



Wycombe District Air Quality Action Plan



**Place People
Prosperity Progress**

Wycombe District Air Quality Action Plan

Air pollution in Wycombe District

Several air pollutants have been identified as a concerns towards human health such as, amongst others, ozone and benzene, however the biggest concerns are reserved for Nitrogen Dioxide (NO₂) and fine particles (PM_{2.5}). European and National limits for these pollutants are defined based upon the known effect these pollutants have on human health. These have latterly been referred to as 'safer' levels as studies since these limits were set have found that there is no safe level of air pollution (Qian, D. et al (2017)).

The 2008 European ambient air directive (2008/50/EC) sets the limits for pollutants which has been translated into UK law by the Air Quality Standards regulations 2010. In line with most substantially settled areas, Wycombe District has areas that exceed the statutory limits of 40µg/m³ (annual mean) for Nitrogen Dioxide (NO₂).

Part IV of the Environment Act 1995 requires local authorities in the UK to review air quality in their area and designate air quality management areas if improvements are necessary. Where an air quality management area is designated, local authorities are also required to produce an action plan describing pollution reduction measures.

Wycombe District Council monitors air quality using 66 diffusion tube and two automatic monitoring station locations. Results from this monitoring suggested that areas of High Wycombe, Marlow and the M40 were in excess of the national limit for Nitrogen Dioxide (NO₂) (annual mean). It was therefore decided in 2017 that an air quality modelling exercise, based upon 2016 monitoring data, will be conducted to determine the extent of the area that exceeded the limit. The result found that substantial areas of arterial roads through High Wycombe and Marlow, along with the whole length of the M40, had exceeded national limits. Following consultation of the public and our statutory consultees, Wycombe District Council declared new Air Quality Management Areas (AQMA) for High Wycombe and Marlow, and amended an existing AQMA for the M40 in December 2017.

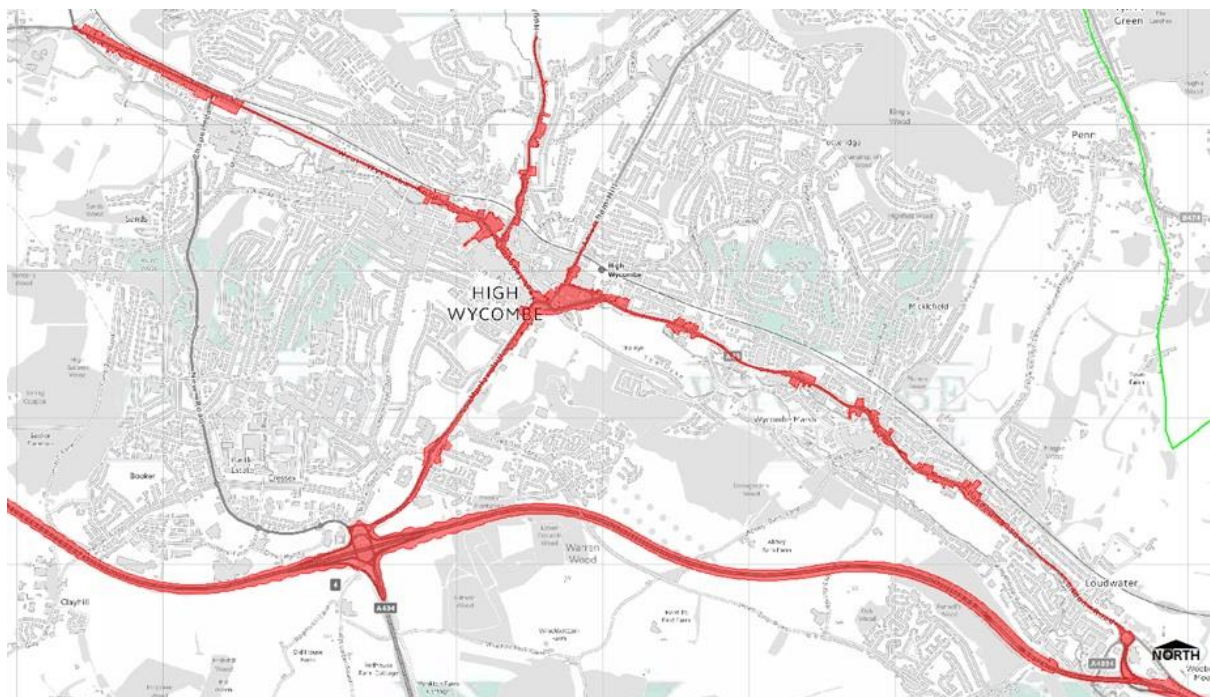


Figure 1 – High Wycombe AQMA declared on 22 December 2017

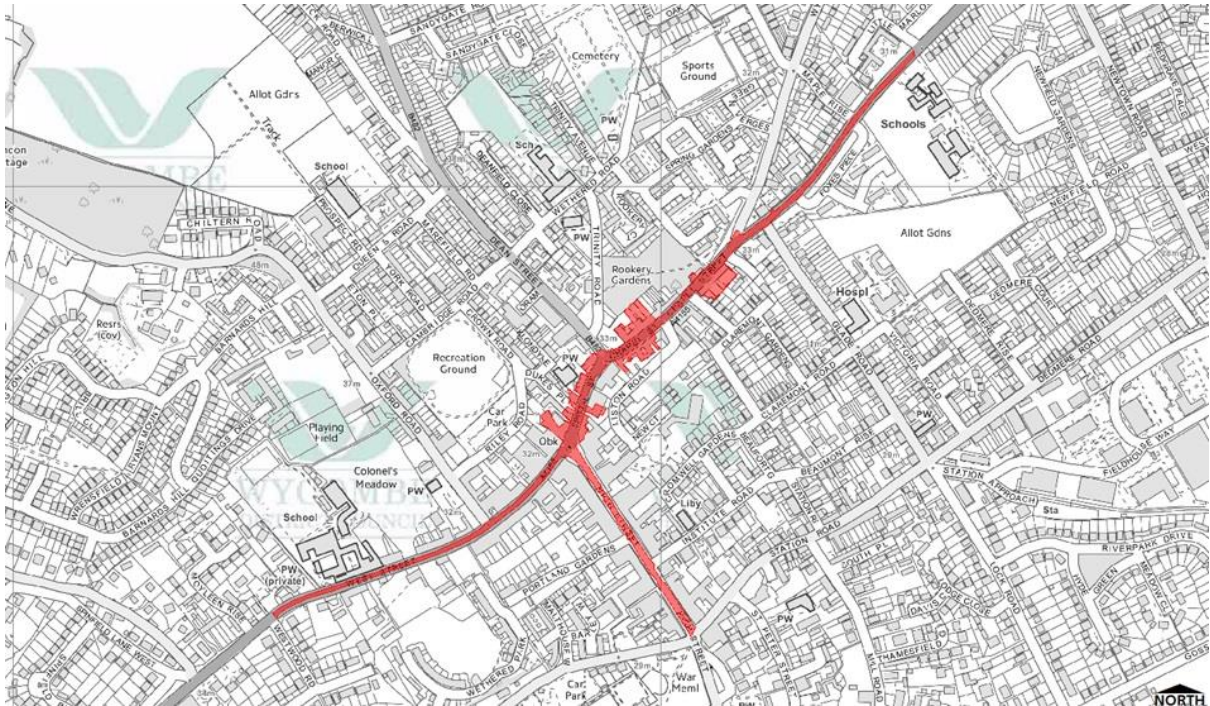


Figure 2 – Marlow AQMA declared on 22 December 2017

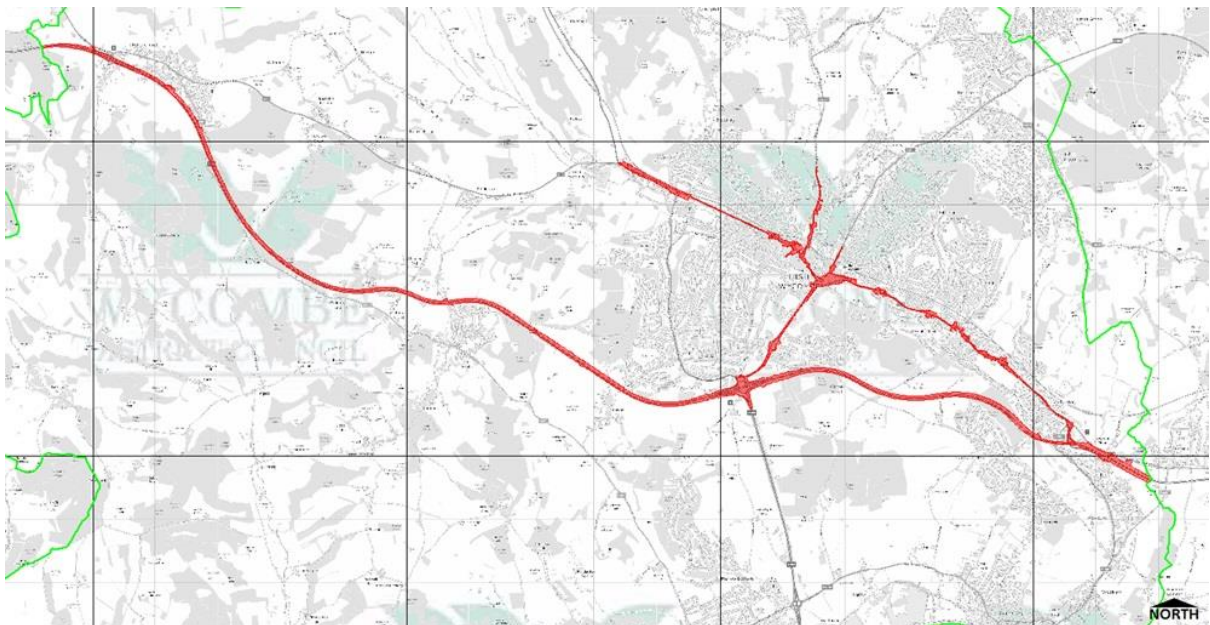


Figure 3 – M40 AQMA as amended on 22 December 2017

Air pollution is considered to be responsible for 44,000 to 53,000 early deaths annually in the UK. Within Wycombe District air pollution is considered to attribute to 5.7% of deaths, with the percentage considered much higher for those that live on, work or spend large amount of time alongside the main arterial roads in the district. Air pollution is the second biggest cause of preventable death in the UK, with only smoking exceeding the mortality rate. Of the 40,000-50,000 deaths in the UK, 14% are linked to Chronic Obstructive Pulmonary Disease (COPD), 72% to cardiac conditions (mainly heart attacks and strokes) and 14% to lung cancer. In addition to

the early deaths, air pollution contributes greatly to number of years that people live in ill health. Air pollution is also a significant cause and aggravator of asthma.

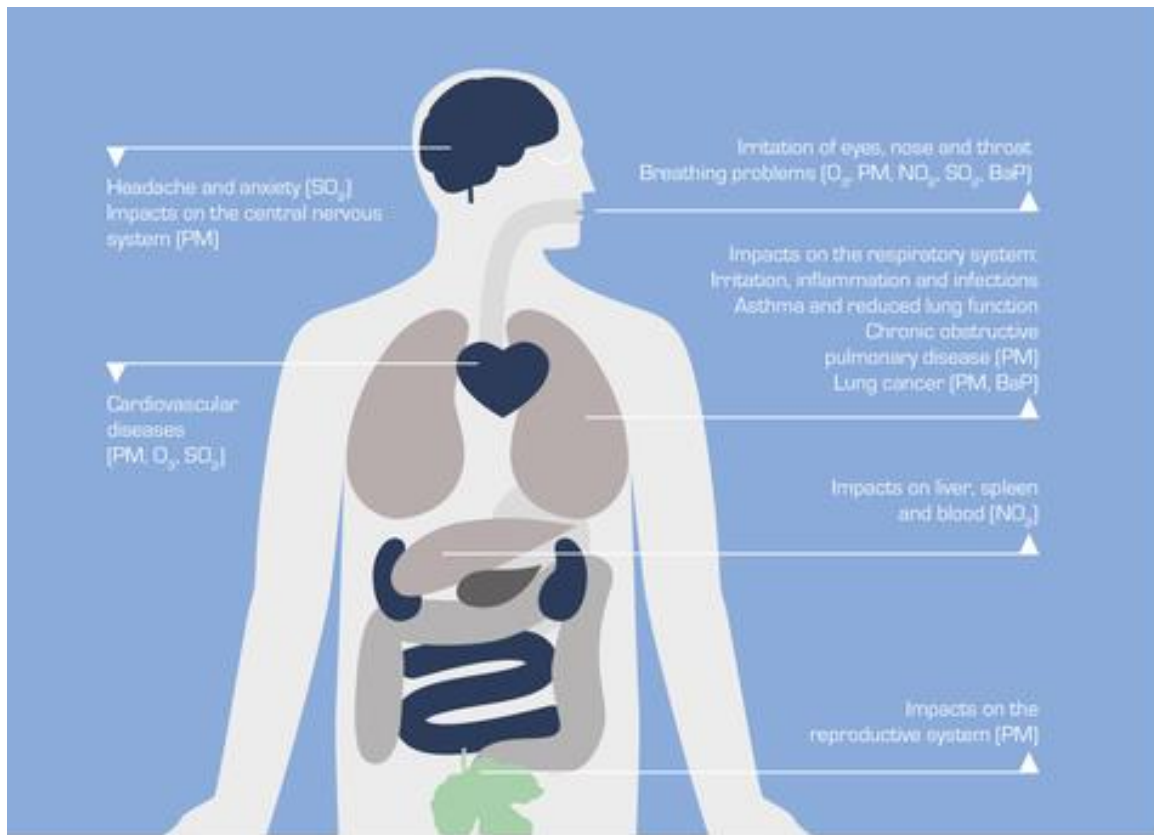


Figure 4 – Main health impacts of air pollution (Source: European Environment Agency www.eea.europa.eu)

	Impact
Annual equivalent attributable deaths	44,750 - 52,500
Annual Social Cost	£25.3bn - £29.7bn

Figure 5 – Annual UK-wide cost of air pollution attributable mortality only (Source: UK government; www.gov.uk/guidance/air-quality-economic-analysis)

Though air pollution affects everyone, it is recognised that not everyone is affected in the same extent. It is generally people living in deprived areas of the district that are more affected than those living in less deprived areas even if they are exposed to the same levels of pollution. People who are already in poor health are affected to a greater extent than those who are healthier. Air pollution can therefore be considered an equality issue and through tackling it we can help to address Wycombe District's health inequalities.

In addition to the health costs of air pollution there is also a substantial impact on the natural and built environment. The cost to the natural environment include effects on

crop yield and biodiversity through nitrogen deposition close to roads whereas the cost to the built environment is from corrosive actions of Nitric acid (a product of the mixing of Nitrogen Dioxide with water) or from soot deposition.

Wycombe District Air Quality Action Plan steering group

Following the declaration of the two new AQMAs and the amended AQMA in December 2017 a steering group including statutory partners and various key stakeholders was formed to produce Wycombe District's Air Quality Action Plan. The members of the steering group are listed below:

Wycombe District Council

- Cabinet member for Environment
- Deputy Cabinet Member for Environment
- Cabinet Member for Planning & Sustainability
- Control of Pollution unit (Environmental Health)
- Major Projects and Estates
- Planning Policy

Buckinghamshire County Council

- Highways department
- Highways infrastructure
- Public transport
- Transport strategy

Town councils

- Marlow Town Council

National bodies

- Highways England

Bus companies

- Arriva Midlands
- Carousel Buses

Public interest and/or environment groups

- Marlow Society
- Transition Town Marlow
- Wycombe Environment Centre
- Wycombe Friends of the Earth

The steering group met at Wycombe District Council's offices on Tuesday 20 February 2018. Two presentations were given to the members of the steering group. The first detailed the current state of air quality within Wycombe District and what the aim of the steering group was. The second presentation focused on the science, causes, health effects and proven mitigation of air pollution. Following a brain storming session and group discussion about various ideas of how to reduce pollution emissions, the delegates were given two months to return to their respective organisations to formulate actions that they can commit to for inclusion within the Air Quality Action Plan. In the intervening time, several meetings with

individual members was conducted by Wycombe District Council's Control of Pollution unit. The following actions are a result of this process.

Air Quality Actions

Public transport

Public transport is an important factor in taking cars off the road and easing congestion, with the associated improvement in air quality. Buses in particular have the potential to take large numbers of single occupancy vehicles off the road. The average journey length in England is 6.8 miles, with a large number of trips being less than a mile. The average occupancy of a vehicle is 1.57 people, with a significant number being single person occupancy. Short car journeys cause up to 60% more pollution per mile than longer journeys. These shorter, single occupancy journeys are potentially where we can realise some improvements to air quality by encouraging those people out of their cars and onto public transport. Many reasons have been stated for people's reluctance to use public transport in Buckinghamshire which include cost of travel, being unaware of readily available information and frustrations regarding confusion over whether you can use your return ticket to travel back on alternative operator serving the same route. It is therefore important that we target those drivers through the promotion of public transport by making travel a lot easier and attractive. Bus and rail services are provided through private operating companies.

Action 1

Working with the County Council and the bus and rail operating companies, we will endeavour to develop new ways of making public transport a more attractive proposition to the public. This may involve using technology to make the experience more user friendly when researching routes, paying for the journey and finding up-to-date journey information. Wycombe District Council can contribute to these initiatives as part of our regular review of the distribution of Community Infrastructure Levy (CIL) funds, or secure improvements to public transport where justified¹ through proposals in the new Local Plan and existing policies.

Though increased public transportation use can make large improvements to local air quality, there are improvements that can be made to the existing bus fleet to make it cleaner. There are differences in the level of emissions between newer greener buses and those that are older. Euro Emission Standards, first introduced in 1992 have incrementally improved emissions from transport. As this plan is being written we have reached the 6th such standard with the Euro VI standard being introduced in 2014. The difference between the Euro I (1992) emission standard and the current Euro VI standard is that a Euro VI engine is only permitted to emit 5% of the Nitrogen Dioxide (NO₂) level that was permitted under Euro I. Even between the last two standards (Euro V and Euro VI) there has been a significant reduction in the permitted emissions levels with a Euro VI engine only being permitted to emit 20% of the Nitrogen Dioxide (NO₂) level that was permitted under Euro V. There are still a number of buses serving Wycombe District, and travelling through our Air Quality Management Areas that are pre-Euro emission standards or are of an early Euro

¹ In accordance with CIL regulation 122: (a) necessary to make the development acceptable in planning terms; (b) directly related to the development; and (c) fairly and reasonably related in scale and kind to the development.

standard. It is therefore obvious that the modernisation of the current bus fleet can have a substantial effect in improving air quality. Though bus companies have investment plans where older buses are gradually replaced with new or newer buses, which will result in incremental improvements over time, it is recognised that replacing middle-aged vehicles, which have several years and a large potential mileage left of their lifespan, with new vehicle is very costly and generally impracticable.

DEFRA periodically offer opportunities for local authorities to bid for bus retrofitting grants which funds the retrofitting of middle-aged vehicles with modern, cleaner engines. This is a more cost-effective way of improving emissions from these vehicles as the associated cost is often in the region of 1/20th of that of replacing the vehicle with a new one. In 2017 Wycombe District Council, along with the three other District Councils within Buckinghamshire, jointly applied to retrofit 34 buses (Euro III, Euro IV and Euro V vehicles) with Euro VI. Unfortunately our bid was unsuccessful. Wycombe District Council, with possible bidding partners, will continue to bid for DEFRA funding to retrofit local buses with cleaner engines.

Action 2

Wycombe District Council, in conjunction with Buckinghamshire County council and bus companies, will continue to apply for government funding to retrofit older buses with less polluting engines.

To reduce the amount of vehicles visiting the central parts of the Air Quality Management Area the Park & Ride facilities at Handy Cross must be maximised. Greater advertising of the facilities and their benefits, both financially and environmentally, must be made.

Action 3

Wycombe District Council and Buckinghamshire County Council will raise awareness of Park & Ride facilities at Handy Cross in order to increase public usage.

National legislation

Whilst the actions in this action plan that are to be carried out by Wycombe District Council and our partners will have a significant effect in reducing pollution, our air quality modelling indicates that the largest Nitrogen Dioxide (NO₂) is from cars, particularly diesel cars.

Emission levels from vehicles is a national problem that needs to be addressed and is largely outside the control of local councils. Central government has the power to tackle this issue directly through the introduction of initiatives that encourage low and zero emission vehicles.

The UK government is responsible for producing an Air Quality Strategy that will ensure that air quality in the UK complies with European Union limits for several pollutants. Twice the UK government has been successfully sued by Client Earth for producing insufficient Air Quality Strategies, with a third such action started in 2017. In the last successful action the UK government was ordered to produce a new strategy that reduces Nitrogen Dioxide (NO₂) in as short a time as possible. In May 2018, the European Commission started proceedings in the European Court of Justice against the UK government for their failure to meet EU limits for Nitrogen Dioxide (NO₂).

It is clear that the UK government needs to take meaningful action to tackle Nitrogen Dioxide (NO₂) emissions from vehicle, domestic and industrial sources to complement the actions taken by local authorities. We will welcome more ambitious national legislation, standards and guidance that will produce uniform action across the UK.

Action 4

We will continue to lobby government to provide meaningful legislation, standards and guidance that will assist with bringing down nitrogen dioxide and particulate matter levels.

Public awareness and behaviour

Public awareness of air quality issues has risen over the last couple of years with increase coverage of the problem in the media and through the work of environmental campaigners. What is perhaps not so apparent is the increase of public awareness of how an individual's actions contributes to either an increase or decrease of emissions. Often people only perceive air quality to be a problem in large cities and do not realise that places that they frequent, work in or even live in can expose them to dangerous levels of pollutants. It is therefore important that the public are regularly engaged to educate them about local air quality problems, why those problems occur and how they can contribute to reducing those problems. This should be done through a multitude of media outlets such as social media, radio interviews, articles in district magazines etc.

Action 5

Wycombe District Council will draw up a programme of regular public engagement to educate them about the current situation regarding air quality in the district, the reasons for the air pollution, how it affects their health and how they can contribute to reducing emission levels.

In recent years a national day, Clean Air day, dedicate to air quality issues has been successfully launched with an emphasis of increasing public awareness. Wycombe District Council has signed up as a supporter of Clean Air Day and intends to run a public awareness campaign on every Clean Air Day.

Action 6

Wycombe District Council will run a public awareness campaign on every Clean Air Day to highlight the issues regarding air quality and how people can reduce their emissions.

In order to allow the public to make informed decisions about how they can support reducing air pollution emissions, it is important to highlight where there is a problem with air quality. It is planned to inform the public that they are entering an Air Quality Management Area by strategically positioning signage informing them of such. The ambition is to keep air quality issues fresh in the mind of the public and that a proportion of the public will consider alternative transport arrangements when visiting those areas.

Action 7

Wycombe District Council will work with the Highway Authority to identify and agree Information displays at strategic positions as drivers are entering the Air Quality Management Areas to inform them that they are entering such.

There is a misconception amongst a small proportion of the population that restarting their vehicle's engine uses significantly more fuel than an idling engine and that regularly restarting their engine damages the starter motor. In fact, idling for a couple of seconds uses more fuel than restarting the engine and starter motors are a lot more resilient than a few decades ago. Unfortunately idling engines are commonly found in town centres, car parks, bus stations and outside schools. Emissions from an idling engine do not disperse rapidly into the environment as they are not subject to the turbulence effect that is caused to traffic travelling at speed. They cause very high concentrations of Nitrogen Dioxide (NO₂) in the immediate vicinity of the car. This is particularly a problem when idling occurs outside schools with vulnerable young children being primarily exposed. A campaign to reduce incidents of engine idling, using powers under Regulation 98 of the Road Vehicles (Construction and Use) Regulations 1986, and associated signage will keep air quality issues in the mind of the public.

Action 8

Wycombe District Council will implement our powers under Regulation 98 of the Road Vehicles (Construction and Use) Regulations 1986 to instruct motorists to switch off their engines while their vehicles are parked and to issue Fixed Penalty Notices to those who refuse to co-operate. Our action will apply to private, public transport and commercial vehicles.

Reducing single occupancy vehicle use in Wycombe District by encouraging people to car share is an important way of reducing road congestion and subsequently air pollution. Bucks Car Share scheme is a good way to introduce potential car sharers to other people who are driving similar journeys. It is also run in such a way that there is an electronic log of who is travelling with who, which should assist in dispelling some people's fears of sharing a lift with a stranger. It is, however, recognised that the scheme is under used and is in need of substantial promotion for it to contribute a significant effect to reducing air pollution. Working with local businesses to encourage them to promote Bucks Car Share to their employees is likely to be our most successful opportunity of promoting the scheme.

Action 9

Bucks car share will be promoted by both Wycombe District Council and Buckinghamshire County Council with the aim of reducing the amount of car journeys taken through the Air Quality Management Areas.

Working with schools

Traffic associated with parents dropping off their children at the school gate has a significant effect on congestion in some areas of the Air Quality Management Areas and can cause elevated air pollution for students. Nationally, 12% of journeys are for educational purposes. Often the journey distances are very short (average of 2.7 miles) and many would be suitable for walking, cycling or, for longer distances, bus journeys. Buckinghamshire County Council has been working with schools to develop 'Park & Stride' schemes where parents are encouraged to drop off their children at a safe, designated area a reasonable distance from the schools so that their children may complete the final stage of their journey on foot. At present around 62 schools in Buckinghamshire have a School Travel Plan that encourages the increased use of sustainable travel. It is Wycombe District Council's intention to assist Buckinghamshire County Council with promoting School Travel Plans, and in

particular 'park & stride' initiative, in order to increase the number of schools advocating green transportation.

Action 10

Wycombe District Council and Buckinghamshire County Council will actively promote the adoption of School Travel Plans and 'park and stride' initiatives in schools, where parents are encouraged to park some distance from the school gates and allow their children to walk the final part of their journey, to complement the aims of Buckinghamshire County Council's Local Transport Plan 4 and reduce congestion around schools.

Business engagement

Business related travel makes up the majority of traffic during peak traffic hours, including employees commuting to work, business deliveries and travel to business meetings. It is therefore essential to engage businesses in the discussion about air quality problems. There are huge potential savings in terms of pollution emissions if businesses were to be encouraged to be ambitious in tackling their effect on local air quality. Initiatives which will be suggested include increased working from home, greener vehicle procurement, consolidated deliveries and a roll out of electric vehicle charging points in their car parks. The latter suggestion can apply to both staff and customer car parks. Should charging points be increased it is likely to make people more confident in taking the step towards purchasing a zero emissions vehicle.

Business support organisation, Bucks Business First, already work with local businesses through their Low carbon Workspaces programme to assist businesses with their aspiration to reduce their carbon footprint. It is our ambition to work with Bucks Business First to promote this scheme.

Action 11

Businesses will be engaged on a regular basis to encourage ways they can contribute to reducing emission levels. We will encourage more working from home, greener vehicle procurement, electric vehicle charging point roll out within their car parks, amongst other initiatives.

Freight strategy

The transportation of goods by freight plays a key role in servicing Buckinghamshire's industry, communities and supporting our growth and economic development. Freight offers our residents choice as consumers and businesses: allowing them to grow, thrive and develop.

A freight strategy is being created that analyses the impact freight is having in Bucks and looks ahead to the impact it might have in 2036. It sets out what can be done to harnesses the benefits of freight and manage its impact.

Freight using inappropriate routes and parking can sometimes cause unnecessary congestion, which leads to air pollution. Ensuring that Freight moves around the county more efficiently will prevent this.

Action 12

A freight strategy that develops policies which will ensure that freight can continue to service the needs of local residents and businesses, whilst at the same managing the effect on the local environment, will be adopted in 2018 by Buckinghamshire County council and cover a period until 2036.

Local planning

Planning decisions have a significant impact on the future air quality within Wycombe District. Wycombe District Council is under an obligation to deliver sufficient housing and employments sites, as well as facilities that the population needs to be sustainable. It is highly likely that the district will see substantial population growth for the foreseeable future. This will inevitably lead to increased traffic as well as increased emissions from domestic and commercial premises. It is therefore important that the impact from increased development is mitigated as far as reasonably practicable. Pollution, including air pollution, can be a material consideration in determining planning applications.

Action 13

Air pollution issues will be a material consideration to be taken into account when planning applications within, or close to the AQMAs are being determined. Where necessary and proportionate, measures to mitigate the impact on human health will be required.

Electric powered vehicles are becoming increasingly popular with over 150,000 vehicles registered in the UK in May 2018, up from 3,500 just five years previous. The UK government has stated that new conventional petrol and diesel vehicles will be banned from 2040. It is therefore important that the infrastructure to support this is put in place in advance of that date. The cost of purchasing a single wall-mounted trickle charge electric charging point (most appropriate for residential properties) is in the region of £500. The largest cost for a member of public being providing wiring and installation. Typically, to retrofit a residential property, it would cost in excess of £1,000, but can be significantly more expensive if driveways need to be dug up and subsequently restored. This is far in excess of what it would cost to install at the property's development. For a developer to install such technology they will be able to benefit from installing in bulk and the fact that new properties are being wired up at the same time, making the installation and wiring costs negligible in comparison to a resident retrofitting the technology. The developer may also benefit from buying the charging points in bulk, making it even more economical to install the technology at the point of development. The cost to the developer will be negligible in comparison to the health benefits and economic cost savings after just a couple of years. The economic costs, including health care, caused by a two car family in terms of air quality is approximately £400 per year for a rural household or £765 per year for an urban household.

Members of the public are also likely to be concerned by the lack of charging infrastructure in towns when considering whether to buy an electric powered vehicle. At the moment the increase in electric vehicle charging points lags significantly behind the increase in electric vehicles. This will soon result in electric vehicle charging points in town centres falling behind the demand for such, potentially stunting the take up of the technology. This shortfall should be partially solved by

encouraging new non-residential developments to install electric vehicle charging points as part of their planning permission.

Action 14

Where electric vehicle charging points are provided as part of a planning application, it will be taken into account as a positive benefit of the development in weighing and balancing the decision.

Wycombe District is obliged to free up land to contribute to its share of local housing demand. This will likely result in an increase in air pollution from both traffic, commercial and domestic sources. It is therefore important that the air pollution that results from the increase in population within the district is mitigated as far as reasonable possible. All new developments that are deemed to have an impact on the highway network must therefore produce a travel plan with the aim of reducing the reliance on single-occupancy car travel.

Action 15

Policy DM2 of Wycombe District Council's Development Plan requires all developments that require the submission of a Transport Assessment should contribute to a number of sustainable travel measures, including putting in place a Travel Plan in line with Buckinghamshire County Council guidance on Travel Plans². This includes workplace and residential developments. A travel plan should encourage positive physical and behavioural attitudes towards sustainable transport; and reduce reliance surrounding single-occupancy car travel. A successful travel plan should aim to achieve its objectives via a package of actions designed to promote safe, healthy and sustainable travel options. A Travel Plan lasts for at least 5 years. Over that time, the development has a main target of reducing single occupancy car use by 10%.

Over recent years there has been a trend towards the installation of biomass boilers in larger buildings in order to reduce Carbon Dioxide (CO₂) emissions. This has gone some way to assisting with reducing greenhouse gas emissions. This has, however, resulted in the unintended consequences of increasing Particulate matter (PM) and Nitrogen Dioxide (NO₂) emissions. Carbon Dioxide emissions do not, however, have a direct impact on the health of people living within Wycombe District whereas PM and NO₂ emissions have a direct impact on the health and mortality rate of people living within the vicinity of the biomass boiler. It is therefore important to prohibit new biomass boilers in areas close to Air Quality Management Areas.

Action 16

When considering applications which include new biomass boilers within 100 metres of the edge of an AQMA, or within the AQMA itself, the Council will take account of the potential pollution impact within the AQMA but also the potential benefits of the use of alternative fuels.

It is recognised that there are opportunities to increase and improve air quality related planning guidance within Wycombe District Council. There are opportunities to improve guidance in areas relating to development within, or close to, AQMA and electric vehicle charging point provision in new developments, amongst other areas. Wycombe District Council's Control of Pollution team and Planning Department will

² <https://www.buckscc.gov.uk/media/4510664/developer-travel-plan-guidelines-01.pdf>

work closely develop Supplementary Planning Guidance to help contribute towards achieving national air quality objectives within the district.

Action 17

Wycombe District Council's Control of Pollution team and Planning department will work closely to investigate opportunities to increase and improve air quality related planning guidance with the aim of contributing toward achieving national air quality objectives within the district.

Electric vehicle charging infrastructure

Though both an increase in electric vehicle charging infrastructure within domestic and non-domestic developments are important in supporting the government's ambition to ban new conventional petrol and diesel vehicles by 2040 and to encourage people to make greener choices when buying a new vehicle, it is recognised that a great proportion of visits to town centres result in cars being parked in on-street and off-street parking spaces that are controlled by councils. It is therefore important that a significant increase in electric vehicle charging points in both on-street and off-street parking spaces are provided.

Action 18

We will investigate suitable sites for potential roll out of electric vehicle charging points in both on-street and off-street parking spaces and, where deemed beneficial, increase the provision of such electric vehicle charging points.

Local government vehicle procurement

Wycombe District Council has a small number of vehicles that are used to perform our statutory duties. Though we have made procurement decisions that are based on value for money which has generally resulted in greener vehicles being chosen, it is important that our decisions also include an assessment of the vehicle's pollution emissions. This is particularly important that when we are asking businesses and members of the public to make green vehicle and travel choices we set a good example ourselves. The effect of our vehicles is generally restricted to the boundaries of Wycombe District and they have a more than average impact on our Air Quality Management Areas due to the places that they frequent and the large mileage along those routes.

Action 19

When procuring council vehicles, the following types of vehicles must be considered in descending order:

- **Electric vehicles**
- **Electric hybrids**
- **Alternative fuels (LPG etc.)**
- **Low emission petrol/diesel engines (of the most recent Euro emission standard)**

The council must justify why those fuels lower in the priority list have been selected. Factors that may be considered, amongst others, include expected journey frequency and mileage, whether the vehicle has stop/ start technology,

the expected journey routes, whether the vehicle is linked to other external contracts and the emission levels of the vehicle. The decision making process shall be documented for public critique.

Though it is important to make green vehicle procurement decisions when buying vehicles that the council directly controls, it is recognised that the vast majority of vehicles operated on behalf of Wycombe District Council are provided by contractors. It is therefore important that green vehicle procurement decisions are equally applied when negotiating contracts with third parties.

Action 20

When negotiating contracts with third parties that will result in contractor vehicles being provided, Wycombe District Council will demand that the contractor uses the following types of in descending order priority:

- **Electric vehicles**
- **Electric hybrids**
- **Alternative fuels (LPG etc.)**
- **Low emission petrol/diesel engines (of the most recent Euro emission standard)**

The council must justify why those fuels lower in the priority list have been selected. Factors that may be considered, amongst others, include expected journey frequency and mileage, whether the vehicle has stop/ start technology, the expected journey routes, whether the vehicle is linked to other external contracts and the emission levels of the vehicle. The decision making process shall be documented for public critique.

Cycling infrastructure

Cycling infrastructure, particularly safe cycling lanes, has the potential to encourage increasing amounts of car drivers to take up cycling. It is recognised that a large proportion of journeys, particularly work and school commutes, are of a suitable distance for cycling to be a viable option. This also has the potential to improve physical activity levels and facilitate weight management of people living and working in the area, with the added benefit of reducing the burden on health budgets. Currently 61.7% of adults in Buckinghamshire are overweight, 15.3% of children are obese and 37.2% of adults are physically inactive. There are lots of opportunities for additional cycling routes, including shared cycling/ walking paths across public land as well as some highway routes. These opportunities should be investigated with an aim of joining up existing cycling networks and bringing access into new areas of the district.

Action 21

Working with the County Council, efforts will be made to investigate potential opportunities for increasing and joining up the existing cycling networks within Wycombe District. Wycombe District Council can contribute to these initiatives as part of our regular review of the distribution of Community Infrastructure Levy (CIL) funds, or secure improvements to cycling networks where justified through proposals in the new Local Plan and existing policies, and can develop bids to grant-funding opportunities as they arise.

Road network improvements

Start stop vehicle movements, particularly at junctions, traffic lights and roundabouts significantly increase pollution emissions along busy road sections. An accelerating vehicle produces several factors more emissions per unit of distance than one that is driving at a steady speed. A great deal of improvements to localised pollution levels can be achieved by taking opportunities to improve traffic flow through the introduction of smart traffic management, junction improvements and strategic re-routing.

Buckinghamshire County Council, in partnership with Wycombe District Council, has been working on improvements to the road networks along arterial routes through High Wycombe with a view to improving journey time reliability and to reduce stop-start vehicle movements. Improvements have already been implemented to the West of the town centre and work has moved on to concentrate on improvements to the Queen Victoria Road/ Easton Street area and the A40 London Road. Air Quality concerns have been influential when decisions on many sections of the scheme have been taken. Wycombe District Council will continue to contribute to these plans, and any other major road developments, with advice as to how to improve air quality.

Action 22

Buckinghamshire County Council plans to improve journey time reliability and reduce stop-start movements along the A40 London Road and in the Queen Victoria Road/ Easton Street area by introducing smart traffic management, junction improvements and strategic re-routing. Wycombe District Council will continue to contribute to the plans with, among other concerns, advice as to how to improve air quality.

Lane closures for roadworks increase start-stop vehicle movements and engine idling when vehicles stop at traffic lights. This has a significant effect on the level of pollutants in the locality of the roadworks. Where prolonged lane closures occur on busy roads, there is the potential for areas that would be marginally below national objectives for Nitrogen Dioxide (NO₂) to breach those objectives.

It is the duty of councils to manage the impact that these lane closures have, through the increase of pollution emissions, on the health of the public. Contractors and local residents who are responsible for the lane closures should be encouraged to complete their works in as quick a time as reasonable possible and safely. This should be done through better planning prior to commencement that will reduce the time intervals between the various stages of work. It is therefore important that no lane closures resulting from unstaffed roadworks will be permitted within the High Wycombe and Marlow Air Quality Management Areas during peak traffic hours (0700-1900hrs). This applies for both commercial and domestic lane closure applications.

Action 23

No lane closures resulting from unstaffed roadworks will be permitted within the High Wycombe and Marlow Air Quality Management Areas during peak traffic hours (0700-1900hrs). Any works during the pre-stated core hours must either have workers on site or manually operated stop/ go signs.

Domestic waste collections

Domestic waste collections have the potential to cause traffic congestion when they are collecting from properties along busy road routes. As it is essential that waste collections from these properties occur on a regular basis, it is important that these collections occur, as far as reasonably practicable, at a time when the impact on congestion is minimal. The greatest potential impact on congestion would be during peak traffic hours when people are commuting to work or are on the school run. It is therefore proposed that as far as reasonably practicable, domestic waste collections will not take place in areas covered by Air Quality Management Areas during peak traffic hours (7am to 9am and 4pm to 6pm).

Action 24

As far as reasonably practicable, domestic waste collections will not take place in areas covered by Air Quality Management Areas during peak traffic hours (7am to 9am and 4pm to 6pm).

Generators

Diesel and petrol generators have a very localised effect on pollution levels. Much as emissions from idling vehicle engines do not disperse rapidly, emissions from generators have an effect for a much longer period as they are usually used in-situ for prolonged periods. Though there are many emergency situations where the use of generators are essential, there are a lot of activities that use generators for non-emergency purposes. Often these non-emergency activities have alternative power sources available which can be utilised. The use of diesel and petrol generators for non-emergency purposes will be restricted within any street, and any property situated in that street, that form part of an Air Quality Management Area or are within High Wycombe Town Centre. A compliance date of 1st May 2019 shall apply to allow time for market traders or planned town centre events to prepare for this change.

Action 25

Diesel and petrol generators shall only be permitted on streets, including on property situated on those streets, that form part of an Air Quality Management Area or are within High Wycombe Town Centre (namely High Street, Castle Street, Frogmoor, St Paul's Row, St Mary's Street, Church Street, Oxford Street, Bull Lane, White Hart Street, Corporation Street and the Eden Shopping Centre) for emergency purposes. Where an emergency occurs, the use of such generators shall only occur until an alternative power source can be accessed. Compliance must be achieved by 1st May 2019.

How we will monitor progress and success of the Air Quality Action Plan

Every year we are obliged to submit an Annual Status report to DEFRA in June. This report details the air quality monitoring results from the previous calendar year. The monitoring results will give an indication of whether air quality within the district and, more specifically, within the Air Quality Management Areas is improving. This will also give an opportunity for a report to be produced each year describing the progress that has occurred with regards to all the aforementioned air quality actions. The action plan will be reviewed on a three yearly basis to ensure it remains relevant, maintaining pace with current science, legislation and public opinion.

Appendix 1

Action Plan Summary Table

Category	Action	Responsibility	Contributors	Potential impact
Public Transport	Working with the County Council and the bus and rail operating companies, we will endeavour to develop new ways of making public transport a more attractive proposition to the public. This may involve using technology to make the experience more user friendly when researching routes, paying for the journey and finding up-to-date journey information. WDC can contribute to these initiatives as part of our regular review of the distribution of Community Infrastructure Levy (CIL) funds, or secure improvements to public transport where justified ³ through proposals in the new Local Plan and existing policies.	Buckinghamshire County Council	Wycombe District Council (Control of Pollution)	Medium
	Wycombe District Council, in conjunction with Buckinghamshire County Council and bus companies, will continue to bid for government funding to retrofit older buses with less polluting engines.	Wycombe District Council (Control of Pollution)	Buckinghamshire County Council, Bus companies	Medium
	Wycombe District Council and Buckinghamshire County Council will raise awareness of Park & Ride facilities at	Wycombe District Council,	Carousel buses	Low

³ In accordance with CIL regulation 122: (a) necessary to make the development acceptable in planning terms; (b) directly related to the development; and (c) fairly and reasonably related in scale and kind to the development.

	Handy Cross in order to increase public usage.	Buckinghamshire County Council		
National legislation	We will continue to lobby government to provide meaningful legislation, standards and guidance that will assist with bringing down Nitrogen Dioxide and Particulate Matter levels.	Wycombe District Council (Control of Pollution)	Buckinghamshire County Council, Buckinghamshire Air Quality Management Group	High
Public awareness	WDC will draw up a programme of regular public engagement to educate them about the current situation regarding air quality in the district, the reasons for the air pollution, how it affects their health and how they can contribute to reducing emission levels.	Wycombe District Council (Control of Pollution)	Buckinghamshire County Council, Buckinghamshire Air Quality Management Group	Low
	Wycombe District Council will run a public awareness campaign on every Clean Air Day to highlight the issues regarding air quality and how people can reduce their emissions.	Wycombe District Council (Control of Pollution)		Low
	WDC will work with the Highway Authority to identify and agree Information displays at strategic positions as drivers are entering the Air Quality Management Areas to inform them that they are entering such.	Wycombe District Council (Control of Pollution), Buckinghamshire County Council		Low

	Wycombe District Council will implement our powers under Regulation 98 of the Road Vehicles (Construction and Use) Regulations 1986 to instruct motorists to switch off their engines while their vehicles are parked and to issue Fixed Penalty Notices to those who refuse to co-operate. Our action will apply to private, public transport and commercial vehicles.	Wycombe District Council (Control of Pollution)		Low
	Bucks car share will be promoted by both Wycombe District Council and Buckinghamshire County Council with the aim of reducing the amount of car journeys taken through the Air Quality Management Areas.	Wycombe District Council, Buckinghamshire County Council		Low
Working with schools	Wycombe District Council and Buckinghamshire County Council will actively promote the adoption of School Travel Plans and 'park and stride' initiatives in schools, where parents are encouraged to park some distance from the school gates and allow their children to walk the final part of their journey, to complement the aims of Buckinghamshire County Council's Local Transport Plan 4 and reduce congestion around schools.	Wycombe District Council (Control of Pollution), Buckinghamshire County Council		Medium
Business engagement	Businesses will be engaged on a regular basis to encourage ways they can contribute to reducing emission levels. We will encourage more working from home, greener vehicle procurement, electric vehicle charging point roll out within their car parks, amongst other	Wycombe District Council (Control of Pollution)	Buckinghamshire County Council	Medium

	initiatives.			
Freight strategy	A freight strategy that develops policies which will ensure that freight can continue to service the needs of local residents and businesses, whilst at the same managing the effect on the local environment, will be adopted in 2018 by Buckinghamshire County council and cover a period until 2036.	Buckinghamshire County Council		Medium
Local planning	Air pollution issues will be a material consideration to be taken into account when planning applications within, or close to the AQMAs are being determined. Where necessary and proportionate, measures to mitigate the impact on human health will be required.	Wycombe District Council (Planning)	Wycombe District Council (Control of Pollution)	High
	Where electric vehicle charging points are provided as part of a planning application, it will be taken into account as a positive benefit of the development in weighing and balancing the decision.	Wycombe District Council (Planning)	Wycombe District Council (Control of Pollution)	High
	Policy DM2 of WDC's Development Plan requires all developments that require the submission of a Transport Assessment should contribute to a number of sustainable travel measures, including putting in place a Travel Plan in line with BCC guidance on Travel Plans ⁴ . This includes	Wycombe District Council (Planning)	Wycombe District Council (Control of Pollution), Buckinghamshir	Medium

⁴ <https://www.buckscc.gov.uk/media/4510664/developer-travel-plan-guidelines-01.pdf>

	workplace and residential developments. A travel plan should encourage positive physical and behavioural attitudes towards sustainable transport; and reduce reliance surrounding single-occupancy car travel. A successful travel plan should aim to achieve its objectives via a package of actions designed to promote safe, healthy and sustainable travel options. A Travel Plan lasts for at least 5 years. Over that time, the development has a main target of reducing single occupancy car use by 10%.		e County Council	
	When considering applications which include new biomass boilers within 100 metres of the edge of an AQMA, or within the AQMA itself, the Council will take account of the potential pollution impact within the AQMA but also the potential benefits of the use of alternative fuels.	Wycombe District Council (Planning)	Wycombe District Council (Control of Pollution)	Medium
	Wycombe District Council's Control of Pollution team and Planning department will work closely to investigate opportunities to increase and improve air quality related planning guidance with the aim of contributing toward achieving national air quality objectives within the district.	Wycombe District Council (Planning), Wycombe District Council (Control of Pollution)		High
Electric vehicle charging infrastructure	We will investigate suitable sites for potential roll out of electric vehicle charging points in both on-street and off-street parking spaces and, where deemed beneficial, increase the provision of such electric vehicle charging	Wycombe District Council (Control of Pollution), Wycombe District	Buckinghamshire County Council	High

e	points.	Council (Parking services)		
Local government vehicle procurement	<p>When procuring council vehicles, the following types of vehicles must be considered in descending order;</p> <ul style="list-style-type: none"> • Electric vehicles • Electric hybrids • Alternative fuels (LPG etc.) • Low emission petrol/diesel engines (of the most recent Euro emission standard) <p>The council must justify why those fuels lower in the priority list have been selected. The decision making process shall be documented for public critique.</p>	Wycombe District Council (all departments), Buckinghamshire County Council		Low
	<p>When negotiating contracts with third parties that will result in contractor vehicles being provided, Wycombe District Council will demand that the contractor uses the following types of in descending order priority;</p> <ul style="list-style-type: none"> • Electric vehicles • Electric hybrids • Alternative fuels (LPG etc.) • Low emission petrol/diesel engines (of the most recent Euro emission standard) 	Wycombe District Council (all departments), Buckinghamshire County Council		Medium

	The council must justify why those fuels lower in the priority list have been selected. The decision making process shall be documented for public critique.			
Cycling infrastructure	Working with the County Council, efforts will be made to investigate potential opportunities for increasing and joining up the existing cycling networks within Wycombe District. WDC can contribute to these initiatives as part of our regular review of the distribution of Community Infrastructure Levy (CIL) funds, or secure improvements to cycling networks where justified through proposals in the new Local Plan and existing policies, and can develop bids to grant-funding opportunities as they arise.	Wycombe District Council, Buckinghamshire County Council		Medium
Road network improvements	Buckinghamshire County Council plans to improve journey time reliability and reduce stop-start movements along the A40 London Road and in the Queen Victoria Road/ Easton Street area by introducing smart traffic management, junction improvements and strategic re-routing. Wycombe District Council will continue to contribute to the plans with, amongst other concerns, advice as to how to improve air quality.	Buckinghamshire County Council	Wycombe District Council (Control of Pollution)	High - localised
	No lane closures resulting from unstaffed roadworks will be permitted within the High Wycombe and Marlow Air Quality Management Areas during peak traffic hours (0700-1900hrs). Any works during the pre-stated core hours must either have workers on site or manually	Buckinghamshire County Council		Medium

	operated stop/ go signs.			
Domestic waste collections	As far as reasonably practicable, domestic waste collections will not take place in areas covered by Air Quality Management Areas during peak traffic hours (0700-0900hrs and 1600-1800hrs).	Wycombe District Council (Waste & cleansing)		Low
Generators	Diesel and petrol generators shall only be permitted on streets, including on property situated on those streets, that form part of an Air Quality Management Area or are within High Wycombe Town Centre (namely High Street, Castle Street, Frogmore, St Paul's Row, St Mary's Street, Church Street, Oxford Street, Bull Lane, White Hart Street, Corporation Street and the Eden Shopping Centre) for emergency purposes. Where an emergency occurs, the use of such generators shall only occur until an alternative power source can be accessed.	Wycombe District Council	Marlow Town Council, High Wycombe Bid Co.	Low