



Air quality results from the 2025 Indices of Deprivation

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Air quality in Lancashire results from the 2025 English indices of deprivation

Introduction

This article considers air quality and emission results for the Lancashire 14-authority area. This encompasses the 12-districts that are within the Lancashire County Council area, and the two unitary authorities of Blackburn with Darwen and Blackpool.

A combined indicator of air quality for small local areas was developed as part of the [English Indices of Deprivation](#) and the results are available for the 945 lower super output area level (LSOAs) in the Lancashire-14 area. The air quality indicator is one of the sub-indicators that forms part of the living environment deprivation domain.

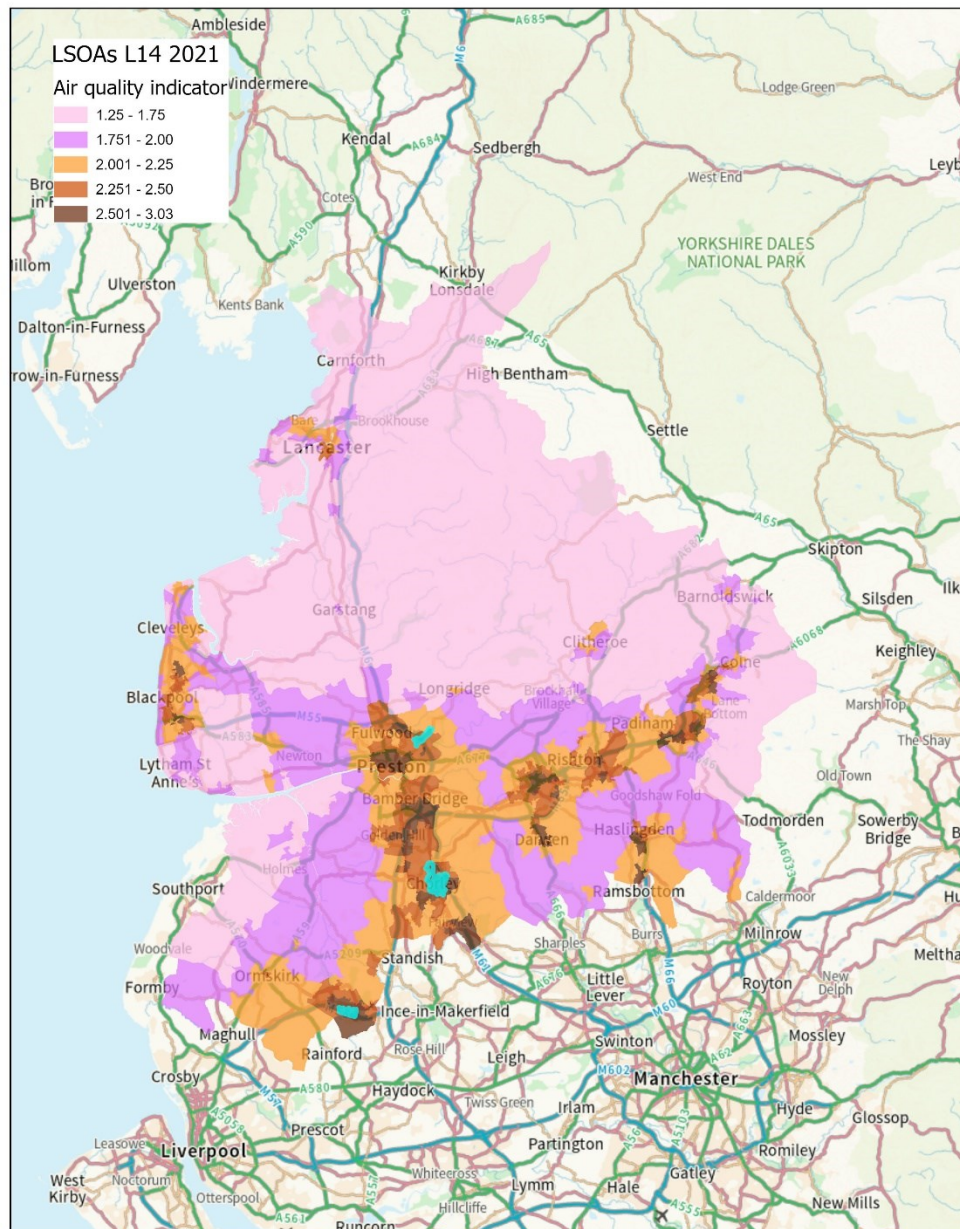
The air quality indicator is a modelled estimate of the concentration of the four pollutants: nitrogen dioxide, benzene, sulphur dioxide and particulates. Air quality data for 2023 on a 1km grid were obtained from the [UK Air Information Resource](#). For each pollutant, the atmospheric concentration is related to a guideline or standard value. For the 2025 IoD, this standard is the [WHO guideline](#), which we also use for the background concentrations section. Please see DEFRA website for details of [various air pollutants](#).

The index values for the four pollutants were derived from the estimate standardised against the WHO values, then summed to create an overall air quality index score for the LSOA. The combined air quality figure which represents the overall quality score or ratio for each LSOA is derived simply by the addition of the scores for each of the four pollutants. A higher value implies a poorer overall air quality though there is no stated value above which the Combined Air Quality Indicator itself is said to indicate an unsafe concentration of pollutants. Nationally the indicator falls into the range 0.92 to 5.72.

The Lancashire Results

Many urban areas in Lancashire suffer to some degree from poorer air quality than other parts of the county though it is clearly much less of an issue in the coastal towns of Lancaster/Morecambe, Fleetwood, Lytham St Annes and Blackpool, presumably due in part to the direction of the prevailing winds.

Figure 1. Combined Air Quality Indicator (2025 Index of Deprivation)



Most Lancashire areas recorded good overall air quality results. Changes in methodology makes comparisons between indices from different periods difficult to interpret. The highest recorded score in Lancashire (3.03), which occurs in two adjoining LSOAs in West Lancashire is considerably less than the worst level recorded in the country (5.72). No areas of Lancashire experience air pollution levels anything like those recorded in the centres of London and other larger cities. More than 200 LSOAs with the highest indicator scores all are in London, of which 7 LSOAs in Camden occupy places in the top 12 including the top 2 ranks. The other five in the top

dozen are located in the City of London and Westminster. Only beginning at rank =213 do we see any LSOAs in other parts of the country, in this case an LSOA in Spelthorne in Surrey, a district neighbouring Heathrow Airport.

There are some parts of the county where the figures are not encouraging but the combined air quality Indicator reveals that out of 33,755 LSOAs in England, the worst performing Lancashire LSOAs were in =7,544th place.

Of the 12 LSOAs with the highest air quality indicator scores (above 2.84) in the Lancashire-14 area, two in West Lancashire have scores exceeding 3. These are in the Dugmoor area and border the M58 motorway. The next highest (2.91) is in Preston, an area covering Red Scar and straddling the M6 motorway. The fourth highest at 2.89 is an LSOA that adjoins the first two in West Lancashire, enclosed by the M58, junction 5 on the M58 and the A577. The next 8 cover the west and southeast of Chorley town centre. This pattern is entirely different from what was seen in 2019. There are 29 LSOAs with air quality indicator scores below 1.58 in Lancaster, Ribbles Valley, Wyre and Pendle. They cover much of the northern part of the county, but not the Lancaster and Morecambe urban area. Those with the best scores, 1.25 or 1.29, are large LSOAs in the rural north-east of the county.