



Light Rail Solutions UK 2024 Ltd.

Auchenshuggle Junction, 8
Beechmore, Moore, Warrington,
Cheshire, England UK,
WA4 6UE

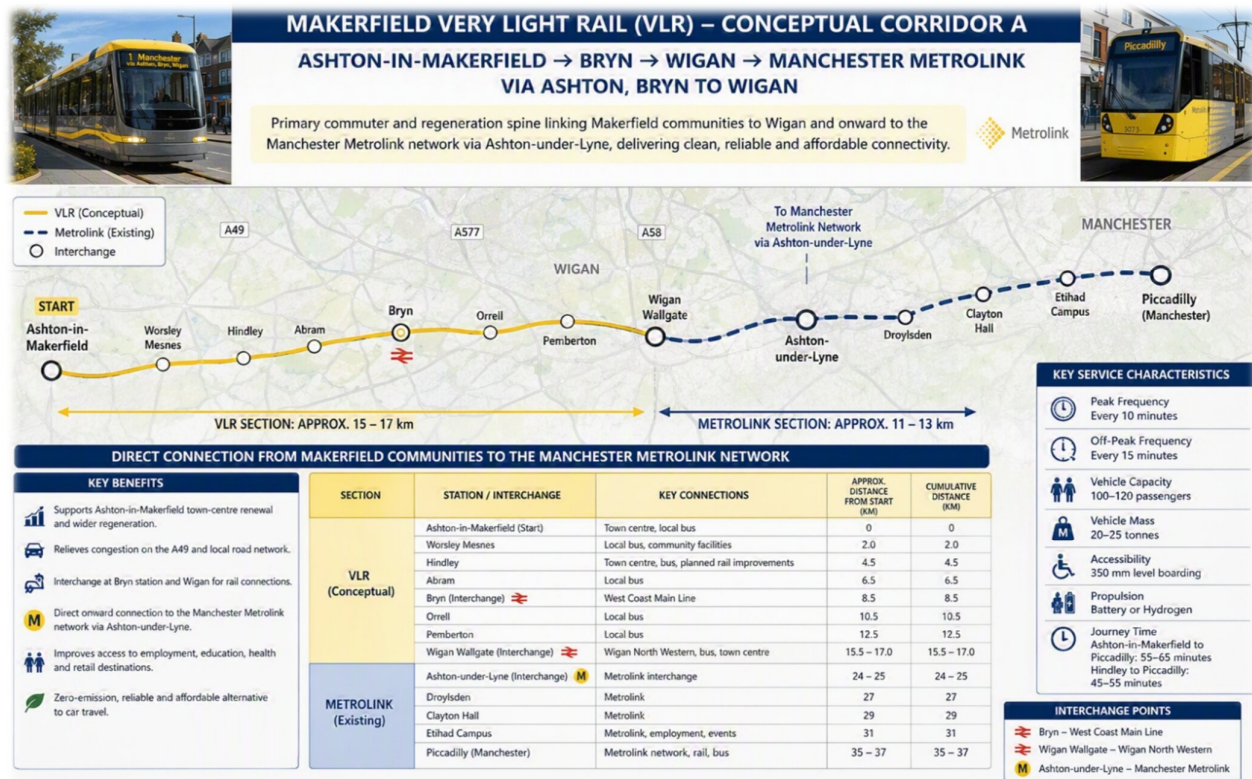
and Swanwick House
22 Towcester Road, Old Stratford,
Milton Keynes, England
MK19 6AQ,

Tel (+44) (0) 07721378223, email: JimH@jimmyharkins.com



BRIEFING NOTE

Light Rail UK – VLR MRT & Hydrogen Trams as a Service (HTaaS)
For: Beverley Craig, Manchester Mayoral Candidate
From: James Harkins, FCILT MTPS, Managing Director, Light Rail UK.



Who We Are

Light Rail Solutions UK 2024 Ltd, trading as Light Rail UK, a national organisation supporting the development and delivery of modern tram, light rail and Very Light Rail (VLR) systems across the UK.

Our work is grounded in long-standing parliamentary, industry and local-authority engagement.

Assisted Manchester Metrolink 1985+ Sheffield Supertram Croydon Nottingham and Edinburgh

Enabled the “Oslo Effect” into the Environment Bill as Non Exhaust Emissions (NEE)

Worked with Norman Baker SoS Transport to set up what became VLR BCIMO FOR Dudley

Strategic Case

Extracts from the conceptual Very Light Rail mini-study for GMCA officers, Wigan Council members and Makerfield parliamentary candidates identify several challenges affecting **Ashton-in-Makerfield, Bryn, Hindley, Hindley Green, Abram, Worsley Mesnes, Orrell and Winstanley, including congestion on the A49, A58 and A577**, slow and unreliable bus services, limited rail access beyond Bryn and Hindley, growth pressures from housing and employment development, and continuing concerns over traffic, safety and air quality; the study explores whether a low-cost, low-disruption VLR network could help address these issues while making clear that it is not a formal proposal or commitment. 【1-4920e0】

Why VLR is Suggested

The study presents VLR as a lower-cost alternative to conventional tram systems because shallow track construction of around 350–400 mm, battery or hydrogen propulsion without overhead wires, modular installation, fewer utility diversions and reduced construction disruption can support affordable delivery **Less than £10m per km. while providing the fixed-infrastructure benefits needed for regeneration and placemaking**; it also notes that Makerfield's typical 5–8 km trip lengths align well with VLR operating characteristics. 【1-4920e0】

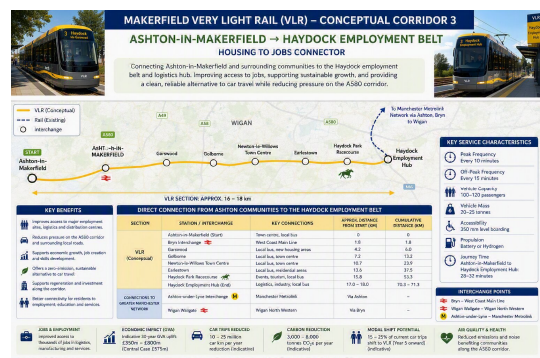
Conceptual Corridor Options

The conceptual VLR network identifies three complementary corridors:

Corridor A, Ashton-in-Makerfield–Bryn–Wigan, as the primary commuter and regeneration route, supporting Ashton town-centre renewal, interchange at Bryn railway station, reduced pressure on the A49 and improved access to Wigan's employment and education destinations;

Corridor B, Hindley–Wigan, as a local access corridor that complements planned rail improvements, supports Hindley regeneration, captures short journeys not well served by heavy rail and offers an alternative to car travel; and

Corridor C, Ashton-in-Makerfield–Haydock Employment Belt, as a housing-to-jobs link improving access to logistics and industrial employment, reducing pressure on the A580 and strengthening sustainable access to major employment areas.





Proposed Service Characteristics

The illustrative operating concept includes:

Item	Indicative Value
Peak frequency	Every 10 minutes
Off-peak frequency	Every 15 minutes
Vehicle capacity	100–120 passengers
Vehicle mass	20–25 tonnes
Accessibility	350 mm level boarding
Propulsion	Battery or hydrogen

Indicative journey times:

- Ashton-in-Makerfield to Wigan: 20–25 minutes.
- Hindley to Wigan: 12–18 minutes. 【1-4920e0】

Construction and Engineering Approach

The construction and engineering approach assumes embedded shallow slab track, modular installation methods, night and weekend works where practicable, selective reallocation of traffic lanes or parking space, and low-cost stops integrated into existing footways, drawing on approaches used in Coventry VLR and emerging UK concepts. 【1-4920e0】

Costs and Funding

Indicative capital costs are assumed at £12–25 million per kilometre in 2026 prices, equating to approximately £120–£200 million for a single corridor and £220–£350 million for a two-corridor network, with potential funding sources including City Region Sustainable Transport Settlement funding, future Levelling Up or successor programmes, developer contributions, local regeneration funding and possible private finance for vehicles and depots. 【1-4920e0】

Key Risks

The key risks identified are limited road width in some locations, the need for strong local political sponsorship,



integration with existing bus services, and potential community concerns arising from previous planning disputes; these can be mitigated through an initial corridor-level feasibility assessment, community co-design and engagement, low-disruption construction techniques, and phased implementation. 【1-4920e0】

Recommended Next Steps

Recommended next steps are for GMCA to commission a high-level feasibility assessment, test integration with the Bee Network and planned rail improvements, and assess regeneration and economic uplift potential; for Wigan Council to consider VLR within its regeneration strategies, review road-space reallocation opportunities and begin early community engagement; and for mayoral candidates to discuss VLR only as a possible long-term transport option, avoid presenting it as a commitment, and encourage participation in future official consultations. 【1-4920e0】

Overall Conclusion

Overall, the study concludes that Makerfield's urban form, short trip lengths, congestion pressures and regeneration ambitions make it a strong potential candidate for a **Very Light Rail network**, with the **Ashton-in-Makerfield-Bryn-Wigan corridor** emerging as the logical first phase and possible later extensions towards Hindley and Haydock, subject to a formal feasibility study before any scheme development proceeds. 【1-4920e0】

Offer to the potentially successful Mayoral Candidate

We would welcome the opportunity to:

- Provide a short briefing on our national VLR/H₂ portfolio
- Share early lessons from live schemes
- Contribute substantial expertise, much of it previously shared with the emerging light rail industry, helping to avoid costly fragmented approaches and repeated false starts
- Support the Task Force's work on governance, funding and delivery reform
- Explore opportunities for national demonstrators

Light Rail UK and its team stand ready to assist as the mayoral candidate shapes the future of mass transit in the UK.