

Passionate about communities: Midland Heart®
fulfils its social agenda with the support of
OS MasterMap®

Case study



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Challenge

Information is the key

Midland Heart can trace its history back to 1920's Birmingham, when it campaigned for slum clearance and housing improvements. Now, with a turnover of £140 million, housing assets of £1 141 million and 1 350 employees, it is one of the top ten housing and regeneration groups in the United Kingdom.

Formed in April 2006, Midland Heart owns and manages 32 000 homes and is in the process of developing another 4 200 by 2012. Every year it invests more than £100 million in improving homes, building new ones and making neighbourhoods more desirable.

Midland Heart also has ambitious development proposals. Whereas it currently adds 600 handovers per annum to its portfolio, it plans to make this 1 000 by 2010.

'We want to focus on our core areas in the West Midlands and grow within the East Midlands,' says Stephen Russell, Strategic Portfolio Manager, Corporate Strategy. *'As we currently have a very diverse stock base, we are looking to strategically rationalise some of our assets and undertake a detailed review of our activities.'*

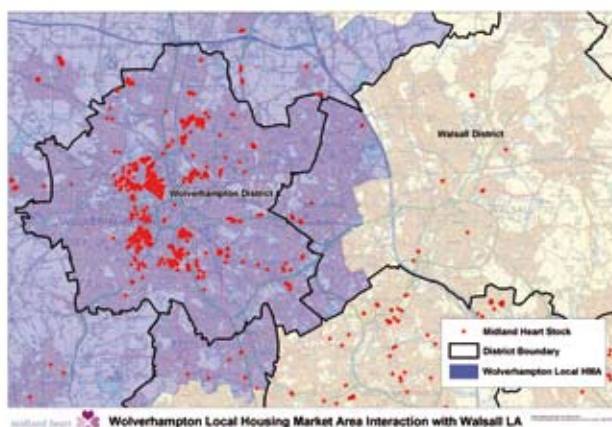
In order to achieve its ambitious targets Midland Heart will need reliable information. As Stephen Russell explains, *'The first step has been to really understand where our stock is'*. To do this Midland Heart utilises several products, including Dotted Eyes® and MapInfo® software and OS MasterMap intelligent digital mapping.

Solution

From the visual to the analytical

Although GIS was previously used in both former organisations, this was to a limited degree. Midland Heart is now determined to utilise GIS to its fullest capacity. *'The visual presentation aspects of GIS are powerful and stakeholders like the details and context they can obtain from OS MasterMap. However, we see GIS as an analytical tool rather than a visual tool,'* states Stephen Russell.

'One of the traditional problems facing housing associations is that they are data rich but not necessarily information rich, and I am interested in how data becomes information and then intelligence. We need to understand our individual units and the associated context: details such as market conditions, void patterns and ASB (antisocial behaviour) incidents – and these vary tremendously. There are also huge demographic differences



across the areas we cover, which means that solutions often need to be tailored to the communities we serve.'

With this in mind, Stephen has worked with his IT department to develop Midland Heart's strategic asset management system, known as SAMS. With the help of Business Objects reporting tools, this links GIS with Midland Heart's housing management system, Northgate®, via a data warehouse. Every property has a reference number with additional attributes and these are used as the building blocks in the system.

SAMS takes information on each property and produces a score similar to a Net Present Value (NPV), a commonly accepted method used to appraise potential developments. It does this by using past trend data to forecast the expected income and expenditure on each property over a 30-year life cycle.

'We call this the yield score,' says Russell, *'and it enables us to see the relative performance of one property against another. That is a key source of information in deciding on any interventions or future decisions. We also need to go beyond identifying poor performance to understand the factors driving the patterns we are seeing; for example, whether poor performance is linked to the layout and condition of the stock or whether it is a result of wider social issues, which may require a holistic response in conjunction with other stakeholders.'*

GIS as a strategic tool

Midland Heart sees GIS as fundamental to the business and it sits primarily within the Corporate Strategy department, which currently has three users of OS MasterMap Topography Layer and Address Layer 2. There are also single licences within Asset Management, New Business and Development, Operations Support and Regeneration. These are delivered via a remote desktop server, with appropriate access controls.

Stephen Russell is the gatekeeper of the GIS, assisting internal customers who need GIS data and other GIS users who have complex requests. *'GIS is not yet established within many housing organisations, partly because it is not well understood as a tool for analysis. The issue is that people do not know what it can*

do. It was important at the beginning to demonstrate its power by producing some initial analysis.' This included mapping the distribution of stock against housing market areas across the West Midlands, providing mapping support for the gas and responsive repairs tendering process, and contributing to the development and presentation of the growth and asset investment strategy.

According to Russell, stock lists, boundary information, market intelligence and internal performance data within SAMS make up some of Midland Heart's core data. *'The key requirement is that the data in the system is reliable. If stock data is geocoded incorrectly, then the power and, more importantly, the faith in GIS are lost. In addition to developing the system and its processes, we are also working on improving the integrity of our data. For example, to increase the power of MasterMap® Topography layer we have included a TOID® reference against all of our properties. This uses address cleaning software in conjunction with OS MasterMap Address Layer 2, which allows us to map our stock against the physical building rather than presenting it as simple point data. The fundamental rule is that every piece of information should have a geographic identifier, such as a postcode, so that it can be mapped and used for analysis.'*

Benefits

Intelligence driven decision making

With knowledge from SAMS and GIS, Midland Heart can make more informed evidence-based decisions. *'Once our internal information is in the right place, it will provide robust evidence as opposed to anecdotal hearsay and will underpin our actions, especially when large sums of money are at stake,'* says Russell. *'Although it is difficult to quantify benefit, making just one or two informed decisions about a property each year will outweigh the costs of implementing GIS. It is important to bear in mind that it is not a substitute to making a decision but a decision-making tool.'*

When it comes to balancing needs at local level, the issues can be complex. One example is how to handle houses in multiple occupancy (HMO). Because of the shortage of affordable family homes, there is pressure to deconvert; yet HMOs are frequently laid out very poorly and therefore relatively expensive to reinstate as single

properties. Given the associated costs, and the fact that extra funding will be required, Midland Heart is conducting a fine-grain analysis of local needs and liaising closely with the local authority in order to ensure the most appropriate decision is taken.

In housing nothing stays the same for long. The market, housing policies and demand are all continually changing. Consequently, Midland Heart has to make daily decisions regarding the management of stock to ensure it is providing what customers want. *'We have to know the where and how; and GIS provides the detail behind the numbers. This is particularly important as we get bigger. We will be moving into new areas and seeking to further our understanding of these areas and of those in which we already operate.'*

Midland Heart is a preferred partner of the Housing Corporation and submits bids to receive support for building affordable homes. Information is required to ensure that any proposed development has a strategic fit with local authority housing plans. For low-cost home ownership, development data is provided on incomes, house prices and affordability to ensure that homes are targeted at those most in need and that there is demand for these products.

GIS data has also been instrumental in supporting the work of Midland Heart in the North Lozells and East Handsworth Neighbourhood Renewal Area in north-west Birmingham. GIS was used to assist in defining the boundaries of the renewal area and to identify the location of stock held by Midland Heart and other key stakeholders. Following this, a detailed profile, which examined characteristics of the area, such as the pattern of house prices and the ethnic composition of the population, was produced.

Return on investment

Focusing on what matters: a roof overhead

SAMS is still developing. *'All the principles are there but data comes from different sources, so can be presented and interpreted in different ways,'* comments Russell. *'This is a continuous development process*

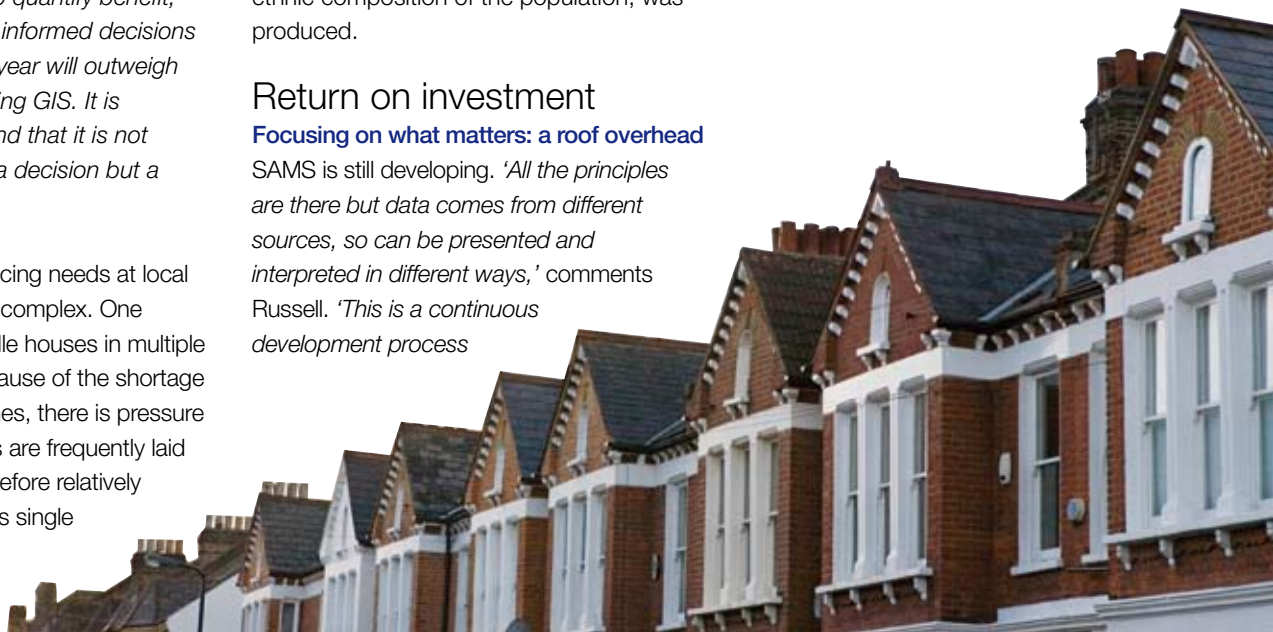


Stock performance using SAMS

and the system and approaches will be refined and examined on an ongoing basis.'

Russell intends to expand the number of users trained in GIS, so giving other departments direct ownership of the associated benefits and releasing him to focus on more proactive research. *'Once SAMS is embedded into business thinking it will highlight key information and inform intelligent decision making.'*

He sees GIS as indispensable. *'It will promote a cultural shift. The combination of the visual and analytical can get the message across. The information we have will fuel thorough discussion before a decision is made. GIS brings intelligence and evidence, which may not otherwise have been available. It supports innovation and feeds into future strategy; and the bigger we become, the more intelligence we will need. The use of GIS in generating this intelligence provides us with an unparalleled picture of the organisation.'*



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passionate about communities



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