

Innovation	Strengths
Warm SMA asphalt	Use of less Carbon in production Road is open to road users sooner
Preservation	Quick process Provides a protective seal that can significantly extend the performance life of an asphalt road surface,
Micro asphalt Rejuvopatch	Seals and waterproofs carriageway defects no need for excavation cold lay - significant carbon reduction
Micro asphalt Rejuvoflex	Seals and waterproofs footway defects no need for excavation cold lay - significant carbon reduction
Roadmender	Reduced costs due to less depth, Quicker to undertake for repair, Requires 70-80% less new material per m ² Reduced HAVS exposure /noise and waste produced
Ultracrete tough Patch	Can be used as a 1st time permanent repair No repeat visits Cold material no carbon usage Works when pothole is under water
Miles Mac – Carbon neutral	Help meet West Berks carbon reduction programme
Higher RAP content in wearing courses	use of recycled materials, less virgin products,

Use of mini planer to carryout carriageway patches	Reduction of HAVs Certainly of depth overall reduction of costs against tradionally 90mm patches material wastage reduced
Jet Patcher –TBC jointly choose suitable sites in the Spring and arrange a programme	
lower PSV use 60 PSV rather than 65 reduce need for expensive high stone PSV	will allow the use of increased RAP material, cheaper product due to being more available
Rubber crumb	Allow the use of alternative materials so becomes more sustainable
Single layer material	Reduced costs due to less depth when required - not standard 90mm all the time, Quicker to undertake for repair as only one type of material, Reduced wastage Reduced HAVS exposure /noise and waste produced
OCL foambase Cold Recycled Bound Material / HBM	Significant savings as 100% recycled product Use of less Carbon in production Cold lay material Ideal in footways / Basecourse
Textureblast	Quick process, meaning roads could remain open, minimising disruption Raises skid resistance levels and improve the safety of the road surface compared to resurfacing, retexturing significantly reduces the carbon impact of a project as hot applied asphalt is not required significantly extend the performance life of an asphalt road surface,



Rosehill Products	<p>Quick process, using recycled rubber products.</p> <p>Product does not deform - standing up well on sites chosen</p> <p>quick to install</p>
Introduction of Causeway ordering system	<p>Replacement of failed system (SMART)</p> <p>Streamline job scheduling / completion process</p> <p>Remove the need for paper</p> <p>Finance systems brought up to date</p>
Cell Pave	<p>Reduced carbon compared to standard grass concrete sections.</p> <p>Reduced manual handling, quicker to install as a result</p> <p>Robust</p>
Kerbo - charger ducts	<p>Reasonable quick to install.</p> <p>Customer feedback good.</p> <p>Provides a cheap way of preventing people tripping over cables</p>

Innovation Log



Weakness	Results
Use of warm mix additive is an additional cost to production Some manufacturers charge more for warm SMA	If laid at depths >40mm material seems to withstand high traffic usage
need to be aware of original skid resistance values as leaves a temporary decrease in skid resistance post-application although skid resistance levels will return to their original values, the rate of this is proportional to the site's traffic levels	No results available at this time as only used product 1st in October 2020
no structural strength added to pavement	Laid on two roads, good feedback in general 1 complaint
no structural strength added to pavement	Programme started November and runs until March - mixed results
Does not work well in wet/rainy weather conditions as a result certain patches failed and had to be redone.	Reasonable successful when used in dry warm weather
More expensive compared to other cold products	Very successful when laid and compacted correctly, No highway claims due to failed pothole repairs reported since Feb 2020 HPAS approved to work on high speed roads
Where carbon off setting can be used, product more expensive consideration needed to where best to use product	paper written
Dependant of PSV of material	Successfully laid on A4 will be monitored over the next few years

	<p>Trial starting in January after initial delay. Sites need to be identified better to achieve output Due to lack of sites available needed to postpone</p>
	<p>no programme started as yet</p>
<p>Possible SCRIM readings lower than anticipated Client not convinced</p>	<p>Trail site Andover Road summer 2022</p>
<p>Possible SCRIM readings lower than anticipated Concerns over recycling product in the future</p>	<p>Ruled out at present due to concerns regarding material</p>
<p>Cost of material - need to work with suppliers to make more cost effective</p>	<p>Areas where used no signs of deformation, looks similar to standard materials</p>
<p>can not be used as wearing course yet needs a slurry / surface dressing as protection or wearing course layer</p>	<p>Trail to be carried out on Andover Road Paper to be written</p>
<p>Can leave surface very open textured / plucking out can then occur</p>	<p>Compared to resurfacing, retexturing significantly reduces the carbon impact of a project as hot applied asphalt is not required Results show that the road surface is restored to the same – or better – skid resistance as when it was first laid. 10,000msq carried out 2022/23 Council saved approximately 1,000 tonnes of high-quality virgin aggregates and 40 tonnes of hydrocarbons Savings of more than 50,000kg of carbon dioxide due to shot blast surface retexturing system.</p>

if not correctly installed subject to bolts becoming loose,	no issues with speed humps installed
Learning new system trainers not fully up to speed with sytem teething issues not addressed in a timely fashion	implementation - early teething problems but now running smoothly
Costs comparable with traditional grasscrete	no issues experienced
can be fiddly if footway uneven, Not sure at present how hard wearing product will be. Will need to be totally replaced if footway improvements works carried out Who maintains going forward!	Will continue to monitor - no issues at present

Case Studies / links if available	Useful web links	Outcome / Business as usual
 <p>West Berkshire County Council Carriageway Improvements</p>		implemented permanently on contract
	Asphalt preservation can double the surface life of roads, says ASI MD – Highways News (highwaysnews.com)	Initially put on hold further trials expected May 2024
	Rejuvopatch Cheshire West & Chester – Rejuvo JPCS	Similar product now used as provided by Colas not Rejuvo
Before After West Berkshire 2.pdf	Rejuvoflex – Rejuvo JPCS	Similar product now used as provided by Colas not Rejuvo
 BST-102 Best Practice Case Study - Road M€	www.roadmenderasphalt.com/	Not plans at present to continue
		implemented permanently on contract, used as primary pothole filler
	awaiting final sign off	implemented permanently on contract
		Due to issue of trying to get 30% high PSV stone currently unviable

		implemented permanently on contract
		no further action at present time
paper being written to join up with Miles Macadam works		implemented permanently on contract
		no further action at present time
need agreement re costs		implemented permanently on contract
		implemented permanently on contract
https://www.volkerhighways.co.uk/en/news/detail/road-retexturing-solution-helps-achieve-carbon-savings	Textureblast - WJ	implemented permanently on contract

 Rosehill-Highways- Case-Study-Speed- Cushions-	One Piece Speed Cushions, Rubber Speed Bumps Suppliers: Rosehill Highways UK	implemented permanently on contract
		implemented permanently on contract
Greener parking for West Berkshire	https://www.groundtrax.com/cellpave-hd-truck-grade-heavy-duty-paving-system/	implemented permanently on contract
 Kerbo Charge v2.1 Install Instructions Envirobed and	EV Charging Cable Gully Pavement Charging Kerbo Charge	Awaiting update from West Berks Council to see if they wish to continue