Providing the tools for asset management

With local authority highway maintenance budgets at risk of reducing year-on-year and councils now under pressure to provide evidence they are carrying out cost effective improvements to maintain their highway maintenance funding, having the necessary tools to help make better informed decisions and obtain better value for money is becoming increasingly important.

The Road Surface Treatments Association (RSTA), the Association of Directors of Environment, Economy, Planning and Transport (ADEPT) and the Midland Service Improvement Group (MSIG) back in 2014 identified the need for better guidance on how to select the most economic treatment option at the pavement decision level and consider the full spectrum of preventative treatments when developing lifecycle plans.

This resulted in an industry panel working collaboratively over a six month period during 2015-16 to produce such a tool involving representatives from RSTA, ADEPT, MSIG, TRL (Transport Research Laboratory), Highways Term Maintenance Association (HTMA) and Technical Advisers Group (TAG). TRL provided a modified version of their iRoads Asset Management System and the other parties contributed towards determining key input parameters such as treatment service lives, life cycles and rates. The panel were particularly careful to ensure the new tool considered all of the pavement treatment options including the full range of road surface treatments and full range of asphalt options to ensure every potential solution can be considered. The new tool is principally aimed at experienced engineers and requires the end user to have a sound grasp of the treatment options available to know which techniques can be used where and when. So training is important and it is highly recommended that end users are trained in how to use the tool beforehand. Training courses will be run by RSTA and TRL and can be booked through www.rsta-uk.org/calendar.htm.

The new tool was launched at the annual RSTA Conference in April and TRL have since provided training for MSIG members hosted by RSTA. Further training courses are planned for later in the year. Prior to launch RSTA members were also briefed about how the new tool works and given the opportunity to contribute towards its development. MSIG is a collective of over 20 Midlands and North West county, city and unitary councils sharing best practice to drive improvements and efficiencies within the highways and road safety disciplines of local authorities. MSIG support the development of the new pavement decision tool because it helps to bridge the gap between strategic asset management planning tools and the extensive guidance that the RSTA has published on road surface treatment products and services. The best outcomes will be achieved if asset managers can make the shift from a predominantly preventative works. Prevention is better than cure, so it is essential that authorities are aware of the full spectrum of road surface treatment options available, and understand where they fit into lifecycle plans. This tool will support sound investment decisions and enable RSTA members to demonstrate how their products and services can help deliver the best return on the investment made in local roads.

Surface dressing

The most widely used road surface treatment for restoring skid resistance and sealing the road is surface dressing with over a century of proven use throughout the UK. For the unintegrated process involves spraying a bitumen emulsion binder onto a prepared road surface followed by the application of chippings and rolling to help provide some initial embedment into the road surface. Road Note 39 is the design guide for surface dressing and in March the seventh edition of Road Note 39 was produced by a panel representing all sides of industry, with the chairman and secretariat provided by the RSTA and TRL respectively. This is an important document that should be used by all relevant contractors and DLOs to ensure surface dressing is specified, designed and installed correctly. The technique can be used successfully on all types of roads, from lightly trafficked country lanes to trunk roads and motorways carrying thousands of vehicles a day. It provides a simple but cost-effective form of surface course maintenance that has an important role to play in highway infrastructure asset management plans. Key benefits include high productivity with some contractors able to install over 40,000 m² per day, conservative use of materials and extending the service life of the existing road surface by up to 15 years. As is the case for all the road surface treatment products provided by the members of the RSTA, used appropriately as part of a lifecycle plan, surface dressing can be an important contributor to minimising the whole life cost of road pavements. It can also help with improving network resilience by preventing water penetration and help avoid damage caused by cold weather, ice and snow.

Road Note 39 (7th edition) can be obtained from http://www.trl.co.uk/reports-publications/road-notes/report/?reportid=7034