

## **Local Government Open Data Breakthrough Projects Evaluation Report**

### **Project title: Linked Open Data Planning Register**

#### **Lead organisations:**

Hampshire County Council  
Rushmoor Borough Council

#### **Technical Partners:**

Local eGovernment Standards Body  
mySociety  
Swirrl

#### **Submission date: February 2015**

#### **Type of project: Data Standards and Data Publication**

#### **Total grant:**

£50000 (*Phase 1 £30000 (2013/14), Phase 2 £20000 (2014/15)*)

#### **Summary of the project**

The Hampshire Hub partnership was awarded funding from the Department for Business Innovation and Skills in June 2013 to produce a linked and open version of planning authority's public registers. Included in the project was the development of a national standard and schema for planning application data. The work informed the Local Open Data Incentive Scheme for planning application data in association with the Local Government Association.

The project has been managed by the Hampshire Hub project team; the Hub being a collection of 21 partner organisations working together to create a local information system and network for improved decision making in Hampshire through the availability of a single evidence base.

The project was split into three main areas of work;

1. development of data standards,
2. collation and publication of data into a linked format
3. the visualisation of the data to produce a 'tool' that helped the public better understand and engage with planning data.

With 15 planning authorities inside the boundary of Hampshire, and the potential resource required to extract data from planning systems, the decision was made to start the project with a minimum of three contributing authorities; this was considered enough to demonstrate the collation, transformation and publication of disparate datasets.

Through a procurement process mySociety were awarded the contract to build data visualisations and tools on top of the planning data held in the Hampshire Hub, delivered by Swirrl using their Publish My Data Platform.

#### **Challenge/opportunity:**

Planning is the responsibility of all local authorities. However, no joined-up approach for publishing planning data exists.

Authorities use different planning systems and even where the same system is used, local authorities have used their own codes and methods to capture data as planning applications are processed. This project would allow for data produced by any of the main suppliers systems to be converted into a reusable and scalable linked data product.

Some work had been done previously to try to ensure standards are available for planning data, such as the London Development Database and Terraquest's work in Hampshire with Hampshire and Isle of Wight Local Authorities (HIOWLA). However, much of the time this work still required some reliance on the data provider (the planning authority). This project looked to remove this reliance and ensure that there is minimal impact on already pressured resources.

By collating data from planning registers into one place the community will become better informed about existing and future planning developments as well as providing valuable economic information to companies working in the construction and development market.

The ability for users to be able to use traditional search methods to find planning applications online, but more specifically using a visual approach to find data is an opportunity that offers much to the community.

#### **Data published and uses:**

- Hampshire recognised the need to engage with technically skilled people from the start of the project; it is for this reason that when developing the schema for the planning register (and latterly the Local Open Data Planning Application Incentive Scheme) that the Local Authorities, the Local eGovernment Standards Body, DCLG and the Planning Advisory Service and the LGA (through esd) were included in discussions.
- Despite the availability of a schema to produce data against, the complexity of extracting the data has proved not as easy as hoped for authorities. The impact on time and resource has put some authorities off from publishing standardised planning applications, even with the availability of the incentive scheme. To date those of the Hampshire authorities, who have published data to the schema are Rushmoor, New Forest District Council and Hampshire County Council. Despite this project being considered complete, the Hampshire Hub team will continue to work with authorities to try to acquire the data, helping them where possible. The team are looking to work with [Nquiring Minds](#), based in Southampton, to develop dynamic extracts from planning systems where possible.
- The data published has subsequently been analysed, processed and visualised by mySociety through an open source product available via [GitHub](#).

#### **Approach to publishing data**

- Planning authorities are already required to publish planning data, be it on their planning register, for those wishing to see in hardcopy at council offices, or through their websites. By taking an electronic format of this data, usually csv, the data is processed and transformed into a linked data format, RDF, and hosted on the Publish My Data platform.
- Metadata is provided alongside the data itself. It provides more detail about publication date, publisher, frequency of update/last updated etc. As part of the

Incentive Scheme authorities are required to also publish a link to their data from [www.data.gov.uk](http://www.data.gov.uk). Once the data is hosted promotion of it is done through the existing Hampshire Hub network and its partners and through the linked data community

- The application developed as part of this project is demonstrating what is possible using planning data, more open ways of working, for example open source tools and the GitHub platform, and exploitation of a relatively new data format such as linked RDF.
- All of this work has been performed in the open, on the code collaboration platform Github. A defacto standard in open-source software development, this makes not only the code, but the history of development, bug tracking and proposed features available for anyone to view and contribute to.
- In addition to the data being made available, open source products were used to deliver the output for this project. Using Github the code for the data visualisations is made available for others to pick up, work with and improve where applicable. The data visualisations work expanded the code made available by Planning Alerts Australia, who themselves took inspiration from work previously done in the UK.
- Planning Alerts is a web application called [Ruby on Rails](#), which provides functionality to store planning applications from multiple authorities and alert interested parties about them. The project used this tool to add the ability to view planning alerts on a map, to search them, and to automatically categorise them based on their descriptions. Also available is the ability to see an application's status, key dates in the decision making process, and statistics for planning authorities as a whole; all things relevant and important to the end user.

## **Benefits and impact**

Planning is key to future economic growth in the UK. By publishing data in an open/linked format the ability for the community to identify areas where planning is occurring, or could be in the future, will help further encourage applications and development.

Economic value can be found in planning data; Local Enterprise Partnerships (LEP) are looking to use planning as a means to help with local economic growth by identifying potential areas of expansion and investment. In Hampshire (and Surrey) the Enterprise M3 LEP is bringing the private and public sectors together to create an improved planning experience by developing and implementing a new [charter](#).

Innovations can also be made through linking Hampshire planning data to existing linked data projects such as [Hampshire's Land Supply](#) (currently being updated with new data) and DCLG's [Open Communities](#) data. Opportunity to further develop the tool through innovative applications could include the linking to Environment Agency Licensing Data, the Planning Inspectorates Appeal register, Land Registry and the Homes and Communities Agency.

The data visualisation element of this project demonstrates what is achievable using open data as its source. Not only has data been made easier to find, interpret and analyse but the output of a product that can be scaled and transferred to other authorities around the country or for pick up by open source developers can only be considered positively.

## **Further information:**

Updates relating to this project will be published through the [Hampshire Hub](#) as they occur

The planning data is published at

<http://data.hampshirehub.net/def/concept/folders/themes/planning-applications>

The beta version of the tool/application at

<http://hampshire-planning.staging.mysociety.org/>

GitHub Links

<https://github.com/mysociety/planningalerts-app/>

[Planning application schema as part of local open data](#)

# Appendix 1

## Method:

### *Standards:*

When creating the standard schema for this project it was recognised early on that the production of a national schema was a more sensible approach; if Hampshire could create a reference schema that was not Hampshire specific it would prove much greater worth in the long run.

Working with the districts the project team established a list of fields that are already published under planning registers. However, to add value to the project the team also tried to identify fields that would be of further interest to people exploring the data; specifically fields that could better inform the type of development happening in what areas (for economic value). As well as contact with local authorities the team spoke with Openly Local to look at what they had been publishing under their Planning Alerts project.

Through comparing the different lists the team established a common set of fields that were being published or could be added to be useful for future proofing the project. This list was then presented to the Local eGovernment Standards Body (LeGSB) to help the project team develop models and standards; LeGSB applied a number of methodologies, including their Smart City's concept model to the data to help better understand how the data worked and how a schema would fit it. The Smart City Concept Model ([www.smartcityconceptmodel.com](http://www.smartcityconceptmodel.com)) is being developed for BIS via the BSI PAS process. Aligning the list of fields to the model drew out that we have information about, CASEs, PLACEs, ORGANISATIONS, DECISIONs, SERVICEs, and that our 5\* data would have the potential to link to, otherwise unrelated, sources of information, and become a part of a wider data ecosystem.

Once the initial schema had been established the team began to work with the LGA and ESD to develop a schema that could be used in the local open data incentive scheme (at the time) looking at the publication of planning data in an open format; alongside similar schemes for licensing and public conveniences. By devising a csv schema

- the LGA's incentive scheme can be used to encourage all Planning Authorities to publish their data in a common form, using consistent codes and terms.
- Hampshire developed a 'staging format' that could be used by any council to go further and publish the data as 5\* linked data using the ontology that our project is developing.

The aim has been to provide a consistent view of planning applications across the county, irrespective of the source of the data. The lack of common vocabulary across any of the contributing councils became a major barrier and required more energy to resolve than we originally expected. We needed to agree a simple set of terms for fields including

- Application Type
- Decision
- Development Category

In resolving these terms, we agreed some principles which we would commend to other councils working in the breakthrough programme.

- locally devised codes are unlikely to be taken up nationally;
- councils are more likely to use existing codes and classifications than a new list; particularly where they are already required to complete returns;
- the national policy owner for the data topic should be engaged to define and publish a set of terms;
  - In our case, we worked with DCLG and the Planning Advisory Service to agree a set of terms for each list.
- lists should be considered to be either volatile, or non-volatile.
  - volatile – a list that might change in the future, e.g. from year to year.
  - non-volatile – where the list is unlikely to change and where the terms need no further explanation.
- lists should be published as URIs where either:
  - they are volatile;
  - they are part of a longer list that is used elsewhere;
  - more useful information can be given when looked-up.
- Where lists are published as URIs, they should use a nationally credible domain, rather than a single council's domain.
  - In our case, we published the lists via [esd.org.uk](http://esd.org.uk) and [opendatacommunities.org](http://opendatacommunities.org)

## Issues and solutions

### *Ordnance Survey IPR*

Planning data always has a spatial element, be it the area a policy relates to or in this case the boundary/location of an application. The majority of authorities that capture the boundary or point location of their applications do so against an Ordnance Survey product. In doing this, the application contains Intellectual Property Rights (IPR) that belong to Ordnance Survey. It is therefore not within the authorities permission at the moment to publish the data in an open format; in the case of this project this refers to the easting/northing of the centroid of the application boundary. Recognising the importance of publishing this data Hampshire applied to the OS for exemption from the IPR for the publication of their data and any data relating to this project being published through the Publish My Data platform; the application was refused. The team have subsequently worked with OS to come up with a solution for the data publication; using an extended developer licence anyone can use the data in an 'open' way for a given period of time (December 2015) at which point if there has been development based upon the data then the developer and OS will enter into their own licensing agreement.

Despite a workaround being found for this project Hampshire believe that the data should be available in an open format as it offers the best possibility for data exploitation and opportunity to continue the aims of the project for improvement in social engagement and driving forward Hampshire's economy.

**February Update** – Despite Ordnance Survey and BIS announcing increased flexibility in open data publication, including the [Presumption to Publish](#) planning data is still considered to need a full exemption to be permitted before the data can be released – HCC and the Hub partners continue to work with Ordnance Survey to a positive conclusion.

### *Local data 'mapping'*

In creating a national standard for planning data it was hoped that the process for data publication would be made easier. In a manner, by serving up reference datasets, the project has achieved this, however the amount of local variation that the team have found amongst planning authorities has been an issue.

Despite the planning acts being responsible, legally, for all planning matters, the way in which applications are classified and categorised is less stringently monitored and no standard was ever created for how planning authorities should record their data in their planning systems. This has caused issues with the project as the team, originally, had wanted to impact as minimally on the partner authorities as possible. The idea being that the output from planning systems could easily be mapped by the team and the technical partner to the standards, this however has not proven to be the case. Increasingly the team have had to ask the partner authorities to run and re-run, their reports to try and get a dataset that matches the standard and from there be imported/transformed into the Publish My Data platform. In some instances the team were successful, however with the amount of local variation it was required to speak to the authority in question to obtain their input and to 'map' their data against the standardised lists.

As the local open data incentive scheme has come on board and there is monetary value in authorities delivering the data in an open format against the standards the progress has improved.

#### *Standards omissions*

As the project progressed it became clear that the standards that had been developed did not quite meet all the requirements. Thankfully what had been created was accurate, but there was need to add to the lists to ensure more/all data could be allocated to a value. Working with LeGSB, LGA/ESD Team and DCLG again the team were able to accommodate the work and more URI served up for districts to map to.

#### *Planning data and open data complexities*

Data about planning applications has further publishing challenges than the typical approach to open data so far. Data such as 'payments for goods and services' can be published as a set of transactions in a batch, on a regular basis. However, the audience for planning applications data is likely to want more than a statistical set of historical data; they are likely to want to query up-to-date data, for instance, so that it can be shown on a local web site, or linked to local online debate. The 'linked data' approach can work well for this requirement, as it does not require the consumers to continually re-download a fresh set of data.