

M6 Junction 21 to Fiddlers Ferry

Appendix and and appendix a

*H2trams as a Service

Park & Ride, direct access from/to the Town Centre and Transport Hubs. Link to Central, Bank Quay Stations and Bus Station and Pedestrian Retail Centre. Frequent and Flexible Service, A Clean and Green Eastern Gateway to Warrington Opens up Fiddlers Ferry for Housing Eliminates LEZ Requirement along A57 No Road/Tyre/Brake Particulates (NEE) (A genuine zero emission vehicle). "High Street, Town Centre" Retail Access.

No Air Pollution at Point of Use!



Self-powered new build tradition summer tram cars



City Cars (3) autonomously coupled, 300 passengers



Tritonex

an absolute game changer for all things hydrogen with 100% Angel share captured and corrosion protected <u>https://triton-hydrogen.com/</u>



Why Green Hydrogen Trams?

Liverpool City Region, The North West showcase doorway



Trams have a proven record of getting people out of their cars whilst producing zero emissions and particulates at point of use and that these very light rail* **(VLR)** offers significant potential for enabling these benefits to be realised on a significant larger scale.

* VLR trams are built to International Light Rail Standards and are a low cost starter line. Less than £10 per track Kilometre and are a significant Public Transport Legacy.

A Coventry VLR example.

The national delivery of an integrated transport system will often involve initiatives that span local authority and county boundaries and mechanisms for coordination at regional levels are needed to help promote and deliver this project.

The proposal for a demonstrator line to Liverpool city centre from the Liner Terminal for very light rail, a system involving vehicles on much lighter rails compared to current tramways with a dramatic reductions in construction costs, faster construction and less disruption.

The largest share of transport emissions comes from cars, accounting for 38% a 20% reduction by 2030!...Transport Scotland Jan 2022

As Trams have a high modal switch circa 25% - 32%, this demonstrator line can achieve that target along this corridor

Statistics in Tram integrated Nottingham show that LEZs are not required

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Legal utilities are left in place



*Installation less than £10M per Km



Light Rail Consultants, Transport Engineers, Private Enterprise, Politicians, Academics, Environmentalists and others.



The new track is laid just 30cm within the road's surface, minimising the need to relocate pipes and cables which is time-consuming and expensive. This is achieved by taking advantage of cutting-edge materials, while still making use of standard rail parts

Hydrogen/electric buses can only be seen as a welcome interim solution in the short term with no transport legacy, they still remain a source of significant particulate pollution (*NEE) arising from the friction between tyres and road surfaces while steel wheels running on steel rails create zero emissions of this type. *All UK Governments are aware of this (Greenwash) NEE pollution

*39,000 folk died from Particulates

Commercial specialists in low cost, VLR, affordable & sustainable tramways