Warwickshire

A comprehensive guide to potholes



Warwickshire County Council

As the highway authority, Warwickshire County Council is responsible for the maintenance and repair of the public highway, which includes the repair of potholes and other defects. How potholes are dealt with depends on the severity of the risk they pose, so we use a risk-based approach to their identification and repair.

What causes **potholes?**

A pothole is generally a sharp-edged depression or hole in the surface of either a carriageway or a footway. They form as the surface ages and becomes less flexible and more susceptible to cracking.

They are usually formed by three elements; surface cracks, water and traffic. Small surface cracks form and expand over time with traffic. Water seeps into the cracks causing further deterioration which is made worse when water freezes and the ice expands. When this thaws and the surface contracts, further damage is caused. When traffic then passes over the surface, it cracks further and breaks, allowing a sharp-edged hole – a pothole - to appear.

What is a **pothole?**

On a carriageway, a pothole is an area where surface material has been lost resulting in a vertical depression where part or all of the surface layers have been removed.

As a general guide, to be assessed as a pothole, it must be greater than 50mm on a carriageway or 20mm on a footway.

Deterioration below those limits is considered a surface defect but may still be considered for a repair to prevent it turning into a pothole.



How do we identify **potholes?**

Planned safety inspections identify defects within the highway that are likely to create hazards to highway users.

We regularly monitor highways with the frequency determined by the following factors.

Category and frequency of planned safety inspections for carriageways

Category of carriageway	Frequency of inspection
Strategic route	Monthly
Main distributor ie B road	Four times a year
Secondary distributor	Three times a year
Link road	Twice a year
Local access road	Once a year
Minor roads	Once a year

Category and frequency of planned safety inspections for footways

Category of footway	Inspection type	Frequency of inspection
Prestige walking zone	Walked	Monthly
Primary walking route	Walked	Monthly

We carry out dedicated monthly walked inspections on our prestige walking zones and primary walking routes. Our other footways are inspected during our driven carriageway inspections thus carry the same frequency.

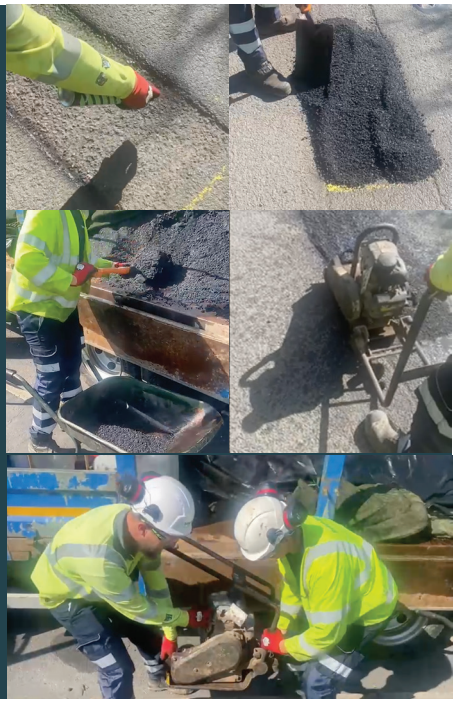
Fundamentally, the busier the highway, the higher the frequency of inspection. As well as defects picked up during planned safety inspections, members of the public are integral to the service through reporting issues either online or via the Customer Service Centre. We aim to inspect these reports within five working days through a team of Highway Area Surveyors. A desktop triage on reports received identifies those potholes deemed to be of a higher concern (based on the information provided)and informs the area surveyors as to which should be prioritised.

How long do repairs take **from when they are reported?**

Pothole repairs are prioritised in line with our risk-based approach which takes into account the impact and probability of injury or damage to the highway user.

We consider factors such as frequency of inspection, location on the carriageway of a defect as well as its size. A smaller defect in the middle of a busy carriageway will be higher priority than a larger pothole elsewhere on the road where it is less likely to impact a car, or a larger pothole on a quieter road.

Once the risk has been determined the inspector will identify a suitable repair timeframe. Some potholes will need to be repaired more urgently than others so priorities will be allocated as below.



Potholes of a serious nature on our busiest roads will be repaired soonest. Generally potholes greater than 50mm in the carriageway, or 20mm on the footway, will get repaired within 30 days (or sooner depending on the level of risk posed).

Response Category	Repair Timeframe
E (Emergency)	Within two hours
1	Next working day
2H	Within five working days
2L	30 days

We may decide not to repair a pothole if it is not a safety issue or severe enough to repair but will monitor the problem and may plan a future repair as part of our preventative treatment maintenance.

Commonly used pothole **treatments**

Permanent

Whenever possible we use a permanent 'first time fix' approach to repairing potholes. This is where we saw cut the surrounding area around the pothole with straight joints. The area is then excavated and filled with a hot material. This is the most robust pothole repair.

Temporary

Where it is not possible to undertake a permanent repair, perhaps due to the fact that that the pothole needs to be repaired urgently to keep the road in a safe condition or because carrying out the repair may damage the structural condition of the surrounding surfaces, then a temporary repair is undertaken. Depending on how quickly we need to repair the pothole will mean we either use a hot material (if time allows), or use a cold applied material if the pothole needs to be filled in an emergency (e.g. within 2 hours).

Where a temporary pothole repair has to be undertaken, we will then arrange for this to receive a permanent repair (if suitable), as part of our planned programme of works.

Find and fix gangs

Our pothole response has been supplemented by a Find and Fix gang which is currently working five days a week with increased budget available through additional government funding.

They work systematically around the county, aligning with the areas covered by Highway Area Surveyors, identifying and repairing potholes on the move, using hot tarmac, exclusively covering the county's Category C and Unclassified network. From October 2023 to December 2024 they have fixed 5,600 defects.

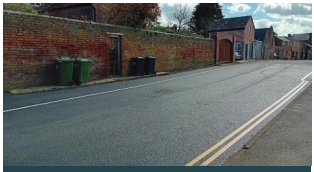
Their role is preventative so they repair defects up to 2sq metres in their early stages of development before they require more invasive, and more costly and disruptive, intervention later on. Another cost saving of this is the reduction in numbers of potential highway insurance claims against the Council.

Preventative **treatments**

Treatments used to prevent the formation of potholes include the following:

Surface dressing:
A cost-effective way of maintaining the road, this involves spraying the road surface with a coat of bitumen (tar-like substance) then rolling stone chippings into it to form a protective, water-resistant layer.

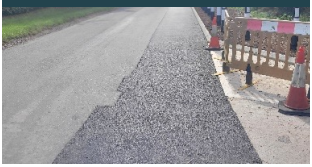




Carriageway resurfacing:
Where an entire length of road needs repair, we will either remove the existing surface material and replace with new or remove the lower construction levels and replace them, known as reconstruction. Where appropriate we will also add material cover over the existing surface to add strength.

Footway resurfacing:
These can also need treating to replace damage to surface or sub-surface layers. We might add a thin treatment known as slurry seal. Or we might resurface the entire footway which involves removing the entire bituminous surface where it has deteriorated. Where surface defects are very localised, we may only carry out patching works without the need to resurface the entire footway.

Patching
Where more localised repairs are needed, routine patching treats small, localised areas while structural patching covers larger areas.



Edge of carriageway repairs
Where damage is extensive at the edge of the carriageway, often caused by vehicles overrunning the edge, the damaged material is excavated and reinforced with concrete then surfaced with Macadam.



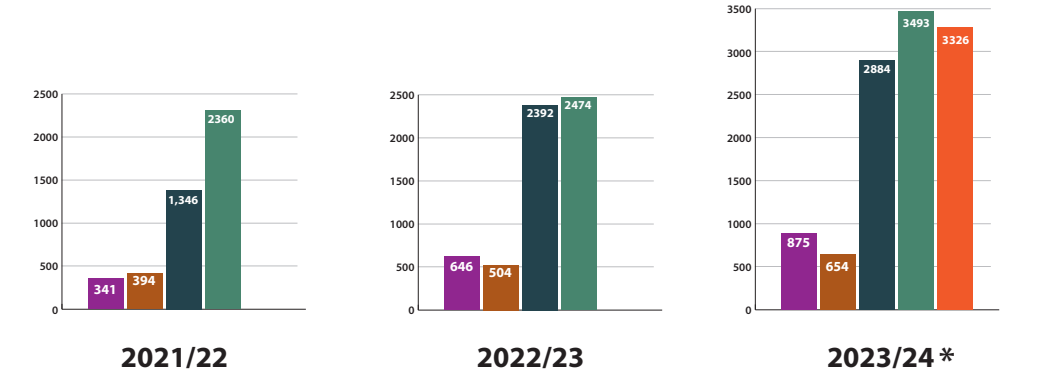
Performance

June 2020 - September 2024

22,380 potholes **reported**

26,410 **repaired**

Number and response category for repairs year on year



*Find & Fix gangs did not become operational until Sept 2023



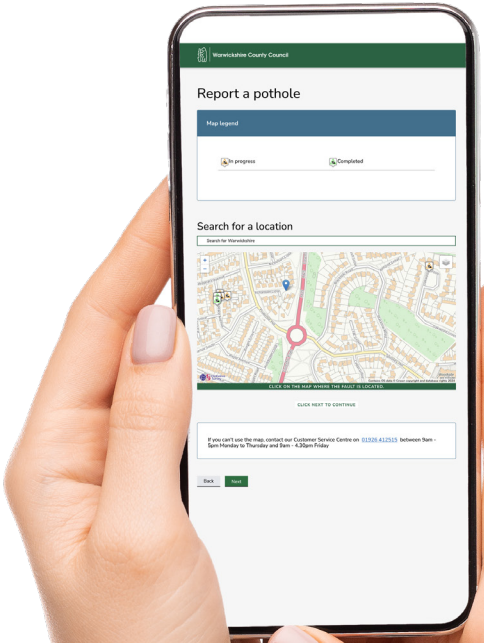
How to **report a pothole**

Potholes can be reported by residents which gives the team local intelligence and the most current picture of the state of the network locally.

It also allows residents to chart the progress of the pothole they report ie if it has already been reported, if/ when it will be fixed, when the job is completed.

To report a pothole and chart its progress, these are the simple steps.

- Go to **warwickshire.gov.uk/potholes**
- Click on '**Create an account'**
- **Add email address** which will receive a verification code to enter
- Once account active, potholes can be reported by **putting in postcode or address**
- Zoom in and **see if it has already been reported.**
- **Add a brief description** and add an image (optional)
- You can **opt to receive email updates** or simply log into account to chart progress.



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