How to improve your address data

Hints and tips from fellow Authority Address Custodians

Introduction

The Authority Address Updates Improvement Schedule is designed to provide a mechanism for each Contributing Authority to plan improvement in their address data over a financial year.

The scheme is designed to support authorities in terms of identifying areas of need and also aims to continuously improve the overall basic quality of the national gazetteers.

In order to help communicate the continuous improvement "standard" of a gazetteer to those outside the immediate gazetteer community, for example, Heads of Service; Chief Executives etc, a scheme following an easily recognisable Gold; Silver; Bronze and Achieved National Standard structure was developed. Within each level, there are individual "targets" that a local address gazetteer works to. There are several elements to the overall Improvement Schedule. In 2012/13 these are:

- update frequency
- number of health check errors
- percentage of LLPG records linked to Council Tax records
- percentage of LLPG records linked to non-domestic rates
- percentage of Basic Land and Property Units with correct representative point code
- classification completeness
- NSG/NLPG street comparison
- plus an indicator measuring percentage of LLPG records linked to PAF

This paper gathers views and experiences together from a number of local authorities who have achieved gold level for their gazetteer. The comments presented in this paper are not exhaustive but have been gathered to help share good practice with other authorities who are keen to work towards a higher level of improvement with their gazetteer.

While having a gold gazetteer is a real sign of achievement, and often a sign of very hard work, as can be seen in this paper, it is important to note that being gold is not intended to mean that the local gazetteer is of superior quality. Rather the gazetteer has met with certain key levels of improvement identified as important. Several authorities who were interviewed felt this is an important point to make.

Five authorities have shared their experiences as part of this research, and GeoPlace are very grateful. These are: Leeds City Council; Cannock Chase Council; South Gloucestershire Council; Derbyshire Dales District Council and Borough of Poole Council.

What led to the change?

Many of the authorities reported that a restructure or another form of major change lead to improvements in their data.

One authority, Cannock Chase, found that becoming a shared service with Stafford Borough Council in 2011 provided the impetus to improve their data. This was aided by an additional member of staff from Stafford but prior to that, the authority had been hampered by low resourcing.

Similarly in South Gloucestershire, a restructure lead to the promotion of the Deputy Authority Address Custodian to Authority Address Custodian which in turn gave them a much deeper understanding of the work and in particular, greater awareness of the purpose of Improvement Schedules.

In the Borough of Poole, following the departure of one member of the team, another member gained a promotion to the Authority Address Custodian role. However all three members of the team do share various aspects of the role. In addition to the day to day data work, the Custodian also carries out a great deal of championing work to promote the gazetteer, and being gold assists this greatly.

How authorities got to gold

Update frequency

Update frequency wasn't an issue shared by those interviewed. Part of this achievement, to daily update, relies on having good processes in place to ensure data is supplied even if the main point of contact is on leave or sick. This could include automating software to produce daily updates plus also putting routines in place to have these sent by FTP automatically.

Health check errors

One authority, Cannock Chase, found that a combination of sifting and prioritising health check anomalies helped address the issue. At one point, the authority had a list of 1900 errors to fix. They reduced this number to just five errors, within eight weeks by;

- knowing what the errors were and where the errors were – this was explored by putting filters on the system to filter out types of errors
- they then went through group by group – fixing the errors
- they submitting data to the hub every day to reduce the number of errors overall

To monitor this on an on-going basis, the team created a second spread sheet which kept a log of all the records they have and any errors they have. This assists in targeting the next batch of work as well as keeping an eye on the bigger picture. Having this separate database outside the GMS to report on the data is really useful for checking and viewing data easily against other datasets. This negates the tasks of having multiple spread sheets for each query.

Additionally, GeoPlace can provide a lot of assistance in producing batch updates that can be applied to software to update multiple records where the same issue occurs.

LLPG link to Council Tax

To monitor and make amendments to this measure, Cannock Chase found it useful to request weekly supplies of data from the Council Tax department so they could keep on top of the links between the two sources. In addition, they request notifications from the Housing department of properties becoming vacant. This then means that the record is not closed as it may no longer appear on the council tax list, but they can change the BLPU State.

Additionally, Leeds stress the value of the weekly schedule of changes that can be downloaded from the Valuation Office Agency (VOA) website (with a username and password obtained from your council tax or non domestic rates teams). This reduces your reliance on the teams to provide the updates.

Leeds and other councils in the Yorkshire region have explored opportunities for improved communication directly with the VOA. This includes the ability to email the VOA for assistance given on providing maps / plans or coordinates. Leeds assert that each region could work together to identify who their VOA officer is and look to engage with them on what could be done to improve communication in their region.

LLPG link to Non-Domestic Rates

Non-Domestic Rates have been a challenge for a number of authorities. Often the issues are with one or two properties where it wasn't clear about the status or detail. Tips to fix these issues include:

- there is a thread in the Knowledge Hub about telecommunications masts[1] which was very useful to help address some of these "sticky issues"
- good relationships with the revenues and benefits teams can really assist. Colleagues from the team can often quickly verify the addresses. Request read only access to their systems to save taking up staff time. Their records often contain history and notes which can crucial to help with sticky records.
- keep in contact with your street naming and numbering officer who, like the revenues and benefits team, may be able to highlight historical records or notes that would help resolve an issue
- where possible, site visits to industrial estates can help resolve batches of issues. One authority, Cannock Chase, did this in key problem areas and spoke with those occupying the buildings as well as walking the areas to resolve issues.

Arrange for a regular supply of information from the business rate team so new unmatched records can be captured straight away. This enables more control and faster input of new intelligence.

[1] http://bit.ly/VhMw3o   You must be logged into the Geographical and Spatial Information Group of the Knowledge Hub to access this page.

Percentage of Basic Land and Property Units (BLPU) with correct representative point code

Cannock Chase council resolved these issues by examining the data spatially, in order to correctly place the Representative Point Code (RPC). The example to the right shows how spatial analysis was used to confirm RPC values 1 and 2 are correct. In other words, that the BLPU's were not in roads or paths. This provides an excellent reality check for the data.
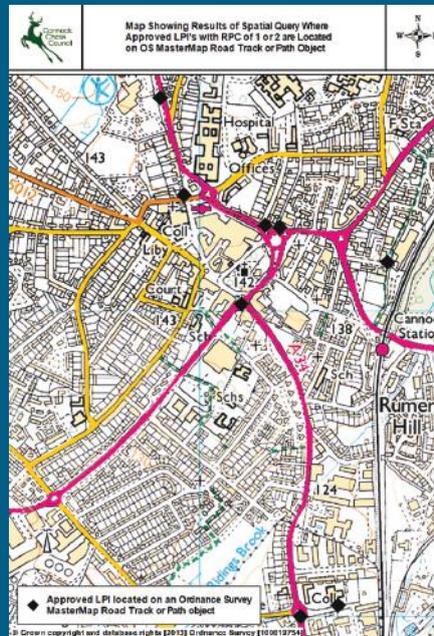
The Borough of Poole carried out a basic land and property unit capture project. They polygonised all 80,000 records and as part of this work naturally checked the RPC of all the records as they did this. A large part of the work was outsourced but all new records are now captured as polygons, because of the benefits to the council. Having good links with the planning department and therefore being able to view planning applications as they are submitted has greatly aided this work going forward also.

In Leeds, the team matched their point data with the OS MasterMap® TOID® feature descriptions (ie. building, road). This enabled the generation of a dataset of points that were located in an area of no features or were located in areas that were not classified as buildings by MasterMap. This helped correct a large proportion of errors and also assisted with fixing a number of accuracy errors caused by positional accuracy improvement.

Classification completeness

The benefit for good classifications is that they help reduce duplicate records, historic records, and help maintain accurate data.

This was a particular issue for one authority where primary classifications needed attention. To address the

Map Showing Results of Spatial Query Where Approved LPI's with RPC of 1 or 2 are Located on OS MasterMap Road Track or Path Object

◆ Approved LPI located on an Ordnance Survey MasterMap Road Track or Path object

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problem, the Authority Address Custodian queried the data to extract, in Microsoft Access, all unclassified records. They then used this list, plus their matches with Council Tax and non-domestic rates records to help define the primary classification. Further work is on-going to add secondary and tertiary classifications, and the same approach is helping enormously as is mapping to verify the work.

A general tip offered by Leeds was that for anyone with a low classification, there is little point in fixing this until there is a link to council tax and non-domestic rates records. Fixing these first gives grounding for classifications as the links can then be used to provide further intelligence about the records.

The Borough of Poole have weekly plans sent to them from the planning team. The Custodian and others in the team can then review new records and plans and add new intelligence this way. Working from the plans in this way greatly assists accurate classification recording.

NSG/NLPG street comparison

The benefit of good comparison reports are that it helps provide a joined-up service across local government and avoids inconsistency in the data.

There were a variety of tools and tricks used to address comparison errors:

- one authority has an arrangement whereby the county local street gazetteer is posted onto a FTP site so they can download it at any time
- a shape file (a GIS format) is used to show start and end points and to identify incorrect BLPU points – looking at things on a map has really helped to identify where these points are
- many of those interviewed stated that resolving the issues really were all down to co-operation. They worked from the monthly reports. The Authority Address Custodian would resolve the ones they could then others were passed to the Authority Street Custodian via email and visa versa
- one authority acknowledged that the Improvement Schedule did form the driver to resolve issues and encouraged co-operation between the county and district

The street comparison improvement caused the Borough of Poole the most problems, due to historical silos that existed between the council's data. Following a restructure, the Authority Street Custodian role moved into the same team as the address team. The data was also brought into the same software as the local address data which really enhanced the interoperability of the data to begin to cleanse and synchronise it. There are no short cuts to actually fixing the discrepancies, other than a great deal of hard work however the team did generally follow the local street gazetteer for street details and used this intelligence to update the address records.

LLPG link to PAF

In addition to the main measures, the Improvement Schedule also includes an indicator which highlights further work that can be done:

- one authority reported that the linking to PAF was very useful. Often looking for one property means the whole area is checked. The search for one business premise means the whole industrial estate gets a complete overhaul as everything is checked off between the local address gazetteer and non-domestic rates and PAF. As a result the data is improved

- another authority reported that they found the monthly updates for PAF more useful rather than the historical records. The newer records gave real new changes, that has been useful.

In one authority, the work helped greatly with two way engagement with other council departments. For example, it meant the team could show there was benefit for the other department with engaging with the process and sharing their address information because they received some new intelligence in return. One council found approximately 12 new properties from this work for their council tax.

Other general tips and tricks

Other general comments received about fixing errors and cleaning data:

- communication is key. Take small steps to building bridges and working closely with other departments really pays off over time and both sides can benefit from this through improved address data

- gradually adding in all relevant datasets and taking the application cross references with them was a valuable, iterative approach to take and ensured errors were avoided along the way. It also meant data could be cleansed as they were added

- when there are cross references in the local address gazetteer, it is simpler to take a cut of another dataset and compare it against the local address gazetteer to ensure the number of properties are linked. Similarly, comparisons can be made between the Electoral Role and Council Tax to ensure they have the same properties

- in another authority the Manager uses spreadsheets to monitor progress month after month. These show the Improvement Schedules each month over the last three years. This shows great vision to approach the issue by breaking it down

- every authority placed great value on having good relationships with the street naming and numbering officers. In more general terms, its valuable to have one central place for address data but if this isn't possible, having good links between them is valuable as it help residents know who to contact with any issues

- similarly, having good relationships with the revenues and benefits and non-domestic rates officers can also be an invaluable source of help

- more generally, having good communication links with all relevant areas, including Electoral Role, Housing, Council Tax and non-domestic rates all helps provide the support needed to maintain top quality information

- do things systematically. Use Access to query data if your local address gazetteer won't do it in the way you want

- using maps is useful to spatial check records

- use a dedicated email account for internal and external queries and issues to be reported to – that several people have access to

- edit the record in its entirety, don't just get it matched for the health checks or Improvement Schedule, edit it once so you have no need to return to it at a later date. Doing this reduced the warnings coming back from GeoPlace, which later turned into errors. As a result there are fewer to fix

- one council has a series of queries set up to identify mismatched data, new cross references and duplicate data, data that exists in the local address gazetteer and not in council tax or non-domestic rates and vice versa

- in evidence in the Borough of Poole, as well as many of the other authorities interviewed are the fact that the authorities have very robust processes in place to support the flows of data and exchange of information which is greatly aided by communication.

GeoPlace LLP

GeoPlace is a public sector limited liability partnership between the Local Government Association and Ordnance Survey.

GeoPlace's role is to create and maintain the National Address Gazetteer and the National Street Gazetteer for England and Wales, providing definitive sources of publicly-owned spatial address and street data. Through agreement with Scotland's Improvement Service Company, working on behalf of Scottish Government, coverage now includes Scotland.

The National Address Gazetteer managed by GeoPlace, is the data storage and internal set of processes bringing together the existing local authority sourced Addressing Datasets together with Ordnance Survey, Valuation Office Agency and Royal Mail data. Ordnance Survey develops the AddressBase range of products based on data provided by GeoPlace. As a separate process, the National Street Gazetteer is made available through GeoPlace.

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