Mark Readman, Highway Services Manager, Durham County Council

[Mark is standing in front of a JCB excavator and piles of rubber tyres at a recycling plant. There is a sound in the background, which is a combination of the wind and the machinery operating.]

[Video Clips: A JCB excavator being used to drop tyres into recycling equipment. Shots of the rubber being ground and recycled in the equipment, until they are the size of small grain.]

[Mark Readman] We are here at Meadowfield at Eco Tyre, which is a tyre processing plant. The tyres are collected locally and transported to this recycling plant. The rubber crumb is a by-product from this particular process and would normally end up in landfill, so we do have is local tyres processed and local rubber going into our project's county wide.

[Mark is now standing in a warehouse in front of large bags of rubber crumb. There is no background noise.]

What you can see behind me is the final product, this is the rubber crumb which is bagged up ready to be transported to our Ashfold plant ready for introduction into the bitumen in material.

[Video Clip: A forklift reversing carry a large bag of rubber crumb.]

[Dave Whitehouse, Head of Research and Product Development, Tynedale Roadstone]

[Dave is standing at the side of a road. There is roadworks being carried out behind him.]

The initial materials that we start out with is plastic crumb just on its own from waste plastics from bags, cartons, containers, meat packaging, which we have used for the last two years. This is a waste recycle, this would be going to landfill if it wasn't going to where we were.

[Video Clips: A forklift carrying a large bag of rubber crumb to a funnel. Fine waste crumb being emptied into a metal filter. Two males operating the mixing function using a computer. Council lorry being driven under static loading tower and being filled with road resurfacing materials and then driving out.]

The next product is the waste fine crumb material this has come from car tyres, recycled car tyres. Add these two materials together we get great properties from out of the asphalt mixes. The benefits of this which are; fatigue resistance, it's also because it is non-absorbent it resists water from penetrating through therefore it stops frost, and that, getting into the material and hopefully reduces the potholes over a period of time.

[Video Clips: Shot of Tynedale Roadstone Ltd. truck. Resurfacing materials being emptied off back off truck into machinery to lay it on the road. Material being laid on road using machinery and being pressed into place using a steam roller.]

In the truck if we are blending fifty-fifty, we have fifty-one point five of car tyres and seven hundred and twenty-eight bags. This is a thirty-five-millimetre slab of the surface material, ten millimetres, which is a normal sort of material that we use on the road.

Now some of the tyre benefits that have, they have UV additives into them to make them flexible and stop them oxidising. That UV helps the flexibility and stops the oxidation of the binder and the other materials in.

At the end of their life because of they are good quality aggregates we will again recycle it back through the mixes and reuse it again. That's all the materials, and also with the rubber in it will just be incorporated into it, as it is currently used now, we already do this as an operation.

[Text: durham.gov.uk/roadmaintenance – Find out more]