

Health & Wellbeing

Air Quality - Our Considerations

1. Issues and opportunities

- 1.1. Air pollution contributed to almost 1 in 20 deaths in Liverpool City Region, equivalent to around 1,040 deaths per year in 2018¹. This figure is higher than the North West average, but is slightly below that of England (which includes London). Nearly two thirds of the local authorities within Liverpool City Region have roadside levels of nitrogen dioxide (NO₂) that breach legal limits, whilst all six of the districts have at least one area with levels of particulate matter (PM_{2.5}) over the level recommended by the World Health Organization (WHO)². Higher concentrations of nitrogen oxides, which can cause lung irritation and can lower resistance to respiratory infections and illness, tend to be found around major roads and urban centres within the City Region³. This is reflected in Figure 1, which shows the average amount of nitrogen dioxide across the City Region in 2018.
- 1.2. Poor air quality costs the Liverpool City Region an average of £480 million per year⁴ by way of absence from work, reduced productivity and direct costs to the NHS.
- 1.3. There is international academic consensus that air pollution is bad for human health. In addition, the UK has reduction commitments for five damaging air pollutants which comprise fine particulate matters, ammonia, nitrogen oxide, sulphur dioxide and non-methane volatile organic compounds, noted for their harm to public health, habitats, biodiversity and the environment⁵.
- 1.4. Locally, Liverpool City Region Combined Authority has declared a Climate Emergency and identified that addressing poor air quality is a necessary component of its response.

¹ British Lung Foundation and Kings College London, 'The health and economic impacts of toxic air in Liverpool City Region', January 2020.

² Defra (2018) Modelled background pollution data. <https://uk-air.defra.gov.uk/data/pcm-data>.

³ LCRA Evidence Research & Intelligence.

⁴ Royal College of Physicians and Royal College of Paediatrics and Child Health, Every breath we take, February 2016, p.xiii.

⁵ Planning Practice Guidance, reference ID: 32-001-20191101.

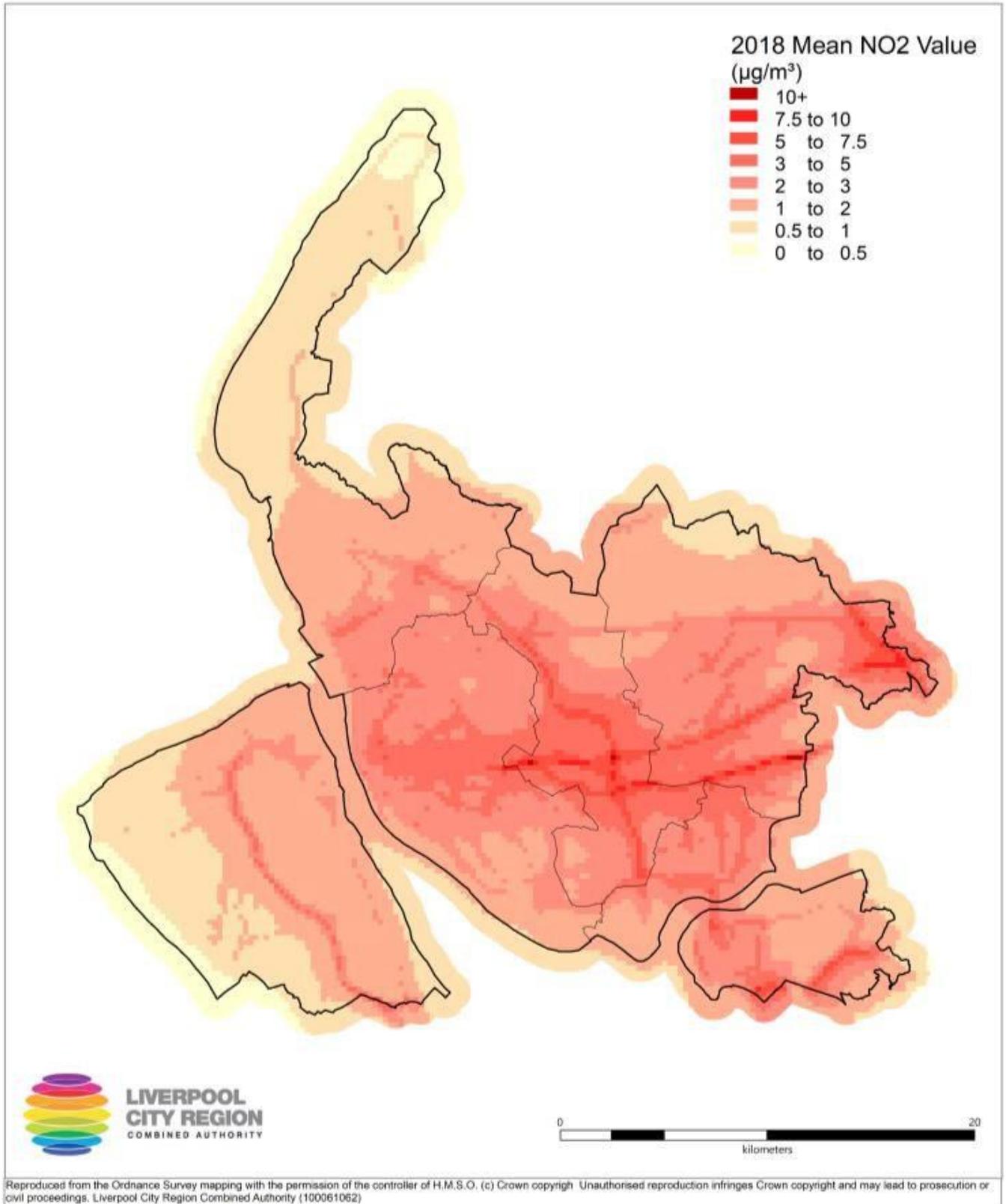


Figure 1. Liverpool City Region Average Nitrogen Levels

- 1.5. Poor air quality particularly impacts deprived areas in the City Region. This has consequences for equality and fairness in the City Region, with high rates of car usage in more affluent areas contributing towards significant air quality challenges in the less affluent areas through which the bulk of this traffic flows⁶. Compounding this is that greenspace and natural capital, which could help improve air quality, is less prevalent in areas of the City Region that need them the most⁷. Furthermore, motor vehicle and car usage has increased in the City region over the last two decades and continues to rise⁸.
- 1.6. The City Region also has a number of declared [Air Quality Management Areas](#) (AQMA – areas that national air quality objectives are not likely to be achieved) which are identified in Figure 2.

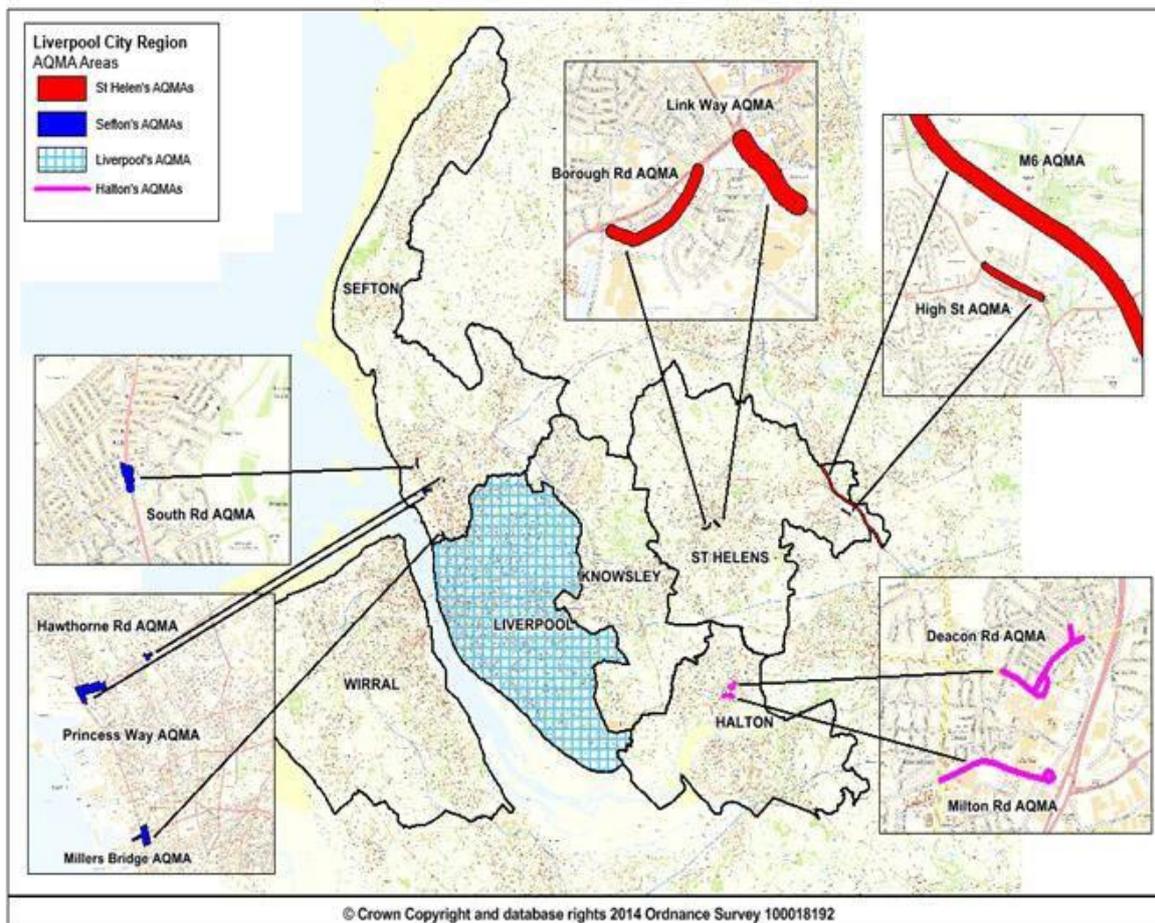


Figure 2. Liverpool City Region AQMA

⁶ Liverpool City Region Combined Authority Transport Plan.
⁷ LCRCA Evidence Research & Intelligence.
⁸ LCRCA Evidence Research & Intelligence.

2. Why does the Spatial Development Strategy need to address this?

- 2.1. The SDS has a statutory duty to address health and health inequalities in the Liverpool City Region. Addressing poor air quality will be a key component of achieving this.
- 2.2. The [National Planning Policy Framework](#) also recognises the importance of addressing poor air quality, and sets out that planning policy should:
 - Sustain and contribute towards compliance with relevant limit values or national objectives for pollutants, taking into account AQMAs and Clean Air Zones, and the cumulative impacts from individual sites in local areas;
 - Identify opportunities to improve air quality or mitigate impacts, such as through traffic and travel management and green infrastructure so far as possible opportunities can be considered at the plan making stage;
 - Ensure that new and existing developments do not contribute to, or are put at risk of unacceptable levels of air pollution and wherever possible development helps improve air quality; and
 - Manage patterns of growth and focus on significant development on sustainable locations to reduce congestion and emissions, improve air quality and public health.
- 2.3. [Planning Practice Guidance](#) sets out what specific issues may need to be considered when assessing air quality impacts, how detailed air quality assessments need to be, and how an impact on air quality can be mitigated.

3. What is being done by the Combined Authority?

- 3.1. Poor air quality is recognised in the Metro Mayor's Manifesto which seeks to tackle this by:
 - Creating an affordable, reliable and integrated transport network;
 - Promoting low carbon technologies and industries in the green economy sector.
- 3.2. The Combined Authority have created an Air Quality Task Force to improve air quality in the City Region. A recent output of the task force has been an [Interim Air Quality Action Plan](#), which makes a number of recommendations, some of which will

inform the SDS, such as using better data to support decision-making, boosting active travel, promoting clean fuels and technologies, reducing Strategic Road Network emissions, using public transport, tackling domestic emissions, reducing freight emissions, providing green infrastructure and pollution mitigation (including greening development and investigation into air quality barriers) and cleaner, greener national and inter-city connectivity. Specifically, the Action Plan also sets out that the Combined Authority will ensure air quality is not considered in isolation when developing plans and projects, and that local planning powers should be used to create clean, liveable and safe places.

- 3.3. The Combined Authority [Transport Plan](#) is also relevant to air quality, and sets a strategic objective to develop a mobility system that enhances health and wellbeing and developing a liveable and resilient City Region that addresses the challenges of poor air quality. A number of priority actions related to this strategic objective are set throughout the Transport Plan. The recently published [Building Back Better Recovery Plan](#) has reaffirmed the Combined Authority's commitment to addressing poor air quality by proposing investment into hydrogen buses and a hydrogen refuelling station to introduce a green route service that would pass through several AQMAs.

4. What you told us

- 4.1. Of relevance to air quality, responses to the previous SDS engagement highlighted that:
- Tackling poor air quality is a major issue for residents across the City Region.
 - Congestion as a result of heavy traffic and pollution caused by harmful greenhouse gas emissions is acknowledged as contributing to poor air quality.
 - There are some opportunities to improve poor air quality such as via electric vehicles and charging points and promoting public transport use rather than using the private car.
 - Air quality monitoring would help tackle poor air quality in the City Region.

5. How we could respond

5.1. Tackling air quality will require more than one SDS policy and interventions that are outside the remit of the planning system. In addition, the Government's White Paper [Planning for the Future](#) envisages a move towards a map and rule based approach as opposed to vague statements of policy. Nonetheless the SDS will seek to ensure that new development is located in sustainable locations to maximise sustainable forms of transport and minimise the need to travel by private vehicle. Other SDS policies suggested as part of this consultation (such as those relating to housing standards, design quality, green infrastructure, and active travel) will also play a key role in addressing poor air quality. As the SDS would be read as a whole, it would not be necessary to repeat these requirements within an air quality policy. However, ensuring that individual development accounts for, and where necessary appropriately mitigates poor air quality, would be make an important contribution to addressing poor air quality.

5.2. As such we suggest that the SDS should include an air quality policy that would:

Set out what locations and types and sizes of development would be required to undertake an Air Quality Impact Assessment.

Where the evidence indicates it is necessary, it would be required that the development delivers appropriate mitigation measures to monitor and address air pollution through design and throughout construction.

5.3. We envisage that the above requirements would be particularly pertinent in AQMAs or locations that could affect them, for defined sensitive uses and users (such as schools), or within areas where the evidence indicates that there are health problems associated with poor air quality. The suggested approach would apply to development proposals that are sources of pollutions and/or include receptors to poor air quality. We will continue to develop our evidence base on air quality and give further consideration to what locations, types and sizes of development any Air Quality Assessment requirement could apply.

5.4. This suggested policy, in conjunction with the other noted strategies, will form part of a comprehensive package to improve air quality. It would also support the Combined Authority's objective to support decision-making with better data, and

the data driven approach articulated by the Government in the Planning White Paper.

6. Which Objectives will this approach help to achieve?

6.1. The suggested policy approach will help support the following SDS objectives:



Addressing health inequalities and creating a healthier City Region



Tackling Climate Change and creating a greener City Region



Delivering an Inclusive Economy

7. How can we make sure this approach would work?

7.1. The following data sets could be used to monitor the effectiveness of the suggested policy:

- Emissions data (NO₂, PM, sulphur dioxide etc).
- Relevant health data relating to air quality (though this is long term and the day-to-day impacts in the short term are negligible).
- The proportion of mitigation measures identified in air quality impact assessments that are implemented.