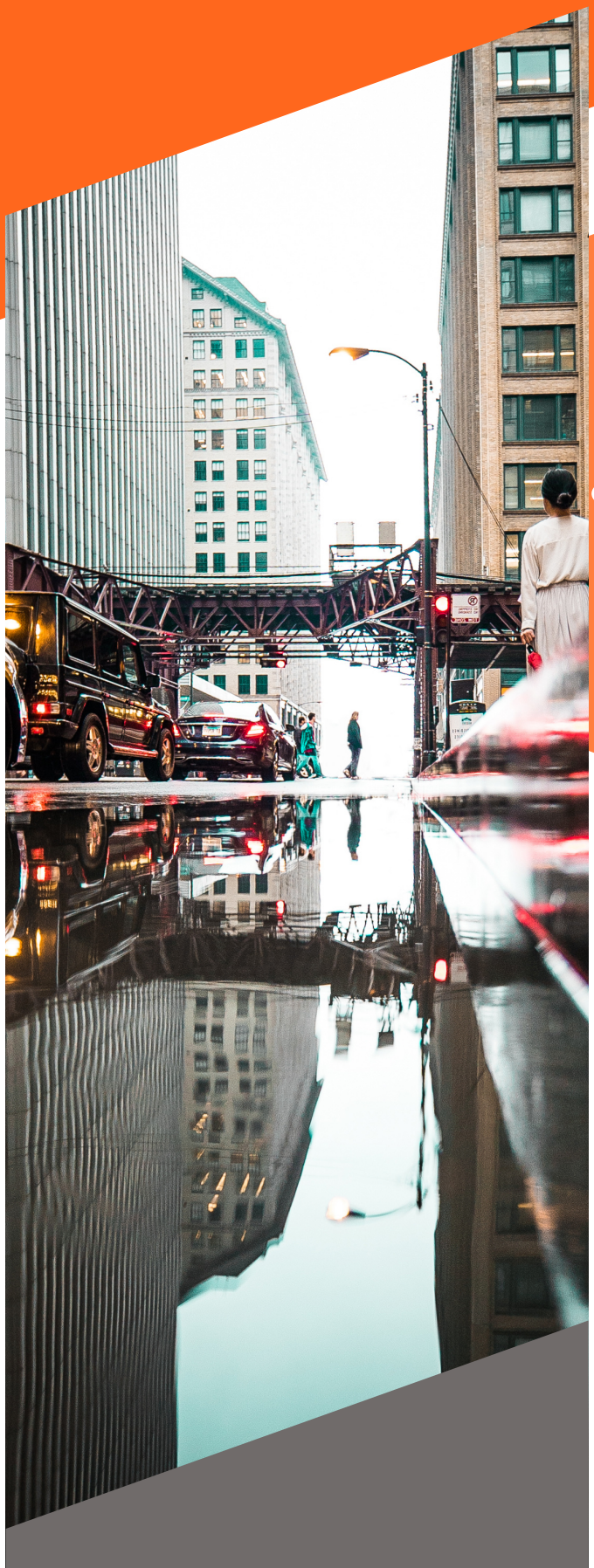
trlsoftware.com

SCOOT® 7

The Leading Adaptive Traffic Control System

TRL Software

SCOOT®7: Take Back Control



The World's Leading Adaptive Traffic Control System. Traffic congestion is an increasing problem in towns and cities worldwide. The pressure on Local Authorities to effectively manage the network whilst still enabling the journey towards future mobility is high. SCOOT has been part of that journey since the 1980s and is future-ready with the latest iteration: SCOOT 7.

Cycling, public transport, walking, e-scooters and increasingly, connected vehicles are all factors in the modern multi-modal environment. Network management tools need to adapt not only to the changes in existing modes/forms of mobility but also make use of the increasingly readily available data set.

As a key part of the traffic managers toolbox for the management and control of traffic signals in urban areas, incident detection and response, local air quality improvement, SCOOT is ready to enable future mobility now.

TRL Software

Key Features

- GLOSA, or cooperative signals data to provide road users with information that can help with their journey
- Multiple split optimisation allows the optimiser to make larger changes without the compromises
- Pedestrian SCOOT functionality for green man period optimised to number of pedestrians
- Modelling link departures to help with optimisation in general, loop failure logic and to reduce detection requirements
- Generalised recovery from LRT or bus priority activity
- Manual triggering of gating

Future Enabling

With the leading experts in SCOOT and industry leaders in future mobility making up the TRL Software team, SCOOT is the subject of a commitment to continuous development. Through work with the world's most advanced urban testbed for connected and autonomous vehicles at the Smart Mobility Living Lab, and our strategic partnership with the Alan Turning Institute, we are uniquely placed to ensure SCOOT is always future ready.

SCOOT OVER CARS

As we see a move towards greener transport and away from cars, it's vital that any adaptive traffic signal system allows priority for alternative forms of mobility in the urban environment.

Bus priority has been a feature of SCOOT® since 1997, with simulation tests showed savings in bus passenger delay of typically 20% to 30%. Fast forward to now, and SCOOT® has differential priority, with up to eight levels of priority for buses, configurable by the bus operator and Local Authority.

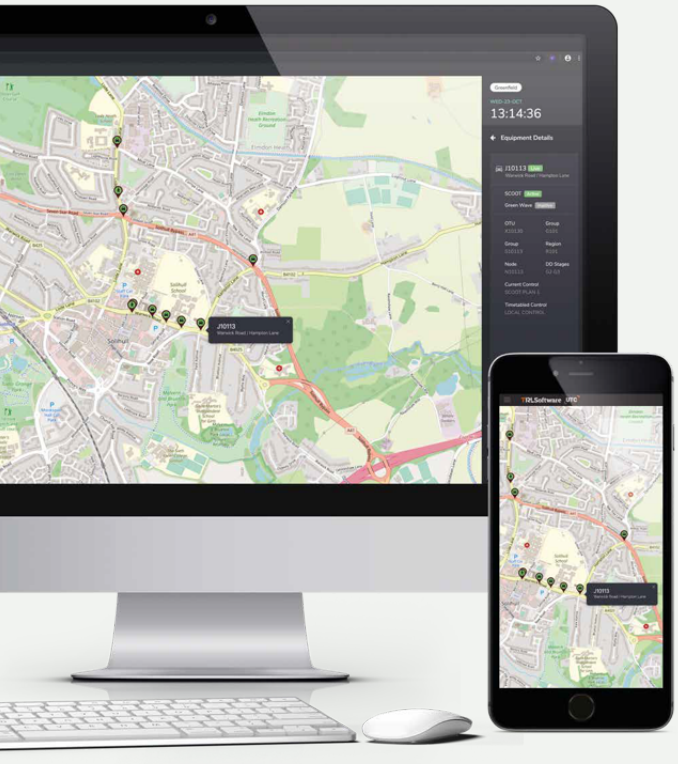
Pedestrians can also be given priority, with the ability to extend the pedestrian green-man time (or invitation to cross time) as the number waiting increases. Using detectors that can count pedestrians, you can configure your network to respond exactly how to provide pedestrians with the desired level of priority.

SCOOT GOES GREEN

As an adaptive signal control strategy, SCOOT alters signal change times to meet the needs of traffic from one cycle to the next. Because signal change times are variable, this has been considered a barrier to implementing a green policy of utilising GLOSA. However, SCOOT 7 provides a prediction of when the signals will next change, with an indication of how accurate this prediction is. Using this prediction could encourage car drivers to let their engines stop, when sensible, whilst waiting for the next green, reducing emissions and pollution.

Other Emission Mitigation Options:

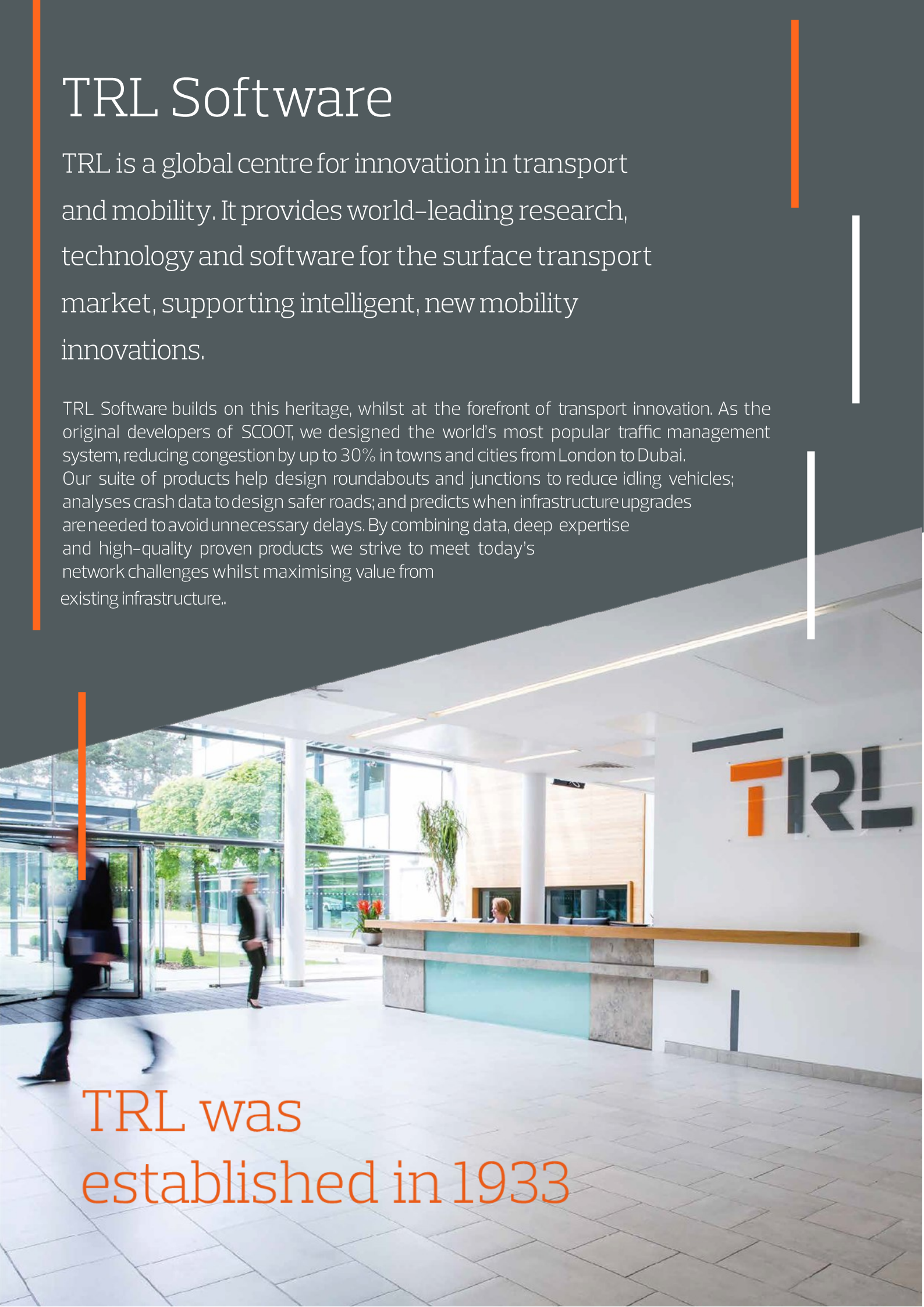
- Use the emissions prediction in SCOOT as the functional objective, with weighting to encourage emissions to be brought below a specified level
- Activate split weighting such that the queuing is reduced using a roadside pollution measuring device, once pollution reaches a certain level
- Activate the gating feature in SCOOT to reduce the volume of traffic entering certain points of your network



TRL Software

TRL is a global centre for innovation in transport and mobility. It provides world-leading research, technology and software for the surface transport market, supporting intelligent, new mobility innovations.

TRL Software builds on this heritage, whilst at the forefront of transport innovation. As the original developers of SCOOT, we designed the world's most popular traffic management system, reducing congestion by up to 30% in towns and cities from London to Dubai. Our suite of products help design roundabouts and junctions to reduce idling vehicles; analyses crash data to design safer roads; and predicts when infrastructure upgrades are needed to avoid unnecessary delays. By combining data, deep expertise and high-quality proven products we strive to meet today's network challenges whilst maximising value from existing infrastructure..



TRL was established in 1933

World class traffic & transportation solutions

Today, TRL supports more than 1,000 clients across 145 countries, driving positive societal and economic benefits.

Our core areas of expertise include: road safety, vehicle safety, crash investigation, human factors & behavioural research, asset management & technologies; intelligent transport systems & traffic operations; sustainability & healthy mobility; major incident investigations.

Our innovative and evidence lead software solutions support the design, management and implementation of safe and reliable transport networks, with products being used worldwide by hundreds of Local Authorities, consultants and engineers.

UTC SCOOT
to coordinate signalled junctions in a network

ARCADY
for assessment of roundabouts

PICADY
for junction design

OSCADY
for evaluation and optimisation of isolated junctions

iROADS
for road asset management

iMAAP
for detailed crash data recording and analysis

MOVA
to regulate traffic flow at isolated signalled junctions

Why TRL Software?

We develop powerful software that is based on solid proven research, trusted by hundreds of local authorities, consultants and engineers around the world.

Our industry experts have extensive experience partnering and collaborating with professionals across the globe, having successfully implemented systems in over 20 countries.

More information on TRL Software's UTC can be found on trlsoftware.com/utc

Call us on +44 (0)1344 379 777 to arrange a free consultation.

01344 379 777

software@trl.co.uk

Crowthorne House, Nine Mile Ride, Wokingham, Berkshire, RG40 3GA

trlsoftware.com

TRL Software