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Dear Sir or Madam,

We, Don Valley Railway Ltd, wish to comment on the Stakeholder Consultation for the Northern Rail Franchise.

Don Valley Railway Ltd (DVR Ltd) is a registered charity, company limited by guarantee and campaign group that wishes to realise the opportunity offered to improve public transport in the Upper Don Valley by utilizing the currently freight-only rail line between Sheffield (Victoria) and Stocksbridge (via Deepcar), South Yorkshire, for passenger trains.

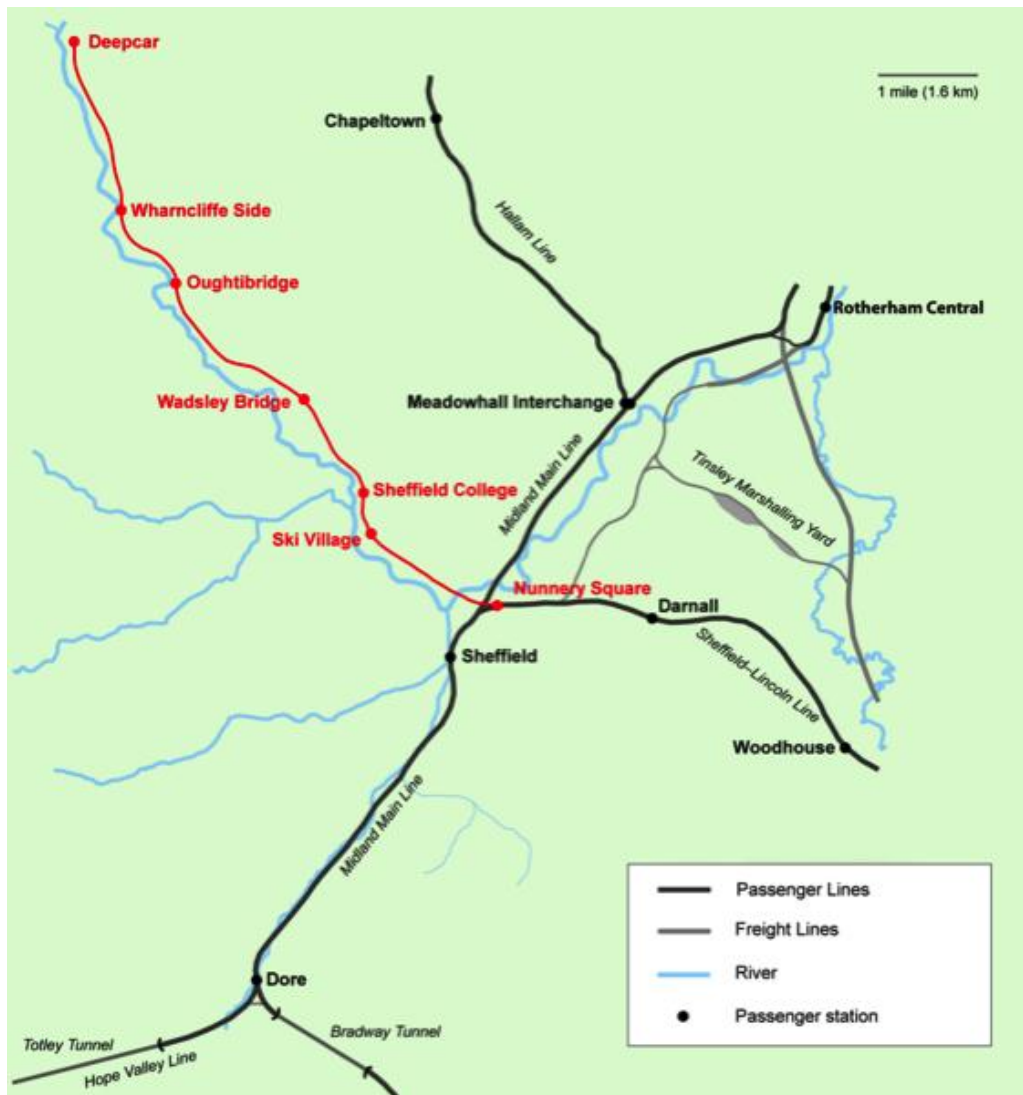


Fig 1 : A map of the Don Valley Line and Upper Don Valley

In 2010 DVR Ltd commissioned Ove Arup Ltd (Arup) to produce the Don Valley Railway Ltd Engineering Feasibility Study (DVRLEFS). This demonstrated the engineering feasibility of utilizing the line for a passenger service stating that the main requirement was stations.

The DVRPEFS found a more positive appraisal than previous studies. It found that CORUS (Now Tata), the sole freight hauliers on the line, have a positive attitude towards the potential of passenger services. Following a track walk, it acknowledged the good condition of the track and the lower cost of bringing the line up to standard. The study also found that the non-stop shuttle operating on a half-hourly service pattern was operationally possible reducing the need for further infrastructure.

It recommended further study into the following areas in particular:

- Operational Arrangements
- Types and costs of rolling stock
- Track gauge and width restrictions
- Sources of funding and production of an initial business case
- Data gathered in 2006 South Yorkshire Transport Plan regarding the viability of the line be updated and revised.

DVR Ltd have since:

- investigated operational arrangements
- investigated rolling stock opportunities regarding the operability of the line, and,
- made significant strides towards funding and producing a study that gives evidence to back up the business case, a Business Plan setting out how this will be achieved, and, setting up a business structure to deliver the project.

It is our aim to produce an initial prospectus document including an initial study and business and project plan to create a business case towards undertaking a full appraisal of the project. We expect to have this document produced later this year.

The Don Valley Line remains a working railway line and provides a vital link to Tata Steel Works, Stocksbridge. Typically a single steel freight train in each direction every working day uses the line which follows a busy commuter corridor into Sheffield. Consequently, there is:

- potential spare track capacity
- the track is in serviceable condition, and,
- it serves a corridor with potential demand

Data from the study undertaken as part of the 2006 South Yorkshire Transport Plan found that at that time a rail service introduced serving stations along the route would require a subsidy, however this subsidy for the assessed stopping pattern found that the level of subsidy would be less than the average per passenger subsidy for services in South Yorkshire. It stated however that there is no source for the additional subsidy.

DVR Ltd since have investigated ways of improving the business case. This has focused around:

- Simplification of infrastructure requirements
- Alternative Service Patterns
- Cost savings via a community model
- Alternative modes of operation
- Discussions regarding interoperability of passenger and freight services

DVR Ltd having investigated the cost savings possible utilizing Light Rapid Transit (LRT) have entered into a working arrangement with Parry People Movers Ltd (PPM), producers of a low cost vehicle that successfully operates on the Stourbridge Branch in the West Midlands and Pre-Metro Operations Ltd. PPM are leaders in reduced fuel-efficient passenger rail vehicles which utilize Flywheel and Regenerative braking technology that reduces by a significant amount the fuel usage for a passenger rail vehicle.

We have also had discussions with Abellio plc, the Co-Operator of the current Northern Franchise. They are interested in the project as it may offer an additional service that has potential to improve the efficiency of the franchise should such an approach be specified within the Franchise Bid criteria.

With the support of the above DVR Ltd believe that their proposal can deliver the following benefits:

- The Upper Don Valley will benefit from improved accessibility, sustainable travel choice, reduced air pollution, and a lowered carbon footprint. By offering a rail service it will extend a more sustainable travel choice

particularly to those with low accessibility who are unable to travel by car.

- The level of subsidy of public transport in the Upper Don Valley will reduce and increased economic development through creating more viable and sustainable development. By adopting principles akin to a Community Rail model onward transport needs can be provided and have been costed in.
- Potential improvements to steel freight operations. We realize and as part of our project will work with Tata to ensure what changes we make benefit them as this link is vital to their operations.
- The Don Valley Railway Project will contribute greatly towards the transformation of Stocksbridge. The town built on the historic Steel industry, though keeping this facility is undergoing a transformation. Tata form one part of the steel legacy, Outokumpu have closed their works and the land it occupied is being converted by Dransfield Properties into new town centre with new retail outlets that will transform the town into a retail destination. On the edge of the Peak District with improved links it could be a desirable location to live and there are plans for significant housing by both Bloors and Dransfields close to the town and line. A location for stops at Deepcar and Stocksbridge has been identified for stations with the support of these local developers.
- The service will create improved access from the Sheffield Conurbation to the North East Peak District, Wharnccliffe Woods and Chase, Wortley Forge, scenic parts of the Upper Don Valley creating tourism and leisure opportunities and boosting the local economy and improving the access to leisure facilities of the city region and consequently increased visitor numbers. These recently featured as part of the route of the Tour de France and increasing visitors have been noted.
- With our aim of reducing the costs of the rail service to beyond break even, we hope to address Government aspiration to reduce the burden on the taxpayer to provide rail services through the development of low-cost Light Rapid Transit (LRT) technology that is transferable to other parts of the network.
- LRT technology could offer partial solutions to pressing rolling stock issues relating to the need to withdraw 'Pacer' trains from service due to EU DLA regulations by 2020. PPM Ltd are currently designing and developing suitable rail vehicles.
- Proposals bring back into use Sheffield Victoria Station, and with this the potential to increase the central Sheffield rail capacity for other services be this planned or at times of disruption.
- As part of the Optioneering process we are considering cross-city options, extending the scheme to the eastern side of Sheffield to run to a potential new station at Nunnery connecting with the Supertram Network and beyond. This could offer opportunities to relieve pressure on Nunnery Main Line Junction and Sheffield Midland stations and add services on the Sheffield to Worksop and Retford Corridor which is currently underserving urban stations with an hourly service.

Optioneering

Ahead of presentation of our prospectus document, we have undertaken research into possible methods to utilize the line. Looking at the likely viability of any number of options we created a matrix of 8 possible general option areas:

Possible Service Option	Possible Vehicular Mode of operation	Passenger Stations Served / Service Pattern	Possible additional features	Previous Studies that inform on these options
1, A shuttle service between Deepcar/Stocksbridge and Sheffield – largely non-stop	Heritage/LRT/ Diesel Tram/ DMU	A single Deepcar/Stocksbridge Station and a single Sheffield station		DVRPEFS
2, A stopping service between Stocksbridge and Sheffield	Heritage/LRT/ Diesel Tram/ DMU	Stocksbridge, Deepcar, Oughtibridge, 2 other stations in North Sheffield, Sheffield Victoria		Don Valley Business Plan Draft
3, Stocksbridge – Middlewood and thence various destinations on the South Yorkshire Supertram Network	Tram Train	Stocksbridge, Deepcar, Oughtibridge	Connecting link – these options are likely to combine with other tram train extensions	Rotherham Tram Train Trial (tbc c. 2018) Sheffield Supertram Extensions studies (2004)
4, Stocksbridge – Hillsborough and thence various destinations on the South Yorkshire Supertram Network	Tram Train	Stocksbridge, Deepcar, Oughtibridge, Claywheels Lane, Wadsley Bridge and Hillsborough College	Connecting link – these options are likely to combine with other tram train extensions	Rotherham Tram Train Trial (tbc c. 2018) Sheffield Supertram Extensions studies (2004)
5, Stocksbridge – Central Sheffield and thence various destinations on the South Yorkshire Supertram Network	Tram Train	Stocksbridge, Deepcar, Oughtibridge, Claywheels Lane, Wadsley Bridge and Hillsborough College, Neepsend, Sheffield Victoria	Connecting link – these options are likely to combine with other tram train extensions	Rotherham Tram Train Trial (tbc c. 2018) Sheffield Supertram Extensions studies (2004)
6, Stocksbridge – Woodhouse and beyond creating a cross city service utilizing the line across the city	LRT / Heritage / Diesel Tram/ DMU Diesel Tram/Tram Train	As above plus Nunnery, Darnall, Darnall East, Adv Manufacturing Park, Orgreave, Woodhouse		Don Valley Railway Business Plan Draft Sheffield Supertram Extensions studies (2004)
7, Sheffield to Stocksbridge Sheffield to Bradford	Heavy Rail	Sheffield to Stocksbridge Stations to be considered as a above	Reinstatement of the route to Penistone	See additional work in this study
8, Sheffield to Manchester as part of Transpennine Rail Network London/Sheffield to Huddersfield Halifax and Bradford	Heavy Rail and Electrification	As above	Reinstatement of Woodhead Railway	Northern Way

Of the 8 option areas we discounted the option for re-opening Woodhead on account of the scale of the project. We also discounted the option for reinstatement of the line between Deepcar and Penistone. We undertook a desk-based exercise looking at the potential benefits of alternative routings to serve a rail corridor between South Yorkshire centres and the 3 largest centres in West-West Yorkshire (i.e Huddersfield, Halifax, and Bradford). This showed that this corridor would be better served by other routing options.

We also rationalised tram-train options. Therefore we considered an initial 4 options:

1, A stopping rail service between Sheffield Nunnery and Stocksbridge with stops at Deepcar, Oughtibridge, Wadsley Bridge, Sheffield Victoria and Sheffield Nunnery operating on a 20 minute frequency.

2, A Shuttle rail service between Sheffield Victoria and Deepcar (with a connecting bus service serving the greater Stocksbridge urban area offering a half hourly service with an hourly stop at Oughtibridge. Operated by the new vehicle being pioneered by PPM to meet the needs of local rail services.

3, A Tram Train service from Stocksbridge to Beighton with a route running through the city centre. This has stops at Stocksbridge, Deepcar, Oughtibridge, Claywheels Lane, Wadsley Bridge, Neepsend North, Neepsend South and Sheffield Victoria, before running on-street calling at Castle Square, Fitzalan Square, Hyde Park, Cricket Inn Road, Nunnery, and returning to Heavy Rail alignments before continuing on to Darnall, with new stops at Darnall East, Advanced Manufacturing Park, Orgreave West, Orgreave East, before carrying on to Woodhouse, with a terminus at Beighton.

4, An extension to the Sheffield Supertram Yellow Route to Stocksbridge with Stops at Claywheels Lane, Oughtibridge, Deepcar and Stocksbridge utilising Tram Trains

The table below illustrates our estimates of infrastructure costs, operating costs, the cost of a 3 year 'kickstart' period to support service growth, service revenues, how long we think each option may take to payback outlay and what the return would be to a company given a 30 year contract to operate the service.

	PPM Stopper	PPM Shuttle Option	Tram Train Stocksbridge - Beighton	Tram Train Stocksbridge to Middlewood
TOTAL INFRASTRUCTURE COS	£17,966,454	£2,785,120	£182,808,108	£57,027,268
Trains per hour	3	2	4	4
ANNUAL OPERATING COSTS*	£1,547,212	£928,518	£2,161,515	£1,047,515
Kick start period revenue	3272485	1875024	16999999	4999999
Kickstart period costs	4641636	2785554	6484545	3142545
Kickstart period revenue -costs	-1369150.125	-910529	10515454	1857454
POST KICKSTART PERIOD REVENUE	2181657	1250016	11333333	3333333
POST KICKSTART REVENUE - COSTS	634445	321498	9171818	2285818
PAY BACK YEARS	30.47	11.49	19.93	24.94
30 YEAR CONTRACT RETURN	£3,971,237	£6,381,044	£407,109,154	£83,123,994
Profit per year	132374	212701	13570305	2770799
Annual Per cent return on investment	0.74%	7.64%	7.42%	4.86%

The striking thing from these initial cost estimates is the differential between the costs of the various options. Tram Train Options are likely to be hugely more expensive. The simple LRT shuttle, has further cost savings on more complex LRT (Light Rapid Transit) options. Further analysis is sought of lower cost options utilizing PPM vehicles.

Our assumptions regarding revenue are based on a TRICs-style assessment of rail demand for Deepcar/Stocksbridge and Oughtibridge based on comparing usage levels at stations with similar characteristics.

Our assumptions regarding revenue for potential Tram train stops are based on each stop having the an average Supertram patronage per station divided by two to reflect the lower frequency of service:

Total Annual number of journeys on Supertram	16million
Total Number of stops	48
Average per stop	333,333
Average frequency of tram per hour per stop peak	8
Average frequency on this section	4
Factored average usage	0.5
Average journeys per stop	166,666

Looking at the potential locations for stops we consider that the additional stops served by tram train options are aspirational and largely dependent on the opportunities offered by bringing into use the extensive development sites along the route.

Further to this we have investigated passenger benefits for Stocksbridge to Sheffield Trips.

Journey	Options	TOTAL JOURNEY TIME
Sheffield Midland Station via TravelSY website recommended route	Base Case (walk + pub transport)	59
	Option 1 + connecting bus	58.5
	Option 2 + connecting bus	47.5
	Option 3 Tram Train City Cn Link	48.5
	Option 4 Tram Train M'wd Link	61.5
Sheffield Moor via TravelSY website recommended route	Base Case (walk + pub transport)	62
	Option 1 + connecting bus	58.5
	Option 2 + connecting bus	54.5
	Option 3 Tram Train City Cn Link	56.5
	Option 4 Tram Train M'wd Link	64.5
Sheffield HSBC via TravelSY website recommended route	Base Case (walk + pub transport)	56
	Option 1 + connecting bus	58.5
	Option 2 + connecting bus	43.5
	Option 3 Tram Train City Cn Link	51.5
	Option 4 Tram Train M'wd Link	58.5
Sheffield Town Hall via TravelSY website recommended route	Base Case (walk + pub transport)	58
	Option 1 + connecting bus	58.5
	Option 2 + connecting bus	48.5
	Option 3 Tram Train City Cn Link	52.5
	Option 4 Tram Train M'wd Link	60.5
Sheffield University Arts Tower via TravelSY website recommended route	Base Case (walk + pub transport)	54
	Option 1 + connecting bus	58.5
	Option 2 + connecting bus	56.5
	Option 3 Tram Train City Cn Link	60.5
	Option 4 Tram Train M'wd Link	56.5
Stocksbridge average location to Hillsborough Corner	Base Case (walk + pub transport)	41
	Option 1 + connecting bus	58.5
	Option 2 + connecting bus	61.5
	Option 3 Tram Train City Cn Link	58.5
	Option 4 Tram Train M'wd Link	42.5

Journey time assessed from first principles include an element for walking to and between services and waiting times. Locations were selected to reflect an average origin/destination to transport connection for the Stocksbridge end and selected city centre destinations at the Sheffield. This shows that journeys to most city centre

destinations will be served by the service offering quicker origin to destination journey times despite the edge of city centre location of Victoria Station.

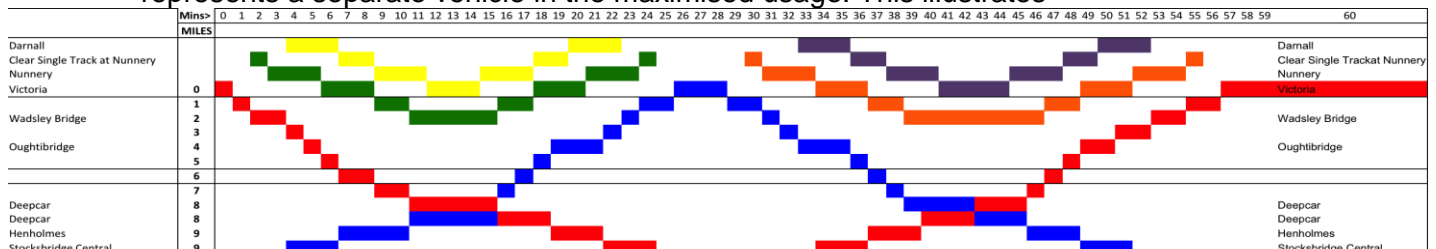
It also shows that the Option 2 with limited stops offers better or equal journey time outcomes than Options 1, 3 or 4 from Stocksbridge.

Looking at Park and Ride Analysis

Mode of park and ride journey from an average Stocksbridge / Deepcar location	TOTAL JOURNEY TIME
Option 1 + park and ride deepcar	50.5
Option 1 + park and ride stocksbridge	56.5
Tram Train M'wd Link + park and ride deepcar	52.5
Option 2 + park and ride	42.5
Option 3 Tram Train City Cn Link + park and ride Deepcar	42.5
Option 3 Tram Train City Cn Link + park and ride Stocksbridge	48.5
Option 4 TramTrain M'wd link + park and ride Stocksbridge	56.5
Option 4 TramTrain M'wd link + park and ride Deepcar	50.5
Base Cases	
Drive to Middlewood +tram	54
Drive Only (peak)	40

None of the options are quicker than driving the full journey to Sheffield Midland Station taking 40minutes. Option 2 and Option 3 (via Deepcar) are the next fastest at 42.5 minutes and these are the options are faster than using the current park and ride at Middlewood at 54 minutes.

Further to this the creation of a platform facility at Victoria Station would allow for additional rail services to access central Sheffield. This could be utilised for additional services serving Sheffield that cannot be accommodated at the existing station particularly in light of constraints at Nunnery Main Line Junction to the north of Midland Station. Below see an example of an hourly service pattern. Each colour represents a separate vehicle in the maximised usage. This illustrates



a half hourly service pattern on the Don Valley Line (Victoria to Stocksbridge) with the introduction of a signal block at Wadsley Bridge. This could accommodate an additional 4 services an hour from destinations to the east to Victoria with two of these continuing up the Don Valley Line serving a station

at Wadsley Bridge. These could serve a range of destinations via Woodburn Junctions to the east.

Further evidence of this research undertaken is available.

It is our intention after the launch of a prospectus document to generate funds for a full study and business plan towards introducing a service on the Don Valley Rail Line. As part of this we would request that the potential of the Don Valley Line is considered and specified in the renewal of the Northern Rail franchise. If we could be included in the consultation in this we feel this would be a rewarding exercise for all rail businesses concerned.

Please do not hesitate to get in touch if you require further information about Don Valley Railway.

Yours Sincerely

Chris Hyomes
Don Valley Railway