

# Case Study

## BRINGING LOCATION TO LIFE

### Using location data and technology of today to reveal the secrets of the past...



## CESHIRE TITHE MAPS ONLINE

### THE CHALLENGE

Cheshire West, Chester Council, and Cheshire East Council operate an Archives Shared Service. The councils wanted to renew their ageing Cheshire Tithe Maps Online application. A refresh would bring the service up-to-date, with contemporary mapping technology and improved functionality, so that the unique information within tithe maps could be used by people with a Cheshire connection everywhere, enabling them to trace the history of a property.

If a building was built before c1850, then tithe maps are an invaluable source of information. They usually offer the earliest reliable large scale map of an area, and identify each building in a town at that time.

The outline shape of the house at the time of the map can be seen and, by linking the map to the tithe apportionment, it is possible to see who owned and who occupied the property and how the land was being used in the mid Nineteenth century.

The existing website was the only one of its kind, and the original application could not be used on smartphones or tablets. It was providing tithe information and map backgrounds using technology that was no longer supported.

The application also excluded an ability to search and navigate to modern places, streets or buildings - and users were expecting to find a place of interest, but couldn't.

### THE SOLUTION

A solution was developed using open source GIS software, while the new tithe maps application was developed by the shared service staff within Cheshire East ICT.

The new, modern mapping interface works on desktops, tablets and mobile devices. The user interface was enhanced from a twin map design to use a map swipe control that lets users more easily compare old and new maps. Ownership and land use information for individual plots is obtained by clicking or touching on an area of interest.



To let users easily locate a place or building of interest, a general search box was included that sends a single request to run a query on spatial datasets:

- Building Names - queries a custom in-house address gazetteer based on the Land and Property Gazetteer (LPG).
- Organisation Names - performs a query on a custom in-house address gazetteer.
- Highways Network - returns results for searches on road names or numbers using the Local Street Gazetteer (LSG).
- OS CodePoint - searches for all postcodes within Cheshire.
- OS Open Names - returns the locations of populated place names (Town, Village, Hamlet).

The service responds with a list of matches, from which the user then chooses a location to examine in closer detail.

## THE RESULTS

In an easy-to-use interface, Cheshire Tithe Maps Online now presents 19th century maps that were drawn up by government to record land ownership, occupancy, land use and the tithe rent charge payable on each plot of land in the county.

The new version of the application is allowing people across the globe to discover the history of any Cheshire property or the area in which their property is located.

By making such a large quantity of historic data available, anyone can examine these insightful, valuable documents. They are an amazing resource for teaching, family and local history and academic research. They are also used by rights of way researchers, highways researchers, archaeologists and walking groups.

The online resource also delivers efficiency benefits for Cheshire Archives and Local Studies. It lets staff answer questions from members of the public much more quickly and, in many cases, it also means people can answer their own questions without having to get in touch with staff or having to travel to Chester to consult the original records within the local archives office.

In addition, an important benefit of the project is the long term preservation of the unique and irreplaceable maps which no longer need to be consulted but which Cheshire Archives and Local Studies still has a duty to retain as the original record.



*By enhancing the user interface and including a modern location search feature, Cheshire Tithe Maps Online has seen an increase of average daily internet usage from 80 to 150 individual user sessions...*

# We are GeoPlace

## Bringing location to life

We are GeoPlace, the team managing a central hub of around 44 million addresses and over 1.39 million streets in the UK.

We take feeds of address and street data from local authorities in England and Wales, central government, Ordnance Survey and Royal Mail. We also take data from Scotland, Northern Ireland, Isle of Man and the Channel Islands via the Improvement Service, Land & Property Services, Isle of Man Government and Digimap respectively.

This data goes through a rigorous validation process, which includes 364 Address data checks and 550 Street data checks, before being accepted into the National Street Gazetteer and National Address Gazetteer.

Overall, we update around 2 million records every month. The information in our database is also enriched with attributes from other datasets to enhance detail and quality - it's an ongoing process of co-operation and collaboration.

The end result is a unified, authoritative source for all addressing and street data in the UK.

Our Gazetteers are prized and respected national assets. They make it easier for central and local government, commerce, organisations and individuals to access Unique Property Reference Numbers (UPRNs) and Unique Street Reference Numbers (USRNs) with confidence.



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



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