

Client: Pitney Bowes Business Insight

Title: Surveyor

Date: 22 April 2011

A confirmed winner

An all-electronic, mobile highways-management system based on Pitney Bowes Business Insight's Confirm solution is providing local authorities with huge efficiency savings **Dominic McNeillis** reports

Mobile GIS technology, which enables more scheduling and reporting work to be carried out in the field, has dramatically changed the face of highways maintenance over recent years. It has also brought councils and their contracting partners closer together through the sharing of common systems, increasing both workflow visibility and control over budgets.

In the former way of working, highways inspectors had to take notes on site before returning back to the office to raise jobs via a paper or computer-based system. Now, it is commonplace for work orders, inspections and inquiries to be input on to GIS-enabled mobile devices which connect back to a central management database. Not only has this significantly reduced unnecessary data duplication and the errors that often occur as a result, but it has enabled field workers to spend more time on actual maintenance rather than administration.

For instance, Somerset CC uses an all-electronic, mobile highways-management system based on Confirm – Pitney Bowes Business Insight's infrastructure asset maintenance and management solution – to carry out repairs on its road network. With 30,000 road defects reported each year, the GIS-empowered mobilisation of the maintenance system has enabled Somerset's inspectors and its highways contractor, Atkins, to respond more efficiently to faults. This has resulted in 98% of defects being repaired within their target response time – a significant improvement.

Inspectors can now report maintenance issues in the field and send the exact location of the fault back to Somerset's Confirm system. This information is automatically relayed via Atkins' Inform system – which interoperates with Confirm – to the company's safety defect controllers, who are then able to allocate the most appropriate work gang to deal with the problem. A 'before' and 'after' photograph is taken of the work, and uploaded to a secure shared website, where the highways team can 'virtually' inspect the repair and sign off the job.

The system enables highway works to be programmed and planned in advance rather than being purely reactive, with Confirm providing real-time visibility into the state of the highway network. Improved understanding of the condition of highway assets also means Somerset can more accurately allocate budgets to the right areas.

With local authorities having to 'do more with

less' as public spending continues to be cut, the mobile GIS-enabled solution in place at Somerset has yielded operational cost and efficiency savings by helping maintenance crews to do their job faster and more accurately. Confirm has completely cut out paper-based reports and work orders, and enabled more inspections to be carried out.

Paul Winter, Confirm manager, environment directorate at Somerset CC, says: 'The end-to-end nature of the solution means every maintenance job stays within the electronic system, right up to completion. By raising work orders directly from the actual location of a defect via mobile devices, we are able to understand and control the works on our highways to an unprecedented degree.'

Simon White, contract director, highway services at Atkins, says: 'In terms of job performance, we're light years ahead of where we used to be with the paper-based system. Before, we had to manually process every defect, all with different priorities and work types. Now, that process has been streamlined considerably by the mobile-enabled system. We can plan repairs more efficiently and check our performance against KPIs in real-time, which helps us to work smarter and more productively.'

The issues of budget control and KPIs are particularly pertinent, as the use of mobile GIS-enabled systems becomes more widespread. Whereas previous paper-based systems might have been relatively inefficient, they did nevertheless impose a strict regime of sign-offs on all activities in the

highways maintenance supply chain. With mobile devices and electronic systems encouraging greater autonomy in the workforce, particularly among contractors, the need for financial and quality controls which can keep up with this new way of working are essential.

Medway Council was faced with exactly this challenge – how to effectively manage the financial and quality performance of its main highways contractor, VolkerHighways.

Historically, all maintenance jobs had been raised manually and tracked by



spreadsheet, which meant transactions were often up to two months in arrears. This made it difficult to understand how the highways department's budget was

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being spent at any one time. Tightly integrating Confirm with the council's financial system led to a huge improvement in the visibility of job orders and transactions. Rather than having to second-guess the state of

the budget based on historical data, Medway now has an accurate, up-to-date overview of its spending.

Phil Moore, head of highways and parking services at Medway Council, says: 'Every time a job is raised with our contractor via Confirm,

it shows as a commitment on our financial system – once a month, this data is integrated automatically with the corporate finance system. I can now see in real-time which orders are paid and which are outstanding.'

Following Somerset's example, Medway will also enable VolkerHighways to work more efficiently by empowering its maintenance workers to issue job orders and completion reports directly from the location of repairs via hand-held mobile computers.

Mr Moore adds: 'We don't want to over-burden our contractor with time-consuming data entry. We want to minimise the contractor payments we make relating to administration and reporting. By enabling the maintenance crews to work mostly from the field on mobile devices, Confirm will generate huge efficiency savings.'

The provision of electronic transactions has brought about savings for both contractor and council, with staff costs reduced by approximately 10%. The trackable visibility that a centralised highway inspection system provides has also meant the council can defend against insurance

claims with greater accuracy, with claims paid out reduced by over 50% in financial terms.

This sharing of IT and GIS systems between council and third parties has been taken a stage further at Southampton City Council, where its outsourcing partner, Balfour Beatty WorkPlace, has taken over responsibility for running the Confirm system. Southampton had previously used Confirm as an on-premise application to manage its highways maintenance programme.

Moving the system from an on-premise to on-demand environment has significantly reduced hardware, implementation and management costs. This is because Southampton's system is run as part of a multi-tenanted infrastructure where hardware and management costs are effectively shared between organisations.

Flexible licensing is also an important benefit of Confirm OnDemand. Entering a five-year agreement as the public sector faces unprecedented outbacks, Southampton and Balfour Beatty WorkPlace needed an asset management system which was scalable and adaptable to changing requirements. Confirm OnDemand allows user licences to be increased or reduced as and when required.

Another advantage enjoyed by Balfour Beatty WorkPlace was the speed of its deployment. The system was fully operational less than five weeks after contracts were signed.

Nigel Gibbons, head of ICT at Balfour Beatty WorkPlace, says: 'In the current environment, where cost savings are everything, the on-demand environment has significantly reduced our capex and enabled us to concentrate on the practical benefits that Confirm delivers, rather than diverting valuable man-hours on management and support of the software. The ability to scale our user licences as and when required also means we have much tighter control over our ongoing spend.'

As public sector budgets come under ever greater pressure, councils and their partners must continue to work smarter through the sharing of common systems and technology.

Despite an often-challenging work environment, mobile GIS is enabling highways maintenance to spearhead this collaborative model and demonstrate that decentralisation doesn't mean lack of visibility or financial control.

• **Dominic McNeillis** is Confirm product marketing manager at Pitney Bowes Business Insight

