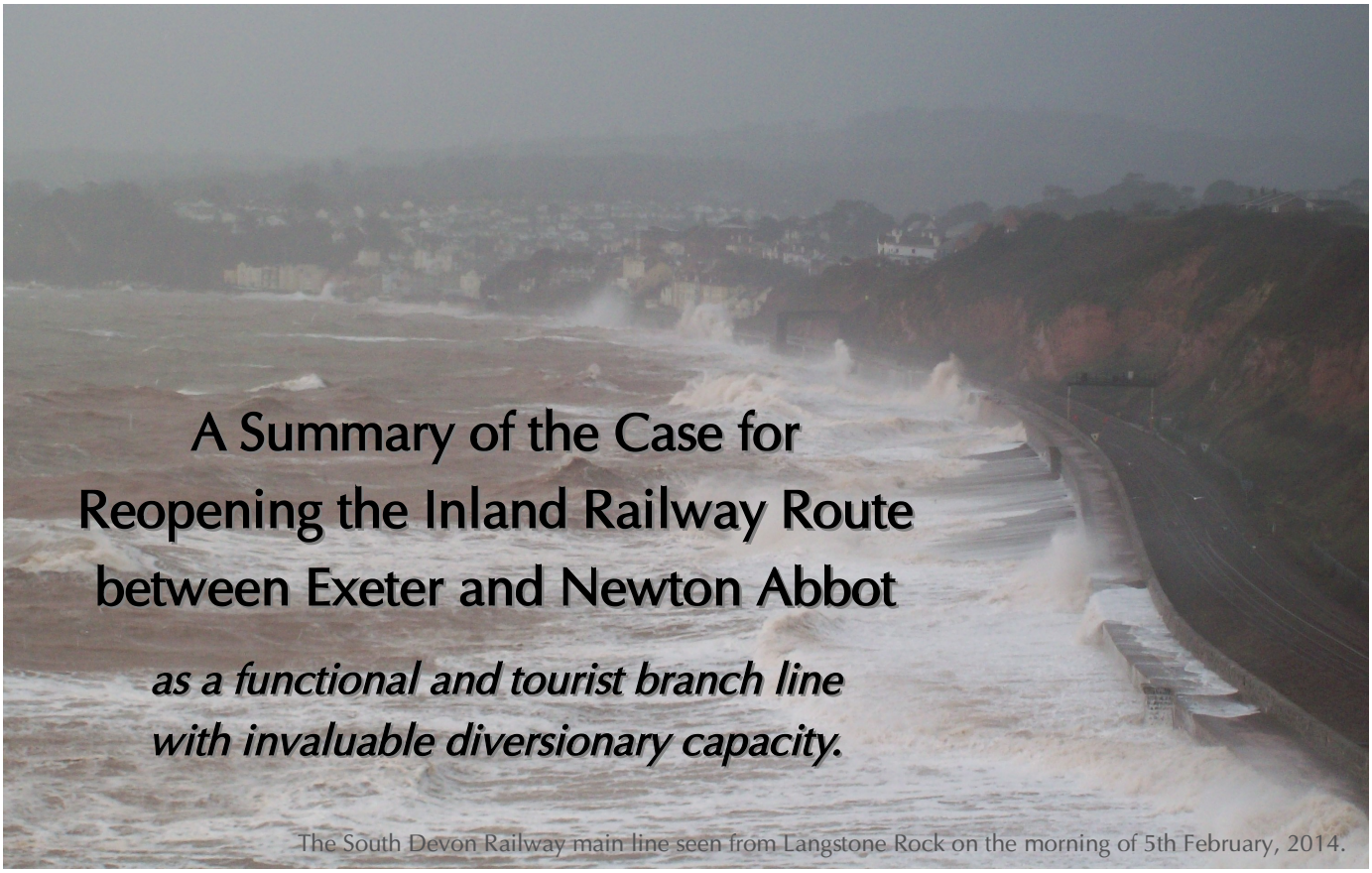
Exeter & Teign Valley Railway, Christow Station, Doddiscombsleigh, EXETER, Devon EX6 7YT www.TEIGNRAIL.Com June, 2014



A Summary of the Case for Reopening the Inland Railway Route between Exeter and Newton Abbot

as a functional and tourist branch line with invaluable diversionary capacity.

The South Devon Railway main line seen from Langstone Rock on the morning of 5th February, 2014.

Until 1958, there were two ways of avoiding the main line of railway between Exeter and Newton Abbot during emergencies. After 1958, and until 1968, there remained one way, via Okehampton, but this was only of value to Plymouth and Cornwall. Now there is but one way into the peninsula beyond Exeter and its estuarine and coastal length is becoming increasingly vulnerable.

The "Atmospheric" Main Line

The "Atmospheric" conveniently serves Starcross, Dawlish Warren, Dawlish and Teignmouth and acts as a defence against sea and river over much of its length. Its scenic splendour can hardly be overstated.

Despite last winter's Dawlish débâcle, the sea wall carrying the South Devon Railway's main line between Langstone Rock and Teignmouth has on the whole been remarkably reliable.

Because of the line's exposure it is one of the most expensive to maintain, but no one should seriously suggest that it be diverted or abandoned in favour of another route.

In the gathering storm of 4th February, a monitoring buoy, managed by Plymouth Coastal Observatory and stationed two miles east of Dawlish, warned of the greatest wave heights since its installation in 2007. It is predicted that conditions are likely to get worse and that sea levels will rise. More frequent and more violent storms should be expected.

Disruption will not just occur when there is damage to the sea wall or the

track above; there will be many occasions when white water alone will temporarily curtail the train service. Even where Network Rail has poured 5,000 tons of concrete, the line can still be lashed by waves.

Were the burghers of Dawlish ever to accept the complete loss of the town's amenity, it would be within the power of modern engineers to build impregnable ferro-concrete defences against sea and cliff, Swiss fashion, but the cost would not be worth a moment's consideration.

When the route is electrified, it will be more vulnerable still, but the landward, bi-directional Up line ought to be mostly unaffected.

The challenge is to ensure that the existing line has the greatest possible resilience, but to have readily available an inland diversionary route between Exeter and Newton Abbot.

The Dawlish Avoiding Line (1935)

Lifted from obscurity at the time of the débâcle, the Dawlish Avoiding Line scheme was seized upon by people with no understanding of its origin.

As much a driver for its construction as the vulnerability of the coastal line was the heavy holiday traffic, which in the 1930s was at its most intense on a mere ten summer Saturdays.

Finally wound up in 1949, the by-pass was really part of a plan to provide greater capacity between Taunton and Newton Abbot. The line had been quadrupled between Cogload Junction (east of Taunton) and Norton Fitzwarren, and between Newton Abbot and Aller (junction for Torbay and Plymouth). Platform relief lines had been provided at stations between Taunton and Exeter, and at Exminster.

The work that was done has since been undone and the railway has given up on the bulk of the holiday traffic, which has anyway changed in pattern.

Today, the route that the avoiding line would have taken is substantially developed on the outskirts of Dawlish and Teignmouth. Any route further west would involve more tunnelling.

This grandiose, unnecessary scheme should not be revisited.

Great Western Two

Playing on the massive expenditure proposed for a bold, new London Midland line, a rather weak campaign was begun by the *Western Morning News* to press for a West Country high speed line, or at least an alternative route.

From Exeter to Newton Abbot by rail is 20 miles and the distance is today covered non-stop in 19 minutes or less.

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If a new line were to make a junction at Exminster and run dead straight to Newton Abbot, the overall distance would be 16 miles. St. David's Station to Newton Abbot as the crow flies is 14 miles.

A direct high speed line, costing £3-billion or more, would save eight minutes at most, a reduction which could be achieved by electrification through to Plymouth.

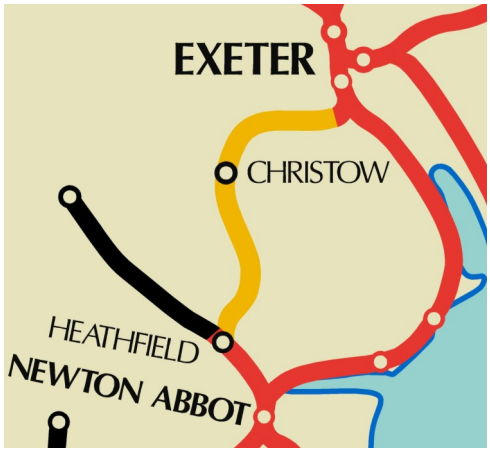
The "Southern" Route

The great disadvantage of the former Southern Railway main line between Exeter and Plymouth, when considered as a diversionary route, is that it would be of no benefit to Newton Abbot, the Torbay conurbation and much of South Devon.

However, it is not the purpose here to argue the case for one railway instead of another. This line must be reopened in due course to serve Mid and West Devon and North Cornwall, but its reinstatement is not the immediate answer to providing resilience to the Great Western main line.

The Teign Valley

It may at first seem nonsensical to suggest reopening a minor route which served only a small population rather than a former main line through growing towns long ago cut off from the rail network.



But when it is seen that a combination of little inland lines formed almost a mirror image of the main line between Exeter and Newton Abbot, attention must be given to its potential.

The Teign Valley route was kept open continually during the war years, 1941-45. As the vital supply route along the coast was an obvious target for the enemy, Government included the Teign Valley in its "Insurance Works" on diversionary routes. In 1943, four loops were installed, able to pass twelve-coach trains, and these greatly improved the line's value during an emergency. This entire facility was thrown away 15 years later.

Some commentators imagine that a rebuilt Teign Valley would lie idle when not needed for diversionary working. The cost of reconstruction could not of course be justified for this limited purpose.

Rather, the Teign Valley would be the first of the West Country's lines to reopen and would connect its community to the centre of the county town and a sub-regional centre, as well as opening up new countryside for trippers and tourists.

The Teign Valley would not be high on the list of lines ripe for reopening in the ordinary course, but the clencher in this case is the Teign Valley's ability to back up the main rail artery at its most vulnerable stretch.

The Line Today

In engineering terms, despite 50 years' attrition, the Teign Valley Branch formation is still around 80% complete. The remainder in Exeter serves a scrap metal yard on the Marsh Barton trading estate and trains of 102-tonne wagons are forwarded. The branch would still be intact as far as Alphington, with potential for the development of more freight traffic from the estate, had not the county and city councils pressed on with an aspirational road scheme.

November, 2011: A staff and cranks' excursion leaves the Paddington to Penzance main line to make its way along what is left of the Teign Valley Branch in Exeter.

Huge incursions were made at each end of the branch in the late 1960s and early '70s by the construction of the A30 and A38 dual carriageways, but these must not be allowed to block railway reinstatement. Both tunnels and four out of the six river crossings are still intact. The four-mile rump of the Moretonhampstead Branch from Newton Abbot to Heathfield was revived for freight traffic in 2011.

Reinstating the Best Divisionary Route

The costliest works would be rebuilding the A30 junction at Alphington, relining Perridge Tunnel and building a new alignment alongside the A38 between Chudleigh and Chudleigh Knighton, for which the path is clear.

The road incursions were made at a time when it was thought that the railway system would wither away. Much road construction was cheaper because it had not to accommodate lines of railway or because it took the courses of closed lines, in a period of massive public transport decline.

Now that that approach is commonly accepted as short-sighted folly, in all cases where railway reinstatement involves crossing or following new roads, the cost should be borne by the Highways Agency or other road authority as a form of reparation.

Many sections of the Teign Valley route could be reconstructed in weeks using the machinery at the disposal of modern engineers.

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A Comparison to the Newquay Branch

A branch line train leaving its terminus in Cornwall in winter with only a sprinkling of passengers is reminiscent of the Teign Valley in its final years. Yet the Cornish lines are still there, while in Devon the arbitrary nature of the closure programme left big towns and vast areas of country bereft of rail transport.

The Newquay Branch survived because it leads to Cornwall's largest resort. Meagre local passenger numbers are supplemented by through trains of hedonistic holidaymakers in summer, although the railway's share of this traffic is much reduced.

An H.S.T. heading for Newquay could almost be weaving its way through the hills to bypass Dawlish.

The "basic" Newquay line recently reached 80,000 local passengers carried annually. If, in its last year, 1958, with lower population, less general mobility, far fewer students, none of the modern promotional effort and no management commitment to the future, the Teign Valley carried 60,000 passengers, the projection today would have to be markedly upwards.

Like the Newquay line has its additional role, so would the Teign Valley, and each time its metals were trodden by diverted trains it would gain a monetary benefit.

A ride on a through train working over the Newquay Branch in summer gives a feel for what the Teign Valley journey would be like. Sometimes made up to nine trailers, HSTs bound up Luxulyan bank—a gradient harsher than any on the Teign Valley—and squeal on the curves of what is largely a former horse tramway.

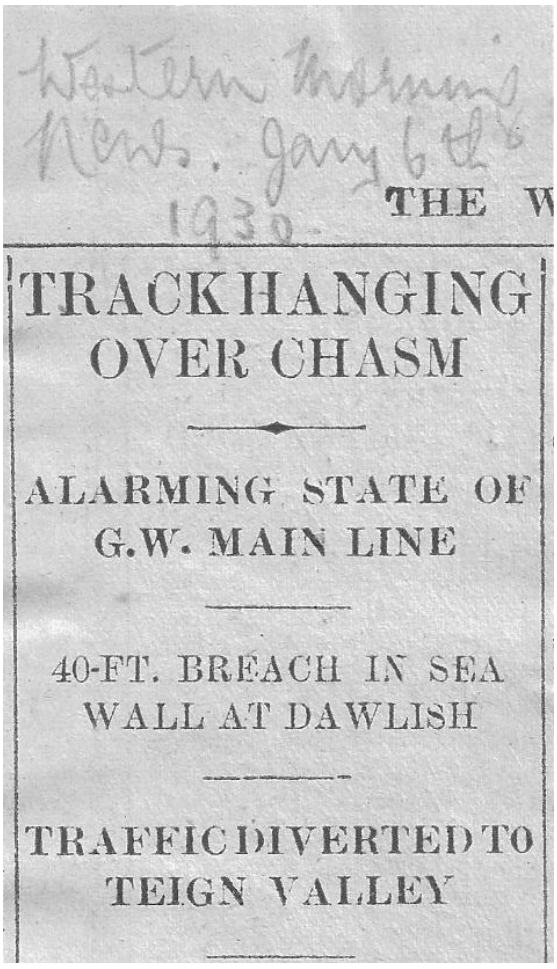
Freight

When there is a revival of railfreight in the West Country, as there must be, many firms will demand absolute dependability in order for transits to be part of a just-in-time or production line discipline. If there is even a 5% chance of service failure, some flows of traffic will not be won to rail.

Diverting or booking trains via the Teign Valley would be no problem with modern traction. If the locomotive of a heavy freight train can climb the South Devon banks unassisted, then it could comfortably make the summit of the old Exeter Railway.

Diversionary Working

Even informed, practically-minded people have remarked that modern trains would not go around the curves of the Teign Valley, as if the line were akin to a winding country lane that ensnares foreign lorry drivers depending upon celestial guidance.


Western Morning News. January 6th 1930.

THE W

TRACK HANGING OVER CHASM

ALARMING STATE OF G.W. MAIN LINE

40-FT. BREACH IN SEA WALL AT DAWLISH

TRAFFIC DIVERTED TO TEIGN VALLEY

The Great Western ran the widest passenger coaches of any British railway and the notice governing diversions over the Teign Valley stated: "No restrictions."

Some folk still remember small steam engines struggling with heavy, diverted trains. These days, if the engineer passed the route for 40 m.p.h., trains would maintain that speed; 20 miles in half an hour, or in practice a delay of as little as 25 minutes.

Diversions would not just occur in the event of extreme disruption. Trains would be diverted when sea conditions allowed only the Up main line to be used; to enable engineering work; during obstruction or failure; or in the normal course to ease pathing pressure along the coast. And the Teign Valley would certainly become a popular alternative route for excursions and land cruises.

In tallying the number of trains that would need diverting in the worst case, it should be noted that around half the main line service is stopping trains which would continue to each side of any blockade. With tight pathing, the Teign Valley could pass six trains an hour, or easily four.

Had the Teign Valley line been available during the 59 days of the Dawlish débâcle, it would have carried around 3,000 trains; many more if all the traffic lost to rail had been worked at night.

Would anyone now be questioning the value of the Teign Valley? Certainly not the businessman on the *Golden Hind*, tucking into his breakfast or engrossed in his laptop, who had been delayed but not disturbed by diversions.

Railway Reconstruction

Future-Proofing the Nation's Transport

The reinstatement of this one Devon branch line would make the trunk railway stronger where it is most vulnerable, but it would have to be only a start towards general railway reconstruction. In Devon and Cornwall, this would mean a reappraisal of the 400 miles and over 200 stations lost from the network.

Because so much has been invested in road transport and it seems so permanent and irreplaceable, there is scarcely a soul outside the environmental movement who will break from the pack, face stark reality and acknowledge that an entire system, like much of the modern world, has been built on the shifting sands of oil — cheap oil, to be precise.

The search is on to find a substitute, but it is other transport instead of other fuels which should be being rediscovered.

Railways and other guided systems are relatively frugal in the use of land, energy and resources. Railways can attract and support high density housing and commercial development. Trains can use any fuel, finite or renewable. The railway operates in its own non-intrusive reservation. The railway has a civilizing effect, in contrast to the barbarism of the roads.

In the end, future-proofing the nation's transport can only mean a massive resurgence of public systems, with the railway as their iron backbone.

Restructuring the Railway

After years of contraction, the railway has become immutable, being unable to shrink any further and incapable of any more than incremental expansion — an unnatural state for any industry. Stations and linesides are littered with evidence of former railway activity, yet nothing new has taken its place. It is almost as if, while big business sees no bounds to its interests, the railway has been ordered to retrench for ever to the narrowest core functions.

Moving the hordes of passengers thrown up by a restless society and hauling heavy freight on light margins is not necessarily the sign of a successful railway, which may be in danger of encouraging the same unsustainable mobility that road transport has caused.

Without doubt, the respective fortunes of rail and road are linked to political representation; there is no rail equivalent of the many strident voices that have championed road transport throughout its ascendancy. Road lobbyists serving vested interests which do not shoulder any responsibility for the future were never countered by the nationalized railway, which should have been proclaiming its potential to lessen road congestion, improve health, promote inclusiveness and freedom, reduce crime, protect the environment,

ensure energy security and much more. Instead, scarcely a whimper was heard.

The kind of independent thought and action that is needed today will not come from Network Rail or First Group or any of the poorly stitched body parts that make up the *Frankenstein* railway. No modern industry executive, used to racing around the road system, can grasp the vision of a unified, fully developed, all-embracing railway, muscling into new territory and areas of transport and ancillary business.

Real railway people are needed, schooled to speak up for the industry as a whole and empowered to act as the management of any normal business would in seeking opportunities and dealing with competition.

This can never be achieved while the railway is disintegrated. The monstrous, artificial creation of 1993 must be put out of its pointless existence and the industry restructured back into territorial units of total railway operations, preferably in private ownership.

Recapitulation

- No matter how much work is done to strengthen the sea wall, it can never be guaranteed to withstand the forces of nature, which are predicted to become more tempestuous.
- The challenge is to make the existing line as resilient as possible while having a matching inland diversionary route.
- The Teign Valley line runs between Exeter and Newton Abbot. As a diversionary route, it would give the best service to South Devon and as good a service as the “Southern” to Plymouth and Cornwall.
- In engineering terms, the Teign Valley line is 80% complete.
- The Teign Valley would be supported on the same economic basis as the existing, comparable line from Par to Newquay.
- A new, heavily engineered inland main line would not relieve the railway of its responsibility for the coastal route.
- As the first of the West Country’s lines to reopen, the Teign Valley would show what is possible and would stimulate demand for wider railway reconstruction.
- Railway reconstruction is not merely desirable or optional: it is imperative for the future of modern Britain.

Route Map

This semi-diagrammatic map is meant to show how the inland route between Exeter and Newton Abbot mirrors the main line along the coast.

At a glance, it can be seen how this would benefit South Devon and the line beyond in an emergency.

For those not familiar with the network as it was, the map also shows some of the many lines that were closed in the West Country — 400 route miles in Devon and Cornwall alone.

Two facts emphasize the extent of the damage: Hartland Point was once the place remotest from the English railway network; and Bude, once served by through coaches from Waterloo, now has the distinction of being the English holiday resort furthest from the railway.

Postscript

February, 2017

Track suspended in mid-air being the kind of imagery beloved of news gatherers, when the sea wall at Dawlish was breached during a storm in February, 2014, the item was reported nationally—even globally for a moment—and took on a quite unsubstantiated importance.

Often with the images went the background story of how such disruption was minimized in the past and what might be done in future. Flashes of possible new or revived routes, unknown to most who saw them, appeared on faraway screens. Who would have thought that the inland mirroring of the main line, in part created by the little Teign Valley and Exeter railway companies, would still be coming to prominence in the 21st century?

The identification mark on the ruins of Greenwall Lane Bridge, seven miles and four chains from Exeter Railway Junction. Judged as unsafe, the bridge was demolished in 2013 at a cost of nearly £100,000.

Even in its ravaged state, the 21-mile route is still about 80% complete as an engineering work. The four-mile rump of the Moretonhampstead Branch again lies dormant after trains of logs, recently sent from Teignbridge, were run around in the extended, wartime loop at Heathfield. The four-aspect signal at Exeter Railway Junction occasionally changes to caution or green for a train of scrap iron or a cranks' excursion. The rest could be reinstated for £180-million, which is around ten times what the track authority paid in compensation to train operators and others after the line was reopened in 2014.

In an age when common sense solutions tend to be dismissed, the Teign Valley route has been the least understood. The authority that cannot grasp the practical railwayman's preference for a branch line with enhanced diversionary capacity is instead pursuing ideas of sloping back the cliffs at Teignmouth, which would mean the closure of the main line for a year, or taking part of a popular resort's beach to build a new sea wall further out, at a cost either way of £500-million. Neither is likely to happen; even if it did happen the line would still not be entirely dependable and there would still be no route diversity.

As a lone voice, and fancying itself as a humble successor to the former companies, the E. & T.V.R. campaigns for the reinstatement of the Teign Valley route, primarily as a year-round functional and tourist branch, but with the wider benefit of providing an emergency bypass.

The reconstruction of 30 miles of the North British "Waverley Route" from Edinburgh nearly as far as Melrose, went ahead despite its "poor" theoretical value, according to the orthodox cost to benefit formula.* Yet, after it was opened in 2015, carryings far exceeded what had been estimated. It has shown very well what happens when a railway comes back to life.

Using the Teign Valley's great advantage, that of avoiding the coast between Exeter and Newton Abbot, as overriding justification would produce a reopened rural railway as an example. If it carried at least as many passengers in its everyday role as, say, are carried today between Liskeard and Looe, it would have proven successful and worthy of being supported for the sake of social cohesion.

And when it was seen at work, civilizing its community, creating employment and opportunities of all kinds, easing road congestion, improving accessibility for everyone, and more, surely a clamour would be heard from the many other places, long deprived of rail transport, where people considered themselves more or equally deserving.

Maybe this is what Government fears.

* The figure was 0.5, or 50p returned for every pound spent. A new main line along the Teign Valley, vastly more than is required, was valued by Network Rail's consultants at 0.3 and was the best by far of all the diversionary route options considered.