



Network Resilience Live Lab bi-monthly newsletter Issue 2 – May 2021

Using technology for a smarter transport system

The [ADEPT SMART Places Live Labs Programme](#) is a £22.9m programme of which the [Network Resilience Live Lab](#) received a £2.65m grant from the Department of Transport. Working with Birmingham City Council and Solihull Metropolitan Borough Council together with Transport for West Midlands (TfWM), the aim is to have a smarter, better-connected transport network in the region.

This bi-monthly newsletter will provide regular updates on the progress of the Live Lab. The pilot project will contribute to developing the operational capability of the [Regional Transport Coordination Centre](#) (RTCC) and its evolution through innovation.

2021 Progress to Date

This period marks a key step forward in realising the benefits of the project and capturing them in order to share learning with the wider sector. This work will be supported by Arcadis Consulting UK, together with IBI Group, as stated later in this newsletter.

The Static Automated Traffic Counter (SATC) data is being collected, processed and used by multiple teams in TfWM to further network resilience aims. Further work to analyse and create predictive analytics from this data is in progress. The traveller personas are being explored by multiple teams that are factoring them into plans and various works in development.

Partnership with West Midlands Police

In partnership with West Midlands Police, and our principle CCTV contractor, Total Integrated Solutions Ltd. (TIS), 69 static automated traffic counters have now been installed across 12 of the key route network as part of the Live lab fixed asset workstream. As part of the process, TfWM also now benefit from journey times and vehicle counts on a further 45 existing police cameras on these routes providing joined up point to point data.

Forthcoming Events

The NRLL team is speaking at various events to provide information on the findings, experiences and processes to date. On June 8, 2021 there will be an **Act TravelWise** webinar which is free to attend. The speakers will be Deborah Fox, Sarah Bayliss, and Rachel Evans from TfWM. They will also be accompanied by Tim Strong from Arcadis Consulting UK (Arcadis). The webinar will showcase: key strands of learning from the programme; in-depth work on traveller personas research; lessons learned from technology enabled, data-driven, travel demand management programmes; and embedding the Live Lab findings as well as methodologies for evaluating behaviour change. You can book your place [here](#).

The **Transport Practitioners' Meeting** is well established event: for 19 years TPM has brought transport practitioners together to debate, share and engage. To think critically and be empowered to make transport a force for good. Running on 7 & 8 July, TfWM will be speaking on July 7 covering various topics about its NRLL programme such as: Preparing for 'Go Live': The demand management timeline in advance of major road works, Accurate Traffic Modelling with 24/7 Highways Data, and Deploying Static Automated Traffic Counters Efficiently. For more information and to book your place, visit: <https://transportconference.co.uk/>

Appointment of new support for benefits realisation

As the Network Resilience Live Lab project moves into its final phase, tangible benefits and outcomes need to be identified and assessed to ensure the operational legacy. Arcadis, with technical specialists in the UK and the Netherlands and supported by technical partners IBI Group, have been appointed to deliver the Live Lab Benefits Realisation and Legacy Project. Arcadis and IBI Group bring relevant knowledge, international best practice and ready-made relationships from the development of TfWM's Regional Transport Co-ordination Centre (RTCC) business case and the monitoring and evaluation frameworks for the Key Route Network and RTCC.



Working in close partnership across the Live Lab workstream teams, Arcadis and IBI Group will contribute to the development of the benefits and business cases to support future investment, extracting and disseminating technical and operational learning, developing a methodology to measure travel behaviour change and supporting skills development to create the legacy outcomes.

This is an essential outcome from the pilot as it moves from innovation project into ‘business as usual’. The findings from the commission will inform TfWM’s forward plans and contribute to ADEPT SMART Places Programme Board’s ability to identify trends across the 8 projects in the Programme, as well as providing evidence of return on investment for Department for Transport.

Testing Outputs in Solihull

As part of the NRLL programme, two mini projects are being scoped to determine the effectiveness and combination of two workstreams: traveller persona profiles results and the use of static automated traffic counters. One of the projects which has already taken shape is that in Solihull, where the aim is to run a travel demand management campaign along the A34 South in Solihull including Dickens Heath.

NRLL is seeking to monitor and evaluate the impact of targeting car users who travel at least part of their journey on the A34 South persuading them to change modes by using a Connected Automated Vehicle in the form of a shuttle bus, or possibly an e-scooter. Some of the gains would be to: better understand traffic flows on the Key Route Network; testing the effectiveness of traveller personas within a real life mobility project; introduce new forms of shared mobility to traditional car-dependant commuters; and implementing the NRLL outputs in a local authority context, informing benefits realisation around skills needed and new methods of monitoring behavioural change. The trial runs from July to November 2021.

New White Papers from ADEPT

The ADEPT SMART Places Live Labs Programme has published several White Papers which cover:

- digital innovations (read [here](#)), and
- new approaches to monitoring and evaluation (read [here](#))

Developed through a series of one-to-one discussions with the local authority Live Lab project leads, ‘Digital’ looks at the rollout of the digital-led aspects of the ground-breaking initiative.

The monitoring and evaluation paper focuses on delivering the programme’s objectives, which include identifying opportunities for collaboration, enabling the development of business cases and ensuring all the learning across the programme is captured.

The quarterly papers are intended to make learnings and insights available as they happen, giving industry decision-makers the opportunity to capitalise on the work being done through the programme.

Peer-to-Peer Collaboration with Staffordshire

Staffordshire County Council and NRLL held a peer-to-peer collaboration session recently, which explored the shared learning and synergies from their respective programmes. The meeting was an opportunity for each party to cover in some detail how technology and new initiatives are making a difference in the monitoring of travel patterns and behaviour and producing a greener environment. Staffordshire has lots of interesting projects from a shortlist of SMEs to trial innovations – five of these concentrating on mobility, and five addressing air quality. Some of these innovations include: technology feeding in traffic light systems to reduce idling time; green walls to help mitigate the



impact of pollution; and fibre cables under the road which has air pushed down the fibre optic, using vibrations from the traffic to identify the type of movement.

Some areas of interest identified by NRLL include: their joint working with universities utilising academic partnerships; work on air quality as this is also an issue in the West Midlands, with Air Quality Management Areas (AQMAs) declared in six of the seven Metropolitan Area Districts; and the role of e-scooters, where usage in Staffordshire is seen predominantly amongst males aged between 20 and 24.

When the Network Resilience Live Lab concludes a business case will be produced explaining how it operationalises the outputs of the Live Lab and what to and to not take forward.

ADEPT represents local authority, county, unitary and metropolitan Directors. The ADEPT SMART Places Live Labs programme is a two-year £22.9 million project funded by the Department for Transport and supported by project partners SNC-Lavalin's Atkins business, EY, Kier, O2, Ringway and WSP. Nine local authorities are working on projects to introduce digital innovation across SMART mobility, transport, highways, maintenance, data, energy and communications. Live Labs is part of ADEPT's SMART Places programme to support the use of digital technology in place-based services.