

NEW HORIZONS FOR WARRINGTON

Warrington Borough Council has adopted Yotta's Horizons asset management platform to bolster its 'invest to save' approach to highways maintenance.

Rachel Corfield looks at the whys and wherefores

Image © Sergey Nivens / Shutterstock

Warrington Borough Council's (WBC) highway infrastructure assets consist of approximately 1,137 km of roads and are valued at approximately £744 million. The Council is currently investing more in preventative maintenance in order to maintain the highway network in a safe condition.

To this end, WBC has implemented Yotta's Horizons visualised asset management software platform to make the business case for prudential borrowing and to invest in infrastructure on a partial 'invest to save' basis.

An evolving relationship

WBC has built a long-standing relationship with Yotta founded on trust. The company, based in Leamington Spa, was initially engaged to run a series of surveys for WBC to gather key data on the condition of roads and footways across the borough as well as helping to document the Council's record of reactive maintenance. These included SCANNER (Surface Condition Assessment of the National Network of Roads), CVI (Coarse Visual Inspection) and FNS (Footway Network Survey) inspections.

Successfully achieved, this objective generated robust data that could be relied upon as the basis for maintenance decisions as well as for strategic asset management planning. Once generated, the next step was to interpret all this rich data and produce forward plans for maintenance works programmes.

As Jim Turton, Engineering and Flood Risk Manager, WBC, explains: "Yotta has undertaken a strong programme of development over recent years and Horizons has been a key focus of that. We

needed a solution capable of analysing a wide range of data, not only traditional UK PMS intelligence but also data relating to maintenance, accidents and public complaints. Over time, it became clear that Horizons was the only solution able to integrate and analyse all of that data for us in one place.

"Another critical factor in clinching the deal was the solution's user-friendliness," he adds. "Horizons is an intuitive system. My team can quickly access the data to check and identify road and footway condition whenever necessary. Data can be accessed at different levels including network, local area or individual road and footway. It's much quicker and simpler than any other system we have tried in terms of identifying the data we need, and then using it to deliver enhanced operational and strategic insight."

Borrowing bid success

One of the first projects on which Horizons was deployed was the Council's bid for extra government funding. For WBC, the key here was to use the software to clearly demonstrate how much this could save by enhancing its future management of the highways network.

By investing in preventative maintenance and reducing the spend on reactive works such as pothole repairs, WBC aims to cut the cost to the local economy of road traffic collisions and, in doing so, make significant savings. Yotta worked closely with WBC to produce an initial appraisal of the Future Highway Funding Strategies report. The report, created using Horizons software with support from Yotta's consultants, provided crucial evidence to support the funding bid. It included impact analyses for different

investment strategies and identified optimum planned maintenance budgets to prevent further deterioration of the network.

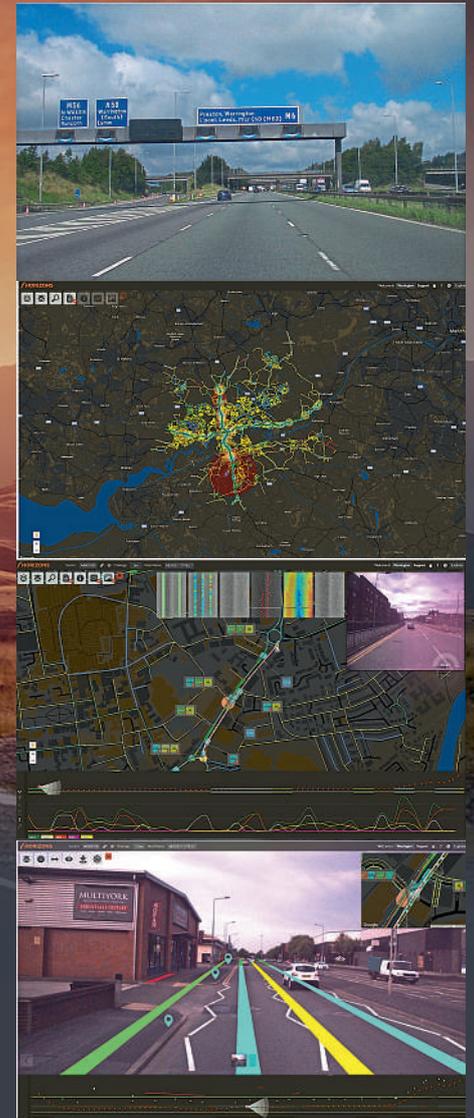
The Prudential Borrowing Strategy Report actively leveraged the road survey data generated by Yotta. Working together, Yotta and WBC integrated this data within Horizons to produce sample outputs for appraisal and acceptance prior to running the full analysis.

Using Horizons, several scenarios were enacted based on Warrington's specific priorities and budget options to identify the approach with the highest benefit-to-cost ratio. These included Steady State Analysis and spend of existing budget, as well as the additional funding needed over three and five-year terms. Horizons uses sophisticated algorithms when undertaking such analyses to produce the most cost-effective programme of works.

"This work helped to produce a clear, understandable and robust evidence-based report and strategy with which the asset management team was able to bid for extra government funding. It also helped prove the business case for the Council to use prudential borrowing to invest in infrastructure on a partial 'invest to save' basis," says Turton. "With support from Yotta, we could demonstrate the potential savings achievable, as well as the positive impact this funding would have for residents, businesses and visitors to Warrington. Likewise, we could highlight the potential negative impact that would arise without the additional funding."

Gauging the benefits

The data generated from Horizons is now also being widely used - in conjunction



Working together, Yotta and WBC integrated a variety of road survey data within Horizons to support the Council's bid for extra government funding

clearly demonstrating exactly how assets are being managed and how the budget could be most effectively allocated. Horizons can also be used to run steady state analyses that enable WBC to plan ahead and establish, for example, how much budget it will require to achieve certain goals over a given period.

Looking to the future, Turton believes that Yotta's open, flexible attitude will help to drive the ongoing Horizons implementation. "It's all about getting to know the software in greater detail. The more familiar we are with it and the more knowledgeable we become, the more we can feed back our views on changes or potential improvements.

"Yotta has been extremely receptive to this," he adds. "They listen, take feedback on board, and are happy to make tweaks to improve the functionality. It typifies the company's approach which concentrates on delivering successful outcomes for itself and its customers."

Rachel Corfield is Head of Account Management at Yotta (<https://www.yotta.co.uk>).

with the WBC team's own engineering expertise – to inform long-term planning and prioritisation of works-specific programmes and to support the need for further funding as and when required.

That's where the rich visualisation functionality of the solution really comes into its own. As Turton explains: "Horizons' high-quality visualisation capabilities make it a great presentation tool. We can use it to engage with all our stakeholders and show how different maintenance options will impact on the future condition of the whole network."

WBC has also benefited from the ease and speed with which it can drill down into the data to study everything in detail - from an individual road to the entire highways network - and answer queries from Council Members about strategic asset management plans, or specific works programmes, while also addressing complaints from the public.

WBC can use Horizons to demonstrate robust asset management processes and develop forward programmes, all of which helps Council Members and residents understand the logic and complexity of scheme selection.

Critically too, the same data analysis capability can be used to more quickly and easily identify and prioritise future schemes of work. As Turton highlights: "With our previous asset management solution, we had access to all of the data, of course, but it was in a more raw and less structured format, so trawling through it to uncover the information we needed was laborious and time-consuming. The intuitive nature of Horizons allows us to easily pinpoint and then assess the key

information for which we are looking."

This ability to manage and then analyse data quickly and efficiently is, of course, the basis for any forward-looking strategic asset management approach. This, in the view of Turton, also positions WBC well by providing a key requirement in respect of current banding under the Government's current Incentive Fund for highway maintenance.

"It was critical for me to be able to demonstrate to key Council decision-makers the importance of formal, clear asset management processes. These place us in a strong position to demonstrate that we are operating appropriate systems and delivering the kind of strategic approach that enables us to move up the bands and qualify for higher levels of funding moving forward. I see Yotta's Horizons solution as a key element in that process."

WBC is also making increasing use of Horizons to extract the key information it needs to provide a sound legal defence against insurance claims and to demonstrate that the organisation is delivering a sound asset management approach.

Positive outlook ahead

With the initial work completed, firm foundations have been laid down to evolve the Horizons approach over time. WBC now has a calibrated treatment in place with which it is happy. The Council can readily upload new data to inform the decision-making process as and when surveys are completed, enabling analyses to be re-run and new programmes of work developed when needed. The system's rich visualisation and presentation capabilities continue to help ensure stakeholder buy-in by