Annex – Historical investment in rail infrastructure enhancements

Rail Enhancement Funding in Wales

In restating the strategic case for rail investment in Wales, we also need to acknowledge the lower level of rail enhancement investment in Wales. Enhancements improve the capability, capacity, reliability of the rail network; the limited share of such investment in Wales has led to relatively less attractive services, attracting fewer passengers, resulting in lower modal share and higher subsidies. This is different from the Operations, Maintenance and Renewal Spend (OMR) which is about maintaining the network's current capability and reliability.

This issue was set out in the Case for Investment[1] in 2018, where, in the period 2011-2015, an estimated shortfall in enhancement investment of £1bn was identified. Whilst ORR and NR did not officially maintain figure for Wales before 2011, we have nonetheless attempted to assess rail enhancement back to the beginning of Control Period 2 (CP2; 2001 – 2004) by reviewing the UK Government's High Level Output Specification (HLOS) for rail and similar documents[2]. We have also reflected the Barnett consequential received for an increased in the DfT budget in 2015 for the period to 2019 and looked ahead to 2029, including the significant expenditure on HS2 (which will not have a direct effect on and, based on evidence from HS2 Ltd, is likely to have significant indirect economic disbenefits – on the rail network or services in Wales). Given the complexity of the rail financing ecosystem and difficulty in accurately assembling all the relevant figures, this analysis should be viewed as an "order of magnitude" guide.

Actual enhancement investment and committed by the UK Government has been estimated (acknowledging some 3rd party funding so totals published by the Office for Rail and Road (ORR) and/or Network Rail are reduced by 15%), from 2001 to the end CP6 (2024) and then projected to end of CP7 (2029) and so including parts of projects like HS2[3] (£78Bn), Transpennine Upgrade (£3Bn), East-West Rail (£1Bn) is, conservatively, of the order of £102Bn.

Table 1 Total UK Government investment in rail enhancements across eth UK (via NR and other organisations)

Period/Project	UK Enhancements (£bn)	Examples of major projects
CP2 (2001-2004)	£2.00	West Coast Mainline
CP3 (2004-2009)	£4.93	West Coast Mainline

1 https://gov.wales/sites/default/files/publications/2018-12/the-rail-network-in-wales-case-for-investment.pdf

2 Annual efficiency and finance assessment of Network Rail 2018-19 - 26 July 2019, **https://www.orr.gov.uk/media/17415/download**
https://www.crossrail.co.uk/about-us/funding
https://www.gov.uk/government/speeches/crossrail-annual-update-2020
https://www.networkrail.co.uk/who-we-are/publications-and-resources/our-delivery-plan-for-2019-2024/

3 https://www.gov.uk/government/publications/hs2-ltd-chairmans-stocktake-august-2019#history

Period/Project	UK Enhancements (£bn)	Examples of major projects
CP4 (2009-2014)	£11.26	Crossrail, Great Western Electrification (GWEP), Thameslink, Stations Improvement
CP5 (2014-2019)	£16.80	GWEP, Crossrail, Midland Mainline Upgrade
CP6 (2019 – 2024)	£8.84	Crossrail, East Coast Mainline (ECML) Enhancements, Midland Mainline, Great Western Electrification Programme (GWEP), Initial Trans-Pennine Upgrade (TPU), South West Resilience
CP7 (2024-2029)	£8.50	Assumed ongoing TPU, East-West Rail, Clapham Junction enhancement
HS2 Spend to summer 2019	£5.10	Design, Land Assembly
HS2 Phase 1 (less spent)	£31.90	Construction to Birmingham
HS2 Phase 2a	£4.00	Construction to/and Crewe Hub
Crossrail to 2019	£8.00	Estimated UK Gov via capex or loan (excludes 3rd party funding via GLA, TfL etc)
Crossrail further costs to 2022	£1.00	Estimated further overspend Vs 2019 est.
Total UK Network	**£102Bn**	

In that same period, UK Government rail enhancement spend in Wales is estimated as follows:

Table 2 UK Government investment in enhancements to the Wales rail network (via NR or committed via TfW)

Period	Wales Network Enhancements (£Bn)	Primary Projects
CP2 (2001-2004)	£0.05	We could not identify any substantive UKG funded enhancement projects so allocated a nominal £50M
CP3 (2004-2009)	£0.10	We could not find any substantive UKG funded enhancement projects so allocated a nominal £100M.

Period	**Wales Network Enhancements (£Bn)**	Primary Projects
		The primary projects funded (VoG Line, Ebbw Valley, Merthyr Enhancements) were funded by the Welsh Government
CP4 (2009-2014)	£0.20	Some of CASR (which is primarily a renewal project); Ebbw Town extension (WG funded)
CP5 (2014-2019)	£0.74	GWEP (includes SWML through Severn Tunnel to Pilning). This is the ORR reported figure for NR Enhancement in Wales Route (exc 3rd party funding which totalled £160M)
CP6 (2019 – 2024)	£0.35	Estimated Core Valley Lines (CVL) Contribution (£190M), Cardiff Central Upgrade (£60), Completion of GWEP
CP7 (2024-2029)	N/A	Nothing committed at present
Total Wales Network	**£1.44BN**	

If one then adds an estimated £755M from a Barnett Consequential received in 2015 (related to an increase in the UK Government's Department of Transport budget for the period to 2019, rather than explicit decisions taken by the UK Government), the total UK Government rail enhancement "investment" in Wales, from 2001 to 2029 is of the order of £2.2Bn. This is a most generous interpretation and likely overstates the actual figure.

Over the same period the Welsh Government has invested, or is committed to invest, approximately £1bn.This includes projects like the Ebbw Valley and Vale of Glamorgan reopenings, a number of new and improved stations, and our major commitment to the South Wales Metro.

As a comparator, the apportionment of total UK spend from 2001 to 2029 to enhancements in Wales on the basis of a population allocation (~5%) would be approximately £5.1Bn or, on the basis of route length (11%), £10.2bn. This suggests an "underinvestment" of between £2.9Bn and £8Bn. Nonetheless, we acknowledge that CP5 has been more beneficial to Wales given investment in the electrification of the Great Western mainline to Cardiff (despite the cancellation of electrification to Swansea) but note that costs allocated to the Wales route also include all those associated with the electrification of the Severn Tunnel. This sets a precedent for a route-based allocation of enhancement investment for Wales.

However, projecting known commitments for the period from 2019 to 2029, we estimate shortfalls of between £2.4bn and £5.1bn. This is based on £350m of UK Government

enhancement investment (including part of CVL & Cardiff Central) compared with at least £50bn across the UK in total.

Whilst there is clearly some margin of error in this analysis, it is clear that Wales' rail network has and continues to be, disadvantaged by the current process for developing and funding major rail enhancement in the UK when there is a significant case for investment across a number of strategic programmes which will benefit both Wales and the UK. This is primarily due to the non-devolved nature of the rail network in Wales and the assessment and prioritisation of schemes on an "England and Wales" basis".

It is also worth stating that lower levels of enhancement investment over a prolonged period contributes to a subsequent lower share of ongoing OMR investment (the Wales Route with 11% of the network receives about 6% of OMR investment). Similarly, a railway starved of enhancement becomes less attractive, drawing fewer passengers leading to higher subsidies. It's an unvirtuous cycle.

This is very different to the situation in Scotland which has resulted in significant enhancement of its network since 2006 when powers & funding transferred to the Scottish Government.

There has also been much discussion related to the application of the Barnett formula. However, its complexity and application at departmental level makes any mitigating intervention to address rail enhancement underfunding in Wales quite challenging. For example, a previous increase in the DfT budget (as a result of projects like HS2 and probably Crossrail) at the last five-year spending review in 2015, for the period 2015/16 to 2020/21, did generate a Barnett allocation. This was due to the higher DfT attribution factor because in the previous financial year, non-devolved projects like HS2 were a relatively small proportion of overall DfT spending (and NR enhancements were completely excluded). However, today HS2 (and now NR enhancement spend) has increased the "non-devolved" proportion of the DfT's budget which is likely to result in a significant reduction in the DfT's Barnett attribution factor. Future spending review changes in budget allocations in the DfT (devolved or non-devolved) would then only generate much smaller consequentials.

Furthermore, it is not yet clear whether the UK Government will accept that the transfer of the CVL to Wales should be taken into account in the Barnett attribution factor in the forthcoming spending review.

For Wales, ensuring projects like HS2 and rail enhancement spend are included in the DfT DEL and with a "devolved" attribution factor, will help Welsh Government receive a more proportionate share of UK rail enhancement funding. Alternatively, HS2 and NR could remain outside the DfT DEL (very unlikely) but have all the relevant spend identified as "devolved" which would trigger 100% attribution-based allocations.

Although investment decisions are ultimately taken by politicians in Westminster, this systematic underinvestment is built into, and magnified, not only into the scheme prioritisation process, but also by the analytical framework which the UK Government rely upon to produce business cases and value for money assessments . The industry's forecasting approach has significantly overestimated demand for schemes in London (by as much as 50%) and underestimated demand for those elsewhere in the UK (by over 50%),

including Wales. Higher passenger forecasts mean more time savings (bigger benefits), increased revenue forecasts (lower costs), and better value for money cases.

It is clear that Wales' rail network has been depreciated and underinvested compared to the network in England. This is fettering our ability to develop an integrated transport network, limiting our ability to attract commuters from their cars, reduce harmful emissions, and the performance of our economy. Whilst any commitment to the funding of rail network improvements in Wales by the UK Government is welcome, there is a clear disconnect between the Welsh Government's commitment to public transport to support decarbonisation and equality, the needs of people in Wales to access jobs, services, and education, and the decision-making processes used by the UK Government to distribute funding across the network in England and Wales.

A UK Government levelling up agenda must include a major overhaul of the process for rail scheme development, funding, and delivery in Wales. The transfer of the CVL to the Welsh Government, provides a catalyst for further reform; without which we will continue to rely on the UK Government to fund and deliver the enhancements that are clearly needed to our rail network across Wales. The status quo is not an option.