

Tram-Train for Wisbech and Haverhill

October 2022

Tram-Train

- Tram-trains are a light rail vehicles which:
 - can operate to light rail standards
 - can also travel on the national rail network alongside mainline trains



Tram-Train street running in Sheffield city centre



Operating over National Rail infrastructure



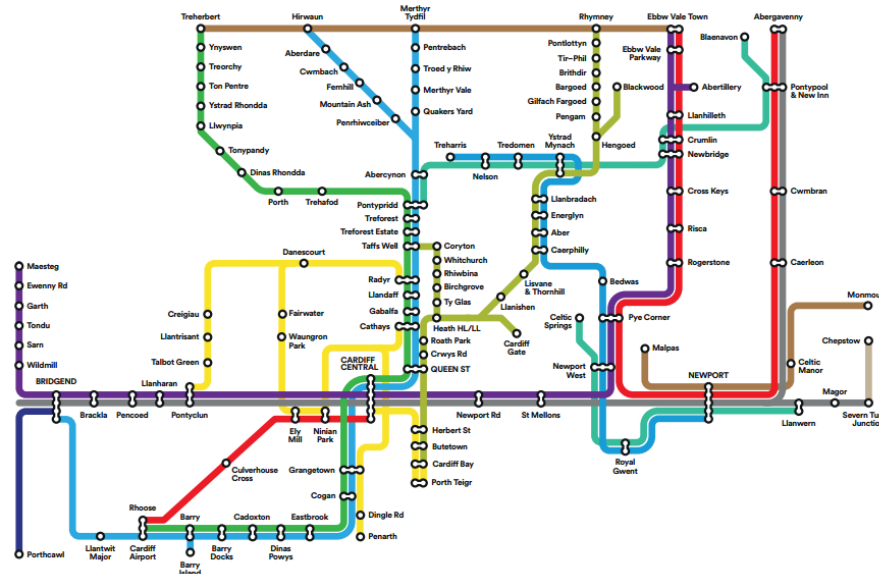
Serving Rotherham Railway station

Tram-Train systems

- 20 systems operating in Europe, with 20 others proposed
- First used in the UK to extend Sheffield Tramlink to Rotherham
- A major part of the “South Wales Metro” modernisation of the Cardiff Valley rail network including a new line into the redeveloped Cardiff Bay area



Stadler Tram-Trains for South Wales



South Wales Metro network

Tram-Train: advantages operating as light rail

- Significantly cheaper level crossings operating to light rail standards
- Tram like extensions to serve town centres and areas of new housing



Light-Rail level crossing in Croydon

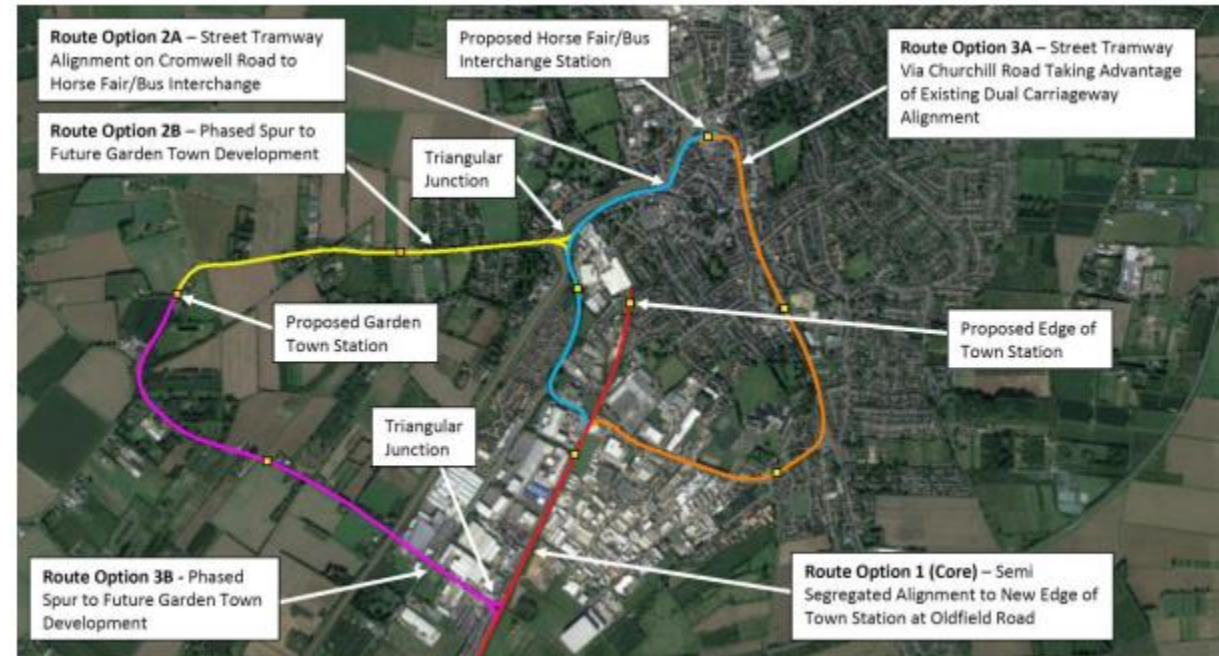


Figure 26 – Summary of Potential Wisbech Area Route Options

Network Rail Tram-Train proposal for Wisbech

Tram-Train: comparable to Heavy Rail

- Operate to National Rail stations
- Interiors and ride quality match modern heavy rail trains



South Wales Tram-Train interior



Wisbech to March: Potential for Light Rail (1)



- **Wisbech to March: Potential for Light Rail Report published by Network Rail's Light Rail Knowledge and Development Team in December 2021**
- Considered Tram-Train, Light Rail and Very Light Rail
- Concluded: when the short- and long-term aspirations were taken into account **“a Tram-Train solution appeared the best credible light-rail option. Tram-Train would enable future operation on both the national rail network and any on street operation into Wisbech town centre or to the Garden Town.”**

Wisbech to March: Potential for Light Rail (2)



- The main factors driving the choice of Tram-Train were:
 - Requirement to operate on the national rail network (e.g. to Peterborough, Ely, Cambridge)
 - The multiplicity of level crossings on the route and the vehicle's suitability to create a cost-effective solution at each
 - Opportunity to operate into Wisbech town centre using the highway network
 - Future extension of the service to serve the Wisbech Garden Town development
 - Consideration of passenger demand and thus vehicle size

Wisbech to March: Potential for Light Rail (3)



	Tram	Tram Train	Very Light Rail	Conventional Train
Ability to access Wisbech town centre	Green	Green	Yellow	Red
Compatibility with a future Garden Town extension	Green	Green	Green	Red
Ability to service an edge of town Wisbech Station	Green	Green	Green	Green
Comparative complexity of signalling control required	Yellow	Green	Yellow	Green
Comparative complexity of level crossing interventions	Green	Green	Yellow	Red
Complexity of station design/integration	Green	Green	Green	Yellow
Ability to operate on the main line	Red	Green	Red	Green
Comparative indicative capital cost	Yellow	Yellow	Yellow	Red
Comparative indicative operating cost	Green	Green	Green	Red

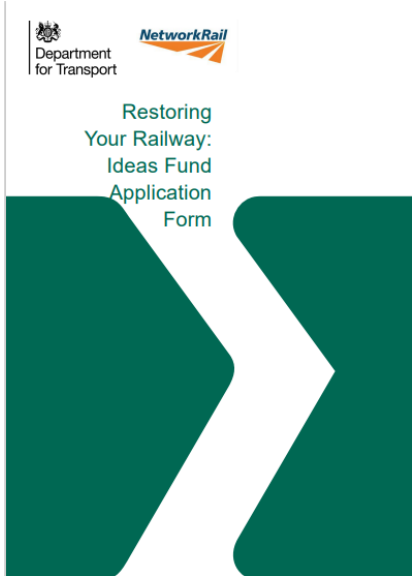
Figure 29: Indicative comparative analysis of possible rail vehicle types for deployment on the Wisbech to March line.

Traffic Light chart from the Network Rail light rail report comparing Tram-Train with other options

Tram-Train for Haverhill



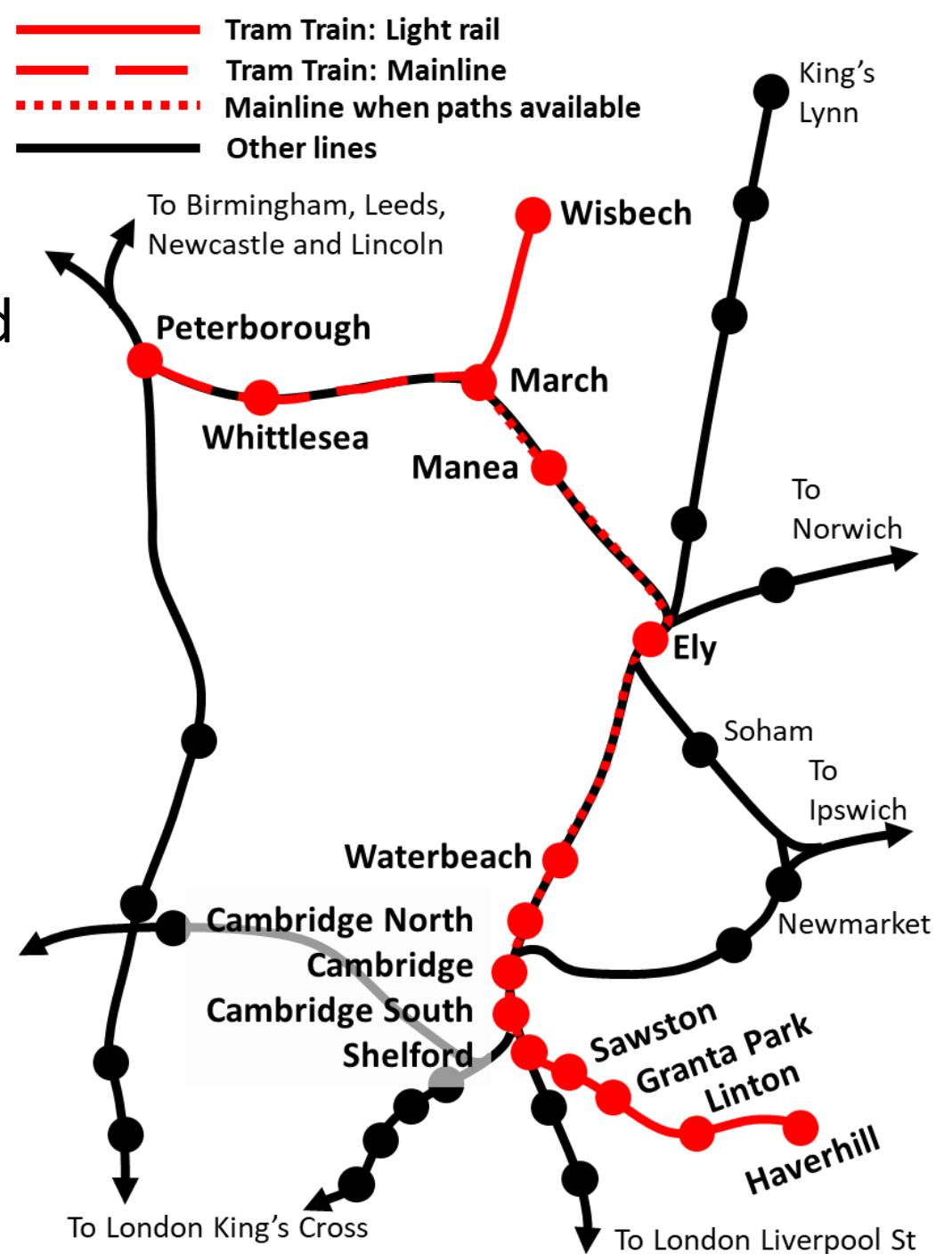
Department
for Transport



- **Railfuture's bid to the DfT's Restoring Your Railway (RYR) fund in 2021 was rated as "a good case for future development" with the RYR "team to keep the scheme under review for a future point"**
- **Network Rail's light-rail team noted that "this proposal has potential as a Tram-Train scheme, especially if the access to West Anglia Main Line (WAML) into Cambridge is required."**
- **"A light rail solution would reduce capital infrastructure costs for the reinstatement to Haverhill. The development of a Tram-Train fleet in the area could also tie with other opportunities such as Wisbech."**

Tram-Train vision for Cambridgeshire

- Tram-Train re-openings to Wisbech and Haverhill could be implemented with a shared Cambridgeshire depot
- This could be the start of a flourishing Tram-Train network
- Could transform access to places such as Peterborough and Cambridge, and non-rail served communities through light rail extensions



Tram-Train for Haverhill: Potential Next Steps

- Engage with Network Rail's light-rail team who already say:
 - Haverhill has potential as a Tram-Train scheme, with a Light Rail based Tram-Train reducing the capital infrastructure costs for the reinstatement
 - The development of a Tram-Train fleet for the Haverhill area could also tie with other opportunities such as Wisbech
 - A Tram-Train solution is the best credible light-rail option for Wisbech
- Engage with the Department for Transport's Restoring your Railway team who have been asked by the Minister of State for Transport to keep the Haverhill scheme under review
- Engage with the Cambridgeshire and Peterborough Combined Authority and Suffolk County Council over sources of funding for a Haverhill Tram-Train study