

Written evidence submitted by the Halifax and District Rail Action Group (IRP0086)

About HADRAG

The Halifax & District Rail Action Group is a campaigning rail users' group centred on the routes through Halifax, Sowerby Bridge and Brighouse on the Calder Valley Line (CVL). We began in 1985 and campaigned for reopening of the lines through Elland and Brighouse, seeing success in 2000 with opening of Brighouse station, and we continue to argue for improvement. We are hopeful that Elland station will open in the next two years. In 2018, HADRAG along with three other user groups along the line launched the Electric Railway Charter to press the argument for a rolling programme of electrification, including the full Calder Valley route as recommended in the Northern Electrification Task Force report in March 2015: "Northern Sparks".

In the wake of the Covid-19 pandemic, our railways must repurpose to flourish. We hope city travel will undergo a revival, but there may be a permanent reduction in city-based commuting and business travel. This should be seen as an opportunity not a threat. Rail and other public transport systems must be transformed to meet a wider range of needs supporting leisure and personal travel needs. **The climate crisis** becomes ever more urgent, and all transport must become zero-carbon. Rail must play a major role, encouraging modal transfer to reduce congestion and pollution, improving individual human wellbeing and protecting the global environment. Modern, clean public transport needs to be branded "sociable transport", "popular transport" – transport for wellbeing.

Short summary

The IRP offers an incomplete programme of enhancements. Decarbonising through electrification of existing routes – including the full Calder Valley Line – in a rolling programme starting now must be a priority over large scale new lines that will take another 20 years to build. This is about urgent rebuilding after the pandemic.

We will support more high speed rail (NPR) proposals if they offer a better deal for our line, for example an NPR interchange in lower Calderdale. ***But if we are offered a choice between electrification now and more high speed projects in the future, we opt for electrification now.***

Value for money should be measured in terms of reducing CO2 emissions, and opening up rail travel to as many of the population as possible. Good growth; sustainable growth. ***That is why we are submitting this response.***

Summary of background and key points:

This response, which is quite short, specifically addresses issues with issues related to our area:

- Need for full electrification of the Calder Valley (CV) line from Leeds via both Bradford and Brighouse, through upper Calderdale to Rochdale and Manchester, and to East Lancashire and Preston. This was the highest-ranked recommendation of the Northern Sparks all-party task force report (March 2015), and topped a list of 12 schemes in an initial 5-year pencilled in for CP6 (2019-2024). Calder Valley electrification is also recommended by Network Rail's TDNS.¹ The line also carries heavy freight trains – the only means of decarbonising this traffic is by electrifying.
- Calder Valley electrification should be part of a rolling programme, designed to cut capital costs and as part of a programme to fully decarbonise transport over the coming 20-30 years. Alternatives to full electrification, such as hydrogen trains and battery trains, are significantly less energy-efficient than pure overhead electrification and this is even more the case when bi-mode or tri-mode trains are employed. The RIA has predicted that a rolling programme of electrification would reduce costs by 33% to 50%.²
- Need for timetable improvements over the next 5 years on the Calder Valley Line, that links Calderdale district with destinations from York and Leeds to Manchester, Chester, Preston and Blackpool. Brighouse and the soon-to-open Elland station need a much better service.
- Promise to provide a service from Bradford, Calderdale and Rochdale to Manchester Airport via the important stations at Oxford Road and Piccadilly serving the south side of Manchester city centre and providing connections has been broken.
- High speed rail. Cancellation by IRP of Northern Powerhouse Rail (NPR) via Bradford.

In the light of the above the following are major concerns and suggestions:

(a) **We welcome** the IRP announcement of Leeds-Bradford electrification and reduction of journey time to 12 minutes. But this raises issues:

- Almost all Bradford Interchange trains are part of a wider service pattern and run to more distant destinations. Until full CVL electrification is achieved the line will be dependent on bi/tri-mode trains. (Or passengers will have to change at Bradford – a ridiculous proposal.)
- We assume that the 12 min journey time is non-stop. The intermediate stations will still have to be served so a more frequent service is implied.

In light of the above there needs to be a plan for full CVL electrification from Yorkshire to East Lancashire, Preston and Manchester as part of a cost-saving rolling programme to decarbonise all railways in the North.

(b) **Bradford needs** a new through station offering increased capacity. It must be close to the Interchange site (not outside the city centre as would be the St James site proposed by Bradford Council) and linked to NPR, the Calder Valley Line and Airedale/Wharfedale routes. With a well-sited station, and a new line, the journey time between Leeds and (central) Bradford could be reduced to 8-10 minutes and conflicts due to the present terminus would be removed.

(c) **Cancellation of NPR via Bradford** is disappointing, and gives rise to wider concerns. IRP proposes a high-speed line from Warrington to a point in the Colne Valley near Marsden. From that point 3 or 4 tracks are proposed to Dewsbury, but IRP has no proposals for increased capacity from Dewsbury to Leeds. This will limit not only NPR services but local and regional services that link the Colne Valley and Calderdale (via Brighouse) with Dewsbury and Leeds.

(d) The technical annex to IRP³ quotes a price of £17bn for the core NPR network proposed.

- A potential **wider network** costed at £25bn would include a branch from Huddersfield to Bradford. Journey time Bradford to Manchester would be about 30 min compared with about 20min for TfN's preferred network.
- But the Huddersfield-Bradford NPR branch would not reduce the need for NPR trains to Leeds to travel via the 2-track Dewsbury route, so capacity issues on this section would not be relieved and would threaten local services. Alternatives should be considered including

some cross-Pennine/NPR trains running direct from Mirfield to York via Wakefield and Castleford, opening up top-quality east-west rail travel to Wakefield district. Leeds would still have enough trains.

- (e) If the NPR line, or a branch, is built to Bradford, its usefulness could be enhanced by having **a station in lower Calderdale near Brighouse or Elland** with connections available to the local transport network including the CV line, future mass-transit, and buses.
- (f) We welcome funding for a start to be made on **WY mass transit**.
- (g) **TRU helps the Calder Valley service**. We welcome plans for TransPennine Route Upgrade (we hope with full electrification of the present route). **In particular the 4-tracking Huddersfield-Dewsbury should enable enhancement of CVL services via Elland and Brighouse, so is important for more than the Huddersfield line**. This scheme announced a decade must go ahead without further delay.
- (h) But in truth **the Integrated Rail Plan is not integrated**. It deals with high speed proposals, with completion dates at least 20 years in the future. It mentions mass-transit, equally far away. It fails to mention improvements, including wider electrification, needed short term to develop better services for present and future work and leisure travellers, rebuild our public transport after the present pandemic and build a system fit to complement new lines such as NPR which will be built over a more distant timescale.
 - **We need action – to improve services and electrify our line – now**. We must not have to wait two decades for proposals that will barely benefit our line and its passengers.
- (i) **Value for money** should be measured in terms of reducing operating costs, effectiveness in achieving zero-carbon by the mid-century deadline, and attracting a larger proportion of the population who support our whole transport network through taxation to rail travel. Electrification will pay back. It is not just about cost cutting in crude financial terms.

Some points in more detail

- 1** **This response** relates to the objectives about capacity and connectivity, levelling up, and value for money.
- 2** **Calder Valley Line electrification as part of a rolling programme**

2.1 Electrification is essential for decarbonisation. Railways are already low carbon and can easily become zero-carbon. We prioritise electrification ahead of ambitious high speed proposals.

2.2 In 2015 all-party Northern Electrification Task force (NETF), produced the Northern Sparks report, which proposed electrification of most lines in three phases. The first phase was to be a 5-year plan over the 2019-24 control period, covering 12 routes. Top-ranked route on business, economic and environmental criteria was the full Calder Valley Line from Leeds via Bradford and Brighouse to Manchester (via Rochdale) and Preston (via East Lancs). The assumption was that planned schemes for the Huddersfield (TP Route Upgrade) and Midland Main Lines would have already gone ahead.

In 2020 Network Rail published its TDNS – traction decarbonisation network strategy – calling for electrification of around 85% of existing non-electric routes.

2.3 Alternative forms of decarbonisation are less efficient than pure electric – they waste more energy for example in storing energy in hydrogen and then getting it back or in charging and discharging batteries:

Type of train	Pure electric	Hydrogen	Battery
Energy efficiency (amount not wasted in transfers)	80%	65%	34%

Efficiency is reduced when bi-mode or tri-mode trains have to be used because of the weight of additional equipment. This is one reason why network electrification is favoured.

Of course, all energy transfers involve some waste. But in the interests of combatting climate change and saving resources we must seek to minimise this waste.

2.4 The Rail Industry Association has shown that a rolling programme of electrification would be expected to save 33-55% of capital costs.⁴

2.5 Electrification in the past has been paid for through savings in operational costs in the future – for example British Rail’s electrification of the East Coast Main Line in 1985-91.

2.6 Electric trains are cheaper to operate and encourage more revenue because:

- They are cheaper to buy.

- They are lower mass and can pull greater loads for the same power. They have better acceleration. Energy from braking can easily be stored and re-used.
- They are less complex, more efficient than other types of train containing diesel engines or hydrogen.
- Maintenance costs are lower, and the trains are more reliable, because the trains are simpler in design. There is also less track wear due to lower mass.
- Revenue will be increased as passengers are attracted by better trains – the well-known “sparks effect”.

2.7 **We welcome the IRP commitment** to electrify Leeds to Bradford Interchange. **But we are disappointed** this is not presented as the first stage of full CV line electrification as recommended by Northern Sparks, and as part of a rolling programme to electrify most of the network.

2.8 The Calder Valley Line also carries heavy **freight** trains. Electrification is even more essential if freight is to be decarbonised.

3 NPR, Bradford and the Calder Valley Line

3.1 We agree with the IRP that the proposed Bradford station at the St James site was unsatisfactory, although it would have given a journey time of 8 minutes, Leeds-Bradford. St James would have been about 10 minutes’ walk from the centre of Bradford, and even with modern links within the city would be much less convenient than the present Interchange station cancelling out the saving offered by an 8-minute journey from Leeds. A 10-minute journey from Leeds to a genuinely central Bradford through station would be preferable. Such a station could also link with the CV line that uses Interchange, and with Airedale/Wharfedale routes that at present use Bradford Forster Square station.

3.2 IRP Technical Appendix Fig 9 gives a timing **Leeds-Halifax** (currently around 34 minutes) by the chosen hybrid core network of 27 minutes (we think this may be slightly pessimistic), 24 min by the potential wider network. “TfN preferred” option gives 34 minutes, which must mean the assumption is use of the unimproved route Leeds-Bradford. **If the CV line were linked to NPR as proposed by TfN in Bradford, Leeds-Halifax time would come down to around 20 minutes**, dependent on Leeds-Bradford journey time. This is a cut of almost a quarter of an hour in journey time and would benefit all stations west of Halifax on both Manchester and Blackpool routes.

3.3 Elland station (expected to open by 2024) and Brighouse are served by an hourly (currently 2-hourly during the Omicron staffing situation) service Bradford-Huddersfield and hourly Monday-Saturday Manchester-Dewsbury-Leeds. Elland and Brighouse serve a population equalling that of upper Calderdale stations combined, but have a much poorer service. A service from Brighouse to Leeds via Halifax, Bradford and NPR would take about 30 minutes, via an indirect route. We suggest:

- Service frequencies on both routes through Brighouse should be doubled to half-hourly in the short term. This would also improve upper Calderdale-Huddersfield connectivity.
- The Leeds via Dewsbury service, at present all-stations, should become semi-fast, half hourly.
 - **The above improvements are needed long before NPR comes to fruition.**
- If NPR is eventually built to serve Bradford **it should have a station in lower Calderdale**, offering connections locally via mass-transit, local rail, bus and active travel, high speed to Leeds and Manchester and destinations beyond such as Liverpool, Manchester Airport and Birmingham.

3.4 New high speed routes will be much more popular if they serve more places, which is why we want an NPR station in Calderdale as well as a link to NPR in Bradford. Possibilities include:

- An extension of the Warrington-Marsden NPR line directly from Marsden to Bradford, mainly in tunnel on a fairly straight route. This could cross the Calder Valley at Elland where an interchange for local and regional transport links could be built.
- As above but using the original TfN routing.
- The potential wider network referred to IRP Technical Annex has a Huddersfield-Bradford NPR branch. This could have a station close to Brighouse also served by buses, local trains etc. It would be close to the M62.

3.5 As mentioned above the Technical Annex offers an NPR branch from Huddersfield to Bradford. The journey time Bradford-Manchester is estimated at 30 minutes, using new or reopened lines. As with all NPR options the precise route is not made public, a serious general concern about this whole process.

3.6 NPR as proposed by IRP would have high-speed Warrington-Marsden, 3 tracks into Huddersfield, 4 tracks thence to Dewsbury, and then the present 2-track route Dewsbury-Leeds with little if anything apparently yet planned on how this would be relieved. As already implied, the Dewsbury line carries local stopping/semi-fast services on the lines via Brighouse (Calder Valley) and the Huddersfield line. There is demand for improvement of these services. In mitigation we think:

- Some NPR services could run direct to York via Wakefield and Castleford serving two Wakefield district stations *en route*.
- There would still be sufficient services via Leeds.
- This could be started in the next few years using the present pattern of services on TPE and Northern routes. We must not have to wait for NPR!

3.7 Whatever form NPR eventually takes, **the Trans Pennine Route Upgrade (TRU) including 4-tracking Hud-Dewsbury, is essential to allow a good mix of fast and stopping services on the Huddersfield line and along the Calder Valley line via Brighouse and Elland and much needed development of local services on these routes.**

3.8 We expect TRU to include full electrification of the existing Huddersfield line from Manchester to York, with a plan to extend to the Calder Valley line and to Hull.

4 Mass transit – we welcome the £100M funding for West Yorkshire, some of which is for development of the mass transit.

- We hope mass transit will serve parts of West Yorkshire not at present well served by public transport, including parts of Halifax and Calderdale.
- Proposed links to North Halifax, Salterhebble and Elland are welcome.
- We hope to see a complete system by 2040.

5 Value for money should be measured in broad terms with environmental issues and carbon-reduction at least as important as traditional commercial, growth-based objectives:

- Growth must be sustainable environmentally. We must talk about good growth, sustainable growth.
- VfM must be measured in terms of reducing operating costs, effectiveness in achieving zero-carbon by the mid-century deadline,

and attracting a larger proportion of the population who support our whole transport network through taxation to rail travel.

- Electrification will pay back. It is not just about cost cutting in crude financial terms.

6 Conclusion: if we have a choice between getting on with electrification of existing routes now and having a high speed network in two decades' time:

- ***we choose electrification.***
- But NPR means more to us if we can see direct benefits for our area.
- TRU and wider capacity increases are essential – more essential than high speed.
- We hope that **additional funding sourced regionally**, as discussed by TfN this week, will enable a more integrated programme. The Integrated Rail Plan is not truly integrated because schemes such as NPR appear incomplete, with links to the existing network are still unclear, and lack a rolling programme of electrification and a true network approach.

Finally, it is unfortunate that IRP Technical Annex has only been published this week, giving us very short time to produce an informed submission.

January 2022

Endnotes

¹ Northern Sparks: Northern Electrification Task Force (NETF) all-party report, March 2015
[EFT_Report_FINAL_web.pdf \(transportforthenorth.com\)](#);

TDNS: [Traction Decarbonisation Network Strategy - Interim Programme Business Case \(networkrail.co.uk\)](#)

² RIA: Rail Industry Association - [Electrification Cost Challenge Report \(riagb.org.uk\)](#)

³ This was after the original deadline (24 Jan) for this consultation, and 3-4 days before the extended deadline (27 January). [Integrated Rail Plan for the North and the Midlands: technical annex \(publishing.service.gov.uk\)](#)

⁴ RIA [Electrification Cost Challenge Report \(riagb.org.uk\)](#)