

'Pothole Action Fund'

Over 16,500 road potholes had been repaired to end of February – and this figure is expected to rise to around 18,000 by the end of March.

Pothole repair funding in Essex combines Essex County Council (ECC) funding with the Department for Transport (DfT) Pothole Action Fund, resulting in an enhanced repair programme of approximately £9.35 million for 2018/19.

ECC recognises public concern, and accordingly is investing over £5.4 million for tackling potholes in 2018/19, including a county councillor led locally-focused pothole repair initiative of £2.5 million. This includes potholes addressed through capital funded surface works such as pre-surfacing patching.

The Department for Transport (DfT) provided £1.335 million for the Pothole Action Fund for 2018/19. When combined with additional DfT pothole repair funding this has resulted in total DfT funding for tackling potholes of some £3.9 million.

The DfT funding has enabled additional road pothole repairs on all road types across Essex. The most appropriate treatments are selected site-by-site, but are mainly traditional patching for most requirements. Other treatments include: injection patching; thermal patching and localised concrete repairs.

Essex Highways complies with best practice, investing in 'right first time' value for money permanent repairs. This approach reflects the Highways Maintenance Efficiency Programme (HMEP) guidance, an industry led, government promoted initiative encouraging good asset management practice.

Cost at individual sites ranges widely, depending on requirements for traffic management, speed of road, and the most appropriate treatment technique. The funding contributes a share of the total cost of operations to fix potholes, including materials, labour, plant including vehicles, management, traffic management, insurance, training and other overheads.

The ECC funding for pothole maintenance repairs has focused on higher priority, safety related repairs, although lower priority repairs have also been undertaken – especially through the County-Councillor-led repair initiative. Pothole repairs have also been undertaken during the roads capital resurfacing programme.

For information on the numbers of potholes repaired under the range of funded repair activities referenced above, please refer to Table 1 below, where it can be seen that the DfT funding significantly enhanced ECC spending plans.

Table 1: Pothole Productivity Repair Outputs	Quantity of Potholes Repaired	
	Funding Initiative	End of February
DfT Pothole Action Fund	7,311	7,963
ECC Funded Carrageway Maintenance	2,422	2,640
ECC Funded Capital Surface Wearing Course Repair	1,028	1,113
ECC Funded Councillor led Pothole Initiative	5,031	5,531
ECC Funded Capital Roads Resurfacing Programme	680	709
Total	16,471	17,956

Pothole prevention through a balanced capital road resurfacing programme of preventative and strengthening treatments in 2018/19

Note that the pothole repair information above relates to general maintenance. Works to address potholes also includes resurfacing. Essex undertakes a comprehensive programme of capital road resurfacing works each year.

Essex takes a preventative approach, whereby capital funded, value for money preventative treatments such as Surface Dressing and Micro Surfacing are applied to seal the road surface to prevent water ingress. Water under the surface, particularly when freezing is a major cause of potholes. Strengthening treatments, such as machine surfacing, recycling and reconstruction, make surfaces more resistant to the formation of potholes, but these are more expensive.

Table 2 below shows capital road works 2018/19, already largely completed. This includes over 2.5 million square metres Surface Dressing and Micro Surfacing. These low cost preventative treatments cover 80% of the total area of works – great value for Essex tax payers.

Table 2: Capital Road Resurfacing Programme 2018/19

Treatment Type	Area in Square Metres	Estimated km treatment length	% Treatment compared to Total
Surface Dressing	2,038,809	259	68.0%
Machine Surfacing	534,899	62	17.8%
Micro Surfacing	388,762	48	13.0%
Major Reconstruction	36,740	4	1.2%
Total	2,999,210	374	100%

Planned length of works is 374 km (232 miles), further than London to York or London to Brussels. Essex has some 5,000 miles of roads, about the distance from London to Saudi Arabia.

Why potholes are unlikely ever to be eradicated completely

Despite the many thousands of repairs and miles of resurfacing done in Essex every year, potholes will still happen. Why?

Water under the surface freezing and thawing, gets in through cracks caused through oxidation (brittle erosion), ground movement and heavy traffic. Eventually roads need substantial, expensive rebuilding. Many existing roads were not built for today's heavy, busy traffic.

For more information about potholes please refer to the HMEP report 'Pothole Review: Prevention and a Better Cure' at:

<http://www.highwaysefficiency.org.uk/efficiency-resources/asset-management/the-potholes-review.html>

Essex Highways uses these HMEP techniques:

- **Intervening at the right time** with preventative treatments such as Surface Dressing or Micro Surfacing to prevent potholes forming
- **Getting it right first time** with permanent repairs to reduce the cost of re-visits
- **Providing clarity to the public** – communicating what is being done on the Essex Highways website, Twitter account and ECC news releases.

The inevitability of some potholes in future is acknowledged by the DfT, and we trust we will receive further Pothole Action funding in future years to add to our planned spending, improving our roads for all road users.