Asset Management

Walsall Council

Walsall Council set out to reduce localised flooding and improve maintenance of the gully network within the challenging context of reduced local authority budgets.

It is projected that by 2015/16 the increase in accurate condition data will have reduced the number of emergency call outs for gully cleaning across Walsall by 50%.

Name of Alliance/Authority/Client	Walsall Council
Project Description	Walsall Council and their contractors Lafarge Tarmac are responsible for a network of 33,000 gullies. Analysis by the Council in early 2013 identified that reactive gully cleaning cost more than ten times the amount of a planned clean. It also revealed that whilst costs had remained broadly the same over recent years the gully network across Walsall had actually been cleaned less. As a result a change in focus, from the costly and reactive approach of emergency gully cleaning, to a more targeted and intelligence led proactive regime was agreed. The decision was made to adopt 'Gully SMART' an innovative GIS based technology solution developed by KaarbonTech. The company uses GIS technology and OS data to map and monitor drainage networks along with other local authority assets. Handheld android devices are used to harvest the data and the information is used to create targeted work programmes based on individual needs. The software system enables: • Data capture for teams in the field using voice, video and photo whilst GIS is used to ensure accuracy of location against Ordnance Survey mapping. • A complete inspection history of assets across the authority's network to be downloaded within 15-30 seconds, allowing the user to work with offline for the rest of the day whilst being easily updated once reconnected. • Flood zones, road names and ward boundaries are automatically populated and gullies identified for attention are clearly visible on robust handheld Android (& IOS) devices. • Collected data to be laid over an OS Mastermap and/or aerial imaging to both provide perspective and aid analysis. The key three challenges were: - The adoption of new technology - Potential impact on productivity during the transition - Populating the system with accurate location and condition data Introducing a system new to the workforce brings challenges, The fact that 'Gully Smart' runs on handheld android or iOS devices was beneficial because the majority of users were familiar with the operating systems. Both technicians in the field and office users required only a two hour training session prior to beginning usage of the system. A key reason for

	this was that KaarbonTech designed the new system to use terminology familiar to staff which aided the transition and delivered consistent recording of condition and location data. This consistency aided management in terms of setting effective performance targets.

Understanding that the data collection would be repetitive the system was streamlined to avoid needless answering of the same questions over and over. By minimising button pressing and harnessing the logic and capacity of the smart devices to offer predicted answers it emerged that the data being entered was giving accurate condition and silt level measurement. Technicians were more likely to answer accurately if there was less repetition for them.

The pre-rollout preparation paid off with productivity from the technicians actually increasing as teams were able to plan their days more effectively. |
| **Outcomes and benefits** | A Report submitted to the Walsall South Area Panel (10th December 2013) from John Roseblade, Group Manager, Highways and Environment stated:

    ☐ Average productivity for an 8 hour day varies from 9 emergency gulley clean outs
      compared with an average of 145 achieved by the contractor on a cyclical basis.

The average cost of a cyclical gully clean has been found to be ten times lower in cost than a reactive call out. Reactive call outs incur significantly higher cost in terms of travel costs and productivity.

Within the first nine months of use of the new system 66% of gullies across Walsall had been cleaned. The remaining 34% is now completed.

It is projected that by 2015/16 the increase in accurate condition data will have reduced the number of emergency call outs across Walsall by 50%.

Richard Pohribnyj, Highway Asset Manager, at Walsall Council states that the he is impressed with the level of spatial accuracy with which the system maps out the gully locations.

The intelligence both gathered and recorded has identified gullies unable to be cleared due to collapsed pipework or blocked sewers. The accuracy of location information is enabling other agencies – such as Severn Trent Water - to be alerted and problems to be addressed.

Areas of excessive leaf fall are now being recorded and the intelligence shared with colleagues in the Council 'Clean and Green Team.' This is enabling these areas to receive prioritised road sweeping during the autumn months and before predicted heavy rain. |
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Disclaimer: When considering all HMEP case studies, please remember that whilst the initiative described was beneficial in this case, it may not be suitable in every situation.

About HMEP

- **HMEP exists to support the sector on its journey to transform highway services.**

- **HMEP does this** by the highways sector, for the highways sector**, working with people and organisations to enable change, so that** greater savings and efficiencies **can be achieved and the demand highway services can be met.**

Context

- Managing local highways is now a **critical challenge** for local authorities who **are in the spotlight and feel concerned about the future of their** single biggest asset: **local roads**.

- They know that maintaining **their highways, with less money**, is a key priority; and that this has been intensified following the bad weather and **continued demand and scrutiny** from the public and business leaders.

- Doing **significantly more with significantly less** has never been more important, or needed.

- Balancing **longer-term**, strategic planning while **keeping our local roads safe and serviceable** is a critical challenge.

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