

Understanding your asset

Stephen Munro is the sector business director, non-PFI highways, at Amey. Here he tells Alec Peachey why collecting the right information and data can improve the long-term resilience of roads

For Stephen Munro and Amey, taking a proactive approach to road maintenance is key. Amey manage nearly 50,000km of local highways across the UK on behalf of local authorities. It maintains roads, footways and cycleways. The company also delivers traffic management, street lighting, cleansing and grounds maintenance services, as well as gritting roads and pavements and clearing them of ice and snow in winter.

Munro is accountable for 14 contracts with over 3,000 employees and a combined turnover of more than £350 million per annum. It is clear from talking to him at the company's office in Oxford that this is a responsibility that the former Thames Water Utilities employee takes seriously.

Munro has a passion for asset management and encourages his team to investigate new approaches to improve local assets.

One of the ways in which the company does this is by collecting and using data.

With the government setting aside funding to incentivise good asset management and efficiencies, it is essential for contractors and local authorities to be prepared.

"Clearly it is a good thing to see investment coming into the industry," comments Munro. "Hopefully it will be a positive thing for the users' as well. I think one of the key things for me is the interesting way that they're starting to change the funding."

"Previously it has almost been a per head allocation of money. So if you've got half a million residents you get X amount of money towards the roads. Now there is a focus around authorities having to apply for money and specifying actual outcomes that they're looking to get for that money. I previously worked in the utilities sector and that was driven on the focus that you'd get a certain allocation after agreeing and delivering the outcomes. You'd then get a similar amount of funding the next time around and if you didn't achieve the outcomes then your funding was reduced. I think

that's going to be key for authorities going forward."

Analysing data

Amey uses a system to collate, visualise and analyse highways asset data. The company can review the condition of the whole road network in a clear format in order to make decisions and manage risks. But is this something that local authorities are buying into?

Adds Munro: *"Asset volume, type and condition change all the time. I think making sure that you understand your assets and that you're given the ability to collect asset data and understand the condition of it, and therefore make a decision of where best to put money, then apply to the government for it – is important."*

"With the current pressure on funding and taxpayers' money the government has got to be able to turn around and say to the public that they're giving money to an authority 'for this, to deliver this and that they've got this outcome'. I think the days of signing cheques for large sums of money without giving any prospected outcomes are long gone."

The cost of getting local roads back into a reasonable condition has been well publicised, but Munro believes using data to make informed asset management decisions could drag the general standard of the network back up again.

"I think the key for us as suppliers' working with our clients is to make sure they get a bigger bang for their buck. The way we work with our works management system enables us to pick up the condition of the asset as we go. This means that you're not just looking at day-to-day responses of filling the local pothole, but actually how do you collect and put together that data, and therefore how do you make a decision. So rather than filling five potholes down a particular street you might go and resurface it instead, even though it costs slightly more in the shorter term. The key to that is data."

Collected data can also be used to inform road users of works that are being carried out.

"We're on the streets every day so therefore the data that we collect should be fed back to our customers so it can be used to help them with"

Amey manage almost 50,000km of local highways across the UK



☹️ *investment and to make decisions,” remarked Munro. “It can also be used to help them inform the customers (road users) so we don’t have people reliant on a sign at the end of a road announcing a closure. Instead we’ve put that information into the system, local traffic news and sat-navs. This could mean that people never get near our work and therefore not only are we doing the work more efficiently and effectively because we’re not having to manage that traffic volume, but also we’re making sure that the customer sees a proactive approach to road maintenance.”*

Planned activity

Another advantage to using information in this way is that it helps to encourage a move away from reactive works.

“I think there’s a growing understanding in the business that reactive and emergency work is expensive,” notes Munro. “If you’ve got a limited amount of money then you don’t want to be spending it on emergency jobs.”

High-quality data collection supported by a robust technological solution is at the heart of Amey’s daily working practices, which have been streamlined to ensure greater efficiencies and value for money for local authorities. This has led to an increase in productivity.

“If you can plan for four hours instead of two that could make a difference to how many jobs you get completed in a day,” comments Munro. “Therefore that means you get more jobs completed

for the same amount of money. It’s about understanding the data. If you’ve got 50 gangs out doing an extra job a day over five days a week, over 50 weeks a year, that’s a substantial amount of additional activity.

“There is an understanding to move more towards planned activity. As far as we’re concerned we plan everything. We’re trying to move our teams away from a reactive culture and back to a more planned culture.”

Munro recognises that local authorities continue to face increased budget constraints. He says that contractors must work with them to ensure they get the maximum return for investment.

He said: *“When you talk to local members they’re asking should I invest £2m in the roads or should I close a library? What we want to do is understand if you’re going to spend £2m what are you going to get for it? And how can we do that more efficiently, more effectively and safely so they can actually keep the library open and improve the roads. That means we have to start looking at different technologies and approaches, and start moving away from reactive works. It’s no coincidence that people get their cars serviced rather than waiting for them to break down. We do the same with our houses. You paint your windows every four years. You don’t wait for them to rot, fall out and put a new set in. We seem to do all of that with our normal planned life, but then at some point we think we’ll just wait for our roads to fall apart*

and then we’ll do something about it. But it is difficult because I wouldn’t want to be the one making those (budgetary) decisions.”

According to Munro, the sharing of best practice can help deliver greater efficiencies across the industry.

“I’ve worked in different industries and I think this one does quite well considering how it could be,” he states. “There are a number of key players who could almost sit in the corner and say ‘I’m keeping this to myself’. But I think people share things and work together, which helps with having one voice. The authorities tend to be doing the same thing. The likes of Manchester are working with surrounding authorities to go for funding.”

With funding set to start filtering down, Munro acknowledges that the relationship between highway authorities and the contracting supply chain is going to be more important than ever.

“I think people need to be able to work with suppliers in a partnership approach, rather than the adversarial. There is a better understanding now around what we need to do together. There is always going to be a bit of pressure because of the way the drivers are. But I think we work really closely with a lot of our clients. We try to understand what they want out of it and make sure we bid the right clients because there are a lot of authorities, and with the cost of bidding, you can’t go for everything. ☹️





dantex

Suppliers of a full range of BBA HAPAS approved materials to **PROTECT, MAINTAIN** and **RESTORE** asphalt and concrete assets through nationwide approved Dantex installers



IRONGUARD



BBA HAPAS approved Ironwork reinstatement system comprising of unique components for a flexible but durable repair.



ULTRA-BAND



BBA HAPAS approved for the filling, sealing and overbanding of cracks and joints. Ideal for lane joint failure.



MAXI-CRETE H



High modulus inlaid and recess repair material for deep cracks and repairs for asphalt and concrete.



MAXI-CRETE



Impervious, impact resistant, highly flexible repair for cracks, failed joints, reflective cracking, transfer joints and cracks. Thin bond repairs for most types of defects in asphalt and concrete pavements.



MAXI-PATCH

Proprietary patching material using recycled mastic asphalt, PMB, high quality aggregate. Ideal for filling potholes, defect trenches and pre-surface dressing repairs.



ULTRA-SCREED

Thin veneer repair material for asphalt and concrete. Used for voids, shallow potholes, ravelled surfaces, lane joints and most surface course defects.



PEP-COAT

Seals and protects concrete, repairs pitted and eroded surfaces. Protects concrete pavements from erosion, frost damage, aircraft fuel spillage and de-icing chemicals.



CONSULTANCY

and EQUIPMENT



Mixers and applicators to hire or buy. Consultancy services with independent advice to ensure you are best able to protect your assets.

**CONSULTANTS AND MATERIAL SUPPLIERS
TO THE HIGHWAY AND AIRPORT INDUSTRY**



E: enquiries@dantexltd.com



W: www.dantexltd.com



T: +44 (0)207 873 2188

☹️ *"Procurement is an expensive thing so I'd welcome any changes to bring the process and time down. It is a positive for both parties because at the moment you've got authorities that have to start procuring two years before a contract ends. That is a cost to them and for us."*

The future

A lack of younger people coming into highways remains a concern for the industry, but Munro believes advances around technology could help attract an entirely new breed of talent.

"I think there's going to be an interesting market around where we go with the likes of wearable technology. We still need the guys to do the day job on the ground, but the key is going to be how do we integrate technology into the day job?"

"How do we use people that are younger than me that have a different concept of technology, what it does and how it works? I think it is vital that we get more young people into the industry. What can we do to bring people into the business and make them the managers and leaders of the business in the future?"

"It brings a different mindset when we're going out to the universities and to the market. That's what we need to continue to do. We need to bring younger people into the business. The age profile of the business as a whole isn't as spread as it should be. We need to bring people in with different ideas and thought patterns so that there



Staff working for Amey are encouraged to use data to help them improve local assets

might be something that they're doing in their day job that could work well."

Many people in the sector believe that the industry is about to enter one of the most important periods in its history, but Munro is not so sure that this is a "be all and end all period".

"The key for us is to use data, support information and technology to make sure we've got a good set of information so we can apply good business cases for funding and show good outcomes at the end of that funding," he tells *Highways Magazine*. *"If we do that then it makes the industry and the market a good place to invest from a political and decision maker's point of view."*

"You also have to be focused on the customer and understanding what they need. If you're taking a customer's

view, taking the data you've got and putting them together you'll get a clear view of where you need to go."

And what role can Amey play in the future of the sector?

"I think Amey have got a big role to play. We're a big player in this industry. There's a lot of opportunity and a lot of authorities that still deliver services in-house that we can support and work with to grow the business. It would be good to get some of the local authorities that are not managed by bigger contractors into a room to understand what they're doing. I think the market has improved and is delivering more for the same value all the time. That will continue as there is a lot of good work and ideas out there and lots of good practice. We just need to continue to push that forward," he concludes. ☹️

