

Enterprise and Learning Committee

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Future Railway Infrastructure In Wales - Contribution By Tony Burton

Introduction

The scope of this contribution is limited to Mid-Wales and its links to North & South Wales. It considers the scope for the acceleration of existing services opportunities for extending rail services to communities without them completion of the north-south rail corridor on the West side of Wales

1. Acceleration of existing services

a) Shrewsbury - Chester - Wrexham

The line from Shrewsbury to Chester via Wrexham was built to high standards by the former Great Western Railway as part of its main line from Paddington to Birkenhead. However, following its relegation to secondary line status in the late sixties, line speeds have not been increased in step with those on other main lines, with the result that the maximum line speed is currently only 70 mph. There is therefore an opportunity for significant time savings by raising the line speed to 90 mph. This has been estimated at about 10 minutes for Class 175 trains stopping at all stations by Scott Wilson in their Chester-Wrexham-Shrewsbury Line Study of March 2007. Clearly there would be scope for significantly greater time savings for express services omitting the closely spaced intermediate stops of Ruabon, Chirk and Gobowen.

With the line's new rôle as part of the strategic rail route linking North Wales to Cardiff, the upgrading of line speeds takes on an increased importance.

The Chester-Wrexham single-line section is currently a major capacity constraint, so the long overdue decision that it is to be redoubled is very welcome. It is to be hoped that the line speed of this section will be raised to 90 mph at the same time.

b) Machynlleth - Pwllheli

Journey times on this line are pedestrian, especially in comparison with the Cambrian main-line itself East of Talerddig. The end to end journey typically takes 2 hours 10 minutes for 57.5 miles - an average speed of only 26.5 mph. This represents a lost opportunity to capitalise on the speed and comfort that the railway can offer and prevents the line from properly fulfilling its rôle of knitting the coastal communities together and linking them to the Severn valley and beyond.

The extended journey times have two, separate causes, as follows.

First of all, the location of the passing loops on this line is currently unsuitable for the two-hourly standard pattern timetable that was introduced on the line in December 2006. Trains currently pass at Tywyn and Harlech, but the running time between the loops is only 45 minutes rather than one hour, so the timetable is padded out with waiting time at these stations and at Barmouth.

Secondly there are numerous permanent speed restrictions along the line. In their 2005 "Performance Analysis of the Cambrian Line", Interfleet Technology identified 15 locations where speed restrictions could be eased, which would yield a nine minute time saving in total. In addition, they pointed to another six minutes in total that could be gained by raising the line speed to 80 mph between Aberdyfi and Llwyngwrl and between Porthmadog and Pwllheli.

In their report, Interfleet technology recommended that a new passing loop be constructed at Llwyngwrl, so that trains could pass there and at Porthmadog. This would eliminate most of the waiting time referred to above, as the current running time between them is about 56 minutes. However, these passing points might be sub-optimal if the recommended line speed improvements were carried out.

Another aspect that needs to be considered is the compatibility of an accelerated Coast service with the proposed hourly service on the Cambrian main-line. Assuming retention of the present arrangement, whereby ex-Birmingham trains split into Aberystwyth and Coast line portions at Machynlleth which travel on in quick succession to Dyfi Junction, there will be a premium on speeding this 4 mile journey leg up, so that the section is released in time for the additional ex-Aberystwyth train waiting in the Dyfi Junction loop.

As set out above, there is clearly scope for accelerating the Machynlleth - Pwllheli services by up to 30 minutes, which would make them considerably more attractive to passengers. However, careful thought needs to be given to the optimum train passing locations, bearing in mind compatibility with the proposed hourly service on the main line.

2. Extension of rail services to towns off the existing network

Several towns with populations of around 10,000 lost their railways in the Beeching era. Brecon, Caernarfon and Denbigh immediately

come to mind in Mid and North Wales. Given the importance now attached to the reduction of CO₂ emissions and the superior performance of rail in this regard, serious consideration is now needed into the re-opening of railway lines to towns of this size.

ATOC's "Connecting Communities" report

The Association of Train Operating Companies has taken a lead in this respect by investigating the scope for re-opening rail lines to serve such towns in England. These investigations have been summarised in their "Connecting Communities" report. The study identified fourteen schemes for establishing passenger services on existing freight lines, disused freight lines or on rebuilt railway lines that would have a benefit cost ratio in excess of one. The median BCR is 1.7 and the median capital cost per head of population benefiting from the new station(s) ranges from zero (for one scheme utilising an existing heritage line) to £5,700 per person, with a mean of £1265 and a median of £525.

One of the schemes proposed in the report is the re-opening of the line between Cranleigh and Guildford, to serve a population of 11,000 at a cost of £63 m. The BCR was estimated at 1.7. There is a close parallel between the situation of Cranleigh, about eight miles from the city of Guildford and that of Caernarvon, about nine miles from the city of Bangor.

3. Completion of the north-south rail corridor on the West side of Wales

As noted above, the Cambrian Coast line is an underexploited asset. It also forms a substantial part of what could become a strategic rail link between North, Mid and West Wales if the Menai Bridge - Afon Wen (near Criccieth) and Aberystwyth - Carmarthen lines were re-opened.

The route between Menai Bridge and Afon Wen is only about 23 miles long and passes through the substantial historic town of Caernarfon, discussed above. It would therefore make sense to re-open this route before the much longer line South of Aberystwyth. The re-opening of the Menai-Bridge - Caernarfon and Caernarfon - Afon Wen sections should be subject to separate WelTAG appraisal in the near term.

TraCC have proposed a study into the rebuilding of a North-South rail link in their draft Regional Transport Plan. They make the interesting proposal of a completely new line between Lampeter and Llandeilo, on the Heart of Wales line, to achieve more direct access to Swansea and Cardiff. The proposed study should be taken forward - ideally by WAG itself, as a North-South rail link is a strategic rather than regional matter.

A.L.Burton 2.11.09