

**GROWTH, ENVIRONMENT AND  
RESOURCES SCRUTINY COMMITTEE**

**SCRUTINY TASK AND FINISH  
GROUP TO INFORM THE  
DEVELOPMENT OF AN AIR  
QUALITY AMBITION STATEMENT  
AND ACTION PLAN**

**8 JANUARY 2020**

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## 1.EXECUTIVE SUMMARY

As recently as the Nineties, it was felt that air pollution was no longer a major health issue in the United Kingdom as legislation had made the great smogs of the Fifties a thing of the past. However, pollutants such as Particulate Matter (PM) and Nitrogen Dioxide (NO<sub>2</sub>) are still at levels which can harm health.

Nationally, poor air quality is considered by the Government to be “the largest environmental risk to public health in the UK”. As well as human health, air pollution also has implications for the natural environment and for the economy (House of Commons, May 2019).

Whilst Peterborough does not currently have any exceedances of relevant National Air Quality Objectives the Council recognises that there are no absolute safe levels of exposure to particulate matter. As such, the Group feel that the Council should aim to make improvements in air quality in recognition that any such effort is likely to have positive impact both in terms of health and climate change. There are a number of activities already undertaken by the Council which are likely to have a positive impact on air quality, health and climate change. However, the group feels that further investment is required to undertake the following recommendations:

**Recommendation 1:** Work with the Cambridgeshire and Peterborough Combined Authority (CPCA) to encourage them to use their Passenger Transport Powers to secure air quality benefits. This should include: supporting the Council and Stagecoach to relocate the bus depot; improve vehicles to reduce emissions from the fleet; ensure the lowest emission vehicles only are used in areas of poorer air quality; and, encourage young people to use public transport.

**Recommendation 2:** Undertake a parking review with the aim of discouraging single occupancy car travel and prioritising Ultra Low Emission Vehicles.

**Recommendation 3:** Increase the activities undertaken to encourage residents to opt for active modes of transport including robust evaluation and monitoring.

**Recommendation 4:** Identify the feasibility of introducing a new policy to ensure that all taxi and private hire vehicles use alternative low emissions fuels only by 2030.

**Recommendation 5:** Work in partnership with the Cambridgeshire and Peterborough

Combined Authority (CPCA) to develop a Mass Rapid Transit (MRT) proposal for the city.

**Recommendation 6:** Support local businesses to make the investment necessary to encourage the transition to active modes of travel and alternatively fuelled vehicles.

**Recommendation 7:** Identify opportunities to install or maximise the benefits of green infrastructure to provide barriers between people and emissions.

**Recommendation 8:** Explore opportunities to for further pedestrianisation in all future public realm works.

**Recommendation 9:** Work in partnership with Fenland District Council to evidence the basis for revocation of AQMA No1.

The recommendations above are described in more detail in section 10 of this report. The financial implications of these recommendations are detailed further in section 11 of this report.

## 2. INTRODUCTION

At Annual Council on 21 May 2018, Cllr John Holdich OBE, Leader of the Council requested that a cross-party scrutiny Task and Finish Group be established to inform the development of the Council's air quality ambitions and make recommendations for specific actions that should be taken by the Council and partners to achieve such ambitions.

The proposal to set up the Task and Finish Group was presented to the Growth, Environment and Resources Scrutiny Committee on 5 September 2018. The proposal was accepted and the terms of reference agreed. Possible nominations to the Task and Finish Group were sought at the meeting to be confirmed following the meeting through the Group Secretaries.

The cross-party Task and Finish Group comprised the following members:



Councillor Nick Sandford  
Chairman  
Liberal Democrats



Councillor Kim Aitken  
Conservative



Councillor Julie Howell  
Green Party



Councillor Mohammed Jamil  
Labour and Co-operative Party

Officers supporting the Task and Finish Group were:

- Charlotte Palmer, Group Manager, Transport and Environment
- Stuart Keeble, Consultant in Public Health
- Iain Green, Senior Public Health Manager Environment and Planning
- Peter Gell, Head of Regulatory Services
- Lynden Leadbeater, Principal Environmental Health Officer: Environment and Pollution Control
- Paulina Ford, Senior Democratic Services Officer
- Karen Dunleavey, Democratic Services Officer
- Darren Sharpe, Natural Environment Team Manager
- Dorothy Poulter, Senior Environment & Pollution Officer

The Task and Finish Group wish to thank all of the officers who have provided guidance and assistance in producing this report for their hard work and support.

### **3. TERMS OF REFERENCE**

#### **Scrutiny Task and Finish Group to inform the development of an air quality ambition statement and action plan**

##### **Purpose**

To make recommendations to the Growth, Environment and Resources Scrutiny Committee to inform the development of the Council's air quality ambitions alongside specific actions that should be taken by the Council and partners to achieve such ambitions.

##### **Scope**

1. Review expert data detailing the perceived and actual risks at a local and national scale to develop an understanding of the impact that can be realised through improvements.
2. To understand how air quality is currently monitored and considered in organisational policies, strategies and services and assess this against good practice.
3. Identify good practice from other local authority areas in order to inform local action.
4. To understand what evidence-based actions could be taken locally by different stakeholders and agree a prioritisation mechanism to ensure any resultant recommendations are effectively targeted.
5. Develop an understanding of the skills and resources that will be required across the Council and relevant stakeholder organisations to deliver agreed actions.
6. To identify and meet with expert witnesses to help inform discussions and recommendations.

##### **Reporting**

The Scrutiny Task and Finish group will report to the Growth, Environment and Resources Scrutiny Committee

**Approved on 5 September 2018 by the Growth, Environment and Resources Scrutiny Committee**

## 4. PROCESS AND METHODOLOGY USED FOR THE INVESTIGATION

### 4.1 Methodology

- Desktop research
- Interviewing Key Witnesses / Stakeholders
- Local knowledge / information obtained by the Task and Finish Group members
- Data and evidence gathered from various officers by the Group Manager, Transport and Environment

### 4.2 Process

The timetable of the events leading to the production of this report are set out below:

<b>Meeting Date</b>	<b>Items Discussed / Guests Attending</b>
26 November 2018	Scoping meeting.
4 February 2019	Review of data and evidence requested at the scoping meeting and provided by officers.
15 March 2019	Interviewing Key Witnesses
29 July 2019	Interviewing Key Witnesses
4 September 2019	Interview Key Witnesses, Conclusions and draft Recommendations
22 October 2019	Review of draft report
26 November 2019	Final review of draft report
8 January 2020	Presentation of report to Growth, Environment and Resources Scrutiny Committee
13 January 2020	Cabinet

### 4.3 Key Witnesses / Expert Advisers interviewed

A number of organisations, detailed below, were invited to be interviewed to share their expert knowledge in specific matters. A summary of the key points raised for consideration are detailed below:



### **Andrew Allen, Campaign for Better Transport**

- Campaign for Better Transport's vision is for all communities to have access to high quality, sustainable transport that meets their needs, improves quality of life and protects the environment.
- Since 1972, Campaign for Better Transport has led calls for improvements to the country's transport networks, campaigning for transport which is greener, more affordable and easier to use.
- The main areas of work include rural transport, technology and work on clean air.
- Promoting active travel including walking and cycling is likely to have a positive impact and good examples exist in Bristol and Stockholm. Funding opportunities include Highway England's designated funds.

### **Darren Roe, Engineering Director, Stagecoach East and Sam Greer UK Bus Engineering Director, Stagecoach**

- Stagecoach currently operate 73 vehicles in Peterborough equating to an annual mileage of approximately 3.3 million miles and 8.2 million passenger trips.
- The size of the current Stagecoach depot in Peterborough restricts the company's ability to accommodate electric vehicles and to grow the network. If, in the future, a new depot became available opportunities to upgrade the fleet would be considered.
- 6% of Stagecoach's fleet nationally uses alternative fuels, the vehicles predominantly use diesel fuel.
- Stagecoach has made a significant reduction in regulated emissions over the past few years. The introduction of zero emission buses will have a positive impact but is dependent on power supply, especially because the majority of buses will be charging at the same time daily.
- There continues to be significant change in technology regarding buses, ethanol, bio-gas, hybrid, hydro. Changes need to be made in a controlled manner as they will affect cost base and increase bus prices. Alongside this the euro classification will continue to change e.g. Stagecoach purchased 600 hybrid buses but these are now approximately 6/7 years old and technology needs updating.
- All routes currently go via the city centre because orbital routes are restricted by demand.
- The current fleet is broken down as follows:

<b>Type</b>	<b>No.</b>	<b>Euro 2</b>	<b>Euro 3</b>	<b>Euro 4</b>	<b>Euro 5</b>	<b>Euro 6</b>
Single deck	30	0	7	0	13	16
Double deck	51	2	16	9	24	0
<b>Total</b>	<b>87</b>	<b>2</b>	<b>23</b>	<b>9</b>	<b>37</b>	<b>16</b>

- The proposed fleet within 36 months is broken down as follows:

Type	No.	Euro 2	Euro 3	Euro 4	Euro 5	Euro 6
Single deck	36	0	0	0	13	23
Double deck	51	0	0	7	24	20
<b>Total</b>	<b>87</b>	<b>0</b>	<b>0</b>	<b>7</b>	<b>37</b>	<b>43</b>

**Dr James Levine - Impact Fellow at the Birmingham Institute of Forest Research, University of Birmingham**

- Work is progressing in the numerical modelling of the impacts of vegetation on urban air quality (at realistic planting scales) via changes in the dispersion of road transport pollution close to its source.
- To improve urban air quality, we must first and foremost reduce the emissions of pollutants at source. Reducing the public's exposure to what is emitted, however, is a means of further reducing its public health impacts: reducing exposure, *as well as emissions*, will yield greater improvements in public health outcomes than reducing emissions alone.
- At realistic urban planting scales, deposition to vegetation typically removes just a few percent of PM<sub>2.5</sub>, and perhaps even less NO<sub>2</sub> (AQEG, 2018). (What little NO<sub>2</sub> is removed by vegetation at these scales is also offset by emissions of NO from accompanying soils.) Similarly, whilst vegetation emits VOCs (including reactive VOCs, such as isoprene, from some species), it makes a relatively minor contribution to total urban VOC emissions (and urban O<sub>3</sub>). Species selection - and even simply planting a mixture of tree species - can mitigate any (already minor) concerns.
- The greatest potential of vegetation to reduce the public health impacts of urban air pollution (directly) lies in its ability to control, or at least modify, the dispersion of air pollutants close to source: *in the right places*, vegetation barriers can as much as halve exposure to local sources of pollution (AQEG, 2018).
- The reductions in pollutant concentrations are limited to the immediate wake of such barriers (i.e., just a short distance downwind of a barrier between source of pollution and people) and care is needed to avoid introducing barriers in the wrong places, which could inadvertently lead to increased exposure. James and his colleagues at the University of Birmingham are developing a prototype Green Infrastructure for Roadside Air Quality (GI4RAQ) Platform to help urban practitioners identify suitable interventions subject to local conditions of wind and urban form. This software is web-based and will be made freely-available in the second quarter of 2020. Meanwhile, they refer you to the guidance recently published by the Greater London Authority (GLA, 2019), which they took a leading role in writing.

- Indirectly, green infrastructure can also help reduce road transport emissions by incentivising active travel (i.e., contributing to modal shift). Green open spaces are vital to the dispersion of pollution. Free from sources of road transport pollution, large green spaces are also inherently cleaner, and can help reduce the public's exposure to pollution by drawing people away from more polluted spaces.
- Dense avenues of trees can effectively protect very quiet streets (where the air quality at ground level is better than the urban background air quality aloft) but can trap pollution on busy roads.
- Green infrastructure is not an efficient means of *removing* air pollution in the urban environment but, in the right places, can be highly effective at controlling the distribution of pollution and thereby reducing the public's *exposure* to it.
- Targeted interventions - where, not only the concentrations of pollutants are highest, but the greatest numbers of people are exposed for the longest lengths of time, and the people exposed are amongst the most *vulnerable* demographics - will deliver the greatest public health benefits. Interventions in these locations will ensure best use of resources and reduce health inequalities.

**Steven Bishop, Head of Transport Strategy & Economics, Combined Authority and Rowland Potter, Head of Transport, Combined Authority**

- The Devolution Deal agreed with Central Government in 2017 gave the Mayor and the Cambridgeshire and Peterborough Combined Authority power over certain transport functions, with the Combined Authority taking over the role of the Local Transport Authority from Cambridgeshire County Council and Peterborough City Council.
- One of the key responsibilities of the Local Transport Authority is the development of a new Local Transport Plan (LTP). The LTP will supersede the interim Local Transport Plan and take an ambitious approach, looking towards creating a world class, integrated transport system, which maximises Cambridgeshire and Peterborough's sustainable, economic potential whilst protecting and enhancing the environment.
- The Combined Authority has a responsibility to implement measures that ensure improvements to air quality can continue to be delivered alongside growth by creating conditions that will change travel behaviour and bring about the use of cleaner vehicles.
- Reductions in vehicle mileage by removing journeys altogether and moving remaining journeys to sustainable modes such as walking, cycling and public transport is important, but needs to be achieved alongside improvements to the transport infrastructure and vehicle fleet to enable sufficient uptake of lower emission transport

modes.

- The key areas identified for action within the Air Quality Action Plans, and to be supported through the Local Transport Plan (draft), include:
  - reducing vehicle emissions, particularly from taxis, buses, coaches, and HGVs
  - maintaining low emissions through the planning process and long-term planning
  - improving public health
- The policies for improving air quality within the Combined Authority area are focused on harnessing improvements to vehicle technology and disincentivising travel by high polluting modes. There are clear synergies with encouraging the use of sustainable and active modes.
- Over 100 schemes identified from previous LTPs, Local Plans, stakeholder views, and professional opinion. Further scheme identification will take place through engagement. The schemes are assessed for: their strategic fit against the objectives of the LTP; consideration of typical value for money criteria in line with Government guidance will be made to assess the likely value for money of each scheme; consideration of commercial, financial and management criteria – the ‘deliverability’ of each scheme; a balanced package of schemes has been identified considering all modes, themes/objectives, and spatial distribution; and all further scheme development must include consideration of impact on air quality.
- Figure one illustrates the transport user hierarchy detailed in the emerging Local Transport Plan. \* <https://ehp.niehs.nih.gov/doi/abs/10.1289/isesisee.2018.S01.01.07>

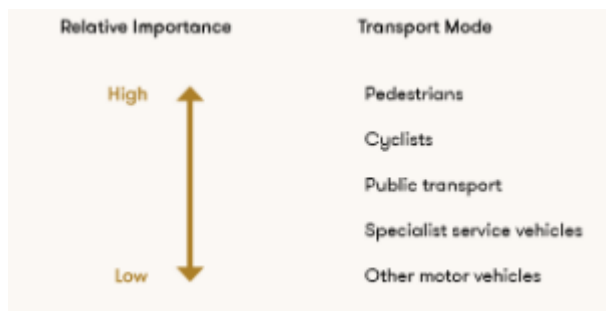


Figure one: Transport user hierarchy

The Task and Finish Group would like to thank everybody who assisted them during the course of the investigation for their support and openness. In addition to those detailed above the Group invited, on a number of occasions, a representative from the Road Haulage Association in order to understand the impact of Heavy Goods Vehicles on air quality. However, no response to any of the Groups communications attempts was forthcoming until

the later stages of finalising this report. At this point the Road Haulage Association provided the following information:

*Tackling poor air quality is a top priority for policy-makers, and the RHA is fully engaged with this agenda. Poor traffic-related air quality in urban areas is associated with congestion, where vehicles including lorries are not able to operate efficiently at slow speeds. Where congestion occurs, pollution “hot spots” caused by nitrous oxides (NOx) emissions can materialise, with potentially adverse health effects for people in the surrounding area.*

*The RHA is actively engaged with policy-makers in both national and local government to solve this problem. The latest vehicle emission standards (known as “Euro VI” and introduced from 2014) has seen NOx emissions fall from lorries by nearly 60% since 2013. With on-going investment by hauliers in the latest cleanest lorries once older lorries reach the end of their lifespan, NOx emissions are predicted to fall by over 80% from 2013 levels by 2024.*

*Meanwhile, we encourage local policy-makers to introduce measures that alleviate congestion. This might include improving general traffic flow by redesigning problematic junctions or rephasing traffic lights. Around schools, this might involve encouraging local school children and their parents to use alternative healthier forms of transport such as cycling or walking, or using public transport. With regards to lorries, the RHA advocates out-of-hours deliveries. These deliveries can then take place when schools are closed, the roads are quieter and pollution levels are at their lowest.*

This broadly aligns with the recommendations contained within this report.

## 5. UNDERSTANDING AIR QUALITY

### 5.1 Introduction to air pollution

As recently as the Nineties it was felt that air pollution was no longer a major health issue in the United Kingdom as legislation had made the great smogs of the Fifties a thing of the past. However, pollutants such as Particulate Matter (PM) and Nitrogen Dioxide (NO<sub>2</sub>) are still at levels which can harm health.

Industrial processes, including energy generation to power our businesses and homes, and the manufacture of goods and food can all create pollution. These processes are carefully regulated to ensure they are managed to avoid potentially significant impacts upon health and the environment.

Stationary and slow-moving road transport including lorries, buses and cars/vans are the primary source of Nitrogen Dioxide (NO<sub>2</sub>) (especially emissions from diesel light duty vehicles) and Particulate Matter (PM) (engine emissions, tyre and brake wear) in urban areas across the UK.

The impact of air pollution depends on how much is emitted, how harmful it is and how it interacts with other substances in the air (Figure 1.0). It also depends on emission location, its residence time in the atmosphere, where it ends up, and how sensitive the exposed population or environment is. Vulnerable individuals and sensitive habitats are at particular risk (Clean Air Strategy, DEFRA, 2019).

## The sources of air pollutants and their effects

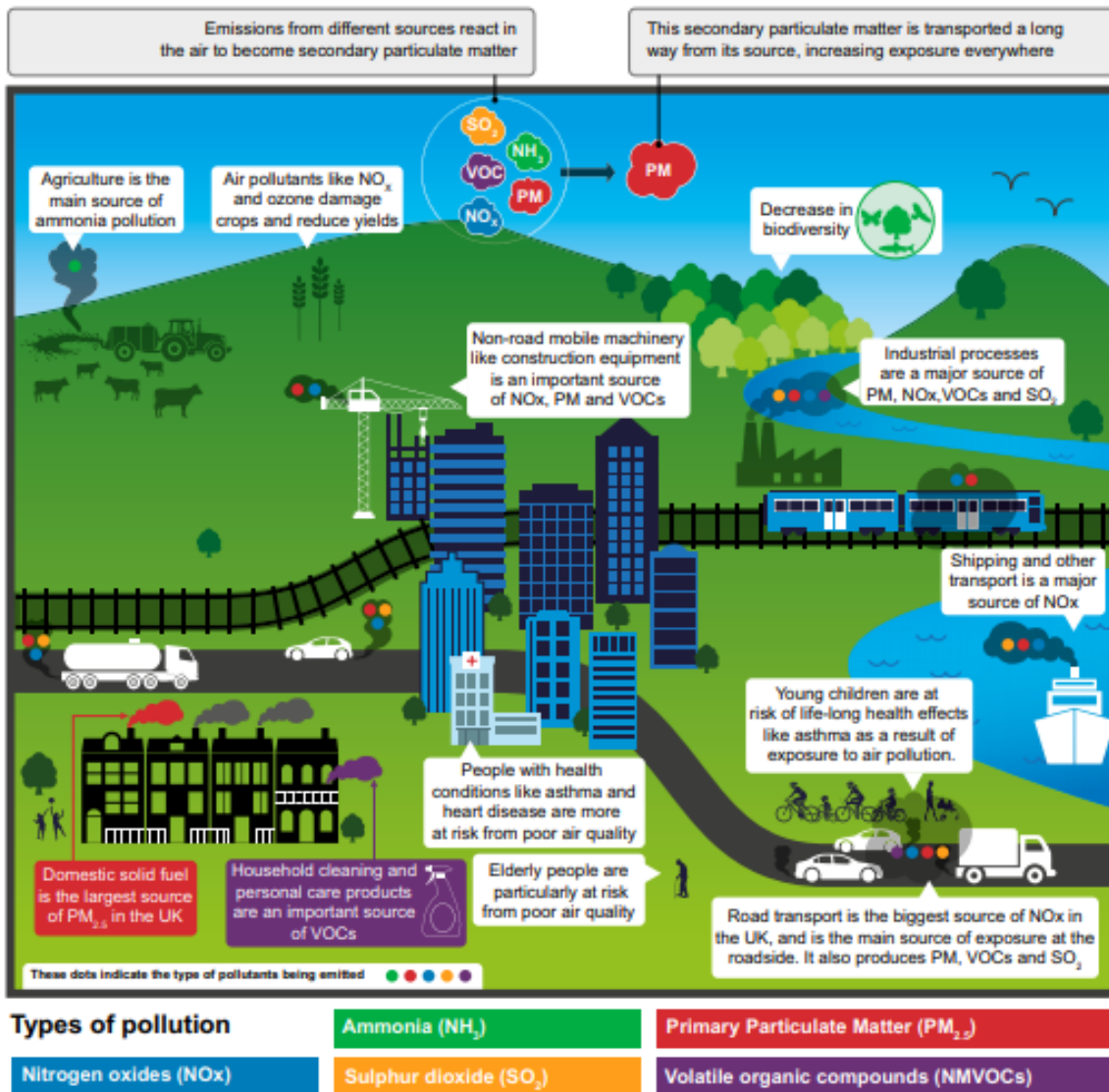


Figure 1.0 The sources of air pollution and its affects (DEFRA, 2019)

The National Air Quality Strategy sets air quality objectives or levels for pollutants such as Nitrogen Dioxide ( $\text{NO}_2$ ) on the basis of scientific and medical evidence on the health effects of each pollutant, and according to the practicability of meeting the standards. There is no statutory requirement to review and assess fine Particulate Matter ( $\text{PM}_{2.5}$ ) as it is recognised there are no absolute safe levels of exposure. As such, any improvement in air quality will have positive health consequences.

### Nitrogen Dioxide ( $\text{NO}_2$ )

The gaseous pollutant nitrogen dioxide ( $\text{NO}_2$ ) is produced by combustion processes. On average around 80% of oxides of nitrogen ( $\text{NO}_x$ ) emissions, in areas where the UK is exceeding  $\text{NO}_2$  limit values, occurs due to transport. Several studies have reported associations with long-term exposure to  $\text{NO}_2$  and adverse effects on health, including reduced



life expectancy. It has been unclear whether these effects are caused by NO<sub>2</sub> itself or by other pollutants emitted by the same sources (such as road traffic). The Committee on the Medical Effects of Air Pollutants (COMEAP) recently (2018) issued a report on the mortality effects associated with long-term average concentrations of NO<sub>2</sub>. Whilst there was fundamental disagreement from some members of the Committee for attributing causality to NO<sub>2</sub> as a sole pollutant, since this involved informed speculation, the recommendation for a method of assessing the health benefits of interventions that reduce all traffic-related pollutants was unanimous.

### **Particulate matter (PM)**

Particulate Matter (PM) is not a single pollutant; it is made up from a huge variety of chemical compounds and materials. Both PM and the gases that can form it travel large distances, so impacts may occur far from the original source. Around 15% of UK PM comes from naturally occurring sources, up to a third from other European countries and around half from UK human-made sources (DEFRA, 2019).

Particulates are classified according to size, either as PM<sub>10</sub> (particles of ≤10µm (micrometres) diameter) or PM<sub>2.5</sub> (particles of ≤2.5µm diameter particles, which are 200 times smaller than a grain of sand) (Clean Air Strategy, DEFRA, 2019). PM<sub>2.5</sub> (Particulate matter with an aerodynamic diameter of 2.5µm or less) has the strongest link to health outcomes due to the particles being inhaled deep into the lungs. PM can be composed of particles from combustion, abrasion of engine components e.g. brake dust, generated during construction and agricultural processes, as well as components generated by chemical reactions in the air.

### **Sulphur Dioxide (SO<sub>2</sub>)**

Historically, the main air pollution problem in both developed and rapidly industrialising countries has typically been high levels of smoke and sulphur dioxide (SO<sub>2</sub>) emitted following the combustion of sulphur-containing fossil fuels such as coal, used for domestic and industrial purposes. Sulphur dioxide (SO<sub>2</sub>) is a corrosive, acidic gas which is harmful to health and combines with water vapour in the atmosphere to produce acid rain. SO<sub>2</sub> pollution episodes in ambient air are also associated with asthma and chronic bronchitis and can be a significant component of particulate matter. Sulphur in coal played a contributory key role in the health impacts of the London smog in 1952. Emissions of SO<sub>2</sub> are primarily from combustion of solid and liquid fuels and have reduced markedly with restrictions on the sulphur content of liquid fuels, as well as a shift away from a reliance on coal for energy generation. However, domestic coal-burning can result in significant indoor exposure to SO<sub>2</sub> (DEFRA, 2019). A large proportion of the Council's area has been declared a Smoke Control Area, where it is an offence to emit smoke from a chimney, which has resulted in significant reductions in levels of smoke and SO<sub>2</sub>.



## 5.2 Monitoring Air Pollution in Peterborough

The Environment Act 1995, (Part IV) places a statutory obligation on all local authorities for Local Air Quality Management (LAQM), this requires them to review and assess the air quality within their area against National Air Quality Objectives and to report annually to DEFRA.

The EU Directive (Air Quality Directive (2008/50/EC)) and the National Air Quality Strategy set air quality objectives for pollutants. In Peterborough, the main air pollutants are associated with road traffic emissions. Petrol and diesel-engine motor vehicles emit a wide variety of pollutants. Of particular concern are Particulate Matter (PM) and Nitrogen Dioxide (NO<sub>2</sub>) at locations where people may live close to busy, congested roads. The relevant objectives of concern for Peterborough are listed in Table 5.0.

**Table 1.0 – Air Quality Objectives relevant to Peterborough**

Pollutant	Air Quality Objective	
	Concentration	Measured as
Nitrogen Dioxide (NO <sub>2</sub> )	200 µg/m <sup>3</sup> not to be exceeded more than 18 times a year	1-hour mean
	40 µg/m <sup>3</sup>	Annual mean
Particulate Matter (PM <sub>10</sub> )	50 µg/m <sup>3</sup> , not to be exceeded more than 35 times a year	24-hour mean
	40 µg/m <sup>3</sup>	Annual mean
Sulphur Dioxide (SO <sub>2</sub> )	350 µg/m <sup>3</sup> , not to be exceeded more than 24 times a year	1-hour mean
	125 µg/m <sup>3</sup> , not to be exceeded more than 3 times a year	24-hour mean
	266 µg/m <sup>3</sup> , not to be exceeded more than 35 times a year	15-minute mean

Objectives are set on the basis of scientific and medical evidence on the health effects of each pollutant, and according to the practicability of meeting the standards. The Regulations make it clear that likely exceedances of the objectives should be assessed in relation to those locations where members of the public are likely to be regularly present and are likely to be exposed for a period of time appropriate to the averaging period of the objective.

Where this process identifies that pollutant concentrations are unlikely to meet the Air Quality Objectives (i.e. exceed the standard) the Local Authority is required to declare an Air Quality Management Area (AQMA) and prepare an Air Quality Action Plan (AQAP), setting out the measures it intends to put in place to achieve the objectives.

The Council has carried out reviews and assessments of air quality for the Local Authority area in accordance with technical guidance periodically issued by Department for Environment Food and Rural Affairs (DEFRA). This has involved screening techniques to determine if there is a need to carry out more detailed examinations of air pollutants. Progressively sophisticated information gathering, modelling and monitoring techniques have then been used to predict and determine pollution levels.

### **5.2.1 Monitoring Nitrogen Dioxide (NO<sub>2</sub>):**

Nationally, there are 497 exceedances of the annual mean objective for Nitrogen Dioxide in the UK. In 2013, the UK met the limit value for hourly mean NO<sub>2</sub> in all areas except for Greater London.

Whilst there are no exceedances of the Nitrogen Dioxide (NO<sub>2</sub>) annual means or hourly objectives within Peterborough City Council administrative area, certain monitoring locations measure levels of NO<sub>2</sub> that are approaching the annual mean objective level. Detailed information including monitoring results are available in the Annual Screening Report available on the Council website <https://www.peterborough.gov.uk/business/environmental-health/environmental-protection/#AirQuality>

The Council carries out the majority of NO<sub>2</sub> monitoring using non-automatic (passive) monitoring diffusion tubes. This is undertaken at 16 sites within the Local Authority area, with tube locations reviewed annually. Diffusion tubes can identify if a locality is likely to exceed the annual mean objective and can also be indicatively used to identify areas that may be at risk of exceeding the hourly limit. In addition to the network of diffusion tubes, in August 2019, the Council installed an automatic (continuous) monitor (Aeroqual) at the western end of Taverners Road.

### **5.2.2 Particulate Matter (PM) (PM<sub>10</sub> and PM<sub>2.5</sub>):**

As no threshold for the effects of long-term exposure to particulate matter on mortality has been identified, there is no regulatory standard applied to the PM<sub>2.5</sub> role for Local Authorities in England. Also there are difficulties in establishing compliance due to the cost of monitoring, the accuracy of monitoring (uncertainty margin of +/-25%), the inadequacies inherent in modelling and the diverse nature of the associated sources. Therefore establishing compliance at specific locations is unlikely to be effective. However Local Authorities are expected to take measures to reduce overall population exposure to PM<sub>2.5</sub>.

For this pollutant, as already stated, focusing attention on hotspots only is therefore not going to generate the maximum improvement in public health for the investment made, since much more widespread adverse effects on health are likely. DEFRA has therefore adopted an

'exposure reduction' approach for PM2.5 to seek a more efficient way of achieving further reductions in the health effects of air pollution, by providing a driver to improve air quality everywhere in the UK rather than just in a small number of localised hotspot areas, where the costs of reducing concentrations are likely to be exceedingly high. This will act to make policy measures more cost-effective and is more likely to maximise public health improvements across the general population.

The Policy Guidance does however expect Local Authorities to work towards reducing emissions and concentrations of PM2.5 in their local area. In doing so they are not expected to carry out any additional local review and assessment including monitoring. Whilst an increase in PM2.5 monitoring across the UK is desirable given the links to the Public Health Outcomes Frameworks, it is also recognised that the costs involved can be prohibitive. The outcomes framework shows that the "Fraction of mortality attributable to particulate air pollution (2017)" for Peterborough is 5.3 compared to 5.1 in England (Public Health England Outcomes Framework).

Based on national modelled monitoring results from DEFRA the level of PM2.5 in Peterborough is slightly higher than the England average (8.5µg/m<sup>3</sup> compared to 8.3µg/m<sup>3</sup> respectively). To place this in a broader context the estimated background rates in London ranges from 8.6 to 12.5 µg/m<sup>3</sup>).

Whilst the Council does not carry out monitoring or take any measures to specifically address PM2.5 concentrations, measures to reduce road traffic emissions generally are likely to reduce emissions of PM2.5. The Council has reviewed existing measures already being implemented to determine whether the Council is already taking positive action to reduce PM2.5 emissions. These are, and will continue to be, reported in the annual screening report. Further measures that may reduce emissions of PM2.5 will be explored and measures to reduce emissions will be developed where these are commensurate with the scale and nature of the local PM2.5 issues.

### **5.2.3 Sulphur dioxide (SO<sub>2</sub>):**

In September 2006 Fenland District Council's Detailed Assessment declared an Air Quality Management Area (AQMA) based on modelling carried out by Hanson Brick Products in their Air Quality Management Plan (Hanson, 2004). This modelling indicated that the 15-minute SO<sub>2</sub> objective was also being exceeded at relevant locations within Peterborough. Following consideration of the information supplied by Fenland District Council, Peterborough City Council determined an Air Quality Management Area (AQMA No.1) to the north-west of the works in April 2007 (maps are included in Appendix D). The AQMA No.1 is in relation to emissions of sulphur dioxide from a point source industrial premise, exceeding the 15-minute mean objective level of 266 µg/m<sup>3</sup> not to be exceeded more than 35 times a year. It is important to note that

this exceedance is modelled, not measured. To date there have been no measured exceedances of SO<sub>2</sub> in the area administered by Peterborough City Council. It was proposed in the 2015 Updating and Screening Assessment (USA), and all subsequent Annual Status Reports (ASR) to revoke the AQMA, subject to the agreement of DEFRA, and this remains the aim. Further details of this AQMA can be found on our website at <https://www.peterborough.gov.uk/business/environmental-health/pollution/>.

## 6. AIR QUALITY AND PUBLIC HEALTH

Air pollution is a serious public health issue. Small particulate matter is one of the top 10 risk factors for disease and ill health in the East of England and is estimated to contribute towards more than 1250 deaths per year (Global Burden of Disease comparative risk assessment<sup>1</sup>). Particulate matter has a much greater impact on health than risk factors such as drug use and second-hand smoke and increases the risk of heart and lung conditions.

The 2017 publication 'Air Quality: A Briefing for Directors of Public Health' provides guidance on conducting a basic assessment to calculate local mortality attributable to air pollution. This involves multiplication of the fraction of mortality attributable to particulate air pollution from Public Health Outcomes Framework indicator 3.012 by the directly age-standardised rate of premature deaths in under 75s per 100,000 population for 2013-15 from the Public Health England 'Longer Lives' profiles in order to ascertain a value for air pollution (particulate matter) attributable mortality per 100,000 population. The results for Peterborough and its nearest three socio-economic comparators are noted within the table below.

**Figure 1: Air Pollution (Particulate Matter) Attributable Mortality per 100,000 Population, Peterborough & Nearest Socio-Economic Neighbours, Under 75s Only, 2013-15**

Area	Premature Deaths 2013-15 per 100,000	Fraction of mortality attributable to particulate air pollution, 2015 (%)	Mortality Attributable to PM <75, rate per 100,000, Persons (3.01)
Peterborough	375	4.7%	17.6
Milton Keynes	333	4.8%	16.0
Swindon	338	5.1%	17.2
Thurrock	361	5.6%	20.2

Source: Public Health 'Longer Lives' profiles and Public Health Outcomes Framework

The rate of deaths in under 75s attributable to particulate matter air pollution in Peterborough is 17.6/100,000, the second highest within the above group of four comparator local authorities. The figure below places these data within the context of other preventable causes of mortality and illustrates that mortality rates from particulate matter air pollution are higher than as a result of preventable liver disease and as a result of suicide and relatively similar to the rate of mortality as a result of communicable diseases.

**Figure 2: Mortality Rates from Preventable Causes, Peterborough & Nearest Socio-Economic Neighbours, Under 75s Only, 2013-15**

PHOF Indicator	Mortality rate per 100,000				
	Peterborough	Milton Keynes	Swindon	Thurrock	England
Preventable Mortality, Persons (4.03)	211.8	185.2	185.2	189.8	184.5
Preventable Cancer <75, Persons (4.05ii)	88.3	82.3	88.4	88.3	81.1
Preventable CVD	60.4	44.8	49.9	54.9	48.1

<75, Persons (4.04ii) Preventable Respiratory Disease	22.0	20.4	18.7	20.9	18.1
<75, Persons (4.07ii) Mortality	17.6	16.0	17.2	20.2	-
Attributable to PM <75, Persons (3.01) Preventable Liver Disease <75, Persons (4.06ii) Communicable Diseases, Persons (4.08)	15.3	13.8	14.6	12.8	15.9
Suicide Rate, Persons (4.10)	18.4	10.4	14.1	-	10.5
	8.4	8.6	9.3	11.3	10.1

Source: Public Health Outcomes Framework

Key			
Statistically significantly better than England	Statistically similar to England	Statistically significantly worse than England	Not Compared

Air pollution due to PM 2.5 is attributable for 4.7% of all deaths. This is similar to England and is one of the lowest rates in the East of England. In 2010, this was equivalent to 79 deaths. This compares to 7 road casualties (2011 data<sup>4</sup>). If you rank the causes of preventable premature mortality (by mortality rate per 100,000) then the premature mortality due to PM 2.5 is higher than liver disease, infectious diseases and suicide.

In comparison to the area's three nearest socio-economic neighbours, Peterborough has higher annual mean rates of nitrogen dioxide, PM2.5 and PM10 than Milton Keynes and Swindon but lower annual mean rates than Thurrock.

**Figure 3: Air Quality Comparison, Peterborough & Nearest Socio-Economic Neighbours, 2015**

Area	Nitrogen Dioxide Annual Mean	PM 2.5 Annual Mean	PM10 Annual Mean
Peterborough	10.35pgm3	9.67pgm3	14.73pgm3
Milton Keynes	9.42pgm3	9.25pgm3	13.75pgm3
Swindon	9.53pgm3	9.06pgm3	13.65pgm3
Thurrock	14.88pgm3	10.46pgm3	15.34pgm3

Source: Department for Environment, Food & Rural Affairs, <https://uk-air.defra.gov.uk/data/gis-mapping>

## 7. WIDER CONTEXT

### 7.1 One of the UK's fastest growing cities

Whilst Peterborough does not currently have any relevant exceedances of National Air Quality Objectives, as one of the UK's fastest growing cities, it is feasible that this could change in the foreseeable future. This is evidenced by data released by the Department for Transport which collates road traffic statistics to provide estimates of the vehicle miles travelled each year in Great Britain by vehicle type, road category and region. Data for Peterborough shows that since 2013 the number of miles travelled on all Peterborough roads has increased from 1.08 billion to 1.24 billion in 2017 representing a 15% increase. This compares to a 12% increase in road traffic across the East of England and an 8% increase across Great Britain (source: <https://roadtraffic.dft.gov.uk/summary>).

### 7.2 Climate Emergency

In 2019 Peterborough City Council declared a climate emergency and agreed to make the council's activities net-zero carbon by 2030. The motion, which was unanimously agreed by councillors, commits the council to achieving 100% clean energy across its buildings and services by 2030, ensuring that all strategic decisions, budgets and approaches to planning decisions are in line with a shift to zero carbon by 2030. The motion also recommended that the council works with partners, the private sector and young people to develop even more ambitious plans and uses its significant influence locally and nationally to encourage others to do the same. The council's scrutiny panels will consider the impact of climate change and the environment when reviewing council policies and strategies. Benefits realised as a result of the climate emergency are likely, in some cases, to have a positive impact on air quality. The recommendations that are outlined in section 10 of this report provide an initial indication as to the likely effect on climate change.

### 7.3 Possible Implications of Brexit

In May 2019, the House of Commons published Briefing Paper CBP8195, Brexit and Air Quality. The paper sets out the current speculation and what is known so far about what could change in respect of air quality following Brexit. Below is an extract from the report, entitled Brexit: statements, concerns and uncertainties:

“Until a final Brexit agreement is reached with the EU, much of what will happen to air quality standards and enforcement following Brexit is the subject of speculation. The Government has been clear that it has no plans to change limit values and targets for air quality following Brexit. The Government's intention is that pursuant to the European Union (Withdrawal) Act 2018, law derived from the EU, including air quality legislation, would be converted into domestic law after Exit Day. Depending on the terms agreed of any future trading arrangements, once the UK has

left the EU the UK could then potentially amend air quality standards and review any deadlines for meeting them.

While the European Union (Withdrawal) Act 2018 will convert the current framework of air quality targets, the role that EU institutions play in monitoring and enforcing these targets will be lost. There has been considerable debate over the loss of the role of EU institutions in monitoring and enforcing environmental law, including on air quality, following Brexit and over the future of EU environmental principles.

In response to concerns raised, the Government held a consultation on environmental principles and governance from May-August 2018. It proposed the creation of a new statutory independent environmental watchdog to hold government to account on its environmental obligations; and options for establishing environmental principles in the UK. A draft Environment (Principles and Governance) Bill was published on 19 December 2018. A Library briefing paper, Environmental principles and governance: the draft Bill, provides background and reaction to the Bill. A further part to this Bill is expected to be published in the next Parliamentary session which will include legislative measures to improve air quality, stemming from proposals in the Government's Clean Air Strategy 2019.

One of the areas that the Government has indicated that it might change post-Brexit is how air quality is monitored and assessed in order to provide requirements that are more targeted and focussed to UK needs.

Some of the Government's Brexit "no deal" preparation technical notices have implications for air quality policy. These include:

- Upholding environmental standards if there's no Brexit deal;
- Industrial emissions standards ('best available techniques') if there's no Brexit deal, 13 September 2018; and
- Reporting CO<sub>2</sub> (Carbon Dioxide) emissions for new cars and vans if there's no Brexit deal, 13 September 2018

For further information on related issues see Library briefing papers, Air Pollution: Meeting Nitrogen Dioxide Targets and Brexit and the environment."

(House of Commons Library, Brexit and air quality May 2019).

#### **7.4 Air pollution versus walking or cycling**

It is a common misconception that walking or cycling in areas with levels of poor air quality is harmful to health. The reality is that evidence shows that this is often not the case. For example, a study by the International Society of Exposure Science and the International Society for Environmental Epidemiology looked into whether active commuting would increase the intake of particulate matter. It concluded that switching to working from home on days with high air pollution would not lead to any health benefits in any of the cities examined (Helsinki, London,



Sao Paulo, Warsaw, Beijing, New Delhi), in addition, there are greater benefits to health by being physically active than avoiding areas of poor air quality as a single measure to improve health outcomes.

## 8. WHAT WE ARE DOING ALREADY

This section of the report details how air quality considered in organisational policies, strategies and services.

### 8.1 Industrial Emissions:

The Industrial Emissions Directive (IED) aims to prevent and reduce harmful industrial emissions across the EU, while promoting the use of techniques that reduce pollutant emissions and that are energy and resource efficient. The requirements of the IED are regulated by the Pollution Team in Peterborough. Not all processes are regulated. The Regulations prescribe process thresholds considered to be proportionate to the environmental risk posed. For example, a car re-sprayer would have to be using more than 1 tonne of VOCs per annum to require regulation. Most small and medium sized car re-sprayers do not reach this threshold.

The Pollution Team has been at the forefront of reducing industrial pollution, using a proportionate framework of national regulation to require industry to improve their environmental performance. Industry has responded with investment and innovation to meet these standards. For example, limits on the emission of NO<sub>x</sub> and SO<sub>2</sub> from combustion sources have been set, particulate emissions from mineral processes restricted, solvent usage of coating (e.g. paint) processes reduced and fuel pumps/ delivery redesigned to recover petrol vapour.

Since 1990, national industrial emissions of nitrogen oxides to air have reduced by 74%, emissions of sulphur dioxide have reduced by 97% and emissions of volatile organic compounds have reduced by 73%.

In Peterborough there are 58 regulated industrial processes. These are inspected routinely according to environmental risk. These processes are required to pay fees to fund the regulatory activities associated with the regime. The fees are determined by DEFRA. This currently amounts to an annual income of £16,500. Cost accounting has to be made publicly available to demonstrate that the fees charged have been directed towards the provision of the service. An annual statistical return, including the cost accounting details, has to be made to DEFRA.

One particularly notable example of the effectiveness of the regime is the reduction of solvent emissions from a Peterborough based industrial process. Through a combination of factors, but primarily the development of water-based paints suitable for use for coating engines, emissions of volatile organic compounds (VOC's) have been reduced from in the region of 200 tonnes per annum to approximately 15 tonnes per annum for the same product output capacity. [VOCs are chemicals which evaporate into the air at room temperature. They are emitted from many sources, including production processes, household chemicals, solvent use and different kinds of combustion] (DEFRA, Clean Air Strategy, 2019).

## 8.2 Planning

The spatial planning system has an important role to play in improving air quality and reducing exposure to air pollution (EPUK & IAQM, 2017). In Peterborough Local Planning Policy LP13 Transport states that “Developers will be required to ensure proposals for major new developments are assessed, using appropriate methodologies (such as Travel Plans, Transport Assessments and Transport Statements), for their likely transport impacts. Major development proposals adjacent to international and nationally designated biodiversity sites will require an air quality assessment to demonstrate no significant adverse effect on sensitive features. Major development located not immediately adjacent, but within the vicinity of, such designated sites, may also require an air quality assessment if there is the possibility of a significant adverse effect arising“. In addition, LP17 Amenity Provision also ensures that “New development should not result in an unacceptable impact on the amenity of existing occupiers of any nearby properties. These impacts may include, adverse impact on air quality from odour, fumes, dust, smoke or other sources.” Where applicable Officers are consulted on developments to assess the effect of changes in exposure of members of the, for example, major demolition or construction projects, stone/sand and gravel operations, introduction of new receptors adjacent to major roads, and the introduction of major roads near to residential areas. Applications are considered in line with national guidance and best practice. Where necessary officers require air quality assessments and appropriate mitigation measures.

## 8.3 Smoke Control

Peterborough has a number of smoke control areas, where it is an offence to emit smoke from a chimney within these areas. Exempt appliances and authorised fuels may be used in these zones. Maps showing the extent of the smoke control areas are available on the Council website <https://peterborough.maps.arcgis.com/apps/webappviewer/index.html?id=1e47538c3218418e86741bf13a33a04b>. Complaints relating to non-compliance with the smoke control legislation are investigated by officers, and where appropriate enforcement action is taken.

## 8.4 Travelchoice and Infrastructure Measures

It is crucial to that these activities are often, if not always, undertaken primarily for other purposes i.e. reducing congestion and/or improving health. Air quality is often a secondary benefit.

<b>Anti-idling Campaigns</b>
Over the last year, Travelchoice has worked with three schools to deliver various initiatives to discourage idling outside of the school gates whilst raising awareness of issues concerning air quality and the additional benefits of healthy and active travel. The team is reviewing the success of the initiatives (such as student-led banner design competitions, face-to-face engagement and active travel promotion) to ascertain the most successful interventions so

that further campaigns can be rolled out to other schools in the future as and when resources become available.

<b>Effect on reducing NOx and PM 10 emissions (low, medium, high):</b> Low	<b>Reduces PM2.5 emissions:</b> Yes	<b>AQASR action:</b> Promotion of 'Smarter Choices' travel and car sharing
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### Participation in National Campaigns

Travelchoice encourages schools to participate in several national campaigns that promote sustainable and active travel modes. Over the last 3 years there has been an increasing number of schools participating in campaigns such as Walk to School Week, the Big Pedal and Bike to School Day. In September 2019 Travelchoice commenced a trial of Modeshift STARS with our schools in the city. The Modeshift STARS initiative provides schools with an online platform to record travel survey information, school Travel Plans, and offers schools a range of resources and advice to complement safe and active forms of travel.

<b>Effect on reducing NOx and PM 10 emissions (low, medium, high):</b> Low	<b>Reduces PM2.5 emissions:</b> Yes	<b>AQASR action:</b> Promotion of 'Smarter Choices' travel and car sharing
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### Air Quality Testing Kits

Last year, Travelchoice trialled air quality monitoring kits (available to all schools for free from Friends of the Earth) outside Queens Drive Infants. Whilst the kits recorded no changes in air quality they were successful in raising the issue and promoting interventions (such as anti-idling and the benefits of sustainable travel) that contribute to improved air quality. Last year, Travelchoice also held Peterborough's first 'School Streets' day outside Ravensthorpe Primary. School Streets involves closing the road outside a school to encourage walking, cycling, scooting or park and stride.

<b>Effect on reducing NOx and PM 10 emissions (low, medium, high):</b> Low	<b>Reduces PM2.5 emissions:</b> Yes	<b>AQASR action:</b> Promotion of 'Smarter Choices' travel and car sharing
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### Travel Plans

School Travel Plans have proven to be successful in reducing the number of pupils and staff travelling to school by private car. 38 schools in Peterborough have a bespoke Travel Plan. Travelchoice continues to work with schools to ensure that Travel Plans are kept current and up-to-date and include travel mode evidence, clearly defined objectives and targets, details of proposed actions, timescales, responsibilities and proposals for monitoring and review.

<b>Effect on reducing NOx and PM 10 emissions (low, medium, high):</b> Low	<b>Reduces PM2.5 emissions:</b> Yes	<b>AQASR action:</b> Promotion of 'Smarter Choices' travel and car sharing
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### Bespoke Walking and Cycling Maps

Travelchoice works with schools to identify key walking and cycling routes to school sites. Postcode plots are used to identify where pupils live in relation to their school, identifying cluster groups and potential walking and cycling routes on the school journey. This information,

together with the census data can be used to target groups or areas that would benefit from targeted information to reduce car use on school journeys. As a result bespoke Walking and Cycling (an on occasion Bus) Maps are produced and distributed.

<b>Effect on reducing NOx and PM 10 emissions (low, medium, high):</b> Low	<b>Reduces PM2.5 emissions:</b> Yes	<b>AQASR action:</b> Promotion of 'Smarter Choices' travel and car sharing
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### School Events

Travelchoice regularly visits schools in the city to participate in events and initiatives to encourage sustainable, safe and active travel. Attending parents evenings, school fairs and special event days (health, wellbeing, environment days) with activities such as 'bling your hi-vis', smoothie bike, cycle-powered cinema, led cycle rides, etc. to highlight the benefits and fun that active and sustainable travel can have.

<b>Effect on reducing NOx and PM 10 emissions (low, medium, high):</b> Low	<b>Reduces PM2.5 emissions:</b> Yes	<b>AQASR action:</b> Promotion of 'Smarter Choices' travel and car sharing
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### Business Travel Plans

There are currently 62 businesses with travel plans (against a target of 90 by 2021). Travelchoice has developed a Business Travel Plan Toolkit which includes templates and an automatic survey reminder. Therefore, updates to Travel Plans in the future should be a simpler process.

<b>Effect on reducing NOx and PM 10 emissions (low, medium, high):</b> Low	<b>Reduces PM2.5 emissions:</b> Yes	<b>AQASR action:</b> Promotion of 'Smarter Choices' travel and car sharing
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### Bespoke Travel Planning Projects

Travelchoice has undertaken a series of bespoke travel planning projects with individual businesses and business clusters in and around the city to encourage staff to travel in a more sustainable and healthy way. The most recent example is the 2018 Lynch Wood Travel Planning project. Over 6 months, Travelchoice worked with three main business clusters within the Lynch Wood Business Park, engaging with eight businesses in total (Thomas Cook, Diligenta, Tata Consultancy Services, Kidney Research UK, Wave, Atkins, RSA and Coloplast). The events were well attended, and we were able to obtain baseline travel data to review in future years. The travel data collected at the events show that nearly two thirds of people currently travel to work in single-occupancy vehicles. However, when this is compared to staff postcode data it becomes apparent that there is the potential for approximately 35% of staff to walk or cycle. We will ensure that future initiatives and events will be tailored to promote (in particular) walking and cycling.

<b>Effect on reducing NOx and PM 10 emissions (low, medium, high):</b> Low	<b>Reduces PM2.5 emissions:</b> Yes	<b>AQASR action:</b> Promotion of 'Smarter Choices' travel and car sharing
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<b>Adult Cycle Training</b>		
Travelchoice offers all residents the opportunity to receive a free 90-minute one-to-one cycle training session. The sessions are delivered by a fully-qualified cycle trainer and cover the basic skills needed for safe on-road cycling. Additional sessions (if necessary) are then offered at a reduced rate of £15 per hour.		
<b>Effect on reducing NOx and PM 10 emissions (low, medium, high):</b> Low	<b>Reduces PM2.5 emissions:</b> Yes	<b>AQASR action:</b> Promotion of 'Smarter Choices' travel and car sharing

<b>Business Grant Scheme</b>		
Businesses in Peterborough can apply to the Council's Business Grant Scheme for match funding (up to £3k) for sustainable travel infrastructure (such as cycle parking or electric vehicle charging posts). Over the last 12 months the Council has provided £9k in Business Grant match funding to City College Peterborough (EV charging infrastructure), Hobarts UK (cycle parking) and Anglian Water (EV charging infrastructure).		
<b>Effect on reducing NOx and PM 10 emissions (low, medium, high):</b> Low	<b>Reduces PM2.5 emissions:</b> Yes	<b>AQASR action:</b> Promotion of 'Smarter Choices' travel and car sharing

<b>Electric Taxi Bid</b>		
The Council secured £90k with £22.5k match funding to install four rapid chargers for the local taxi fleet, supporting a transition to ultra low emission vehicles. Whilst the Council does not have data available for private hire vehicles (due to limitations in the operating system) data shows that in respect to hackney carriages 2.5% of the current fleet are ULEV's.		
<b>Effect on reducing NOx and PM 10 emissions (low, medium, high):</b> High	<b>Reduces PM2.5 emissions:</b> Yes	<b>AQASR action:</b> Electric vehicle charging points in public car parks and for taxis

<b>Electric Charging Infrastructure</b>		
The Council has installed EV charging posts in 9 public locations within the city centre. Most posts have the ability to charge two vehicles at one time. In addition, the Council has committed to creating a charging hub in the Riverside car park which will consist of 3 additional chargers which will allow 6 vehicles to charge at one time. This provision is in addition to privately owned charging posts at various businesses, shopping centres and leisure facility locations. The Council will continue to install additional charging posts and explore additional funding opportunities. Recent statistics from Department for Transport show the our local authority has had the largest increase in electric vehicles anywhere in the country in the last year with 8,249 new vehicles registered, a jump of 2,824 compared to the previous 12 months. This represents the biggest rise in the UK. A vehicle licensing statistics report produced by the Department for Transport in 2018 showed that 4.9% of licensed vehicles in Peterborough are ULEVs.		
<b>Effect on reducing NOx and PM 10 emissions (low, medium, high):</b> High	<b>Reduces PM2.5 emissions:</b> Yes	<b>AQASR action:</b> Electric vehicle charging points in public car parks and for taxis

<b>Integrated Transport Block Funding</b>		
<p>The Council receives Integrated Transport Block funding from the Department for Transport via the Cambridgeshire and Peterborough Combined Authority on an annual basis. This funding (currently £1.407m per year), is used to fund small-to-medium-sized highway improvements. The majority of this funding is used to make walking, cycling and public transport improvements, as well as installing additional electric vehicle charging posts.</p>		
<p><b>Effect on reducing NOx and PM 10 emissions (low, medium, high):</b> Low</p>	<p><b>Reduces PM2.5 emissions:</b> Yes</p>	<p><b>AQASR action:</b> Well developed and safe pedestrian connections throughout the City / walking and cycling infrastructure improvements</p>

<b>Local Cycling and Walking Infrastructure Plans</b>		
<p>In 2017, the Government published its first Cycling and Walking Investment Strategy setting out its ambition to make walking and cycling the natural choices for shorter journeys or as part of a longer journey. Local Cycling and Walking Infrastructure Plans (LCWIPs), are a new, strategic approach to identifying cycling and walking improvements required at the local level. They enable a long-term approach to developing local cycling and walking networks, ideally over a 10-year period. The Council submitted a successful expression of interest to the DfT for technical support to develop a LCWIP for Peterborough. It is anticipated that our draft LCWIP will be submitted to the DfT shortly and will be available for public review in 2020.</p>		
<p><b>Effect on reducing NOx and PM 10 emissions (low, medium, high):</b> Low</p>	<p><b>Reduces PM2.5 emissions:</b> Yes</p>	<p><b>AQASR action:</b> Well developed and safe pedestrian connections throughout the City / walking and cycling infrastructure improvements</p>

<b>Bikeability</b>		
<p>Bikeability is the 21st century 'cycling proficiency' designed to give children confidence and skills for riding a bike. There are 3 levels of training; level 1 starts when a child has already learnt to ride a bike, progression on to level 2 for children aged 10-11 years and finishing on level 3 for children aged 11-18 years. The number of pupils in Peterborough that have received Bikeability training over the last year (up to July 2019) are: Level 1 - 683 pupils; Level 2 - 1134 pupils; Level 3 - 73 pupils; Balance Bike training (early years) - 123 pupils; Learn to Ride - 50 pupils. On average around 50 of our city schools receive Bikeability training each year. Several factors are attributable to schools not participating in the scheme, ranging from clashes in the timetable with exam prep, children simply not owning a bicycle and Ofsted pressures on core curriculum subjects.</p>		
<p><b>Effect on reducing NOx and PM 10 emissions (low, medium, high):</b> Low</p>	<p><b>Reduces PM2.5 emissions:</b> Yes</p>	<p><b>AQASR action:</b> Bikeability (Cycle Proficiency training in Schools)</p>

<b>Bike-It</b>		
<p>The Council commissions Sustrans (a UK sustainable transport charity) with funding from the Cambridgeshire and Peterborough Combined Authority to further promote sustainable travel</p>		



through the Bike-It programme. The overall aim of Bike It is to significantly increase the number of young people regularly travelling safely using active and sustainable modes of transport, with a particular focus on walking, cycling and scooting. Each year schools are encouraged to participate in the National Big Pedal competition and in March 2019 St Thomas More finished 9th nationally out of nearly 800 large primary schools with over 94% of pupils taking part.

<b>Effect on reducing NOx and PM 10 emissions (low, medium, high):</b> Low	<b>Reduces PM2.5 emissions:</b> Yes	<b>AQASR action:</b> Bike-It (Walking and Cycling Promotions/Activities in Schools) Joint initiative between 'Peterborough Environment City Trust (PECT) & Travelchoice.
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In addition to these measures the Council also undertakes an annual staff travel survey in February. The results of the survey are listed below:

<b>Travel Mode</b>	<b>2018 results (pre-Sand Martin House and agile working)</b>	<b>2018 – Sand Martin House</b>
Car (driver)	65.2 %	45.7 %
Car (passenger)	4.3 %	5.6 %
Walk	12.6 %	11 %
Cycle	9.1 %	10.5 %
Car share	0.4 %	0 % (see car passenger %)
Bus	4.8 %	4.7 %
Train	2.6 %	1.5 %
Motorcycle	0.5 %	0.2 %
Taxi	0 %	0 %
Other (inc agile from 2018)	0.5 %	20.8 %

As a direct result of the survey responses, the Council has increased provision of pool bicycles (including 2 electric bicycles), arranged a series of staff engagement opportunities to deliver bespoke and personalised sustainable travel information to staff and is installing a public bicycle pump and repair station at Sand Martin House.

In addition, the move to a more agile way of working has proven to have had an impact on staff travel habits and the associated benefits of health, wellbeing and the environment. These results will now inform the adoption of a new Travel Plan working document for staff and visitors.



## **8.5 Local Transport Plan (LTP)**

The directly-elected Mayor and the Cambridgeshire and Peterborough Combined Authority hold strategic transport powers and are the Local Transport Authority for the Cambridgeshire and Peterborough area. They are responsible for allocating local transport funding to the most important transport needs to help improve traffic flow, reduce congestion, improve road safety, increase walking and cycling and improve accessibility, amongst other things. The Combined Authority sets the overall transport strategy for Cambridgeshire and Peterborough, called the Local Transport Plan. Peterborough City Council previously had these powers and produced its own Local Transport Plan (LTP) but this is now a function of the Combined Authority.

The vision for the LTP is to deliver a world class transport network for Cambridgeshire and Peterborough that supports the sustainable growth and health and wellbeing of our communities, providing opportunities for all. The goals are to; deliver economic growth and opportunity for all our communities; provide an accessible transport system to ensure everyone can thrive and be healthy; and enhance our environment and tackle climate change together. There are a number of different objectives that underpin this including an objective to ensure transport initiatives improve air quality across the region to exceed good practice standards.

The LTP recognises that the levels of economic and population growth forecast for the Combined Authority area will result in an increased demand for travel, including road freight, which contributes a disproportionate amount of polluting emissions in terms of vehicle numbers. The Combined Authority has a responsibility to implement measures that ensure improvements to air quality can continue to be delivered alongside growth by creating conditions that will change travel behaviour and bring about the use of cleaner vehicles. Reductions in vehicle mileage by removing journeys altogether and moving remaining journeys to sustainable modes such as walking, cycling and public transport is important but needs to be achieved alongside improvements to the transport infrastructure and vehicle fleet to enable sufficient uptake of lower emission transport modes. The key areas identified for action to be supported through the Local Transport Plan, include:

- reducing vehicle emissions, particularly from taxis, buses, coaches, and HGVs
- maintaining low emissions through the planning process and long-term planning
- improving public health

The policies for improving air quality within the Combined Authority area are focused on harnessing improvements to vehicle technology and disincentivising travel by high-polluting modes to reduce road traffic emissions. There are clear synergies with encouraging the use of sustainable and active modes. Crucially, all further scheme development must include consideration of the impact on air quality.

## **8.6 Local Plan**

The Local Plan objectives link to the Environment Action Plan and aims to reduce reliance on fossil fuels and to minimise pollution which affects human health. The Transport Policy (LP13) also links to the requirements of the Local Transport Plan which aims to reduce the need to travel, especially by car. The Biodiversity and Geological Conservation Policy (LP28) aims to address adverse impacts such as air pollution. The following policies also influence air quality:

- Presumption in Favour of Sustainable Development (Policy LP1)
- Health and Wellbeing (Policy LP7)
- Trees and Woodland (Policy LP29)

In addition, we currently aim to add policy requirements on impacts to human health and health impact assessments into the emerging Cambridgeshire and Peterborough Minerals and Waste Local Plan. The nature of minerals and waste management development can have implications relating to the issue of air quality, therefore an appropriate and effective policy framework is required to address this.

## **8.7 Trees and Woodland strategy**

The value of trees, in respect to urban air quality, has long been recognised by the Council. In contrast to grey infrastructure, trees provide a comparatively large surface area for deposition of pollutants and thereby remove more PM, NO<sub>2</sub>, and O<sub>3</sub> (Ozone). Equally, at street level, trees can help alter the flow of air, leading to the dilution of pollutants and also separating local clean air from less clean regional air. The Council has a policy in the Trees and Woodland Strategy that requires developers to submit details of tree species, size and planting stock to be used and numbers to be planted as part of their proposals. The policy also requires that planting should aim to replace any loss of biomass, and where practicable, retain or increase the canopy cover on site.

In 2014 a canopy cover survey was commissioned which involved analysing aerial photography and measuring the area occupied by tree crowns. This found that the average canopy cover in the City is 9.43%. The Council's Trees & Woodland Strategy aims to target increasing canopy cover in those wards with lowest coverage. In addition, the Council will, wherever possible, work in partnership with Peterborough Environment City Trust to deliver its aspiration to plant more trees within the Forest for Peterborough project.

## **9. NATIONAL GOOD PRACTICE**

The group reviewed actions undertaken by a number of other councils including Nottingham City Council, Leicester City Council and Bristol City Council. Further information about the work undertaken by these authorities can be found in appendix B.

It was, however, difficult to find examples of cities comparable to Peterborough in terms of both size, transport network and with no exceedances of air quality standards. As such, whilst this exercise has added some value, the group have used other accepted methodologies for ascertaining the potential impact any future intervention may have.

## 10. FINDINGS AND RECOMMENDATIONS

The following section is intended to inform the air quality ambitions of Peterborough City Council. The group recognises that whilst Peterborough does not currently have any exceedances of relevant National Air Quality Objectives any improvements in air quality will have positive health benefits. The group also feel that such improvements are also likely to have a positive impact in terms of contributing to tackling climate change.

Having spoken to various key witnesses and having received information and evidence from officers to understand the current situation and what evidence-based actions could be taken locally by different stakeholders the Task and Finish Group concluded that there are a number of recommendations required as follows. Each of these recommendations have been indicatively assessed using guidance from the Department for Environment and Rural Affairs (February 2018): Local Air Quality Management Technical Guidance (TG16) and Public Health England (March 2018): Review of interventions to improve outdoor air quality and public health.

These measures are in addition to those already committed to in Chapter 8.1 What we are doing already Each measure has been categorised in terms of its effectiveness in reducing NOx and PM10, and if there is a positive effect on reducing PM2.5 emissions. The 'Effect' levels of High (Green), Medium (Amber) or Low (Red) are derived from information included in Local Air Quality Management Technical Guidance (TG16) <sup>(1)</sup> or Public Health England's 2019 document, Review of Interventions to Improve Outdoor Air Quality and public health <sup>(2)</sup>. Where a measure is marked as neutral this indicates that the effectiveness of the measure is dependent on how it is implemented; e.g. green infrastructure requires careful planning as well as being combined with other measures, as poor design or species selection can have a negative impact on air quality.

**Recommendation 1:** Work with the Cambridgeshire and Peterborough Combined Authority (CPCA) to encourage them to use their Passenger Transport Powers to secure air quality benefits. This should include: supporting the Council and Stagecoach to relocate the bus depot; improve vehicles to reduce emissions from the fleet; ensure the lowest emission vehicles only are used in areas of poorer air quality; consider the introduction of orbital bus routes; introduce bus priority measures; and, encourage young people to use public transport.

The Group are aware that the CPCA are midway through their programme of bus task reform, however, the group recommend that further pressure is put on operators to improve fleet vehicles quickly to remove the worst emitting vehicles from the city's roads. In particular, the CPCA should ensure Stagecoach delivers on its commitments to improve the local vehicle

fleet as outlined in section 4.3 of this report.

The Group would like to request that the CPCA undertake its process of bus reform, and reach a decision on franchising, in a speedy manner in order to ensure benefits are felt for residents as soon as possible.

<b>Effect on reducing NOx and PM 10 emissions (low, medium, high):</b> High	<b>Reduces PM2.5 emissions:</b> Yes	<b>Budget required:</b> Nil – this can be incorporated into existing work
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**Likely impact on the climate emergency declaration:** Positive

**Recommendation 2:** Undertake a parking review with the aim of discouraging single occupancy car travel and prioritising Ultra Low Emission Vehicles.

The group recognises the steps that have been undertaken to date to install electric vehicle charging infrastructure into car parks and the plans in place to improve these.

The group however would like to request the relevant officer within the council undertakes a feasibility study to review the current policy and parking charges with the aim of discouraging single occupancy car travel.

<b>Effect on reducing NOx and PM 10 emissions (low, medium, high):</b> High	<b>Reduces PM2.5 emissions:</b> Yes	<b>Budget required:</b> Nil – this can be incorporated into existing work
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**Likely impact on the climate emergency declaration:** Positive

**Recommendation 3:** Increase the activities undertaken to encourage residents to opt for active modes of transport including robust evaluation and monitoring.

The Group recognises the extensive work already undertaken by the Travelchoice team with the support of the Cambridgeshire and Peterborough Combined Authority but recognises the current resource limitations of the team's work.

The Group would like to increase the FTE in the team from two to three because the overwhelming evidence received by this working group suggests that any action that can be taken to reduce the use of motorised vehicles will have a positive effect on air quality and health. The Group would specifically like to see Travelchoice increase the number of 'schools streets' initiatives that take place annually. In order to achieve this the Group recommends that the Council seeks additional funding from the Cambridgeshire and Peterborough Combined Authority.

The group recommends that the Cabinet and/or the Combined Authority investigate the feasibility of exercising the power under the Transport Act (1998) to introduce a workplace parking levy as a means of discouraging car use.

<b>Effect on reducing NOx and PM 10 emissions (low, medium, high):</b> (Broad scope range from High to Low)	<b>Reduces PM2.5 emissions:</b> Yes	<b>Budget required:</b> £32k
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**Likely impact on the climate emergency declaration:** Positive

**Recommendation 4:** Identify the feasibility of introducing a new policy to ensure that all taxi and private hire vehicles use alternative low emissions fuels only by 2030.

The group recognises the steps that have been undertaken to date to support the taxi and private hire vehicle federations to improve their fleets.

The group, however, would like to commission the relevant officer within the council to ascertain the feasibility of introducing a policy whereby all vehicles are mandated to use alternative fuels only by 2030. The Group would like officers to explore ways in which this work could be achieved within existing resources and if this proves unsuccessful seek capacity funding from future budget setting rounds.

<b>Effect on reducing NOx and PM 10 emissions (low, medium, high):</b> Medium	<b>Reduces PM2.5 emissions:</b> Yes	<b>Budget required:</b> £30k
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**Likely impact on the climate emergency declaration:** Positive

**Recommendation 5:** Work in partnership with the Cambridgeshire and Peterborough Combined Authority (CPCA) to develop a Mass Rapid Transit (MRT) proposal for the city.

The Group recognise that work has already commenced to investigate the feasibility MRT and request that the CPCA recognise the benefits of MRT on air quality and prioritise bringing forward a suitable scheme for Peterborough.

<b>Effect on reducing NOx and PM 10 emissions (low, medium, high):</b> Medium	<b>Reduces PM2.5 emissions:</b> Yes	<b>Budget required:</b> Nil – this can be incorporated into existing work
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**Likely impact on the climate emergency declaration:** Positive

**Recommendation 6:** Support local businesses to make the investment necessary to encourage the transition to active modes of travel and alternatively fuelled vehicles.

<p>The group recognises the steps that have been undertaken to offer business grants to local firms with the aim of supporting staff to adopt active travel methods. However, the group also recognises that these grants are not always taken up and as such would like to recommend that details of the grants are shared with Councillors so that uptake can be encouraged via direct contact with local businesses.</p>		
<p><b>Effect on reducing NOx and PM 10 emissions (low, medium, high):</b> Low</p>	<p><b>Reduces PM2.5 emissions:</b> Yes</p>	<p><b>Budget required:</b> Nil – this can be incorporated into existing work</p>
<p><b>Likely impact on the climate emergency declaration:</b> Positive</p>		

<p><b>Recommendation 7:</b> Identify opportunities to install or maximise the benefits of green infrastructure to provide barriers between people and emissions.</p>		
<p>The Group recognises that in specific situations green infrastructure, in particular trees and hedges, not only have an intrinsic value but can provide small improvements to air quality by absorption of pollutants into their leaves and also create an effective barrier to reduce exposure to air pollution.</p> <p>The Group recommends:</p> <ul style="list-style-type: none"> <li>• Further development of the Integrated Transport Programme of capital works to identify any opportunities to utilise green infrastructure.</li> <li>• At the next opportunity to review LP29 (Local Planning Policy) (Trees and Woodland) officers should further develop this policy to ensure opportunities to utilise green infrastructure to improve air quality are maximised.</li> <li>• Prior to any changes to LP29 when considering planning applications officers to consider maximising the use of green infrastructure to achieve air quality benefits.</li> <li>• (NB this measure has been scored based upon the Public Health England Document Review of Interventions to Improve Outdoor Air Quality).</li> </ul>		
<p><b>Effect on reducing NOx and PM 10 emissions (low, medium, high):</b> *potentially (location dependant)</p>	<p><b>Reduces PM2.5 emissions:</b> Unknown</p>	<p><b>Budget required:</b> Nil – this can be incorporated into existing work</p>
<p><b>Likely impact on the climate emergency declaration:</b> Positive</p>		

<p><b>Recommendation 8:</b> Explore opportunities for further pedestrianisation in all future public realm works.</p>		
<p>The Group recognise that in the future the Council will undertake public realm improvement works. Due to the positive links between active travel and air quality, the group recommends</p>		

that ease of access including pedestrianisation is considered at the outset of future development, ensuring that all users' needs are considered.

<b>Effect on reducing NOx and PM 10 emissions (low, medium, high):</b> low	<b>Reduces PM2.5 emissions:</b> yes	<b>Budget required:</b> Nil – this can be incorporated into existing work
<b>Likely impact on the climate emergency declaration:</b> Positive		

<b>Recommendation 9:</b> Work in partnership with Fenland District Council to evidence the basis for revocation of AQMA No1.		
<p>The Group recognises that there have been no measured exceedances of the SO<sub>2</sub> objective levels in Peterborough since AQMA No1 was declared (April 2007). Where pollutant concentrations are consistently below the objective levels local authorities can apply to revoke an AQMA (LAQM-TG16-February-18-v1).</p> <p>The Group recommends that Officers work in partnership with Fenland District Council to gather evidence to apply to DEFRA to revoke the AQMA No1.</p>		
<b>Effect on reducing NOx and PM 10 emissions (low, medium, high):</b> NA	<b>Reduces PM2.5 emissions:</b> NA	<b>Budget required:</b> Nil – this can be incorporated into existing work
<b>Likely impact on the climate emergency declaration:</b> None		



## **11. FINANCIAL IMPLICATIONS**

It is recognised that the Council is already undertaking a number of activities that have a positive impact on air quality across the city. However, the group is also aware that the rate at which Peterborough is growing, alongside the recognition that any improvement in air quality is likely to have positive impacts on health, means that there is clear evidence that further investment should be made to improve air quality.

The majority of the recommendations detailed in section nine above have no additional resource implications for the Council and can be delivered within existing resources. Two of the recommendations will involve additional investment amounting to £67k annually. However, officers are in the process of exploring the feasibility of seeking additional external funding and/or delivering the recommendations within existing resources. As such these recommendations will not result in a budget pressure at this stage. It is recommended that this is revisited in six months' time and a capacity bid developed if no alternative sources of funding are forthcoming

In addition to the financial implications detailed above the Group recommends that officers continue to seek sources of alternative funding as and when opportunities arise.

## **12. LEGAL IMPLICATIONS**

In Peterborough there are no exceedances of relevant National Air Quality Objectives, which the Council reports on annually. The Council is currently full filling its legal obligations in relation to air quality. The recommendations proposed in this report will further strengthen the Council's position but are not legally required.

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## 14. GLOSSARY

Abbreviation	Description
AQAP	Air Quality Action Plan - A detailed description of measures, outcomes, achievement dates and implementation methods, showing how the local authority intends to achieve air quality limit values.
AQMA	Air Quality Management Area – An area where air pollutant concentrations exceed / are likely to exceed the relevant air quality objectives. AQMAs are declared for specific pollutants and objectives.
ASR	Annual Status Report - the annual air quality report submitted to DEFRA.
CO <sub>2</sub>	Carbon Dioxide.
COMEAP	Committee on the Medical Effects of Air Pollutants.
DEFRA	Department for Environment, Food and Rural Affairs.
DMRB	Design Manual for Roads and Bridges – Air quality screening tool produced by Highways England.
EU	European Union.
EV	Electric Vehicle.
IED	Industrial Emissions Directive.
LAQM	Local Air Quality Management.
LCWIPs	Local Cycling and Walking Infrastructure Plans.
LTP	Local Transport Plan.
NO <sub>2</sub>	Nitrogen Dioxide.
NO <sub>x</sub>	Nitrogen Oxides.
O <sub>3</sub>	Ozone.
PECT	Peterborough Environment City Trust.
PM <sub>10</sub>	Airborne particulate matter with an aerodynamic diameter of 10µm (micrometres or microns) or less.
PM <sub>2.5</sub>	Airborne particulate matter with an aerodynamic diameter of 2.5µm or less.
SO <sub>2</sub>	Sulphur Dioxide.
UKAS	United Kingdom Accreditation Service.

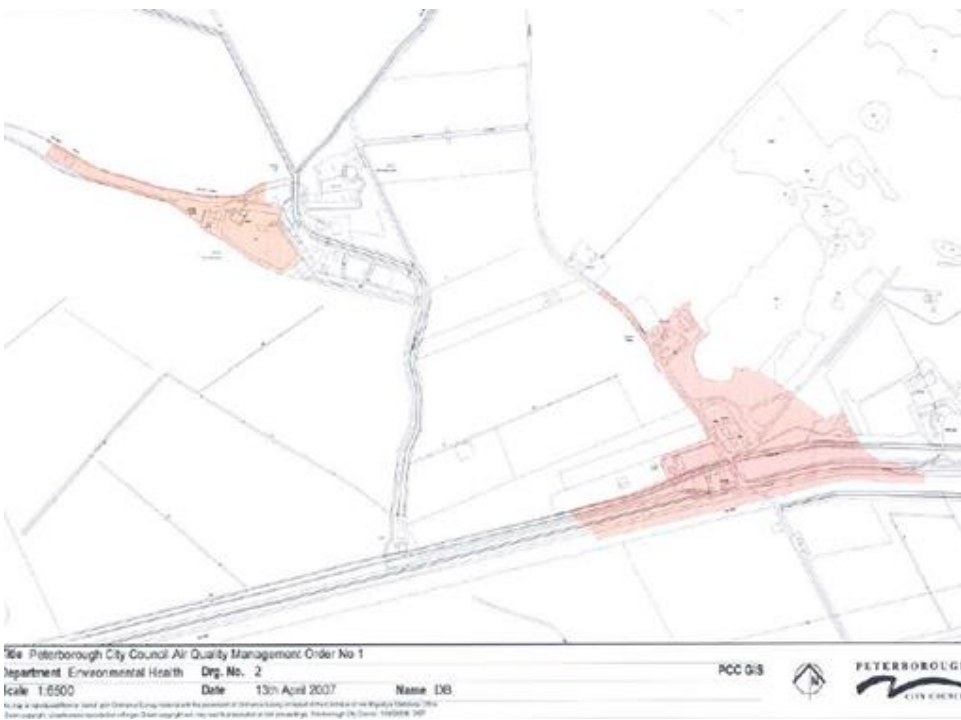
ULEV	Ultra-Low Emission Vehicles.
VOC	Volatile Organic Compound.

## 14. APPENDICES

### Appendix A: Peterborough Diffusion Tube Monitoring Locations October 2019



**Appendix B: Air Quality Management Area (AQMA No1)**





## **Appendix C:** Activity in other cities.

The following section provides an overview of some of the work undertaken in other authorities:

**Nottingham City Council:** In July 2017 DEFRA and the Department for Transport (DfT) jointly released the “UK Plan for Tackling Roadside Nitrogen Dioxide Emissions”. This plan named Nottingham and a number of other Local Authorities areas as having persistently high levels of Nitrogen Dioxide. The Secretary of State for Environment directed that Nottingham City Council produce a local plan to show how compliance with the air quality directive will be reached before 2020. Nottingham City Council have committed to a number of actions including:

- Developing an integrated public transport system - The Council recognises that public transport is a major part of the solution to poor air quality and therefore has developed a comprehensive strategy to improve the public transport offering to citizens and businesses. For the last 15 years Nottingham City Council has been developing an integrated public transport system, in partnership with local operators, which offers a viable and high-quality alternative to car travel. The bus and tram network has grown from 67 million (2004) and currently carries over 78 million passenger journeys annually.
- Supporting the uptake of EV charging - Nottingham City Council was successful in its bid for over £6m to help fund a range of innovative measures that will deliver the uptake of an additional 8,000 ULEVs on their roads by 2020.
- Hackney carriages - The Council has adopted a target to ensure that every Hackney Carriage in Nottingham should be an ultra-low emission vehicle (ULEV) by 2025, with at least 40% of the fleet an ULEV by 2020.
- Cycle ambition programme - The City Council secured £6.1m through the Local Enterprise Partnership to kick-start an overhaul of Nottingham's cycling facilities. The aim of the programme has been to increase the number of people cycling on a regular basis by 10% by 2025. To do that the City Council has built a series of cycle routes, with four main cycle corridors into the city centre, these have achieved high quality routes based on Transport for London best practice and segregated from traffic where possible. The development of a high-quality city centre cycle hire facility is also an important component of this strategy.
- Behaviour change - Nottingham City Council was recently successful in winning £2.7m funding from the DfT's Access Fund to deliver a programme of

behaviour change activities working with households and businesses to promote sustainable travel options to improve air quality, including support for cycling.

- The Clear Zone - encompasses a number of restrictions that prevent general traffic from accessing the largely pedestrianised central core of the City Centre, though special access permits are issued by the Council to allow loading and unloading between 10am and 4.30pm.
- Workplace parking levy - Major aspect of Nottingham City Council's Approach to promoting sustainable transport is the Workplace Parking Levy (WPL). The WPL scheme is a congestion charge designed to encourage employers to reduce the number of free workplace parking places they provide to staff and switch to alternative modes of transport. The scheme is largely administrative with employers managing their own account online. Since charging began in 2012 over £44 million of revenue has been generated with 100% compliance from liable employers, and over 99.9% of potential revenue has been collected. The WPL team operates at less than 5% of revenue cost, and their prevailing ethos is about achieving compliance rather than taking enforcement action.
- Clean Bus Technology Fund - Nottingham City Council sees public transport as part of the solution to tackling poor air quality in the city. Historic investment our bus fleet means that Nottingham City Transport (NCT) has a relatively modern fleet of mainly Euro 5 diesel buses, the oldest of which is just over 7 years. Nottingham has set ambitious targets of having one of the least polluting bus fleets in the country. The city council saw retrofitting NCT's fleet of Euro 5 buses as a way of achieving this. In 2017 The City Council applied for £2.7m from the Clean Bus Technology Fund. The fund would enable the retrofit of a 161 Euro V buses to Euro VI standard by NCT (in addition 5 Euro III training vehicles would also be retrofitted to Euro VI standard) and 5 Vehicle Euro V vehicles operated on our contracted Locallink service would be retrofitted to Euro VI standard.

Full details of activity in Nottingham can be found here:  
<https://www.transportnottingham.com/policies/air-quality/>

**Leicester City Council:** Leicester exceeds statutory guidelines of 40µg/m<sup>3</sup> for nitrogen dioxide (NO<sub>2</sub>) in several areas of the city. The majority of this pollution comes from road traffic emissions along major routes into the city (there are over 29,000 daily car commuters into the city in 2014, with the average commuted distance being six miles) and in the city centre. As such the majority of actions relate to road traffic as follows:



- To lobby and work with central government to introduce national measures to progressively reduce polluting emissions from diesel vehicles, for example through fiscal regimes and disseminating national initiatives locally, such as promoting the uptake of low emissions vehicles.
- To introduce a low emission zone focussed initially on buses using Haymarket bus station and St Margarets bus station, by 2017, and to work towards an ultra-low emission zone (ULEZ) for all vehicles over the period to 2026, or sooner if possible.
- To work with bus, freight, rail and taxi transport sectors to reduce their environmental impact.
- To increase the uptake of ultra-low emission vehicles by residents and business.
- To progressively reduce emissions by 50% by 2025 from the council's fleet operations.
- To implement a sustainable procurement guide in 2016.
- To deliver a phase ii 'connecting Leicester' initiative by 2019 encouraging walking and cycling.
- To increase the uptake of more sustainable transport options.
- To increase the number of public transport trips.
- To deliver our Leicester cycle action plan (2014 – 2024) and integrate walking initiatives.
- To optimise our highway network.
- To deliver a programme of 20mph zones.
- To deliver a parking improvement programme.
- To ensure air quality considerations are embedded into the new local plan to be adopted in 2017.
- Using trees and plants to reduce air pollution

Full details of activity in Leicester can be found here:

<https://www.leicester.gov.uk/media/180653/air-quality-action-plan.pdf>

**Bristol City Council:** Due to forecast air quality exceedances Bristol City Council has been directed by the Minister to produce a Clean Air Plan to achieve air quality improvements in the shortest possible time. In line with Government guidance, as part of the Plan Bristol City Council is considering implementation of a Clean Air Zone (CAZ), including both charging and non- charging measures. CH2M has been commissioned by Bristol City Council (BCC) to produce a Strategic Outline Case for the delivery of a package of measures which will bring

about compliance with the Limit Value for annual mean nitrogen dioxide in the shortest time possible in Bristol.

In June 2019 Bristol's Cabinet approved consultation on two options derived from the work done in the strategic outline case. Consultation runs from July 2019 to mid-August 2019 and further information on the options will be available following this.

Full details of activity in Bristol can be found here: [https://www.cleanairforbristol.org/wp-content/uploads/2018/05/Strategic-Outline-Case\\_BCC\\_Final\\_05.04.18.pdf](https://www.cleanairforbristol.org/wp-content/uploads/2018/05/Strategic-Outline-Case_BCC_Final_05.04.18.pdf)

Further information on this review is available from:

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