



innovations
products and services



CAPITA SYMONDS

successful people, projects and performance

powered by innovations

Innovations provide complete solutions for data, information and asset management. From the development of bespoke software to the provision of our own integrated solutions, Innovations enables proactive management through the innovative use of technology.

integrated software solutions

Innovations provide a diverse range of software products from property and highways management to works and project tracking. Our integrated modular approach, coupled to the use of the latest system, web and mobile technologies, enables proactive asset and process management and provides key information for strategic planning and reporting.

development services

Innovations provide quality software services including system development, integration and support. Working closely with clients and providing in depth knowledge throughout the whole process from concept to delivery, our highly skilled team has a proven track record of software development and providing solutions to meet user requirements.

system integration

Besides developing and supporting its own systems, Innovations has experience with implementing systems from other suppliers (typically coupled with implementation-specific customisation and adaptations provided by Innovations) from design through to user acceptance and commissioning.

support services

Innovations provide a range of quality support and maintenance functions from call centre support to fully managed systems, including service management, service desk, application management and support, third party management and application hosting.

why use Innovations?

As a part of Capita Symonds, our team has in-depth business knowledge of the marketplaces it serves. We work closely with our customers and other parts of Capita, so we are able to produce systems which add value to our customer's businesses. Our modular approach means that you only have to pay for what you require at that point in time and our desire to deliver an outstanding service means that we can adapt our systems to meet customer-specific requirements.

Capita Symonds Limited

Part of Capita Symonds, one of the UK's leading multidisciplinary consultancies, the Innovations team of nearly fifty staff is committed to providing products, services and support of the highest quality.

CAPITA SYMONDS

products

innovations supply a range of quality
asset and data management products

realise:

property management through innovation

universal surveyor:

mobile surveying solution

urban regeneration control:

enhanced regeneration management through innovation

bridge inspector:

structure survey and management

IHMS:

integrated highways management system

postbox:

customer relationship management system

CIRTAS:

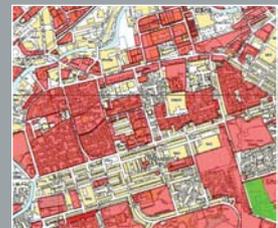
capita innovations road transport accident system

candidates list

a scheme management system for potential local transport plan schemes

iSignals

traffic signals asset management system



successful people, projects and performance

property management through innovation

realise

Effective management of property management, property redevelopment and property rationalisation processes requires real time data from a variety of sources. These data sources are often located on multiple, difficult to access systems, making property management and operational decisions time consuming and costly.

the potential of *realise*

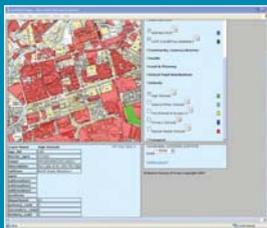
realise, the web-based property management system from Innovations, provides a single, secure and user-friendly gateway for all client property data requirements. Property location, condition and works information can be viewed, mapped and reported upon. Financial details from works cost through to energy reports can be assessed.

The *realise* integrated approach greatly enhances data value through ease of access and increased functionality, and enables better more informed management of property and facilities.

the value of *realise*

Better property management, efficient use of resource and optimised reporting yielding an increased return on investment.

Diverse user requirements are handled simply and effectively. Each user has all the data they might require available, potentially yielding significant cost savings in time and resources.



key benefits:

- Optimised property and facilities management
- Enables strategic asset management planning
- Integrates and greatly enhances existing data systems
- Provides condition reporting, mapping and financial tracking
- License free GIS mapping option
- Mitigate risk

key features:

- Web based 'one stop shop' for all property data
- Bespoke reporting, display and mapping
- Financial management tools
- Condition and survey reporting
- Works ordering
- Multiple user levels
- Image and document store
- Utilises data from *universal surveyor*
- Ease of use

mobile surveying solution

universal surveyor

key benefits:

- Time and cost saving through reduction in survey time required
- Ease of use
- Consistent methodology
- QA and validation built in
- Flexibility
- Compatible with industry standards
- Improved quality of output

universal surveyor can collect data in the following areas:

- Asbestos (Type 2)
- Condition - mechanical, electrical, building
- Decent homes
- Disability Discrimination Act (DDA)
- Fire risk
- Housing Health & Safety Rating (HHSR)
- Legionella
- Property valuations
- Standard Assessment Procedure (SAP)
- Suitability and sufficiency
- Other

universal surveyor

universal surveyor is an innovative tool for the electronic collection of on-site data for virtually any application. Data capture is carried out using a handheld PDA pre-configured with site / survey information including everything from standard forms to schematics and maps.

Each client has the flexibility to match their individual asset management needs to the system through a custom built application.

quality assured

With *universal surveyor* data collection is standardised, validated and securely transferred to the host database. Once data is loaded into the system a variety of reports can be generated.



enhanced regeneration management through innovation

urban regeneration control (URC)

Urban regeneration is vital to the continuing development of our urban environments and can play a significant role in boosting local economies and increasing quality of life. Strategies to deliver regeneration are often complex involving multiple projects, contractors and sites with a high level of financial commitment. Managing project finances, measuring socio-economic gain and reporting to key stakeholders throughout development is essential for sustainable regeneration.

urban regeneration control was specifically designed to enhance regeneration project management, increase awareness and enable efficient monitoring and reporting. Multiple project outputs are collated and monitored through the regeneration whole life cycle. High level reports and position statements can be produced on a variety of issues from financial planning (spend and forecast) through to job creation and land use change as a result of regeneration.



URC

key benefits:

- Optimises regeneration management
- Collates key financial and socio-economic information
- Enables high level reporting to key stakeholders and funding bodies

key features:

- Tracking of multiple projects and contractors
- Spend profiling and forecasting
- Audit trail for works changes and key economic indicators
- Report generation and display
- Links into relevant databases, including GIS e.g. planning applications within area
- Mapping of works and linked data
- Shared document library

structure survey and management tool

bridge inspector enables the recording and analysis of the condition of bridges and related structures. Through *bridge inspector* structures are surveyed, prioritised and maintenance schedules developed and optimised.

Survey work is carried out using a tablet PC, which holds all structure information, and can include images and associated documentation. Bridge location can be actively mapped in the office or field enabling survey and maintenance route planning. Once a survey is complete data is uploaded onto the host database and Bridge Condition Indicator (BCI) scores are calculated, repair costs, if required, detailed and reports generated.

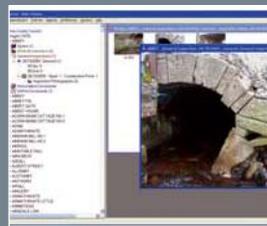
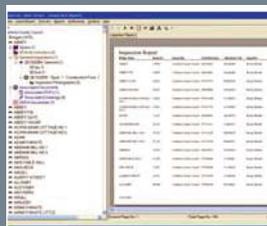
key benefits:

- Enables rapid surveying reducing costs
- Full structure information is taken onto site (including images)
- Provides BCI scoring allowing prioritisation of maintenance
- Mapping to form survey routes and structure location

key features:

- Easy to use
- Field portable (optimised for tablet PC)
- BCI score calculation
- Structure repair cost calculation
- Generates reports
- Active mapping of location

bridge inspector



integrated highways management system

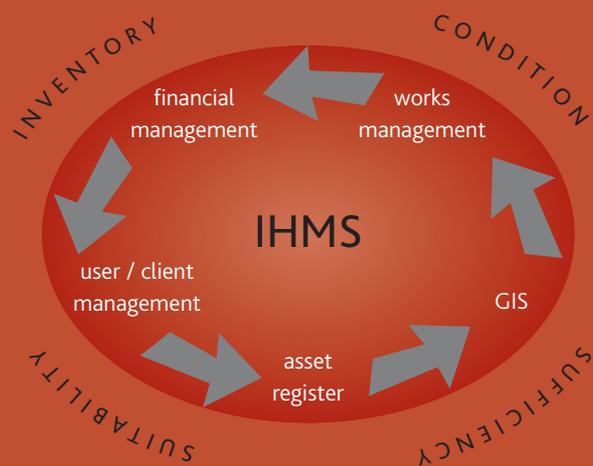
The highways network is an extensive, high value asset that requires strategic management. Efficient management of this asset requires a whole life approach.

a complete solution

In response to the changing requirements for asset management, Capita Symonds Innovations has produced the Integrated Highways Management System (IHMS). *IHMS* is an integrated solution which enables life cycle management of highways, infrastructure and works.

Accessed through a web browser, *IHMS* was designed in conjunction with end-users and provides an intuitive system facilitating efficient and effective proactive management. Mobile platforms, including Tablet PC and PDA handhelds, are utilised for remote survey works.

asset management plan



key benefits:

- Fully integrated modular approach
- Provides information for Transport Asset Management Plans
- Enables proactive management of the network
- Optimised and user focused
- Integrated mapping and GIS tools

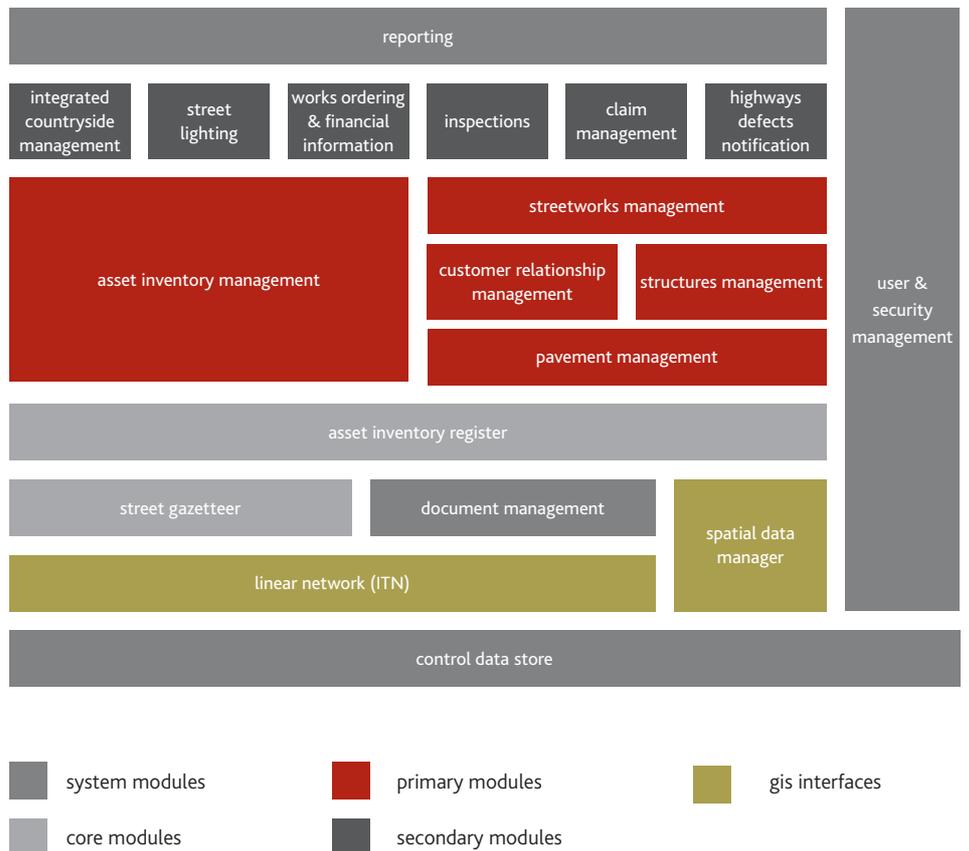


IHMS

module list:

- Asset Inventory Management (AIM)
- Asset Inventory Register (AIR)
- Central Reporting Facility (INFORM)
- Programming Tool
- Events Manager (EVENTS)
- Highways Claims Management (HICLAIM)
- Integrated Countryside Management System (ICMAS)
- Pavement Information Management System (PIMS)
- User Manager (PROFILE)
- Inspections Module (INSPECT)
- Street Information Gazetteer Management (SIGMA)
- Street Lighting (ILLUMINATE)
- Street Works System (STREETWISE)
- Structures Information System (SIS)
- Works Order Finance Information System (WOFIS)
- Programme Manager

Capita Symonds Integrated Highways Management System



capita innovations road transport accident system

CIRTAS is a recording, validation and analysis tool for road traffic accidents enabling local highway authorities to analyse the data as part of their casualty reduction schemes. These schemes and campaigns help the local authorities achieve the casualty reduction targets set by the Government.

A desktop application *CIRTAS* enables you to add, view, query, edit and analyse road traffic accident data. The system collects both objective factors (speed limit, time of day, weather conditions, casualty information etc) and 'contributory factors', those factors which the reporting officer at the scene of the accident believes to have contributed to its occurrence.

Core to the system is a fully integrated GIS facility which enables users to view accident locations graphically, move accidents if located incorrectly, query the system by drawing boundaries and then view the accident, casualty and vehicle data.

The system conforms to the Department of Transport STATS 21 standard for the management, reporting and validation of accident data.

geospatial analysis

CIRTAS enables spatial analysis of accident data facilitating the identification of problem hotspots and the validation of safety schemes.



key benefits:

- Simple STATS21 reporting of accident data
- Increased process efficiencies and cost savings
- Enables road safety analysis and reporting

key features:

- Easy recording and entry of data
- Validation of data
- Mapping and analysis functions
- Powerful reporting functions

CIRTAS

services and support

innovations provide high quality
software development and support services

development services

- system analysis and design
- information architecture design
- software design and development
- project management
- system integration
- mobile technology solutions
- interface design
- data management
- interactive media design and production
- system testing

support services

- service management
- service desk and help desk
- call centre operations
- application management and support
- data centre and hosting services
- system management
- software commissioning
- implementation support



quality assurance and after sales care

Software quality is assured through rigorous development processes and test procedures. Complete after sales support is available for all products and services, combined to various service level options. In recognition of this, Capita Symonds is accredited to ISO 9001, ISO 14000 and ISO18000 while our data centre services conform to ISO27001.

testimonials:

“Capita has shown exceptional commitment in the face of a demanding, roller-coaster project. Their approachability is excellent, with good client facing skills and complete openness.”

Simon Brown, HA Project Manager

“Capita shows great tenacity and takes pride in resolving issues and delivering a good quality of service. Their staff show initiative and frequently put forward well thought through solutions to problems. They are a hard working team who enjoy providing a quality service and who are pleasant, friendly and always professional to work with.”

Janet Foreman, HA Project Manager



case study data management and optimisation: HATRIS

client: Highways Agency

Highways Agency Traffic Information System

With an ever increasing volume of traffic on the highways network strategic management and optimisation has never been more important.

Effective management of this extensive network requires vast quantities of data to be collected, validated and manipulated. To achieve this, *HATRIS* was commissioned by the Highways Agency. Innovations undertake the management and development of this critical system.

HATRIS is a centralised system that collates data from a number of sources, including in-road sensors, GPS locators and cameras. From this data store critical information such as traffic flows and journey times are calculated, mapped and used for monitoring and reporting to the Department of Transport.

Challenging requirements for the use of traffic flow data, changes in monitoring technology and the growing data volume means that the system is constantly evolving and being optimised by Innovations.

HATRIS comprises two core elements which are:

- Journey Time Database (JTDB)
- Traffic Flow Data System (TRADS)

JTDB: The Journey Time Database is a processing and reporting system holding all journey time data via a number of sources including roadside cameras and Trafficmaster GPS. Currently over six million data points are added to the system daily with the managed database having grown to over one billion rows. In total Capita Symonds processes around 500 gigabytes of traffic data per month and have storage capacity for fifteen terabytes of Highways Agency data.

TRADS: The Traffic Flow Database System was developed to provide a central collection and reporting point for fifteen minute and hourly based traffic flow data. Serco (on behalf of NTCC) collects most of the data via telemetry which they then supply (validated and then estimated) on a daily basis to Capita via SFTP. Capita's processes pick up the data and uploads it to TRADS. This data is then made available via a secure website to the Highways Agency and their sub-contractors.

innovations:

- Management of critical system
- Administration of several databases: 3 billion rows in total, with the addition of approximately 40 millions rows per month
- Secure handling of large data flows: 500GB added to the system every month
- System optimisation carried out to increase robustness, speed of data retrieval and reporting
- System monitoring and reporting
- Management of technology integration and change

case study integrated communication and management system: POSTBOX

client: Cumbria Highways

postbox

postbox was developed for Cumbria County Council to provide a GIS map based electronic communications system for the reporting and management of highways defects throughout the county. The application encompasses desktop software for call centre users, a web interface for members of the public to log faults and a remote survey Tablet PC version for mobile workers called *informer*.

Reported defects are logged on the system via the 24/7 call centre hotline, online web portal, fax or email. A centralised system collates key information, prioritises and assigns highway faults to relevant inspectors and contractors. Works progress is logged and tracked with unique identifiers and progress made available to the public. Reported defects can be mapped ensuring precise location and enabling faster repair.

Beyond highways defects, *postbox* provides a central source of information allowing stakeholders and the public to receive the most up to date information about any particular communication or call including County Council policies, ferry timetables, traffic signal lists and road closure lists. *postbox* encourages all stakeholders to work in a coordinated manner, sharing, feeding and obtaining information.

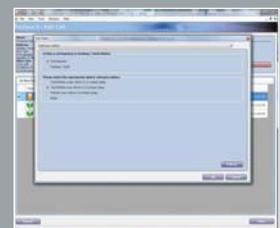
innovations:

- Development of a bespoke works management system
- Linked multiple reporting/ communication methods
- Mobile survey/ fault reporting tool
- 24/ 7 hot line support provision
- KPI information logged and reported

testimonial:

“Postbox has provided the highways service with an effective way of managing highways-related telephone calls. The system transfers information from our call centre in Carlisle to the 'front-line' highways staff, and also provides the call centre operators with a lot of information needed to respond to queries.”

John Robinson, Cumbria County Council



testimonial:

“Informer has revolutionised the way in which Cumbria Highways operates. It has had a large impact upon the way with which Highways Complaints are handled.”

Doug Coyle, Cumbria County Council

case study mobile working and system integration: INFORMER

client: Cumbria Highways

informer

informer is part of a suite of products which has been developed for use within Cumbria Highways and was designed to work in partnership with *postbox*. Informer provides the mobile works element of the system allowing mobile works parties to prioritise, locate and fix reported highway defects.

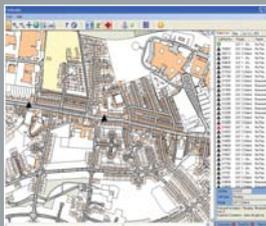
Developed as a desktop application for the tablet PC *informer*:

- Remotely informs works parties when and where works are to be carried out
- Provides information as to what work needs to be done, the priority, when it needs to be done by and where the instruction has come from.
- Enables the completion and closure of works orders

Core to the software is a fully integrated GIS system which displays the exact location of the work. The response gangs have the option to re-locate any incorrectly located defects and also to log new defects directly. After they have completed the work then tasks are simply marked as complete and this is automatically sent back to *postbox*, along with any comments entered.

innovations:

- System design
- Development of mobile works tool
- Integration with existing system
- GIS development



candidates list system

Effective highway scheme management has become increasingly important to ensure any work being carried out on the highway is correctly planned, co-ordinated and managed throughout its lifecycle. Capita Symonds has developed the Candidates List, a fully integrated web-based GIS solution, developed to record and manage transport schemes.

key features:

- Ability to add a new scheme
- Ability to edit schemes
- Identify any candidate schemes to be taken forward into a scheme programme.
- Advanced search functions via search screen or GIS
- Reporting system
- Administration system
- Ability to assess a scheme against LTP criteria, apply a rating and generate an overall LTP score



IHMS: programming tool and events manager (EVENTS)

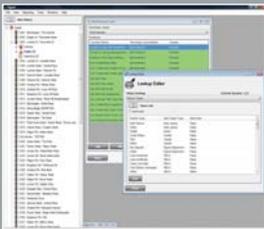
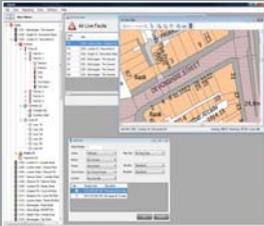
The co-ordination of works on the network is a key activity for all authorities and therefore the Programming Tool was developed, enabling full visibility of what works is being carried out on the network at any point in time and combining this into one central programme. The Programming Tool has been developed specifically to assist authorities in co-ordinating all activities taking place on the road network and as such there is the facility to record events which may impact activities such as planned sporting activities etc. The following information can currently be recorded:

- Event type such as air shows, bank holidays, bicycle races and school holidays
- Description
- District
- Start date
- End date
- Recurring type, for example never (i.e. a one-off event), monthly or annually
- Number of recurrences
- Carriageway Impact
- Delay (0 - 5, 6 - 10, 11 - 12, 21 - 50)

Events can either be manually added, edited or imported in bulk using a pre-defined format.

Within the programming tool users are able to view all works along with the events in order to make an informed decision as to whether consent can be granted to conduct the work. There are three ways in which works can be viewed for co-ordination purposes, either via the digital mapping facility, a Gantt Chart or by carrying out a manual search to find out which works and activities will be taking place and print out a suitable report.





traffic signals asset management system (iSignals)

iSignals enables the recording, management and analysis of all traffic signal assets. While it is a standalone system, it can be loaded into a wider asset management system such as *IHMS*. Faults, condition and general information about the assets can be recorded and reported upon, one of the key reports being the energy return report for DfT. *iSignals* is split into a number of key areas which are:

- General information e.g. site number, location, description, photo's, installation date etc.
- Inventory e.g. type of pole, type of controller for each traffic signal
- Faults - there is the facility to add and edit faults for each traffic signal
- Inspections - ability to add and edit inspections at both site and asset level
- Search
- Reporting
- Administration - enables user accounts to be administered, lookup values updated etc.

www.capitasymonds.co.uk/innovations

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