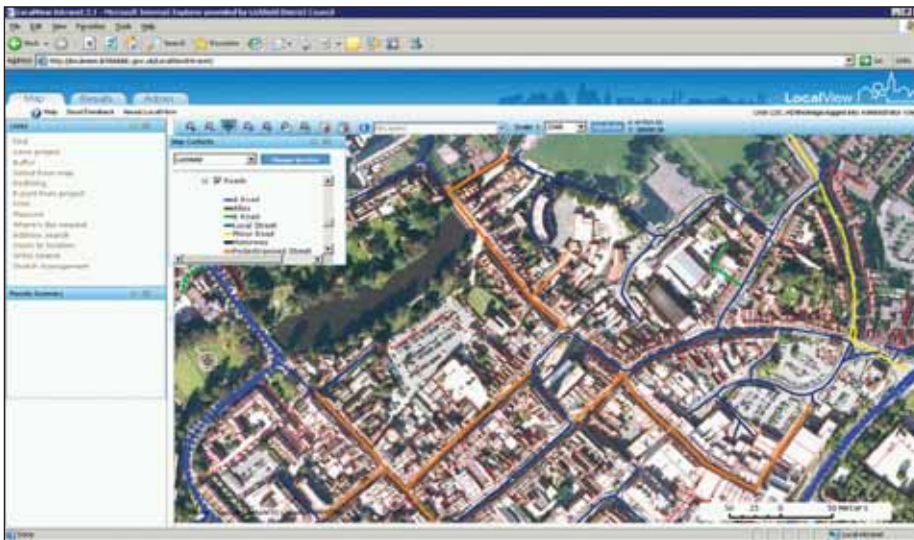


# GIS encourages cross border communication

In government, GIS is now an established technology. Increasingly it is being used to help central and local government to cut costs, deliver more personalised services and make it easier for citizens to access the resources and information they need. To fully understand the power and potential of GIS for government in the future however, we should take a moment to consider the road travelled so far and what lies ahead.



## Adoption of GIS by degrees

In the early days GIS was most likely to be employed within individual departments of local authorities – highways, for example. Here, GIS may typically be used to help survey and monitor assets such as lamp posts, bollards and bus stops. By recording the precise location and state of repair of these assets on multi-level interactive maps, authorities are better able to plan maintenance work more strategically and cost efficiently.

An interesting 'next step' development in the use of GIS is illustrated by Newcastle City Council's adoption of GIS to manage traffic more effectively. The speed management GIS system this authority deploys gives managers a clear understanding of traffic speed and flow across the city. For example, they can examine average speeds along particular stretches of road or find the proportion of motorists exceeding the limit. This information has helped the authority identify potential accident black spots and the statistics have been used to support proposals for traffic calming measures.

## Erasing the boundaries

Over time as GIS has spread, its strategic value has become more widely recognised. Most signif-

icantly, it has become increasingly 'joined up' across previously disparate departments within Local Authorities. GIS has grown in many leading authorities to become a truly enterprise wide system, often assisting in multi-agency initiatives.

At Lichfield District Council the benefits of an evolution to a more centralised and shared approach to GIS are plain to see. Lichfield had been using GIS applications in several departments for many years, but was keen to create a central store of GIS data and to make it easier for staff to access and use. To achieve these objectives, Lichfield centralised its disparate data resources utilising ESRI's Spatial Database and introduced LocalView Intranet. This is a browser-based application designed specifically for Local Authorities, which enables people across departments to access a central repository of spatially related information and maps. A key advantage is the user-friendly browser environment, which means users do not need specialist GIS skills to be able to view the data.

Initially, Lichfield District Council rolled the solution out to just a small number of users. The IT team customised the front end, loaded relevant spatial data and adapted the look, feel and range of tasks appropriately for the specific audience.

Before long, the council had six LocalView Intranet portals, each customised to the data and tasks needed by specific departments or user groups. Employees enter the application that they need via a link on the council's Intranet. They can access the solution from any computer in the office, on the road or at home, so it supports flexible and mobile working. The IT team can tailor the user experience to the task at hand and all data files are managed centrally, so information is always up to date.

As well as a corporate portal, with general data, there are specific portals for environmental health, planning, emergency planning and operational services. The system is used, for example, to plot incidents of fly-tipping and to identify hot spots around the region, then use this information to decide where to site CCTV cameras and warning signs.

## Dependable in a crisis

The benefits of this enterprise wide deployment of GIS were highlighted in 2007 when the region was hit by some of the worst flooding in decades. The council immediately launched a proactive campaign to support residents by making up-to-date information available. Data on the extent of the flooding was loaded into LocalView Intranet, providing everyone in the council with a clear view of the communities and roads worst affected. Employees across departments then used this information to plan the response effort.

Lichfield District Council also uses LocalView Intranet to provide external partners with access to its data. Because this is an Intranet-based solution (rather than Internet-based), councils have greater control. They can set up different portals and limit data sets, so that partners see only the data that is relevant for them. Access to confidential data can be restricted - for example, they can let the police and fire service view data on crime without fear of the information entering the public domain.

It is so easy to develop new Intranet portals that the IT team can respond to short-term requirements. The council has, for example, set up temporary facilities to give employees and other partners shared access to the data required to support new funding bids, planning proposals and other multi-agency projects.

As the Lichfield District Council study demonstrates, GIS has significantly empowered smarter local decision-making. But as location is increasingly recognised as the common denominator that brings local government, central government and partners together, the role of GIS is set to move centre stage.

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