

Proposal for a Direct, All-Wales, Holyhead to Cardiff, Fast, Rail Link

Proposal

This proposal is for a railway route that connects Holyhead with Cardiff. The whole journey would be undertaken within Wales, but it would also link with Ireland, through Holyhead and with England through Cardiff.

Preamble

There is currently no railway line within Wales that connects North and South Wales.

This has the effect of diminishing awareness of being a country - it is highly unusual for any country to lack a direct connection from one end to another.

In fact, it would be interesting to research whether any another country in the world requires travellers to spend most of their travel time going through a second country in order to get from one end of their own country to another by rail.

This situation reflects not only our geography (the obstacles created by the mountains), but also our history - having a long border with England and having most major routes run east-west.

Even earlier than that, the Princedoms were not conducive to imparting a sense of being a unified country

The Assembly needs to overcome these outdated legacies if it is to be an effective instrument of government, regeneration and renewal.

Road link

The terrain of Wales means that the construction of an effective, modern north-south road link would cost many billions - far beyond the budget of the Assembly. This is therefore not likely to happen.

Furthermore, road building attracts road vehicles and road vehicles are a major source of pollution in general and carbon in particular.

Rail-link History

Up to the 1960's, people could get from north to south Wales by train, by accessing one of the following routes in Mid-Wales:

- a On the east side of Wales, the line from Moat Lane Junction (near Newtown) to Talyllyn Junction (near Brecon) and then on to Dowlais, provided access to Abergafeni and Newport as well as to Neath and

to the Swansea Valley. In fact, trains went in a total of seven directions from Brecon. Brecon is no longer served by rail.

- b On the west side of Wales, the line from Aberystwyth provided access to Llanbedr-Pont-Steffan and Carmarthen.
- C The Central Wales Line (Shrewsbury to Swansea) connects those two cities, but only part of it runs through Wales. Furthermore it is somewhat idiosyncratic in that not many people from one end of it wish to travel to the other end of it! By now, it provides a sort of bus-service on rail, calling at innumerable stations. Even upgraded, it could not deliver a competitive journey time from North Wales to South Wales.

These routes had never been developed as effective North-South links, and the railway companies that used them did not attempt to provide through trains from north to south. They could have done so, but they did not own the whole route! BR did not make radical changes to the already existing services. Apart from the Central Wales line, these lines are now closed.

Present Situation

To travel by train from north to south Wales or vice versa, it is now necessary to undertake most of the journey through England.

Guiding principles underlying the present proposal

Need for Rail Link

A viable North-South rail link, as an alternative to a road link is needed in Wales, not only for transport and mobility reasons, but also for social, economic and cultural reasons (creating a sense of 'one country'), and for

- the regeneration of certain areas along the proposed route
- increased connectivity of those and of other areas served by the proposed line.

Mitigate problems on A470 Road

The creation of a North-South rail link would, by definition, reduce traffic on the A470 and the problem of traffic density which is seen to require the upgrading of that road would diminish if not disappear.

'Provide and promote'

The principle that underlies this proposal is the logistical principle of

- 'Provide and promote'

rather than

- 'Predict and provide'

The latter principle underlies never-decreasing road-building programmes which in turn are known to bring about increased road use. We can anticipate that this principle will come under increasing scrutiny as the environment, sustainability principles, the need to decrease CO₂ emissions and the output of carbon are taken on board by planning and other authorities and as EU legislation begins to kick-in.

In adopting the principle of 'provide and promote', the proposal recognises that the route and the services it offers will need active engagement by many agencies. Support and promotion by the four Wales Transport Consortia (TAITH, TRACC, SEWTA and SWWITCH), for example, would be important in ensuring that strategies are developed and put in place to provide integrated services. Most obviously, local buses should connect with the trains from the outset.

The services provided on the route would need to deliver a range of travel options:

- The long-distance, fast journey for the traveller, let's say from Cardiff to Ruthin or from Bangor to Merthyr Tydfil
- The intermediate traveller who might go from Merthyr to Newtown or from Corwen to the Royal Welsh Show at Llanelwedd

[Travellers fitting into these two categories would use the fast service which would stop only at major conurbations]

- The commuter or shopper who might go from Ruthin to Llandudno or from Bedlinog to Cardiff
- Rail freight provision should also be ensured in the form of sidings and retail parks at various key locations. These sites should, of course, be well connected by road and in the case of retail parks, should have a good bus service

Parameters

The present study identifies the following themes which a proposed North-South Rail link would need to address:

- Logistical
- Social
- Economic

Rather than deal with the proposal thematically, I will examine it geographically, whilst attempting to draw attention to these themes.

Possible rail link

Any possible link first requires passengers to get to mid-Wales from which the routes to South Wales have to start.

Logistical Issues

A Access first to Mid-Wales

One main logistical problem in creating a North-South rail link through Wales is getting from North Wales (especially North-West Wales) to Mid Wales.

1. Cambrian Coast

In theory, North Wales is connected to Mid-Wales by means of the Cambrian Coast Line, but few people would want to start their North-South journey from Pwllheli.

Furthermore, there are several locations where that line can only ever be slow, notably Friog cliffs and between Aberdyfi and Dyfi Junction. It also requires firstly travelling east to Machynlleth up one side of the Dyfi Estuary in order to travel west to Aberystwyth on the other side to access the Aberystwyth to Carmarthen Line. This adds time to the journey without benefiting any population clusters after Aberdyfi.

2. Aberystwyth to Carmarthen*

Although there are many very straight alignments on this route, Aberystwyth to Carmarthen is very slow in places, notably the southernmost part of the line south of Pencader Junction. [what??? is this running??]

3. Llandudno Junction to Bala

* One very strong case for Aber to Carmarthen, however, is that it would re-open a whole hinterland of remote locations badly served by public transport (e.g. Lampeter) and there a case can be made for re-opening that line, but not as part of the N-S link.

This requires either:

- The reopening of the Blaenau Ffestiniog to Bala Line. The main logistical problem here may not be the diversion necessitated by the flooding of Cwm Celyn, but rather the speed constraints imposed by what was originally a narrow-gauge line, namely Blaenau Ffestiniog to Llan Ffestiniog. This section contains many tight curves which will always be subject to severe speed restrictions.

Or

- Bala could be reached from Llandudno Junction by creating a diversion after Betws y Coed and building a new line. This would require a tunnel of about eleven miles from a location near Penmachno to Frongoch, near Bala.

I regard the speed constraints that I have noted as very serious, and imagine that they would be regarded as very frustrating by travellers. We are, after all, talking about a line that joins two ends of a country. The equivalent in England is the West Coast main line with average speeds of over 100 mph !!

Passenger frustration must be kept to a minimum or, I suspect, the journey would be the butt of many jokes.

4. Rhyl to Corwen

The former LMS line from Rhyl (Foryd Junction) to Corwen would deliver a direct route as far south as Corwen, and a tunnel of two miles would be needed from Llandrillo to the Tanat Valley thence to Buttington Junction near Welshpool and Moat Lane Junction, near Newtown where the journey south from Mid-Wales would begin.

B Single-line constraints

Much single-line formation is used, and it is therefore necessary to ensure that there are sufficient long, dynamic loops that enable trains to pass without both having to stop. From Newtown to Moat Lane Junction, doubling of the track should be re-instituted.

C Track-bed

Track and track-bed need to be engineered to high specifications to ensure

- maximum line speeds at all points and
- a high RA (route Availability - i.e. the axle-weight that can be carried) - not lower than RA7 to avoid losing potential freight movements because of RA constraints

D ERTMS

For EU funding, ERTMS (European Rail Traffic Management System) would be obligatory, and would bring capacity benefits.

E Freight Distribution Centres

Provision for freight should be made at as many places as possible and any new roads built within reach of the route should ensure easy access to the high-speed rail line.

F Open Access

Under 'open access', more than one company should be encouraged to compete for the franchise on the route.

The line we are talking about is a line that connects one end of Wales (N.W.) to another (S.E.). Rolling-stock must be good and subsidised as with Arriva trains Wales. The equivalent of Virgin Pendelinos or Voyagers would be required.

- The long-distance journey must be in clean, comfortable coaches
- There needs to be a buffet
- There must be sufficient tables and telephone/ broadband connection so that people can work as they catch the early train from Bangor to Cardiff or from Cardiff to Llandudno.

The fast service must be user-friendly, including executive-friendly.

The Proposal

Underlying Principles

- This proposal regards using the Clwyd Valley Line as the preferred option for accessing mid-Wales. Very little new formation is required and its starting-point (Rhyl) is equidistant from both ends of the North Wales Coast line.
- On the route itself, three major conurbations would thus acquire rail access. From two of these (Denbigh and Ruthin) considerable commuter traffic could be taken off the roads. The third (Corwen) is in need of major regeneration.
- The proposal sees considerable value in accessing the Heads of The Valleys[#] - an area in great need of regeneration.

[#] 'The Valleys comprise the largest long-lasting regeneration region in the world. They were first established as an area for economic assistance by the Special Areas Act in 1934. More than 70 years later many of the same problems addressed by that Act persist.....many of the problems have retreated in scale from much of the Valleys to coalesce within the

- The route impacts on N-E, S-E, N-W, & S-W Wales (S-W, via the Central Wales Line which still functions and which the proposed route meets at Builth Road) .

Accordingly, this proposed route starts at Foryd Junction, slightly west of Rhyl, but the train could go into Rhyl station for passengers to alight, and then return to the Junction itself. The bridge to accommodate the track is still there parallel to the main North Wales Coast Line.

From the South, it starts at Cardiff and uses the Rhymni Valley line -still *in situ* as a freight line - to go to Merthyr Tydfil (Dowlais, Cae Harris) and then on through the Brecon Beacons via the Torpantau Tunnel, taking us north to Moat Lane junction.

The Route

The following is the proposed route:

1. Rhyl - St Asaph - Denbigh - Ruthin - Corwen

Straight alignment much of the way. High speeds possible, especially at the northern end. Some constraints for a short distance, at the Eyarth Gorge.

Road congestion caused by commuters reduced. Corwen becomes rail-connected again and some of the considerable heavy goods traffic which passes through it hopefully transferred to road. Outlying villages and districts benefit. Park and ride could be used for shopping in Rhyl, Llandudno and Chester. Travel south from Corwen made easy. Llangollen heritage railway enabled to deliver more regeneration and economic benefits stretching through to Llangollen.

2. Corwen - Llangynog

At Corwen, the proposed route continues along the former Barmouth Line to Llandrillo, south of which a 3 mile tunnel is required to connect the Pennant and Rhiwarth Valleys and to emerge, through the Berwyn Mountains, in Llangynog. This is new formation, and the largest civil engineering component of the proposal.

3. Llangynog - Llanymynech

At Llangynog, use the track-bed of the former Tanat Valley line to Blodwel Junction. This takes the route to Llanymynech. There are no

core Heads of the Valleys,how can we make a psychological breakthrough to enable people envisage a different but viable future for the Heads of the Valleys? (IWA flyer)'

steep gradients on this section. The Cambrian heritage railway wishes to extend in this direction from Oswestry and a connection at Llanymynech would make Oswestry rail-connected in a western direction.

Commuter and shopping services would increase mobility in the Tanat Valley and Llanrhaeadr-ym-Mochnant.

4. Llanymynech - Buttington Junction

At Llanymynech, the track-bed of the Cambrian Main Line from Whitchurch to Buttington Junction (near Welshpool) is used. This is main line formation and is straight and flat.

Llanymynech, Pool Quay become rail-connected and travel to south Wales from Welshpool and Newtown becomes more flexible - for example, travellers to south-west Wales would change at Builth Road and catch the Swansea connecting service.

Business between Cardiff and Newtown and Welshpool becomes viable as executives catch an early train for breakfast and work at their lap-tops.

5. Buttington Junction - Moat Lane Junction

At Buttington Junction, the route joins the line through Welshpool and Newtown to Moat Lane Junction and then south to Builth Road.

Moat Lane Junction becomes a significant location as passengers from trains travelling east on the Cambrian Coast line would take the high-speed, direct Cardiff service from this point, probably accessing the service nearby, at Newtown to reduce the number of stopping-places.

It is anticipated that this would become an important 'feeder' route, supplying the North-South service with many passengers travelling to Cardiff from locations such as Machynlleth, Aberystwyth and locations from the Cambrian Coast as far as Pwllheli. At present these people have to travel to Shrewsbury if they want to get to Cardiff or Swansea.

6. Moat Lane Junction - Builth Road

This uses the former Mid-Wales Line (not Central Wales Line) to get to Builth Road. Here, it intersects with the Swansea to Shrewsbury ('Central Wales') line and forms a junction. Track-bed needs to be restored in Llanidloes.

From a civil engineering point of view, it is unlikely that the present road arrangements (on the former track-bed) at Llanidloes would be a problem. The road could be placed in a tunnel and the railway placed back at its previous height to access the still extant station building.

Llanidloes is said to be in some economic straits with a recent news item lamenting the effect on the town of the closure of the Laura Ashley shop. Restored rail connectivity could be most advantageous for the town as

commuters and shoppers could travel easily to Newtown, Welshpool and also, (via the Cambrian Line which they would join at Moat Lane Junction) Shrewsbury.

Travel from Llanidloes to South Wales (Cardiff or Swansea and intermediate locations) becomes easy and fast via the new junction which would be constructed at Builth Road.

This new junction enables users of the Central Wales Line travelling from Swansea and South-West Wales - to have a direct, fast route to North Wales on the section that has been described hitherto. A direct service (Swansea - Rhyl and the North Wales Coast) could be run, but the present proposals anticipate that Cardiff will be a destination and starting-point for more passengers than will Swansea. Accordingly, we would suggest that the Swansea to Moat Lane Junction section be viewed as a connecting 'feeder' route, like the Pwllheli - Shrewsbury one which connects at Moat Lane Junction. However, its upgrade to ensure higher line speeds would benefit the high-speed route with which it connects, as more people would be inclined to use it.

7. Builth Road - Talylllyn Junction

Much of the alignment of the old line is very straight and, given a high level of track and track-bed engineering, good speeds could be reached.

Where the line South of the Marteg Tunnel (near St Harmon's), meets the road, the new road is now lower than the former railway but used, it seems, to be higher and civil engineering would be required here.

At Llanelwedd, a round-about now occupies the area of the level-crossing and this would need a civil engineering alternative.

Near Doldowlod, the road occupies part of the former track-bed.

South of Builth, there is a quiet road occupying part of the former track-bed near Aberedw and Erwood. This road would need diverting or its original route or alignment restored.

At the former Three Cocks Junction, the alignment is in the direction of needed for this route, and brings the route to Talylllyn Junction. Upon reaching Talylllyn Junction, the route would not use the tunnel and go into Brecon and then reverse, but rather use a new platform, at what was the 'triangle' at Talylllyn Junction, so as to retain direction of travel and thus continue travelling south. A connecting shuttle service for the half mile into Brecon could be arranged and a platform constructed at the triangle in Talylllyn.

This part of the line would re-connect Rhayadr to the rail network and hopefully mitigate some of the adverse effects of heavy traffic through that town and bring about some regeneration.

The 'local' train service would be very useful to communities along that section - Llansteffan, Talgarth etc.

The benefits to Builth Wells and Llanellwedd are obvious, and rail travel to the Royal Welsh Show becomes possible from every direction in Wales.

Brecon would become rail-connected again, and thus gain easy access to areas south of the Beacons.

8. Talylllyn Junction - Torpantau

The disused Mid-Wales Line track-bed now follows the rather steep route (1 in 40 for 6.75 miles to Talybont on Usk) then the 'Seven Mile Bank' (1 in 38 with a short break at Pentir Rhiw station) to the Torpantau Tunnel.

The Torpantau tunnel is the highest rail tunnel in England and Wales and provides the route with access to the Heads of the Valleys and South Wales.

9. Torpantau Station - Dowlais Top

Torpantau station is located south of the tunnel. From Torpantau, the route is to Pontsticill Junction and then not into Merthyr (logistical problems after Cefn Viaduct), but to Dowlais Top.

The alignment could run parallel to the Brecon Mountain Railway.

From Dowlais Top an alignment is needed for the short distance to Dowlais Cae Harris, because it is from here that the Rhymni Valley Line (Taff Bargoed Branch) is accessed. Initial map surveys suggest that a short new alignment at this point would not be problematical.

10. Dowlais Top - Cardiff

The Rhymni Valley Line (Taff Bargoed Branch) is *in situ* as a freight line (see photographs). Upgrade would be needed. The route would use this line as it goes through Cwm Bargoed, Bedlinog, Trelewis, Nelson and Llancaiach and on to Ystrad Mynach and Cardiff(see maps 1 & 2).

The Heads of the Valleys is given rail access north again and this opens it out.

Research should be undertaken to try and assess the viable cultural, psychological, economic and regeneration benefits that such rail connection would deliver.

The Institute of Welsh Affairs has identified that 'problems have retreated in scale from much of the Valleys to coalesce within the core Heads of the Valleyshow can we make a psychological breakthrough to enable people envisage a different but viable future for the Heads of the Valleys?' (IWA flyer)

WAG has recognised this fact as the existence of their document, published in June, 2006, indicates - 'Turning Heads - A Strategy for the Heads of the Valleys 2020' -.

'Using special funding from the Welsh Assembly Government of £140million, the programme will focus the Team Wales approach to maximize the benefits arising from all forms of public sector expenditure, estimated at £1billion per year directly or indirectly invested by the Assembly and local authorities and the £300million upgrading of A465(T) Heads of the Valleys road, and lever in at least £360million of private sector investment'.

<http://www.walesresilience.org/consultations/closed/busandeconclocons/HoV?lang=en>

In view of the magnitude of this investment, and of £300 Million being allocated just to the upgrading of the Heads of the Valleys Road, a rail route through the adjoining Beacons would be a serious omission in any strategic development.

This very week, a major IWA Conference on the Heads of the valleys is arranged for Thursday, 7th February in Aberdar.

G Stopping Places for the 'through' express, Holyhead - Cardiff trains

This proposal suggests the following 15 stops on the 'through' express service:

Holyhead / Bangor / Llandudno Junction / Rhyl / Denbigh / Rhuthun / Corwen / Welshpool / Newtown (*Cambrian Coast Line 'feeder' connection here*) / Llanidloes / Rhaeadr / Builth Road (*Central Wales Line 'feeder' connection here*) / Talylylyn Junction (*connecting service for Brecon*) / Dowlais (*for Merthyr Tudful and Heads of Valleys*) / Cardiff

A typical Holyhead - Euston train would have as many as 11 stops, but this is not comparing like with like, as the One-Wales train service has certain additional cultural and regenerational purposes.

Benefits

i One-Wales Strategy.

- Starts in North-West Wales

Delivers a service originating in North-West Wales (Holyhead, Bangor, Llandudno Junction) to *Cardiff and Newport*, which it views as the destinations of most North-South travellers. Many towns and villages in North Wales are within reach of Bangor, Llandudno or Holyhead for the commencement of the journey, and are thus provided with a viable alternative to a road journey.

- Delivers transport and sustainability benefits in North-East Wales

Enhances accessibility to St Asaph, Denbigh, Ruthin, Corwen. Reduces road congestion and provides a commuter and shopping alternative. Regenerates Corwen.

- Provides added connectivity for South-West Wales

Through its 'feeder' routes, it radiates connectivity to Swansea, Neath, Llanelli (via the Central Wales Line)

- Provides added connectivity for Mid-West Wales

Cardiff now become easily accessible by rail from Aberystwyth, Machynlleth and North Wales locations along the Cambrian Coast

- Delivers transport and sustainability benefits for isolated communities in Mid-Wales

Llanidloes, Welshpool, Newtown, Rhaeadr, Brecon and all the areas around them (even Oswestry, albeit in England) gain added connectivity, and the restoration of a rail connection to three of those sizeable and rather isolated towns provides mobility options to useful destination - far and near.

- Links Heads of the Valleys and South-East Wales

It uses the already existing Taff Bargoed Branch of the Rhymni Valley Line to deliver the North-South journey into Cardiff for commuting and shopping, whilst providing also a South-North paradigm that thereby opens a 'gateway' through the Brecon Beacons from the Heads of the Valleys. This is an area of high social exclusion and the alternative, north-facing travel paradigm which the route offers can help bring about '*a psychological breakthrough to enable people envisage a different but viable future for the Heads of the Valleys*' This future could include promoting and servicing the tourist industry based in the Brecon Beacons. The route facilitates this psychological and cultural change.

ii Business

Businesses would more readily consider operating in both north and south Wales.

A business based in the Carmarthen area recently reported that they operate as far a-field as Devon because it is easily accessible by rail, but do not operate north because of the lack of rail transport although they would like to do so.

iii Regeneration

It could contribute substantially to the regeneration of whole areas of Wales that are economically underdeveloped

Specific towns in which regeneration is not happening, would benefit e.g. Corwen, Llanidloes

iv Culture

- *It is a 'One-Wales' vision.* For such a vision to become a reality, support and encouragement are needed. Based on the principle of 'Provide and Promote', the planning, construction and operation of the line can be a means of conveying the vision and of implementing, sustaining, maintaining and developing it.

It could contribute directly to building up the cohesion of Wales.

- It is a cross-cultural vision, because the route makes the whole length of Wales a 'land-bridge' between Ireland and England. EU Interreg details should be researched.

v The Assembly

This link would provide an opportunity for the Assembly to demonstrate that it is capable of delivering a scheme that is

- tangible, visible
- affects Wales as a whole and benefits Wales from north to south, east to west, and many points of the compass

Further Reflection

Further reflection is suggested on the following themes and topics:

Culture-change

- Environmental and sustainability principles, together with EU legislation means that road-expansion may no longer be regarded as the sole solution to mobility issues and that a culture-shift in travel paradigms is needed. This pioneers such a culture-shift in Wales.
- An improvement in the quality of life can become a guiding principle in deciding travel options. Someone going on a return journey from one end of the Cardiff-Holyhead route to the other can work and have time to reflect whilst on the outgoing journey, and relax on the return journey. This is not possible when driving even on an improved A470.

National stress-level could be reduced and greater efficiency and physical and inner health of target groups achieved

Electrification

Iain Coucher, Chief Executive of *Network Rail* and Adrian Shooter, Chairman of the *Association of Train Operating Companies* have written to the Department for Transport, describing its failure to electrify more lines as 'very short-sighted'. They maintain that the Government's recent White Paper on rail uses 'misleading' arguments to justify its failure to invest in wider electrification.

The electrification of the route from the outset should be considered.

Funding

Many funding options should be studied. Certain projects are able to attract rail investment - for example 'Eco-towns'. UK Government want 20 of these by 2020. If any are proposed for Wales, they should be along this route.

Schemes exist within the private sector to pay for rail opening when housing schemes are being developed. For example:

'The Kilbride Group has become involved in the development of community rail schemes since 2004, as a result of its interest in the use of rail infrastructure to link new development areas to employment and educational opportunities.

Kilbride Community Rail will invest and build necessary rail infrastructure, whether for freight or passengers, to provide new communities and customers with the necessary rail infrastructure to service their requirements'.

<http://www.kilbridegroup.com/docs/kilbride-community-rail.asp>

Irish Experience

A similarly ambitious scheme is now taking place in Ireland. It is the re-opening of the 'Western Corridor'. Irish rail has begun track-laying on the first phase. In common with our 'One-Wales' rail proposal, that corridor also goes through remote regions and connects them to vibrant centres. The whole scheme re-opens 184km - perhaps not less than the re-opening involved in the present proposals.

Phase 1 Re-opening of Ennis - Athenry line (58km), to allow introduction of Galway-Limerick services by 2009

Phase 2 Re-opening Athenry-Tuam-Claremorris line (52km)

Phase 3 Re-opening Claremorris-Collooney line (74km)

<http://www.nxtbook.com/nxtbooks/sb/irj1207/index.php?startpage=8>

+ Archimandrite Deiniol

Spokesman *Yn Ein Blaenau*

Blaenau Ffestiniog 03 02 08

Y mae Yn Ein Blaenau yn Gorff Anlywodraethol cymunedol i hybu a chefnogi cynlluniau i adfywio economi Blaenau Ffestiniog a'r fro, ac i wneud y mwyaf o gyfalaf daearyddol, dynol a chymdeithasol sylweddol yr ardal

Yn Ein Blaenau is a community-based NGO, set up to promote and support schemes intended to rejuvenate the economy of Blaenau Ffestiniog and the area and to maximize the considerable physical, human and social capital of the region

11 Heol y Manod, Blaenau Ffestiniog, Gwynedd LL41 4DE
Tel: + 44 (0)1766 831272