

Appendix 1 - Summary of projects

Smart Ticketing

Liverpool City Region Combined Authority (LCR CA) aims to transform the way people pay for and use public transport ticketing across the Liverpool City Region through a Smart Ticketing and Technology Programme (3TP). The proposed 3TP investment programme is a continuation of progress made to date on Smart Ticketing and consists of multiple elements such as electronic ticket machines, web portal and product management.

The roll-out of the Liverpool City Region Smart Ticketing scheme phase 1 will consist of equipping bus operating companies with new electronic ticket machines (ETMs), allowing contactless payment, onboard ticket collection and improved journey data recording.

IPEMU

The concept of using battery technology, rather than third rail, on the lines has been identified as a cost effective, potential solution to extending the reach of Merseyrail trains. This technology is known as Independently Powered Electrical Multiple Units (IPEMU).

Merseytravel wish to run a trial of IPEMU to:

- a) Test the concept of using battery power; and
- b) Assess the suitability of the technology to deliver the LTRS ambition of extending the geographic reach of the Merseyrail trains.

This is an opportunity to develop a new train fuel technology that could have major benefits for the LCR in terms of network expansion, efficiency and the potential for new rail stations.

TCIS

The TCIS project, sponsored by Merseytravel, will deliver the installation of high fibre optic cables across the entire Liverpool City Region train network map. In total 120km of fibre cable will be laid. The installation of this cabling will allow the technological capabilities of the new rolling stock to be used. Without the cabling the capability referenced above will be redundant.

Enabling this technology will provide passengers with on board, real-time information, location services and Wi-Fi connectivity across the network. A review across the rail sector has identified that provision of 100 Megabits per second (Mbps) will provide a good quality Wi-Fi coverage for passengers. Delivering this project will give Merseyrail the UK's highest capacity, full coverage rail Wi-Fi system.