## Innovation

**Street Lighting** – continually trialling and using new products to lower energy usage including large digital touch screens which is improving operational effectiveness and efficiency. The council's contractor is also trialling the use of LIDAR mapping and AI to provide more accurate survey data. Drone scouting for night-time inspections of street lights will be developed during 2024.

**Gully sensors**- The council have installed several at flooding hotspots to monitor and assist with flooding response. The Council have worked their supplier Karbontech to develop new schedules of maintenance which has realized efficiencies.

**Warm asphalt-** The council have trialled warm asphalt and are monitoring the performance of several sites.

**Low carbon company (Seaham)** – The council have held discussions with a local company that has developed an asphalt replacement and a concrete replacement. The council may use this material at the EXPO that will be held in Sunderland in 2025.

**Vaisala for inspections** – The council are using Vaisala software to improve efficiency in highway maintenance planning and highway inspections and highway claims defence.

The council have taken steps to procure a Retro reflectivity survey of traffic signs and road markings and expect that this will take place in the new financial year.

The council's highway operations team are using digital technology to make the maintenance operations more efficient.

The council continues to work with its contractors and suppliers to develop new processes and materials or to trial new products.

## **Streetworks**

Where major works are planned in advance the council makes use of Section 58 (NRSWA) notifications to prevent unnecessary excavations by utility works. This can protect recently renewed footways and carriageways from being damaged by works known about before the surfacing took place. It should be noted however, that there are several exemptions that allow utility companies to excavate in streets that have recently been resurfaced.

The council also use several software systems such as Symology and One network to coordinate all works in the highway. The council will delay highway maintenance works if it knows that utility works are planned.