

Climate Change and Potholes



Analysis briefing | Aimee Stanton | January 2024

At the end of 2023, Round Our Way submitted Freedom of Information (FOI) requests to all councils in Britain responsible for local road repairs requesting details on their recorded potholes for the last five years (2018 to 2023). We also consulted experts in road design and maintenance to understand how climate change is impacting the scale of Britain's pothole problem, and spoke to people injured in accidents caused by potholed roads.

For 2023 we have council data on potholes from January until the end of November. Where stated, we have made conservative projections about the number of potholes likely to be reported in December 2023. We received responses containing comparable five year data from just over 55% of councils. Where stated, we have made estimates about the likely recorded pothole numbers from councils that did not provide data or data in a comparable format.

Key findings

Projections:

- When estimates for 2023's December data, and for areas where we lack comparable data, are applied, this year's British pothole figure reaches over 1.2 million.
- If it is assumed that the reported data in December (available later in January 2024) is typical of an average 2023 month, and that the pothole levels for missing local authority areas are comparable with those councils that have provided data, 1,207,398 potholes will be recorded by councils across Britain in 2023.
- This represents a 62.3% increase in comparable figures for 2022, when 743,923 potholes were estimated to have been recorded across all council areas.

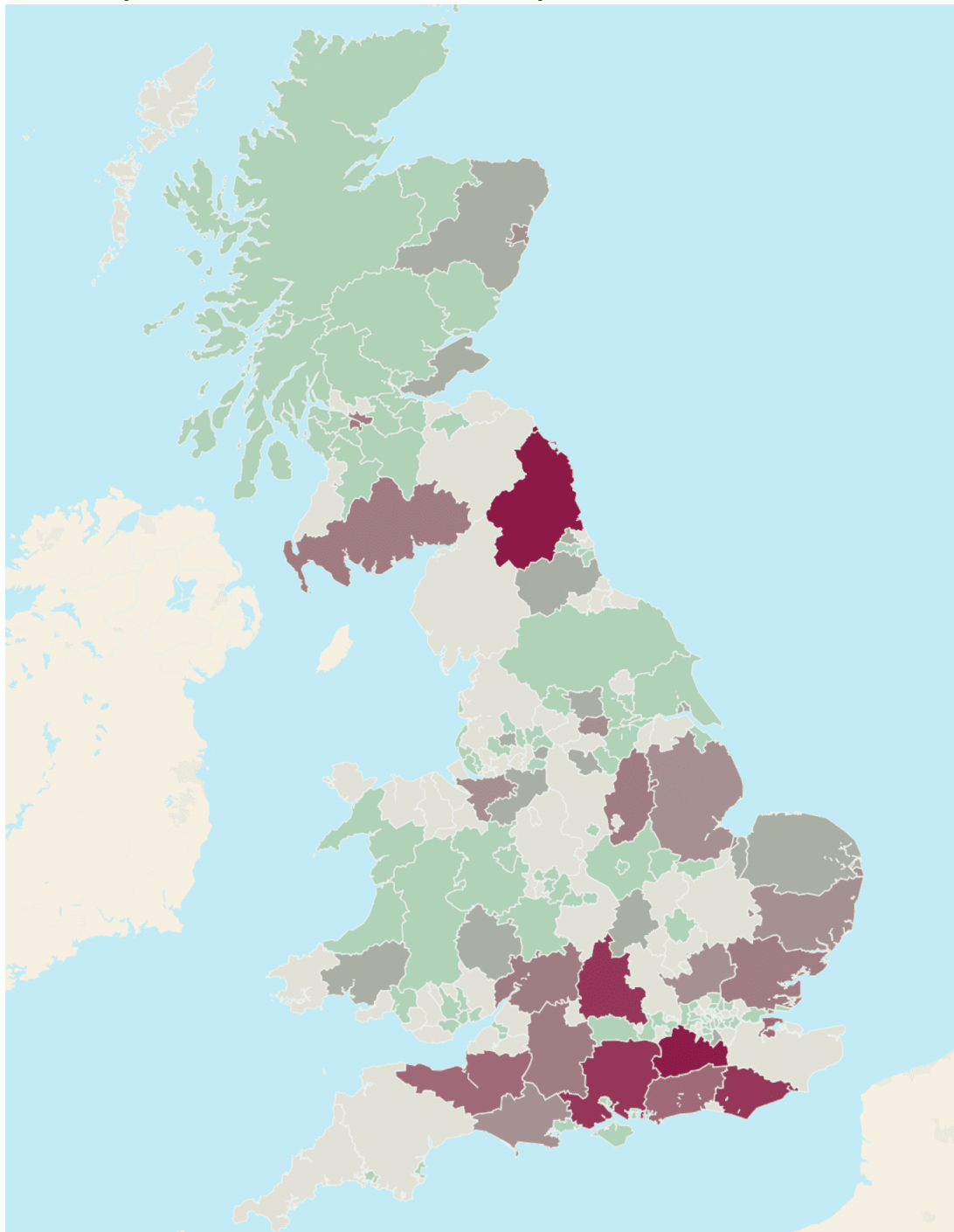
	2023 Projected Pothole Numbers	Growth since 2022
Great Britain	1,207,398	62.30%
England	1,022,673	63.44%
Scotland	132,642	47.73%
Wales	52,083	83.18%

- In addition to the above, Round Our Way projections suggest that London will record 48,906 potholes in 2023 (a growth of 75.59% since 2022); England's Unitary Councils will record 444,264 potholes (up 59.72%); England's Metropolitan Councils will record 135,234 potholes (up 16.96%); and, England's County Councils will record 394,270 potholes (up 93.19%).

2023 data and five-year trends:

- Analysis of the data from the FOI responses received from 115 local authorities (55.3% response rate) across Britain, reveals that 2023 is set to be a five-year high for pothole numbers.
- For the areas where this is comparable data, almost 630,000 potholes were recorded by authorities between January and November 2023.
- Before 2023, the highest level recorded in recent years was 638,092, in 2018, when the country was hit by the 'Beast from the East' weather front. When December data is available to be added to the annual total, it is highly likely that 2023 will eclipse 2018 levels.
- The figures show the number of potholes fell to a five-year low in 2022 when 423,000 were recorded, the number then surged by 48.7% to almost 630,000 in 2023.
- During the five-year period (2018 to 2023) 3.1 million potholes were recorded.

Recorded potholes in Britain between January and November 2023



- Potholes
- 0-4,999
 - 5,000-9,999
 - 10,000-14,999
 - 15,000-19,999
 - 20,000-24,999
 - 25,000-29,999
 - 30,000-34,999
 - 35,000+



Projected potholes across the country

The information below are projections based on the data received from FOI responses.

Projections assume that December 2023's pothole total will equal that of an average month in January to November 2023. Furthermore, it is assumed that the pothole totals for those councils where we are missing data are the same as the annual averages for those areas where we do have data. To make this projection as accurate as possible, separate projections have been made for Scotland, Wales and the different types of local authority in England.

Overall across Great Britain we find:

Great Britain	
Number of councils we have 5 year data for	115
All councils	207
Projection for full year 2023 for councils where we have data (December projected using YTD monthly average)	686,759
Projection for full year 2023 for ALL councils (inc. those we are missing data on) (projection assumes missing council areas have same average number of potholes to areas we have data for)	1,207,398
Projection for full year 2022 for ALL councils (inc. those we are missing data on) (projection assumes missing council areas have same average number of potholes to areas we have data for)	743,923
Growth 2022 - 2023 (based on projections)	62.30%

Examining England, Scotland and Wales separately we find:

England	
Number of councils we have 5 year data for	88
All councils	153
Projection for full year 2023 for councils where we have data (December projected using YTD monthly average)	589,064
Projection for full year 2023 for ALL councils (inc. those we are missing data on) (projection assumes missing council areas have same average number of potholes to areas we have data for)	1,022,673
Projection for full year 2022 for ALL councils (inc. those we are missing data on) (projection assumes missing council areas have same average number of potholes to areas we have data for)	625,703
Growth 2022 - 2023 (based on projections)	63.44%

Scotland	
Number of councils we have 5 year data for	19
All councils	32
Projection for full year 2023 for councils where we have data (December projected using YTD monthly average)	78,756
Projection for full year 2023 for ALL councils (inc. those we are missing data on) (projection assumes missing council areas have same average number of potholes to areas we have data for)	132,642
Projection for full year 2022 for ALL councils (inc. those we are missing data on) (projection assumes missing council areas have same average number of potholes to areas we have data for)	89,787
Growth 2022 - 2023 (based on projections)	47.73%

Wales	
Number of councils we have 5 year data for	8
All councils	22
Projection for full year 2023 for councils where we have data (December projected using YTD monthly average)	18,939
Projection for full year 2023 for ALL councils (inc. those we are missing data on) (projection assumes missing council areas have same average number of potholes to areas we have data for)	52,083
Projection for full year 2022 for ALL councils (inc. those we are missing data on) (projection assumes missing council areas have same average number of potholes to areas we have data for)	28,432
Growth 2022 - 2023 (based on projections)	83.18%

The data also allows further sub-projections in England based on the council type:

England: London only	
Number of councils we have 5 year data for	20
All councils	33
Projection for full year 2023 for councils where we have data (December projected using YTD monthly average)	29,640
Projection for full year 2023 for ALL councils (inc. those we are missing data on) (projection assumes missing council areas have same average number of potholes to areas we have data for)	48,906
Projection for full year 2022 for ALL councils (inc. those we are missing data on) (projection assumes missing council areas have same average number of potholes to areas we have data for)	27,852
Growth 2022 - 2023	75.59%

England: Metropolitan Councils only	
Number of councils we have 5 year data for	22
All councils	36
Projection for full year 2023 for councils where we have data (December projected using YTD monthly average)	82,643
Projection for full year 2023 for ALL councils (inc. those we are missing data on) (projection assumes missing council areas have same average number of potholes to areas we have data for)	135,234
Projection for full year 2022 for ALL councils (inc. those we are missing data on) (projection assumes missing council areas have same average number of potholes to areas we have data for)	115,624
Growth 2022 - 2023	16.96%

England: Unitary Councils only	
Number of councils we have 5 year data for	33
All councils	63
Projection for full year 2023 for councils where we have data (December projected using YTD monthly average)	232,709

Projection for full year 2023 for ALL councils (inc. those we are missing data on) (projection assumes missing council areas have same average number of potholes to areas we have data for)	444,264
Projection for full year 2022 for ALL councils (inc. those we are missing data on) (projection assumes missing council areas have same average number of potholes to areas we have data for)	278,143
Growth 2022 - 2023	59.72%

England: County Councils only	
Number of councils we have 5 year data for	13
All councils	21
Projection for full year 2023 for councils where we have data (December projected using YTD monthly average)	244,072
Projection for full year 2023 for ALL councils (inc. those we are missing data on) (projection assumes missing council areas have same average number of potholes to areas we have data for)	394,270
Projection for full year 2022 for ALL councils (inc. those we are missing data on) (projection assumes missing council areas have same average number of potholes to areas we have data for)	204,084
Growth 2022 - 2023	93.19%

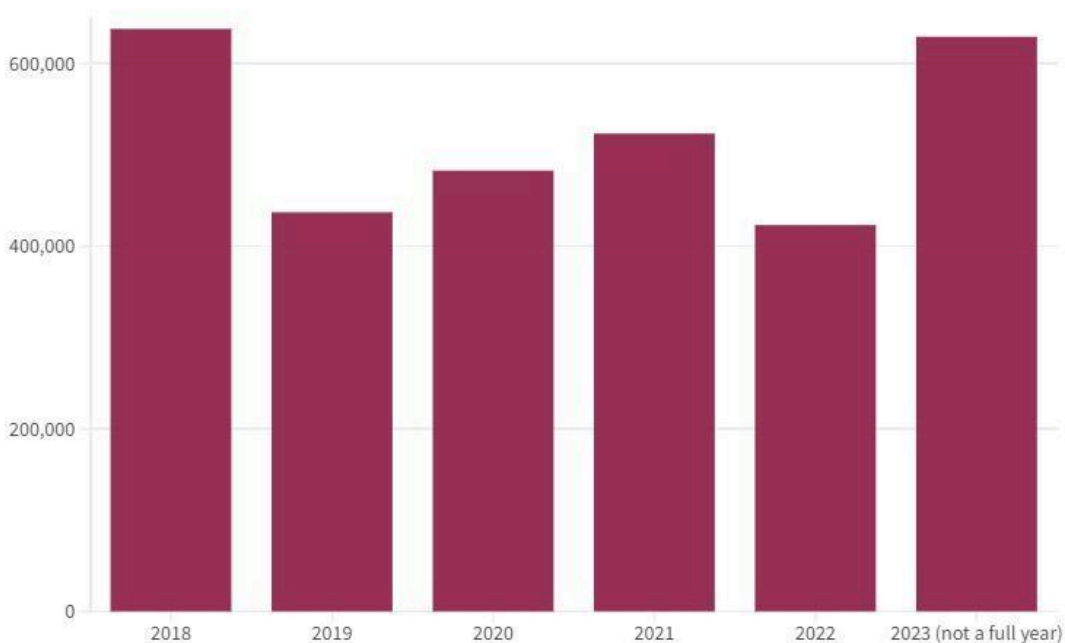
Findings across the country

The information below is based on hard data from FOI responses and not projections.

Year	Potholes (based on FOI responses - not projections)
2018	638,092
2019	437,193
2020	482,861
2021	523,468
2022	423,221
2023 (Jan to Nov)	629,529

Britain's pothole crisis

Almost 630,000 potholes have been recorded by councils throughout 2023



Source: Round Our Way • Based on analysis of Freedom of Information requests sent to 208 UK local authorities • Figures sourced from 115 authorities that responded with information. 2023 captures figures up to Dec. Correct as of 13/12/2023.



England

- Almost 540,000 potholes were recorded in England in 2023. In total, more than 2.7 million potholes have been recorded by councils in England since 2018. This is based on a response rate of 57.5%.
- Surrey recorded the greatest number of potholes during 2023 with more than 68,000, followed by Northumberland with more than 38,000 and Oxfordshire with more than 32,000.
- The number of reported potholes has dropped by 2.7% over the last five years, falling from 555,000 in 2018 to 540,000 in 2023.
- In comparison to 2022's figures, the number of reported potholes increased by 50.2%, rising from 360,000 in 2022 to 540,000 in 2023.

Scotland

- Almost 71,000 potholes were recorded in Scotland in 2023. In total almost 350,000 potholes have been recorded by Scottish authorities since 2018. This is based on a response rate of 56.3%.
- Glasgow recorded the greatest number in 2023 with almost 18,000, followed by Dumfries and Galloway with almost 16,000.
- The number of reported potholes increased by 3.7%, rising from 68,000 in 2018 to almost 71,000 in 2023.
- In comparison to 2022's figures, the number of reported potholes increased by 34.8%, rising from 52,000 in 2022 to 71,000 in 2023.

Wales

- More than 17,000 potholes were reported in Wales in 2023. In total, almost 74,000 potholes have been recorded by Welsh councils since 2018. This is based on a response rate of 36.4%.
- Carmarthenshire recorded the highest number in 2023 with more than 5,000, followed by Cardiff with almost 4,000.
- The number of reported potholes increased by 35.9% over the five year period, increasing from 13,000 in 2018 to 17,000 in 2023.
- In comparison to 2022's figures, the number of reported potholes increased by 67.9%, rising from 10,000 in 2022 to 17,000 in 2023.

London

- More than 22,000 potholes were reported in London in 2023. In total, more than 121,000 potholes have been recorded since 2018. This is based on a 54.5% response rate.
- Croydon recorded the greatest number this year with nearly 6,000, followed by Ealing with almost 4,000.
- The number of reported potholes fell by 11.9% during the five year period, dropping from 26,000 in 2018 to 23,000 in 2023.
- In comparison to 2022's figures, the number of reported potholes increased by 53.5%, rising from 15,000 in 2022 to 23,000 in 2023.

Methodology

- Round Our Way sent Freedom of Information requests to 208 local authorities in the UK (207 in Britain, 1 body in Northern Ireland) responsible for recording/repairing potholes. Of which 130 (62.5%) were able to provide data for the 2023 year to November. In total, 115 authorities (55.3%) were able to provide data for the five-year period – 2018 to 2023.
- As 78 councils and the month of December were missing from the data analysis a projection has been applied to determine an estimated total number of potholes likely to be recorded by councils across the country for the full years 2022 and 2023. These numbers are set out in the key findings.
- To produce a projection for the likely number of potholes recorded in December 2023 we have calculated an average monthly figure for January to November 2023 and applied this to the missing month (this creates a projected total for 2023 for areas where we have data of 686,759 potholes). In practice, the figure is likely to be higher as recorded pothole numbers tend to be higher in winter months.
- To produce a projection of the number of potholes recorded in areas where we did not receive FOI responses, or where the responses did not include comparable data, we have taken a recorded pothole average for councils where we have data and applied this to areas where we do not have data. Projections are based on separate average calculations for councils in Scotland and Wales and by council type in England. For 2023 this projection includes our estimate of the December 2023 figure.
- The FOI requests were sent on 10 November 2023. We requested information up to the present date, however due to differences in reporting some councils provided data up to October, while a small number included a few days of December. The vast majority covered the period January to the end of November.
- Important information to note: not all potholes will have been recorded in this data; some potholes may have been reported more than once; not all reported potholes will have been confirmed as potholes; some councils record potholes on roads and footpaths – both have been included in our analysis; due to differences in recording some councils group all group defects together and are unable to separate out individual potholes. Figures are estimates.
- The analysis only includes potholes recorded by councils, not the relevant agency, Highways England for example, in dealing with national roads.
- An earlier [analysis by RAC](#), using a similar methodology, found pothole numbers had been increasing across the UK in the years prior to Round Our Way's analysis. During the time period 2014 to 2017 the number of potholes was still lower than Round Our Way's figure for 2023 despite having a higher response rate (76%).

Year	Potholes
2014	350,345
2015	356,432
2016	522,059
2017	512,270