Using unique property references for effective asset management in Conwy

Conwy Borough Council is using Unique Street Reference Numbers (USRN) to keep its asset management system up to date & help public services run more efficiently.

Challenge

To improve its operations and services, Conwy Borough Council wanted to develop a more efficient system to manage and monitor its assets, in particular its street lighting inventory which had more than 20,000 units with incomplete and inaccurate locations. In addition to ensuring this was as up to date and robust as possible, it also required a more efficient fault reporting and tracking process for both its staff and the public.



Efficient asset management requires both accurate geospatial information and technological implementation to maximise service delivery. The aim of the new customer service portal was to improve the overall customer experience, whilst creating efficiencies that would maximise the use of technology and make data more accessible and transparent to the general public.

Solution

The existing Street Lighting Inventory data was imported into their asset management system and a spatial analysis was carried out. This enabled Conwy to allocate each asset to the nearest Street and USRN in the Local Street Gazetteer (LSG), however, due to the poor quality of the street lighting data and inventory, a large data cleansing project was also undertaken. Assets were checked and reviewed, ensuring that every street light location was referenced to the correct USRN. Mobile technology was also introduced in the form of tablets, enabling all jobs, inspections and service requests to be recorded and completed out in the field.

The product of the inventory and analysis was a new customer service portal. The portal is a simple, userfriendly web interface that can be accessed online, via PC, mobile or tablet. Clicking on an asset brings up a simple form for users to submit a report and upload photos. The submitted report then filters straight into the Asset Management System, where it is allocated to a supervisor who creates a job, which is then issued directly to an electrician's tablet for completion.

Users can choose which asset they want to display: street lights, lit signs or lit bollards. All assets are displayed on a map and categorised by their current status (Green-Working, Red- Fault Reported, Amber-Works Issued). Through the gazetteer-based search filter users can also zoom to street, postcode or CS Reference Number to accurately view and record a fault. If using a mobile device, users can also use the GPS Button to zoom into its current location on the map, which displays the number of assets in the selected range that recalculates upon zooming in on different areas.

Benefits

Provides accurate, current information to help public services to run more efficiently.

By consistently defining, referencing and linking local assets using their USRN through a BS 7666

accredited Gazetteer, the LSG is vital for Conwy's Asset Management System and Highways Operations. Together with the implementation of mobile technology for its electricians and a user-friendly customer portal for reporting faults, the Council has created a complete solution that improves service delivery, efficiency and communication.

Councillors have expressed their appreciation of the system, in particular the transparency the portal represents, facilitating a two-way communication when dealing with energy suppliers and third parties.

Enables quick and easy location of assets for timely investigations and resolution in the field

Equipping electricians with mobile technology has enabled all jobs, inspections and service requests to be recorded on tablet and completed out in the field. This has allowed Conwy to capture all aspects of the street lighting assets' lifecycle in its entirety, including the plant, labour and material elements of every job undertaken.

Previously, reports and faults were reported manually via a paper works ticket or verbal instruction, creating a slow and inefficient process. In addition, electricians were reliant on narrative descriptions of fault locations provided over email or phone, leading to frequent miscommunication of incorrect information or location.

As a result of the portal, Conwy has seen the percentage of street lamp failures repaired within five calendar days rise to 89.94%. Its KPI for the average number of calendar days taken to repair street lamp failures during the year also showed a significant improvement from 4.75 days in 2014-15 to 2.56 days in 2017-18.

Enables online reporting of faults and greater transparency in tracking their progress

A major benefit of this solution is the transparency and ease of reporting. Previously there were no efficient means of updating customers, or a reporting mechanism to monitor and track the progress of reports and faults. Customers are now able to immediately report and record faults using a user-friendly web interface accessible online via PC, mobile or tablet. The Customer Portal enables users to select the online location of specific faulty street lights, meaning that accurate information is recorded instantly. They are also able to view the current status of a streetlamp and see whether a fault has already been reported online.

At every key stage of the requests' lifecycle, the customer remains informed and updated throughout. Upon logging the report, the customer receives an automated confirmation email and will continue to receive updates on progress through to completion. When the electrician completes the job allocated on their tablet, this automatically sends an email to the customer advising them that works have been completed.

Between November 2017 and November 2018, 30% of the 11,676 reports relating to street lighting received by Conwy were recorded using the online portal. This process can only be achieved by accurate and unambiguous geospatial referencing using the LSG.

Geoplace's case study can be viewed here



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For more examples of how geography and geospatial data unlock value, <u>visit the RGS-IBG website</u>