



# Vision of the Year

Qualifying dates: July 2024 – July 2025

Closing date: Thursday 31 July 2025

## ENTRY CRITERIA

- All entries must be submitted on a maximum of ten pages and accompanied by at least three high-resolution images in .jpeg or .tiff format. You are free to include supporting brochures, videos and other media.
- If supplying printed submissions, please submit 3 copies of each entry for judging purposes.
- Entries can be submitted into more than one category.

Entrant	Network Rail, in collaboration with CNNCT, DfT, Eversholt Rail, LRSSB, ORR, Pre Metro Operations, RSSB, TDI Greenway, UKTram
Outline of entry	The Mixed Use Railway Initiative was born from the collective experience of industry colleagues supporting the development of rail reconnection projects in the former Restoring Your Railway programme. Our experience demonstrated that a “one size fits all” heavy rail solution would not achieve the desired outcome of viable reopening of routes and reaching new markets. Together we realised the best solution will result from assessing the most appropriate integration of technological, commercial and operating systems between the various rail based modes. This building on examples already in operation around the UK, and further afield. This wide ranging approach offers the best opportunity to deliver new markets: a vision of a seamless journey that is a viable alternative to the private car. The ability for technology to be shared across sub modes will reduce operational and capital cost of the whole system and improve financial sustainability.
Supporting elements	Please see attached supporting submission
<b>Entry submitted by:</b>	
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ALL ENTRIES SHOULD BE SENT TO: E-mail: [awards@lrtaf.com](mailto:awards@lrtaf.com)

Post: 2025 Global Light Rail Awards, 13 Orton Enterprise Centre, Bakewell Road, Orton Southgate, Peterborough, PE2 6XU UK  
by no later than Thursday 31 July 2025. PLEASE ATTACH SUPPORTING MATERIAL/IMAGES.

For further information about any aspect of the awards, call us on +44 (0)1733 367604 or e-mail [awards@lrtaf.com](mailto:awards@lrtaf.com)



### **The Principle of the Mixed Use Railway Vision**

In the UK, “rail systems” have a low market share of all transport journeys. If we are to create a sustainable public transport system and deliver on climate goals we need to grow rail’s market share. One opportunity towards achieving this goal is to extend the reach of the rail network, thereby opening new markets currently beyond the reach of the rail system. Our vision is to achieve this by offering rail solutions with capital and operating costs that create a financially viable product. The concept is founded on the principle of matching the appropriate solution to meet the expected demand at an affordable price.

The railway as a product comprises sub-modes: heavy rail, metro, Tram Train, light rail, and very light rail. This spectrum of modes offers a diverse range of solutions. However, the choice of solution is often compromised because the rail sector is fragmented with the modes sitting in individual silos. Misconceptions and ‘received wisdom’ prevent effective cross industry co-operation and knowledge share. Our vision breaks down those prejudices by creating a diverse community of rail organisations willing to work together to deliver the solutions that communities need.

### **How the Mixed Use Railway Initiative was born**

The Mixed Use Railway Initiative was born from the collective experience of industry colleagues supporting the development of rail reconnection projects in the former Restoring Your Railway programme. Our experience demonstrated that a “one size fits all” heavy rail solution would not achieve the desired outcome of viably reopening routes and reaching new markets. Together we realised the best solution results from assessing the most appropriate integration of technological, commercial, and operating systems between the various rail based modes. This builds on examples already in operation around the UK, and further afield. This wide ranging approach offers the best opportunity to deliver new markets: a vision of a seamless journey that is a viable alternative to the private car. The ability for technology to be shared across sub modes will reduce operational and capital cost of the whole system and improve financial sustainability.

### **The focus of the Mixed Use Railway Initiative**

The Mixed Use Railway Initiative is inherently targeted at reconnecting local communities. Adapting services to the local context is an important action to best serve the needs of our communities. By operating locally, public transport operators, authorities and industry can unite to propose operations that respond directly to local needs.



The vision of the Mixed Use Railway Initiative is shared across the industry through the close collaboration of organisations spanning the rail based public transport sector.

This includes:

- local transport authorities wanting to reconnect their communities
- suppliers with new and innovative vehicle and infrastructure technologies
- transport operators who interface with the National Rail network, and
- industry regulators who are willing to engage and are open to innovation.

Light rail is a major element in the Mixed Use Railway Initiative. Its broad characteristics of offering simpler, cheaper infrastructure and operating systems, with its inherent flexibility in accessible design make it ideal to be part of the Mixed Use Railway toolkit.

The Mixed Use Railway community has embraced the vision. We have a raft of complementary workstreams which align with the goal of delivering simpler, cheaper and relevant local transport solutions using appropriate commercial and operating models. Working together we have developed case studies from across the railway network to demonstrate financially robust and operationally feasible business cases that will expand the market reach of the railway.

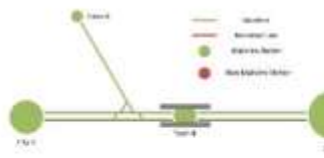
“The Department for Transport is heavily engaged in the Mixed Use Railway Initiative because of its potential to stimulate economic growth through better and more efficient public transport. It offers opportunity to make the fullest use of steel wheel/steel rail technology and existing or disused heavy rail alignments.”

**David Sexton, Rail Investment Strategy Manager, UK Department for Transport**

## The Three Reference Cases

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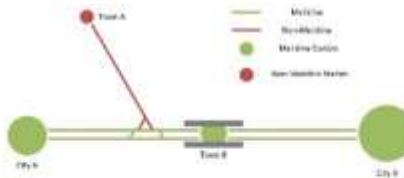
### Lower Cost Operations on the National Rail Network



- Examples of what happens today, e.g. Dartmoor Line.
- Cost reductions through lighter weight vehicles e.g. Tram Train
- Considerations around appropriate asset classification (track and train) and solutions for different service levels.



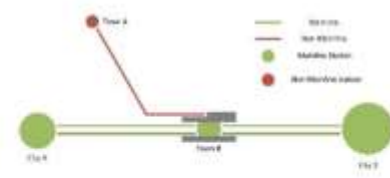
### Integrated service offer: sharing infrastructure operations



- Opportunity to integrate/share services between networks e.g. Tram Train.
- Compatible rolling stock across networks
- Requires open minded commercial, operational co-operation
- Commercial / operational agreements required – examples already exist



### Connected service offer: separated infrastructure operations



- Timetable alignment critical to passenger experience. e.g. Stourbridge.
- Network segregation allows an agile approach to operations.
- Opportunity to operate as a vertically integrated railway
- Commercial arrangements (e.g. through ticketing) required.
- Opportunity for new technology e.g. VLR



Using the community's collective experience of developing and reviewing proposals to reconnect communities we have created three Reference Cases that define generic concepts for delivering appropriate solutions. The above graphic defines these concepts and shows the modal options relevant to the type of connection needed. These help to bring life to the Mixed Use Railway vision making it tangible for stakeholders and funders to understand and align with their own aspirations.

The reference cases, enabled by the collective Mixed Use Railway vision, are made credible through real life examples. These point the way to how future ideas can be fashioned into meaningful solutions:

- Lower cost operation on the national rail network: [reopening of the Dartmoor Line](#)
- Connecting two networks with through/shared operation: [South Yorkshire Tram Train](#)
- Branch line connection to main line interchange: [Stourbridge VLR Shuttle](#)

## Operating Model Options

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### infrastructure manager

a body or undertaking that is responsible for the establishment, management and maintenance of railway infrastructure, including traffic management and control-command and signalling.



### railway undertaking

a licensed public or private undertaking, the principal business of which is to provide services for the transport of passengers by rail with a requirement that the undertaking ensure traction.



### contracting entity / revenue risk holder

the entity contracting the required passenger services and/or taking the revenue/commercial risk of such passenger service.



The three Reference Cases have been developed with a clear understanding of the “art of the possible” in terms of technical, engineering and railway operational know-how. Another critical dimension, where the status quo may not be the most appropriate, is the commercial operating arrangements. The current model of national railway licensing, service specification, and track access contracting may not work best for the solutions which the vision of the Mixed Use Railway Initiative foresees.

The Mixed Use Railway community has thought about the key roles in the commercial operating model and the options for delivering each. This is set out in the above graphic. The options have been tested against the three Reference Cases. This highlighted there are multiple alternatives to the current regulatory framework.

This thought leadership of the Mixed Use Railway community has informed the debate on the future industry framework under Great British Railways. The work we have done, inspired by the vision of Mixed Use Railway fed into GBR consultation responses from Mayoral Strategic Authorities and other operators of light rail systems with aspirations to expand operations on the national rail network.

“UKTram’s Centre of Excellence is delighted to make a positive contribution to the development of the Mixed Use Railway Initiative. The vision that forms the Mixed Use Railway Initiative has the potential to deliver significant savings in operating and infrastructure costs on the Mainline railway. We are convinced that this initiative could lead to changes in railway practices that will be the most significant in a generation. This will pave the way for recognition that the rail industry is far more integrated than the sum of its parts.

A wonderful example of cooperation across the Heavy and Light Rail modes.”

**Colin Robey, Chair of Centre of Excellence, UKTram**



LRSSB – LRG 71.0



### Tram-Train Interface Guidance

The participation of the ORR, RSSB and LRSSB adds a special dimension and endorsement to the Mixed Use Railway Initiative. These industry regulatory and safety bodies reinforce the credibility of the Vision. Helping to shape its direction and in turn guiding them to reflect on the role they can play to give reality to it.

Over the past 12 months RSSB and LRSSB have used the community as sounding boards for the development of guidance that is directly relevant to delivering the vision of the Mixed Use Railway Initiative.

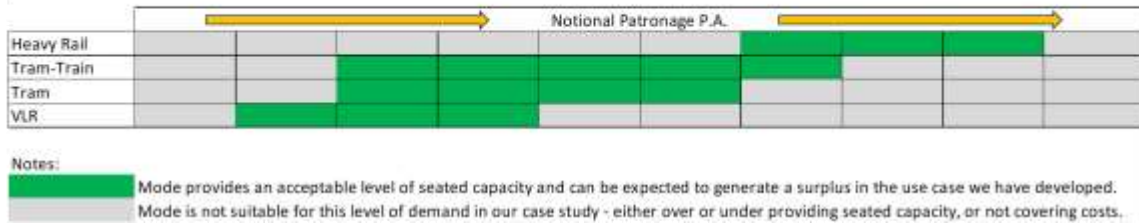
RSSB has consulted the community on the full scale revision of its guidance *GEGN8502 Operation of Urban Rail Vehicles on or adjacent to GB Mainline Infrastructure*. Once published (due late 2025) this document will provide hugely important clear guidance on how urban light rail vehicles can be introduced to the mainline network. This will play a key role in enabling operations as envisioned in two of the three Reference Cases.

LRSSB has published *LRG71.0 Tram Train Guidance*. This is a major step forward for the light rail sector providing guidance on the operation of the interface between tramway and railway systems. Combined with the RSSB guidance (once published) the sector will have some much needed clarity and direction, which will enable the vision of the Mixed Use Railway to advance further.

“[the] Mixed-Use Railways initiative delivers significant value by strengthening cross-modal rail partnerships and facilitating new markets through collaboration. Safely integrating lighter vehicles, such as tram-trains, onto the mainline railway would provide passengers with a viable alternative to the car, connecting communities and delivering significant economic and social benefits.”

**Richard Turner, Principal Rolling Stock Systems Engineer, RSSB**

## Case Study: Revenue / Patronage/ Operating Cost



An aim of the Mixed Use Railway Initiative is to provide broad guidance to promoters and investors of where and how rail modes might be an appropriate solution for connecting/reconnecting communities with the national rail network.

Drawing together technical, operating, commercial and cost planning expertise the community aims to create some indicative “rules of thumb” for where each modal option might offer the most cost effective solution.

The above graphic is indicative of the envisaged concept: matching assumed annual patronage with each mode’s passenger capacity. Then to consider the relationship between assumed farebox revenue and operating costs for each respective mode.

The intention is to provide a broad indication of likely best modal solution(s) for a given market size. This helps to focus where the innovation enabled by the Mixed Use Railway Initiative can have maximum impact.

This analysis has only been possible through the close collaboration of industry partners. With willingness to share cost/revenue data to assist the development of the indicative model. The model has been the subject of peer review by the wider Mixed Use Railway community. The final model will include clear indications of market size and alignment of indicative most applicable mode(s).

“I am a partner from the Light Rail Safety and Standards Board and long time advocate of the Mixed Use Railway Vision. I see this initiative as a critical opportunity to bridge longstanding gaps between rail modes, enabling innovative, lower-cost solutions that better serve local communities. We commend the work being done in this space, offering a viable alternative in areas where conventional rail approaches may not be feasible. Along with UKTram our involvement supports the development of safety and operational frameworks that can unlock the full potential of this vision and fully support this progressive and vital contribution to the sector.”

**Craig O'Brien, Head of Engineering Safety & Innovation, LRSSB**

## Summary



The vision of the Mixed Use Railway Initiative has captured the imagination of organisations across the broad spectrum of the UK rail industry. These diverse and influential organisations are brought together through a combined belief that to maximise the potential to connect/reconnect communities to the national rail network a new approach is needed.

The vision has been brought to life through its community and created workstreams spanning major elements needed to deliver that new approach.

The Vision of the Mixed Use Railway delivers on all the criteria for this award:

- **Innovative and Different Thinking:** the Vision upends the traditional, siloed nature of the GB rail industry. It breaks down barriers and sets out a wholly new approach to how rail (including light rail) can play a significant role in connecting or reconnecting communities.
- **Problem Solving:** the Vision sets out a logical and holistic approach to identifying the best rail based option(s) for a given market size. By considering the technical, engineering, regulatory, cost and economic elements the Vision enables full consideration of the potential for all possible rail solutions.
- **Value for Money:** at the heart of the Vision is the delivery of efficient and effective rail systems which are appropriate for the market and specified application. The Vision has the potential to be a highly valuable tool in the identification and delivery of cost effective rail services.
- **Teamwork and Collaboration:** the Mixed Use Railway community represents organisations from across the wide spectrum of rail – with a particular focus on light rail modes. The way this diverse group has worked together is testament to the broad appeal of the Vision.

Since its inception the Mixed Use Railway community has made fantastic progress to create a common vision and bring it to life through these workstreams. The next stage is to refine these elements and focus on delivering tangible solutions through specific projects.

The graphic on the final page sets out the full scope of the Vision, mapping the three Reference Cases to existing solutions and indicating potential future opportunities which could be unlocked through the drive and imagination created by the team.

**Real World Applications** Across the three reference cases, there are five potential applications. These are summarised below:

<b>Reference Case</b>	RF1: Lower Cost Operations on the National Rail Network	RF2: Integrated service offer: sharing infrastructure operations	RF3: Connected service offer: separated infrastructure operations		
<b>Potential Applications</b>	1. Standard Operations	2. Mixed Use Railways- Integrated Light Rail & Heavy Rail	3. Mixed Use Operations- Integrated, heavy rail and "visitor economy	4. Separate System	5. Heritage in a High Population Area
<b>Description</b>	<ul style="list-style-type: none"> <li>Existing opportunities around feeder lines</li> <li>Lighter vehicles could bring cost savings</li> <li>Lower cost freight connections</li> </ul>	There are opportunities to build on existing two way through operating models linking the local and national network.	There is the opportunity to run two way operations with: <ul style="list-style-type: none"> <li>Passenger TOCs extending onto non -NR infrastructure providing enhanced connectivity for existing services, or;</li> <li>Private operators extending onto NR infrastructure providing extension of their operations.</li> </ul>	Area of the network which can run entirely segregated; no interaction with the mainline- passengers move from one network to another, not vehicles. Provides connectivity to a mainline interchange station for onward connectivity.	Provides connectivity to a mainline station for onward connectivity by running a commercial service on heritage railways as demand is sufficiently high.
<b>Existing Examples</b>	Dartmoor Line, Kirkby- Headbolt Lane	Sheffield Tram-Train, NEXUS & Metropolitan Line	Swanage Railway, Pickering to Whitby	Stourbridge Shuttle	None currently.
<b>Examples in Development</b>	GWR Battery Train Trial	Oldham - Rochdale- Bury Pathfinder, Don Valley line, Valley Lines	None. RSR (Freight only)	Wisbech-March	Stoke - Leek (includes freight)
<b>Future Examples*</b>	Buxton	Fleetwood -Poulton-le-Fylde	Weardale Line	Oswestry-Gobowen	Rawtenstall- Bury (East Lancashire Railway)