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EXCLUSIVE

Why South West NEEDS a Dawlish avoiding line

The best of today's railway writing from ...

Neill Mitchell

"The benefits would accrue not only to the connectivity, economic performance and image of Plymouth, but also the sub-regional economies of Exeter, Torbay, Newton Abbot, south Devon and the whole of Cornwall."

Feature, 56-61



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New rail links to the South West

In a sequel to his article "An all-weather track in the West?" (RAIL 677), independent West Country transport analyst NEILL MITCHELL makes the case for high-speed inter-city rail connectivity for the South West peninsula

The impact of the recent storms upon the resilience of the South West's mostly 19th century strategic arterial rail infrastructure, and resultant devastation of the far South West's regional economy, has seemingly presented government with a plethora of macro-problems.

But, courtesy of the Prime Minister's direct intervention, perhaps we now have a unique opportunity to (at last) fast-track the prudent and visionary remedial actions needed for the future rail connectivity of the South West - within an accelerated timeframe.

Certainly one is reminded of former Conservative Prime Minister Harold Macmillan's observation that the agendas of government are invariably dictated by "events, dear boy, events". And, a little later, of Labour's Harold Wilson remarking: "A week is a long time in politics" and "politics is the art of the possible" (the latter plagiarised from Otto von Bismarck).

For my decidedly more modest part, writing in RAIL 677 (August 2011), I observed: "Today, it's simply not acceptable for the 21st century business, freight, school run, tourism and leisure rail travel of the Devon and Cornwall peninsula (west of Exeter) to remain dependant upon a solitary 'fair-weather railway'."

For those who questioned my arguments back then, I think that I can now confidently (but regrettably) claim 'case proven'! So, let us take stock once more.

Crucially, in the context of 'joined-up government', it must be understood that the European Union and the government's Department of Business, Innovation and Skills (DBIS) are both actively promoting measures focused upon enhancing the strategic competitiveness of the far South West. The objectives are urban and rural wealth and employment creation, improvement of skills, and raising the region's overall GDP.

The region certainly has great prospects. However, these are severely constrained not

only by a post-War legacy of poor connectivity, but also by this connectivity having actually deteriorated further in recent years. This is now recognised as being the principal obstacle to the South West being otherwise fit to match today's pace of economic growth in other (formerly peripheral) regions of continental Europe.

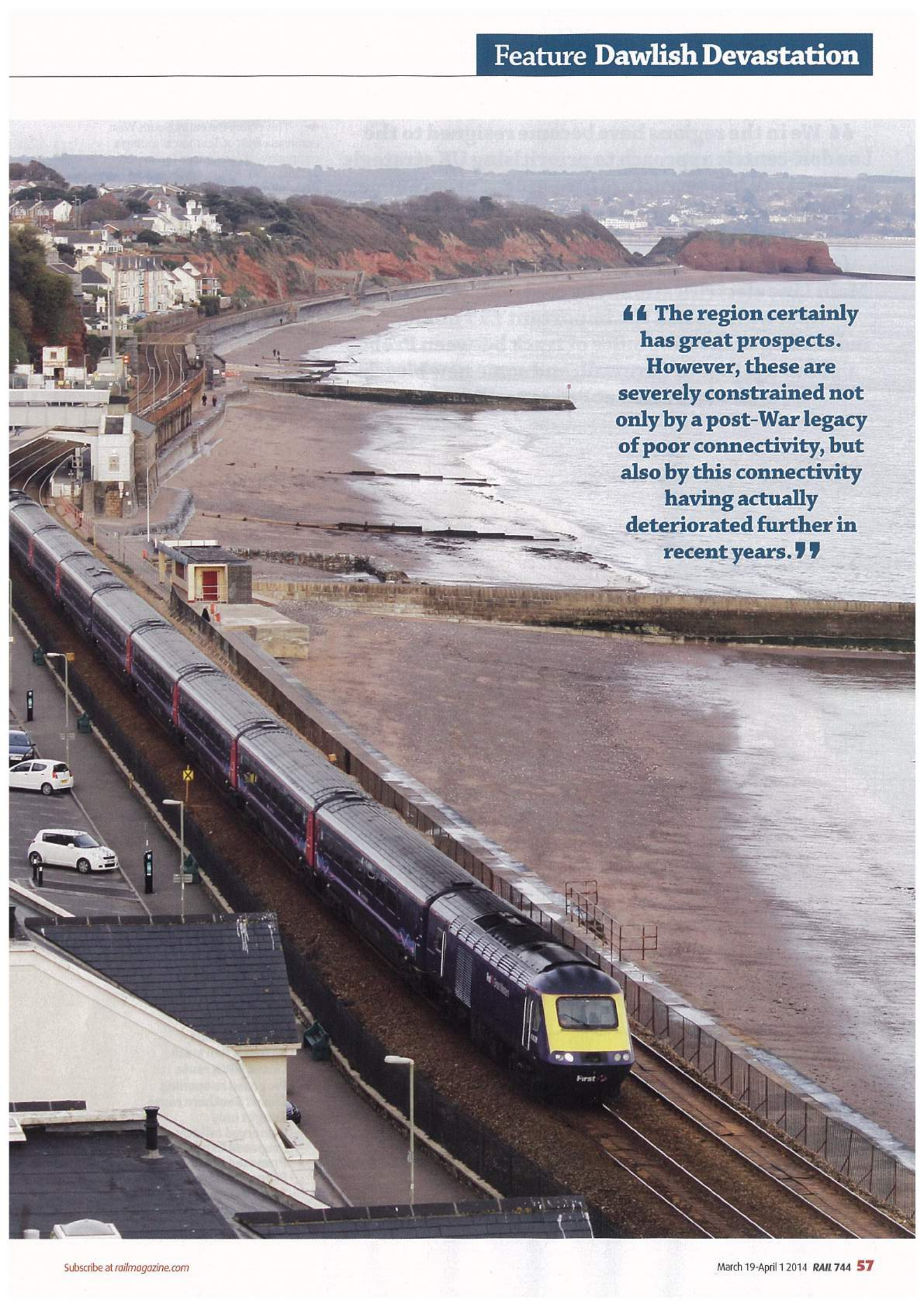
Whitehall's DBIS (and its predecessor the DTI) has long put to rest quaint notions of the far South West's economy being predominantly characterised by bucket and spade holiday resorts and picturesque cream tea ruritania, pleasing though these facets remain for visitors and locals alike.

Instead, the focus has rightly been upon an economic region of the EU covering some 1,396 square miles, populated by 2.2 million people contributing some £36 billion per annum to the UK's output, driven by 98,000 businesses supporting 1.1 million jobs.

But no matter how energetically that regional engine is being stoked, its boilers constantly fail to achieve their full working pressure - largely owing to the nationally recognised and tested inhibitor that for every 100 minutes travel time from London, regional productivity drops by 6%. ➔

The close proximity of the railway to the English Channel is obvious on December 4 2013, as First Great Western 43028 leads the 1206 London Paddington-Penzance through Dawlish. It is running on the Up line, rather than on the Down line. STEWART ARMSTRONG.



An aerial photograph showing a long, dark blue and yellow high-speed train (First Class) stopped at a station platform. The platform is situated on a cliffside overlooking a wide, sandy beach. The beach is bordered by a sea wall and a promenade. In the background, there are residential buildings on the cliffside and a large body of water. The sky is overcast.

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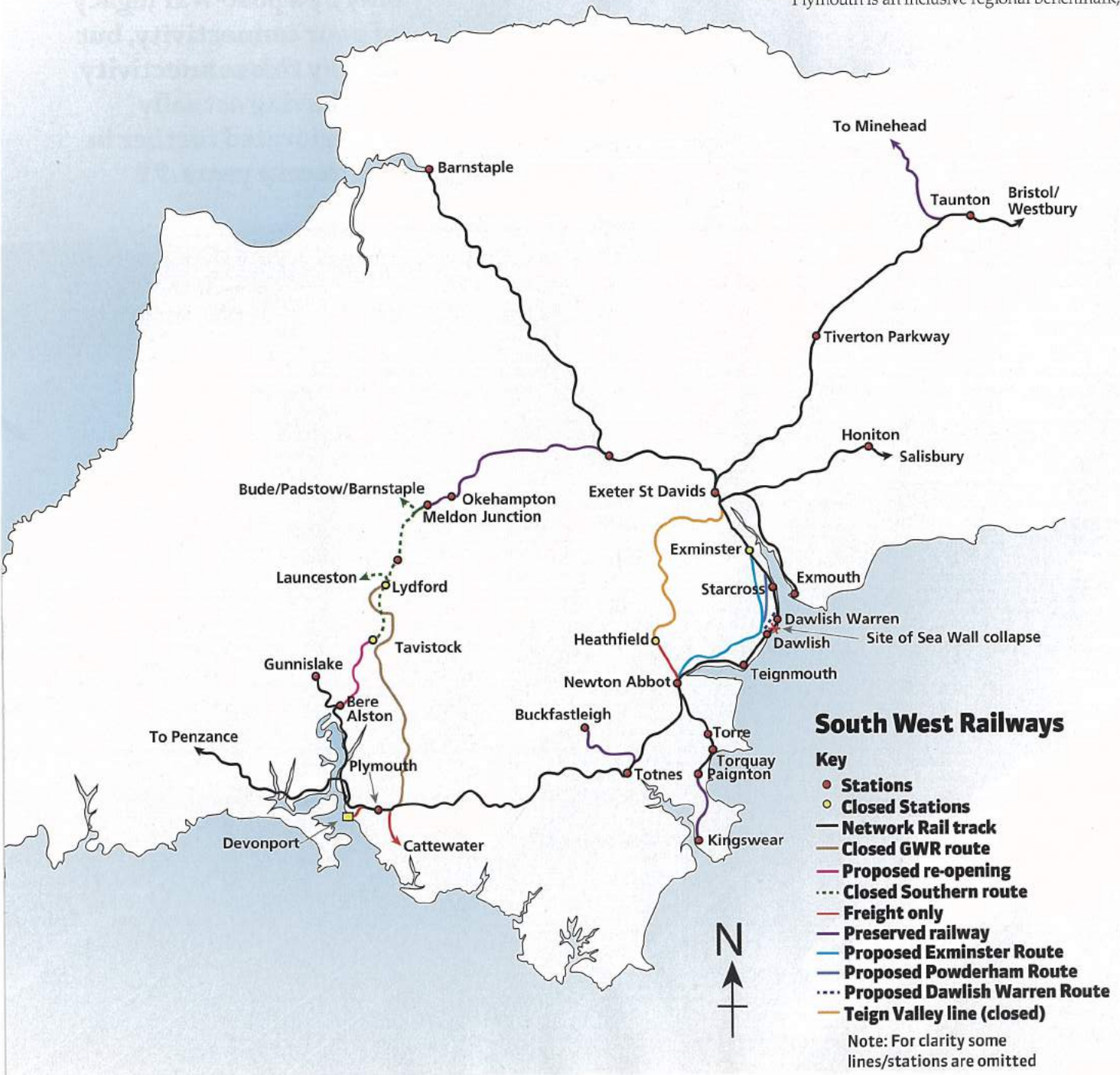
There was £8 billion for the West Coast Main Line upgrade, and now £20bn for HS2, £15bn for Crossrail (and £1bn for its trains), £8bn for Great Western Main Line electrification... by contrast, in the South

West we have had the important £15 million redoubling of the nine miles of track between Probus and Burngullow in Cornwall, and some new bicycle sheds erected at Penzance!”

➤ This places the entire South West peninsula west of Taunton at multiple competitive disadvantage (up to trebled, as far as Penzance). It does not, of course, diminish the admirable entrepreneurship of new businesses germinating in the South West, but it is a formidable deterrent to potential inward investors, and thus of major concern to DBIS in particular.

Hence, for over a decade (post-Hatfield) we have heard much of Plymouth's demand for reinstatement of its former three-hour rail journey time from London Paddington. But why should a regular journey time linespeed objective of three hours (or less) to Plymouth be such a priority for the region as a whole? Do minutes really count?

There is a much more fundamental strategic reason. The three-hour threshold for Plymouth is an inclusive regional benchmark,



the automatic by-product of which would be a future two-hour journey time to Exeter, and four and a half hours to Penzance, with proportionate enhancement of journey times to all of the peninsula's intercity stops along the 109 miles in between.

The benefits would therefore accrue not only to the connectivity, economic performance and image of Plymouth, but also the sub-regional economies of Exeter, Torbay, Newton Abbot and south Devon and the whole of Cornwall. Collectively, perhaps directly inclusively, it would affect one million people or more.

In short, if UK plc is seriously committed to economic growth and to the global competitiveness of its regions, then Plymouth's three-hour intercity rail threshold must surely now be seen as a primary objective.

So how are matters progressing towards that end?

It is sobering to remind ourselves that from the mid 1970s onwards, emblazoned along the full length of the parapet lintel above the British Transport Police offices at Plymouth's North Road Station (today exposed as bare concrete), British Rail's prominent black and white enamelled-steel signage used to boldly proclaim: "Fastest Journey Time to London 3 Hours".

This was a reflection of the high hopes and optimism for the future competitiveness of inter-city rail, which had accompanied the introduction of the diesel High Speed Train (HST) fleet to what was then BR's Western Region.

Later, amid the meltdown of UK rail services and the collapse of Railtrack plc following the game-changing Hatfield disaster in 2000, this epic signage was discreetly dismantled one dark and stormy night by a conscientious local manager at First Great Western.

One option being considered is to build a railway inland, thereby avoiding Dawlish, but still serving Newton Abbot and Torbay. One of the options would head inland from Exminster. On January 11, First Great Western 43191 races through Exminster with the 1058 Penzance-London Paddington.
STEWART ARMSTRONG.

His action, although disappointing, was no more than an objective reflection of the reality at that time. It was simply no longer possible to operate three-hour services between Plymouth and Paddington, owing to the inadequacy of the track and signalling infrastructure.

Subsequently, the immediate post-Hatfield speed restrictions that had been placed upon the Great Western Main Lines were eliminated, in a slow process of track renewals carried out by the emergent Network Rail. Even so, there was no question of investment being made available for wholesale route upgrading, to permit future higher-speed operation.

So, if British Rail felt sufficiently confident to promote its three-hour journey time between Plymouth and Paddington all those years ago, what are the impediments today? Is it the age of the HST 125 fleet, now approaching some 40 years in service? Are these trains no longer fit for purpose?

No, these popular and stalwart inter-city greyhounds are more than capable of performing their long-distance design speed of 125mph. Such operation could easily reduce the 226-mile Paddington-Plymouth journey times to 2hrs 40mins (inclusive of the established stopping pattern), as identified in the Railtrack EU TENS Study of 1996/97 - A

Vision for a World Class Rail Transportation Network for the South West.

Sadly, however, 40 years on there is still not a single metre of track along the entire 269-mile length of main line between Reading and Penzance where 125mph operation is permitted. Heading westwards, the maximum is 110mph, dropping progressively to 90mph, 65mph and ultimately 50mph.

In recent decades, we in the regions have become resigned to the London-centric approach to prioritising UK strategic national rail infrastructure investment programmes.

There was £8 billion for the West Coast Main Line upgrade, and now £20bn for HS2, £15bn for Crossrail (and £1bn for its trains), £8bn for Great Western Main Line electrification, £750m for the Reading station reconfiguration, and so on. By contrast, in the South West we have had the important £15 million redoubling of the nine miles of track between Probus and Burngullow in Cornwall, and some new bicycle sheds erected at Penzance!

Within political perceptions of the need for 'fair shares' of the regional cake, whenever Whitehall apportions investment to the London Paddington-Bristol-South Wales line, ministers and civil servants persistently describe that route (in good faith) as "THE" Great Western Main Line (GWML). ➔

Plymouth

Some might say that because the university city of Plymouth is the largest city in the West Country (core population of 261,000, making it the 14th largest in England), as well as being a member of the Key Cities Group, and recently selected as part of the SW peninsula for the present government's City Deal, it requires a link to London that takes less than three hours.

It is also a city sustaining employment for more than 105,000 people (many of them highly skilled, including nuclear-qualified engineers in the Naval Dockyard), with

an economy significantly dependent upon inward investment. Yet it no longer has any connectivity by air services, since the closure of its airport.

And it is a city that (unlike Exeter) is also beyond the outreach of the national motorway network, and which (again unlike Exeter) is exposed to only a solitary arterial inter-city and inter-regional main rail line, a line whose operating speeds are in places restricted to just 50mph-60mph.

All this, as a major EU city competing in the 21st century!





➤ This begs the question of what precisely is the status of the other 305-mile inter-regional railway between Paddington and Penzance? Is it the 'not the GWML', or is it just an exceptionally long branch line?

If it is a GWML (and surely it is), then has the time not come for government and the rail industry as a whole to recognise that there are two GWMLs, perhaps meriting clear branding for future decision-making and regional political recognition as GW1 and GW2?

In this context, GW2 has been the substantially poor relation for far too long, relying for the most part for its line speed upgrading on modest incremental benefits derived from other capital projects, and on hand-me-down rolling stock.

Headline Numbers

1,396

square miles

98,000

businesses

1.1

million jobs

2.2

million population

£36

billion contribution to UK output

Yes, the Reading reconfiguration will enhance the robustness of GW2 timetabling, and maybe cut a few minutes' slack from inter-city journey times.

Yes, electrification of the 50 miles between Paddington and Newbury is a first step in GW2's long-term prospects of eventually catching up with GW1 (although it currently seems unlikely that Penzance services will be rostered with future rolling stock equipped to draw power from these first miles of overhead line electrification).

Then there's the Intercity Express Programme (IEP) for Great Western trains. Just how far down GW2 will these new bi-mode trains be operating? At the moment, west of Exeter is looking very doubtful indeed.

To be fair, over the past decade, positive efforts have been made intermittently by managers of both Network Rail and First Great Western to re-timetable some three-hour services at odd times during the day. In part, these have relied on the 'make do and mend' approach of cutting out some intermediate stops. But this is still most certainly not the regular/standard journey time.

Matters have now been brought to a head by the latest breach in the sea wall at Dawlish, and the time has come for decisive action.

Questioned in the House of Commons on February 12 by local MP Oliver Colvile (Conservative, Plymouth Sutton & Devonport), Prime Minister David Cameron said: "Obviously the gap in rail provision created by the Dawlish disaster will take time to deal with. Above and beyond that, I know that what he and the people of Plymouth want is a timetable achieving a three-hour service to Plymouth. As I have said, we have a longer-term programme looking at rail alternatives at the same time as restoring the Dawlish line."

To which an understandably sceptical Western Morning News, reflecting decades of regional frustration at the lack of investment in the South West's rail artery, quickly responded

Any diversionary plan must not involve closure of the coast line, says Neill Mitchell, because thousands of people still rely on that stretch of railway. On December 5 2013, First Great Western 143618 passes Royal Parade in Dawlish (where the wall collapsed on February 4), working the 1123 Exmouth-Paignton. STEWART ARMSTRONG.

with the pertinent headline: "We will hold you to that."

So, the message is clear. Government has committed itself both to reinstating the existing low-speed Dawlish sea wall route of GW2, and to additional arterial resilience being joined up (in terms of value for money), with the enhanced line speed objective represented by the 'three hours (or less) to Plymouth' benchmark.

In practice, this clearly determines the issue, because neither the Teign Valley nor Okehampton re-opening options, nor the Dawlish breakwater idea, would reduce GW2 journey times in the slightest.

Hence, we are led inexorably to selection of the Dawlish Avoiding Line (DAL) deviation option (currently NR's C(i) option), between Exminster and Newton Abbot.

First drawn up in minute detail by the Great Western Railway from 1935, and thence subjected to full parliamentary scrutiny and written into statute as the GWR (Additional Powers) Act 1936 and subsequent GWR Act 1937, its funding was to be underwritten by the government of the day. Work upon this project started in 1939 for completion by January 1941, at a cost equating roughly to £300m in today's values. The Second World War then intervened.

Now, 75 years later, applying today's advanced tunnel boring technology (beneath Haldon Ridge) and aspiring to future IEP bi-mode line speeds of up to 125mph, we must re-align the GWR's DAL routing yet more directly to make it truly fit for purpose as an inter-city rail artery of the 21st century (additional option C(i)a). As both the Romans

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and Brunel taught us, the shortest distance between two points is a straight line.

The present 20-mile sea wall distance between Exminster and Newton Abbot would thus potentially reduce to 16 miles under the GWR plan and to 12 miles today - shaving eight miles and ten minutes off GW2 operation and preparing this (albeit short) stretch of main line for future electrification.

The cost? Well, perhaps we might initially pitch at around £500m (comparable with the Reading station project, the A3 road tunnel at Hindhead or considerably less than the Edinburgh tram).

So, just as with Spain’s near-complete re-routing and upgrading to 125mph of the regional Atlantic High Speed Rail Axis through Galicia, this is ‘do-able’ in terms of conventional (non-HS2) regional rail investment.

Moving on, in its arguments justifying HS2, UK government has consistently championed the role that rail can play in delivering wider inter-departmental strategic economic, social and connectivity policy objectives. These include boosting competitiveness, clearing trade routes of congestion, achieving modal capacity shift from roads to rail, strengthening the rural economy, and relieving social/geographic exclusion.

Against that backdrop, the DAL project needs (surely) to be followed in quick succession by full re-opening of the former 57-mile LSWR/BR(s) main line between Plymouth and Exeter via Okehampton (closed May 6 1968).

As a secondary £500m project, perhaps no more fanciful than the Scottish Government’s current 30-mile re-opening of the ‘Waverley Line’ to Galashiels, this would deliver separate regional connectivity benefits.

In particular, it presents the opportunity for a parkway station at Meldon - where the A30 trunk artery crosses the old line, adequate parking space could be accommodated within the former Southern Railway quarry crater.

Indeed, Meldon Parkway would assuredly exceed the extent of Tiverton Parkway station’s geographical catchment, by reaching across west Devon and deep into north Cornwall (as once served, pre-Beeching, by the Southern Railway’s ‘Withered Arm’). Perhaps it would also afford scope for a future intermodal freight depot.

This line would (as the ‘missing link’ in the orbit of the ‘Devon Metro’) re-establish its former ability to service commuter, retail and leisure outreaches from both the cities of Plymouth and Exeter, restore rail connectivity to the growing market towns of Okehampton and Tavistock, and create stunning new rail tourism access opportunities.

However, for those advocating this route as a viable alternative spur into that of GW2 to Paddington (if worked as such), it would be considerably slower. It would fail to serve the greater proportion of Devon’s economically productive population in the south of the county, and (if routed from Penzance to Paddington) would require double reversals at both Plymouth and Exeter St David’s.

On the other hand, if envisaged to continue

onward through Exeter St. David’s to Exeter Central (as of old, now as South West Trains franchise) and ultimately to Waterloo, then its potential value for the far South West’s connectivity increases considerably.

It would provide not only the resilience of a full-length (but slower) ‘Second Artery’ and access to destinations throughout southern England, but also the greater convenience of the Waterloo hub in London.

Finally, with both the DAL and re-opening of the Okehampton Line being the two desirable ways forward, what of the present Exe Estuary and Dawlish sea walls of the ‘Riviera Line’?

Well, this historic route must and will continue to be maintained, not only for rail purposes, but also as part of south Devon’s coastal defences. Perhaps suited to through freight services, this line could continue to accommodate weekend engineering work diversions from the new DAL deviation, some scenic promotional potential for CrossCountry main line services from the Midlands and the North (summer seasons/weekends), and local ‘Torbay/Riviera Shuttle’ services between Exeter and Torquay, via Dawlish, Teignmouth and Newton Abbot.

In this way, it would continue to offer the joys and local convenience of the ‘Fair Weather Railway’ at Dawlish, whose Brunellian origins as the route of the short-lived pneumatic Atmospheric Railway provide us with an especially apt tourism branding for its future as South Devon’s ‘Atmospheric Railway’, in the scenic sense.

But we must otherwise consign to history its perpetual economic threat to the west of Exeter high-speed arterial rail connectivity of the Devon and Cornwall peninsula. We should also ask the question whether the regional rail budget alone should continue to subsidise capital maintenance of exposed coastal defences?

Meanwhile, let’s now begin planning the deviation route for the GW2 high-speed inter-city DAL between Exminster and Newton Abbot (and the process for its delivery) without undue delay.

There’s no need for dithering - the Prime Minister’s intentions on behalf of the government have been clearly and very publicly articulated. ■

About the author

Neill Mitchell, Transport analyst

Neill Mitchell is an independent regional transport analyst, based in Plymouth. He is the former Regional Chairman of the seven-county South West Chambers of Commerce network, and has served for seven years as a publicly-appointed member of the Network Rail board. He also directs his own strategic management, public relations and events promotion consultancy.



The damage caused at Dawlish further east, between Rockstone Bridge and Langstone Rock, was more superficial, with the wall separating the pedestrian walkway and the tracks now strewn over the railway. This was the view on February 5. ANTONY CHRISTIE.