COUNCILS: THE NEW INVESTORS?

Why councils are steadily emerging as the 'new investor class'

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THE SOCIAL VALUE ACT

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IT & technology

Harnessing
the power of GIS

There's no doubt that authority-wide digital transformation programmes have dominated the headlines this year, often achieving multi-million pound savings and changing the very face of council departments. However, sometimes it's the seemingly simple innovations that are transforming services in the wake of challenging financial times.

Geographic information system (GIS) mapping has been used by local government for a number of years in areas such as planning and customer services. However, Norfolk County Council decided to explore how GIS could be used to improve and reduce the cost of its school transport services for children with Special Educational Needs (SEN).

Being a rural county, the cost of transporting children to school is extremely high, with the council spending around £10m a year on taxis and mini buses. As part of a bid to meet cost-saving targets of £500,000 this year, the use of GIS was a good way to identify where savings could be made.

The Schools Travel Application was created for the council by Esri UK to help display all information on one map. At the click of a button, staff can now see where each pupil with a SEN lives, how they get to school, if they travel alone and what this costs the council. This enables the council to find out if pupils could share their journey with other children, or if there is a suitable school closer to where they live.

Tim Hudson, information exploitation team manager at Norfolk County Council, explains: 'The mapping application is powered by a data warehouse that extracts pupil, establishment, contract and travel information from the line of business system and is visualised using a web application developed using Esri UK's Arc GIS JavaScript API and a reporting dashboard.

'The regular extraction of data ensures the team always has the most up-to-date information available, thereby adding evidence-based intelligence to their decision-making. The other essential ingredient in the successful development of this application was the enthusiasm and effective sponsorship from the council's travel and transport team.

'We [the information exploitation team] have a strong track record of developing effective business-focused applications especially within the world of GIS. The data warehouse, also developed by the team, is now presenting us with new opportunities to join data from multiple line of business systems and therefore add greater value and intelligence to our products. This is a big step forward for the team and for the county council.'

Although the exact level of savings for this year have yet to be confirmed, the council is confident the new system will contribute 'significantly' to its £500,000 target. The council also hopes the system will have other uses in the future such as helping to decide where new specialist schools should be built.

'Innovative local authorities like Norfolk County Council are using GIS to introduce mapping applications that can support areas of the business where GIS is not traditionally used,' said Paul Clarke, head of government at Esri UK. 'An increasing number of business functions across the sector are starting to benefit from digital transformation via GIS and it has the flexibility to support many more. Not only internally to help drive decision-making and introduce more efficient processes but to help improve public-facing services too.

'New web maps are helping councils make the power of mapping available to staff right across their organisation, revealing new insights and making staff's jobs easier and more effective.' ∎

Laura Sharman finds out how Norfolk County Council is using a geographic information system to improve its school transport services.

GIS mapping for school transport