Local Land and Property Gazetteers to the National Address Gazetteer

1.

2.

3.

AddressBase products are used in sectors including local and central government, emergency services, utilities and insurance.

Key uses include fraud detection, mobilising emergency services vehicles, asset management, risk management and analysis. Increasingly the data is being used in mobile and International applications.

In order to be successful in their work users need the data that is complete, accurate and nationally consistent.

4.

Compilation

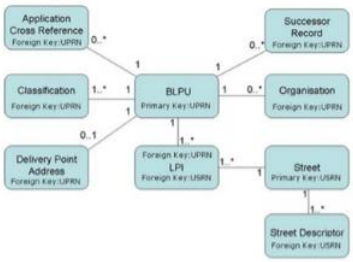
Every LLPG Custodian in England and Wales then provides data in a standardised format to the national hub at GeoPlace – as do all Scottish authorities via a Scottish hub maintained by ThinkWhere.

Ordnance Survey supply Objects Without Postal Addresses which derived from their MasterMap Topogrphy Layer data.

We centrally create PO Box records and - as an interim measure - unmatched commercial subdivisions, both based on Royal Mail PAF data.

We also source data for Northern Ireland, Jersey, Guernsey and the Isle of Man to provide the first and only UK spatial address dataset

5.



Structure

Upon receipt (and successful validation) of the data this is stored in GeoHub.

Every six weeks the database team then create a copy which is restructured into the formats of the AddressBase Products – AddressBase, AddressBase Plus and AddressBase Premium.

AddressBase and AddressBase Plus are "flattened" version of the data structure i.e. they have only one table.

AddressBase Premium is a relational structure. Creating this involves moving some LLPG data to new record types – namely the Organisation and Classification records based on the information in LLPG BLPU records.

6.

PAF link

Royal Mail PAF data is used widely – by over 37,000 users – as a key source of addresses for mailing purposes and as a trusted source of postcodes for front-office data capture processes. These include customer support, insurance policy applications and utility account management.

Upon receipt of the latest Royal Mail PAF data the GeoPlace data matching team link the Royal Mail data to your records using a range of automated algorithms and manual inspection techniques. Over 70% of new records are matched by the team within two days of receipt. The remainder are sent to you for resolution.

Where a link has been made the Royal Mail delivery point address, postcode and Unique Delivery Point Reference Number is incorporated into AddressBase Products (alongside your geographic address) allowing users to get the best of both worlds.

7.

Postcode Locator

In order to help users find addresses they need, and aggregate data using postal boundaries, AddressBase products provide information from three key sources of postcode data – Royal Mail, LLPG's and the Ordnance Survey's Code-Point with Polygons product.

From September 2015 an AddressBase_Postal field will be added to every record by the NAG Team and this will be one of the following codes:

Code	Notes
D	A BLPU record that is linked to PAF
N	Not a postal address
C	A BLPU record that is postal and has a Parent BLPU that is linked to PAF
L	A BLPU record that is postal and does not have a Parent BLPU that is linked to PAF (n.b. this may be because it doesn't have a parent UPRN or because its parent is not linked)

A BLPU will be considered postal if:

- It is PAF linked, and/or
- It has a Local Authority postal address flag of Y or A and it has a classification in the Definitely or Maybe Postal lists, and/or
- It has a classification in the Definitely Postal1 list

8.

Coordinates

If you supply a coordinate with an RPC of 3,5 or 9 and a "Final Surveyed" coordinate is available from AL2 we will incorporate the AL2 coordinate into product.

You can ensure your coordinate is used in AddressBase Products by placing it in the relevant BLPU extent and giving it an RPC of 1 or 2.

We also convert the source coordinate information into Latitude and Longitude using the ETRS89 coordinate reference system using the OSTN02 transformation.

This enables compliance to the INSPRE directive as well as use in web, mobile and international applications

9.

Ward and Parish

In order to help users locate records and aggregate data using electoral boundaries, AddressBase Products contain Ward and Parish Code fields.

From September 2015 for AddressBase Plus and AddressBase Premium from April 2016, the Ward and Parish fields will be populated using OS Boundary Line and a point in polygon query. If the point falls within more than one boundary, then the first alphabetically will be assigned. If the point is not within a ward or parish polygon, then this field will not be populated.

We also use the ward and parish information to derive a code to each record specifying which country the object is in, to help international users understand the data.

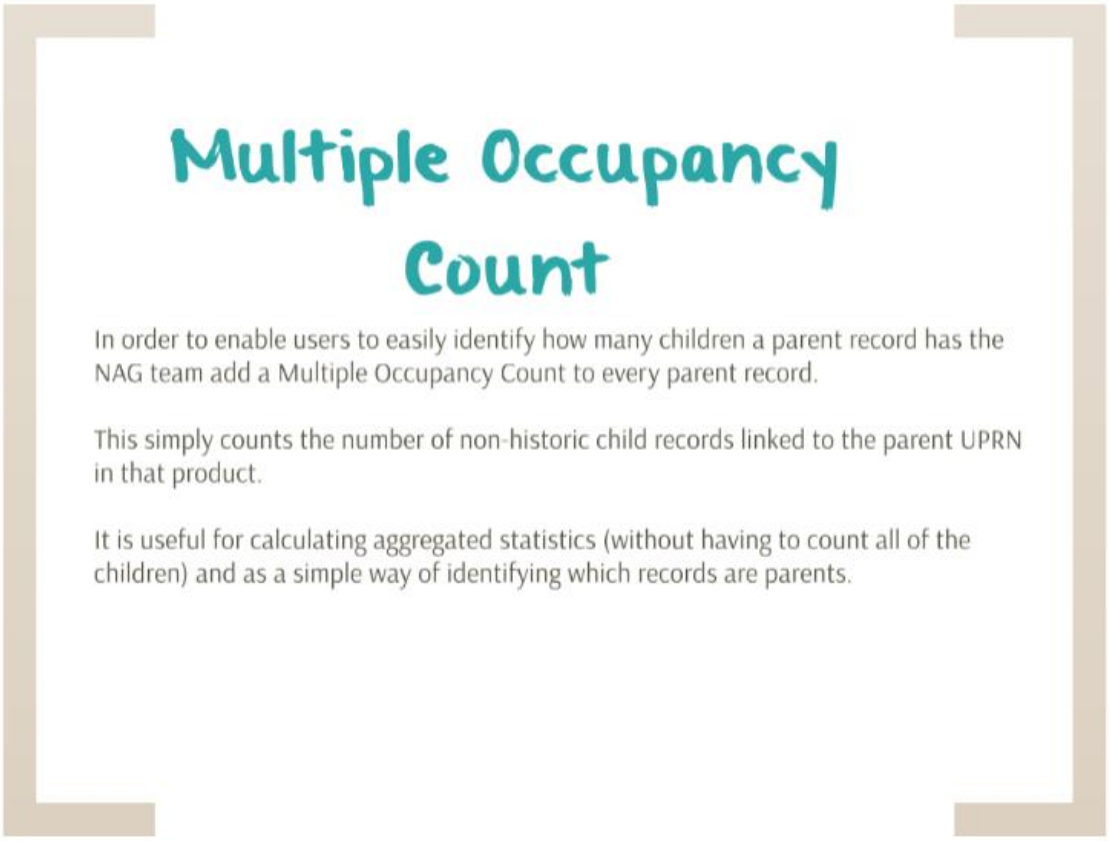
10.

AddressLayer 2

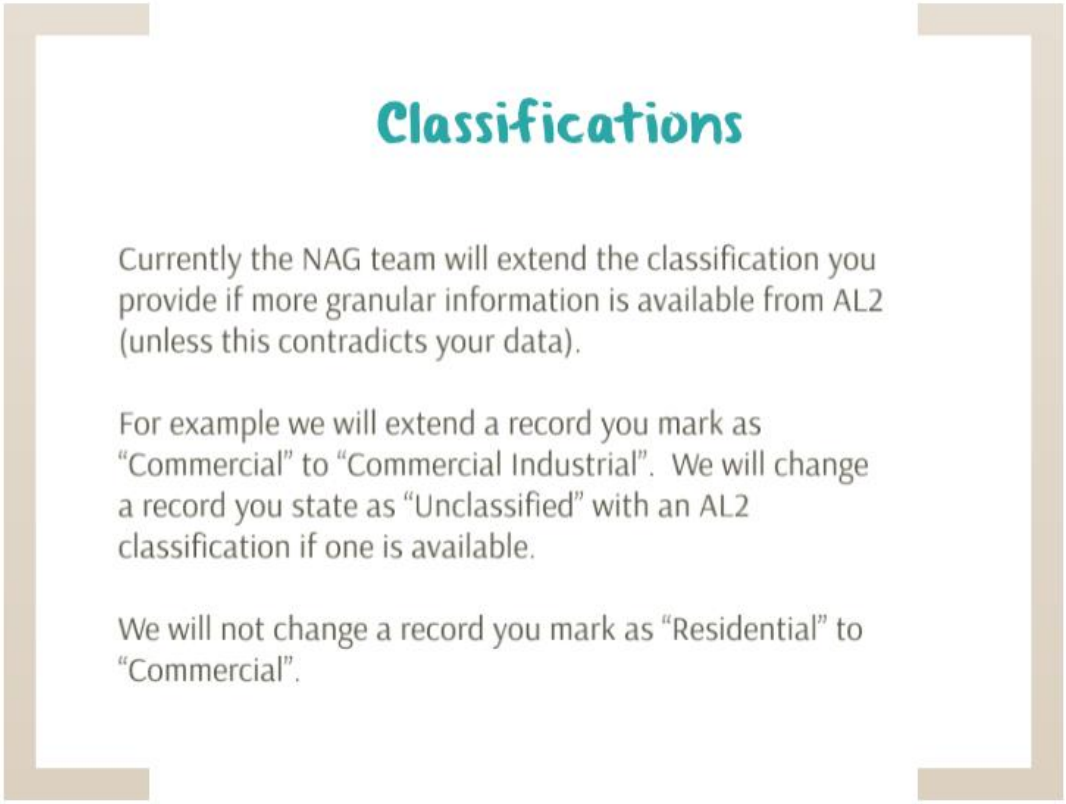
Where a match can be identified, GeoPlace have created a cross reference from the UPRN to Address TOID from Ordnance Survey's Address Layer 2 (AL2) product.

As AL2 is no longer maintained these cross references are no longer updated or added to. However they enable migration from AL2 to AddressBase and data sharing with legacy systems and so remain a feature.

11.


Multiple Occupancy Count
In order to enable users to easily identify how many children a parent record has the NAG team add a Multiple Occupancy Count to every parent record.
This simply counts the number of non-historic child records linked to the parent UPRN in that product.
It is useful for calculating aggregated statistics (without having to count all of the children) and as a simple way of identifying which records are parents.

12.


Classifications
Currently the NAG team will extend the classification you provide if more granular information is available from AL2 (unless this contradicts your data).
For example we will extend a record you mark as "Commercial" to "Commercial Industrial". We will change a record you state as "Unclassified" with an AL2 classification if one is available.
We will not change a record you mark as "Residential" to "Commercial".

13.

MasterMap topography layer

As AL2 contains a link to MasterMap Topography Layer the NAG Team can link your record to the surveyed data. When we do so we will create a UPRN to OS Topography TOID cross reference.

This allows us to verify your coordinate against the map.

Using advanced spatial analysis capability the NAG team identify any records where the NLPG/OSG coordinate isn't in "in the building" as defined in MasterMap and the NLPG Team report these back to you for local resolution.

This aids consistency and accuracy of results for users whose supply area covers multiple LLPGs for example in mobilising and service delivery planning and flood analysis.

14.

In order to use the gazetteer in conjunction with a routing network the NAG Team create a cross reference to Ordnance Survey's MasterMap ITN Layer product.

This enables users such as emergency services to locate a property using AddressBase products and route to them using ITN, as well as performing drive time analysis to ensure the optimal level of fire risk cover for their area.

Integrated Transport Network

15.

Valuation Office Agency

Benefiting from the long-standing LLPG-VOA Council Tax and NDR matching exercise the NAG team create a centrally maintained cross reference record to these datasets (where a link has been identified by GeoPlace or you).

In addition the Primary Description and Special Category from the VOA NDR data are supplied within AddressBase Plus and AddressBase Premium.

16.

Official Flag

The Official Flag data you supply is simplified for users.

The rules for this are to be confirmed however where an LPI is flagged as an Official Address, this is carried through to the National Address Gazetteer and AddressBase products

The following rule is applied when populating the Official Flag field:
IF NLPG OFFICIAL_FLAG is R or C then this shall be blank, else it shall be the NLPG OFFICIAL_FLAG. This is because the other codes are for internal LLPG use only.

17.

All of these additional elements mean that the record may be inserted, updated or deleted in an AddressBase product, even though it has not been inserted, updated or deleted in the source data (or vice versa).

In order to provide lifecycle dates to users which reflect the data they use we record the start, entry, end and last update dates of the AddressBase data as well as those for the source data. The AddressBase dates are provided to users.

18.

Not used

Some fields are not required by users and so are not incorporated into AddressBase products, although they are stored in the NAG hub and may be used by NAG production rules.

These include:

Locally generated Ward and Parish records

Locally generated cross references

Locally created Post Towns and Postal Address fields

19.


National Address Gazetteer
All these elements collectively create the National Address Gazetteer which is used increasingly by the public and private sectors in the form of the AddressBase range of products

20.