## Oxfordshire Air Quality Group Annual Report - Health Improvement Board

### National Context

1. The health effects of air pollution have been widely publicised and it is now recognised by the government as the country's second-biggest health threat, after smoking.
2. There is now categorical evidence that long-term exposure to everyday air pollutants contributes to cardiovascular disease (CVD, including heart diseases and stroke), lung cancer, and respiratory disease (which includes asthma and chronic bronchitis).
3. Public Health England estimated the mortality burden attributed to long term fine particulate air pollution exposure in Oxfordshire to be 5.6% of the population, equivalent to 276 deaths (Age 25+) and equivalent to 2944 life years lost[1]. It should be noted that there is considerable uncertainty attached to this estimate. By contrast, there were 26 fatalities on Oxfordshire's roads in 2014[2].
4. The UK is currently failing to comply with its obligations under the Ambient Air Quality Directive 2008. As a result, the European Commission has launched legal proceedings against the UK for its failure to cut excessive levels of nitrogen dioxide ($NO_2$). This leaves the UK Government open to potential fines of up to £300m.
5. Under Part 2 of the Localism Act under the Government could require responsible authorities to pay all or part of an infraction fine.

### The role of District Councils

6. The Environment Act 1995 requires district councils to carry out periodic review and assessment of air quality within their area. The air quality objectives applicable to Local Air Quality Management (LAQM) in England are set out in the Air Quality (England) Regulations. Short and long term objectives are set for a number of pollutants including nitrogen dioxide and particulate matter.
7. District councils are required to designate an Air Quality Management Area (AQMA), if any of the air quality objectives are not being achieved.
8. Once an AQMA has been designated the district council should prepare an Action Plan that sets out how it will achieve the air quality standards or objectives for the area that it covers.
9. District councils report annually to the Department for Environment, Food and Rural Affairs (Defra) on the results of monitoring in their area and progress with the implementation of their Action Plans. A new format for reporting, the Annual Status Report, was introduced in 2016.

[1] *Public Health England Estimates of Mortality in Local Authority Areas Associated with Air (April 2014) Pollution* https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/332854/PHE_CRCE_010.pdf

[2] *Oxfordshire County Council Road Traffic Accident Casualty Data Summary 2014* https://www.oxfordshire.gov.uk/cms/sites/default/files/folders/documents/roadsandtransport/safety/CasualtyReport2014.pdf

## The role of County Councils

10. Where a district council is preparing an Action Plan, the county council is obliged to submit measures related to their functions (i.e. local transport, highways and public health) to help meet air quality objectives in their local area.
11. Oxfordshire County Council developed Local Transport Plan 4 (LTP4) which contains a commitment to improve public health and wellbeing by increasing levels of walking and cycling, reducing transport emissions, reducing casualties, and enabling inclusive access to jobs, education, training and services.

## Air Quality in Oxfordshire

12. Air quality across Oxfordshire is considered to be generally good as the county is largely rural in nature. In the more densely populated areas of the county, and those which experience high traffic flows such as Oxford, Banbury and Bicester, increased levels of air pollution are of concern. In these areas, road traffic is the most significant source of pollutant emissions.
13. Air quality is regularly monitored at many locations across Oxfordshire. At some locations air quality is at levels where legal intervention is required by Local Authorities. There are currently 13 AQMAs in Oxfordshire, where the annual mean objective for nitrogen dioxide is being exceeded (four in Cherwell, one covering the whole of Oxford city, three in South Oxfordshire, three in Vale of White Horse and two in West Oxfordshire). The table below summarises monitoring results from 2014 and 2015.
14. The figures in the table below are the average annual concentrations of Nitrogen Dioxide measured by diffusion tube in each of the AQMAs in 2014 and 2015. In those AQMAs with more than one diffusion tube the worst i.e. highest result has been used. The Government objective level is an annual mean concentration of nitrogen dioxide of 40 µg/$m^3$.

## Air Quality Management Areas in Oxfordshire

| **District** | **AQMA** | **$NO_2$ µg/$m^3$ 2014** | **$NO_2$ µg/$m^3$ 2015** |
|---|---|---|---|
| Oxford | Whole of city | 65 | 67 |
| West | Witney town centre | 47 | |
| | Chipping Norton town centre | 58 | |
| Cherwell | Banbury Hennef Way | 79 | 78 |
| | Banbury town centre | 42 | 41 |
| | Bicester town centre | 47 | 46 |
| | Kidlington Bicester Road | 44 | 41 |
| South | Watlington village centre | 49 | 41 |
| | Wallingford town centre | 41 | 34 |
| | Henley-on-Thames town centre | 59 | 47 |
| Vale | Abingdon-on-Thames town centre | 45 | 45 |
| | Marcham village centre | 50 | 48 |
| | Botley A34 | 53 | 48 |

15. Most AQMAs in Oxfordshire are relatively small geographical areas, typically in urban centres. However, in the case of Oxford the whole of the city has been declared an AQMA.
16. The figures above highlight that 2015 saw generally lower levels across the county however it is too early to say whether or not this is indicative of a downward trend or whether other factors have influenced these results such as the favourable meteorological conditions seen in the winter of 2015.

**What is being done?**

17. The District Councils have either developed, or are in the process of developing Air Quality Action Plans for the AQMAs in their areas.
18. As the cause of all the AQMAs is road traffic, the actions focus on reducing emissions from vehicles and can be grouped into the following themes:
    a. Influencing the development of the Local Transport Plan and area specific strategies to ensure that impacts on air quality are considered at an early stage;
    b. Reducing emissions from transport, for example through the introduction of Low Emission Zones;
    c. Promoting more sustainable forms of transport, particularly electric vehicles;
    d. Encouraging modal shift to more active forms of transport such as walking and cycling;
    e. Education and awareness raising around air quality to promote behavioural change; and
    f. Ensuring that air quality is given due consideration as part of the planning process.
19. Opportunities to draw down funding from a variety of sources to implement measure to improve air quality in Oxfordshire have been taken where possible.
20. Further details of specific action by district can be found in appendix 1.

**What could the Health Improvement Board do?**

21. Defra's Local Air Quality Management Policy Guidance (PG16) recommends that local Directors of Public Health and 'Health and Wellbeing' boards should work closely with local authorities. Working in partnership will increase support for measures to improve air quality, with co-benefits for all. Defra recommends that the following local action is taken:
    a. Ensuring the Joint Strategic Needs Assessment has up to date information on air quality impacts on the population; and
    b. Working closely with local authority health and air quality officers – e.g. have regular update meetings on key, emerging issues.
    c. That Directors of Public Health/ H&W Boards sign off on air quality Annual Status Reports and Action Plans prior to submission to Defra.

22. Introduce policies that encourage a shift from motorised transport to walking and cycling as this is expected to reduce total vehicle emissions, including particulate pollution. If this could be achieved in towns and cities, then we could expect local improvements in air quality leading to health improvements, as well as additional health benefits through increased physical activity through walking and cycling.

**Appendix 1.**
**Recent Actions**

The launch of the Oxfordshire air quality website (https://oxfordshire.air-quality.info/) in 2015 was a great success and allows users to see real-time air quality data in a visual map based format whilst providing a raft of air quality data and information for Oxfordshire all in one place. The webpage comes complete with a children's section and quiz.

In addition to this the Districts have been working closely with the County Council and as a result the County have approved an air quality appendix to their Local Transport Plan 4, the key themes are;

- Encouraging walking and cycling
- Restricting diesel vehicles in town centres through the introduction of clean air zones
- Working more proactively with the district councils on action planning
- Introducing low or zero emission mass transit vehicles

**South specific actions:**

- Adoption of new district wide air quality action plan.
- Low emission strategy for the district was produced and is currently undergoing public consultation.

**Vale specific actions:**

- Draft developer guidance to be integrated in to the local planning process.

**Cherwell specific actions:**

- Development of a comprehensive and workable air quality action plan to improve air quality in partnership with other organisations that will assist in the implementation of the measures.

**Oxford City Council specific actions**

- Launched Oxford Park and Pedal which has seen over 100 cycle parking spaces introduced at two of our park and ride sites.
- Ran the Test Drive the Future event to introduce the public to a range of electric vehicles (EVs) and the financial and environmental benefits of going electric. The event provided an opportunity to test drive vehicles, and outlined the options for driving an electric car 'pay as you go' through one of Oxford's car clubs.
- Commissioned a study into options for a Delivery and Servicing Plan for its city centre premises. Consideration and implementation of the options is now underway.