#### **Potholes**

Potholes are a plague on Britain's roads. The Local Government Association claims it would take 14 years to clear the backlog of potholes, despite councils filling in almost two million per year, and the Government has pledged six billion to try and tackle the problem by 2021.

Potholes form for a number of reason, material failure due to fatigue, Sub structure failure poor utility reinstatement, increased traffic volumes and not least the weather.

The changeable British weather conditions that we experience every year especially over the winter months, from stormy wet weather to prolonged freezing conditions leads to increased incidents of water freezing within the structure of the carriageway which leads to cracking of the road surfaces and potholes forming.

# What is a pothole?

For the purposes of Lancashire County Councils Highway Safety Inspection Policy, a carriageway pothole is considered to be a sharp edged depression or hole of 40mm or greater in depth (20 mm in well used footways) and extending in any one direction greater than 150mm (50mm in footways).

#### Who Identifies the Potholes?

Highway Safety Inspector identifies potholes, along with other highway defects, likely to create danger or serious inconvenience to users of the network or the wider community. Such defects include those that are considered to require emergency or urgent attention as well as those where the locations and sizes are such that longer periods of response will be acceptable.

Members of the public use one of the following methods to report potholes and other highway defects:

Report It	http://www.lancashire.gov.uk/roads-parking- and-travel/faultsearch/	This is the council's on-line reporting tool which allows customers to report highway defects.
Email	highways@lancashire.gov.uk	Report defects via a dedicated email
		address that is monitored by our customer access service.
Telephone	0300 123 6780	Report defects by telephoning the customer access service

# How are Potholes Prioritised?

The council receives notification of potholes from a number of different sources including though its Highway safety Inspections, highway operatives working on the network, Councillors and the general public.

The speed at which a pothole is addressed is dependent on how hazardous it is to road users, once this has been established either using the information available or by undertaking an inspection, a time frame will be given, this could be between 4 hours and 20 working days. This ensures that resources are targeted to the potholes that could be hazardous to road users.

## Who Fixes the Potholes?

The county council typically deploys around 70 operatives in two man teams across the county to repair potholes and uses contractors to supplement in-house resources where necessary.

A team working entirely on potholes can repair between 15 to 20 potholes each day. The county council takes a "right first time" approach to pothole repairs with a permanent repair made in a single visit wherever possible. However, there may be occasions due to safety reasons or the poor condition of the existing road, that a permanent repair at that time is not possible. On these occasions an infill repair may be carried out until permanent pothole, patching or resurfacing works can take place sometime in the future.

## How are potholes fixed?

Depending on the location and weather the follow methods can be used:

Excavate and Reinstate Method -This will be used to repair a defect where the surrounding road surface is such that a neat, sound edge is available or can be saw cut.

Infill Repair Method - This will be used to repair a defect where the surrounding road surface deterioration is such that no neat, sound edge is available or can be saw cut.

Spray Injection repair method - A rapid patching technique suitable for use on all road types using cold emulsion asphalt which is placed into the void depression in the road surface under high pressure. The void is first blasted with compressed air to clean the surface and remove any debris, then the surface of the void is sprayed and coated with bitumen emulsion. Finally the asphalt is blasted into the void, and another coat of bitumen applied to seal the surface.

Mechanical Repair method - For larger areas, a planing machine is used to remove the surface and for significant areas of patching, a road paving machine is deployed to lay the bituminous material

Insitu Road Heating Repair method - These methods heat up the existing surfacing material and mix it with new material. The process provides a good bond between existing and new material but the process is relatively slower, costly and unsuitable in wet conditions.