



EAST BERWICKSHIRE'S LIGHT-RAILWAY LINK TO CENTRAL BORDERS

*An Innovative Proposal to Reinstate the
Disused Berwickshire Railway Route*

In 2001 as an Elected Scottish Borders Councillor, I proposed that we should survey the existing track bed of the defunct Reston to Galashiels Railway, with a view to develop a tram/light railway system to link the whole of Berwickshire to the central Borders. This track bed across from Reston can still be identified on Google Earth.



In March 2019 the long-awaited Borders Transport Corridors Pre-Appraisal produced by consultant Jacobs UK was published.

“Extending the borders railway east to Berwick as well as, or instead of, south west to Carlisle” is among the options proposed for further consideration as part of plans to improve transport links in the region.

Proposed Reinstatement Of Berwickshire Rail Line



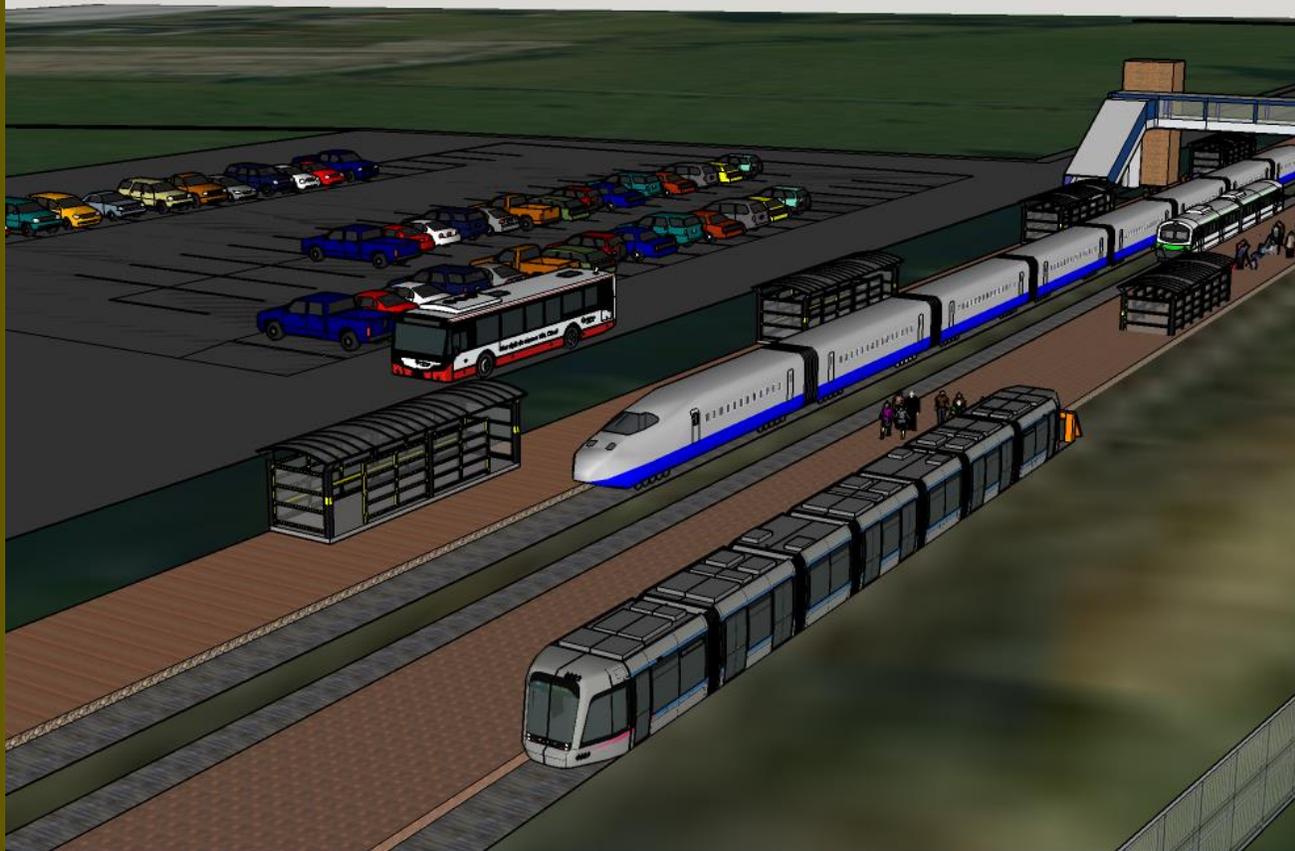
It is 33 miles following the original Berwickshire Railway track bed from Reston Station hub to Tweedbank Station.

Only 3 miles of that distance will need to be re-routed because of development on the line (shown in yellow on the image).

Tram-Trains/light rail systems is becoming the preferred option when reopening disused railway lines.

The Tram-Train/light rail would join the proposed Extended Border Railway for the last 3.5 miles via **Borders General Hospital** to the Tweedbank Station.

Tram-Train/Light railway at Reston Terminus



Stations at:
Chirsidebridge
Duns
Greenlaw
Gordon
Earlston
Melrose

Borders General Hospital

Tweedbank

Galashiels

The Berwickshire Line Tram-Train will join the extended Borders Railway Main line at Ravenswood Junction

The **lowest emitters** per passenger-kilometre are coaches, light rail and tram. Petrol cars are the second highest after domestic air travel



STRATEGIC OBJECTIVES

- Enabling economic growth
- providing sufficient capacity for people travelling to take part in economically productive activities and employers to access new labour pools
- improving connectivity to/from the retail, leisure and tourism sectors of the economy
- improving access to workers for businesses.
- Reducing carbon and the passenger/transport sector's impact on the environment by:
 - directly reducing the environmental impact of rail by reducing less carbon efficient and less sustainable modes of transport by using battery/electric motive power.
- Improving the quality of life for communities and individuals by:
 - Improving access to employment and training opportunities
 - connecting communities
- providing access to social infrastructure such as educational establishments and major leisure venues
- improving integration across the transport network

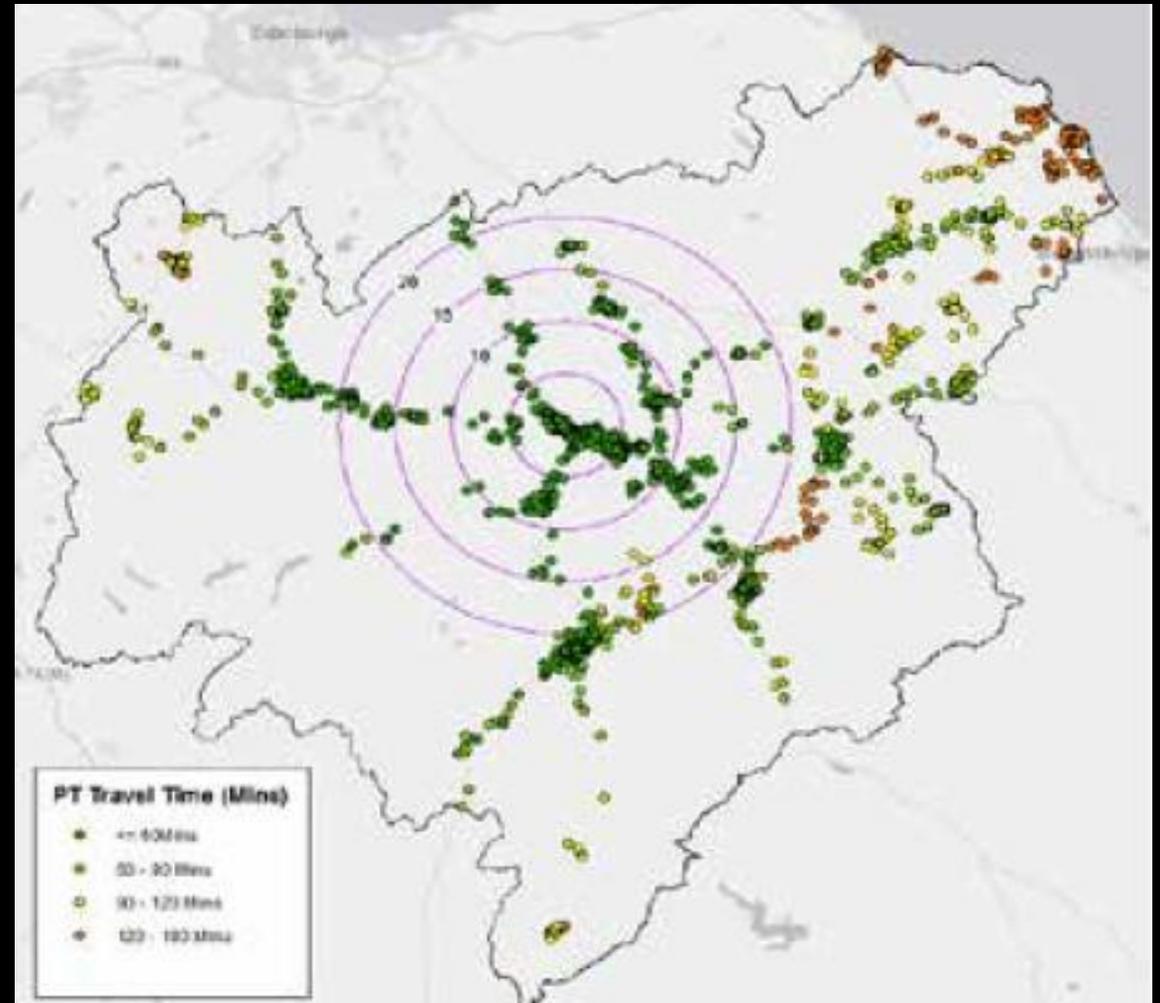
ACCESSIBILITY & CONNECTIVITY

- The Borders Railway has shown how investment in rail infrastructure can yield benefit for travellers, the environment, the economy and communities.
- Lack of bus services travelling east-west linking Scottish Borders towns with the Galashiels Transport Interchange, results in increased journey times.
- It is clear that there is an east-west public transport accessibility problem. Postcodes in the east towards the A1 are anywhere between 120 and 180 minutes by public transport from the Galashiels Transport Interchange.
- At least one fifth of all Scottish Borders postcodes have “no accessibility” or are unable to complete a journey within the 360-minute time period to either Edinburgh, Newcastle and Carlisle during any time of the day.

ACCESSIBILITY & CONNECTIVITY

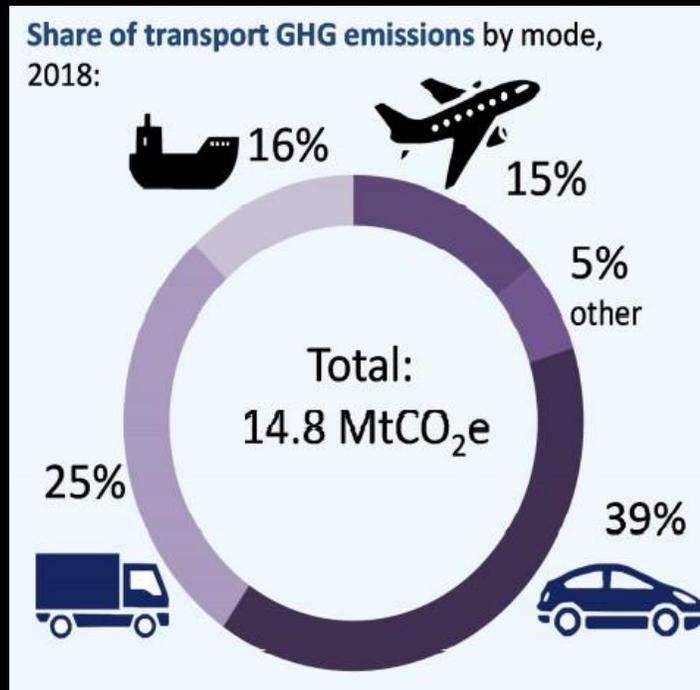
The map opposite highlights public transport journey time accessibility to the Galashiels Transport Interchange from Scottish Borders postcodes in the AM peak period (7am to 10am). The purple rings indicate 5km, 10km, 15km and 20km catchment areas from the interchange.

- The map clearly highlights much better PT journey time accessibility along the main north-south corridors, including the A7 and A68, suggesting that there could be a problem with public transport service provision / frequency travelling east to west.
- Increased interest in rail infrastructure could provide opportunities that would have a positive influence on future travel in the Scottish Borders.
- 28% travellers surveyed that use Tweedbank are from people living further east towards Berwick.

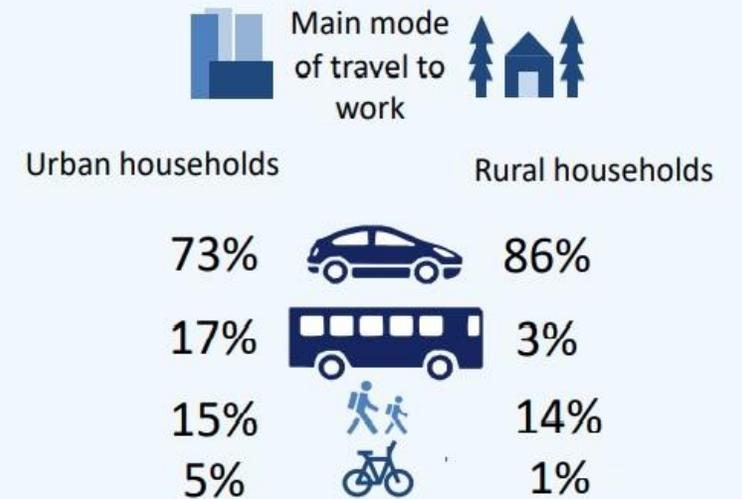


CLIMATE CHANGE

- The Scottish Parliament committed to an ambitious target of net zero emissions by 2045 and transport needs to play its part. Transport is currently Scotland's largest sectoral emitter, responsible for 36% of Scotland's total greenhouse gas emissions



Higher income and rural households were more likely to **travel to work** by car in 2019.



SOCIO POLITICAL ECONOMIC

- Rural households tend to drive more frequently than urban households, in many cases due to the limited public transport options available.
- A particular issue for rural areas is the lack of public transport acting as a barrier for young people accessing education, training and employment and the link to long-term outmigration.
- High Quality of life in the Scottish Borders is attracting people to live in the area for the following reasons: low crime rate, natural environment and a place to raise a family.
- High Quality of Life in the Scottish Borders making the region an attractive place for travel and tourism due to its unique environment. Leisure and tourism markets should be built upon this setting.
- it is worth noting that there are more people in the over 65 age category in the Scottish Borders compared to the national average.
- The Socio-Economic problems are largely interlinked, with the main problems relating to the high number of people travelling out-with the Scottish Borders to work and study – mostly to Edinburgh. This is believed to impact on the amount of employment opportunities available due to a perceived ‘brain-drain’ and resulting social and economic deprivation as less money and funding is available in the area

VERY LIGHT RAIL

THE first Revolution Very Light Rail (VLR) vehicle is complete and will now start testing at the Quinton Rail Technology Centre (QRTC) in Long Marston, near Stratford-upon-Avon, Britain. The vehicle is designed for branch line operation. The consortium behind its development believes it is ideal to support the reopening of closed lines and network extensions.

The bodyshell is built from recycled carbon fibre using a modular design and has a design speed of 104km/h. The vehicle is powered by hybrid diesel-electric powertrain adapted from automotive engine technology.

The VLR is also fitted with a lithium titanate battery pack that would be used to power the vehicle in stations and built-up areas at speeds up to 32km/h. Capacity is for 56 seated passengers.



Around the world light rail is playing an increasing role in enhancing the public transport offering. This is the result of its efficiency in moving large numbers of people on key transport corridors and electric propulsion generating zero emissions at the point of use.

There is potential for many more light rail developments, including the use of tram-train technology which can play a role alongside heavy rail in re-connecting communities.

Tram-Train



South Yorkshire Tram – Train

The first tram train in the UK, 2018, provides a direct service between Sheffield City Centre to Rotherham Central & Parkgate.

Up to 3 services an hour travel on the Supertram network from Sheffield Cathedral to Meadowhall South / Tinsley, then proceed over a new section of track linking the tram line to the rail line. It then continues on to the national rail network to Rotherham Parkgate via Rotherham Central station.

Trams are ideal for inner-city public transport: they are above ground for easy access, have clear routes that can't be diverted like a bus, and most are electric powered for no emissions. But they aren't great for linking together our cities and towns, which are further apart and tend to be connected by higher speed rail networks.

Glasgow, Manchester, and areas in Wales are looking to build their own versions (2019).

A tram Train is a fusion of light and heavy rail infrastructure

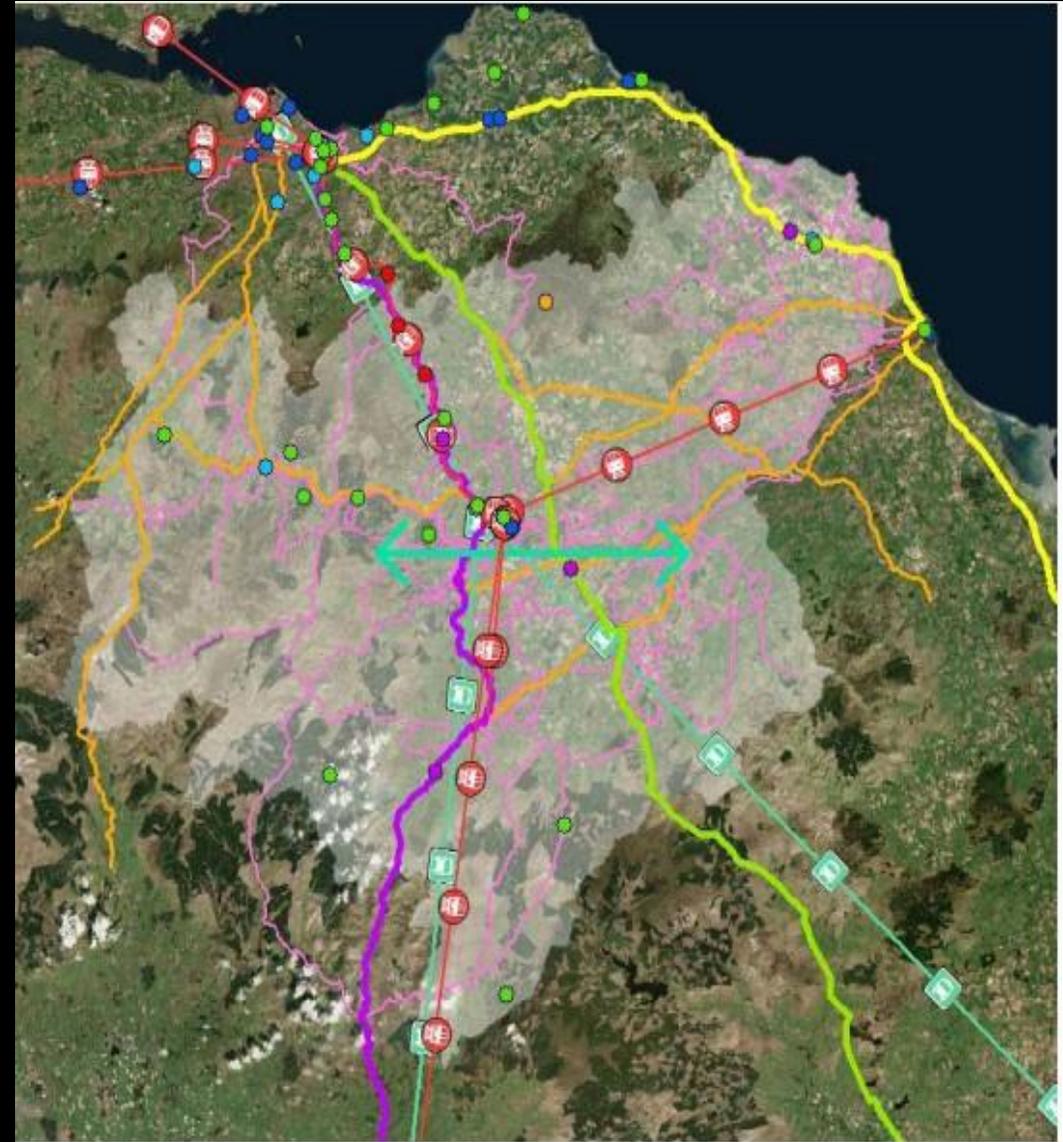
To get the best of both worlds, you have to merge train and tram technology together into a hybrid known as the tram-train, a vehicle that can run on tram networks as well as standard heavy rail, despite their different power, communications, signalling and safety regulations.

Tram Trains operate wholly electrically and will have the capability to operate on battery and conventional electrical systems

BORDERS TRANSPORT CORRIDORS PRE-APPRAISAL

Option 10 Public Transport
Railway Extension – South/East. Extend the Borders Railway towards East Coast Main Line (ECML) via Berwick-upon-Tweed or Reston.

This option would contribute to the objectives to “improve interchange with and between sustainable travel modes,” to “improve journey times, reliability and safety to employment, key services and leisure” and to “reduce business transport costs for economically competitive sectors” by extending the Borders Railway towards the East Coast Main Line (ECML) at Berwick-upon-Tweed. It is expected that this option would also score positively against most STAG criteria. The Borders Railway onboard passenger travel survey (March 2017) highlighted that 28% of respondents that use Tweedbank station travel from locations further to the east towards Berwick



WHAT NEXT

- **Canvas the level of support from local Community Groups and Community Councils.**
- **Lobby our government representatives for support.**
- **Rail Action Group, East of Scotland (RAGES) are supportive of this proposal. They have a track record of success having achieved the reopening of East Linton and Reston Main Line Railway Stations which are currently under construction as well as improved services within the region.**
- **Reston Community Council are supportive of this proposal.**



A FULLY INTEGRATED CONCEPT BRINGING BERWICKSHIRE AND CENTRAL BORDERS TOGETHER



RESTON'S TRANSPORT HUB TO SECURE A CONNECTED FUTURE FOR SOUTH EAST SCOTLAND



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Ex Scottish Borders Councillor for Eyemouth and District North 1999 to 2003.

Documents referenced in this presentation:

- *Borders Transport Corridors Pre-Appraisal*
- *Scotland Route Study Strategic Transport Projects Review - Initial Appraisal: Case for Change Edinburgh and South East Scotland Region*
- *Scottish Borders Council Local development Plan*
- *Railjournal.com*
- www.stagecoachbus.com
- www.wired.co.uk