



Printed maps help familiarise staff with properties – even when they haven't visited the site

# Reaching for excellence in grounds maintenance

Richard Spooner relates how Thames Valley Housing has transformed its grounds maintenance activity – and saved a small fortune in the process

Thames Valley Housing (TVH) of Twickenham, Middlesex, has a mantra - 'Reach for Excellence'. It is no hollow catchphrase. Judged by 'What House' magazine as the Best Large Housing Association in 2010, TVH has shown it can save £2m from its housing management spending over ten years, without impacting its quality of service. The projected savings come from reduced spending on grounds maintenance – an achievement in which Geographic Information Systems (GIS) technology plays a major role.

Niall O'Rourke, Assistant Director of Property and Asset Management at TVH, ([www.tvha.co.uk](http://www.tvha.co.uk)) describes the problems that GIS was brought in to address. "TVH manages over 14,000 homes in over 40 local authorities across south east England. Our properties tend to be in a large number of small, densely-developed, and geographically dispersed schemes. That means they are more expensive to clean and maintain when compared to large estate-based properties. Our annual grounds maintenance bill is around £1.6m. If, by using GIS, we could make even a small percentage saving from this sum, then it would be a fairly easy decision to invest in the technology."

## The case for GIS

The decision to invest in GIS was taken in December 2009, with Niall as project sponsor. He summarises the basis of his ultimately successful business case as follows:

"We learned from our last major grounds maintenance tendering exercise just how many gaps there were in the geographic information

that we had on our schemes. We were often unsure of the extent and precise boundaries of land under our responsibility. We couldn't identify the extent and make up of ground cover – whether it was grass, hard-standing, planted beds or mulched beds.

"It was largely left to tenderers to gather this information based on site visits. This was costly, both for them and us, and led to delays in obtaining prices from service providers and in providing estimated service charges to new tenants. Worst of all, it meant we had no agreed and transparent pricing mechanism, making it very difficult to establish if we were getting value for money and very difficult to challenge service providers' estimates or to benchmark our costs with our peers. What we needed were accurate and up-to-date map records of our holdings and a Geographic Information System with which to manage them."

In 2010 TVH approached the Ordnance Survey for advice on its map products and, at the same time, appointed a consultant to advise on the purchase of GIS software. A requirements team was drawn with representation from the ICT, Finance, Policy and Performance and Neighbourhood Teams. Although there are many potential uses for GIS in housing, it was agreed that the application against which the system would be judged was to be grounds maintenance. A shortlist of GIS vendors was drawn up and an eight-week evaluation period followed during which TVH had a number of demonstrations from prospective vendors. Ultimately, TVH selected Cadcorp Spatial Information System (Cadcorp SIS) software as being the most appropriate GIS for its needs.

**Cadcorp SIS in use**

The system currently sits with the Estates Services Team, in the Property and Asset Management Department. Its principal use is to generate estimates of the extent of land cover, by type, for each scheme. Such calculations are a simple enough activity for a GIS as comprehensive as Cadcorp SIS and which automatically calculates the area for any features represented as polygons in the GIS.

However, the GIS is also responsible for managing the map data against which measurements are made. Two sources of third party map data products are crucial to the work of the Estate Services Team: Ordnance Survey MasterMap® which provides an accurate and up-to-date topographic map, and Title Plans from the UK Land Registry which provides the equally important information on the precise boundaries of land ownership. By overlaying ownership information against topographic information, TVH can easily see the precise geographic extent of its maintenance responsibilities.

TVH also uses Cadcorp SIS to help create and manage its own grounds maintenance map layers. Without any prior expertise in GIS, the staff of TVH have completed the mapping of over 400 schemes in less than a year and now have a comprehensive library of information for each scheme receiving grounds maintenance services. This is a step change for TVH, as Niall points out. “Under the previous way of working, if schemes were mapped at all, this was done by the service provider. TVH is now firmly in control of its own spatial information, and empowered because of it.”



Maps now play a central role in information-sharing in meetings

**The benefits**

Even after only one year of managing its map data in a GIS, TVH has no doubts about the benefits. “We have vastly improved information about grounds maintenance responsibilities on our schemes” notes Niall. “We have consistent and transparent costs for the services we deliver to our residents. As a result, we are able to adopt a far more professional approach when procuring and managing grounds maintenance services. We are also able to respond faster and more confidently to tenant queries about the cost of services being delivered.”

The benefits are not limited to grounds maintenance on existing schemes, as Niall points out. “We can now calculate the costs of providing grounds maintenance services on new schemes prior to them being constructed. This allows us to consider the implications of grounds maintenance at the design stage. It also means we can estimate future service charges for new developments. This saves us time in seeking and challenging quotes from service providers, and allows us to share cost information with prospective residents.

“The comprehensive mapping and pricing information allows us to tailor services to schemes so that we can increase or decrease the frequency of the service to suit the residents’ needs. It also enables us to provide our residents with clear cost information. It is important to note that our residents also play a key role in the monitoring of estates services. We have over 80 Resident Inspectors assessing the quality services we deliver. These have responded favourably to the scheme maps with which they are now provided and see them as enhancing their professionalism.”

**The long term view**

As with many housing associations, TVH prefers to establish long-term relationships with its service providers as this minimises the expense of frequent re-tendering. Contracts for grounds maintenance are no exception, being typically of between five and 10 years duration.

Having recently agreed a new round of grounds maintenance contracts, Niall is in a position to compare the prices he has negotiated for the next five to 10 years with those agreed during the last round of tendering in 2004/5.

“We are making annual savings of about £200,000 on a bundle of grounds maintenance services that would previously have cost us £900,000 annually. That is a total saving of £2m over a ten year contract period. I can’t be precise about the contribution of GIS to this saving, versus, say, the impact of increased levels of professionalism in TVH and a changed economic climate. However, it seems to me that the bulk of these savings are directly attributable to TVH being better informed and that is down to the use of Cadcorp SIS and the spatial information it manages.”

What of the future? Niall believes the main users of the GIS – at least in the short term – will continue to be the Estates Services Team. “It has already discovered the value of using GIS to identify possible development, regeneration and infill opportunities for TVH. GIS will also be used in the review and re-tendering of our responsive repairs services in the next year.”

Far from keeping the system to himself, Niall is keen to extend its use to other departments and to integrate it with TVH’s housing management and asset management systems. We will be watching with interest.

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