

Yotta Asset Management System: Tyne & Wear Authorities



CASE STUDY

YOTTA
FROM DATA TO DECISIONS

“Over the last decade, we have developed a close, trust-based working relationship with Yotta. The extensive experience and expertise they have built up on our highway network is invaluable to us. Yotta has already demonstrated their ability by plotting different road investment scenarios and analysing their likely impact. We have confidence in their knowledge of our data, the agility of their software and their ability to analyse market trends and deliver accurate, well-informed advice. Thanks to Yotta, we have made great strides towards achieving asset management best practice and to maximising our share of the Government’s Incentive Fund.”

Jimmy Young - Highway & Flood Risk Management,

Team Leader
**Gateshead
Council**

Yotta Drives Strategic Asset Management Gains for **TYNE & WEAR** AUTHORITIES

FOUR of the **FIVE**

local authorities in the
Tyne & Wear region:



**Gateshead
Newcastle
Sunderland
South Tyneside**

Four of the five authorities in the Tyne & Wear region source highways asset management services from technology company, Yotta. All four are operationally independent but also work collaboratively as part of the Tyne & Wear group; the North East Combined Authority group (NECA) and the Tyneside and Teesside group.

This collaboration makes sense, not just because of the councils’ geographical proximity but also because their road network lengths and usage levels are similar.

Yotta has a **longstanding relationship of between ten-to-fifteen years** with these councils. The UKPMS highways surveys Yotta conducted were focussed on collecting information on everything from road condition, highway drainage and street lighting.

To help to manage, maintain and analyse the road condition data gathered in its surveys, Yotta has provided three of the authorities with the Yotta Asset Management System, here comprising its visualised asset management solution, Horizons, together with key modules from its complementary Mayrise asset management suite.

DELIVERING THE IMPLEMENTATION

The drivers for implementing the Yotta Asset Management System were different for each council.

 South Tyneside	<p>Solution: Horizons & Asset Management Consultancy.</p> <p>Outcome: Asset management best practice together with forward-looking investment scenario planning.</p>
 Gateshead	<p>Solution: Mayrise Highways, Street Lightening & Street Works, Mayrise mobile, Horizons Explorer & Asset Management Consultancy.</p> <p>Outcome: Incorporated full Yotta Asset Management System, Agile mobile working and improved data collection.</p>
 Sunderland	<p>Solution: Horizons Explorer & Asset Management Consultancy.</p> <p>Outcome: Visualised repository for their data effectively as a tool for viewing asset inventory information collected from Yotta surveys.</p>

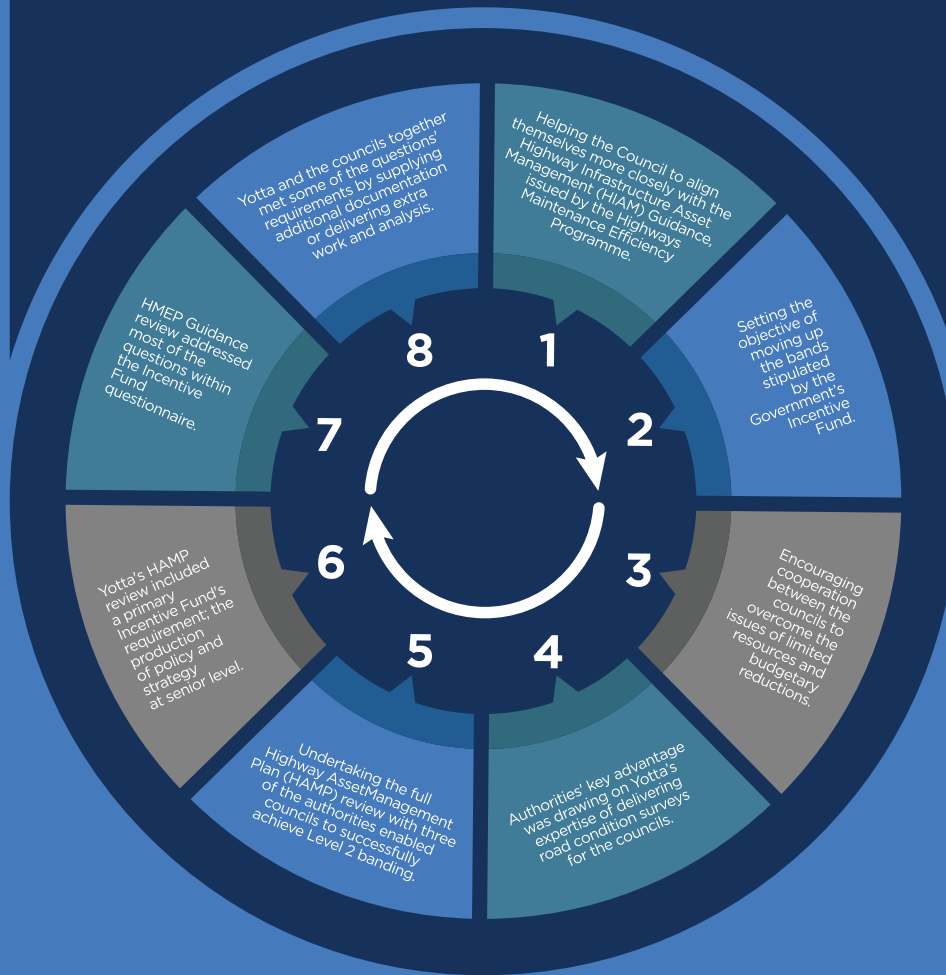
STRATEGIC HIGHWAYS ASSET MANAGEMENT

The combination of the data Yotta collects coupled with the experience and expertise it has built up by working with the Tyne & Wear authorities over the past decade enables them to offer additional services and this has been a great benefit to Gateshead Council.

As Jimmy Young, the council's Highway & Flood, Risk Management, Team Leader, explains: "The years of experience Yotta has, enable them to offer an accurate explanation of any anomalies and to clearly outline the reasons why results differ from expectations. On top of this, they can offer additional services on a one-off basis to supplement the work in the term contract. This might be a comparison of this year's survey with years gone by; it might be bringing enhanced GIS capability to enable us to analyse the data ourselves more flexibly, or it might simply be additional consultancy provision.

Yotta has demonstrated their ability to deliver expertise in our highways network by plotting different road investment scenarios and analysing their likely impact. We have confidence in their knowledge of our data; the agility of their software and their ability to analyse market trends and deliver accurate, well-informed advice."

YOTTA'S PROCESS DRIVEN APPROACH



Yotta also helped to manage the formation of a benchmarking group between the authorities. This started by focussing on performance measures, already collected by all four councils that could be easily compared including national road condition indicators and claim defence records, with a view to sharing best practice and to demonstrate tangible economic efficiencies.

The benchmarking process is ongoing and the move towards Band 3 in the Incentive Fund will include dissemination of best practices across the four authorities. Yotta advised each authority to work independently of the other councils on lifecycle planning. They each have different treatments and working practices and lifecycle plans needed to be modified accordingly.

Yotta therefore focussed on defining the predicted lifecycle of each carriageway sub asset group for each council. This involves defining how treatments are applied, then projecting the anticipated lifespan of each prior to creating deterioration profiles to be applied to each carriageway sub asset group. Once intervention triggers are defined for each treatment, Yotta and the authorities can together apply a budget profile against the highways assets and project likely outcomes for different investment scenarios. The final step is visualisation, and, in particular, enabling engineers to see and interrogate the results.

MOVING THROUGH THE BANDS

In practice, South Tyneside has fulfilled its original plans for the Yotta Asset Management System by using Horizons primarily to support the case for making investments in its highways network and showing the impact that reductions and increases in funding might have. South Tyneside is also using the solution for incentive fund development and through the use of Horizons.

Sunderland and Gateshead councils are also using Yotta's Horizons for Incentive Fund development and to support asset management best practice.

All three councils have now achieved Band 2. They are now actively using Horizons to support their separate bids for Band 3 status under the Incentive Fund as well as the development of complementary highway asset management plans in support of that. Sunderland Council has also reaped significant rewards from Horizons since implementation by using it to interrogate and visualise information that they otherwise would not have had access to.

It has also helped them from a collaborative working perspective. Having all the information they need within the same software package makes that more intuitive in itself. Having data within the same repository also makes it easier to run relevant benchmarking tests.

OPTIMISING ASSET MANAGEMENT THROUGH CONSULTANCY

The ongoing process of working with the Tyne & Wear authorities has enabled Yotta to gather large volumes of data on the councils' behalf, including details of national indicators and information about condition analysis.

This has helped to inform not just the prioritisation of works on the network but also Yotta's push to align the councils with Highways Maintenance Efficiency Programme (HMEP) best practice and support their bids for funding.

**Yotta supports
South Tyneside's
bid to move
from Band 2 to
Band 3 in time
for the 2017/18
submission.**

Yotta's Consultancy services offering has been key in helping each authority to achieve a best practice position tailored to its own specific needs.

LOOKING TO THE FUTURE

The councils are looking to advance the way they are using the software, in order to achieve even greater levels of insight. This can then feed into asset management best practice and lifecycle planning. They are also planning to increase the number of assets that they analyse, in order to better understand the impact of different funding scenarios on the different asset groups. Yotta is likely to play a key role once again in helping the councils to achieve their key goals.

Ten years' experience of learning from the councils, will continue to enable Yotta to rapidly adapt its software and consultancy to meet the evolving needs of local authorities. The partnership-based approach has been key in enabling Yotta and the councils together to actively work towards achieving strategic asset management best practice and to optimise funding in an environment, where budgets and other resources are coming under increasing pressure.

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