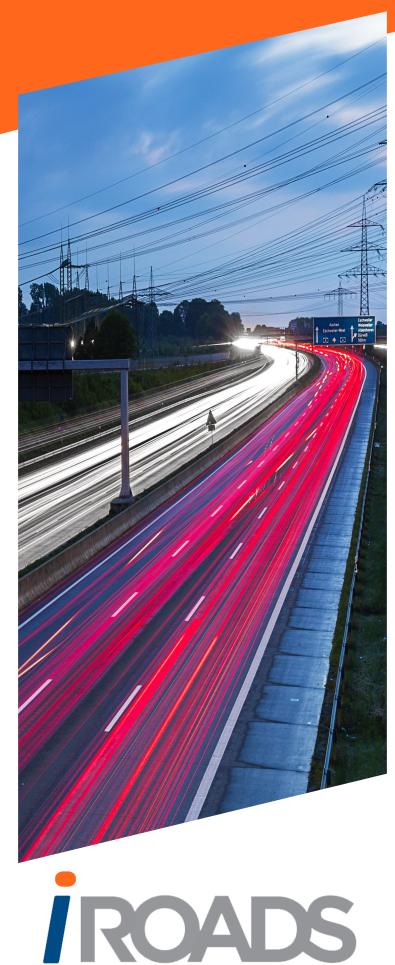


### Expert and Innovative Software

Innovative asset management software, offering a comprehensive management, planning and decision support tool for infrastructure assets.

TRL specialise in helping Local Authorities, highway network operators and international transport organisations to be more effective in the management of their highways infrastructure. iROADS, supported by TRL's data management capabilities, which includes pavement condition, asset inventory, construction and spatial information helps clients get best value from their highways asset management data.

The TRL team can draw upon a wealth of knowledge and experience to ensure that iROADS meets users' needs, responding quickly to enquiries, providing excellent customer service and in-depth support and consultancy. The long-term relationship with many existing iROADS users is testimony to the value that we are able to provide.





## Unlocking the value of your asset management data

The iROADS Infrastructure Asset Management System has the potential to bring about significant benefits in terms of efficiency and effective service delivery by enabling the implementation and operation of a comprehensive and effective asset management process.

iROADS allows asset owners and operators to realise those benefits and savings through better management of their road and infrastructure networks and helps them to make a business case for appropriate levels of investment in the longer term. iROADS turns infrastructure asset management plans from theory into practice. Its flexibility allows for it to be deployed anywhere in the world, for use with varied survey types, survey machines and integration with HDM-4.

## Stand-alone or server-based system

ROADS uses a flexible deployment model, based around a selection of "toolkits" that can be combined according to client requirements and can be implemented as a stand-alone single user system, a server-based multi-user system or as a hosted service accessed via the internet. The system is complemented by integrated

on-site tablet based data capture software to provide a flexible solution that supports the whole of the asset data lifecycle.



#### iROADS planning and decision

making achieves investment returns for asset management data resulting in the following benefits:

- > Reduced contract pricing based on better quality information
- > Improved network safety and reduced risk
- > Improved conformance to contractual and statutory requirements and reduced penalties
- > Improved return on investments in data and in asset maintenance and replacement
- > Evidenced based development of policy





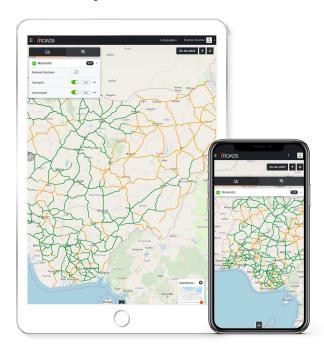
- > The highway network
- > The highway infrastructure assets
- Network performance e.g. service levels, risk, key performance indicators
- > The impact of alternative funding and maintenance regimes on future condition and performance of roads and associated assets
- > Programmes for asset replacement
- > Forward works programmes
- > Business cases for investment in preventative maintenance, plus
- > Modelling condition-based contractual performance measures
- Producing reports on network performance using "RAG" (red/ amber/green) mapping and graphical reporting

#### Multiple Toolkits

The iROADS toolkits use a licence–free mapping system which allows users to easily interact with the condition, inventory and performance data held against the asset network. iROADS can be used at the strategic level to support high level policy decision making and budgetary planning, through to the works programming and planning level, as well as for day to day operational use by engineers and asset management practitioners.

## Unlocking the value of your asset management data

iROADS incorporates extensive iROADS is fully configurable allowing a wide range of data formats to be options for imported survey data and supports requirements such as fitting the data to the section length, functionality enables the user to length tolerance checks and reversal make maximum use of their data of survey data at load time.



iROADS is fully configurable allowing a wide range of data formats to be loaded, including users' custom surveys and data types. This functionality enables the user to make maximum use of their data and to unlock the value in that data. Because this data is aligned to the asset, potential scheme locations can be identified using sophisticated data homogenisation and merging tools, on the basis of condition and section characteristics, as well as locally defined parameters and surveys.

#### **Pavement Toolkit**

The iROADS Pavement Toolkit is used to apply good pavement management and asset management practices to the maintenance and planning of carriageway, footways networks and for other infrastructure assets.

- Integrated data from a range of sources, including machine and visual surveys, inventory, construction, traffic data etc.
- > Single year works programme
- > Value management
- > Value engineering
- > Integrated solutions

#### **Risk Toolkit**

The iROADS Risk Toolkit is designed to assist in the identification, assessment, and prioritisation of risks and then allows for the management of follow up activities i.e. coordinating an economical application of resources to assess and mitigate the likelihood and/or impact of An event. The Risk Toolkit can be used for any of the assets where a risk policy and procedures have been produced, including but not exclusive to:

- > Skidding
- > Vehicle restraint systems (VRS)
- > Drainage and flooding
- > Utilities etc.

#### **Asset Register**

The iROADS Asset Register sits at the heart of the iROADS suite and is a powerful, mapbased data management tool for infrastructure assets. It brings high-quality data management to the iROADS suite of products and allows users to manage condition, inventory, inspection and other data.

- > Management of the network
- > Management of infrastructure assets
- > Management of asset surveys
- Map based
- > Integrated solutions

#### **Asset Toolkit**

The iROADS Asset Toolkit is designed to assist in the management of other major assets that require bespoke processes and systems. This toolkit is mainly used for the management of street lighting, bridges and structures, but can be aligned to work with any asset you own.

- > Bespoke reporting systems
- > Align with best practice for assets
- > Utilities



#### Lifecycle Toolkit

The iROADS Lifecycle Toolkit is designed for the development of multiple year work programmes and has powerful lifecycle planning, whole life costing and multiple forward programming and planning tools.

- Multiple year works programming and budgeting
- > Condition projection
- > Lifecycle planning
- > Management of performance based PPP/PFI contracts
- > Economic prioritisation
- > Whole life costing
- Long-term modelling of the impacts

   (on condition, serviceability, asset
   value and cost) of alternative
   budgetary scenarios.

#### **0& M Toolkit**

The iROADS O&M Toolkit is designed to support the operation and management of a highway network. It is designed for managing all aspects of the highway network. It allows the highway manager to define any part of the service/inspection. Users can define their own survey regime/process, or can use the pre-configured inspections:

- Long stop condition requirement (LSCR)
- > Cyclic maintenance
- > Safety inspections
- > Detailed inspections
- > Asset inspections i.e. street lighting
- > Routine maintenance management
- > Schedule of rates
- > Works ordering

#### *i*CAPTURE

The i ROADS on–site software can be a standalone product purely for site operatives to use with other systems or used in conjunction with the main i ROADS software. It is windows based and supports the following surveys:

- > Routine maintenance
- > UKPMS visual surveys
- > HAPMS visual surveys
- > Detailed inspections
- > Asset inspections

- > Risk surveys
- > Value management surveys
- > Inventory surveys

# 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

#### **TRANSYT**

optimises coordinated signal timings

#### **iMAAP**

for detailed crash data recording and analysis

#### MOVA

to regulate traffic flow at isolated signalled junctions





