8

Calderdale MBC

Wards Affected **All**

Cabinet **3rd September 2018**

The Contribution of Rail to the Economy of the Leeds City Region; Pressing the Need for Investment on the Calder Valley Line

Report of Director, Regeneration and Strategy

1. Purpose of the report

1.1 To inform Members of the potential benefits that may arise from the electrification of the Calder Valley Line in order to inform any subsequent lobbying strategies with HM Government, DfT, local MPs, Network Rail etc.

1.2 To inform members of the issues and impacts that arose from the May 2018 timetable changes.

2. Need for a decision

2.1 This report describes the benefits that the electrification of the Calder Valley Line (CVL) may bring and consequently introduces Cabinet Members to a number of possible "lines" to take when determining a future lobbying strategy.

2.2 It also advises Cabinet Members of the disruption caused by the failure of the recent timetable changes.

3. Recommendation

It is recommended:

3.1 That Cabinet adopt an effective strategy for lobbying HM Government, Department for Transport, local MP's, Network Rail and others in order to bring forward the electrification of the Calder Valley Line. Key lines to take in the strategy are that electrification will bring:

1) Faster acceleration and deceleration which will result in improved journey times and decreased headways leading to a potential increase in services.
2) Less wear and tear on the rail infrastructure making the service cheaper to run and more reliable, with the subsequent potential to create lower fare increases.
3) Positive impacts on the environment as electric trains emit between 20% - 35% less carbon dioxide than their diesel counterparts.
4) The phenomenon that recognises that people like electric trains and consequently as they are introduced passenger numbers appear to increase accordingly.

5) Consistency across other electrified lines which should increase the flexibility of the overall engine stock.
6) The opportunity to investigate “smart” (discontinuous/innovative electrification) to reduce cost and disruption in construction, using trains with modest on-board energy storage whilst avoiding the use of inefficient and operationally costly diesel bimodes.

3.2 That Cabinet develop an effective approach with West Yorkshire Combined Authority (WYCA) and our Local Authority partners to develop a coherent rail investment strategy and lobbying programme and identify the resources required.

3.3 That the Council become signatories of the Electric Railway Charter (attached, appendix).

4. Background

4.1 Strategic Approach

4.1.1 On 21st September 2017 Cabinet resolved that:

"This Council welcomes and endorses the joint statement agreed by Council and business leaders who attended the Transport Summit held in Leeds on 23rd August and in particular supports the calls on Government to:

- *honour in full commitments already given to deliver improvements to rail services across the North, including full electrification, track and signalling improvements on key commuter routes and the upgrade of hub stations, and to remove uncertainty about this at the earliest opportunity;*

- *prioritise its manifesto commitment to deliver new west-east rail infrastructure reaching across the North, work with Transport for the North to set out a clear timetable for its delivery in the Autumn Budget, develop an appraisal process to support it, and provide evidence that this timetable will not be adversely affected by decisions to fund other large infrastructure projects elsewhere in the country; and*

- *set out a fairer distribution of transport funding - road and rail, revenue and capital - across all regions of the country.*

More specifically, this Council urges Government to recommit to the full electrification of the Transpennine route and the subsequent electrification of the Calder Valley Line.

Council asks the Chief Executive to write to Chris Grayling MP informing him of our concerns and also to ask our local Members of Parliament to support these representations."

4.1.2 A reliable rail service is vital to the economic resilience of Calderdale. The Calder Valley Line links Leeds with Manchester via Bradford, Halifax and Rochdale, plus several intermediate towns in the Upper Calder Valley, as well as providing a link between York and Blackpool and Huddersfield via Brighouse.

4.1.3 The aims and objectives for improving the Calder Valley line are:

- Better strategic connectivity between the principal stations, including faster, more frequent trains;
- More capacity to support commuter flows to Leeds and Manchester Victoria;
- Strengthening the links between the smaller stations, preferably with a more even distribution between departures; with a focus on Sowerby Bridge, Brighouse and (in the future) Elland stations which serve major urban areas.
- A range of complementary solutions including enhancing service quality and access to the network including better walking, cycling and bus access, plus additional car parking provision; particularly in the growth area of Brighouse.

- Aligning development, land use and wider transport plans to make best use of the railway and strengthen rail demand; relieving road congestion along the A646 and Elland/Brighouse corridors.

4.1.4 In 2012, CMBC, in partnership with WYPTE (now WYCA) and Bradford DBC developed a strategic approach to delivering investment in the CVL which was underpinned by a strong evidence base, and widely supported by the rail industry.[i] The strategy focuses on three areas:

1) Rolling stock enhancements
2) Timetable and service improvements
3) Infrastructure requirements

4.2 Committed Investment

4.2.1 The CVL strategy, including the business case for electrification, was developed with WYCA, Greater Manchester, Network Rail and the Train Operating Companies and influenced the Northern Hub work. The result of this was a c£30m investment in the line, a commitment for new rolling stock from the new franchisee (Arriva North) and additional services including services to Manchester International Airport.

4.2.2 The track and signal investment is on-going throughout 2018/19 and includes:

- New points at Bradford
- Bay platform at Rochdale
- New track at and around Rochdale and Sowerby Bridge
- Platform lengthening at Hebden Bridge, Walsden, Todmorden and Sowerby Bridge and new lifts for Hebden Bridge
- Signal replacement from Pudsey to Hebden Bridge

4.2.3 Outputs from the enhancements mentioned in 4.2.2 include:

- Journey time reductions. (Network Rail have predicted 53 minutes journey time Bradford-Manchester down from 61 minutes. This includes 4 stops with existing trains. New trains will have better performance so possibility of further improvement or addition stop by the fast service e.g. Sowerby Bridge)
- Capacity increase based on 4 minute headways.

4.2.4 All service enhancements (including those originally proposed for the May timetable including the link to Manchester Airport) have been postponed to May 2019 at the earliest.

4.3 Move towards electrification

4.3.1 The main benefits that would accrue from the electrification of the CVL are as follows:

1) Faster acceleration and deceleration which results in improved journey times and decreased headways or the required space between trains. When headways are decreased then more services per hour can operate. Currently the CVL is restricted to 6-7 minute headway's and suffers from severe

overcrowding. Additional services would increase line capacity. Through electrification we could significantly increase the number of services on the CVL. This would help connect the 2.7m people travelling between Manchester, Bradford and Leeds; reduce dependency and increase resilience on the M62 corridor; and support the movement of freight between Liverpool and Hull.

2) Less wear and tear on the rail infrastructure so cheaper to run, and more reliable (more time on the tracks). Electric trains are lighter than diesel trains; trains don't need to carry fuel as electricity is supplied through the overhead cables. Great Britain has an excellent rating for safety but its rating for intensity on the Rail Performance Indicator is only good due to a low level of freight utilisation. Our quality of service is poor due to high fares and poor punctuality of regional trains. Anything we can do to reduce costs and pass these savings onto the customers helps modal shift. Reliability is a must for commuters.

3) Better air quality in rail stations; better for the environment, emitting 20-35% less carbon dioxide than diesel counterparts, even with non-renewable electricity generation. Diesel exhausts impair air quality through particulates and nitrogen oxides (NOx), whilst electrics are almost pollution-free at point of use (even brake dust can be reduced through electric brake systems). Generating electricity may involve pollution, but as generation moves towards zero-carbon, so will electric transport. Electric traction is quieter.

4) 'Sparks effect', people like electric trains and passenger numbers increase. This may be because the rolling stock is new and the trains are more reliable. This brings wider economic benefits including less road congestion and associated costs.

5) Consistency across the network is becoming more important within the strategic rail context. Calderdale, Rochdale and Bradford will have access to two HS2 stations and Northern Powerhouse Rail. The CVL must be fully integrated into this network and the quality and performance of the services will need to be consistent if we are to compete globally.

4.3.2 Traditional electrification comes at a high initial cost particularly for the Calder Valley Line due to the tunnels. In a report commissioned by WYCA[ii], Electrification was shown to represent a better value for money and more environmentally sustainable way of delivering rail services. However, the reduced operating costs that electric traction can offer must be offset against the need for initial capital investment in infrastructure. Analysis suggests that, based on the Scenario 1 (preferred) service pattern, electrification could offer a £950m operating cost saving over a 60 year period (PV 2010 prices), which could stand capital investment of up to £1,290m (current prices)[iii].

4.3.3 Diesel bimodes emit CO_2 and other pollutants, are costly to buy, inefficient (so consume more energy) because of additional mass, costly to operate/maintain because of fuel costs and complexity and costly in terms of track wear because of the extra mass (weight). In terms of costs it is not clear whether use of diesel bimodes to fill in the gaps in partial electrification schemes actually outweighs the benefits of partial electrification. The answer must be to electrify as much as possible, use smart solutions and have trains with a modest amount of on-board electrical energy storage to cover the gaps. Smart electrification technology

eliminates the need to lower the trackbed through bridges/tunnels or increase the height of the bridge/tunnel structure in order to provide clearance for 25kV electrification.

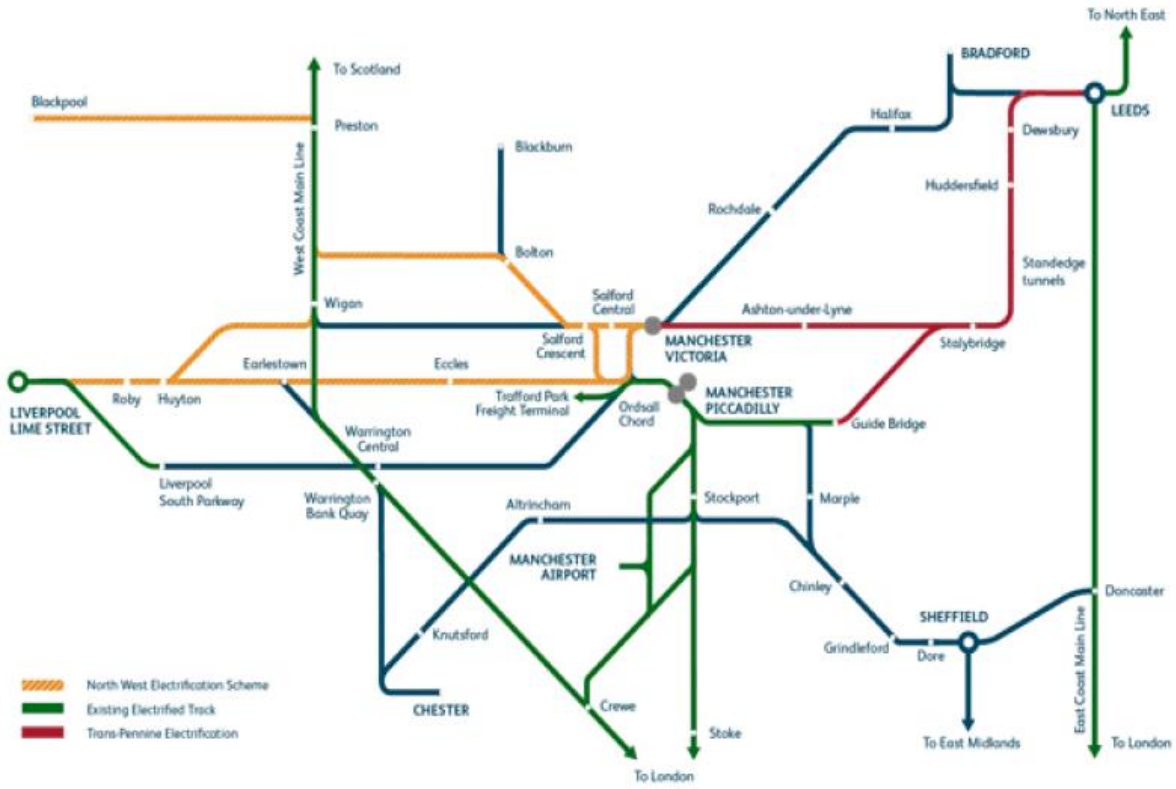
4.3.4 The Northern Electrification Task Force in the March 2015 NETF report, gave “full” CVL (Leeds-Bradford/Brighouse-Hebden-Bridge to Manchester and Preston) top score 84/100 on weighted criteria ahead of 3 dozen other schemes.

4.3.5 The analysis suggests that a material sum of capital investment could be incurred to support electrification of the Calder Valley Line. The ongoing operating cost savings could improve the financial sustainability of services and strengthen the case for future enhancements. It would be worth understanding in more detail the engineering challenges and economic case for electrification on the Calder Valley Line.

4.3.6 These considerations align with the *Electric Railway Charter 2018.* The charter is a declaration of support for a growing, sustainable railway that will promote good growth whilst protecting and enhancing the local and global environment.

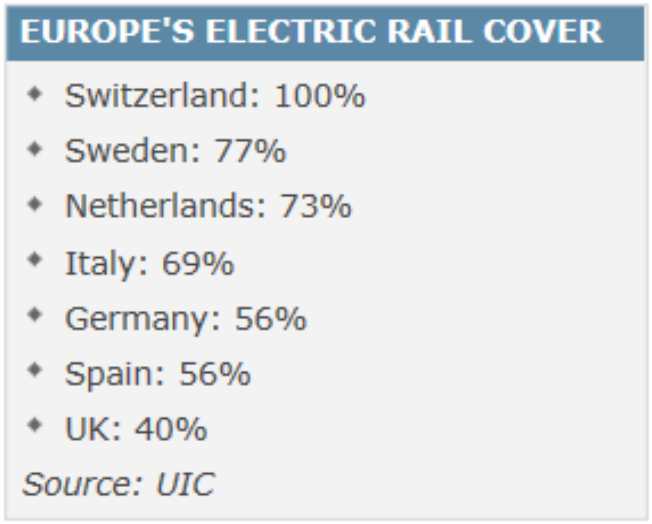
4.3.7 These benefits should be used to headline any future lobbying strategies with HM Government, DfT, local MP’s, Network Rail etc. Whilst construction disruption would be substantial the prize is very significant. If we do not electrify the line, Calderdale will be the hole in the doughnut and continue to get cascaded rolling stock of a lower quality than the rest of the network.

Electrification Programme in the North



[Image: Network Rail]

4.3.8 The planning for the electrification of the Trans Pennine route is well underway and will bring benefits to Calderdale passengers travelling via Dewsbury.



4.4 Impact of the recent timetable changes on the economy

4.4.1 A recent report by the Northern Powerhouse Partnership "*Devolving our Railways"* showed that during the recent timetable disruption:

- £38m was lost to the Northern Powerhouse on Northern Rail trains alone, with up to £1.3m a day at the height of the crisis
- Half of trains seriously late or cancelled on some Trans Pennine routes on individual days; up to 6,000 trains in total

4.4.2 Up to one million hours of lost time from commuting, work and leisure travel was lost on Northern Rail trains alone and on the Trans Pennine Express half of all trains were very late or cancelled. Up to late July / early August) more than 20% of services on the North Trans Pennine route were more than 30 minutes late or cancelled.

4.4.3 The report suggests that the full cost to the North is likely to be considerably higher, as while Northern Rail provided figures for their affected services, Trans Pennine did not. Over the entire period, using Northern Rail figures, 945,180 hours were lost to delays, an average of 22,504 per day.

4.4.4 The severe difficulties on the railways had a significant impact; employees were unable to get to work and family life was disrupted. For businesses availability of labour and production has been affected.

4.4.5 The report shows that although Northern Rail acted swiftly to put in place an emergency timetable, TransPennine Express did not; with some of their trains the worst performers. Just over 15% of their North Trans Pennine route trains were very late or cancelled trains; the worst day for performance being Tuesday 22nd May when just under 40% of services were in this category.

4.4.6 The report outlines a number of recommendations to ensure problems on this scale are never seen again. The most urgent and important of these (according to

the partnership) is government devolving far more power and authority to Transport for the North, allowing them to hold Network Rail and the train operators to account and act decisively and quickly to prevent disruption.

4.4.7 Data in the report refers to services provided by Northern Rail and Trans Pennine Express only. It does not, for example, include any journeys within the North made on Cross Country, LNER or Virgin Trains West Coast as the Partnership does not have access to data about entry and exit stations for passengers using these services.

4.4.8 Similar work by WYCA shows that disruption within the Leeds City Region mirrors the same pattern with:

- Cancellations and delays being felt across the overall network but being most acute on routes in the North West where Northern did not have sufficient trained drivers to deliver the service. Driver availability issue also affected services between Manchester and Leeds on the CVL.
- Congestion in the rail infrastructure in the Manchester area causing delays in the North TransPennine (Leeds – Huddersfield- Manchester) route. This was partly due to the problems above but was also caused by the revised service patterns utilising the new link between Victoria and Piccadilly.
- A raft of problems being caused by incomplete planning by Network Rail especially with regard to the operation of Leeds station. This caused delays throughout the City Region.
- Overcrowding due to short formation which was a result of the rolling stock shortage.

4.4.9 The missing trains in the North West are now being re-introduced on a route by route basis. From Monday 30 July, 75% (125) of these services will be reintroduced, with the remaining 25% (43) to be reintroduced during September. Whilst some routes have stabilised, passengers travelling on the CV and Huddersfield Lines continue to experience a high level of delays and cancellations. (It should also be noted that the poorest performing lines over the last three rail performance periods were the CV and the Huddersfield lines.)

4.4.10 Over the 4 week period 23rd July 2018 – Friday 17th August (weekdays only) covering services on the Calder Valley line via Halifax: 113 services were cancelled; equivalent to 4% of those that should have operated over the four week period. The evening peak was a particular problem - between Leeds and Halifax 7% of services were cancelled leading to severe overcrowding on adjacent services.

Over the same period 767 services were three or more minutes late to/from Halifax which is equivalent to 29% of all services that operated.

4.4.11 The Transport for the North Board convened several times in the early days of the new timetable with the Minister and DfT officials to discuss immediate actions and the longer term steps to be taken in the North. These meetings called into question whether decisions taken by the TOCs and Network Rail in the lead up to the timetable change were accountable to passengers and their elected representatives and whether the devolved franchise management had been effective in ensuring the interests of passengers in the North.

4.4.12 There is a view that this fragmentation/disintegration contributed to the May 2018 breakdown in service delivery. Common sense suggests that a single, devolved and integrated office responsible for strategic planning and then delivery of an optimised timetable across the North would be a better solution than these separate organisations. This is in equal part about (effective) devolution of control to the North and integration of operational rail functions that need to be together. It may be argued that the railway in the North needs to work as one body through the devolution agenda.

4.4.13 At a Northern level a review of the circumstances leading up to timetable change has been agreed in order to identify and act on the lessons learned. It was also agreed that a review into the effects and causes of the disruption would be led jointly by Cllr Judith Blake, Leader of Leeds City Council, and Jo Johnson, Rail Minister.

5. Legal Implications

5.1 Not applicable.

6. Financial Implications

6.1 There are no revenue or capital financial implications arising from this report. It is, however, worth noting that other than officer time, the Council's budgets do not contain any funding to support any action, and therefore any funding issues would have to be considered and addressed in any future report.

7. Consultation

7.1 The Electrification of the CVL was recently considered by the Place Scrutiny Board with Members of HADRAG present. They recommended that the Council should adopt an effective lobbying strategy to bring forward the electrification of the CVL.

8. Environment, Health and Economic Implications

8.1 Electrification of the CVL will encourage modal shift which will result in an improvement in air quality and congestion in Calderdale. The current poor quality and unreliable service is likely resulting in people choosing to drive their cars rather than take public transport.

9. Equality and Diversity

9.1 Improved connectivity is a benefit to all.

10. Conclusion

10.1 Severe timetabling and reliability difficulties have been experienced during 2018. Electrification is one means to building a modern fit for purposed rail service in the Calder Valley

Background documents

Arup, Calder Valley Line Enhancement Strategy, 2012
Devolving our Railways, Report by Northern Powerhouse Partnership, 2018.
http://www.northernpowerhousepartnership.co.uk/publications/devolving-our-railways-learning-the-lessons-from-a-summer-of-northern-rail-chaos/
Rail Performance and Governance Report to: West Yorkshire Combined Authority, 2 August 2018.
Electric Railway Charter 2018

Contact Officer
Mary Farrar, Corporate Lead for Transportation **Mary.farrar@calderdale.gov.uk** **01422-392336**

Documents available for inspection at Westgate House

[i] Calder Valley Line Enhancement Strategy, Arup, 2012
[ii] Strategic Economic Case for Investment in the Calder Valley Line, SDG, 2016

Campaigning rail user groups on the Calder Valley Line in the North of England

Electric Railway Charter 2018

This is declaration of support for a growing, sustainable railway that will promote good growth whilst protecting and enhancing the local and global environment. The Charter is both a call for rail businesses and local regional and central government bodies to act, and a commitment by its authors to continue to campaign in pursuit of railway electrification. The Charter is founded by four campaigning rail users' groups along the Calder Valley Line in the North of England.

We invite business, environmental, political, workplace and community groups to declare their support for our aims.

We declare our belief, as explained more fully in our supporting document *Arguments for Electrification*, that:

- Rail transport is and must continue to be developed as an attractive alternative to travel on congested roads, providing economic and environmental benefits.
- Road transport will move towards zero-emission, zero-carbon traction over coming decades; so too must rail.
- Diesel traction, including diesel "bi-mode" trains, and other forms depending on the combustion of fossil fuels must be phased out over a timescale which is short enough to make a real environmental impact.
- Electrified railways have a powerful business advantage through lower operational, maintenance and energy costs, and user-benefits leading to the well-established "sparks effect". The cost of electrification is recouped through operational savings later.
- Electrified railways have powerful environmental advantages – including the improvement of air quality, and the combatting of climate change by elimination of CO_2 emissions. As electricity generation moves towards zero carbon, so will electric railways. We must aim for a zero-carbon future for transport.
- The report "Northern Sparks" produced by the Northern Electrification Task Force (NETF) in March 2015, remains a strong statement attracting broad political support, in favour of electrification of main and secondary routes across the North of England.
- Gaps in electrification, for example due to lengths of tunnel or difficult bridges should be overcome by on-train energy storage that uses modern batteries or genuinely clean alternative fuels (such sustainably generated hydrogen). Enduring use of diesel or other sources derived from fossil fuels should be rejected.

We call on the rail industry, ***and on*** government at all levels:

- To reassert the need for a programme of railway electrification covering main and secondary routes.
- To initiate without delay a programme of railway electrification across the North of England, with a dedicated planning team and workforce, building on lessons learnt from recent schemes elsewhere.
- Specifically, to plan for early implementation of the NETF electrification schemes starting with the top-ranked proposal for the full Calder Valley Line (CVL), extending from Leeds via Bradford and Brighouse through Rochdale to Manchester and through Burnley to Preston, as top-ranked NETF recommendation. The CVL scheme would follow naturally upon completion of the TransPennine Route Upgrade which is focussed on the route through Huddersfield.

***Northern Sparks* report March 2015 – NETF Tier 1 schemes**
Scores on economic and operational/environmental criteria

- **Calder Valley "full"**: Leeds to Manchester and Preston via Bradford and Brighouse ***84***
- **Manchester-Warrington C-Liverpool:** ***80***
- **Southport/Kirkby-Salford Cr:** ***79***
- **Chester-Stockport:** ***75***
- **Northallerton-Middlesbrough:** ***73***
- **Leeds-Harrogate-York:** ***70***
- **Selby-Hull:** ***70***
- **Sheffield-Barnsley/Castleford-Leeds** and connections: ***68***
- **Bolton-Clitheroe:** ***67***
- **Sheffield-Doncaster/Wakefield** (Dearne Valley): ***67***
- **Hazel Grove-Buxton:** ***66***
- **Warrington-Chester:** ***64***

STORM:
Support the Oldham, Rochdale Manchester rail line

HADRAG:
The Halifax & District Rail Action Group

Upper Calder Valley Sustainable Transport Group

Bradford Rail Users' Group

supported by North West and Yorkshire branches of Railfuture

railfuture *the independent campaign for a better passenger and freight rail network*