms minimize delays from conflicting through services.

The ELLX train service here meshes with other ELL trains from West Croydon and New Cross to provide 12tph and more on the core section. ELLX trains also have to mesh with Southern's Victoria – Crystal Palace – London Bridge services, which are joined at Sydenham by Caterham – London Bridge trains. This emphasizes the difficulty of finding train paths on Britain's congested railway network, and also provides us with out-of-the-window views of a range of train services: whilst not being the centre of the universe, Crystal Palace has certainly become more a more easily accessible destination to our clients and staff (and, of course, everyone else!).



Class 378 at Crystal Palace station on ELLX Opening Day: our office is just visible as the tower with chimneys in the background skyline

We look forward to the continued success of these services – and our business!

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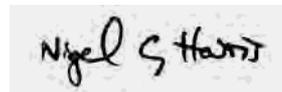
Editorial

Few companies get a railway built in to their basement, and even fewer are railway planning consultancies. Whilst we are delighted to have seen the East London Line extension (ELLX) reach Crystal Palace, a number of concerns remain. First, why do projects seem to take so long? Whilst working for London Underground, I was responsible for the first train service simulation of the line, a paper on which appeared in "Developing Metros" in 1995, no less than 15 years ago. At least the project has learnt from the findings, which included the fact that a single-platform terminus here would be operationally risky, especially given all the single-track termini on the line – so we also have a 'bolt-hole' platform here.

The second observation is that too many projects still seem to over-run their budgets, so elements have to be cut out. There have been a number of problems with the ELLX project at Crystal Palace station, which is a complex old building with inadequate historical records. At one stage, we even had to provide a temporary electricity supply to power the CCTV and lighting on the new platform!

As a result of these problems, building work has not yet started on the station improvements supposed to be associated with the scheme. There are still over 100 stairs to some platforms, an issue brought into even clearer focus when one of our associates, Matthew Smith, broke his leg (that's surely taking being an accessibility expert too far!)

With the economy over-spent and the election now over, the detail of where cuts will lie is not yet clear. However, the railway will no doubt bear its share. All those of us in the railway have to keep on finding ways of planning, delivering and operating the railway more cost-effectively. With our experience (both from our own projects, and that gleaned from looking out of the window!), we shall be pleased to assist any of our clients to do this.



Environmental Progress

Last year's newsletter reported our installation of solar panels. These have delivered over 1.3MWh of power during the last 12 months, reducing our carbon footprint even further. However, we have continued to compensate for our emissions by helping the Woodland Trust through its Woodland Carbon Scheme to create 600m² of new native woodland in the UK – enough to store at least 24 tonnes of CO₂.

Nevertheless, our strategic programme towards carbon neutrality is continuing. The CO₂ sequestered over the last couple of years has exceeded our footprint in those years. We are thus working towards being carbon neutral *over the history of the company*. Current analysis includes getting information on the carbon footprints of key office assets (such as PCs and furniture) to ensure that these too have been accounted for historically.

A New Station for Stonehouse?

The town of Stonehouse in Gloucestershire has a station on the line to Swindon and London, but not on the line to Bristol. This latter station was closed in the Beeching era but



CrossCountry service passes the site of Stonehouse Bristol Road

economic growth and traffic congestion has created pressure to re-open it, to be served by the hourly Gloucester – Bristol local service introduced a few years ago.

In 2009, Dunmore Developments purchased a piece of land adjacent to the former Stonehouse Bristol Road station. They needed advice on the likely impact of any station re-opening on their site. This involved undertaking demand forecasts to ascertain the business case for the station, and advising on the likely scale and footprint of the facilities required, and how these might interact with the type and arrangement of development they envisaged for their site. The Railway Consultancy also provided support through the planning process until the submission of a formal planning application, in particular providing the contacts and explanations of practice which are not obvious to those from outside the railway trying to do business with it.

Improving Train Service Performance

During one week in February 2010, three different train operators contacted us with a view to analysing and hence improving the performance of their train services. Despite different operating environments, Southern's London – Brighton main line, NSB's Jaerbanen (Stavanger – Egersund), and DB Regio's Tyne & Wear metro all had one thing in common: trains were getting late.

The Railway Consultancy has developed a "holistic" approach to investigating performance: it's almost "forensic train service planning" as we go into the large number of elements which make up a train service. It is the system nature of the railway which makes it interesting, but also that nature which means that poor decisions or practices in one discipline affect others. Disciplines include timetabling, rolling stock reliability, train control, train-crew actions, platform management, retailing policy, and passenger information, as well as managing the external influences of weather, passengers, vandalism and political interference. We start from a program of detailed operational surveys which not only collect useful information, but also enable us to watch problems arise, and ask appropriate questions.



In Norway, NSB had recently introduced a higher level of service on the local services out of Stavanger, taking advantage of an infrastructure enhancements program which included track doubling. Unfortunately, train service punctuality had gone down whilst the number of cancellations had gone up. Internal investigations had concentrated on equipment failures (including of rolling stock), and an extra train had been allocated to services to improve matters. However, managers felt that a more wide-ranging review of the service from outside would be helpful, and the Railway Consultancy was delighted to assist. Despite freezing temperatures, we undertook a survey program which drew attention to some deficiencies in the timetabling process, and to items of

signalling and other equipment whose late installation was causing operational problems. It also became apparent that the geographical isolation of Stavanger from its responsible management meant that some issues were not being addressed until they became major problems, so we recommended the creation of a new post of local manager. The most important conclusion for NSB was probably that new services should not be introduced until all the required infrastructure is in place, a lesson of particular relevance to them, as they are currently working towards a major timetable re-cast in 2012.



DB Regio took over operation of the Tyne & Wear metro in the Newcastle area from 1st April 2010, through a concession agreement including some performance-based payments. However, DB wanted to move away from a 'bus-style' timetable to one in which all components were clearly identified, so that there was sufficient information to balance robustness (and hence capacity) against performance. Although some automatic train monitoring systems are to be introduced, the Railway Consultancy was contacted to provide some 'quick win' information about train running and (especially) station stops. The level of variability of both inter-station run times and station stops appeared to be of as much significance as the absolute time taken, although the latter was shown to be an issue at South Gosforth. Here, passengers interchanging between lines, and train-crew changing between duties, were both contributing significantly to delays; extra time needs to be allocated for these activities. Elsewhere, recommendations were made for reallocating time between line sections, especially moving it to those areas which include level crossings.

So if you'd like your railway to work better, we'd be pleased to come and examine it in detail. Our recommendations may cover absolutely anything – but are likely to improve its performance without requiring significant investment.

Project News

Car-Parking Research

There is a widespread belief within the rail industry that demand for rail services may be suppressed by lack of convenient access to stations, particularly in relation to car parking. The Passenger Demand Forecasting Council, a rail industry body administered by the Association of Train Operating Companies (ATOC), wished to explore the relationships between railway car park pricing and provision and rail demand in detail and, during the Autumn of 2009, The Railway Consultancy



reviewing existing relevant research, the study used both desktop and site based research to build up a picture of car park usage across three defined rail sectors (London and the South-East, Inter-City and Regional / Passenger Transport Executive).

During the site-based case studies, we achieved a high response rate from surveyed passengers, demonstrating the importance of the issue to rail users. However, we did not find statistical evidence that passengers drove to stations with emptier car-parks, nor that trip rates at stations with full car parks were lower than those where car park spaces were available. Hence, we concluded that passengers will find alternative ways to get to their desired local station. Options include Kiss and Ride (which proved to be a very important), cycle, taxi and walking, although observations of bus / rail interchange demonstrated some of the challenges of integrating these modes. We also found higher-than-expected car-park price elasticities, supporting the anecdotal feedback from passengers that price was a key issue for them, although this can be due to station-specific factors such as the presence of nearby non-rail cheaper car-parking facilities. Overall, the study provided useful context for the industry in ensuring that full consideration is given to pricing and provision of parking as part of effective provision of all access modes to stations.

WRI Book

The late Summer is the delayed publication date for the Wheel:Rail Interface Handbook. This book, sponsored by Network Rail, is the culmination of several years' research by the University of Birmingham and others, and has substantially furthered the knowledge of this key issue (the cause of the 2001 Hatfield crash). Available shortly from www.anharris.co.uk.

The Best Station

Having been to Hell on Company business for Norwegian State Railways in 2006, during the last year we undertook operational analysis at a much better place – in fact, it was Paradis. However, as you can see from the picture shown right (and contrary to what you might expect!), it was snowing in Paradis.



The Railway Consultancy provides services across areas such as demand forecasting, operational planning, strategy and business development; for more details see our website www.railwayconsultancy.com

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