the agi conference at GIS 2002

agi

A07.2

Scottish Neighbourhood Statistics Right to Buy Data

Alastair Dargie, Director, Boreas Technologies

Introduction

Scottish Neighbourhood Statistics was launched in April 2001 with a budget of £7 million over a period of 3 years. This budget is used to capture and disseminate local level statistics. One of the projects to benefit from this is Communities Scotland's (Scotland's agency for housing and regeneration) use of right to buy data. The project has been run by Communities Scotland in conjunction with the Scottish Executive. So far the project has completed 2 phases both mostly focused on address matching and geo-coding of Right to Buy data from 1980 to 2000. It has also looked at methods of disseminating this data to a large user base, including all local authorities in Scotland, each of which have their own IT policies ad GIS strategies. The data has been captured from a mixture of paper records and existing electronics records and compiled and validated into one Microsoft Access database. All data has been collated at a unit postcode level and then unit postcode information can be disseminated at a variety of different geographies such as wards, postcode sectors and local authorities through use of special tagging within the access database. During the address matching process great attention to detail was made to ensure the highest possible degree of accuracy so much so that every year has an accuracy of 97-100%. This database has been disseminated to each local authority. This has highlighted several issues surrounding IT policies and GIS strategies.

The main issues raised are around different GIS software usage and versions used of Microsoft products and incompatibility arising there from.

Since the creation of the Scottish Parliament and the devolved powers that accompany the parliament, much greater emphasis has been put on the need for local level information and statistics. This enables the parliament to use its resources to greater effect, hence the creation of Scottish Neighbourhood statistics where, wherever possible, statistics are gathered at unit postcode level.

In 2001 the Scottish Parliament passed a new housing act focused mainly on the social housing agenda. Part of this act looks at Right to Buy legislation and makes several minor changes to existing legislation, this is of particular interest in pressured areas where demand outstrips supply for social housing. The data created in phases 1 and 2 of the Right to Buy project can be used to assist in highlighting these issues.

In turn, the same data can be used to assist in implementing the Scottish Executive's social justice agenda, which is discussed fully within the paper.

Discussion

Around the start of 2002 the UK government put forward suggestions for a greater need for local level statistics in Britain. From this, England and Wales had a project called Neighbourhood Stats. In Scotland the same project was taken forward by the Scottish Executive but had a grater emphasis on the needs of the Scottish Economy due to the evolved powers of the Scottish Parliament. Neighbourhood Stats is a 3 year project that was launched in April 2001 with a budget of £7 million and has proceeded to capture various datasets at a local level, normally postcode unit level, across Scotland. Prior to Neighbourhood Stats most data was collated at ward boundary or larger geographies area, however, to accurately address the needs

of the social justice agenda, greater details is needed as problems cab be associated with just 5 or 6 streets within a ward boundary.

One of the projects to have benefited from the Neighbourhood Stats agenda is Communities Scotland's use of Right to Buy data in association with the Scottish Executive. Under the previous housing act (prior to changes that came into place in 2001) very tenant of a council house in Scotland and some tenants of housing associations had the right to purchase the property they had rented for a set period of time. This is referred to in legislation as the "Right to Buy". In addition to this, the length of tenancy is linked to discounts that they are entitled to receive off the valuation of the property. The communities Scotland project has used records that had to be kept under legislation, to map every council house sale since 1980 at a unit postcode level. For every house sale data is recorded on its location, value, sale price, discount received and purchaser/tenant.

The aim of this project was to capture this information at unit postcode level and be able to disseminate the data at both unit postcode level and other larger geographies including wards, postcode sectors and local authorities. The data was to be disseminated to Communities Scotland, the Scottish Executive and all local authorities in Scotland. It is also recognised that there may be a future need to disseminate the info to every housing association in Scotland. Also an overview of how this data can be managed on an annual basis including updates and changes to geographic areas in a sustainable low cost manner had to be investigated.

The project was broken down into 2 phases, the first of which captured all of the data from 1993 to 1999 where both paper records and digital records were available. The second phased involved capturing all of the data from 1980 to 1993 where only digital records where available. The first issue that was encountered was that all of the digital records only contained the postcode and no other address information for each house sale. In addition to this all the data is historic and contains postcodes that may have been removed or amended from the postcode index file. Therefore, the first task of the project was to create a historic postcode index file for each year from the GROS postcode index database. This was possible as not only does this database hold the existing postcodes but also all previous postcodes with a data for both creation and deletion as a live record. The second task was to process each year of records and match them on their relevant postcode index year. Then any un-matched records were matched against all postcode indexes incase incorrect postcodes had been used at the time of data entry. Phase 1 differed from phase 2 of the project in that all records that remained unmatched were checked against their full address details that were held on paper records and then manually corrected. This was not possible for phase 2 where only digital records where available.

The third task was to add spatial tags to each of the records. Instead of tagging each of the Right to Buy records we tagged the entire postcode index and created a link between the two, therefore, any additional records found could easily be merged into the database without the need to repeat the spatial tagging process.

The fourth task was to thoroughly test the integrity of the data and 10% of all records were manually checked against paper records where available or the original digital information where paper records where not available.

The final task of the project was to design an affordable way of disseminating the data to the various user groups. To facilitate this we built an interface in Access that enables users to query the database at any of the geographies that spatial tags had been added for. They can also export this data to various tabular data structures for use in spreadsheets, databases or GI systems.

The main issues which have come to light through these tasks are firstly, the quality of the original data supplied to us, this being variable, as each Local Authority submitted their forms to different quality standards. This is not an uncommon issue especially regarding address based data. The second issue to arise is that disseminating this data back to the local authorities can prove costly due to different versions of software being used. Phase 1 of the project was originally to be distributed in Access 97 format, however, several local authorities has started using access 2000 which is not backwards compatible. In

addition to this it was recognised that the dataset would be very powerful used within a GI system, however, pre-creating the data for a specific system was not possible as each local authority has its own GI system, or in some cases 4 systems, being used. To get around this the Microsoft Access interface was created in Access 97 and Access 2000 and export routines were simplified so that the data could then be imported into the relevant Local Authorities' GI systems.

The final issue that arose was the copyright limitations on the GRO postcode index in that each local authority generally only had copyright for its own area. Therefore, the national dataset could not be disseminated to each local authority, they could only receive their own geographic area. As a result of this 32 variations of the whole Scotland database had to be created for each local authority.

Now that the data has been processed and disseminated it is easy to see many of its potential uses. One of the key uses for the dataset is to support "The Housing (Scotland) Act 201". This act was primarily focused on the social rented section and built upon similar acts released in 1980, 1986 and 1987. The Right to Buy was originally included in the "Tenant's rights, etc (Scotland) Act 1980" put forward by the conservative government. The only major change to this original act came in 1986 and 1987 when substantial changes were made to the discounts available. All acts set out rules ad objectives of meeting the needs of the social rented section and included in this is the Right to Buy. However the 2001 act sets out more substantial changes than any of the previous acts. Prior to the 2001 act tenants of public landlords such as local authorities, water authorities, Scottish homes (now Communities Scotland) and some registered housing associations and similar organizations have a "secure tenancy" which gave them the Right to Buy. However, most tenants of housing associations had "assured tenancies" which did not include the Right to Buy. The 2001 act sets out to change these two types of tenancy into a new "Scottish Secure Tenancy". Again there have been major changes to the discounts available, but the biggest change is including the Right to Buy for more housing associations.

There are, however, exceptions to the Right to Buy including one exception for areas of high pressure, where demand for social housing outstrips available stock. This is one of the key areas in which the Right to Buy data created can be utilised, not only to look at post demand, but also to forecast future demand for Right to Buy in relation to available housing stock.

The data also feeds into the Scottish Social Justice agenda that was launched as "a Scotland where everyone matters". This initiative was launched in 1999 and is a continuation of various Government policies on tackling social exclusions. Not only does it set key targets focused on children, young people, families, older people and communities, but it also sets key milestones that are to be reported on annually until 2020. One of their milestones is "increasing the quality and variety of homes in our most disadvantaged communities". The Scottish Executive is measuring this by looking at statistics on the overall breakdown of the Scottish Housing stock and looking at percentage of homes suffering from overcrowding. Again the use and uptake of Right to Buy will impact heavily on the statistics on Scotland's housing stock by tenure.

Although the work undertaken to date has focused mostly on the capture of historic data, the need to manage the future data as well as historic data in a better more consistent way is apparent from the obligations of the Housing Scotland Act 2001 and the Scottish Social Justice Agenda previously discussed.

In the future an annual update will be undertaken, however, it would also be possible to facilitate this through web enabled database system which allows each local authority to enter and validate their information at source and to a consistent standard. In addition to this, as more housing association stock becomes part of the right to buy, careful consideration has to be given to who captures this information. The Right to Buy data captured to date only touches the surface of the potential use of this data to maximize the social property portfolio.

Conclusions

Communities Scotland and the Scottish Executive neighbourhood stats team have taken forward a project to capture all Right to Buy data from 1980 to 1999. This has been facilitated by Boreas Technologies and an

extremely high accuracy of between 97 and 99% was achieved. The project has highlighted issues over multiple organizations capturing data a worrying standards and also the issues surrounding dissemination of this data back to 32 organisations with different IT infrastructures and GIS policies. This in turn raises the cost of capturing, validating and then disseminating a national dataset. The introduction of "The Housing (Scotland) Act 2001" will in the future bring additional complications in that there will be more bodies capturing the information. Also greater attention will need to be paid to local level high pressure housing demand areas. To do this accurately local level stats must be available and up-to-date. There are many options open to the future management of this data, such as greater use of the internet, creation of an extranet for input and validation of records, whilst this could solve a lot of the input issues, it does not solve the dissemination and final usage of the data. If used to its full potential the data set created could be used to effectively reduce high pressure areas in the social housing market.

References

"The Housing Bill: The Right to Buy", The Scottish Parliament, 25 October 2000.

"The Housing (Scotland) Bill", The Scottish Parliament, 8 March 2001.

"Social Justice Annual Report", The Scottish Parliament, 29 November 2001.

www.scotland.gov.uk

www.communitiesscotland.gov.uk

www.boreastech.com