

case study - grit bin management

# Luton Borough Council

## How it started

Luton Borough Council has the responsibility of maintaining approximately 485 kilometers of roads, encompassing primary, secondary, and supplementary routes. Their mandate includes ensuring that grit bins, vital for combating icy conditions during winter, are efficiently managed and maintained to safeguard public safety.

## The solution

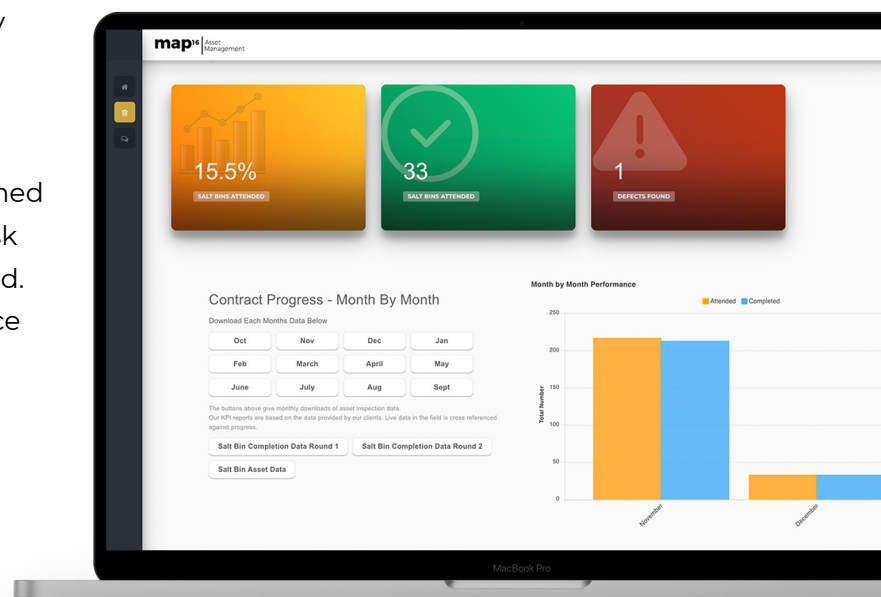
In response to the need for a streamlined grit bin management system, map16 devised a tailored mobile and web-based platform, designed to comprehensively map and monitor the council's extensive grit bin network.

The platform allows ground crews to conduct on-site inspections and seamlessly log relevant information directly from the field. With a simple click of a button, crews can update the system, utilising built-in photo uploading functionality to provide visual documentation. Key metrics such as salt capacity and overall condition can be swiftly updated, alongside identification of any defects such as damage, litter accumulation, or unauthorised bin relocation. All these functionalities are presented in a user-friendly map view dashboard, facilitating intuitive navigation and efficient data management.

## The benefits

The implementation of map16's solution has seen significant benefits for Luton Borough Council and the communities it serves.

The system optimises the management of the borough's grit bins, ensuring they consistently operate at peak efficiency. Enhanced management of grit bins directly contributes to public safety during winter months. With properly maintained bins strategically positioned across busy public areas and footpaths, the risk of accidents due to slippery surfaces is reduced. This proactive approach to winter maintenance strengthens the council's commitment to safeguarding the well-being of its public, instilling confidence in the accessibility and safety of pedestrian routes even in adverse weather conditions.

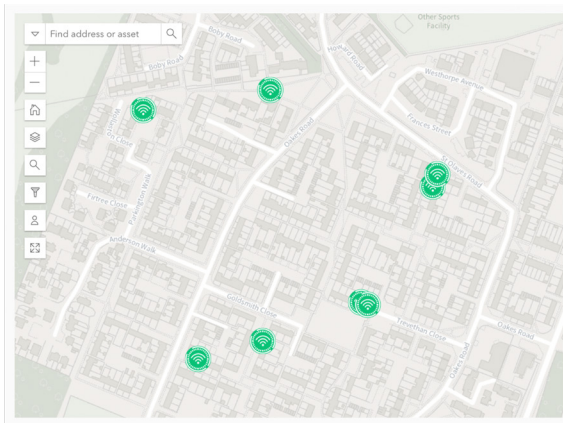


## In the field

Whereas previously all data collected on site was manually entered through multiple, time consuming systems, the map16 inspection forms now auto-populate at lot of data, meaning the engineer's primary function is doing the inspection works, not completing paperwork. Crews can now also massively improve health and safety validity with photo uploads directly into the relevant forms, proving they've done essential tests, and showing works have been completed to the standard expected.

Crews are able to increase efficiency when in the field as the system allows Anglian Water to identify jobs within a close vicinity to each other, and can complete multiple jobs during one visit, saving the company time and money. Full inspections are carried out, including CCTV works, jetting and the installation of a monitor as a proactive approach to ensure the network is running smoothly.

**“Every team was doing something different, there were so many inefficiencies in what we were doing, we realised that there had to be a better way of doing this”.**  
Harley Evans, Anglian Water Programme Manager



## The digital twin

Data that was once a row in a spreadsheet now has a tangible, reliable digital twin. Users can see how the sewer network is performing across the region as a whole as well as in specific areas, and therefore can be more efficient with planning resource where it is actually needed. Known problematic areas that had previously been identified by Anglian Water have their own dashboard, with frequent cleanses scheduled for these assets. It's this attention to detail that minimises network disruptions, and maximises network knowledge.

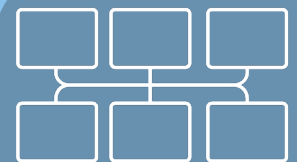
Crew performance can be easily monitored across the region, tracking everything from a universal platform - it's essentially a program manager tool and a progress management tool, all in one. See which teams are scheduled to work on particular days, how they are performing, individual task failure rates and and shifts worked vs monitors installed. Users are able to see a detailed, specific view on productivity, dialling in on performance. To be able to really see exactly how teams are performing, exactly where your pain points are and where your failure demand is allows you to design these things out.

**127,000**  
metres of unknown  
sewer found and  
inspected



Achieved twice the  
amount of works  
within budget

**1,629**  
previously unknown  
blockages discovered



6 systems in 1