



Cherwell District Council Air Quality Action Plan

In fulfilment of Part IV of the
Environment Act 1995
Local Air Quality Management

March 2017

Cherwell District Council

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Executive Summary

This Air Quality Action Plan (AQAP) has been produced as part of our statutory duties required by the Local Air Quality Management framework. It outlines the action we will take to improve air quality in Cherwell between 2017 and 2020.

Air pollution is associated with a number of adverse health impacts. It is recognised as a contributing factor in the onset of heart disease and cancer. Additionally, air pollution particularly affects the most vulnerable in society; children and older people, and those with heart and lung conditions. There is also often a strong correlation with equalities issues, because areas with poor air quality are also often the less affluent areas^{1,2}.

The annual health cost to society of the impacts of particulate matter alone in the UK is estimated to be around £16 billion³. Cherwell District Council is committed to reducing the exposure of people in Cherwell to poor air quality in order to improve health.

We have developed actions that can be considered under five broad topics:

- Policy guidance and development control
- Promoting low emission transport
- Promoting travel alternatives to private vehicle use
- Transport planning and infrastructure
- Public information

Our priorities are:

- Priority 1 – Strengthening local policy to improve air quality and its role in protecting health;
- Priority 2 – Reducing NO_x emissions from cars in all AQMAs;
- Priority 3 – Ensuring new developments encourage and facilitate low emission and alternative transport;
- Priority 4 – Ensuring transport infrastructure delivery takes account of air quality improvement potential within AQMAs;
- Priority 5 – Raising awareness of poor air quality and encouraging improvement actions by vehicle users and fleet managers.

¹ Environmental equity, air quality, socioeconomic status and respiratory health, 2010

² Air quality and social deprivation in the UK: an environmental inequalities analysis, 2006

³ Defra. Abatement cost guidance for valuing changes in air quality, May 2013

In this AQAP we outline how we plan to effectively tackle air quality issues. It is recognised that Public Health and Highways Authority matters are beyond Cherwells direct control and partnership working to deliver the measures outlined is essential.

We recognise that there are a large number of air quality policy areas that are further outside of our influence (such as vehicle emissions standards agreed in Europe), but for which we may have useful evidence, and so we will continue to work with regional and central government on related policies and issues.

Responsibilities and Commitment

This AQAP was prepared by the Public Protection Service of Cherwell District Council with the support and agreement of the following departments:

Cherwell District Council:

- Public Protection
- Environmental Protection Team
- Bicester Delivery Team
- Procurement Team
- Planning Policy Team
- Corporate Performance Team
- Communications Team

Oxfordshire County Council:

- Oxford, Cherwell and West Locality Team

The draft AQAP (August 2016) was approved to go to public consultation by the Councils Executive at their meeting on 3 September 2016.

An online survey was launched and ran from 12 October 2016 to 8 January 2017. The survey format and text is shown in Appendix C. Consultees were invited to participate via links in press releases, the council website, emails, letters and social media. The responses to this online survey are presented in Appendix D.

This AQAP will be subject to an annual review and appraisal of progress each year will be reported in the Annual Status Reports (ASRs) produced by Cherwell District,

Cherwell District Council

as part of our statutory Local Air Quality Management duties, and to the Councils Executive.

If you have any comments on this AQAP please write to us using the following details and quoting AQAP in the title / header:

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1 Introduction

This report outlines the actions that Cherwell District Council will deliver in order to reduce concentrations of air pollutants and exposure to air pollution; thereby positively impacting on the health and quality of life of residents and visitors to the Cherwell area.

It has been developed in recognition of the legal requirement on the local authority to work towards Air Quality Strategy (AQS) objectives under Part IV of the Environment Act 1995 and relevant regulations made under that part and to meet the requirements of the Local Air Quality Management (LAQM) statutory process.

This Plan will be reviewed every five years at the latest and progress on measures set out within this Plan will be reported on annually within Cherwell District's air quality ASR.

2 Summary of Current Air Quality in Cherwell District

Cherwell District Council has identified four areas where air quality does not meet national air quality objectives for nitrogen dioxide. The locations of these four Air Quality Management Areas (AQMAs) can be found on our website at www.cherwell.gov.uk/airqualitymanagement. There are two in Banbury, one in Bicester and one in Kidlington. These concentrations are largely related to road traffic emissions. AQMA No.1 in Hennef Way exceeds the annual and hourly mean objectives for nitrogen dioxide.

AQMA No.2 between Oxford Road to Southam Road, Banbury, including a section of High Street exceeds the annual mean objective for nitrogen dioxide.

AQMA No.3 on a section of Bicester Road, Kidlington to the north of the Water Eaton Lane controlled junction exceeds the annual mean objective for nitrogen dioxide.

AQMA No.4 between the mini roundabout in Kings End through Queens Avenue to the Field Street mini roundabout, including St Johns, exceeds the annual mean objective for nitrogen dioxide.

The latest monitoring indicates nitrogen dioxide concentrations are trending downwards in most places. This includes within the AQMAs, although concentrations in the AQMAs remain above the national air quality objective levels for nitrogen dioxide. Further information can be found in the latest Annual Status Report which can be downloaded at the website above. Monitoring locations and the latest monitoring data can also be found using the interactive map on <https://oxfordshire.air-quality.info/>.

3 Cherwell District's Air Quality Priorities

3.1 Public Health Context

Four AQMAs have been identified with people exposed to sufficiently poor air quality to require legal intervention under Environment Act 1995, which this action plan contributes to. Table 3.1 shows the number of residential properties within the AQMAs.

Table 3.1 – Residential properties within AQMAs

AQMA	Description	Nitrogen Dioxide Concentration ($\mu\text{g}/\text{m}^3$) ^a	Approximate No. residential properties within AQMA
AQMA No.1	Hennef Way, Banbury	59.8	3
AQMA No.2	Banbury	40.9	86
AQMA No.3	Kidlington	41.1	5
AQMA No.4	Bicester	46.0	111

Notes:

^a 2015 Concentration at relevant exposure reported in ASR 2016

These AQMAs are localised areas representing the worst affected places. The main source of pollutants in these AQMAs is traffic emissions. Traffic emissions are not localised i.e. journeys originating and terminating within the AQMA so measures to address emissions district-wide are collated as general measures.

It is anticipated that most general measures to reduce emissions will also contribute to reducing PM_{2.5} emissions from vehicles.

Where local measures to reduce pollutant concentrations are identified, these measures have been related to that specific AQMA.

Oxfordshire County Councils Joint Strategic Needs Assessment (JSNA) provides information about Oxfordshire's population and the factors affecting health, wellbeing, and social care needs and can be found at <http://insight.oxfordshire.gov.uk/cms/joint-strategic-needs-assessment>

Air quality is included in Section 4.2.8 of the 2016 JSNA under the “Wider Determinants; Environment” section and recognises:

- Poor air quality is known to have negative impacts on health.
- In the more densely populated areas of the county, and those which experience high traffic flows, increased levels of air pollution are of concern. In these areas, road traffic is the most significant source of pollutant emissions.
- There are currently 13 AQMAs in Oxfordshire, where the annual mean objective for nitrogen dioxide is being exceeded (four in Cherwell, one covering the whole of Oxford, three in South Oxfordshire, three in Vale of White Horse and two in West Oxfordshire).
- Trends in air quality across some of Oxfordshire’s long-standing AQMAs show signs of improvement, with reductions in concentrations of nitrogen dioxide over recent years. However, new AQMAs are still being identified.
- Air Quality and Mortality Estimates in 2010 the UK Committee on the Medical Effects of Air Pollutants estimated that removing all man-made, particulate matter air pollution could save the UK population approximately 36.5 million life years over the next 100 years, and would be associated with an increase in UK life expectancy from birth, of six months on average.
- The calculated attributable proportion of deaths associated with air pollution, among those aged 25 and over in Oxfordshire, was 5.6% in 2010. However, given the uncertainties this could, in fact, be somewhere between 0.9% and 11%. For 2013 it was estimated that 5.3% of all-cause mortality among people aged 30 and over in Oxfordshire was attributable to particulate air pollution from man-made sources. This value has fluctuated between 5.1% and 5.6% over the years between 2010 and 2013 but it is not possible to tell whether or not changes are statistically significant.
- The national and regional averages in 2013 were 5.3% (England) and 5.2% (South East). Meanwhile, the proportion of mortality attributable to man-made air pollution in the districts ranged from 5% (in West Oxfordshire) to 5.6% (in Oxford) with the other three districts at 5.3%.

-The quantification of mortality burden associated with long term nitrogen dioxide concentration exposure is not currently available.

3.2 Planning and Policy Context

3.2.1 Cherwell Local Plan Part 1

The Cherwell Local Plan Part 1 was adopted in July 2015. It sets out proposals to support the local economy and the community between 2011 and 2016. This can be downloaded from the Cherwell District Council website or by following this [link](#).

Sustainable development is a key part of this Plan focussing proposed growth in and around Banbury and Bicester and limiting growth in rural areas. The Plan sets out planning policies grouped around three themes; Developing a Sustainable Local Economy, Building Sustainable Communities and Ensuring Sustainable Development. Section C outlines how these themes will be delivered in Bicester, Banbury, Kidlington and villages and rural areas.

The need to consider the effects of development on air quality, and how they can contribute towards improvements, is identified as a key challenge to ensuring sustainable development. Commuters in Cherwell travel relatively long distances to work and reducing travel by car and managing traffic congestion are identified as key challenges. Maximising the opportunity to shift from dependency on cars to sustainable modes of transport is also identified.

Relevant objectives and policies which may contribute to improvements in air quality within the AQMAs are referred to below. Further detail can be found in the adopted Local Plan.

The strategic objectives (SO) for ensuring sustainable development include minimising carbon emissions, promoting decentralised and renewable or low carbon energy where appropriate (SO11), reducing the dependency on the private car with increasing the attraction of public transport, cycling and travel by foot (SO13).

Policy SLE4 includes new developments to provide financial and/or in-kind contributions to mitigate the transport impacts of development. All development where reasonable to do so, should facilitate the use of sustainable modes of transport to make the fullest possible use of public transport, walking and cycling. Encouragement will be given to solutions which support reductions in greenhouse gas emissions and reduce congestion. Development which is not suitable for the

roads that serve the development and which have a severe traffic impact will not be supported.

Policies ESD 1 – ESD 5 address carbon emission reductions. These include a requirement that all new residential development will be expected to incorporate sustainable design and construction technology to achieve zero carbon development. All new non-residential development will be expected to meet at least BREEAM 'Very Good' (ESD 3). The encouragement of decentralising energy systems in developments e.g. district heating or combined heat and power (ESD 4). Support for renewable and low carbon provision wherever adverse impacts can be addressed satisfactorily is part of ESD 5.

Policy ESD10 includes the requirement for air quality assessments where development proposals would be likely to have a significantly adverse impact on biodiversity by generating an increase in air pollution.

Policy BSC 8 acknowledges the local environment has a fundamental impact on the health and well-being of local people. By providing facilities such as local open space this allows for activities such as walking and cycling, promoting healthy lifestyles.

Policy ESD 17 refers to providing opportunities for walking and cycling by maximising the opportunity to maintain and extend green infrastructure links and connecting the towns to the urban fringe and the wider countryside beyond.

Section C of The Cherwell Local Plan Part 1 contains the policies for Cherwells Places and includes detailed site-specific policies for large strategic developments. This includes a new zero-carbon mixed use development including 6000 homes at North West Bicester (Bicester 1: North West Bicester Eco-town).

The Infrastructure Delivery Plan (IDP) is appended to the Local Plan Part 1 and details projects to facilitate the proposed development growth. Some of these will contribute to improvements in air quality within the AQMAs. The IDP is reviewed on an annual basis.

3.2.2 Cherwell Local Plan Part 2

Cherwell District Council is currently preparing Cherwell Local Plan 2011-2031 (Part 2) which will contain non-strategic site allocations and development management policies.

An Issues Consultation Paper was published in January 2016. Related documents can be on the Cherwell District Council website or following this [link](#).

3.3 Source Apportionment

The AQAP measures presented in this report are intended to be targeted towards the predominant sources of emissions within Cherwell District’s area.

Source apportionment exercises have been undertaken. These are presented in the following reports which can be found on www.cherwell.gov.uk/airqualitymanagement:

- Further Assessment - Hennef Way (2013)
- Banbury Source Apportionment (2015)
- Kidlington Source Apportionment (2015)
- Detailed Assessment – Bicester (2015)

The source apportionment aspects of these reports have been revised using the most recent emission factors (including petrol / diesel vehicle apportionment), background concentrations and monitoring results. The traffic survey data used is the same.

A summary of sources is shown in Table 3.2 below. The data used to inform these calculations is shown in Appendix B:

Table 3.2 Summarised NO₂ concentrations in AQMAs apportioned by source

AQMA	NO ₂ Concentration	% NO ₂ by Source				
		Background	Cars	LGVs	HGVs	Buses
1 (Hennef Way)	59.8 µg/m ³	32%	39%	17%	10%	2%
2 (Banbury)	40.9 µg/m ³	32%	39%	13%	10%	6%
3 (Kidlington)	41.1 µg/m ³	35%	41%	9%	6%	9%

4 (Bicester)	46.0 $\mu\text{g}/\text{m}^3$	27%	50%	8%	2%	13%
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3.3.1 AQMA No.1 Hennef Way, Banbury - Source Apportionment

The source apportionment works reported in the 2013 Further Assessment for Hennef Way, Banbury were based on an exceedence of the annual mean objective not being predicted by the modelling undertaken. Uncertainties were identified in the monitoring i.e. significantly above the objective at the property boundary but significantly below at the property façade facing away from the roadside, which translated into the modelling. Subsequent monitoring at relevant exposure is reported in the Updating and Screening Assessment 2015 and Annual Status Report 2016. Monitoring at both facades, at different heights on the roadside façade and at the property boundary fence have been reported and show exceedences at the roadside façade. The worst of these exceedences has been used for the source apportionment in this AQMA.

The worst case NO_2 of $59.8 \mu\text{g}/\text{m}^3$ is apportioned to:

- $6.3 \mu\text{g}/\text{m}^3 \text{NO}_2$ (10.5%) Regional Background
- $12.9 \mu\text{g}/\text{m}^3 \text{NO}_2$ (21.6%) Local Background
- $23 \mu\text{g}/\text{m}^3 \text{NO}_2$ (38.5%) Cars of which,
 - $19.8 \mu\text{g}/\text{m}^3 \text{NO}_2$ (33.1%) Diesel Cars
- $10.2 \mu\text{g}/\text{m}^3 \text{NO}_2$ (17.1%) Light Goods Vehicles
- $6.1 \mu\text{g}/\text{m}^3 \text{NO}_2$ (10.2%) Heavy Goods Vehicles
- $1 \mu\text{g}/\text{m}^3 \text{NO}_2$ (1.7%) Buses

Cars are the main contributor (38%) to this NO_2 concentration. Diesel car emissions are attributed to the majority of these car related emissions with 33% of the total, $19.8 \mu\text{g}/\text{m}^3$. This diesel car fraction is larger than the total background NO_2 concentrations of $19.2 \mu\text{g}/\text{m}^3$.

Light goods vehicles, of which the majority are diesel, make up the next highest proportion (17.1%) of this concentration, with HGVs accounting for 10% and buses a much smaller fraction (1.7%).

3.3.2 AQMA No.2 Banbury - Source Apportionment

The worst case NO₂ of 40.9 µg/m³ is apportioned to:

- 8.9 µg/m³ NO₂ (21.8%) Regional Background
- 8.7 µg/m³ NO₂ (21.3%) Local Background
- 19.2 µg/m³ NO₂ (46.9%) Cars of which,
 - 16.4 µg/m³ NO₂ (40.1%) Diesel Cars
- 6.3 µg/m³ NO₂ (15.4%) Light Goods Vehicles
- 5 µg/m³ NO₂ (12.2%) Heavy Goods Vehicles
- 2.8 µg/m³ NO₂ (6.8%) Buses

Cars are the main contributor (46.9%) to this NO₂ concentration. Diesel car emissions are attributed to the majority of these car related emissions with 40.1% of the total, 16.4 µg/m³. The total background concentration of NO₂ (17.6 µg/m³) is attributed to 43.1% of the total.

Light goods vehicles, of which the majority are diesel, make up the next highest proportion (15.4%) of this concentration, with HGVs accounting for 12.2% and buses a smaller fraction (6.8%).

3.3.3 AQMA No.3 Bicester Road, Kidlington - Source Apportionment

The worst case NO₂ of 41.1 µg/m³ is apportioned to:

- 6.4 µg/m³ NO₂ (15.6%) Regional Background
- 7.8 µg/m³ NO₂ (19.0%) Local Background
- 16.8 µg/m³ NO₂ (40.9%) Cars of which,
 - 14.3 µg/m³ NO₂ (34.8%) Diesel Cars
- 3.5 µg/m³ NO₂ (8.5%) Light Goods Vehicles
- 2.6 µg/m³ NO₂ (6.3%) Heavy Goods Vehicles

- 3.9 µg/m³ NO₂ (9.5%) Buses

Cars are the main contributor (40.9%) to this NO₂ concentration. Diesel car emissions are attributed to the majority of these car related emissions with 34.8% of the total, 14.3 µg/m³. The total background concentration of NO₂, 14.2 µg/m³, is attributed to 34.8% of the total.

Buses make up the next highest proportion (9.5%) with 3.9 µg/m³. Light goods vehicles make up the next highest proportion (8.5%) of this concentration, with HGVs accounting for a lower fraction of 6.3%.

3.3.4 AQMA No.4 Bicester - Source Apportionment

The worst case NO₂ of 46.0 µg/m³ is apportioned to:

- 6.6 µg/m³ NO₂ (14.3%) Regional Background
- 5.9 µg/m³ NO₂ (12.8%) Local Background
- 22.8 µg/m³ NO₂ (49.6%) Cars of which,
 - 19.5 µg/m³ NO₂ (42.4%) Diesel Cars
- 3.6 µg/m³ NO₂ (7.8%) Light Goods Vehicles
- 0.8 µg/m³ NO₂ (1.7%) Heavy Goods Vehicles
- 6.2 µg/m³ NO₂ (13.5%) Buses

Cars are the main contributor (46.9%) to this NO₂ concentration. Diesel car emissions are attributed to the majority of these car related emissions with 42.4% of the total, 19.5 µg/m³. The total background concentration of NO₂ (12.5 µg/m³) is attributed to 27.1% of the total.

Buses, 6.2 µg/m³, make up the next highest proportion (13.5%) of this concentration with light goods vehicles accounting for 7.8 % and HGVs a much smaller fraction (1.7%).

3.4 Required Reduction in Emissions

The required reduction in emissions has been calculated in line with Defra's statutory Technical Guidance document (LAQM.TG16) to determine the road NO_x reduction

required to meet the annual mean air quality objective of $40 \mu\text{g}/\text{m}^3$ NO_2 . It is anticipated that this reduction will also achieve the hourly mean objective. Total oxides of nitrogen (NO_x) are used for the required reduction in vehicle emissions. This is routinely used for vehicle emissions standards instead of NO_2 . Vehicles emit nitrogen dioxide (NO_2) and nitrogen oxide (NO) which make up the total NO_x . The NO reacts with ozone in sunlight to create NO_2 . The relationship between NO_x emitted and ambient NO_2 is not linear so emission reductions are presented in NO_x .

3.4.1 AQMA No.1 Hennef Way, Banbury – Required Reduction

To reduce the total NO_2 concentration by $19.8 \mu\text{g}/\text{m}^3$ at the worst case monitoring location in this AQMA, a road NO_x reduction of $61.6 \mu\text{g}/\text{m}^3$ (52%) is required.

3.4.2 AQMA No.2 Banbury – Required Reduction

To reduce the total NO_2 concentration by $0.9 \mu\text{g}/\text{m}^3$ at the worst case monitoring location in this AQMA, a road NO_x reduction of $11.1 \mu\text{g}/\text{m}^3$ (16%) is required.

3.4.3 AQMA No.3 Bicester Road, Kidlington – Required Reduction

To reduce the total NO_2 concentration by $1.1 \mu\text{g}/\text{m}^3$ at the worst case monitoring location in this AQMA, a road NO_x reduction of $11.2 \mu\text{g}/\text{m}^3$ (17%) is required.

3.4.4 AQMA No.4 Bicester – Required Reduction

To reduce the total NO_2 concentration by $6 \mu\text{g}/\text{m}^3$ at the worst case monitoring location in this AQMA, a road NO_x reduction of $25.6 \mu\text{g}/\text{m}^3$ (30%) is required.

3.5 Key Priorities

The key priorities for action are:

- Priority 1 – Strengthening local policy to improve air quality and its role in protecting health;
- Priority 2 – Reducing NO_x emissions from cars in all AQMAs;
- Priority 3 – Ensuring new developments encourage and facilitate low emission and alternative transport;
- Priority 4 – Ensuring transport infrastructure delivery takes account of air quality improvement potential within AQMAs;

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- Priority 5 – Raising awareness of poor air quality and encouraging improvement actions by vehicle users and fleet managers.

4 Development and Implementation of Cherwell District AQAP

4.1 Consultation and Stakeholder Engagement

In developing this AQAP, we have worked with other local authorities and agencies to improve local air quality. Schedule 11 of the Environment Act 1995 requires local authorities to consult the bodies listed in Table 4.1. A public online survey portal was used to facilitate the consultation. A copy of this survey is presented in Appendix C.

The following stakeholder engagement was undertaken to direct people towards this consultation survey:

- Online consultation link
- Local press release
- Social media press release
- Letter drops to properties within and close to AQMAs
- Steering group meetings

The response to our consultation / stakeholder engagement is shown in Appendix D.

Table 4.1 – Consultees from Schedule 11 of EA 1995

Consultee
Secretary of State
Environment Agency
Highways authority
Neighbouring local authorities
Other public authorities as appropriate, such as Public Health officials
Bodies representing local business interests and other organisations as appropriate

4.2 Steering Group

An officer level steering group was set up to consider the actions in Tables 5.1 to 5.5 with representatives from:

Cherwell District Council Planning Policy

Cherwell District Council Environmental Protection

Cherwell District Council Bicester Delivery Team

Cherwell District Council Communications

Oxfordshire County Council Localities, Policies and Programmes Teams

Two steering group meetings were run in 2016 to further develop the measures proposed.

Several steering group meetings were run in 2013 to develop action measures for AQMA No.1 – Hennef Way. These actions were not taken further due to the uncertainties raised over an exceedance occurring at a relevant receptor (identified in the 2013 Further Assessment report) and Defra requiring further monitoring to address this uncertainty. These measures are included in tables 5.1 – 5.5.

5 AQAP Measures

Table 5.1 to 5.5 show the Cherwell District AQAP measures. It contains:

- a list of the actions that form part of the plan
- the responsible individual and departments/organisations who will deliver this action
- expected benefit in terms of pollutant emission and/or concentration reduction
- the timescale for implementation

Updates on the implementation of these measures will be reported on in future Annual Status Reports which will be available to download at www.cherwell.gov.uk/airqualitymanagement.

Measures included in the consultation where there has been no funding and / or commitment to undertake these measures are included in Table 6.1. These will be retained as measures which could improve air quality but are not being progressed until funding and commitment can be secured to undertake these.

Measures that will not be pursued and the reasons why are shown in Table A.1 in Appendix A.

Table 5.1 – Air Quality Action Plan General Measures

Measure No.	Measure	EU Category	EU Classification	Lead Authority	Planning Phase	Implementation Phase	Target Pollution Reduction in the AQMA	Cost	Comments
G.1	Explore the Local Plan including Low Emission Vehicle uptake measures being incorporated into new developments	Policy Guidance and Development Control	Air Quality Planning and Policy Guidance	CDC	2016/17	2017/18	Medium	Low	Local Plan Part 2 will consider measures to encourage low emission vehicle take-up through development management policy.
G.2	All major developments to include Emission statements and mitigation strategies within an appropriate air quality assessment submitted at the application stage.	Policy Guidance and Development Control	Air Quality Planning and Policy Guidance	CDC	2016/17	2017/18	Medium	Low	Emission statements and mitigation strategies will be required in air quality assessments. This will be included in development management policies as part of Local Plan Part 2 development.
G.3	Damage cost calculations to be included in air quality assessments to show the financial impact of developments.	Policy Guidance and Development Control	Air Quality Planning and Policy Guidance	CDC	2016/17	2017/18	Low	Low	Damage Cost calculations will be required in air quality assessments. This will be included in development management policies as part of Local Plan Part 2 development.

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Measure No.	Measure	EU Category	EU Classification	Lead Authority	Planning Phase	Implementation Phase	Target Pollution Reduction in the AQMA	Cost	Comments
G.4	Travel plans submitted with development proposals will make reference to their contribution to an air quality mitigation strategy. Progress will be reported to OCC post development completion.	Policy Guidance and Development Control	Air Quality Planning and Policy Guidance	OCC	n/a	In place	Low	Low	Travel plans are coordinated and progress checked by OCC. Measures to address air quality specifically can be adopted through the development control process in partnership with CDC. These should be included in the Local Air Quality Management Annual Status Report.
G.5	Air Quality actions to be included in the Local Transport Plan	Policy Guidance and Development Control	Air Quality Planning and Policy Guidance	OCC	2015	2016	Medium	Low	LTP4 (2016 update) includes an annex on actions to address air quality. On-going measure development and updates to LTP4 should represent changes in air quality. Maintain close links between OCC and CDC.
G.6	Air Quality included in the Public health framework Joint Strategic Needs Assessment	Policy Guidance and Development Control	Air Quality Planning and Policy Guidance	OCC	2015	2015	Low	Low	JSNA includes a statement on air quality. To maintain, update and progress actions as part of the annual review process.

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Measure No.	Measure	EU Category	EU Classification	Lead Authority	Planning Phase	Implementation Phase	Target Pollution Reduction in the AQMA	Cost	Comments
G.7	Low emission vehicles to be included in taxi licensing policy to encourage their take up and use within the district.	Policy Guidance and Development Control	Other Policy	CDC	2017/18	2018	Low	Low	At the next Taxi licensing policy review measures to encourage low emission vehicles will be included.
G.8	Low emission plant, vehicle, delivery and fleet requirements to be included in sustainable procurement section of CDC procurement policy.	Policy Guidance and Development Control	Sustainable procurement guidance	CDC	2017	2018	Medium	Low	To include "Consideration will be given to minimise oxides of nitrogen and particulate emissions whenever plant & vehicles are purchased, deliveries made or contracts procured" in the CDC procurement policy.
G.9	Low emission plant, vehicle, delivery and fleet requirements to be included in OCC procurement policy.	Policy Guidance and Development Control	Sustainable procurement guidance	OCC	2017	2018	Medium	Low	

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Measure No.	Measure	EU Category	EU Classification	Lead Authority	Planning Phase	Implementation Phase	Target Pollution Reduction in the AQMA	Cost	Comments
G.10	Air pollution and action measures awareness raising campaign	Public Information	Via other mechanisms	CDC	2017	2017/18	Low	Low	No funding has been identified for a project. Scope of this campaign to be determined. Minimum will be within existing council communication channels promoting existing schemes e.g. lifishare, easeitoxford, oxon-air, council website.

Table 5.2 – AQMA No.1 Hennef Way Air Quality Action Plan

Measure No.	Measure	EU Category	EU Classification	Lead Authority	Planning Phase	Implementation Phase	Target Pollution Reduction in the AQMA	Cost	Comments
1.1	Banbury Park and Ride Bus service around M40 junction	Alternatives to private vehicle use	Bus based Park & Ride	OCC	2017/18	tbc	Medium	Medium	Feasibility to be investigated within next area strategy review within LTP4
1.2	Lift share scheme	Alternatives to private vehicle use	Car & lift sharing schemes	OCC	current	current	Low	Low	oxfordshire.liftshare.com is operational
1.3	Corporate policy encouraging home working where possible and equipment provision.	Promoting Travel Alternatives	Encourage / Facilitate home-working	CDC	current	current	low	Low	CDC transport policy encourages home working and regularly reviews work travel.
1.4	Promote use of canal towpath routes	Promoting Travel Alternatives	Promote use of rail and inland waterways	CDC / Canal and Rivers Trust	2017/18	tbc	Low	Low	
1.5	Promote use of rail to get into Banbury	Promoting Travel Alternatives	Promote use of rail and inland waterways	CDC / Chiltern Rail	2017/18	tbc	Low	Low	

Table 5.3 – AQMA No.2 Banbury Air Quality Action Plan

Measure No.	Measure	EU Category	EU Classification	Lead Authority	Planning Phase	Implementation Phase	Target Pollution Reduction in the AQMA	Cost	Comments
2.1	Banbury Park and Ride Bus service around M40 junction	Alternatives to private vehicle use	Bus based Park & Ride	OCC	2017/18	tbc	Medium	Medium	Feasibility to be investigated within next area strategy review within LTP4
2.2	Banbury wide car club	Alternatives to private vehicle use	Car Clubs	Banbury CAG	2017	tbc	low	Low	Banbury CAG progressing this. Funding shortfall currently identified.
2.3	Corporate policy encouraging home working where possible and equipment provision.	Promoting Travel Alternatives	Encourage / Facilitate home-working	CDC	current	current	low	Low	CDC transport policy encourages home working and regularly reviews work travel.
2.4	Promote use of canal towpath routes	Promoting Travel Alternatives	Promote use of rail and inland waterways	CDC / Canal and Rivers Trust	2017/18	tbc	Low	Low	
2.5	Promote use of rail to get into Banbury	Promoting Travel Alternatives	Promote use of rail and inland waterways	CDC / Chiltern Rail	2017/18	tbc	Low	Low	Promote use of rail to get into Banbury

Table 5.4 – AQMA No.3 Kidlington Air Quality Action Plan

Measure No.	Measure	EU Category	EU Classification	Lead Authority	Planning Phase	Implementation Phase	Target Pollution Reduction in the AQMA	Cost	Comments
3.1	Lift share campaign at Water Eaton Park and ride	Alternative to private vehicle use	Car & lift sharing schemes	OCC	2017	2017	Low	Low	Water Eaton traffic drives through this AQMA. Promote lift share to encourage sharing to the park and ride.
3.2	Promote use of canal towpath routes	Promoting Travel Alternatives	Promote use of rail and inland waterways	CDC / Canal and Rivers Trust	2017/18	tbc	Low	Low	
3.3	Promote use of rail to get into Bicester	Promoting Travel Alternatives	Promote use of rail and inland waterways	CDC / Chiltern Rail	2017/18	tbc	Low	Low	Promote use of rail to get into Bicester
3.4	Investigate traffic light management to reduce north side queuing.	Traffic Management	UTC, Congestion management, traffic reduction	OCC	2017	tbc	Medium	Low	Traffic is currently optimised using MOVA system. Possible use of system to optimise for sensitivity of air quality receptors to be investigated.

Table 5.5 – AQMA No.4 Bicester Air Quality Action Plan

Measure No.	Measure	EU Category	EU Classification	Lead Authority	Planning Phase	Implementation Phase	Target Pollution Reduction in the AQMA	Cost	Comments
4.1	Bicester Park and Ride Bus service	Alternatives to private vehicle use	Bus based Park & Ride	OCC	2015	2016	Medium	Delivered	Potential to include alternative vehicle charging at this site to encourage low emission vehicle transport
4.2	Promote Oxford Parkway station for journeys into Bicester	Alternatives to private vehicle use	Rail based Park & Ride	Chiltern Rail	2016	2016	Low	Low	Oxford Parkway alternative to travel to Bicester. Potential to advertise eastoxford.
4.3	Low emission delivery plans	Freight and Delivery Management	Delivery and Service plans	OCC	2017	tbc	Low	Low	Assess feasibility to introduce low emission delivery vehicle requirements.
4.4	Bicester active travel i.e. walking and cycling campaign	Promoting Travel Alternatives	Intensive active travel campaign & infrastructure	CDC	2016	2017	high	tbc	Healthy new town priority to encourage active travel i.e. walking and cycling
4.5	Wayfinding campaign	Promoting Travel Alternatives	Other	CDC	2016	2017		tbc	Wayfinding campaign to signpost walking and cycling routes around Bicester.

Measure No.	Measure	EU Category	EU Classification	Lead Authority	Planning Phase	Implementation Phase	Target Pollution Reduction in the AQMA	Cost	Comments
4.6	Central corridor works in LTP	Traffic Management	Strategic highway improvements, Re-prioritising road space away from cars, inc Access management, Selective vehicle priority, bus priority, high priority, high vehicle occupancy lane	OCC					
4.7	Develop Satellite Catapult project	Promoting Travel Alternatives	Other	CDC	2017	tbc	Low	Medium	This project is being developed in Bicester, looking at ways to use the satellite catapult to map, communicate and educate on air quality and travel data.
4.8	Develop school project using air quality sensors	Public Information	Via other mechanisms	CDC	2017	tbc	Low	Low	Drayson technology sensors are being considered for use to develop a project working with schools.

Table 6.1 – Measures without commitment and / or funding

Measure	EU Category	EU Classification	Target Pollution Reduction in the AQMA	Comments
Targeted business-led employee lift share schemes for Banbury - Brackley employee journeys and local industrial estates i.e. Wildmere and Overthorpe	Alternatives to private vehicle use	Car & lift sharing schemes	Low	No dedicated OCC Travel Choices Team and no funding for Business travel choices. Work with business travel is done through development control.
Identify school journeys on this route e.g. Banbury - Middleton Cheney to monitor and promote school travel plans	Promoting Travel Alternatives	School Travel Plans	Low	No dedicated OCC Travel Choices Team and no funding for Business travel choices.

Measure	EU Category	EU Classification	Target Pollution Reduction in the AQMA	Comments
Green Wall Barrier between carriageway and receptor	Transport Planning and Infrastructure	Other	Medium	No commitment or source of funding identified
Targeted Banbury - Brackley employee journeys and local industrial estates i.e. Wildmere and Overthorpe workplace travel plan promotion	Promoting Travel Alternatives	Workplace Travel Planning	Low	No dedicated OCC Travel Choices Team and no funding for Business travel choices. Work with business travel is done through development control.
Electric Vehicle Charging in CDC owned car parks	Promoting Low Emission Transport	Procuring alternative Refuelling infrastructure to promote Low Emission Vehicles, EV recharging, Gas fuel recharging	Low	No funding for this was identified.
Priority parking for lift share permit holders in CDC owned car parks	Alternatives to private vehicle use	Car & lift sharing schemes	Low	No funding for this identified. Lift share permit system and assign priority parking for permit holders.
Identify school journeys in Bicester AQMA to monitor and promote school travel plans	Promoting Travel Alternatives	School Travel Plans	Medium	School traffic was highlighted through the consultation as a key issue in this AQMA. No funding was identified for this. There is no dedicated OCC Travel Choices Team and no funding for Business travel choices.
Bicester wide car club	Alternatives to private vehicle use	Car Clubs	Low	There is a car club run by developers on the Elmsbrook development. No funding for a Bicester wide car club was identified.
Create Clean Air Zones which encompass the AQMA's	Promoting Low Emission Transport	Low Emission Zone (LEZ)	Medium	Central Governments Joint Air Quality Unit released Clean air zone framework guidance. LTP4 includes reference to Clean Air Zones. No funding has been identified to progress this measure.

Appendix A: Reasons for Not Pursuing Action Plan Measures

Table A.1 – Action Plan Measures Not Pursued and the Reasons for that Decision

Action category	Action description	Reason action is not being pursued (including Stakeholder views)
Air quality neutral development	Major developments in or within 100 metres of an AQMA will be air quality neutral	Difficult to enforce. No definition of air quality neutral. Arbitrary 100 metre distance may be open to challenge.
Bus based Park and ride	Removal of Water Eaton Park and Ride to reduce travel to this park and ride facility. .	The park and ride facility reduces journeys into neighbouring authorities AQMA.
Rail based Park & Ride	Promotion of rail based park and ride	Banbury and Bicester stations are located in areas which may encourage journeys through AQMAs.
Environmental Permits	Environmental permit based actions	Transport is the main contributor to pollutants in the AQMAs.
Freight Consolidation Centre	Freight Consolidation Centre	Main emission source is cars
Freight Partnerships for city centre deliveries	Freight Partnerships for city centre deliveries	Main emission source is cars
Quiet & out of hours delivery	Quiet & out of hours delivery	Main emission source is cars
Route Management Plans/ Strategic routing strategy for HGV's	Route Management Plans/ Strategic routing strategy for HGV's	Main emission source is cars
Public information via television	TV campaign	Limited impact
Anti-idling enforcement	Anti-idling enforcement campaign	Idling hasn't been identified as a significant issue in any AQMA.
Reduction of speed limits,	Reduction of speed limits	Speeding or faster moving traffic has not been identified as an issue. Hennef Way dual carriageway has a

Cherwell District Council

20mph zones		speed reduction to 50 mph in place currently.
Road User Charging (RUC)/ Congestion charging	Congestion charging in towns	No zone for congestion charging identified.
Testing Vehicle Emissions	Roadside testing of vehicle emissions campaigns	
Workplace Parking Levy, Parking Enforcement on highway	Workplace Parking Levy, Parking Enforcement on highway	Roadside parking not identified as a significant issue.
Vehicle Retrofitting programmes	Vehicle Retrofitting programmes	
Transport Planning and Infrastructure	Purchasing the 3 houses within AQMA No.1	Not improving air quality or the neighbourhood with empty properties.

Appendix B: Source Apportionment Calculations

The source apportionment and emission reduction calculations were undertaken using the Defra LAQM NO_x to NO₂ calculator V 4.1 and national background mapping as recommended in LAQM Technical Guidance TG16 (April 2016). The following inputs were used:

-Year of monitoring used: 2015

-2015 diffusion tube monitoring as reported in ASR 2016

-Estimated Regional Concentrations above the surface layer:

Ozone 61 mg m⁻³

Oxides of nitrogen 12 mg m⁻³ as NO₂

Nitrogen dioxide 10 mg m⁻³

-All UK Traffic Mix

Fraction NO_x emitted from local road vehicles as NO₂ - 0.23979

Appendix C: Consultation - Online Survey

Air Quality Action Plan Development Survey

Air Quality Action Plan Aim

Cherwell District Council are developing a plan to improve air quality in the district and address poor air quality in four areas. These areas are where national air quality objectives, designed to protect health from nitrogen dioxide, are not being achieved.

A draft Air Quality Action Plan (AQAP) has been produced and we would like your comments. This is an opportunity to give your opinion on what you would like considered in the AQAP. The survey responses will shape the final plan which aims to consider:

- 1) How information about what affects air quality and measures that improve it
- 2) Measures to improve air quality where we live, work and visit
- 3) Ways to reduce the effect of vehicles on our local environment and health
- 4) Steps to protect the health of ourselves, neighbours, employees and visitors

Air Quality Action Plan Development Survey

Air Quality Management Areas

The four areas where the national objectives are not being achieved have been designated as Air Quality Management Areas (AQMAs). These are:

AQMA No.1 Hennef Way, Banbury

http://www.cherwell.gov.uk/media/pdf/f/3/Hennef_Way_AQMA_-_Printed_March_2012.pdf

AQMA No.2 Banbury

http://www.cherwell.gov.uk/media/pdf/r/8/AQMA_No.2_boundary_for_AQMA_Order_-_October_2014.pdf

AQMA No.3 Kidlington

http://www.cherwell.gov.uk/media/pdf/s/q/AQMA_No.3_boundary_for_AQMA_Order_-_October_2014.pdf

AQMA No.4 Bicester

http://www.cherwell.gov.uk/media/pdf/a/1/AQMA_No.4_-_October_2015.pdf

Air Quality Action Plan Development Survey

Air Quality Action Plan Priorities

The priorities of this draft Air Quality Action Plan based on nitrogen dioxide levels and their source (which is largely from road vehicles) are:

Priority 1 – Strengthening local policy to improve air quality and its role in protecting health;

Priority 2 – Reducing oxides of nitrogen emissions from cars in all Air Quality Management Areas (AQMA);

Priority 3 – Ensuring new developments encourage and facilitate low emission and alternative transport;

Priority 4 – Ensuring changes to transport infrastructure takes account of air quality improvement potential within AQMAs;

Priority 5 – Raising awareness of poor air quality and encouraging improvement actions by vehicle users and fleet managers.

The full draft Air Quality Action Plan can be found at www.cherwell.gov.uk/airqualitymanagement. The action plan measures are outlined for comment in this consultation.

Air Quality Action Plan Development Survey

Monitoring

How we monitor air quality and the latest results can be found in our latest air quality report, the 2016 Annual Status Report. This can be downloaded at <http://www.cherwell.gov.uk/airqualitymanagement>. An interactive map with monitoring results trends can be found at <http://www.oxfordshire.air-quality.info/>

This consultation will end on 18 December. The action plan will be developed based on the feedback we receive from this consultation process. A final version of the Air Quality Action Plan will be completed by February 2017.

The questions below are designed to take into account your views so they can help us create a plan to improve air quality and provide information which is of interest. We look forward to your response.

Consultation responses will be reported at the end of the consultation. We are unable to respond to consultation responses individually.

Air Quality Action Plan Development Survey

Respondent Information

1. Do you live, work or travel within Cherwell District?

- Live
- Work
- Travel
- None of the above

2. Are you a resident in or close to an Air Quality Management Area (AQMA)?

- Yes
- No

3. Do you travel through an AQMA in a motor vehicle?

- Yes
- No

Air Quality Action Plan Development Survey

Proposed General Measures

Draft measures being considered for inclusion in the Air Quality Action Plan are listed in the following pages.

The "General Measures" apply to the whole district. Measures specific to each Air Quality Management area (AQMA), follow. Please comment on the proposed measures and feel free to add others for consideration.

- Explore Cherwell's Local Plan including low emission vehicle uptake measures incorporated into all new development.
- Planning applications for major developments to include emission statements and mitigation strategies within an appropriate air quality assessment.
- Damage cost calculations to be included in air quality assessments to show the financial impact of developments.
- Major developments in or within 100 metres of an AQMA will be air quality neutral.
- Travel plans submitted with development proposals will make reference to their contribution to the mitigation strategy and progress will be reported to CDC for five years post development completion.
- Air quality actions to be included in the Local Transport Plan.
- Air quality included in the public health Joint Strategic Needs Assessment.
- Include low emission vehicles in taxi licensing policy to encourage their take up and use within the district.
- Low emission plant, vehicle, delivery and fleet requirements to be included in sustainable procurement section of Cherwell District Council procurement policy.
- Low emission plant, vehicle, delivery and fleet requirements to be included in sustainable procurement section of Oxfordshire County Council procurement policy.

4. Please use the box below to comment on any of these measures. Do you feel that there are any measures missing which could be included to improve air quality across the district?

Air Quality Action Plan Development Survey

Proposed Measures for AQMA No.1 Hennef Way, Banbury

Draft proposed measures being considered for Air Quality Management Area No. 1 Hennef Way, Banbury. Please comment on the proposed measures and feel free to add others for consideration.

- Banbury Park and Ride Bus service around M40 junction
- Targeted business-led employee lift share schemes
- Corporate policy encouraging home working where possible and equipment provision.
- Promote use of canal towpath routes
- Promote use of rail to get into Banbury
- Identify school journeys on this route e.g. Banbury - Middleton Cheney to monitor and promote school travel plans
- A vegetation wall to act as a barrier between the road and the houses
- Targeted business-led workplace travel plan promotion

5. Please use the box below to comment on any of these measures. Do you feel that there are any measures missing which could be included to improve air quality in this AQMA?

Air Quality Action Plan Development Survey

Proposed Measures for AQMA No.2 Banbury

Draft proposed measures being considered for Air Quality Management Area No. 2, Banbury. Please comment on the proposed measures and feel free to add others for consideration.

- Banbury Park and Ride Bus service
- Priority parking for lift share permit holders in CDC owned car parks
- Banbury wide car club
- Corporate policy encouraging home working where possible and equipment provision.
- Promote use of canal towpath routes
- Promote use of rail to get into Banbury

6. Please use the box below to comment on any of the specific measures. Do you feel that there are any measures missing which could be included to improve air quality in this AQMA?

Air Quality Action Plan Development Survey

Proposed Measurers for AQMA No.3 Kidlington

Draft proposed measures being considered for Air Quality Management Area No. 3 Kidlington. Please comment on the proposed measures and feel free to add others for consideration.

- Lift share campaign at Water Eaton Park and ride.
- Promote use of canal towpath routes
- Promote use of rail to get into Bicester
- Feasibility for traffic light management to reduce north side queuing to be investigated.

7. Please use the box below to comment on any of these specific measures. Do you feel that there are any measures missing which could be included to improve air quality in this AQMA?

Air Quality Action Plan Development Survey

Proposed Measures for AQMA No.4 Bicester

Draft proposed measures being considered for Air Quality Management Area No.4 Bicester. Please comment on the proposed measures and feel free to add others for consideration.

- Bicester Park and Ride Bus service
- Priority parking for lift share permit holders in CDC owned car parks
- Bicester wide car club
- Promote Oxford Parkway station for journeys into Bicester
- Low emission delivery plans
- Bicester active travel i.e. walking and cycling campaign
- Identify school journeys on this route to monitor and promote school travel plans
- Wayfinding campaign
- Central corridor works in Local Transport Plan

8. Please use the box below to comment on any of these specific measures. Do you feel that there are any measures missing which could be included to improve air quality in this AQMA?

Air Quality Action Plan Development Survey

Further information

9. After considering the actions proposed and your comments so far, are there any actions that you are planning to personally take to improve air quality in Cherwell?

10. If you have any further comments on this consultation, please feel free to give them below.

Air Quality Action Plan Development Survey

Close

Thank you for completing the survey, please see the councils website at <http://www.cherwell.gov.uk/airqualitymanagement> for further information regarding the details of this consultation.

Appendix D: Survey Consultation Responses

General Measures. Please use the box below to comment on any of these measures. Do you feel that there are any measures missing which could be included to improve air quality across the district?

Plant more trees

I know that bus services have been cut from my area of town and idont imagine this is the only part of Banbury to be affected. We need to invest in good local transport services

In Banbury would be good to have adequate cycle lanes, more trees or shrubbery to counter the pollutants, relief road to enable vehicles exiting the motorway to be drawn away from the areas mentioned in the report.

Is air pollution from business premises and potential business premises included

Hennef Way to the M40 junction is a real bottleneck and can only get worse with more businesses moving into the trading estates

no

A lot of traffic on the roads in general is caused by parents taking their children to school. The impact of this is evident at school holiday times. I firmly believe the number of cars on the road would be greatly reduced if affordable public transport was available for all schools including primary schools.

encourage staff to walk/cycle/car share/use public transport. Such encouragement could be to pay travel allowances inversely proportionate to emmissions. charge for car parking at offices, promote alternatives to individual cars. lobby for change in emmissions based taxation to take account of high polluting hybrids that can only do 20 miles on electric motor. offer reduced parking/free charging for genuine electric vehicles. improve cycle routes to avoid slow, winding routes. look to make areas traffic free. build cycle/foot bridge over railway to offer uncongested alternative to the two existing traffic clogged roads. convert old railway route between Brackley and Banbury into a footpath/cycleway route to encourage emission free travel between two centres + general health benefits from more active population.

Explore mitigation measures to address the impact of air quality

Encourage the planting of more trees and hedgerows - increase the viability of open spaces to provide a green lung to new developments

The biggest problem must be the volume of traffic at peak periods and older vehicles with higher levels of NO2 emission. Town growth must increase this problem over the next five years.

Every major development should me made to include EV charging points (how come Sainsbury's have 2 but a later Tesco development have none) this should be included in the local plan as a matter of urgency. It should really be stipulated that a minimum of 10% of the parking spaces have charge points. Milton Keynes offers free parking for EV drivers - this attracts people to own them. Without measures like these they town will just get worse. The planning for the north west should be changed so that chargers should be mandatory at all new builds (not just "provision for charges" as it currently is)

Increase bus use, and provide increase cycle network. Low emission buses

Direct action needs to be taken immediately. Reduce the number of buses entering Bicester Re open North Street to Banbury Roa, this will help to spread the pollution in a wider area area and dilute it. Impose speed restrictions in the area, Say 20 mph Stop giving any more planning permissions that increase traffic in Central Bicester. Etc,etc.

N//a

CDC promised cycle paths around Bicester. They have not delivered on this promise bar a few isolated stretches. CDC paid for a consultants report which recommended banning HGVs from the centre of Bicester. CDC have ignored this report. CDC proposed car sharing scheme despite OCC having had one for years. The problem in Bicester will only improve if the traffic through town is routed on new roads on the periphery of the town and stopping any more housing/warehouse developments.

This is too late for Bicester, there have been too many developments without thinking through the consequences for the air quality in Bicester. I live on Kings End in Bicester - it's a conservation area, it also has a signpost on it disallowing any vehicle over 7.5 tonnes except for access. 1 this road is access Sainsbury's but so is Launton Road. Little use is being made of the ring road by huge trucks and cars alike. This could have improved the air quality in Bicester but now the damage is done. Many are probably just following their SatNavs without realising they are going to sit in a huge traffic jam rather than drive round the ring road at 50 miles per hour. Surely the council have a duty of care to the buildings in the conservation area as well as the owners of the properties.

How about building a ring road around Bicester that works now, let alone when the 10000s of new houses are built. Then maybe the quickest route won't be directly through the middle of the town. The road plan is currently flawed! Why go the longer, slower route around the failing ringroad?

Reduce amount of traffic travelling to and from and across Bicester. Close down Bicester village. Reduce amount of housing - Bicester is due 100% in number of homes with an antiquated traffic system that current plans do not address

Stop traffic into and around Bicester Village.

Stop cars using villages as "rat runs"

Re-assess any recent changes in road layout that may have had a detrimental affect on air quality.

Seem ok. How about funding the buses so people don't have to drive everywhere. how about doing something about all the traffic caused by bicester village which adds to the bad air quality in that area, a bypass for lorries, park and ride for bicester village located out of town.

I live near AQMA no 2 but I have not noticed poor air quality when I have walked near Banbury Cross because of wide pavements, plenty of trees and generally a pleasant environment. The area I am surprised is not covered by an AQMA is along the A4620, its crossing with Bridge Street, and then along Bridge Street itself where it crosses the railway. I walked along this route for years taking my children to school and the combination of heavy traffic, often stationery because of congestion or pedestrians crossing, make it one of the most polluted-feeling walks in Banbury. Hundreds of school children cross the bridge both ways every day as it links Grimbsbury with routes to the secondary schools. I think this area is the one that needs priority.

1, the buses are all diesel and pump out lots of pollution, make the electric.

Nothing to add

Pro actively prevent further AQMAs arising, such as Ardley, where the M40 junction, incinerator fumes and lorries delivering to the tip and incinerator may tip it over the edge.

I agree with vehicles that will help increase air quality but I feel you're placing your efforts in the wrong area. It is half term this week and that amount of traffic on the roads in these areas and indeed everywhere is DRAMATICALLY reduced. I personally feel encouraging more lift sharing and the return or schools buses would greatly benefit air quality in general. I'm sure everyone can agree that one child per car is not environmentally friendly.

Local master plans all include significant elements that encourage the increase and growth of motor vehicle pollution in these areas e.g. increased housing, more local roads, more out of town shopping offering large scale car parking, large distribution developments (more large lorries). Doubtful whether mitigating plans/ideas will counter this or whether requirements for development will be enforced. Nothing about actually reducing the volume of polluting activity i.e. vehicles and encouraging/increasing non or less-polluting alternatives e.g walking, cycling, rail,

reduce the increased traffic flow going to the new railway station by creating access from the A34 to the station.

Exclusion of all HGVs from B430 Weston on the Green

Low emission vehicles sound nice but the emissions that it takes to create and charge them exceed that of conventional vehicles. Battery powered vehicles only change the location that the emissions come from. Removing some of the impediments to traffic flow might help clear the problems.

better public transport as living in a village with non-existent buses it is impossible to get anywhere without a car or motor bike. Cycling is not an option with small children. Also why not have a school bus system like in America as if all children were picked up by bus it would cut down dramatically the amount of vehicles on the road, not to mention the CO₂ coming out of parked cars outside schools

Measures missing are charging points in Banbury to encourage electric vehicle. Require usable and safe cycle lanes. Relief road required to take vehicles exiting the motorway from using Banbury town centre as a through road.

Considering points two to four above, I would like to know why a Waitrose was granted planning permission within and around the Hennef Way/Southam Road areas both of which are highlighted as needing to reduce the poor air quality. How is a large supermarket and subsequent additional car park 'neutral'? Surely the extra few hundred cars per day visiting the new supermarket will be adding more emissions to the area you're actually trying to reduce them? As it is in between both sites and not necessarily a 'target' the extra traffic will use either or both areas at risk to access an already traffic congested roadway.

I would like to know how considering points two, three, and four that a Waitrose was granted planning permission on that stretch of road (Southam Rd). Surely an additional supermarket and its carpark would bring great traffic and emissions which would only add to the impact of poorer air quality, and is not 'neutral'. How was this passed considering the above points?

Stop the growth of rapeseed in the fields. It has dreadful effects for asthma/hay fever sufferers.

AQMA No.1 - Hennef Way. Please use the box below to comment on any of these measures. Do you feel that there are any measures missing which could be included to improve air quality in this AQMA?

free bus between town centre and both retail parks to reduce cars travelling between the retail parks and the town. The M40 junction park and ride wouldn't be used by those living south side of Banbury.

As stated previously, we need investment in local transport to make it both user friendly and affordable

Park and ride would be good, but would have to be developed so that customer is not taken from the town centre. Employee lift scheme may work if businesses run 9-5 shifts. Home working would be better. Canal towpaths would have to be made safer, railways provide good parking facilities unfortunately the car park causes congestion feeding into the air quality which you are trying to improve. vegetation I have already mentioned, a cheaper and more flexible transport system may encourage more use. I suggest large wind turbines to disperse the pollutants and provide energy.

Schools should be encouraged/mandated to have a "walking bus" initiative whereby parents sign up to a walking group that delivers their children to school safely, rather than clog up streets with their dreadful/irresponsible parking.. Would it be possible to liaise with Head Teachers?

no

I agree with these measures and personally would be happy to work from home as I live 20 miles away. I am glad that school traffic is being taken into account, rather than just businesses. Car sharing for both is a great idea.

Reduce the speed limit on Hennef Way and consider relocating the pelican crossing/installing a footbridge.

Vegetation wall might be a good idea but in some areas has been found to prohibit the dispersal of airborne pollutants and increase pollutant concentrations.

greater promotion of walking buses for school age children

Need to improve the canal towpath for cycle traffic from the Track roundabout to the footbridge over the canal towards the Hansel Fields roundabout.

Better cycle route avoiding road

1, lots as mentioned before, copy other towns or cities .

N/a

I live in Bicester

This is naive, you will not get people out of their cars.

Promote Bicester park and ride more

None of this will have any affect on the issue as it relates to Bicester.

These are all fine but I think a big issue relating to this AQMA will be goods traffic. Are there no measures to deal with this?

Increase business rates, so those that the more employees you have that drive to work in petrol/diesel cars the higher business rates you pay

Nothing comes to mind.

Prevent stationary traffic building up at the roundabouts - consider traffic lights or other measures.

As mentioned previously, it's not the businesses you need to target. I travel during rush hour and there is no issue at all when the schools are on holidays....

Very good.

I would very much like to see school buses, as the drop in the amount of traffic during half term is huge.

The vegetation wall is a great idea and works well. Park and ride service would be great but it needs to reduce the cost that drivers would pay at in town parking otherwise folks would not use it.

I think all new houses with gardens should have to have tree/s in their garden to offset the co2 the houses and extra vehicles coming from them as the area gets progressively more built up. Also why aren't all houses and new office blocks not as standard fitted with solar panels or similar as this should be mandatory.

See previous page.

A second entry onto the retail park is essential. The traffic build up at peak times on the roundabout can only be exacerbating the emissions to the area, where as a separate entrance/exit point front eh Tesco car park on Southam Road would ease the flow of traffic and thus lower emissions. Recently traffic was backed up on the retail park and surrounding roads for several hours.

AQMA No.2 Banbury - Please use the box below to comment on any of these measures. Do you feel that there are any measures missing which could be included to improve air quality in this AQMA?

Living in a village but travelling to Banbury is very expensive by bus, cheaper to drive or get a taxi if one way journey for 2 adults.

Additional relief road from the motorway to take away traffic trying to get to the outskirts at the other end of town. Subsidised parking for vehicles used for car sharing.

Any initiative needs to be frequent and easy to use and delivered from the service user point of view rather than the non-user's perspective

no

Reduce the speed limit and consider alternative routing of through traffic

loan bikes at park and ride sites and easy access to safe cycling and walking routes from perimeter car parks

Probably insufficient to deal with the increase in traffic volumes created by the growth of the town.

Better off road cycle network, especially around the train station, Middleton road.

Reduce the number of vehicles with road calming measures

N//a

I live in Bicester

1 all very laudable but will people give up using their cars?

Can we have some measures aimed at safe cycling? And again, why are there no measures connected with goods traffic?

Have one day a week when the town is closed to all petrol/diesel driven traffic

Nothing comes to mind regarding the AQMA. However, I think a Park and Ride service could have some attraction perhaps on a weekend between the M40 and Banbury town centre linked to the retail park bus service.

Increase parking charges to deter cars.

Same as before. A school park and ride may help if it's located outside of Banbury and then children are brought in by bus.

Very good

Create a local area lift share scheme along the lines of BlaBlaCar.

Including a park and ride in the area of Bodicote would be helpful too.

see previous as this applies to all areas suggested

Where would the park and ride be set up ? also I do not think a park and would be used much. Previous scheme run at Christmas proved to be low usage. If more thought went into cycle paths it may encourage greater use, even pioneering a 'Boris type bike scheme'

Personally, I think the pedestrian crossings are all too close together. There is a crossing on all four junctions of the cross, then a hundred yards further up on Horse Fair there is another, another mini one a hundred yards further up and then on the corner of North Bar there is the traffic lights and crossings (the Three Pigeons). While as a business owner I want pedestrians to come into town, surely all of these crossings in such a short space will mean cars are just sitting there with their engines running up to three times in a matter of a few hundred yards. All the time the traffic is waiting, the emissions are building.

AQMA No.3 Kidlington - Please use the box below to comment on any of these measures. Do you feel that there are any measures missing which could be included to improve air quality in this AQMA?

No new comments to be made on the above only that cycling appears to be ignored.

Can't comment as don't have any experience of Kidlington

no

Consider alternative junction arrangements to prevent / reduce the impact of queuing traffic

N/A

N//a

I live in Bicester

1 the train'a great, and I'm looking forward to being able to get the train to Oxford again. Thank you Chiltern Rail. There are some people who you will not for to use public transport. Others don't give it a second thought and would definitely use it. Maybe exorbitant parking charges like in Oxford would do it?!

Using rail is fair enough but how do people then complete their journeys; no-one will walk anymore and bus services are being cut to shreds

1. Introduction of separate designated cycle lanes. 2. Upgrade A34 to eliminate traffic queueing and the knock on effect of using the area as a rat run. 3. Better phasing of traffic lights at junction of Bicester Road and A41 to reduce traffic queueing. 4. Parking restrictions on Bicester Road as parking slows down traffic. 5. Better phasing of traffic lights at junction of Bicester Road and Oxford Road to reduce traffic queueing. 6. Promote switching off engines at traffic lights. 7. Use smart traffic lights that operate according to traffic queueing.

I know the canal area is little used in Kidlington and I suggest the tow path route to Oxford could be opened up to cyclists and perhaps small motorcycles. Keep them off the busy roads into Oxford and make use of an unloved facility.

Cycle lanes on main north-south route

Same as before

Make park and ride parking free

Slip road from the A34 giving direct access to the park and ride and new railway station, keeping traffic away from Bicester Road. Reduced speed (from 40 to 30) to slow traffic and 'put people off' using it as a through road to the railway station. Introduce resident parking in layby and around the close to prevent people coming and parking by the houses instead of using the park and ride.

Removing roughly half of the traffic lights on the Oxford road would reduce the time that vehicles are idling in traffic. One direction travel roads within the city centre would also limit idling time.

see previous as this applies here to

Do not live in Kidlington, unable to comment.

AQMA No.4 Bicester - Please use the box below to comment on any of these measures. Do you feel that there are any measures missing which could be included to improve air quality in this AQMA?

Bring back catchment areas for schools to avoid pupils having to travel miles to attend school. I notice the decrease in traffic when pupils on holiday, perhaps there is a quick fix here ?

Can't comment as don't use Bicester

no

Implement the proposals for the central corridor route set out in the Bicester Sustainable Transport Strategy.

N/A

Again - encourage EV take up by free parking and charge points in council car parks

Consider positive ways to reduce traffic, either travelling to/from Bicester Village or through traffic going to/from Tescos on A41 and/or going towards/away Junction 9 on the M40. Sheer weight of traffic would seem to be the cause of pollution in this Management Area.

More effort should be made to reduce the 'school run' vehicles going to/from Bicester Community College, twice a day. Travel to/from Oxford should be promoted using Bicester Village station when the service through to the main station in Oxford starts in December 2016.

Build an integrated and joined up cycling network in Bicester.

N//a

A circular bus network from 6am-10pm. A proper ring road to take traffic away from Queens Avenue No further expansion of Bicester Village Cancel planning permission for warehousing developments.

Please just stop the lorries! They should not be thundering past the old houses on Kings End, the Causeway and Church Street.

Park and ride is pointless where it is. Should have been built by M40 with decent access and exits. Lack of planning - it's obvious Bicester will expand so the park and ride will end up in the middle of the town eventually! Stop cancelling bus services. Fix the ring road. it's half done, and not good enough for today's traffic, let alone when the "eco"town is built. These people are going to have cars you know!

Once again how do people continue on with their journeys if going by rail? They will NOT walk to final destination which puts the kibosh on your active travel plans

1. Implement separate designated cycle lanes. 2. Eliminate traffic into Bicester Village, which causes huge traffic queues. Make access to Bicester Village by Park and Ride buses only. 3. Use smart traffic lights that operate according to traffic queueing. 5. Implement a proper and complete ring road around Bicester. 6. Stop messing around with so called hamburger roundabouts that do not work and just cause months of traffic misery in construction and waste of public money. 7. Use some common sense before allowing new business access to existing roads e.g. appalling and dangerous placement of Tesco access. 8. Move Tesco access to Bicester Avenue access point so traffic lights can be eliminated at the present Tesco entrance.

Organise buses to serve Bicester Village station.

Work with bus companies to reinstate the routes that have recently been lost. Look at the changes that have been made to the road layout in the last few years, and assess whether these need to be changed back to what worked in the first place. Have a proper independent assessment of the road layout around Bicester Village and the effect this has on traffic travelling south along Queens Avenue.

Bring back the local bus services to Langford and Bure Park and other areas where they have been stopped and charge more for car parks so that more people will use them.

Prioritise developing land for jobs before more housing in order to create local opportunities that stop people having to commute. Bicester has an appalling lack of quality employers, meaning a large percentage (majority?) of workers have to travel. For my own journey, to Aylesbury, there is no viable public transport option given I can do the journey in 30 mins by car.

Bicester seems to be well served with travel options

Cycle lanes and electric car charging points. Increase the cost of parking

Same as before

Vehicle low emission zone, particularly for buses and HGVs (the latter which traverse the area despite the weight restriction)
Banning al HGVs from driving through centre of Bicester. Any deliveries enter via London Road only.
School journey times are very busy in this area, this is important topic to look at, especially considering most people are local and shouldn't need cars. Include investigate ways to control volume of traffic through stated area, especially vehicles with generally higher emissions (lorries, busses etc...) can through traffic be directed to other routes?
The use of banbury and Buckingham roads as through roads causes lots of traffic on a daily basis. This is regular Bicester traffic, school traffic and Bicester Village traffic. We live on field street and see it every day. We feel more should be made if the ring roads. Discourage traffic from using these roads as quick through roads by adding measures which would make the ring road a more time efficient route?
Air quality in Weston on the Green / A34/M40 is extremely poor and steps must be taken to improve this.
I have no comment.
So air quality is below acceptable levels in the defined management area, but you are not interested in the the adjacent areas which must be feeding low quality air into the area, why ? Why did you permit the incinerator so close to Bicester and upwind, what contamination is that spewing over Bicester, similarly what contamination is the energy plant on the so called ECO town throwing out ? If as you seem are only blaming motor vehicles you could speed up the flow of traffic by having synchronised pelican or toucan crossings instead of giving priority to pedestrians particularly at school throw out times. You could dispense with the inane chicanes on Banbury Rd and Buckingham Rd as the do not serve any purpose apart from producing more pollution by slowing down the traffic. Of course the ultimate answer would be to build a proper dual carriageway ring road which any sensible Council would have done.
see previous as answer applies here too
Do live in Bicester, unable to comment.
Stop the growth of rapeseed in the fields. It plays havoc for hay fever/asthma sufferers. Lorries to only deliver during the night. To cut down on exhaust fumes during the day.

After considering the actions proposed and your comments so far, are there any actions that you are planning to personally take to improve air quality in Cherwell?
Find a job away from Banbury
I have invested in a hybrid car to reduce my emissions as I can't use public transport for my journey to work
reduce single occupancy use of car
carry on cycling to work and try to avoid peak times when I need car.
Encourage through traffic to use alternative routes and reduce speed limits in town centres. Investigate possible mitigation measures such as a green wall on Hennef Way
I walk and cycle when I can.
Personally we have already invested in one electric car and are considering a second.
Regularly publish air quality data
There is little I can do as where I live is close to this area, and I can't always avoid travelling through it.
I will pressure councillors.
No
Sack the CDC member Tony Illot for failing to act on his portfolio. Tie all developments into a single plan which balances transport and air quality.
Again, kept the huge trucks to the ring road and Launton Road. The old houses are being ruined, the once beautiful roads of quant old houses are now unbearably busy.
Move?
No. That is the responsibility of CDC.
Promote bus and rail travel. Buses to some villages have ceased recently which has meant more people having to use cars.
I am keen to move out of Bicester because of traffic and air quality issues.
I presume you mean in Cherwell District. My children both walk to school and I work from home and use the train to travel to occasional meetings. I would like us to use bicycles more locally but I do not consider it safe on the road to do so.
I walk almost everywhere.
Travel into and out of urban areas outside of rush hour to avoid queuing traffic in and around town
Considering an electric car
I would love to use public transport to get to work but it just isn't available to me.
Driving less. Not using Banbury Gateway shopping centre. reducing the number of visits to town and shopping centres by car.
Move to somewhere that's taking it seriously? I already make most local journeys (up to 30 minutes walk) on foot
walking a lot more!
walk everywhere and use more public transport . might get a bike
I live in the centre of Bicester and we only own one vechicle. We only use the car for work or large shopping trips. Otherwise we tend to walk in and around town and my husband takes the train to work.
Change from diesel to petrol vehicle if there is any financial incentive
I am unable to do so due to the fact that I already ride share in with a co-worker, that co-worker uses their personal vehicle for Cherwell business and that there is no public transportation options connecting Buckingham and Banbury.
1 to move out of the area to one controlled by a Council who can control their planning applications sensibly
We will replace our diesel car with a petrol car when the lease expires.
Keep on cycling wherever possible, or walk.

If you have any further comments on this consultation, please feel free to give them below.
shared green travel plans could be revisited and re-launched.
Easier to identify problems rather than solutions, so I don't envy you the task, but I do think that the welcome growth of Banbury etc will make this a major problem for the future, as air pollution of the industrial kind used to be. Investment in buses, cycle routes and relief roads will be needed at some point. Also car sharing for school runs as well as peak hour commuters - need to work with schools on that.
The chicane on the Buckingham road near Coopers Green increases pollution by making vehicles wait, often for a minute or more with engines running and then accelerate away through the gears thereby using far more fuel than if they were able to flow through at a steady 30mph. I live near there and also see many close calls where impatient drivers try to get through against oncoming traffic.
This has been going on for over 10 years. When will the government take Cherwell Council to court. When are the EU going to support air quality improvements in Bicester. When are central UK government going to do something?.
No
Sack all Bicester Councillors for failing to represent the needs of their constituents.
This has been too long coming and is too late for Bicester. I fear the damage is done and you councillors have ruined our town. Shame on you.
No doubt nothing sensible will actually be done as usual, except allowing Bicester Village and Tesco and other developers to do what they want, without thinking about the consequences.
It's good we are having this survey. However I am surprised at the emphasis on car travel rather than large lorries (on the one hand) and promoting cycling (on the other). Perhaps if this is for strategic reasons then at some stage it could be explained. Many thanks.
All the proposed actions will not reduce the air pollution, the traffic in Banbury is appalling. Only really radical measures will make a difference.
Nothing to add
Put children back onto buses and we'll all be better off
We do feel the park and ride should be promoted much more across Bicester and much sooner on the signs on the routes into town - ring roads and A41 from motorway junction. Is this service cheap enough to encourage users? We also think the lack of proper well signposted cycle lanes and busy traffic encourages people to cycle in the pavements which has become a daily hazard of walking to station or around town.
Nothing comes to mind.
I think more grants should be given to provide affordable solar panels/heat pumps etc. The green deal previously being run was rubbish. We would love to get rid of our oil fired central heating but as we live in a village without gas there are little options available. We have already insulated our windows and roof however encourage reduced parking charges for electric vehicles, introduce electric charging points. Please consult cyclists before introducing any further cycling initiatives, previous attempt was very poorly thought out and implemented.

Glossary of Terms

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
AQS	Air Quality Strategy
ASR	Air quality Annual Status Report
CRT	Canal and River Trust
Defra	Department for Environment, Food and Rural Affairs
EU	European Union
LAQM	Local Air Quality Management
NO	Nitrogen Oxide
NO ₂	Nitrogen Dioxide
NO _x	Nitrogen Oxides
PM ₁₀	Airborne particulate matter with an aerodynamic diameter of 10µm (micrometres or microns) or less
PM _{2.5}	Airborne particulate matter with an aerodynamic diameter of 2.5µm or less
tbc	To be confirmed