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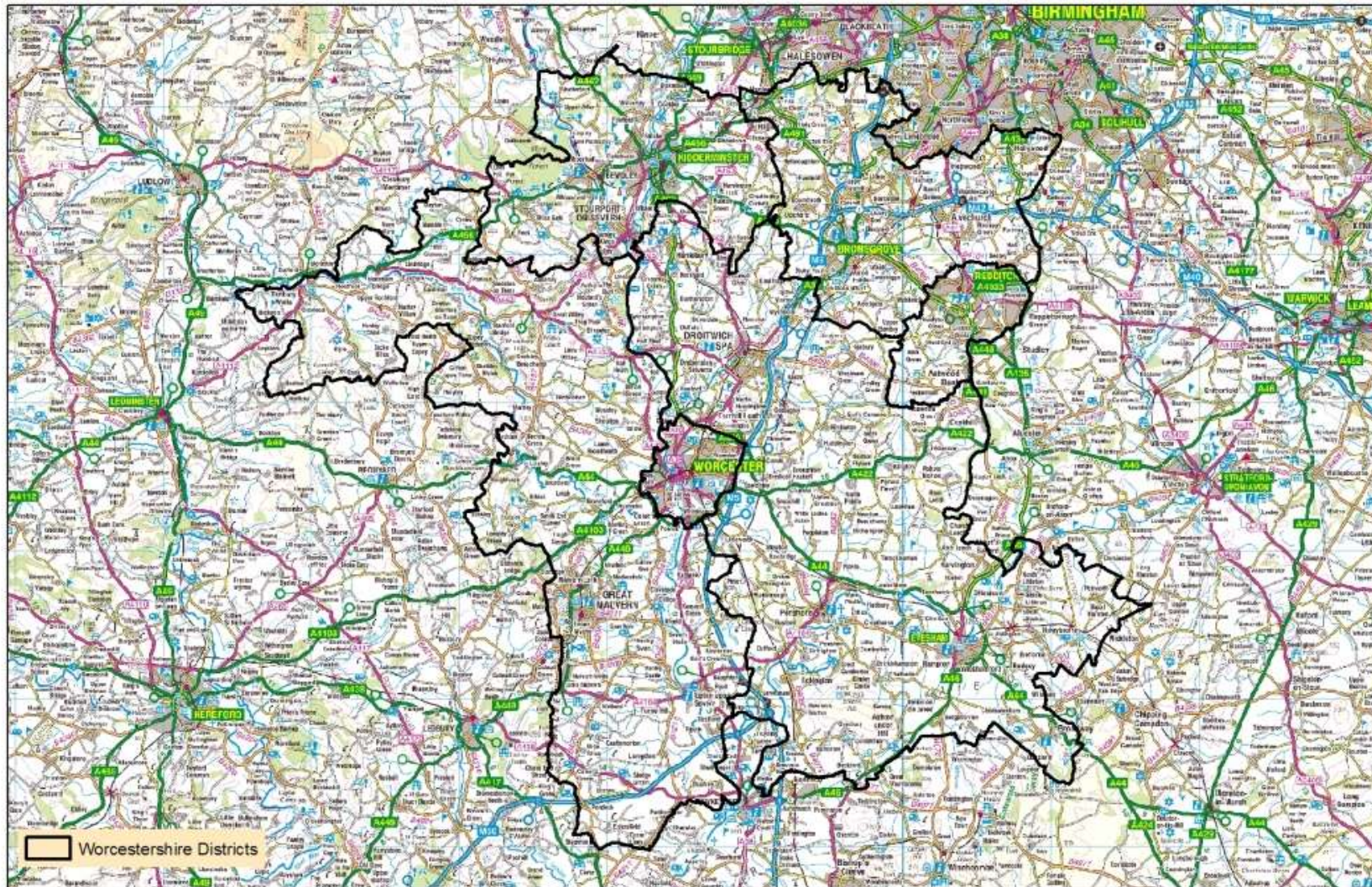
# **Air Quality Action Plan for Worcestershire**

August 2013

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Details of dates of adoption by the partner authorities will appear here in future updates of AQAP







## Executive Summary

This Air Quality Action Plan (AQAP) for Worcestershire has been developed and produced by Worcestershire Regulatory Services (WRS). It is a statutory duty for a local authority to develop an AQAP following the declaration of an Air quality Management Area (AQMA) in response to identified exceedence(s) of one or more of the air quality strategy objectives. This Countywide AQAP fulfils the requirements of the Local Air Quality Management process set out in Part IV of the Environment Act 1995 and the relevant Technical Guidance documents.

Before the plan can be adopted it must be subject to consultation with the general public, and must also be appraised and accepted by the Secretary of State as being suitable for purpose. The purpose of the AQAP is to set out the local actions that will be implemented to improve air quality and work towards meeting the objectives.

Currently there are ten declared Air Quality Management Areas (AQMAs) in Worcestershire for exceedence of the annual average air quality objective for NO<sub>2</sub>:

- Kidderminster Road, Hagley
- Lickey End, Bromsgrove
- Redditch Road, Bromsgrove
- Worcester Road, Bromsgrove
- Dolday/Bridge Street, Worcester City
- Lowesmoor/Rainbow Hill, Worcester City
- Newtown Road, Worcester City
- Port Street, Evesham
- Horsefair/Coventry Street, Kidderminster
- Welch Gate, Bewdley

Available best practice and guidance documents have been reviewed to identify all possible solutions included within this AQAP for consultation. WRS have also undertaken a review of available monitoring data, previous reports and plans from the last decade to ascertain long term pollutant trends and clarify the levels of exceedences within each AQMA. Relevant local policies and plans are also identified within the document and site visits to each AQMA have been undertaken to establish prevailing conditions.

The Action Plan Options are in two sections relating to the effect the actions would have on air quality: Generic Actions and AQMA Specific Actions. The generic actions have been grouped into types under the following headings:

- Traffic Management
- Lowering Emissions
- Promotion of Alternatives
- Education & Information
- Planning Initiatives
- Policy & Guidance

Anticipated costs, timescale and air quality benefit are indicated where possible. The AQAP will be finalised updated with the preferred actions following the consultation period. A steering group will then be formed to help deliver the preferred actions.

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## 1 Introduction

### 1.1.1 Purpose of the Action Plan

This Air Quality Action Plan (AQAP) for Worcestershire has been developed and produced by Worcestershire Regulatory Services (WRS). It is a statutory duty for a local authority to develop an AQAP following the declaration of an Air quality Management Area (AQMA) in response to identified exceedence(s) of one or more of the air quality strategy objectives (detailed in section 2).

Before the plan can be adopted it must be subject to consultation with the general public, and must also be appraised and accepted by the Secretary of State as being suitable for purpose. The purpose of the Air Quality Action Plan is to set out the local actions that will be implemented to improve air quality and work towards meeting the objectives. Not all of the potential actions discussed in this document are likely to be formally adopted but are actively under consideration at this time.

### 1.1.2 Who are WRS?

Worcestershire Regulatory Services (WRS) is a shared service acting on behalf Worcestershire County Council, Redditch Borough Council, Bromsgrove District Council, Wyre Forest District Council, Worcester City Council, Malvern Hills District Council and Wychavon District Council.

The service was formed in June 2010 from the Environmental Health and Licensing departments of the six Worcestershire local authorities and Trading Standards from Worcestershire County Council. Responsibility for managing local air quality transferred from the partnership council's Environmental Health teams to the newly formed WRS Pollution Team in April 2011.

### 1.1.3 Current status of air quality in Worcestershire

Currently there are ten declared Air Quality Management Areas (AQMAs) in Worcestershire. These are situated within the Bromsgrove, Worcester City, Wychavon and Wyre Forest Districts. No AQMAs have been declared within Malvern Hills District Council and Redditch Borough Council areas to date. The areas comprise:

- Kidderminster Road, Hagley
- Lickey End, Bromsgrove
- Redditch Road, Bromsgrove
- Worcester Road, Bromsgrove
- Dolday/Bridge Street, Worcester City
- Lowesmoor/Rainbow Hill, Worcester City
- Newtown Road, Worcester City
- Port Street, Evesham
- Horsefair/Coventry Street, Kidderminster
- Welch Gate, Bewdley

Newtown Road in Worcester is due to be revoked and a new AQMA in St Johns area of Worcester is to be declared. Additionally an area in Stourport on Severn is being

considered as a possible AQMA. These three areas are not considered any further in this AQAP.

#### **1.1.4 Approach to Air Quality Action Planning**

Traditionally an action plan has been produced for each individual AQMA. However with 10 inherited AQMAs, and potentially more to manage in Worcestershire in the future, there are clear advantages in terms of resources and managing the processes to combining actions for all AQMAs into one countywide action plan. Considering that many solutions employed are generic to all AQMAs a single action plan has the potential to provide economies of scale in terms of staff resources, budgets and working partnerships. Clearly this is important and necessary in the current economic climate when there is increasing pressure on Local Authority to maximise resources effectively and efficiently as possible.

It is generally recognised that although Local Authority has the responsibility of managing the air quality in their areas they are unlikely to have direct control or capability to effect real reductions in pollution levels. This is because most AQMAs are declared as a result of pollution from traffic in built up urban areas over which LAs have no direct control. It is recognised that strong working partnerships must be formed with those able to directly deliver real reductions in pollutants related to vehicle emissions e.g. Highways at Worcestershire County Council, the Highways Agency, and Bus and Freight Quality partnerships.

It has been noted that some local plans have targeted solutions that have not been delivered. So in developing this AQAP WRS have sought to identify weaknesses in previous plans in order that valuable resources and effort are not expended on unrealistic or unachievable targets.

Available best practice and guidance documents have been reviewed to identify all possible solutions. All solutions are included within this AQAP for consultation. The AQAP will be finalised updated with the preferred actions following the consultation period. A steering group will then be formed to help deliver the preferred actions.

#### **1.1.5 How the AQAP has been formed**

WRS have reviewed available guidance from Defra to ascertain which potential actions are most effective. Surprisingly there is minimal data available to local authorities on the success of the variety of solutions adopted in previous action plans across the UK or identified in guidance documents. Defra do provide a number of practice guidance documents and examples of AQAP by other LA upheld as best practice to aid production of an AQAP. A number of these reports have been reviewed during the development of this plan and are referenced at the end of the document.

WRS have also reviewed all previous AQAPs produced by Worcestershire Local Authorities to determine what actions have been previously identified and if they have been successfully implemented. Additionally neighbouring authorities AQAPs and regional frameworks have been reviewed to identify any actions that could impact positively or negatively on AQMAs in the county.

WRS have also undertaken a review of available monitoring data, previous reports and plans from the last decade to ascertain long term pollutant trends and clarify the levels of exceedences within each AQMA.

Relevant local policies and transport plans that impact on local air quality have been identified and summarised e.g. planning, climate change, local transport plan. New approaches to Local Air Quality Management in England under consultation by Defra have also been considered.

Additionally several site visits to each AQMA at peak traffic times have been undertaken to identify prevailing conditions and define the issues within each AQMA that cause elevated levels of NO<sub>2</sub>.

### **1.1.6 Objectives of the AQAP**

The aim of this AQAP is to identify solutions that can deliver real measurable contributions to improving air quality in Worcestershire. However it is recognised that delivering significant reductions in pollutants is not a quick process. Therefore the plan is intended to be a strategic document for many years and it must be future proof and versatile to accommodate changes to National and Local policy and guidance.

Objectives of the Worcestershire AQAP are as follows:

- To provide a robust framework for ensuring long term commitment and support of air quality issues.
- To be flexible enough to be amended with new policy changes, additional AQMAs and solutions as new ideas materialise in the air quality management field.
- Identify the effective actions that will be the basis of a long term implementation strategy to improve local air quality in Worcestershire.
- Highlight air quality issues in Worcestershire to policy makers and organisations that can deliver real improvements within partner authorities and the wider community.
- Identify members of potential Steering Group that will deliver implementation of the finalised action plan
- Identify national, regional and local policy that has an impact on local air quality or a role to play in improving air quality.
- Focus and resources should be targeted on implementing achievable actions that can provide the most cost effective reductions in emissions and improvements in local air quality.

### **1.1.7 Why air quality matters - Air Quality and Health**

Estimates indicate that air pollution reduces life expectancy in the UK by an average of six months with equivalent health costs estimated to be up to £20 billion a year.



Improvements between 1990 and 2001 have helped avoid an estimated 4,200 premature deaths a year, and 3,500 hospital admissions a year. The UK Air Quality Strategy aims to reduce the reduced life expectancy impact to five months by 2020. (Defra 2009b)

The most important air pollutant in terms of health effects is PM – particles emitted from vehicle exhausts, chimneys or formed in the air from reactions between other pollutants. The World Health Organization (WHO) advises there is no safe exposure level to PM. For people with lung and heart conditions, elevations in particulate air pollution can worsen their symptoms.

The short term health effects of nitrogen dioxide (NO<sub>2</sub>) are also well established. At higher concentrations it can cause irritation of the lungs and can exacerbate existing lung conditions including asthma. However it is unlikely that such high levels of NO<sub>2</sub> will be reached in the UK. Ground level ozone (O<sub>3</sub>) is formed when other pollutants react in sunlight and can cause breathing problems and reduced lung function. (Defra website accessed 03.04.2013)

In Worcestershire all current AQMAs have been declared because of an exceedence of the Nitrogen Dioxide annual average air quality objective (see Section 2).

### 1.1.8 Nitrogen Dioxide

In the context of air quality, nitrogen oxides usually refer to nitric oxide (NO) and nitrogen dioxide (NO<sub>2</sub>), collectively known as NO<sub>x</sub>. NO<sub>x</sub> is emitted from many combustion processes, and the main sources in the UK include power generation, industrial combustion and road transport. In this report, concentrations of oxides of nitrogen are expressed in units of micrograms per cubic metre (µg/m<sup>3</sup>).

NO is not considered to be of concern with respect to human health. However, it is rapidly oxidised in the environment, forming NO<sub>2</sub>. At high concentrations NO<sub>2</sub> acts as an irritant, causing inflammation of the airways. By affecting the immune cells in the lungs, it can also increase susceptibility to respiratory infections. It has been difficult to determine the direct, individual health effects of NO<sub>2</sub> at ambient concentrations because it is emitted from the same sources as other pollutants.

Motor vehicles make the largest contribution to long-term ground level concentrations in urban areas, and the highest NO<sub>x</sub> levels in UK cities generally occur at kerbside, particularly in locations with poor dispersion characteristics such as street canyons. Annual mean concentrations of NO<sub>2</sub> beside busy urban roads frequently exceed 40 µg/m<sup>3</sup> (the limit value set by the European Union to protect human health) and may reach 80 µg/m<sup>3</sup> or higher (as observed in 2011 at the London Marylebone Road monitoring station). Concentrations above the Air Quality Directive limit values for human health occur at roadside in most large cities in the UK. This is not a problem specific to the UK and is common in many other European countries.

At urban background locations in the UK, i.e. within built-up areas but away from busy roads, annual mean NO<sub>2</sub> concentrations are lower, typically in the range 15-40 µg/m<sup>3</sup>. However, some urban background sites (for example in central London, Manchester and Glasgow) often measure annual mean concentrations above 40 µg/m<sup>3</sup>. Peak hourly mean concentrations exceed 100 µg/m<sup>3</sup> at most urban locations, and occasionally exceed 300 µg/m<sup>3</sup> at the most congested urban roadside sites. (Defra, 2011)

'NO<sub>2</sub> is an irritating gas that is absorbed into the mucous membrane of the respiratory tract which can damage cell membranes and proteins. Elevated concentrations of NO<sub>2</sub> may cause inflammation of the airways with long term exposure affecting lung function, causing respiratory symptoms. Over the short term this may lead to lower resistance to respiratory infections such as influenza due to NO<sub>2</sub> affecting the immune cells of airways. It may also enhance the response to allergens in sensitive individuals.

Very high levels may lead to narrowing of lung airways, particularly among people with pre-existing asthma and cause severe lung damage (severe difficulty breathing) or death. For example, in London in 1991 an episode occurred where average hourly NO<sub>2</sub> concentration reached a maximum of 423 ppb (808 µg/m<sup>3</sup>), four times the Air Quality Objective (AQO) for 1 hour mean NO<sub>2</sub>. This resulted in a 10% increase in death rates and an increase in hospital admission rates among older people with chronic lung diseases. However, when healthy volunteers have been exposed to varying concentrations of NO<sub>2</sub> no health effects have been found.

The secondary particles formed by NO<sub>2</sub>, which contribute to PM<sub>10</sub>, can penetrate deep into the lungs causing inflammation. This can also cause worsening of conditions of people with heart and lung diseases. Also the particles may carry surface-absorbed carcinogenic compounds. NO<sub>x</sub> furthermore contributes to photochemical smog formation and acid deposition and may react with other substances producing powerful greenhouse gases.

For NO<sub>2</sub>, the 1-hour mean AQO of 200 µg/m<sup>3</sup> (with no more than 18 exceedences per year) is based on acute health effects, while the annual mean AQO of 40 µg/m<sup>3</sup> is based on chronic health effects.' (Lowe, 2010)

## 2 Policy

### 2.1 National Policy

#### 2.1.1 UK Air Quality Strategy for England, Scotland, Wales and Northern Ireland

Under Part IV of the Environment Act 1995 local authorities have a statutory duty to undertake periodic reviews of ambient air quality within their boundaries. The most recent version of the Air Quality Strategy (2007) sets out the framework of Local Air Quality Management (LAQM). It also sets out a series of health-based air quality objectives and the dates by which these are to be achieved.

The 2008 European Union ambient air quality directive (2008/50/EC) also sets legally binding limits for concentrations in outdoor air of major air pollutants that impact on public health. Achievement of these values is a national obligation rather than a local one. The directive requires EU member states to implement air quality plans where the standards are breached. The EU directive was transposed into UK law within the Air Quality Standards Regulations 2010.

A list of the air quality objectives relevant to England and the typical locations at which the objectives should and should not apply (as set out in The Air Quality Strategy) is presented in the tables on the following pages.

The air quality directive contains provisions for additional time to meet limit values for particulates PM<sub>10</sub> (3 years) and nitrogen dioxide (5 years) which the UK, like most other EU members states, has or will be seeking. Defra's current view is that 'meeting EU air quality limits for NO<sub>2</sub> (nitrogen dioxide) close to roadsides in London and other major cities by the extended 2015 deadline is very challenging given the largest source of this pollutant is road transport'.

In early 2011, the European Commission began a review of EU air quality policy which will culminate with the publication of new proposals on ambient air quality and emissions ceilings in 2013.

It is anticipated that measures adopted at international and national levels will ensure that objectives are reached at most relevant locations. However measures adopted at a local level can help to significantly improve air quality in specific locations and as such the Government recognises the important role that local authorities have to play in working towards achieving the objectives.

Local Authorities in UK are required when carrying out their local air quality management duties to have regard to technical and policy guidelines issued by the Secretary of State:

Defra (02/2009) Local Air Quality Management Policy Guidance LAQM.PG(09)

Defra (02/2009) Local Air Quality Management Technical Guidance LAQM.TG(09)

Table 2-1 UK Air Quality Objectives

Pollutant	Objective	Conc measured as	Date to be achieved by and maintained thereafter	European Obligations	Date to be achieved by and maintained thereafter
Nitrogen Dioxide	40 $\mu\text{g.m}^{-3}$	Annual mean	31/12/2005	40 $\mu\text{g.m}^{-3}$	01/01/2010
	200 $\mu\text{g.m}^{-3}$ not to be exceeded more than 18 times a year	1 hour mean	31/12/2005	200 $\mu\text{g.m}^{-3}$ not to be exceeded more than 18 times a year	01/01/2010
Particles (PM <sub>10</sub> )	40 $\mu\text{g.m}^{-3}$	Annual Mean	31/12/2004	40 $\mu\text{g.m}^{-3}$	01/01/2005
	50 $\mu\text{g.m}^{-3}$ not to be exceeded more than 35 times a year	24 hour mean	31/12/2004	50 $\mu\text{g.m}^{-3}$ not to be exceeded more than 35 times a year	01/01/2005
Particles (PM <sub>2.5</sub> ) Exposure reduction	25 $\mu\text{g.m}^{-3}$	Annual mean	2020	Target value 25 $\mu\text{g.m}^{-3}$	2010
Particles (PM <sub>2.5</sub> ) Exposure reduction (in UK Urban areas)	Target of 15% reduction in concentrations at urban background		Between 2010 and 2020	Target of 20% reduction in concentrations at urban background	Between 2010 and 2020
Ozone	100 $\mu\text{g.m}^{-3}$ not to be exceeded more than 10 times a year	8 hour mean	31/12/2005	Target of 120 $\mu\text{g.m}^{-3}$ not to be exceeded more than 25 times a year averaged over 3 years	31/12/2010
Sulphur Dioxide	266 $\mu\text{g.m}^{-3}$ not to be exceeded more than 35 times a year	15 minute mean	31/12/2005		
	350 $\mu\text{g.m}^{-3}$ not to be exceeded more than 24 times a year	1 hour mean	31/12/2004	350 $\mu\text{g.m}^{-3}$ not to be exceeded more than 24 times a year	01/01/2005
	125 $\mu\text{g.m}^{-3}$ not to be exceeded more than 3 times a year	24 hour mean	31/12/2004	125 $\mu\text{g.m}^{-3}$ not to be exceeded more than 3 times a year	01/01/2005
Polycyclic aromatic hydrocarbons	0.25 $\text{ng.m}^{-3}$ B[a]p	As annual average	31/12/2010	Target of 1 $\text{ng.m}^{-3}$	31/12/2012
Benzene	16.25 $\mu\text{g.m}^{-3}$	Running annual mean	31/12/2003		
	5 $\mu\text{g.m}^{-3}$	Annual average	31/12/2010	5 $\mu\text{g.m}^{-3}$	01/01/2010
1,3 – butadiene	2.25 $\mu\text{g.m}^{-3}$	Running annual mean	31/12/2003		
Carbon Monoxide	10 $\mu\text{g.m}^{-3}$	Maximum daily running 8 hour mean	31/12/2003	10 $\mu\text{g.m}^{-3}$	01/01/2005
Lead	0.5 $\mu\text{g.m}^{-3}$	Annual mean	31/12/2004	0.5 $\mu\text{g.m}^{-3}$	01/01/2005
	0.25 $\mu\text{g.m}^{-3}$	Annual mean	31/12/2008		

Information taken from Table 2 of The Air Quality Strategy for England, Scotland, Wales and Northern Ireland (Vol. 1)



Table 2-2 Typical locations where objectives apply

Table 2.2 Typical locations where the objectives should and should not apply			
Averaging Period	Pollutants	Objectives should apply at ...	Objectives should not generally apply at ...
Annual mean	1,3 Butadiene Benzene Lead Nitrogen dioxide PM <sub>10</sub>	All background locations where members of the public might be regularly exposed.	Building facades of offices or other places of work where members of the public do not have regular access.
		Building facades of residential properties, schools, hospitals, libraries etc.	Gardens of residential properties.
			Kerbside sites (as opposed to locations at the building facade), or any other location where public exposure is expected to be short term
24 hour mean and 8-hour mean	Carbon monoxide PM <sub>10</sub> Sulphur dioxide	All locations where the annual mean objective would apply.  Gardens of residential properties.	Kerbside sites (as opposed to locations at the building facade), or any other location where public exposure is expected to be short term.
1 hour mean	Nitrogen dioxide Sulphur dioxide	All locations where the annual mean and 24 and 8-hour mean objectives apply.	Kerbside sites where the public would not be expected to have regular access.
		Kerbside sites (e.g. pavements of busy shopping streets).	
		Those parts of car parks and railway stations etc. which are not fully enclosed.	
15 minute mean	Sulphur dioxide	Any outdoor locations to which the public might reasonably be expected to have access. All locations where members of the public might reasonably be exposed for a period of 15 minutes or longer.	

## 2.1.2 National Planning Policy Framework

In March 2012 the existing Planning Policy Guidance notes were superseded by the National Planning Policy Framework (NPPF). This document sets out the Government's requirements for the planning system with an emphasis on enabling local people and councils to produce their own local and neighbourhood plans.

The NPPF is based on 12 core planning principles. Three of these are relevant to local air quality management and are summarised below:

Core principle number 7 states that planning should *"...contribute to conserving and enhancing the natural environment and reducing pollution..."*

Core principle number 9 states that planning should *"...actively manage patterns of growth to make the fullest possible use of public transport, walking and cycling..."*

Core principle number 10 states that planning should *"...take account of and support local strategies to improve health, social and cultural wellbeing for all..."*

The NPPF sets out a number of policies in paragraphs. Paragraph 124 specific to air quality and other relevant policies to local air quality management are summarised below:

#### Achieving Sustainable Development - Section 4: Promoting Sustainable Transport:

Paragraph 29. Transport policies have an important role to play in facilitating sustainable development but also in contributing to wider sustainability and health objectives. Smarter use of technologies can reduce the need to travel. The transport system needs to be balanced in favour of sustainable transport modes, giving people a real choice about how they travel. However, the Government recognises that different policies and measures will be required in different communities and opportunities to maximise sustainable transport solutions will vary from urban to rural areas.

Paragraph 30. Encouragement should be given to solutions which support reductions in greenhouse gas emissions and reduce congestion. In preparing Local Plans, local planning authorities should therefore support a pattern of development which, where reasonable to do so, facilitates the use of sustainable modes of transport.

Paragraph 31. Local authorities should work with neighbouring authorities and transport providers to develop strategies for the provision of viable infrastructure necessary to support sustainable development, including large scale facilities such as rail freight interchanges, roadside facilities for motorists or transport investment necessary to support strategies for the growth of ports, airports or other major generators of travel demand in their areas. The primary function of roadside facilities for motorists should be to support the safety and welfare of the road user.

Paragraph 32. All developments that generate significant amounts of movement should be supported by a Transport Statement or Transport Assessment. Plans and decisions should take account of whether:

- the opportunities for sustainable transport modes have been taken up depending on the nature and location of the site, to reduce the need for major transport infrastructure;
- safe and suitable access to the site can be achieved for all people; and
- improvements can be undertaken within the transport network that cost effectively limit the significant impacts of the development. Development should only be prevented or refused on transport grounds where the residual cumulative impacts of development are severe.

Paragraph 33. When planning for ports, airports and airfields that are not subject to a separate national policy statement, plans should take account of their growth and role in serving business, leisure, training and emergency service needs. Plans should take account of this Framework as well as the principles set out in the relevant national policy statements and the Government Framework for UK Aviation.

Paragraph 34. Plans and decisions should ensure developments that generate significant movement are located where the need to travel will be minimised and the use of sustainable transport modes can be maximised. However this needs to take account of policies set out elsewhere in this Framework, particularly in rural areas.

Paragraph 35. Plans should protect and exploit opportunities for the use of sustainable transport modes for the movement of goods or people. Therefore, developments should be located and designed where practical to:

- accommodate the efficient delivery of goods and supplies;
- give priority to pedestrian and cycle movements, and have access to high quality public transport facilities;

- create safe and secure layouts which minimise conflicts between traffic and cyclists or pedestrians, avoiding street clutter and where appropriate establishing home zones;
- incorporate facilities for charging plug-in and other ultra-low emission vehicles; and
- consider the needs of people with disabilities by all modes of transport.

Paragraph 36. A key tool to facilitate this will be a Travel Plan. All developments which generate significant amounts of movement should be required to provide a Travel Plan.

Paragraph 37. Planning policies should aim for a balance of land uses within their area so that people can be encouraged to minimise journey lengths for employment, shopping, leisure, education and other activities.

Paragraph 38. For larger scale residential developments in particular, planning policies should promote a mix of uses in order to provide opportunities to undertake day-to-day activities including work on site. Where practical, particularly within large-scale developments, key facilities such as primary schools and local shops should be located within walking distance of most properties.

Paragraph 39. If setting local parking standards for residential and non-residential development, local planning authorities should take into account:

- the accessibility of the development;
- the type, mix and use of development;
- the availability of and opportunities for public transport;
- local car ownership levels; and
- an overall need to reduce the use of high-emission vehicles.

Paragraph 40. Local authorities should seek to improve the quality of parking in town centres so that it is convenient, safe and secure, including appropriate provision for motorcycles. They should set appropriate parking charges that do not undermine the vitality of town centres. Parking enforcement should be proportionate.

Paragraph 41. Local planning authorities should identify and protect, where there is robust evidence, sites and routes which could be critical in developing infrastructure to widen transport choice.

#### Achieving Sustainable Development - Section 11: Conserving and Enhancing the Natural Environment:

Paragraph 109. The planning system should contribute to and enhance the natural and local environment by:

- protecting and enhancing valued landscapes, geological conservation interests and soils;
- recognising the wider benefits of ecosystem services;
- minimising impacts on biodiversity and providing net gains in biodiversity where possible, contributing to the Government's commitment to halt the overall decline in biodiversity, including by establishing coherent ecological networks that are more resilient to current and future pressures;
- preventing both new and existing development from contributing to or being put at unacceptable risk from, or being adversely affected by unacceptable levels of soil, air, water or noise pollution or land instability; and

- remediating and mitigating despoiled, degraded, derelict, contaminated and unstable land, where appropriate.

Paragraph 110. In preparing plans to meet development needs, the aim should be to minimise pollution and other adverse effects on the local and natural environment. Plans should allocate land with the least environmental or amenity value, where consistent with other policies in this Framework.

Paragraph 120. To prevent unacceptable risks from pollution and land instability, planning policies and decisions should ensure that new development is appropriate for its location. The effects (including cumulative effects) of pollution on health, the natural environment or general amenity, and the potential sensitivity of the area or proposed development to adverse effects from pollution, should be taken into account. Where a site is affected by contamination or land stability issues, responsibility for securing a safe development rests with the developer and/or landowner.

Paragraph 124. Planning policies should sustain compliance with and contribute towards EU limit values or national objectives for pollutants, taking into account the presence of Air Quality Management Areas and the cumulative impacts on air quality from individual sites in local areas. Planning decisions should ensure that any new development in Air Quality Management Areas is consistent with the local air quality action plan.

#### Decision Making - Planning conditions and obligations

203. Local planning authorities should consider whether otherwise unacceptable development could be made acceptable through the use of conditions or planning obligations. Planning obligations should only be used where it is not possible to address unacceptable impacts through a planning condition.

204. Planning obligations should only be sought where they meet all of the following tests:

- necessary to make the development acceptable in planning terms;
- directly related to the development; and
- fairly and reasonably related in scale and kind to the development.

205. Where obligations are being sought or revised, local planning authorities should take account of changes in market conditions over time and, wherever appropriate, be sufficiently flexible to prevent planned development being stalled.

206. Planning conditions should only be imposed where they are necessary, relevant to planning and to the development to be permitted, enforceable, precise and reasonable in all other respects.

### **2.1.3 Government White Paper “The Future of Transport”**

This strategy builds on the progress made since the 2000 implementation of the 10 Year Plan for Transport and extends the UK’s investment plans to 2014-15 and look further forward at the challenges that the UK will face over the next 20 to 30 years.

Objective is “a transport network that can meet the challenges of a growing economy and the increasing demand for travel, but can also achieve our environmental objectives”. This includes providing a freer flowing road network, fast and reliable public transport and making walking and cycling a real alternative for local trips.

The Strategy is built around three central themes: sustained investment over the long term, improvements in transport management and planning ahead.



## National Active Travel Strategy, 2010

The National Active Travel Strategy was published by the Department for Transport and the Department of Health in 2010. It highlights national plans to put walking and cycling at the heart of local transport and public health strategies over the next decade.

The guiding principles state that walking and cycling should be everyday ways of getting around – not just for their own sake but also because of what they can do to improve public health, tackle congestion, reduce carbon emissions and improve the local environment.

## 2.2 Regional Policy

### 2.2.1 Regional Spatial Strategy for the West Midlands

Regional spatial strategies (RSS) provided regional level planning frameworks for the regions of England outside London. RSS became the strategic level plan charged with informing local development frameworks (LDFs) in 2004. Their revocation was announced by the then new Conservative/Liberal Democrat government on 6 July 2010, however the decision to revoke the Regional Strategies through the Localism Bill has been subject to a high court challenge and further legal decisions. On the subject of local air quality the RSS states:

‘Although air quality in the Region is improving, local authorities with poor air quality may need to declare Air Quality Management Areas (AQMA) and to produce action plans to reduce air pollution to meet national standards. Reducing the need to travel will play a key part in this and Regional and local planning policies, together with local transport plans, must play their part in helping reduce air pollution throughout the Region. In developing these plans consideration should be given to how any adverse effects from development on air quality might be mitigated.’

Policies that may be applied to local air quality include the following:

Policy QE4: Greenery, Urban Greenspace and Public Spaces

*“...Local authorities and others should also encourage patterns of development which maintain and improve air quality...”*

Strategy Objective G - *“to ensure the quality of the environment is conserved and enhanced across all parts of the Region”*

Strategy includes headline indicators for achieving urban and rural renaissance, one of which is *“changes in the number of days with poor air quality in different parts of the region”*

Guiding Principle D *“...addressing environmental inequalities in air pollution...”*

## 2.3 Local Policy – County Level

There are currently no AQMAs within Malvern Hills and Redditch District Council areas hence policies of those two councils relating to Air Quality have not been considered in this document at this time. Should it be necessary to declare an AQMA in either of these districts in the future this master Action Plan document will be updated to include local Council policies, AQMA assessment details and AQMA specific actions at that time.

### 2.3.1 Herefordshire & Worcestershire Air Quality Strategy (AQS)

In 2008 the Herefordshire Council and the local authorities of Worcestershire set out a unified approach to managing local air quality across the two Counties in three documents:

- Herefordshire and Worcestershire Air Quality Strategy
- Herefordshire and Worcestershire Air Quality Planning Protocol
- Herefordshire and Worcestershire Air Quality Supporting Documents

The general aims of the strategy is to raise profile of air quality as an issue for consideration within a wide range of local government and regional policies and frameworks including local planning, transport planning, health, industry, housing and environmental protection.

Additionally the AQS provides a framework for a consistent approach to local air quality considerations in development control (planning) processes and links to other initiatives such as Climate Change programmes and future Local Transport Plans. The strategy set out a number of commitments under different subject areas including Planning, Transport, Climate Change and Energy, Health, Industry and domestic sources to achieve those aims. The full document is available to download from the Pollution pages of the WRS website

<http://www.worcsregservices.gov.uk/>

It is noted that since production in 2008 many local and national policies and guidelines referred to in the H & W AQ Strategy and Planning Protocol documents have changed and that an update of these documents is now due. However at this time it is considered appropriate to focus WRS resources on production of the Countywide Action Plan. Amendment to these documents will occur at a later date.

### 2.3.2 Local Transport Plan 3 (LTP3)

Local Transport Plans (LTPs) are documents required by the Transport Act 2000 (amended by the Local Transport Plan 2008). All transport authorities are required to produce an LTP in which they set out their objectives and plans for developing transport in their area over a stipulated period. Worcestershire County Council's third Local Transport Plan (LTP3) sets out the long-term vision, objectives and outcomes for transport in Worcestershire for 2011 to 2026. The plan includes a range of policies, underpinned by a strategic programme of investment in maintenance of the existing network and investments in transport schemes where these can be justified, to deliver the vision and achieve the objectives and outcomes sought.

#### Worcestershire LTP3 Objectives

In accordance with national and local objectives, a series of local transport-specific objectives have been identified for the Worcestershire LTP3. These are shown below in Table 2.3 which is a reproduction of Table 1.2 in the main LTP3 document.

A principal aim of the LTP3 is to deliver the greatest possible benefits through the delivery of cost effective transport infrastructure and services, or in other words, achieving best value for money. Worcestershire County Council will make full use of its Transport Scheme Appraisal Framework to ensure that all proposed and delivered schemes meet this aim (WCC, 2011).

Table 2.3: National, Local and Worcestershire LTP3 objectives (WCC, 2011)

National Transport Objectives	Worcestershire Sustainable Community Strategy Objectives	Worcestershire Third Local Transport Plan (LTP3) Objectives
To support national economic competitiveness and growth, by delivering reliable and efficient transport networks.	Economic success that is shared by all  Stronger Communities	To support Worcestershire's economic competitiveness and growth through delivering a reliable and efficient transport network <b>The Economic Objective</b>
To reduce transport's emissions of carbon dioxide and other greenhouse gases, with the desired outcome of tackling climate change.	A better environment for today and tomorrow	To reduce the impacts of transport in Worcestershire on the local environment, by reducing noise and transport-related emissions of carbon dioxide and other greenhouse gases, with the desired outcomes of tackling climate change and reducing the impacts of transport on public health <b>The Environment Objective</b>
To contribute to better safety security and health and longer life-expectancy by reducing the risk of death, injury or illness arising from transport and by promoting travel modes that are beneficial to health.	Communities that are safe and feel safe	To contribute towards better safety, security, health and longer life expectancy in Worcestershire, by reducing the risk of death, injury or illness arising from transport and promoting healthy modes of travel <b>The Health and Safety Objective</b>
To promote greater equality of opportunity for all citizens, with the desired outcome of achieving a fairer society;	Stronger Communities  Meeting the needs of children and young people	To optimise equality of opportunity for all of Worcestershire's citizens with the desired outcome of creating a fairer society. <b>The Equality Objective</b>
To improve quality of life for transport users and non-transport users, and to promote a healthy natural environment	A better environment for today and tomorrow	To enhance the quality of life for Worcestershire's residents by promoting a healthy, natural environment, conserving our historic built environment and preserving our heritage assets <b>The Quality Of Life Objective</b>
	Economic success that is shared by all  Stronger Communities  A better environment for today and tomorrow	To enhance the quality of Worcestershire's Transport Asset, through sensitive and appropriate design with the desired outcome of reducing the costs and inconvenience of maintenance works <b>The Asset Management Objective</b>

### LTP3 Structure

The Worcestershire LTP3 has been structured as a compendium. A number of topic-specific policies have been developed, as separate documents, to provide additional detail and support the outcomes of the LTP3. The policy and other documents identified by WRS as most relevant to air quality are as follows:

- Transport Accessibility Policy
- Transport and Air Quality Policy
- Cycling Policy
- Development Control (Transport) Policy
- Multimodal Freight Policy
- Integrated Passenger Transport Policy
- Intelligent Transport Systems Policy
- Smarter Choices Policy
- Sustainable Modes of Travel to School Strategy
- Transport and Climate Change Policy
- Traffic and Parking Management Policy
- Walking an Public Realm Policy
- Network Management Plan
- Environmental Report

Within each topic-specific document are a number of specified policy statements. The policy statements within each document relevant to air quality are detailed in Appendix 3 and referred to throughout this AQAP.

The full plan and associated documents can be downloaded from the County Council's website at: <http://www.worcestershire.gov.uk/cms/local-transport-plan.aspx>

### LTP3 Timeline

Previous local transport plans for Worcestershire were developed to cover five-year periods, from 2001 to 2006 and then 2006 to 2011. Recent government guidance has given local transport authorities the freedom to locally decide the length of local transport plans. Worcestershire has chosen to develop the LTP3 for a longer plan period (from 2011 to 2026), as this will enable Worcestershire County Council to be more strategic, and where justified, ambitious in its aims for maintaining and enhancing Worcestershire's transport networks. In particular, this will enable the development of major schemes, as identified in Section 11 of the LTP3 document (WCC, 2011)

### Major Schemes identified in LTP3

Major schemes involve substantial investment (in excess of £5 million) in transport infrastructure and services and are designed to deliver commensurately large benefits to Worcestershire's economy, environment and quality of life. Worcestershire will bid for funding from central government and the private sector to fund these schemes during the 15-year life of the Local Transport Plan.

The major schemes outlined within the LTP3 main document are as follows:

- Evesham Abbey Bridge and Viaduct
- Worcester Transport Strategy (Phase 1)
- Worcestershire Parkway
- Kidderminster Transport Strategy
- Redditch Transport Strategy



With the exception of the Redditch Transport Strategy all of the above major schemes will potentially provide benefit to existing AQMAs. Another major scheme, not outlined in LTP3 but detailed on WCC webpages, that will have potential impact on current AQMAs is the New Bromsgrove Rail Station Interchange. A brief outline of these schemes pertinent to LAQM and the current proposed timelines are provided in table 2.4 below.

Table 2.4: Proposed major and other significant transport schemes pertinent to LAQM

Major Scheme	Current Status/Timescale for Delivery	Potentially Benefitting AQMA(s)
<b>Worcester Transport Strategy (Phase 1) Major Scheme</b>		
<p>The scheme involves the delivery of an integrated package of inter-related transport measures specifically developed to support the performance of the economy and improve the local environment through:</p> <ul style="list-style-type: none"> <li>■ Strategic Highways Improvements: Enhancements to the key junctions on the Worcester Southern Link Road, to improve traffic flow, particularly at peak times and reduce transport costs to businesses and road users;</li> <li>■ Rail Station Enhancements: This will involve investment and improvement in passenger and interchange facilities at Worcester Foregate Street and Malvern Link stations, helping to improve the quality of rail travel and encourage increased use of these under-utilised transport assets. The improvements to passenger facilities to Worcester's Foregate Street will include upgrading of signage, the ground level waiting area, information and ticketing facilities, lighting, security and improved sheltered walk links to Foregate Street and its taxi ranks and bus stops.</li> <li>■ Key Corridor Improvements: This will involve investment in key corridors to improve the quality of transport infrastructure and public realm along these routes. This will help to smooth traffic flows and improve conditions for all road users;</li> <li>■ Transport Information Systems: Measures to provide users with better, more accurate information on the transport network, with the aim of increasing network efficiency. For example, variable message signs will direct car drivers to city centre car parks which have available capacity, while public transport users will be provided with real time information on services via mobile phones and at stop/station signs.</li> <li>■ Improved infrastructure for walking and cycling: This would involve enhancements designed to encourage more local trips on foot and by bike. The improvements to passenger facilities to Worcester's Foregate Street will be on the ground level and include upgrading of the waiting area, signage, information, shelters, lighting and security.</li> </ul>	<p>Following a competitive bidding process the Worcester Transport Strategy Phase One project has been awarded £14.2million. The proposals to make travelling around the area easier will be put in place between 2012 and 2015.</p>	<p>Lowesmoor/ Rainbow Hill, Worcester</p>

<b>Evesham Abbey Bridge and Viaduct Major Scheme</b>		
<p>This scheme involves the complete replacement of the Abbey Bridge in Evesham and the viaduct which approaches it. This scheme will maintain, and potentially improve accessibility into Evesham Town Centre.</p>	<p>Works began in spring 2013 and due for completion by 2014.</p>	<p>Port Street, Evesham</p>
<b>Worcestershire Parkway Major Scheme</b>		
<p>This scheme involves the development of a new parkway station at the intersection of the Bristol to Birmingham/North West/North East and the Worcester - London (Cotswolds Line) main line railways, close to junction 7 of the M5. This station would provide significantly improved direct access to national (inter-city express) rail services from Worcestershire, and provide significant opportunities for local economic growth. This scheme will:</p> <ul style="list-style-type: none"> <li>•Improve access (particularly by car) to direct rail services from Worcestershire to London, the South West, South Wales, Birmingham and beyond</li> <li>•Significantly reduce journey times to key regional and national destinations</li> <li>•Enable interchange between the Worcester – London (Cotswold Line) and Cross Country services</li> <li>•Benefit the Worcestershire economy and support economic growth as access to and from the county will be improved.</li> </ul>	<p>In February 2013 WCC bid for major funding from Network Rail's 'New Stations Fund' to progress this scheme further. No update as to the success of the bid at this time.</p>	<p>No specific AQMAs identified from available information</p>
<b>Kidderminster Transport Strategy Major Scheme</b>		
<p>This scheme will be developed following detailed technical work to identify an integrated package of inter-related transport measures specifically targeted at supporting the performance of the local economy and improving the environment in Kidderminster and its hinterland. These measures will include a number of schemes as identified in the Wyre Forest Core Strategy, to support the ReWyre initiative to regenerate Kidderminster as a thriving centre of socio-economic activity. The first phase of the scheme proposed the Hoobrook Link Road. This will connect the A442 Worcester Road to the A451 Stourport Road via the old British Sugar site (situated to the south of Kidderminster Town centre).</p>	<p>WCC has recently secured £4.9million from DfT towards the Hoobrook Link Road phase of the scheme. A planning application should be submitted in August 2013 and if the remaining funds are found it is hoped that construction could commence in December 2014.</p>	<p>Horsefair, Kidderminster</p>

<b>Bromsgrove Rail Station Interchange Major Scheme</b>		
<p>This scheme will see the station moved further south to allow Network Rail to electrify the line from Barnt Green to Bromsgrove. This strategic project will also allow the train companies to increase the frequency of the rail service between Bromsgrove and Birmingham. Improved facilities and better integration with local bus services will make it more attractive for people to use the train to travel between Bromsgrove and Birmingham and Worcester, reducing congestion, carbon emissions and making it easier to access the town. Proposals include:</p> <ul style="list-style-type: none"> <li>■ A car park with approximately 350 spaces designed to current standards in terms of security, lighting, ticketing, customer facilities and information. Parking charges will be similar to today.</li> <li>■ A modern station building which may include toilets, ticket desk and a retail facility</li> <li>■ Four platforms connected by a covered footbridge and lifts, designed to be fully accessible for all</li> <li>■ Secure covered cycle storage, motor cycle parking, electric car parking and charging points</li> <li>■ Direct access to local bus services through a bus / rail interchange</li> <li>■ A taxi rank and drop off / pick up point</li> <li>■ Alterations to New Road to remove parking from the west side to improve access to the new station</li> <li>■ New access road to the station directly from Stoke Road</li> <li>■ Restrictions on parking on streets close to the station</li> </ul>	<p>Public consultation completed on 17th March 2013. WCC will use the results of the consultation to finalise the design to be submitted for planning approval in Autumn 2013.</p> <p>Should the scheme be approved WCC hope construction of the new station will begin in 2014 and scheduled to open in Summer 2015</p>	<p>Bromsgrove AQMAs</p>

### Worcestershire County Council's Packaged Approach to Delivering LTP3

The LTP3 main document states: '...WCC will seek to group transport schemes together as packages of investment. Packaging investments in a range of modes of transport generally delivers far greater benefits, and thus increases the value for money and business case for investment. It is vital, therefore, that schemes within each package are integrated such that benefits to the economy, environment and quality of life are maximised. This is critical in an era where Worcestershire will be required to compete for funding. Each of these packages will be incorporated with a broad area strategy.'

LTP3 main document also notes: 'Without contributions from alternative sources, including private sector contributions, many of the schemes and packages identified below will not be deliverable. It will be important, therefore, that the LTP3 is closely aligned with the relevant Local Development Plans and Core Strategies and that new developments are accompanied with appropriate investment in transport infrastructure and services, such that the Worcestershire economy, environment and quality of life are not undermined.'

The three area strategies identified within LTP3 are as follows:

- North East Worcestershire including the Bromsgrove Urban, Redditch Urban and North East Worcestershire Rural Packages;
- South Worcestershire including the Worcester Urban, Droitwich Spa Urban, Great Malvern Urban, Tenbury Wells, Upton upon Severn and the South Worcestershire Rural Packages;
- Wyre Forest including the Kidderminster Urban, Stourport-on-Severn Urban, Bewdley Urban and Wyre Forest Rural Packages.

Schemes identified from the Strategic Delivery Programme as directly relating to, or with the potential to benefit, local air quality within the above packages are outlined and referred to within this AQAP.

### **2.3.3 Local Climate Change Policies**

At the County level, the Worcestershire Partnership has made tackling climate change a key crosscutting issue throughout its Sustainable Community Strategy. The Worcestershire Climate Change Task Group has developed the Worcestershire Climate Change Strategy and Pledge, which many key county organisations have signed up to. The Worcestershire Local Area Agreement (LAA), a three year agreement negotiated between key partner organisations to tackle key issues in the county, includes a number of targets to tackle climate change that are aligned with key priorities identified to improve local air quality.

**Worcestershire County Council** has signed up to the Worcestershire Climate Change Pledge. As part of this pledge, organisations have committed to a number of actions to tackle climate change.

- Raise awareness of climate change issues with staff and in organisations activities.
- Monitor and reduce energy use.
- Insulate buildings and encourage staff to do so.
- Minimise waste by using less and recycling more.
- Set targets to reduce carbon emissions.
- Assess likely impacts of climate change and make plans to adapt.
- Implement a staff travel plan.



- Operate a sustainable purchasing policy.
- Use renewable energy.

Actions undertaken by WCC as part of their climate change strategy include:

- Implementation of the Sustainable Travel Town project, branded Choose How You Move in Worcester City which has delivered a reduction in single occupancy car use of 12 % amongst households participating in the project. The Choose How You Move scheme in Redditch will be the main focus for transport related CO<sub>2</sub> savings in the early part of this decade.
- Support the roll out of broadband and home working practices enabling ICT to reduce need to travel by enabling home working, virtual meetings etc.
- Support for electric vehicle technology via 'Plugged in Places' funding.
- Encouraged the development of both School and Employer Travel Plans, which aim to reduce single occupancy car use.
- Promote the Worcestershire Car Share database.
- Developed an Eco-Driving Course which demonstrates simple principles designed to reduce fuel consumption by at least 10 to 15 per cent, reducing costs, CO<sub>2</sub> emissions and accidents.
- Developed a new integrated passenger transport website providing greater access to passenger transport information.
- Improved the availability of passenger transport information so that it is more accessible through libraries and the Worcestershire Hub to those wishing to choose an alternative to the private car
- Implementation of Worcestershire's Walking & Public Realm Policy providing a strategic framework for the development of measures which will help to make journeys on foot safer, easier and more pleasant.

**Bromsgrove District Council** and Redditch Borough Council are signatories of the Nottingham Declaration and key partners in the delivery of the LAA. Over 300 local councils have signed up to the Nottingham Declaration, each pledging to actively tackle climate change in their area and help the UK deliver its national climate change targets. BDC and RBC have produced a combined Climate Change Strategy and Action Plan 2010 – 2013. Section 7 of the climate change strategy identifies a number of themes and Transport is the most relevant theme to local air quality.

The climate change strategy recognises traffic congestion is an issue which can cause air quality problems and health impacts within the Bromsgrove area and that 'future development must include the provision of a sustainable transport network if these issues are to be improved.'

Strategic Transport Actions identified:

- Encourage partner organisations to ensure that key services are accessible to everyone via public transport
- Planning Departments to influence sustainable travel options in new developments

- Identify vulnerabilities relating to transport in a changing climate e.g. the impact of melt point of tarmac during heat waves
- Encourage use of walking and cycling to achieve significant health benefits
- Establish a Council Travel Plan for own business miles including options of car sharing and public transport
- Review staff mileage reimbursement rates

The Climate Change Strategy within Bromsgrove is managed by the Better Environment Theme Group.

**Worcester City Council** has signed up to the Nottingham Declaration and the Worcestershire Climate Change Pledge. WC produced a Climate Change Strategy in 2009. The strategy's objectives closely follow the actions outlined in the Worcestershire Climate Change Pledge as detailed above.

**Wychavon District Council** outlines the council's climate change strategy within 'Intelligently Green Plan 2012 – 2020'. The plan focuses on four subject areas for improvement: Energy, Construction, Food Tourism and Green Spaces, and Transport. Clearly the latter is the most significant in terms of air quality. The strategy for reducing carbon from transport is as follows:

- Raise local employers' awareness of green fleet reviews and the benefits of reducing fuel costs and emissions in Wychavon through the Worcestershire Local Enterprise Partnership, Wychavon magazine and Business Briefings.
- Raise awareness of car sharing and the Worcestershire Car Share Database by targeting the top ten employers in the district with information and marketing
- Host a training event for parish councils, volunteer centres and community groups to raise the profile of developing a community car scheme
- Deliver the objectives contained within the Wychavon Travel Plan
- Ensure that enhanced cycle routes and connections are identified and delivered through the allocated development sites in the South Worcestershire Development Plan.
- Review existing cycle provision at all train stations and major bus interchanges in Wychavon and work with Worcestershire County Council and Network Rail to identify whether there are opportunities to enhance cycle and vehicle parking provision at these sites to encourage greater use of public transport.
- Locate and install an electric car charging point for public use in each town within the district.
- Exploit opportunities (e.g. New Homes Bonus, section 106 agreements, other funding) to create circular routes, which are suitable for pedestrians, cyclists and mobility vehicles, around the three main towns and connections to improve access to and from surrounding areas.
- Work with Worcestershire County Council to explore the potential for car share parking points at key locations near major roads.

**Wyre Forest District Council** has signed up to the Worcestershire Climate Change Pledge, Have produced a strategy and produce a Wyre Forest Climate Change Action Plan each year. Key Theme 6 within the Wyre Forest Climate Change Strategy outlines the plans for 'Reducing Energy Use and Emissions from Transport' as follows:

Partners to lead by example e.g. develop green travel plans, procure energy efficient vehicles, and promote 'eco-driving' amongst staff.

Actively participate in the delivery of countywide transport activity e.g. development of school and employer travel plans, delivery of actions in local transport plans, policies and strategies, Worcestershire Car Share Database.

- Work with partners to improve the quality and accessibility of the bus network in the district, e.g. through implementation of bus priority measures.
- Work with partners to implement improvements to the local rail network facilities and services, including the delivery of improved facilities at Kidderminster station.
- Work with partners to identify and provide Park and Ride facilities in the district.
- Develop and deliver planning policies that reduce the need to travel incorporate the development of a sustainable transport infrastructure.
- Promote the purchase of locally produced goods and services.
- Raise awareness about more sustainable transport choices e.g. by providing information about public and community transport options and promoting local walking and cycling maps.
- Continue to enable local people to have a voice about transport issues through forums such as the Wyre Forest Cycle Forum.

#### **2.3.4 Local Planning Policy**

Due to recent changes by central government and the introduction of the NPPF, local authorities are currently in the process of rewriting their local development plans to replace the previous Local Development Frameworks. The current status is as follows:

- Bromsgrove DC and Redditch BC have delayed publication version Local Plans until further work has been undertaken to address Housing Growth in Redditch. A consultation on that subject begins on 1<sup>st</sup> April 2013.
- Worcester City, Wychavon DC and Malvern Hills DC are working in partnership to produce the South Worcestershire Development Plan. Consultation was completed in February 2013 and the final version of the plan is due to be produced and adopted later this year.
- No current timeline for delivery of Wyre Forest DC new plan could be identified during the production of the AQAP.

Future versions of the AQAP will include any relevant policies included in revised Local Development Plans when the information becomes available.

It should be noted the AQAP becomes local policy through adoption by the Local Authority.

### **2.3.5 Other legislation**

The Clean Air Act 1956, extended in 1968, consolidated in Clean Air Act 1993: Regulates black and dark smoke produced by industry; smoke, dust, grit and fumes from boilers and non EA responses; Smoke Control Areas. Since all AQMAs within Worcestershire have been declared because of NO<sub>2</sub> this legislation is not relevant to the AQAP.

### 3 Air Quality Management Areas in Worcestershire

Currently there are ten declared Air Quality Management Areas (AQMAs) in Worcestershire. These are situated within the Bromsgrove, Worcester City, Wychavon and Wyre Forest Districts. No AQMAs have been declared within Malvern Hills District Council and Redditch Borough Council areas to date.

At the time of writing the action plan WRS are in the process of preparing committee reports recommending revocation of Newtown Road AQMA and declaration of a new AQMA in St Johns for Worcester City Council to consider. Additionally declaration of an AQMA in Stourport on Severn by Wyre Forest District Council will need to be considered following further assessment in the future. These three areas are not considered any further in this AQAP. Information relating to any new AQMAs will be incorporated into the master Final Action Plan following declaration of an AQMA and the finalisation of a Further Assessment Report as required by Defra.

Table 3-1 below provides a summary of the general details of each current and potential AQMA in Worcestershire.

The following pages of this section present a review of all available data to identify issues for consideration for each of the nine current AQMAs including:

- Current AQMA boundary plan and description;
- Prevailing conditions including photos from site visits 2012/13;
- Summary of Further Assessment report;
- Source apportionment data;
- Required reductions to achieve objectives identified from modelling;
- Long term local trends from monitoring data in the last decade;
- Any actions implemented as a result of earlier Action Plans;
- Any relevant actions planned or implemented identified from Local Transport Programme 3 (LTP3);
- Summary of action plans of neighbouring Local Authorities outside Worcestershire with AQMAs that bound onto Worcestershire AQMAs;
- Summary of Issues identified.



**Table 3-1 Overview of current and potential AQMAs in Worcestershire.**

District	AQMA	Date Declared	Previous Action Plans	Actions Implemented
Bromsgrove	Kidderminster Road, Hagley	17.02.2010	None	Further Assessment completed March 2012.
Bromsgrove	Lickey End	26.07.2001	Oct 2004	Refer to AQMA Review and Appendices for summary of previous actions considered.
Bromsgrove	Redditch Road	17.02.2010	None	Further Assessment completed March 2012.
Bromsgrove	Worcester Road	24.10.2011	None	Further Assessment completed March 2012.
Worcester City	Bridge Street/ Dolday	01.03.2009	Sept 2010 (Incomplete Draft/WIP)	Further Assessment completed August 2010.
Worcester City	Lowesmoor/ Rainbow Hill	01.03.2009	Sept 2010 (Incomplete Draft/WIP)	Further Assessment completed August 2010.
Worcester City	Newtown Road	01.03.2009	Sept 2010 (Incomplete Draft/WIP)	AQMA to be revoked 2013 following the conclusions of Further Assessment completed August 2010.
Worcester City	St Johns	TBC	None	Declaration to be considered by WCC 2013
Wychavon	Port Street, Evesham	01.09.2007	Dec 2009 (Draft)	Continual monitoring within AQMA demonstrated results fallen below objective but AQAP to be finalised and actioned (PR, 2010). Communications with County Council re implementation of MOVA traffic light system at Waterside/Port Street junction. Features in LTP3 to be considered in conjunction with Abbey Bridge development now due 2013.
Wyre Forest	Horsefair, Kidderminster	06.01.2003 Extended 29.07.2009	2004	Refer to AQMA Review and Appendices for summary of previous actions considered.
Wyre Forest	Stourport-upon- Severn	TBC	None	Declaration to be considered by WFDC 2013
Wyre Forest	Welch Gate, Bewdley	06.01.2003	2004	Refer to AQMA Review and Appendices for summary of previous actions considered.

**Table 3-2 Summary of Contributory Factors and Local Impacts for AQMA in order of levels of exceedence**

AQMA	AADT	Source Appt. Main Contributor	Street Canyon	Approx. No. of residential properties in AQMA	Predicted no. of people affected by exceedence	1 hour NO <sub>2</sub> objective applicable	No of exceedences of annual NO <sub>2</sub> objective recorded 2007-11/ No. of monitoring positions	Highest model predicted NO <sub>2</sub> / and monitored in 2007 - 11		Reduction in total vehicle emissions required
Horsefair	TBC	Modelling required	Y	97	NQ	N	14/4 <sup>1</sup>	NQ	74.1	NQ
Lowesmoor	TBC	Cars/LGVs 30–45%	Y	327	100+	N	8/4 <sup>2</sup>	56.2	60.4 <sup>3</sup>	50%
Worcs Rd	TBC	Cars/LGVs 41.3%	Y x 2	55	10 - 100	N	15/8 <sup>4</sup>	54.9	59.8	25 – 50%
Welch Gate	TBC	Modelling required	Y	20	NQ	N	5/2	NQ	50.3	NQ
Dolday	TBC	HDV 30-45 %	Y	149	10 - 100	N	4/2 <sup>5</sup>	57.5	46.6 <sup>6</sup>	50%
Lickey End	TBC	Modelling required	N	29	NQ	N	10/3	NQ	46.5	NQ
Redditch Rd	TBC	Cars 26%, HDV 22.5%	Y x 2	44	10 - 100	N	9/3	46.2	45.6	25%
Hagley	TBC	HGV 32.5%	N	112 + 3 block flats	<10	N	2/4 <sup>7</sup>	42.7	42.8	10 – 25%
Port St	TBC	Cars 39.3%	Y	86	<10	N	1/8	41.5	41.7	10%

<sup>1</sup> Horsefair – only 3 locations 2007;<sup>2</sup> Lowesmoor – only 1 location 2007 – 08<sup>3</sup> Requires calculation back to nearest receptor;<sup>4</sup> Worcs Rd - 2 Locs 2007, 4 locations 2008-09, 8 locations 2010-11;<sup>5&6</sup> Dolday Discounts automatic monitoring results 2008 and requires calculation back from roadside to Façade;<sup>7</sup> Hagley – 2 Locs 2007, 4 locations 2008 – 11