

Our vision | Clean, efficient transport that is safe, reliable, and accessible for everyone

Environment and Decarbonisation

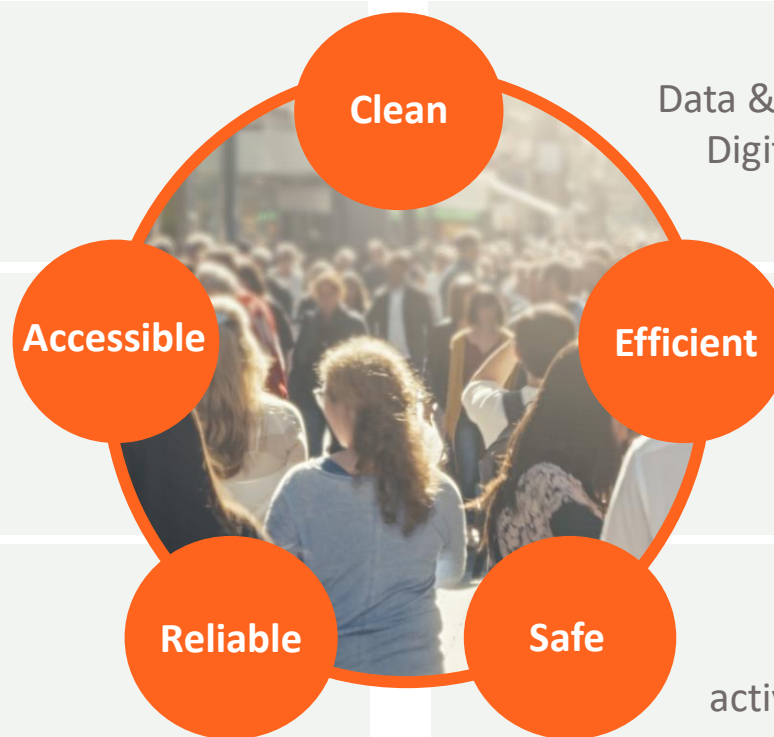
Transport solutions that protect the natural environment. The primary challenge is the decarbonisation of transport.

Transport Safety

Safe systems incorporating safe roads, safe speeds, safe vehicles & safe road users.

Transport for Sustainable Development

The role of transport in driving sustainable development, with a focus on low to middle income economies.



Digitisation of Transport

Data & connectivity enabling new journey capabilities.
Digital roads: Design & lifecycle asset management, construction, monitoring & maintenance.

Automation in Transport

What automation will enable, & how it will be applied to transform transport.

New Mobility

New ways of moving people & goods, including active travel, & new business models & on-demand services to promote inclusivity & ease of use.



Smart Mobility Living Lab London

Enabling real world mobility innovation in
complex urban environments

20km
Private Fibre
Net-work

200
Monitoring
Columns with
High-Speed Wi-Fi
Access Points

273
HD
Cameras

70
Sites &
areas of
interest

41
Road feature
types

34
Roadside
Cabinets

24km
Routes
across
Greenwich
and QEOP

32
Connected
(V2X) sites

510m
Ducting

2km
Network
Cabling

Test

Validate your technology
in the real world

Simulate

BIM, data sets (video, V2X),
traffic model (VISSIM), traffic
control model (UTC SCOOT®)

Innovate

Inform your strategic direction
by joining the SMLL Innovation
Community

Unique capability

Long heritage

Complex
environments

Expert support

Stakeholder access

Real world and
Digital
infrastructure

Approvals and
Regulation

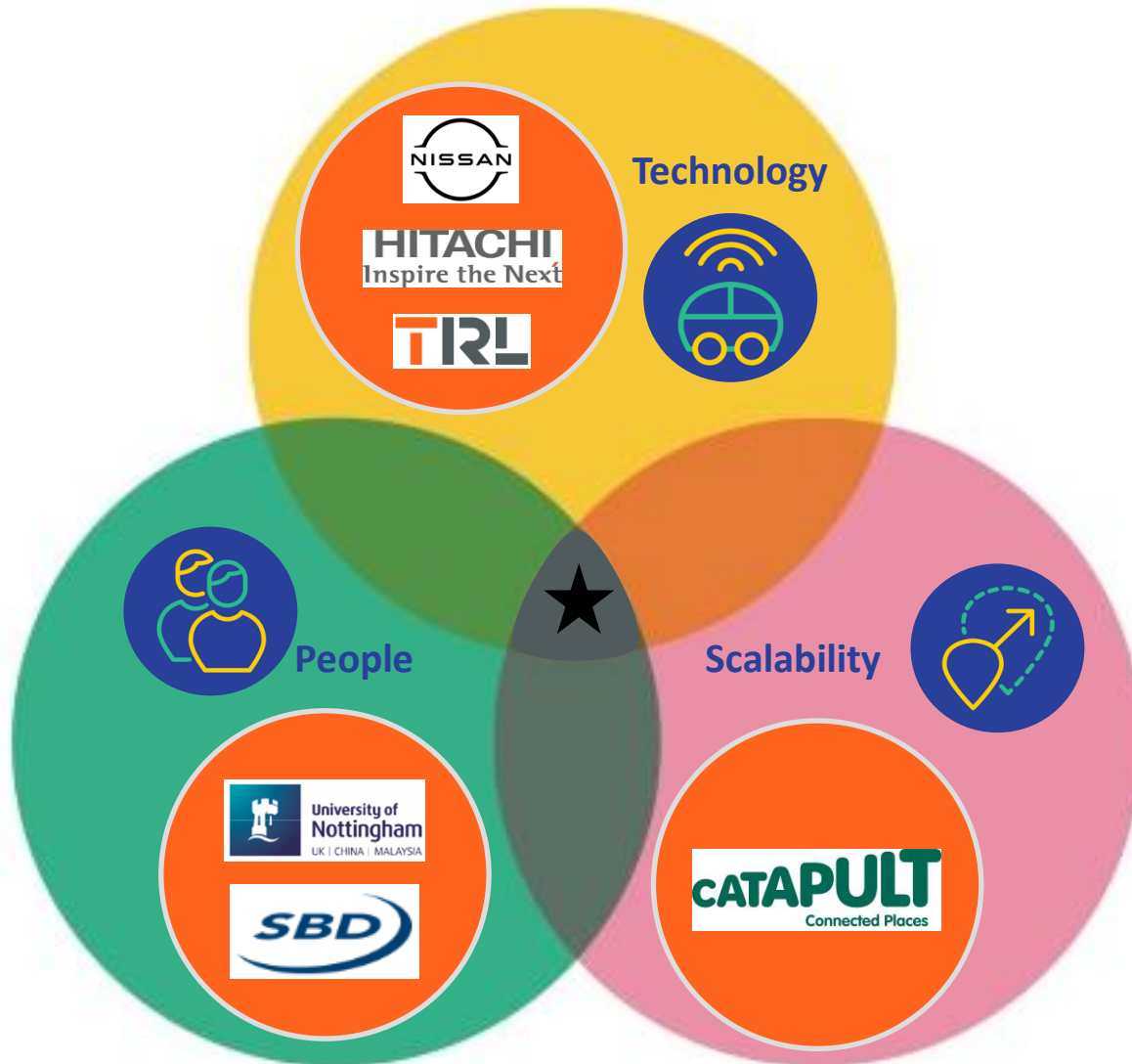


Smart Mobility Living Lab London

A thriving and growing innovation community



ServCity: CAVs in complex urban spaces



M3 Jn9 Cycling and Walking virtual audit

Client: Volker Fitzpatrick / National Highways

Overview: Use of simulation technology to support evaluation of walking and cycling scheme.

Relevant capabilities/knowledge:

- Application of Gaming technology to support user-centric design approach
- Virtual evaluation of walking and cycling routes using Pedestrian and Cycling Environmental Review Systems



Benefits to customer/outcomes:

- Accessible and immersive visualisations to support virtual public consultation for £150M scheme
- Evidence to support design process and DCO application to ensure that scheme meets user needs
- Scalable VR twin of the scheme to put users at the heart of the design process and allowing virtual testing of the scheme design as it develops

Horizon Scanning

Client: National Highways

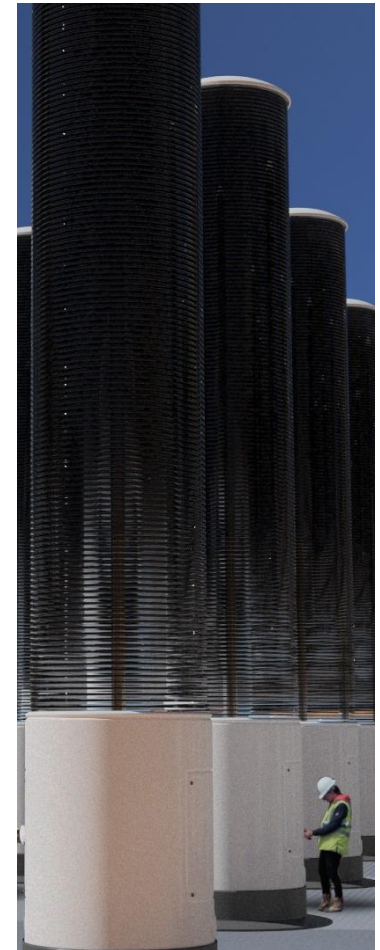
Overview: Implementation of repeatable Technology Horizon Scanning approach to ensure National Highways are “hyper aware” of major developments outside of their organisation.

Relevant capabilities/knowledge:

- Futures Thinking
- Transport innovation evaluation and management

Benefits to customer/outcomes:

- Increased technology intelligence and foresight
- Strategic innovation management including understanding risks and opportunities and balanced three horizon approach over next 30 years.



Consumers, Vehicles and Energy Integration (CVEI) project

- £5 million project for the Energy Technologies Institute (ETI) delivered by TRL-led cross-industry consortium
- Addressed challenges and opportunities in transitioning to secure and sustainable low-carbon vehicles, and examined integration of vehicles with the energy supply system
- Delivered world's first and largest trials of electric vehicles with mainstream consumers to understand their travel needs and the barriers and motivations impacting EV adoption

Outputs have directly informed government policy and industry strategy



- Behavioural and attitudinal data gathered from 447 drivers
- Understanding of travel needs and propensity to adopt EVs
- Assessed barriers preventing adoption to inform intervention design

- 510 charge points installed across the country
- Fleet of 123 cars managed during trials
- Data gathered from: 15,700 charge events and 71,000 journeys covering 584,000 miles

Future of Kerbside

Client: TRL invested project

Overview: *Taskforce to map the future of the UK's Kersides

Relevant capabilities/knowledge:

- Futures Thinking
- Transport innovation evaluation and management

Expected Benefits to customer/outcomes:

- Define ways to optimise the management of kerbside space across the UK and make roads safer.
- The taskforce will look for practical solutions, and offer the results to national leaders to raise the profile of the issues.



*Taskforce members: TRL, Appyway, Bentley Systems, TfL, Grid Smarter Cities, Liberty Charge, Infinium Logistics Solutions, ADEPT, UCL, Connected Places Catapult RAC Foundation, Wei Yang & Partners

Digital Roads for Local Roads

Client: ADEPT

Overview: Define what a digital road is for local roads. Identify benefits of digitalisation to communities. Develop roadmap

Relevant capabilities/knowledge:

- Futures Thinking
- Asset management, smart infrastructure

Benefits to customer/outcomes:

- Understand what opportunities can be derived from NH digital roads strategy for LRN
- Arm LAs with the knowledge and intel to define local strategies





Questions?

Asiya Jelani
Account Director

ajelani@trl.co.uk
07920 825303