How innovative Surface Treatments are saving Local Authorities money

– preventing potholes before they appear

We understand that saving money is a top priority for all local authorities, alongside simultaneously looking for innovation that works and assists them in the delivery of a number of their key objectives.

Trevor Thompson, Business Manager at Roadtechs, discusses the importance of using different surface treatments to extend the serviceable life from the road network. The network is the most valuable asset the council owns.

People ask what does Roadtechs mean by "Keeping Green Roads Green"?

We are referring to the results from the condition surveys that drive the plans for highways maintenance across the UK.

What is the Road Condition Index (RCI)?

The Road Condition Indicator (RCI) is used to assess the condition of individual sections of road. It is calculated using the outputs from surveys. An RCI score can range from between 0 to 315. Any stretches of road scoring below 40 are declared to be in good, in green, condition. Any stretches scoring higher than 40 but less than 100 will not be in perfect condition but would still offer a good driving surface—called amber condition. Anything scoring over 100 is likely to be in poor condition and will probably need maintenance in the next year or so—called "red" condition.

The Highways Management System directs spend in red areas not for SET on green roads. The survey systems ignore the green roads and report back on the amber and red conditions because that is what the algorithms in their systems are designed to do. This needs to change.

Surface Treatments

By applying Reclamite in the first five years of the life of the surface the return will dwarf the investment involved. If the local authority in this example reallocated £1m from the reds budget and applied Reclamite—for that spend it would be able to treat approximately 50km. So, if you have a Primary Road Network length of 700km, when this is repeated over the next 10 years it will have treated 500km. The local authority would have 500km in green condition with the ability to repeat the applications of Reclamite.

It was Henry Ford who said, "if you always do what you've always done, you'll always get what you've always got." Incorporating surface treatments into asset management planning will extend the life of your network and reduce the need for disruptive reactive maintenance. It can also enhance the benefits gained from improved public perception and fewer insurance claims.

Reclamite treatment being applied

What causes the asphalt to deteriorate?

As well as traffic wear, bitumen in the asphalt oxidises over time leading to cracking and aggregate loss. Traditional repairs can be noisy and disruptive to the road user and the local economy.

Are Surface Treatments new?

Reclamite, which is a penetrative bitumen rejuvenator BBA/ Hapas approved, has been used in the USA for over 50 years and in mainland Europe. It was first used in the UK in 2007/8.

How innovative Surface Treatments are saving Local Authorities money – preventing potholes before they appear

Reclamite can be applied before defects become evident. This enables the bitumen to be rejuvenated through the full depth of the wearing course. The micro cracks are sealed preventing them developing into visible cracks and then into potholes and other defects. At the same time, the surface will be resistant to the ingress of water.

What about the parts of the network that you would like to surface dress but have been unable to due to noise threshold or traffic behaviour? Until now you may have left the asset to deteriorate with patching and multiple repairs required before replacement is the only option – 'sweating the asset'.

Using surface treatments brings the following additional benefits at installation:

ENVIRONMENTAL

Reducing environmental impact **by 90%.**

No quarried aggregate.

No landfill generated.

Low noise compared to traditional repairs.

FINANCIAL

Whole life cost reduction of **up to 40%**

OPERATIONAL

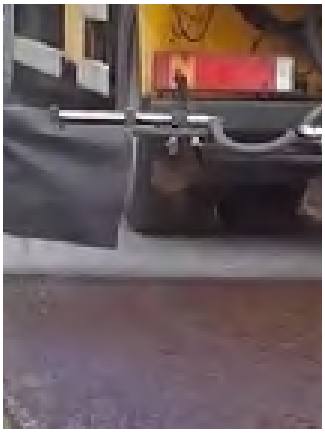
Efficient installation minimising disruption, minimising traffic management costs.

Keeping the traffic moving.

SAFETY

Primarily mechanical process – minimal human interaction.

Rhinophalt® surfacing



CRF surfacing

Roadtechs have two other surface treatment solutions which are available for the network.

Rhinophalt – which is an asphalt preservation system.

CRF – A surface sealant. A flexible and resilient cold spray bitumen emulsion solution to create a sealed surface and provide economical alternative to conventional wear seals. Can be applied to pavements with early stage deterioration such as ravelling, loss of aggregate or brittleness.

An early adopter of Reclamite, Norfolk County Council has looked at its whole life costings and when viewed against traditional treatments, using Reclamite extensively delivers best value.

Norfolk County Council has included the use of Reclamite in their Transport Asset Management Plan.

Part of our ethos at Roadtechs is to understand what our customers are trying to achieve. We do this by providing a survey to installation solution.

For further information visit **www.surfacetreatments.co.uk** or call the team on **01508 536360.**

Speak to our experts, contact us today

T: +44 (0) 1508 536 360 | **E:** info@roadtechsgroup.com

www.roadtechsgroup.com

roadtechs surface treatments