KaarbonTech

Middlesbrough moving forward

RISK MODELLING FOR SMART DRAINAGE MANAGEMENT

THE PROBLEM

With highway flooding an ever-increasing problem, councils are looking for ways to manage the highway drainage asset more effectively. The old ways of cyclical management and maintenance needed to be replaced with data led decision making, for cost savings and efficiency.
KaarbonTech developed Risk SMART to address these challenges.

THE APPROACH

Risk SMART is a state-of-the-art risk modelling system to help local authorities take a comprehensive, risk-based approach to their highway drainage management. KaarbonTech software is designed to identify geospatial data sets, that provide crucial information for managing risk, to effectively shape the programme. Information, including road hierarchy and demand, collision sites, flood zones and IoT, is then combined with gully condition data, to accurately measure risk.

The results are compiled and presented in an interactive matrix, allowing for individual, or groups of gullies to be assigned different cleansing schedules, based on their level of vulnerability to risk. Programmes are created to provide efficient proactive maintenance, based on actual need. At the click of a button, the results of any programme changes can be assessed, and ongoing management amended accordingly. With its simple, intuitive interface, and clear data visualisation, Risk SMART is easy to use, producing comprehensive and engaging visual reports.

THE RESULT

Risk SMART has transformed the way councils can profile, compare, and manage risk on their drainage network. They now have a clear understanding of network vulnerability and the ability to make evidence-based, cost-effective changes to their maintenance programmes.
The highway authority can provide evidence-based reports, to assist politicians in the budget decision making process.