

**Worcestershire County Council**  
**The Pothole Action Fund 2017/18**

The [Government's Pothole Action fund](#) gave local authorities in England £70 million for 2017/18 to help them tackle more than 4 million potholes nationwide. Funding was calculated according to size of the local network in the area.

The allocation for [Worcestershire in 2017/18 was £1.169 m](#) to repair potholes permanently and carry out resurfacing treatments in order to reduce the likelihood of potholes from forming, thus safeguarding the highway asset in line with the Government funded and sector led Highway Maintenance Efficiency Programme (HMEP). In 2016/17, the allocation was £894,000.

**How has Worcestershire County Council spent this allocation?**

As the Highway Authority for Worcestershire, we have a duty under the Highways Act 1980 to maintain our roads and we are responsible for maintaining the highway network comprising 2,546 miles (4,098 km) of roads.

To ensure it is well managed and maintained, it is essential that the management of the highways network is carried out in a systematic way, which takes a long term view of the performance and condition of our highway assets, our corporate objectives, maintenance requirements, customer expectations, service risks and funding availability.

By employing asset management techniques and principles, we are able to set long term objectives to manage and maintain our highway assets and have the following requirements in place to provide for an effective performance management framework:

- A strategic approach over the long term to manage the highway network
- Meeting stakeholders' needs
- Using a systematic approach for service delivery and programmes of work
- Optimal allocation of resources
- Managing expenditure over the asset lifecycle
- Meeting performance and condition requirements in the most efficient way
- Managing Risk

By adopting asset management principles and methodologies we are able to:

- Prioritise works across the county
- Develop and implement long term maintenance works programmes
- Provide levels of service that support service delivery priorities
- Prioritise roads that would benefit from the use of preventative maintenance processes to prolong the life of our carriageway assets

- Where feasible carry out permanent first time repairs to safety defects such as cracking, edge deterioration, low skid resistance and potholes to name but a few.

### **How do potholes form?**

Due to the progressive ageing of the network, the formation of potholes usually occur during or shortly after poor weather when water seeps into cracks. In addition, during the winter when water freezes, we often get the 'freeze-thaw effect' which is when the underlying material becomes weaker through expansion and contraction through the formation of ice. The road is weakened further when traffic passes over it, causing the surface layer to crack and break, causing a pothole to form in the road surface.

### **Prevention of potholes**

Worcestershire County Council adopt the view that 'prevention is better than cure' to safeguard the asset and for this reason, we carry out a number of preventative treatments. This view is in line with the Government's Pothole review report published in 2012.

We prioritise the management of rectifying safety defects by allocating our own revenue budget; the Pothole Action funding received from Government was allocated as capital funding in 2017/18 to carry out a number of proactive and preventative treatments to help address broader localised carriageway deterioration, existing potholes and further reduce the formation of potholes.

We generally carry out three types of preventative treatments:

1. Mini patching: we excavate the area up to 40 Sq m and reinstate with Bitumen Macadam.
2. Midi patching: For larger surface areas between 40 Sq m and 250 Sq m, we excavate the area and reinstate with two layers of Bitumen Macadam.
3. Edge of carriageway repair: The area is excavated and reinforced with a mix of concrete. This not only prevents cracking, it further reinforces the edge of carriageway that can be susceptible to vehicle overruns on the verge and causing further damage. Lining is then replaced as appropriate.

Photos of these different types of treatments are shown overleaf:

Example of midi patching repairs being carried out



Example of before and during mini patching repairs



Example of before and during edge of deterioration repairs



Example of after edge of deterioration repairs



## How have we spent the £1.169 m?

Across Worcestershire, these three preventative treatments have been carried out during the financial year 2017/18 and are shown in the table below. The table indicates the total number of schemes carried out and the respective total surface area treated:

	<b>Mini Patching ( up to 40m2)</b>	<b>Midi Patching (40m2 to 250m2)</b>	<b>Edge of Carriageway</b>
Number of schemes	164	57	8
Total size of area or length completed	17,880m2	4605m2	17,050m2
Total cost	£300k	£569k	£300k

The DfT have calculated that the allocation of £1,169m would fix 22,056 potholes based upon their costed formula of £53 per pothole. Investing the allocation into preventative treatment using the methodologies above, we have repaired and reduced the risk of potholes forming at a wide range of locations across the county. Based upon an average pothole/deteriorating area being 1 metre square, this would equate to the equivalent cost of £29.57 to fix each pothole or potential pothole forming utilising the above methods of repair.

Ends -