

SUBJECT – Sustainable Transport and Tourism Task & Finish Group - Rail Services.

From:- The Better Trains for Chepstow Group. 14th June 2009

1. Introduction.

On behalf of the Better Trains for Chepstow Group, which has sought improved rail services at Chepstow for the last four years, I must say that it is encouraging to see public transport identified as a possible solution to promote and exploit Sustainable Tourism in Wales. We are pleased to offer the following comments and suggestions based upon our experiences.

2. Monmouthshire and the Chepstow Line.

The Wye Valley AONB and Monmouthshire are popular tourist attractions, and have been since the 18th Century. The rail line from Severn Tunnel Junction to Cheltenham which runs close to the centre of Chepstow is grossly under utilized but offers the visitor to these parts:

- One of the most scenic lines in Britain
- Access to some of Britain's most outstanding countryside
- Links to the historic towns of Cardiff, Gloucester and Cheltenham
- The potential for days out to other notable cities and towns such as Bristol, Bath, and Weston super Mare
- Access to the national cycle path, coastal footpath, and the Wye Valley and Offas Dyke Footpaths.
- Local tourist attractions such as;- Tintern Abbey, Magor Marsh, Caldicot Castle, Dewstow Sunken Gardens, Caerwent Roman town, Chepstow Castle and the Racecourse.

3. The Problem.

3.1 A quarter of all visitors coming to Wales (an estimated 2.5 million persons, out of a total of about 10 million*) visit South East Wales yet only 3% by train. By comparison with other areas of outstanding natural beauty in Britain, and we think particularly of the Wye Valley, this is a pathetically low number and could easily be increased to nearer 8%.

3.2 It is a fact that if tourists arrive by Public Transport they are likely to use public transport during their stay in Wales. If they arrive by private car they are likely to use their car during their stay. It is therefore important to look outside Wales for those services that deliver into the Principality. Many visitors from abroad prefer public transport and find it difficult to visit us by train.

3.3 All our train services in Monmouthshire fall short of meeting customer needs and are far removed from that expected by visitors and tourists in the 21st century. Unless the fundamental shortcomings are dealt with there can be little prospect of attracting more visitors to this area by rail. The attached PDF Brochure lists three changes needed to improve train services along the Chepstow line and explain why they are necessary. Included is a local railmap, which we found essential to our campaign since few people understand where the trains run and connect.

3.4 The One Wales Agenda which rightfully gives priority to improving links to the North appears to neglect Monmouthshire and SE Wales and the cross border rail links to England via Gloucester and Bristol.

3.5 Two TOC franchise contracts recently awarded by the DfT had the effect of seriously worsening local train services and failed to deliver improvements that should to have been made.

- The contract for the Cardiff – Portsmouth service awarded to FGW severed services between Chepstow and Bristol with no saving in overall journey time.
- The Cardiff-Nottingham contract let to Arriva CrossCountry has so far not delivered stops at Chepstow which are perfectly feasible without adding to journey times.

WAG and our local representatives need to pay closer attention and exercise greater control over the content of TOC franchise contracts if we are ever to see an improvement in train services, especially those administered from London.

4. Our Suggestions.

4.1 Three Ways to Improve Chepstow Line Train Services.

- **FGW should reinstate Cardiff/Portsmouth train stops at Severn Tunnel Junction and reconnect Chepstow line services with Bristol.**
- **Arriva Cross Country should stop their trains at Chepstow instead of passing slowly through the town.**
- **The Arriva TW train service frequency should be upgraded to hourly.**

4.2 Identify shortcomings and take action to deal with them. These need not be expensive and the benefits could be immediate. In our experience a good way to appreciate the problems tourists encounter is to speak to people at a station like Chepstow. In addition to the fundamental shortcomings in our train services there are a considerable number of things that need to be done to help make train journeys to Monmouthshire less traumatic and more pleasurable.

4.3 We suggest that WAG should negotiate with the DfT and Arriva CrossCountry Ltd to serve Chepstow with a regular hourly service. This could be closely monitored and serve as an example of the benefits such an improvement could bring to the TOC and community.

4.3.1 We would like to see this idea published in your Report and for it to be used as an example for the way forward. It should encourage the Welsh Assembly Government to look outside the borders and negotiate with the Train Operating Company and DfT to deliver this option.

4.3.2 This initiative has the advantages of being low cost, and capable of being implemented immediately if desired. We believe that it will result in increased tourism by rail, increase the passenger revenue to the Train Operating Company and also demonstrate a better utilisation of the existing DfT franchise service. The Transport Minister has agreed that there is time in the schedules but has so far declined to insist that AXC make the stops.

4.3.3 Chepstow is a key tourist attraction town in Monmouthshire, Wales and a gateway to the Wye Valley AONB and the Forest of Dean. The rail route along the edge of River Severn is a ride that is an attraction in itself.

4.3.4 The Arriva Cross Country provides access to Wales from Birmingham and the Midlands and the service usually carries only between twenty and fifty passengers in Wales. There is therefore ample capacity throughout the whole day to accommodate tourists without the need for any additional rolling stock.

4.3.5 Making Chepstow one of the standard stops on this service can be accommodated. **(See attached Appendix for details and explanations).**

4.3.6 The fact that the services run through already means that there are no significant cost implications in providing this additional service.

4.3.7 The town is one of the key settlements identified in the Wales Spatial Plan – 2008 Update, so the stopping of the Cross Country services would also make considerable advances towards providing the “turn up and go” transport suggested as necessary for key settlements in the Spatial Plan.

Jim JENKINS. Chair, Better Trains for Chepstow Team.

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** Bus and Tourism Paper for Sustainable Transport Forum 2009
Attached; BT4C Brochure PDF*

Appendix to BT4C Sustainable Tourism Forum Task & Finish Group. Arriva Cross Country services.

Rationale / Explanation why Arriva Cross Country Nottingham line services can call at Chepstow without affecting the overall journey times to and from the stations on either side.

Timetable Planning

The creation of the timetables is a complex, iterative and evolving process. Rather than start with a fresh sheet each timetable starts with the previous version, with priority given to existing unchanged services and those required to meet the contractual agreement with the DfT / WAG. Thus if a Train Operating Company bids for a new timetable slot it will initially be rejected by Network Rail if it conflicts with an existing planned movement, even if this movement is classified as lower in rating such as a freight, local / stopping or even empty stock movement.

Network Rail issues a document each year called the "Rules of the Plan" which among other information includes the "Headway" between trains for every line of railway. The "Headway" is the minimum time for timetable planning purposes after a train has passed before the next train can be planned to proceed.

Between Cardiff and Severn Tunnel Junction this is four minutes, so in theory a maximum of fifteen trains ($4 \times 15 = 60$) can be timetabled to leave Cardiff heading eastwards on the busy Main Line. In practice a pragmatic approach has been made and trains are planned to leave five minutes apart. This approach is realistic in that it allows for minor perturbations in dispatching trains without causing knock on delays from one train to the next, and hence helps to deliver higher reliability in timekeeping. This of course limits the total number of trains an hour to twelve ($5 \times 12 = 60$), but as the maximum hourly number of trains presently timetabled in any one hour is only nine (Two London services, Portsmouth, Taunton, Manchester, Holyhead, Cheltenham, Nottingham and Ebbw Vale) this is not a problem.

The timetables have evolved so that eastbound trains generally leave Cardiff at five minute intervals starting with the "On the Hour". These are: -

XX:00 Cardiff to Taunton
XX:05 Spare
XX:10 Maesteg to Cheltenham
XX:15 Spare
XX:20 Cardiff to Holyhead
XX:25 Swansea to Paddington
XX:30 Cardiff to Portsmouth
XX:35 Cardiff to Ebbw Vale
XX:40 Spare
XX:45 Cardiff to Nottingham
XX:50 Carmarthen to Manchester
XX:55 Cardiff to Paddington

For operational convenience the Maesteg to Cheltenham departs at 12 minutes past as there are no constraints because the next five minute Slot is at present spare.

As can be seen the Arriva Cross Country Cardiff to Nottingham could leave five minutes earlier if required as the XX:40 slot is spare, but it cannot leave five minutes later without affecting the Arriva Trains Wales Carmarthen to Manchester with knock on alterations to the First Great Western Cardiff to Paddington and the Cardiff to Taunton services before the next spare "Slot" becomes available to absorb the change. Each of these three services has an associated "half hour" departure. (The Carmarthen to Manchester has the Cardiff to Holyhead along the Abergavenny line, The Cardiff to Paddington has the Swansea to Paddington along the Bristol Parkway / Swindon line and the Cardiff to Taunton has the Cardiff to Portsmouth along the Bristol Temple Meads line. So an alteration to any of the original three would need an alteration to its associated service to maintain the half hourly pattern on the line concerned)

Recovery Times

The theoretical times it takes for a train to make its journey is calculated based on the performance and the maximum speed of the type of train, the effects of gradients, the maximum speed of the line and specific geographical limitations due to the track on the allowable speeds of trains, called "Permanent Speed Restrictions". It is the 30mph Permanent Speed Restriction through Chepstow Station on a line that otherwise has a 90mph Maximum Line Speed that is relevant to the case for stopping the Cross Country services.

Once the theoretical time has been calculated for the journey then additional time is added to the timetable. This is often referred to as "Recovery Time" and there are three main types.

The first is "Engineering Time". The maintenance regime on the railway consists of regular inspections to identify the start of any deterioration of the infrastructure. The work needed to rectify the potential problem is identified, prioritised and planned based on the priority and the availability of access to the track without disruption to train services wherever this is possible. To ensure absolute safety there are occasions when it is deemed prudent to lower the speed of trains over the developing defect until it has been dealt with. These are called "Temporary Speed Restrictions". By the very nature of this system it is not possible to predict in advance where these Temporary Speed restrictions may be required. It has been practice therefore to sprinkle odd single minutes across the whole of the journey. This is based on years of experience so that the total minutes added would normally cover the requirements before the end of the journey.

The second is "Performance Time" this is also usually spread as single minutes across the whole journey and in the same way as the additional minute added to the Headway helps to keep minor perturbations during the journey at stations etc. from impacting on the performance reliability.

The third and the one that is of significant implication to the stopping of the Cross Country service is "Pathing Time". This is where when all of the other items have been considered there is a theoretical conflict between two or more train movements. This can occur for example where a train at a diverging junction needs to cross the adjacent line at a time when another train would be passing. In the case of the Cross Country service it is where two trains coming from different locations converge onto a single line and both have been calculated to arrive at about the same time.

Birmingham New Street and the limitations that it causes

The sheer number of trains that converge and then diverge from Birmingham and the number of different directions from which they come; added to the complexity and limitations of the confined space have made Birmingham one of the main bottlenecks on the railway system. This has resulted in the DfT dictating which routes services are allowed to use. This is not based on which routes most passengers might want to travel on but simply to reduce to a minimum the number of conflicting train movements within the constrained area, even though this may result in more people having to change trains to get to their destinations.

Even with the major changes as a result of the upgrading of the West Coast Main line and increased service frequency of Virgin Trains, the timetable has still been an evolution of the previous version. This has restricted Arriva Cross Country to historical timetable slots through Birmingham that are less than ideal for running the Nottingham – Cardiff services. This has resulted in an excessively long turnaround time at Nottingham and a shorter than ideal turnaround at Cardiff.

The high utilisation of the line between Gloucester and Birmingham tends to preclude any extended dwell times at stations along this part of the line. This with the specified times for Birmingham itself has dictated the arrival at Gloucester for southbound trains (XX:21) and the departure time from Gloucester for northbound services (XX:46).

Effect of Stopping at Chepstow

It is usual to add three or four minutes for each station stop on lines up to 100mph and four to five minutes on lines above 100mph. This gives time for deceleration, a minute for station dwell time to enable passengers to alight and join the train, and then for the acceleration back up to maximum speed.

The effect of the 30mph Permanent Speed restriction through Chepstow means that a station stop can be accommodated within two minutes. This has been verified on site by BT4C by timing both stopping and non stopping services.

Adding Chepstow into the stopping pattern of the Nottingham line trains therefore could be expected to extend the journey time for through travellers. However owing to the specific circumstances of the timings of the Nottingham service this two minutes can be accommodated both in the down direction (southbound Nottingham to Cardiff) and in the Up direction (northbound Cardiff to Nottingham) without affecting the departure times at the two stations either side (Newport and Gloucester)

Special Circumstances Down / Southbound Trains

Having arrived at Gloucester at XX:21 as a result of the limitations at Birmingham detailed above, this results in the Cardiff bound train arriving at the trailing junction where it joins the London to Cardiff line at Severn Tunnel Junction at theoretically one minute behind the Paddington to Cardiff train. In order to separate the two trains a five minute "Pathing time" is added to the Nottingham to Cardiff service. This can be verified by examining the Draft Timetable for Consultation which shows the Arriva Cross Country service without this Recovery time arriving and departing from Newport only one minute after the existing First Great Western Paddington to Cardiff service. As explained above there must be a minimum four minute separation and ideally five minute.

What this means is the train is held at the red signal protecting the convergence point until after the First Great Western has passed clear ahead. This protecting signal is actually on the west end of Caldicot Halt. Every hour throughout the day if both trains are running to time you can observe this Arriva Cross Country service crawling slowly towards and then stopping at the signal to wait its pathing time.

By stopping at Chepstow it will use up two of the five minutes waiting time that would otherwise be spent waiting at a wayside signal. The arrival and departure at Newport would remain unchanged.

Special Circumstances Up / Northbound Trains

Having left Cardiff at XX:45 the train would arrive at Gloucester at around XX:40. As explained above owing to the busy line between Gloucester and Birmingham and the specific time slot to arrive at Birmingham the service waits at Gloucester until XX:46 before departing. This has also been verified by BT4C and on one occasion the train was timed to wait in the platform at Gloucester for seven minutes before leaving at its official departure time.

The effect of adding in the Chepstow stop means that instead of waiting six minutes the service only has to wait four minutes at Gloucester.

This can also be verified by the first train in the morning that under the Franchise is required to call at Severn Tunnel Junction, Caldicot, Chepstow and Lydney. Assuming three minutes at the other stations and two minutes at Chepstow to be added to the timings this would add eleven minutes to the overall journey time. This service departs Gloucester at the standard XX:46. To do this one might have expected that the departure from Cardiff would have to be eleven minutes earlier at XX:34 but examination of the timetable shows it using the spare XX:40 slot. This is only five minutes earlier than the standard departure time, confirming that another six minutes can comfortably be accommodated from the built in recovery time.

Conclusion

Adding the two minutes necessary for trains to stop at Chepstow can be accommodated in both directions, by using otherwise wasted waiting time. There is no need to change the timetabled times at Newport and Gloucester or any other station on the whole of the line.

Phil Inskip
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