
New Trial to Create Longer-lasting Road Surfaces

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A new trial which could revolutionise the way public highways are resurfaced has begun in Essex.

It is hoped the addition of a new strengthening compound to traditional surfacing material could increase the lifespan of roads by up to double. This would greatly reducing future maintenance, and the associated traffic delays, as well as halving the carbon footprint associated with such work.

We are working on the trial in Chelmsford with Ringway Jacobs, which supplies highway services in Essex. Ringway Jacobs has brought in the international expertise of its shareholding companies Eurovia [UK](#), in particular its specialist asset management consultancy Jean Lefebvre [UK](#) (JLUK), and partners, to undertake the trial.

Key to the innovation is a technology called Gipave, developed by the Italian company Iterchimica. It consists in adding an advanced product to a traditional surfacing material, in this case, for the first time in [UK](#), a hot rolled asphalt (HRA).

Gipave contains graphene – which is 200 times stronger than steel yet extremely flexible. This makes the asphalt far less susceptible both to hardening and cracking in cold temperatures and softening in warm temperatures. It also increases the elasticity and strength to reduce the wear, particularly under high loading.

Gipave further reduces environmental impacts and carbon emissions as it contains a specific type of selected hard plastic, which is usually considered non-reusable, avoiding less sustainable disposal methods.

Cllr Lee Scott, Essex County Council Cabinet Member for Highways Maintenance and Sustainable Transport, said: “This is potentially a game changer in road and footway surfacing as increasing the expected life of the surface would drastically reduce maintenance costs and half the carbon footprint typically associated with such surfacing.

“Less maintenance also means less disruption for road users, so this trial has really positive potential for the travelling public, for council taxpayers and for all those who want to see the council provide its services in the most sustainable way possible.

“We look forward to seeing what the results of trial and what potential benefits the graphene solution might bring to the county – and indeed the rest of the [UK](#).”

Ringway Jacobs Managing Director Phil Horton said: “As a business we believe innovation is key to offering the highest quality and best value services to our clients.

“Our company structure enables us to call on the expertise of industry leaders across the world and we are delighted to be bringing that know-how to Essex in a project that could save time and money while at the same time reducing the carbon footprint associated with resurfacing work.”

Read the [original article](#) on Essex County Council.