

Worcestershire  
**Regulatory Services**

*Supporting and protecting you*

## Air Quality Action Plan Progress Report for Worcestershire April 2015 – March 2016

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

September 2016

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# 1. INTRODUCTION

## 1.1 Purpose of Air Quality Action Plan Progress Report

This report fulfils the requirements of the Local Air Quality Management (LAQM) process as set out in Part IV of the Environment Act (1995), the Air Quality Strategy for England, Scotland, Wales and Northern Ireland 2007 and the relevant Policy and Technical Guidance documents.

An air quality action plan progress report is required to be submitted to DEFRA by the end of June each year.

This progress report covers the period of 1<sup>st</sup> May 2015 to 31<sup>st</sup> March 2016. It includes updates for the following administrative areas in Worcestershire.

- Bromsgrove District Council
- Worcester City Council
- Wychavon District Council
- Wyre Forest District Council

There are currently no declared AQMAs in the Malvern Hills District or Redditch Borough, therefore these areas are not discussed further in this Progress Report document.

## 1.2 Air Quality Objectives

The air quality objectives applicable to LAQM in England are set out in the Air Quality (England) Regulations 2000 (SI 928), The Air Quality (England) (Amendment) Regulations 2002 (SI 3043), and are shown in Table 1.1. This table shows the objective pollutant concentrations in units of microgrammes per cubic metre  $\mu\text{g}/\text{m}^3$  (milligrammes per cubic metre,  $\text{mg}/\text{m}^3$  for carbon monoxide) with the number of exceedences in each year that are permitted (where applicable) along with the compliance date for each objective.

**Table 1.1 Air Quality Objectives included in Regulations for the purpose of LAQM in England**

Pollutant	Air Quality Objective		Date to be achieved by
	Concentration	Measured as	
Benzene	16.25 µg/m <sup>3</sup>	Running annual mean	31.12.2003
	5.00 µg/m <sup>3</sup>	Annual mean	31.12.2010
1,3-Butadiene	2.25 µg/m <sup>3</sup>	Running annual mean	31.12.2003
Carbon monoxide	10 mg/m <sup>3</sup>	Running 8-hour mean	31.12.2003
Lead	0.50 µg/m <sup>3</sup>	Annual mean	31.12.2004
	0.25 µg/m <sup>3</sup>	Annual mean	31.12.2008
Nitrogen dioxide	200 µg/m <sup>3</sup> not to be exceeded more than 18 times a year	1-hour mean	31.12.2005
	40 µg/m <sup>3</sup>	Annual mean	31.12.2005
Particulate Matter (PM <sub>10</sub> ) (gravimetric)	50 µg/m <sup>3</sup> , not to be exceeded more than 35 times a year	24-hour mean	31.12.2004
	40 µg/m <sup>3</sup>	Annual mean	31.12.2004
Sulphur dioxide	350 µg/m <sup>3</sup> , not to be exceeded more than 24 times a year	1-hour mean	31.12.2004
	125 µg/m <sup>3</sup> , not to be exceeded more than 3 times a year	24-hour mean	31.12.2004
	266 µg/m <sup>3</sup> , not to be exceeded more than 35 times a year	15-minute mean	31.12.2005

## 2. BROMSGROVE DISTRICT COUNCIL

### 2.1 Air Quality Management Areas

Air Quality Management Areas (AQMAs) are declared when there is an exceedance or likely exceedance of an air quality objective. Following declaration, the authority must prepare an air quality action plan (AQAP) within a 12-18 month period setting out measures it intends to put in place in pursuit of the objectives.

A summary of AQMAs declared by Bromsgrove District Council can be found in Table 2.1. Further information related to declared or revoked AQMAs, including maps of AQMA boundaries are available online at

<http://www.worcsregservices.gov.uk/pollution/air-quality/air-quality-management-areas.aspx>.

**Table 2.1 – Declared Air Quality Management Areas**

AQMA Name	Pollutants and Air Quality Objectives	City / Town	One Line Description	Action Plan
<b>Worcester Road AQMA</b>	NO <sub>2</sub> annual mean	Bromsgrove	Mixed residential and commercial street. Some parts street canyon. Main route into the town centre from the south west.	Air Quality Action Plan for Worcestershire, 2013 and subsequent Air Quality Action Plan for Worcestershire Progress Report 2013-2015
<b>Redditch Road AQMA</b>		Stoke Heath, Bromsgrove	Part of ring road around Bromsgrove town centre towards M42 J1. Some residential properties very close to road.	
<b>Lickey End AQMA</b>		Lickey End, Nr Bromsgrove	Junction of M42 and A38.	
<b>Hagley AQMA</b>		Hagley	Main commuter route from Worcestershire to Birmingham.	

## 2.2 Priority Actions for the AQMAs within Bromsgrove District

The action plan for Worcestershire identified many potential air quality solutions for each AQMA but it is recognised that some are not actionable simultaneously due to a variety of constraints. With this in mind WRS conducted a “priority actions” process in 2014 for each AQMA. The top five priority actions established for the Bromsgrove District AQMAs are outlined in Table 2.2 below. Full detail on these measures and the prioritisation methodology can be found in the full Air Quality Action Plan for Worcestershire (September 2013) document and the Air Quality Action Plan for Worcestershire Progress Report 2013-2015 (October 2015), both available online at <http://www.worcsregservices.gov.uk/environmental-health/pollution/air-quality/air-quality-action-plan.aspx>

**Table 2.2 Priority actions for the Bromsgrove District AQMAs**

AQMA	AQAP Action Ref Number	Action Description
<b>Hagley AQMA</b>	5.1.1	Alteration to the phasing of the traffic light systems
	5.2.2	Freight quality partnership
	KR5	Junction review – significant queuing traffic in both directions on A456 heading for A491 Stourbridge Road junction
	5.1.8	Introduction of traffic signals at roundabout
	5.1.4	Variable message signage to include traffic information, car park information, bus and rail connections etc.
<b>Lickey End AQMA</b>	5.1.1	Alteration to the phasing of traffic light systems
	5.3.4	Promote flexible working arrangements
	LE4	Junction review - narrowing of two lanes into one causes

		bottleneck at top of A38 South
	LE6	Traffic exiting Barnsley Hall Road causes congestion - introduce no right turn restriction
	LE7	Traffic turning right into Harvester Public House from A38 south causes congestion – introduce no right turn restriction
<b>Redditch Road AQMA</b>	5.1.1	Alteration to phasing of traffic light systems
	5.2.2	Freight quality partnership
	5.3.4	Promote flexible working arrangements
	RR7	Two in-road bus stops on carriageway either side of central street canyon
<b>Worcester Road</b>	5.3.8	Promote and support walking and cycling initiatives in Worcestershire
	5.3.1	Travel Planning
	WR3	Zebra crossing at Hanover Street/Worcester Road junction causes congestion
	WR9	Local school traffic causes congestion exiting Shrubbery Road – requires junction review

## 2.3 Progress and Impact of Measures to address Air Quality in Bromsgrove District

Worcestershire County Council is currently in the process of completing its fourth Local Transport Plan (LTP4), which is due out for consultation later this year.

Draft LTP4 includes the Bromsgrove Transport Strategy which comprises a series of packages for the Bromsgrove area. One of the stated aims of LTP4 will be the



remediation of the Worcester Road, Redditch Road and Lickey End AQMAs. The most pertinent packages are as follows:

- Worcester Road/Rock Hill Key Corridor of Improvement (including Worcester Road AQMA remediation)
- Bromsgrove Eastern Bypass Key Corridor of Improvement Major Scheme (A38) (including remediation of the Redditch AQMA)
- Lickey End (M42 Junction 1) Major Enhancement Scheme and Lickey End AQMA Remediation

Worcestershire Regulatory Services will continue to liaise with the County Council in the development of these packages to ensure that remediation of the AQMAs remain a strategic transport priority. Over the past five years WRS has experienced closer working ties with the County Council's Strategic Transport Team and it is anticipated that collaboration on their strategic policies and improvement schemes at the early planning stages will ensure that air quality improvements remain a priority across all of Worcestershire infrastructure.

WRS is currently being consulted on the draft business case for the Bromsgrove Eastern Bypass Key Corridor (A38) Improvement Major Scheme and has provided comment in relation to the proposals and the remediation of the relevant AQMAs in the area. Worcestershire County Council currently have £1.8m allocated for detailed review and redesign of the bus network in Bromsgrove. Progress in relation to specific priority actions is detailed below.

## 2.4 Hagley AQMA

### **Progress with action 5.1.1 and KR5 – Alteration of the phasing of traffic light systems / Review of signalised junction at Kidderminster Rd/Birmingham Rd/Stourbridge Rd Junction**

Worcestershire County Council has confirmed that this action has been completed: The signal set controller apparatus was updated on 20/04/2015 to MOVA which gradually optimises the signals operation according to observed demand.

WCC further advised in July 2016 that *‘The equipment at Hagley is the very latest technology, so further investment in signalling infrastructure here is not required’* and *‘ traffic flow is starting to settle down now in Hagley, which suggests that the signal calibration process is nearing completion’*

### **Progress with action 5.1.4 – Variable Messaging Systems to redirect vehicles away from AQMA (and other relevant messages)**

No progress at this time: In Oct 2015 Worcestershire County Council confirmed plans to install Variable Messaging Systems (VMS) signs across the County. The strategy is to complete a ring of VMS signs around Worcester City in 2016 then replicate this in Bromsgrove and Kidderminster areas as funding is identified.

### **Progress with action 5.1.8 – introduction of signals at roundabouts**

Worcestershire County Council has confirmed this action has been completed: *“Developer led reconstruction of the Hagley Roundabout (A456/A491) with signals was opened to the public on the 22/01/2015. Minor alignment revisions were made to lining / destination lining on the 06/03/2015. Revisions were made to the A491 northbound access onto the roundabout on the 21/08/2015. Each set of signals is operating using MOVA (WCC June 2015).”*

## **Progress with action 5.2.2 – Freight quality partnership**

On-going: This action is designed to encourage freight vehicles to avoid AQMA and find alternative routes. Further discussion with County Highways in 2014 identified two separate approaches:

- 1) use of paper HGV route maps is now outdated, work should focus on updating data with sat nav companies to ensure route planning avoids AQMAs.
- 2) A wider FQP that potentially restricts HGV access to AQMAs could form part of a wider Transport Strategy for Worcester. In 2015 Worcestershire County Council confirmed they provide update information for Sat Nav technology providers on an on-going basis.

Details have only been provided above for actions that are priority actions. For details of progress made with both priority and non-priority actions during the reporting year please see Table 2.3. For actions where no progress has been made in the reporting year the details of progress made to date can be found in the Air Quality Action Plan for Worcestershire Progress Report 2013-2015 (October 2015, available online at

<http://www.worcsregservices.gov.uk/environmental-health/pollution/air-quality/air-quality-action-plan.aspx>

## **Timeline for Implementation**

There is currently no indicative timeline for any further actions in Kidderminster Road, Hagley at this time.

It is envisaged that the implementation of action 5.1.1/KR5 and 5.1.8 in 2015 will result in consistently below AQO concentrations of nitrogen dioxide in future years enabling the resolution of the AQMA. WRS will continue to monitor concentrations in the AQMA throughout 2016 and review in 2017.

WRS will continue to support Worcestershire County Council as necessary in pursuit of funding for the implementation of any initiatives to improve air quality in the wider Bromsgrove area.

**Table 2.3 – Progress on Measures to Improve Air Quality in Hagley AQMA IN REPORTING YEAR**

Measure No.	Measure	EU Category	EU Classification	Lead Authority	Planning Phase	Implementation Phase	Key Performance Indicator	Target Pollution Reduction in the AQMA	Progress to Date	Estimated Completion Date
PRIORITY ACTIONS										
5.1.1/KR5	Alteration to phasing of traffic light systems/Junction review	Traffic Management	Strategic highway improvements and congestion reduction	Worcestershire County Council	COMPLETED 2013 - 14	COMPLETED 20/04/2015	Improved Traffic Flow	5-10%	See text above (Section 2.4)	COMPLETED
5.1.4	Variable Message Systems	Traffic Management	Other	Worcestershire County Council	Currently Unknown	Currently Unknown	Decrease in traffic movements through AQMA	1%	See text above (Section 2.4)	Currently unknown
5.1.8	Introduction of signals at roundabout	Traffic management	Strategic highway improvements and congestion reduction	Worcestershire County Council	COMPLETED 2014 - 15	COMPLETED 2015	Improved Traffic Flow	5-10%	See text above (Section 2.4)	COMPLETED
5.2.2	Freight Quality Partnership – work with satellite navigation companies to route HGVs around AQMAs	Traffic Management	UTC, congestion management, traffic reduction	Worcestershire County Council	COMPLETED 2014 - 15	On-going.	Fewer HGVs travelling through AQMA	5-10%	See text above (Section 2.4)	On-going duty under Traffic Management Act 2004

NON-PRIORITY ACTIONS										
5.2.5	Greening Council and Business Fleets	Promoting Low Emission Transport	Procuring alternative Refuelling infrastructure to promote Low Emission Vehicles, EV recharging, Gas fuel recharging	Bromsgrove District Council, Worcestershire County Council	2015-2017	2018 Onwards	Increase in number of Council and business fleet vehicles of higher Euro Standard and/or utilising alternative fuels	1%	Proposed Compressed Natural Gas Station in Bromsgrove/Redditch has stalled due to a number of obstacles (financial, strategic, political) plus specific industrial constraints and limitations of the existing highway network. WCC have indicated that development of such a facility would need to be supported by relevant policy before the case would be explored any further.	It is anticipated that the Local Transport Plan 2017 will be developed to incorporate policy on alternative fuels and associated infrastructure.
5.2.10	Installing electric vehicle charging points	Promoting Low Emission Transport	Procuring alternative Refuelling infrastructure to promote Low Emission Vehicles, EV recharging, Gas fuel recharging	Bromsgrove District Council, Worcestershire County Council	2013	2014 onwards	Increase in availability of EV charging points and corresponding increase in use of electric vehicles	1%	Recommendations for installation of EV Charging Points routinely recommended by WRS on relevant planning consents. To be formalised in SPD currently being drafted by WRS officers. Progress delayed by approx. 15 months due to conflicting priorities	Estimate formal adoption by District Council by end 2017.
5.3.1	Travel Planning	Promoting Travel Alternatives	Personalised travel planning	Worcestershire County Council	Currently taking place	2017 onwards	Increased uptake of alternative modes of transport	<1%	Personalised travel planning program planned as part of wider health improvement drives from County Council who are currently preparing a bid for the DfTs Access Fund to move project forward. County Council currently developing a "one-stop-shop" online travel portal due to be rolled out in 2017.	Estimated end 2017
5.3.2	Car Sharing	Alternatives to private car use	Car and lift sharing schemes	Worcestershire County Council	2014 – 2015 COMPLETED	Liftshare Scheme launched Autumn 2015	Increase in number of people car sharing	<1%	Liftshare Scheme launched in Autumn 2015	Liftshare website scheme launched Autumn 2015. Currently operating

5.3.4	Promote flexible working arrangements	Promoting travel alternatives	Encourage/facilitate home-working	Worcestershire County Council	N/A	On-going	Increase in number of people able to work from home	<1%	To date the main promotion of flexible working arrangements is a continued push by Worcestershire County Council to get the entire County connected to high speed broadband to enable successful working from home. Currently the total fibre optic broadband coverage across the County is 94% with 49,737 properties currently able to connect to superfast speeds	Currently unknown
5.5.1	Produce Air Quality Supplementary Planning Document	Policy Guidance and Development	Air quality planning and policy guidance	WRS and District Councils	Currently on-going. SPD currently being drafted by WRS officers	Draft due for completion by October 2016. Start of formal adoption processes by November 2016	Formally adopted and utilised SPD at all six LPAs across County	<1%	SPD currently being drafted by WRS officers. Progress delayed by approx. 15 months due to conflicting priorities	Estimate formal adoption by District Council by end 2017.
5.5.4	Encourage developers to provide sustainable transport facilities and links serving new developments	Policy Guidance and Development	Air quality planning and policy guidance	WRS and District Councils	Currently on-going, SPD currently being drafted by WRS officers	Draft due for completion by October 2016. Start of formal adoption processes by November 2016	Formally adopted and utilised by all six LPAs across County	<1%	SPD currently being drafted by WRS officers. Progress delayed by approx. 15 months due to conflicting priorities	Estimate formal adoption by District Council by end 2017.
5.6.3	Air Quality Networks	Policy Guidance and Development Control	Regional Groups Co-ordinating programmes to develop Area wide Strategies to reduce emissions and improve air quality	Bromsgrove District Council, Worcestershire Regulatory Services	2014	2014 onwards	Improved cross boundary working between local authorities in Worcestershire	1%	WRS hold position of Air Quality technical coordinator for the Midlands Joint Advisory Council (MJAC). Provision of AQ services to Tewkesbury DC & Herefordshire Council 2015-16	On-going

5.6.8	Forge closer links with local health agencies	Other	Other	WRS and Worcestershire County Council	N/A	On-going	Participation of relevant health agencies in the Worcestershire Air Quality Steering Group	<1%	WRS officers have met with the Director of Public Health at Worcestershire County Council to highlight the air quality agenda in relation to NO2 and PM2.5. Discussions are on-going as role of DoPH is considered	On-going
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**Table 2.4 Hagley Action Plan Update Non-Feasible Actions April 2015 to March 2016**

These actions were not identified as priority actions following completion of the prioritisation matrix and have been discounted as unfeasible for the Kidderminster Road AQMA following further consideration. These actions will not be reported on in the future.

No	Measure	Focus	Reasons Why Action Not Feasible
5.1.2	Change carriageway from two ways to one way. Consider inclusion of dedicated bus lane/cycle lane etc.	Maximising efficiency of roadway	Not applicable on major A Roads connecting north-south and west.
5.1.10	Pedestrianisation of streets within area	Complete pedestrianisation and removal of emissions	Not applicable on major A Roads connecting north-south and west.
5.1.14	Traffic calming measures (aim is to deter drivers using route)	Employ speed bumps or other measures to deter traffic from using the route	Not applicable on major A Roads connecting north-south and west.
5.2.7	Introduce fixed penalty notices for stationary idling	Enforce penalty notices for parked drivers who refuse to turn off engines	No enforceable situations e.g. taxi ranks or outdoor bus depot in AQMA
5.2.8		Different rates of parking depending on factors such as engine	No chargeable residential parking facilities affecting AQMA identified



	Introduce differential parking rates - engines	size, emissions	
5.2.9	Introducing differential parking rates - air quality event	Parking rates linked to times of poor air quality or special events to encourage uptake of park and ride facilities	No local car parks affecting AQMA or park and ride services
5.2.13	Tree planting	Planting of green infrastructure in a bid to mitigate pollutants	No evidence reduces NO2 and could restrict airflow creating street canyon and fumigation worsening AQ situation

## 2.5 Lickey End AQMA

### **Progress with action 5.1.1 – alteration to phasing of traffic light systems**

This action will be addressed as part of the suite of actions included in the LTP4 A38 Bromsgrove Eastern Bypass Enhancement Scheme and the LTP4 Lickey End (M42 Junction 1) Major Enhancement Scheme. As detailed above, one of the stated aims of the Schemes is to remediate the Lickey End and Redditch Road AQMAs. The majority of the Scheme's contents involve junction capacity and efficiency enhancements designed to fundamentally improve and regulate traffic flow. The existing traffic signal systems at Lickey end will be assessed and upgraded as appropriate as part of the wider enhancement schemes.

### **Progress with action 5.3.4 – promote flexible working arrangements**

To date the main promotion of flexible working arrangements is a continued push by Worcestershire County Council to get the entire County connected to high speed broadband to enable successful home working. Currently the total fibre optic broadband coverage across the County is 94% with 49,737 properties currently able to connect to superfast speeds. Further information can be found at

[www.superfastworcestershire.com](http://www.superfastworcestershire.com)

### **Progress with action LE4 – junction review required due to narrowing of two lanes into one causes bottleneck at top of A38 South**

This action will be addressed as part of the suite of actions included in the LTP4 A38 Bromsgrove Eastern Bypass Enhancement Scheme and the LTP4 Lickey End (M42 Junction 1) Major Enhancement Scheme. As detailed above, one of the stated aims of the Schemes is to remediate the Lickey End and Redditch Road AQMAs. The majority of the Scheme's contents involve junction capacity and efficiency enhancements designed to fundamentally improve and regulate traffic flow.

### **Progress with action LE6 – traffic exiting Barnsley Hall Road causes congestion - introduce no right turn restriction**

This action will be addressed as part of the suite of actions included in the LTP4 A38 Bromsgrove Eastern Bypass Enhancement Scheme and the LTP4 Lickey End (M42 Junction 1) Major Enhancement Scheme. As detailed above, one of the stated aims of the Schemes is to remediate the Lickey End and Redditch Road AQMAs. The majority of the Scheme's contents involve junction capacity and efficiency enhancements designed to fundamentally improve and regulate traffic flow.

### **Progress with action LE7 – traffic turning right into Harvester Public House from A38 south causes congestion – introduce no right turn restriction**

This action will be addressed as part of the suite of actions included in the LTP4 A38 Bromsgrove Eastern Bypass Enhancement Scheme and the LTP4 Lickey End (M42 Junction 1) Major Enhancement Scheme. As detailed above, one of the stated aims of the Schemes is to remediate the Lickey End and Redditch Road AQMAs. The majority of the Scheme's contents involve junction capacity and efficiency enhancements designed to fundamentally improve and regulate traffic flow.

Details have only been provided above for actions that are priority actions. For details of progress made with both priority and non-priority actions during the reporting year please see Table 2.4. For actions where no progress has been made in the reporting year the details of progress made to date can be found in the Air Quality Action Plan for Worcestershire Progress Report 2013-2015 (October 2015, available online at

<http://www.worcsregservices.gov.uk/environmental-health/pollution/air-quality/air-quality-action-plan.aspx>

### **Timeline for Implementation**

It is estimated that LTP4 will be out for consultation in October 2016 and be formally adopted by May 2017.

The A38 Bromsgrove Eastern Bypass (A38) Enhancement Scheme business case is currently being compiled and is expected to be completed within the next 12 months. At which point it will be submitted to funding bodies for their consideration.

**Table 2.5 – Progress on Measures to Improve Air Quality in Lickey End AQMA IN REPORTING YEAR**

Measure No.	Measure	EU Category	EU Classification	Lead Authority	Planning Phase	Implementation Phase	Key Performance Indicator	Target Pollution Reduction in the AQMA	Progress to Date	Estimated Completion Date
PRIORITY ACTIONS										
5.1.1	Alteration to phasing of traffic light systems	Traffic Management	UTC, congestion management, traffic reduction	Worcestershire County Council	LTP4 draft due for consultation October 2106. Estimated adoption by May 2017.	Currently unknown	Improved traffic flow in area. Increased number of pedestrians using zebra crossing alternative	2%	See text above (Section 2.5)	Currently unknown within operational lifetime of LTP4
5.3.4	Promote flexible working arrangements	Promoting travel alternatives	Encourage/facilitate home-working	Worcestershire County Council	N/A	On-going	Increase in number of people able to work from home	<1%	See text above (Section 2.5)	Currently unknown
LE4	Narrowing of two lanes into one causes bottleneck at top of A38 south. Action - junction review	Traffic Management	UTC, congestion management, traffic reduction	Worcestershire County Council	LTP4 draft due for consultation October 2106. Estimated adoption by May 2017.	Currently unknown	Improved traffic flow and reduction in NO2	3%	See text above (Section 2.5)	Currently unknown within operational lifetime of LTP4
LE6	Traffic exiting Barnsley Hall Road right. Action - no right turn restriction	Traffic Management	UTC, congestion management, traffic reduction	Worcestershire County Council	LTP4 draft due for consultation October 2106. Estimated adoption by May 2017.	Currently unknown	Decrease in obstruction to traffic flow	1%	See text above (Section 2.5)	Currently unknown within operational lifetime of LTP4

Measure No.	Measure	EU Category	EU Classification	Lead Authority	Planning Phase	Implementation Phase	Key Performance Indicator	Target Pollution Reduction in the AQMA	Progress to Date	Estimated Completion Date
LE7	Turning right into Harvester PH from A38 south. Action - no right turn restriction	Traffic Management	UTC, congestion management, traffic reduction	Worcestershire County Council	LTP4 draft due for consultation October 2106. Estimated adoption by May 2017.	Currently unknown	Improved traffic flow and reduction in NO2	1%	See text above (Section 2.5)	Currently unknown within operational lifetime of LTP4
NON-PRIORITY ACTIONS										
5.2.2	Freight Quality Partnership	Freight and delivery management	Route management plans/strategic routing strategy for HGVs	Worcestershire County Council	N/A	On-going	Fewer HGVs travelling through AQMA	2-5%	Worcestershire County Council regularly inform sat nav companies of banned and sensitive routes. Acknowledged can take some time for information to filter down to users.	On-going duty under Traffic Management Act 2004
5.2.5	Greening Council and Business Fleets	Promoting Low Emission Transport	Procuring alternative Refuelling infrastructure to promote Low Emission Vehicles, EV recharging, Gas fuel recharging	Bromsgrove District Council, Worcestershire County Council	2015-2017	2018 Onwards	Increase in number of Council and business fleet vehicles of higher Euro Standard and/or utilising alternative fuels	1%	Proposed Compressed Natural Gas Station in Bromsgrove/Redditch has stalled due to a number of obstacles (financial, strategic, political) plus specific industrial constraints and limitations of the existing highway network. WCC have indicated that development of such a facility would need to be supported by relevant policy before the case would be explored any further.	It is anticipated that the Local Transport Plan 2017 will be developed to incorporate policy on alternative fuels and associated infrastructure.

Measure No.	Measure	EU Category	EU Classification	Lead Authority	Planning Phase	Implementation Phase	Key Performance Indicator	Target Pollution Reduction in the AQMA	Progress to Date	Estimated Completion Date
5.2.10	Installing electric vehicle charging points	Promoting Low Emission Transport	Procuring alternative Refuelling infrastructure to promote Low Emission Vehicles, EV recharging, Gas fuel recharging	Bromsgrove District Council, Worcestershire County Council	2013	2014 onwards	Increase in availability of EV charging points and corresponding increase in use of electric vehicles	1%	Recommendations for installation of EV Charging Points routinely recommended by WRS on relevant planning consents. To be formalised in SPD currently being drafted by WRS officers. Progress delayed by approx. 15 months due to conflicting priorities.	Estimate formal adoption by District Council by end 2017.
5.3.1	Travel Planning	Promoting Travel Alternatives	Personalised travel planning	Worcestershire County Council	Currently taking place	2017 onwards	Increased uptake of alternative modes of transport	%	Personalised travel planning program planned as part of wider health improvement drives from County Council who are currently preparing a bid for the DfTs Access Fund to move project forward. County Council currently developing a "one-stop-shop" online travel portal due to be rolled out in 2017.	Estimated end 2017
5.3.1 5.3.9 5.3.8	Measures linked to walking and cycling initiatives	Promoting travel alternatives	Promotion of cycling and promotion of walking	Worcestershire County Council	Currently ongoing	Currently ongoing – Worcestershire County Council pursuing investment where opportunities arise	Increased uptake of walking and cycling in Evesham	<1%	LTP4 package Bromsgrove Strategic Active Travel Network Investment Program will specifically focus on scoping of a walking and cycling network for Bromsgrove. Sustrans and Living Streets currently working on scoping exercise due to report back at end of 2016.	Unknown – currently ongoing

Measure No.	Measure	EU Category	EU Classification	Lead Authority	Planning Phase	Implementation Phase	Key Performance Indicator	Target Pollution Reduction in the AQMA	Progress to Date	Estimated Completion Date
5.3.2	Car Sharing	Alternatives to private car use	Car and lift sharing schemes	Worcestershire County Council	2014 – 2015 COMPLETED	Liftshare Scheme launched Autumn 2015	Increase in number of people car sharing	<1%	Liftshare Scheme launched in Autumn 2015	Liftshare website scheme launched Autumn 2015. Currently operating
5.5.1	Produce Air Quality Supplementary Planning Document	Policy Guidance and Development	Air quality planning and policy guidance	WRS and District Councils	Currently on-going. SPD currently being drafted by WRS officers	Draft due for completion by October 2016. Start of formal adoption processes by November 2016	Formally adopted and utilised SPD at all six LPAs across County	<1%	SPD currently being drafted by WRS officers. Progress delayed by approx. 15 months due to conflicting priorities	Estimate formal adoption by District Council by end 2017.
5.5.4	Encourage developers to provide sustainable transport facilities and links serving new developments	Policy Guidance and Development	Air quality planning and policy guidance	WRS and District Councils	Currently on-going, SPD currently being drafted by WRS officers	Draft due for completion by October 2016. Start of formal adoption processes by November 2016	Formally adopted and utilised by all six LPAs across County	<1%	SPD currently being drafted by WRS officers. Progress delayed by approx. 15 months due to conflicting priorities	Estimate formal adoption by District Council by end 2017.
5.6.3	Air Quality Networks	Policy Guidance and Development Control	Regional Groups Co-ordinating programmes to develop Area wide Strategies to reduce emissions and improve air quality	Bromsgrove District Council, Worcestershire Regulatory Services	2014	2014 onwards	Improved cross boundary working between local authorities in Worcestershire	1%	WRS hold position of Air Quality technical coordinator for the Midlands Joint Advisory Council (MJAC). Provision of AQ services to Tewkesbury DC & Herefordshire Council 2015-16	On going



Measure No.	Measure	EU Category	EU Classification	Lead Authority	Planning Phase	Implementation Phase	Key Performance Indicator	Target Pollution Reduction in the AQMA	Progress to Date	Estimated Completion Date
5.6.8	Forge closer links with local health agencies	Other	Other	WRS and Worcestershire County Council	N/A	On-going	Participation of relevant health agencies in the Worcestershire Air Quality Steering Group	<1%	WRS officers have met with the Director of Public Health at Worcestershire County Council to highlight the air quality agenda in relation to NO2 and PM2.5. Discussions are on-going as role of DoPH is considered	On-going

**Table 2.6 Lickey End, Bromsgrove AQMA Action Plan Update Non-Feasible Actions April 2015 to March 2016**

These actions were not identified as priority actions following completion of the prioritisation matrix and have been discounted as unfeasible for the Kidderminster Road AQMA following further consideration. These actions will not be reported on in the future.

No	Measure	Focus	Reasons Why Action Not Feasible
5.1.2	Change carriageway from two way to one way.	Maximising efficiency of roadway	Not applicable on this key corridor into town
5.1.8	Introduction of traffic signals at roundabouts	Introduction of traffic signals at roundabouts to improve traffic flow. Traffic flow held at more strategic point to improve flow through the AQMA.	Already in place
5.1.10	Pedestrianisation of streets within area	Complete pedestrianisation and removal of emissions	Not applicable on this key corridor into town
5.1.14	Traffic calming measures (aim is to deter drivers using route)	Employ speed bumps or other measures to deter traffic from using the route	Not appropriate for this key corridor into/out of town. Likely worsen concentrations
5.2.7	Introduce fixed penalty notices for stationary idling	Enforce penalty notices for parked drivers who refuse to turn off engines	No enforceable situations e.g. taxi ranks or outdoor bus depot in AQMA
LE1	Current boundary of AQMA requires amendment to conform with best practice guidance	Amend boundary of AQMA following future dispersion modelling if revocation is not appropriate	No benefit from undertaking at this time
LE13	Further assessment is out of date (undertake up to date dispersion modelling and source apportionment)	Undertake up to date detailed dispersion modelling using latest tools and data	Further assessments no longer required by LAQM.PG.16.No benefit from undertaking at this time

## 2.6 Redditch Road AQMA

### **Progress with action 5.1.1 – alteration to phasing of traffic light systems**

This action will be addressed as part of the suite of actions included in the LTP4 A38 Bromsgrove Eastern Bypass Enhancement Scheme. As detailed above, one of the stated aims of the Scheme is to remediate the Redditch Road AQMA. The majority of the Scheme's contents involve junction capacity and efficiency enhancements designed to fundamentally improve and regulate traffic flow. The existing traffic light junction at Redditch Road and Hanbury Road junction will be reviewed as part of the wider scheme.

### **Progress with action 5.2.2 – freight quality partnership**

It has previously been identified that use of the Worcestershire County Council Lorry Route Advisory Map has declined significantly in recent years due to now almost universal use of satellite navigation systems. The Steering Group agreed that focus should be on working with satellite navigation data providers to ensure that HGVs are routinely routed around AQMAs.

Worcestershire County continues to regularly inform the satellite navigation companies of banned and sensitive routes, including AQMAs. They acknowledge that it can take some time for the information to filter down to users. Provision of relevant information to satellite navigation companies will continue going forward.

### **Progress with action 5.3.4 – promote flexible working arrangements**

To date the main promotion of flexible working arrangements is a continued push by Worcestershire County Council to get the entire County connected to high speed broadband to enable successful working from home. Currently the total fibre optic broadband coverage across the County is 94% with 49,737 properties currently able to connect to superfast speeds. Further information can be found at

[www.superfastworcestershire.com](http://www.superfastworcestershire.com)

## **Progress with action RR7 – two in-road bus stops on carriageway either side of central street canyon**

This action will be addressed as part of the suite of actions included in the LTP4 A38 Bromsgrove Eastern Bypass Enhancement Scheme. As detailed above, one of the stated aims of the Scheme is to remediate the Redditch Road AQMA. The majority of the Scheme's contents involve junction capacity and efficiency enhancements designed to fundamentally improve and regulate traffic flow. The location of bus stops relating to the Redditch Road AQMA will be reviewed as part of the wider scheme.

Details have only been provided above for actions that are priority actions. For details of progress made with both priority and non-priority actions during the reporting year please see Table 2.5. For actions where no progress has been made in the reporting year the details of progress made to date can be found in the Air Quality Action Plan for Worcestershire Progress Report 2013-2015 (October 2015, available online at

<http://www.worcsregservices.gov.uk/environmental-health/pollution/air-quality/air-quality-action-plan.aspx>

### **Timeline for Implementation**

It is estimated that LTP4 will be out for consultation in October 2016 and be formally adopted by May 2017.

The A38 Bromsgrove Eastern Bypass (A38) Enhancement Scheme business case is currently being compiled and is expected to be completed within the next 12 months. At which point it will be submitted to funding bodies for their consideration.

**Table 2.7 – Progress on Measures to Improve Air Quality in Redditch Road AQMA IN REPORTING YEAR**

Measure No.	Measure	EU Category	EU Classification	Lead Authority	Planning Phase	Implementation Phase	Key Performance Indicator	Target Pollution Reduction in the AQMA	Progress to Date	Estimated Completion Date
PRIORITY ACTIONS										
5.1.1	Alteration to phasing of traffic light systems	Traffic Management	UTC, congestion management, traffic reduction	Worcestershire County Council	LTP4 draft due for consultation October 2106. Estimated adoption by May 2017.	Currently unknown	Improved traffic flow in area. Increased number of pedestrians using zebra crossing alternative	2%	See text above (Section 2.6)	Currently unknown within operational lifetime of LTP4
5.2.2	Freight Quality Partnership	Freight and delivery management	Route management plans/strategic routing strategy for HGVs	Worcestershire County Council	N/A	On-going	Fewer HGVs travelling through AQMA	2-5%	See text above (Section 2.6)	On-going duty under Traffic Management Act 2004
5.3.4	Promote flexible working arrangements	Promoting travel alternatives	Encourage/facilitate home-working	Worcestershire County Council	N/A	On-going	Increase in number of people able to work from home	<1%	See text above (Section 2.6)	Currently unknown
RR7	Two in road bus stops on carriageway either side of central street canyon	Traffic management	UTC, congestion management, traffic reduction	Worcestershire County Council	LTP4 draft due for consultation October 2106. Estimated adoption by May 2017.	Currently unknown	Improved traffic flow in area. Increased number of pedestrians using zebra crossing alternative	2%	See text above (Section 2.6)	Currently unknown within operational lifetime of LTP4

NON-PRIORITY ACTIONS										
5.2.5	Greening Council and Business Fleets	Promoting Low Emission Transport	Procuring alternative Refuelling infrastructure to promote Low Emission Vehicles, EV recharging, Gas fuel recharging	Bromsgrove District Council, Worcestershire County Council	2015-2017	2018 Onwards	Increase in number of Council and business fleet vehicles of higher Euro Standard and/or utilising alternative fuels	1%	Proposed Compressed Natural Gas Station in Bromsgrove/Redditch has stalled due to a number of obstacles (financial, strategic, political) plus specific industrial constraints and limitations of the existing highway network. WCC have indicated that development of such a facility would need to be supported by relevant policy before the case would be explored any further.	It is anticipated that the Local Transport Plan 2017 will be developed to incorporate policy on alternative fuels and associated infrastructure.
5.2.10	Installing electric vehicle charging points	Promoting Low Emission Transport	Procuring alternative Refuelling infrastructure to promote Low Emission Vehicles, EV recharging, Gas fuel recharging	Bromsgrove District Council, Worcestershire County Council	2013	2014 onwards	Increase in availability of EV charging points and corresponding increase in use of electric vehicles	1%	Recommendations for installation of EV Charging Points routinely recommended by WRS on relevant planning consents. To be formalised in SPD currently being drafted by WRS officers. Progress delayed by approx. 15 months due to conflicting priorities	Estimate formal adoption by District Council by end 2017.
5.3.1	Travel Planning	Promoting Travel Alternatives	Personalised travel planning	Worcestershire County Council	Currently taking place	2017 onwards	Increased uptake of alternative modes of transport	<1%	Personalised travel planning program planned as part of wider health improvement drives from County Council who are currently preparing a bid for the DfT's Access Fund to move project forward. County Council currently developing a "one-stop-shop" online travel portal due to be rolled out in 2017.	Estimated end 2017

5.3.1 5.3.9 5.3.8	Measures linked to walking and cycling initiatives	Promoting travel alternatives	Promotion of cycling and promotion of walking	Worcestershire County Council	Currently on-going	Currently on-going – Worcestershire County Council pursuing investment where opportunities arise	Increased uptake of walking and cycling in Evesham	<1%	LTP4 package Bromsgrove Strategic Active Travel Network Investment Program will specifically focus on scoping of a walking and cycling network for Bromsgrove. Sustrans and Living Streets currently working on scoping exercise due to report back at end of 2016.	Unknown – currently on-going
5.3.2	Car Sharing	Alternatives to private car use	Car and lift sharing schemes	Worcestershire County Council	2014 – 2015 COMPLETED	Liftshare Scheme launched Autumn 2015	Increase in number of people car sharing	<1%	Liftshare Scheme launched in Autumn 2015	Liftshare website scheme launched Autumn 2015. Currently operating
5.5.1	Produce Air Quality Supplementary Planning Document	Policy Guidance and Development	Air quality planning and policy guidance	WRS and District Councils	Currently on-going. SPD currently being drafted by WRS officers	Draft due for completion by October 2016. Start of formal adoption processes by November 2016	Formally adopted and utilised SPD at all six LPAs across County	<1%	SPD currently being drafter by WRS officers. Progress delayed by approx. 15 months due to conflicting priorities	Estimate formal adoption by District Council by end 2017.
5.5.4	Encourage developers to provide sustainable transport facilities and links serving new developments	Policy Guidance and Development	Air quality planning and policy guidance	WRS and District Councils	Currently on-going, SPD currently being drafted by WRS officers	Draft due for completion by October 2016. Start of formal adoption processes by November 2016	Formally adopted and utilised by all six LPAs across County	<1%	SPD currently being drafter by WRS officers. Progress delayed by approx. 15 months due to conflicting priorities	Estimate formal adoption by District Council by end 2017.

5.6.3	Air Quality Networks	Policy Guidance and Development Control	Regional Groups Co-ordinating programmes to develop Area wide Strategies to reduce emissions and improve air quality	Bromsgrove District Council, Worcestershire Regulatory Services	2014	2014 onwards	Improved cross boundary working between local authorities in Worcestershire	1%	WRS hold position of Air Quality technical coordinator for the Midlands Joint Advisory Council (MJAC). Provision of AQ services to Tewkesbury DC & Herefordshire Council 2015-16	On going.
5.6.8	Forge closer links with local health agencies	Other	Other	WRS and Worcestershire County Council	N/A	On-going	Participation of relevant health agencies in the Worcestershire Air Quality Steering Group	<1%	WRS officers have met with the Director of Public Health at Worcestershire County Council to highlight the air quality agenda in relation to NO2 and PM2.5. Discussions are on-going as role of DoPH is considered	On-going



**Table 2.8 Redditch Road AQMA Action Plan Update Non-Feasible Actions April 2015 to March 2016**

These actions were not identified as priority actions following completion of the prioritisation matrix and have been discounted as unfeasible for the Kidderminster Road AQMA following further consideration. These actions will not be reported on in the future.

No	Measure	Focus	Reasons Why Action Not Feasible
5.1.2	Change carriageway from two way to one way.	Maximising efficiency of roadway	Not applicable on this key corridor into town
5.1.10	Pedestrianisation of streets within area	Complete pedestrianisation and removal of emissions	Not applicable on this key corridor into town
5.1.14	Traffic calming measures (aim is to deter drivers using route)	Employ speed bumps or other measures to deter traffic from using the route	Not appropriate for this key corridor into/out of town. Likely worsen concentrations
5.2.7	Introduce fixed penalty notices for stationary idling	Enforce penalty notices for parked drivers who refuse to turn off engines	No enforceable situations e.g. taxi ranks or outdoor bus depot in AQMA
5.2.8	Introduce differential parking rates - engines	Different rates of parking depending on factors such as engine size, emissions	Not applicable to this bypass of town AQMA due to volume of transboundary traffic between Redditch and Worcester, M42 and Wychbold and distance from town centre car parks
5.2.9	Introducing differential parking rates - air quality event	Parking rates linked to times of poor air quality or special events to encourage uptake of park and ride facilities	Not applicable to this bypass of town AQMA due to volume of transboundary traffic between Redditch and Worcester, M42 and Wychbold and distance from town centre car parks
5.3.5	Workplace parking charging schemes	Promote charging schemes to discourage single occupancy car journeys and encourage take up of sustainable alternatives	Unlikely to have significant impact on this bypass of town AQMA due to volume of transboundary traffic between Redditch

		(car sharing, cycling, walking, public transport)	and Worcester, M42 and Wychbold
RR3	Current boundary of AQMA requires amendment to conform with best practice guidance	Amend boundary of AQMA following future dispersion modelling if revocation is not appropriate	No benefit from undertaking at this time
RR5	Properties close to roadside create street canyon	Not feasible to change without Compulsory Purchase Order and removal of properties	Action relates to generic actions included as part of action plan. Action will not be considered further.

## 2.7 Worcester Road AQMA

### **Progress with action 5.3.8 – promote and support walking and cycling initiatives in Worcestershire**

Worcestershire County Council is currently in the process of completing their fourth Local Transport Plan (LTP4). LTP4 includes the Bromsgrove Transport Strategy which forms a series of packages for the Bromsgrove area. One of the packages going forward as part of LTP4 is the Bromsgrove Strategic Active Travel Network Investment Program which specifically focuses on the scoping of a walking and cycling network for Bromsgrove. Worcestershire County Council has already commissioned Sustrans and Living Streets to start work on this scoping exercise. It is envisaged that they will report back by the end of October 2016. Once the scoping for a walking and cycling network is completed Worcestershire County Council will begin to pursue developer contributions and explore other funding streams in order to implement the network.

### **Progress with action 5.3.1 – travel planning**

Where appropriate WRS has continued to support Worcestershire County Council in the development and roll out of initiatives aimed at informing travel choices, including personalised travel planning.

Worcestershire County Council are currently looking to promote travel choice under the wider banner of health living as it is widely recognised that health improvements are one of the main drivers in encouraging uptake of active travel modes. Worcestershire County Council is currently preparing a bid for the DfTs Access Fund to move this project forward. It is envisaged that this will include a personalised travel planning programme as this is widely recognised as the most effective way to encourage modal shift to active travel modes.

In addition to the above Worcestershire County Council is currently developing a 'one stop shop' online travel portal which will provide all the information that anyone

requires to plan a journey in Worcestershire. The planning stages of this initiative are well advanced and it is envisaged that it will roll out in 2017. The online travel portal will include advise on home working and reducing the need to travel, as well as bus times, rail times, walking and cycling journey planners and so forth.

**Progress with action WR3 – zebra crossing at Hanover Street/Worcester Road junction causes congestion (upgrade of crossing to MOVA linked signalised pedestrian crossing or similar)**

This issue will be addressed as part of the suite of actions included in the Worcester Road/Rock Hill Key Corridor of Improvement scheme outlined in LTP4. WRS will be consulted on the specific details of the scheme in the very early stages of its development. It is envisaged that the zebra crossing will be removed and pedestrian crossing incorporated into a MOVA signal set stretching across a wider area. However extensive modelling and testing will be required before a final solution can be agreed.

In the meantime, later on this year, Worcestershire County Council will look to scope out any possible “small win” options in relation to the functioning of the zebra crossing as there may be a small amount of funding available in the near future.

**Progress with action WR9 – local school traffic causes congestion exiting Shrubbery Road – requires junction review (introduction of no waiting restrictions)**

This issue will be addressed as part of the suite of actions included in the Worcester Road/Rock Hill Key Corridor of Improvement scheme outlined in LTP4. WRS will be consulted on the specific details of the scheme in the very early stages of its development. A detailed review of the Shrubbery Road junction will form part of a wider review of traffic flow along Worcester Road. However extensive modelling and testing will be required before a final solution can be agreed.

Details have only been provided above for actions that are priority actions. For details of progress made with both priority and non-priority actions during the

reporting year please see Table 2.6. For actions where no progress has been made in the reporting year the details of progress made to date can be found in the Air Quality Action Plan for Worcestershire Progress Report 2013-2015 (October 2015, available online at

<http://www.worcsregservices.gov.uk/environmental-health/pollution/air-quality/air-quality-action-plan.aspx>

### **Timeline for Implementation**

It is estimated that LTP4 will be out for consultation in October 2016 and be formally adopted by May 2017. The A38 Bromsgrove Eastern Bypass (A38) Enhancement Scheme business case is currently being compiled and is expected to be completed within the next 12 months. At which point it will be submitted to funding bodies for their consideration. The development of a 'one-stop-shop' online travel portal is well underway and it is envisaged that the program will be rolled out in 2017. Initial scoping for a Bromsgrove walking and cycling network is currently taking place. The results of which are expected later on in 2016.

**Table 2.9 – Progress on Measures to Improve Air Quality in Worcester Road AQMA IN REPORTING YEAR**

Measure No.	Measure	EU Category	EU Classification	Lead Authority	Planning Phase	Implementation Phase	Key Performance Indicator	Target Pollution Reduction in the AQMA	Progress to Date	Estimated Completion Date
PRIORITY ACTIONS										
5.3.8	Promote and support walking and cycling initiatives in Worcestershire	Promoting Travel Alternatives	Promotion of walking Promotion of cycling	Worcestershire County Council	Initial scoping due by end 2016	Currently unknown	Increase in uptake of walking and cycling modes	1%	See text above (Section 2.7)	Unknown
5.3.1	Travel Planning	Promoting Travel Alternatives	Personalised travel planning	Worcestershire County Council	Currently taking place	2017 onwards	Increased uptake of alternative modes of transport	%	See text above (Section 2.7)	Estimated end 2017
WR3	Zebra crossing at Hanover Street/Worcester Road junction causes congestion	Traffic Management	UTC, congestion management, traffic reduction	Worcestershire County Council	LTP4 draft due for consultation October 2106. Estimated adoption by May 2017.	Currently unknown	Improved traffic flow in area. Increased number of pedestrians using zebra crossing alternative	2%	See text above (Section 2.7)	Unknown within operational lifetime of LTP4
WR9	Local school traffic causes congestion exiting Shrubbery Road – requires junction review	Traffic Management	UTC, congestion management, traffic reduction	Worcestershire County Council	LTP4 draft due for consultation October 2106. Estimated adoption by May 2017.	Currently unknown	Improved traffic flow in area of Shrubbery Road junction.	<1%	See text above (Section 2.7)	Unknown within operational lifetime of LTP4

Measure No.	Measure	EU Category	EU Classification	Lead Authority	Planning Phase	Implementation Phase	Key Performance Indicator	Target Pollution Reduction in the AQMA	Progress to Date	Estimated Completion Date
NON-PRIORITY ACTIONS										
5.2.2	Freight Quality Partnership – work with satellite navigation companies to route HGVs around AQMAs	Traffic Management	UTC, congestion management, traffic reduction	Worcestershire County Council		On-going.	Fewer HGVs travelling through AQMA	5-10%	Worcestershire County Council regularly informs sat nav companies of banned and sensitive routes. Acknowledged can take some time for information to filter down to users.	On-going duty under Traffic Management Act 2004
5.2.5	Greening Council and Business Fleets	Promoting Low Emission Transport	Procuring alternative Refuelling infrastructure to promote Low Emission Vehicles, EV recharging, Gas fuel recharging	Bromsgrove District Council, Worcestershire County Council	2015-2017	2018 Onwards	Increase in number of Council and business fleet vehicles of higher Euro Standard and/or utilising alternative fuels	1%	Proposed Compressed Natural Gas Station in Bromsgrove/Red ditch has stalled due to a number of obstacles (financial, strategic, political) plus specific industrial constraints and limitations of the existing highway network. WCC have indicated that development of such a facility would need to be supported by relevant policy before the case would be explored any further.	It is anticipated that the Local Transport Plan 2017 will be developed to incorporate policy on alternative fuels and associated infrastructure.

Measure No.	Measure	EU Category	EU Classification	Lead Authority	Planning Phase	Implementation Phase	Key Performance Indicator	Target Pollution Reduction in the AQMA	Progress to Date	Estimated Completion Date
5.2.10	Installing electric vehicle charging points	Promoting Low Emission Transport	Procuring alternative Refuelling infrastructure to promote Low Emission Vehicles, EV recharging, Gas fuel recharging	Bromsgrove District Council, Worcestershire County Council	2013	2014 onwards	Increase in availability of EV charging points and corresponding increase in use of electric vehicles	1%	Recommendations for installation of EV Charging Points routinely recommended by WRS on relevant planning consents. To be formalised in SPD currently being drafted by WRS officers. Progress delayed by approx. 15 months due to conflicting priorities	Estimate formal adoption by District Council by end 2017.
5.3.2	Car Sharing	Alternatives to private car use	Car and lift sharing schemes	Worcestershire County Council	2014 – 2015 COMPLETED	Liftshare Scheme launched Autumn 2015	Increase in number of people car sharing	<1%	Liftshare Scheme launched in Autumn 2015	Liftshare website scheme launched Autumn 2015. Currently operating
5.3.2	Car Sharing	Alternatives to private car use	Car and lift sharing schemes	Worcestershire County Council	2014 – 2015 COMPLETED	Liftshare Scheme launched Autumn 2015	Increase in number of people car sharing	<1%	Liftshare Scheme launched in Autumn 2015	Liftshare website scheme launched Autumn 2015. Currently operating



Measure No.	Measure	EU Category	EU Classification	Lead Authority	Planning Phase	Implementation Phase	Key Performance Indicator	Target Pollution Reduction in the AQMA	Progress to Date	Estimated Completion Date
5.3.4	Promote flexible working arrangements	Promoting travel alternatives	Encourage/facilitate home-working	Worcestershire County Council	N/A	On-going	Increase in number of people able to work from home	<1%	To date the main promotion of flexible working arrangements is a continued push by Worcestershire County Council to get the entire County connected to high speed broadband to enable successful working from home. Currently the total fibre optic broadband coverage across the County is 94% with 49,737 properties currently able to connect to superfast speeds	Unknown
5.5.1	Produce Air Quality Supplementary Planning Document	Policy Guidance and Development	Air quality planning and policy guidance	WRS and District Councils	Currently on-going. SPD currently being drafted by WRS officers	Draft due for completion by October 2016. Start of formal adoption processes by November 2016	Formally adopted and utilised SPD at all six LPAs across County	<1%	SPD currently being drafted by WRS officers. Progress delayed by approx. 15 months due to conflicting priorities	Estimate formal adoption by District Council by end 2017.

Measure No.	Measure	EU Category	EU Classification	Lead Authority	Planning Phase	Implementation Phase	Key Performance Indicator	Target Pollution Reduction in the AQMA	Progress to Date	Estimated Completion Date
5.5.4	Encourage developers to provide sustainable transport facilities and links serving new developments	Policy Guidance and Development	Air quality planning and policy guidance	WRS and District Councils	Currently on-going, SPD currently being drafted by WRS officers	Draft due for completion by October 2016. Start of formal adoption processes by November 2016	Formally adopted and utilised by all six LPAs across County	<1%	SPD currently being drafted by WRS officers. Progress delayed by approx. 15 months due to conflicting priorities	Estimate formal adoption by District Council by end 2017.
5.6.3	Air Quality Networks	Policy Guidance and Development Control	Regional Groups Co-ordinating programmes to develop Area wide Strategies to reduce emissions and improve air quality	Bromsgrove District Council, Worcestershire Regulatory Services	2014	2014 onwards	Improved cross boundary working between local authorities in Worcestershire	1%	WRS hold position of Air Quality technical coordinator for the Midlands Joint Advisory Council (MJAC). Provision of AQ services to Tewkesbury DC & Herefordshire Council 2015-16	On-going.

Measure No.	Measure	EU Category	EU Classification	Lead Authority	Planning Phase	Implementation Phase	Key Performance Indicator	Target Pollution Reduction in the AQMA	Progress to Date	Estimated Completion Date
5.6.8	Forge closer links with local health agencies	Other	Other	WRS and Worcestershire County Council	N/A	On-going	Participation of relevant health agencies in the Worcestershire Air Quality Steering Group	<1%	WRS officers have met with the Director of Public Health at Worcestershire County Council to highlight the air quality agenda in relation to NO2 and PM2.5. Discussions are on-going as role of DoPH is considered	On-going

**Table 2.10 Worcester Road AQMA Action Plan Update Non-Feasible Actions April 2015 to March 2016**

These actions were not identified as priority actions following completion of the prioritisation matrix and have been discounted as unfeasible for the Kidderminster Road AQMA following further consideration. These actions will not be reported on in the future.

No	Measure	Focus	Reasons Why Action Not Feasible
5.1.10	Pedestrianisation of streets within area	Complete pedestrianisation and removal of emissions	Not applicable on this key corridor into town
5.1.14	Traffic calming measures (aim is to deter drivers using route)	Employ speed bumps or other measures to deter traffic from using the route	Not appropriate for this key corridor into/out of town. Likely worsen concentrations
5.2.7	Introduce fixed penalty notices for stationary idling	Enforce penalty notices for parked drivers who refuse to turn	No enforceable situations e.g. taxi ranks or outdoor bus depot in AQMA

		off engines	
5.2.13	Tree Planting	Planting of green infrastructure in a bid to mitigate pollutants - no evidence of having significant impact within AQMAs	No evidence reduces NO2 and could restrict airflow creating street canyon and fumigation worsening AQ situation
WR4	Two street canyons within the AQMA	Canyons may be effectively removed via compulsory purchase order - refer to generic actions	Action relates to generic actions included as part of action plan. Action will not be considered further.
WR5	Eight school and nursery campuses within or adjacent to AQMA	This relates to generic actions such as school travel plans	Action relates to generic actions included as part of action plan. Action will not be considered further.
WR12	Modelling indicates exceedances only at properties within street canyons	Refers to generic actions such as Compulsory Purchase Orders, parking restrictions, bus quality partnership and freight quality partnership	Action relates to generic actions included as part of action plan. Action will not be considered further.

## 3.0 Worcester City Council

### 3.1 Air Quality Management Areas

Air Quality Management Areas (AQMAs) are declared when there is an exceedance or likely exceedance of an air quality objective. Following declaration, the authority must prepare an air quality action plan (AQAP) within a 12-18 month period setting out measures it intends to put in place in pursuit of the objectives.

A summary of AQMAs declared by Worcester City Council can be found in Table 3.1. Further information related to declared or revoked AQMAs, including maps of AQMA boundaries are available online at

<http://www.worcsregservices.gov.uk/pollution/air-quality/air-quality-management-areas.aspx>.

**Table 3.1 - Declared Air Quality Management Areas**

AQMA Name	Pollutants and Air Quality Objectives	City / Town	One Line Description	Action Plan
<b>Bridge Street / Dolday AQMA</b>	NO <sub>2</sub> annual mean	Worcester	Mixed residential and commercial City Centre one way system. Some parts street canyon.	Air Quality Action Plan for Worcestershire, 2013 and subsequent Air Quality Action Plan for Worcestershire Progress Report 2013-2015
<b>Lowesmoor /Rainbow Hill AQMA</b>			Key bus and commuter corridor from north and east into City. Rainbow Hill is predominately residential. Lowesmoor is commercial ground floor with residential above.	
<b>St Johns AQMA</b>			Busy corridor from west and south west of City. Mixed residential and commercial	To be completed 2016 - 17

## 3.2 Priority Actions for the AQMAs within Worcester City

The action plan for Worcestershire identified many potential air quality solutions for each AQMA but it is recognised that some are not actionable simultaneously due to a variety of constraints. With this in mind WRS conducted a “priority actions” process in 2014 for each AQMA. The priority actions established for Worcester City are outlined in Table 3.2 below.

**Table 3.2 Priority actions for the Worcester City AQMAs**

AQMA	AQAP Action Ref Number	Action Description
<b>Dolday / Bridge Street</b>	5.1.7	Improvement of signage to avoid AQMA
	5.2.2	Freight Quality Partnership
	5.1.1 / DD3	Alteration to traffic phasing
	5.2.1 / DD5	Bus Quality Partnership
<b>Lowesmoor</b>	5.1.1 / LRH5	Loading and unloading restrictions during peak times
	5.1.7	Improvement of signage to avoid AQMA
	5.2.1	Bus Quality Partnership
	5.2.2	Freight quality partnership
<b>Rainbow Hill</b>	5.2.1	Bus Quality Partnership
	5.1.1 / LRH5	Loading and unloading restrictions during peak times
	5.3.4	Promote flexible working arrangements
	5.1.4	Variable Message Signage

No priority actions are shown for St Johns AQMA as the prioritisation process was undertaken prior to the declaration of that AQMA. This work will be completed following determination of emissions source apportionment which is currently underway.

Separate priority actions have been determined for the Lowesmoor and Rainbow Hills areas due to the differing characteristics of these two areas of the same AQMA.

Further detail on these measures and the prioritisation methodology can be found in the full Air Quality Action Plan for Worcestershire (September 2013) document and the Air Quality Action Plan for Worcestershire Progress Report 2013-2015 (October 2015), both available online at

<http://www.worcsregservices.gov.uk/environmental-health/pollution/air-quality/air-quality-action-plan.aspx>

### **3.3 Progress and Impacts of Measures to Address Air Quality in Worcester City**

In November 2014 Worcestershire County Council produced a technical discussion paper for the Worcester urban area which presented a number of transport-focused options for each location with the intention of improving air quality. The appraisal presented in the paper confirms that the problem of air quality in the city centre is attributed to wider transport strategy issues and accessibility in the city centre.

In light of these findings the Worcestershire Air Quality Steering Group – Worcester Urban AQMA sub-group have concluded that the progression of one or two of the priority actions as identified above in Table 3.2 would be ineffectual and that the focus should be on securing the inclusion of these, and other actions, in a wider low emission strategy for Worcester city, linked to a city centre transport strategy or Masterplan.

Central to the development of the master plan is a transport model for the city centre. Further information, including a copy of the technical discussion document, is available within the 'Air Quality Action Plan Progress Report for Worcestershire April 2013-2015'

<http://www.worcsregservices.gov.uk/pollution/air-quality/air-quality-action-plan.aspx>.

In February 2016 the County Council gave the following update on progress:

*'Worcestershire County Council has identified the funding to build the Worcester City Centre Transport Model in the 2016/2017 financial year. As with all transport models, it could take up to 12 months to construct and validate this, although there are some opportunities to speed up the process, especially now a citywide Bluetooth-powered Journey Time Monitoring System is in operation. The County Council are engaging with Worcester City Council in this important process, recognising that to which will also need to consider the built environment and regeneration opportunities; particularly in the Shrub Hill area of the city.'*

Worcestershire Regulatory Services will continue to liaise with the County Council in the development of these packages to ensure that remediation of the AQMAs remain a strategic transport priority. Over the past five years WRS has experienced closer working ties with the County Council's Strategic Transport Team and it is anticipated that collaboration on their strategic policies and improvement schemes at the early planning stages will ensure that air quality improvements remain a priority across all of Worcestershire infrastructure.

### **3.4 Dolday AQMA**

#### **Progress with action 5.1.7 – Improvement of signage to avoid AQMA**

This action forms part of wider Worcester A4440 improvement works. The 3<sup>rd</sup> phase of A4440 improvement works is currently underway and the 4<sup>th</sup> phase to make improvements to the stretch between Carrington Bridge and Powick to the south west of the city is at the planning stage.

Additionally, Worcestershire County Council is installing Variable Messaging Systems (VMS) around Worcester City to be completed in 2016. As of November 2015 6 VMS signs had been emplaced in a ring around the City.



### **Progress with action 5.2.2 – freight quality partnership**

It has previously been identified that use of the Worcestershire County Council Lorry Route Advisory Map has declined significantly in recent years due to now almost universal use of satellite navigation systems. The Steering Group agreed that focus should be on working with satellite navigation data providers to ensure that HGVs are routinely routed around AQMAs.

Worcestershire County continues to regularly inform the satellite navigation companies of banned and sensitive routes, including AQMAs. They acknowledge that it can take some time for the information to filter down to users. Provision of relevant information to satellite navigation companies will continue going forward.

### **Progress with action 5.1.1/DD3 – alteration to phasing of traffic light systems**

Worcestershire County Council has indicated this action was completed in late 2014 and that data demonstrates a reduction in queuing times.

### **Progress with action 5.2.1/DD5 – Bus quality partnership**

Worcestershire County Council no longer subsidise local bus operators so no longer have any control or influence over how the operators work. In 2015 Worcestershire County Council and WRS attempted to develop a Low Emission Bus Scheme (LEBS) bid for the Worcester City area; however we were unable to secure any commitment, either formal or informal, from First Group who operates the vast majority of buses across Worcestershire.

Potentially another attempt could be made in the future should further LEBS funding be made available to local authorities in future years. At this time no funding has been announced for 2016/17. Furthermore, a commitment from First Group and current bus fleet data is required prior to initiating a bid, neither of which has been forthcoming to date.

In April 2016 Worcestershire County Council confirmed that First Group had introduced some modern vehicles (Euro VI) into its fleet of buses in the Worcester network in October 2015. WRS currently have no details of the roll out program for new vehicles to the fleet or on which routes older vehicles have been replaced.

In light of the above, resources are currently focused on the development of the Masterplan. A relocation of the current bus station at the centre of the city, adjacent to the Dolday AQMA to an area more distant from areas of poor air quality could be considered as part of the Masterplan and regeneration of the City. In addition to changes to traffic flows via redesign of routes through the City this has the potential to effectively achieve the required reduction in impact on the current AQMAs from public transport. However, it should be noted the detail and progression of the Masterplan is currently in its infancy.

Details have only been provided above for actions that are priority actions. For details of progress made with both priority and non-priority actions during the reporting year please see Table 3.3. For actions where no progress has been made in the reporting year the details of progress made to date can be found in the Air Quality Action Plan for Worcestershire Progress Report 2013-2015 (October 2015, available online at

<http://www.worcsregservices.gov.uk/environmental-health/pollution/air-quality/air-quality-action-plan.aspx>

### **Timeline for Implementation**

Priorities for 2016/17 for air quality improvements in Worcester City in 2016 - 17 are:

- Continuing to promote requirement and gain political agreement for a 'Worcester City centre transport strategy and Masterplan' incorporating a 'Lowering Emissions Strategy'.
- Develop the city centre master plan between key representatives of Worcestershire County Council Highways and Worcester City Council.

- Completion and adoption of 'Supplementary Planning Document for Air Quality' to enshrine current air quality recommendations in policy.
- Upgrade of signals in St Johns AQMA.
- Completion of installation of Variable Messaging Signage around the city.
- Engage with First group on prioritising routes through Air Quality Management Areas as destination for latest Euro code vehicles as part of any current or future update of local fleet program.

**Table 3.3 - Progress on Measures to Improve Air Quality in Dolday / Bridge Street AQMA IN REPORTING YEAR**

Measure No.	Measure	EU Category	EU Classification	Lead Authority	Planning Phase	Implementation Phase	Key Performance Indicator	Target Pollution Reduction in the AQMA	Progress to Date	Estimated Completion Date
Priority Actions										
5.1.7	Signage to avoid AQMA	Traffic Management	Other	Worcestershire County Council	Phase 3 of A4440 works COMPLETED 2013. Phase 4 2016 - 17	2014 - 2031	Decrease in number of strategic journeys through AQMA	5-10%	See text above (Section 3.4)	2031
5.2.2	Freight Quality Partnership – work with satellite navigation companies to route HGVs around AQMAs	Traffic Management	UTC, congestion management, traffic reduction	Worcestershire County Council	COMPLETED 2014 - 15	On-going.	Fewer HGVs travelling through AQMA	5-10%	See text above (Section 3.4)	On-going duty under Traffic Management Act 2004
5.1.1/DD3	Alteration to phasing of traffic light systems/Junction review	Traffic Management	Strategic highway improvements and congestion reduction	Worcestershire County Council	COMPLETED 2013 - 14	COMPLETED 20/04/2015	Improved Traffic Flow	5-10%	See text above (Section 3.4)	COMPLETED
5.2.1	Bus Quality Partnership	Promoting Low Emission Transport	Public Vehicle Procurement - Prioritising uptake of low emission vehicles	Worcester City Council / Worcestershire County Council	2016 - 17	2018 onwards	Elimination of lower Euro standard buses on key city centre routes.	5-25%	See text above (Section 3.4)	Currently unknown
Non Priority Actions										
5.1.4	Variable Message Systems	Traffic Management	Other	Worcestershire County Council	2015	2015 - 2016	Decrease in traffic movements through AQMA		See text above (Section 3.4)	2016

Measure No.	Measure	EU Category	EU Classification	Lead Authority	Planning Phase	Implementation Phase	Key Performance Indicator	Target Pollution Reduction in the AQMA	Progress to Date	Estimated Completion Date
5.2.5	Greening Council and Business Fleets	Promoting Low Emission Transport	Procuring alternative Refuelling infrastructure to promote Low Emission Vehicles, EV recharging, Gas fuel recharging	Bromsgrove District Council, Worcestershire County Council	2015-2017	2018 Onwards	Increase in number of Council and business fleet vehicles of higher Euro Standard and/or utilising alternative fuels	1%	Proposed Compressed Natural Gas Station in Bromsgrove/Redditch has stalled due to a number of obstacles (financial, strategic, political) plus specific industrial constraints and limitations of the existing highway network. WCC have indicated that development of such a facility would need to be supported by relevant policy before the case would be explored any further.	It is anticipated that the Local Transport Plan 2017 will be developed to incorporate policy on alternative fuels and associated infrastructure.
5.2.10	Installing electric vehicle charging points	Promoting Low Emission Transport	Procuring alternative Refuelling infrastructure to promote Low Emission Vehicles, EV recharging, Gas fuel recharging	Worcester City Council, Worcestershire County Council	2013	2014 onwards	Increase in availability of EV charging points and corresponding increase in use of electric vehicles	1%	Recommendations for installation of EV Charging Points routinely recommended by WRS on relevant planning consents. To be formalised in SPD currently being drafted by WRS officers. Progress delayed by approx. 15 conflicting priorities	Estimate formal adoption by District Council by end 2017.
5.3.1	Travel Planning	Promoting Travel Alternatives	Personalised travel planning	Worcestershire County Council	Currently taking place	2017 onwards	Increased uptake of alternative modes of transport	%	The development of a 'one-stop-shop' online travel portal is well underway and it is envisaged that the program will be rolled out in 2017.	Estimated end 2017
5.3.2	Car Sharing	Alternatives to private car use	Car and lift sharing schemes	Worcestershire County Council	2014 – 2015 COMPLETED	Liftshare Scheme launched Autumn 2015	Increase in number of people car sharing	<1%	Liftshare Scheme launched in Autumn 2015	Liftshare website scheme launched Autumn 2015. Currently operating

Measure No.	Measure	EU Category	EU Classification	Lead Authority	Planning Phase	Implementation Phase	Key Performance Indicator	Target Pollution Reduction in the AQMA	Progress to Date	Estimated Completion Date
5.3.4	Promote flexible working arrangements	Promoting travel alternatives	Encourage/facilitate home-working	Worcestershire County Council	N/A	On-going	Increase in number of people able to work from home	<1%	To date the main promotion of flexible working arrangements is a continued push by Worcestershire County Council to get the entire County connected to high speed broadband to enable successful working from home. Currently the total fibre optic broadband coverage across the County is 94% with 49,737 properties currently able to connect to superfast speeds	Currently unknown
5.5.1	Produce Air Quality Supplementary Planning Document	Policy Guidance and Development	Air quality planning and policy guidance	WRS and District Councils	Currently on-going. SPD currently being drafted by WRS officers	Draft due for completion by October 2016. Start of formal adoption processes by November 2016	Formally adopted and utilised SPD at all six LPAs across County	<1%	SPD currently being drafted by WRS officers. Progress delayed by approx. 15 months due to conflicting priorities	Estimate formal adoption by District Council by end 2017.
5.5.4	Encourage developers to provide sustainable transport facilities and links serving new developments	Policy Guidance and Development	Air quality planning and policy guidance	WRS and District Councils	Currently on-going, SPD currently being drafted by WRS officers	Draft due for completion by October 2016. Start of formal adoption processes by November 2016	Formally adopted and utilised by all six LPAs across County	<1%	SPD currently being drafted by WRS officers. Progress delayed by approx. 15 months due to conflicting priorities	Estimate formal adoption by District Council by end 2017.

Measure No.	Measure	EU Category	EU Classification	Lead Authority	Planning Phase	Implementation Phase	Key Performance Indicator	Target Pollution Reduction in the AQMA	Progress to Date	Estimated Completion Date
5.6.3	Air Quality Networks	Policy Guidance and Development Control	Regional Groups Co-ordinating programmes to develop Area wide Strategies to reduce emissions and improve air quality	Worcestershire Regulatory Services	2014	2014 onwards	Improved cross boundary working between local authorities in Worcestershire	1%	WRS hold position of Air Quality technical coordinator for the Midlands Joint Advisory Council (MJAC). Provision of AQ services to Tewkesbury DC & Herefordshire Council 2015-16	On-going.
5.6.8	Forge closer links with local health agencies	Other	Other	WRS and Worcestershire County Council	N/A	On-going	Participation of relevant health agencies in the Worcestershire Air Quality Steering Group	<1%	WRS officers have met with the Director of Public Health at Worcestershire County Council to highlight the air quality agenda in relation to NO2 and PM2.5. Discussions are on-going as role of DoPH is considered	On-going
NAWC1	Develop and implement Worcester City Centre Masterplan and combined Low Emission Strategy	Traffic Management	UTC, Congestion management, traffic reduction	Worcestershire County Council, Worcester City Council, WRS	2015 - 16	2016 - 17	Formal adoption and implementation of City Centre Masterplan and Low Emission Strategy	Not yet determined	See text above (Section 3.4)	2017 – 18

**Table 3.4 Dolday/Bridge Steet AQMA Action Plan Update Non-Feasible Actions 1<sup>st</sup> May 2015 to 31<sup>st</sup> August 2016**

These actions were not identified as priority actions following completion of the prioritisation matrix and have been discounted as unfeasible for the Dolday/Bridge Street AQMA following further consideration. These actions will not be reported on in the future.

No	Measure	Focus	Reasons Why Action Not Feasible
5.1.2	Change carriageway from two ways to one way.	Maximising efficiency of roadway	Already one way system
5.1.5	Loading and unloading restrictions	Creation and implementation of TRO to restrict loading and unloading during peak times	Already apply along entire route of AQMA
5.1.10	Pedestrianisation of streets within area	Complete pedestrianisation and removal of emissions	Not applicable on this route
5.1.14	Traffic calming measures (aim is to deter drivers using route)	Employ speed bumps or other measures to deter traffic from using the route	Not applicable on this route
5.2.7	Introduce fixed penalty notices for stationary idling	Enforce penalty notices for parked drivers who refuse to turn off engines	No enforceable situations e.g. taxi ranks or outdoor bus depot in AQMA
DD6	Two street canyons within the AQMA	Action relates to generic actions - removal of receptors, compulsory purchase schemes	Action relates to generic actions included as part of action plan. Action will not be considered further.
DD9	Nearby college of technology	Action relates to generic actions - travel planning etc.	Action relates to generic actions included as part of action plan. Action will not be considered further.
DD12	Further assessment indicates reducing vehicle emissions by 50% will be an effective measure	Action relates to generic actions above - see all above	Action relates to generic actions included as part of action plan. Action will not be considered further.



DD13	Recorded data needs working back to facades of properties	Reassessment of data back to facades to give more accurate representation of situation	Has been applied to more recent data since publication of AQAP in 2013 and will continue. Action will not be considered for historic data due to resource implications.
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## **3.5 Lowesmoor AQMA**

### **Progress with action 5.1.5/LRH5 - Loading and unloading restrictions during peak traffic times**

Identified as priority action and discussed by Steering Group who agreed action to be investigated further in Dec 2014. No further action to date as focus has been on other priorities such as Low Emission Bus Scheme (LEBS) bid.

### **Progress with action 5.1.7 – Improvement of signage to avoid AQMA**

This action forms part of wider Worcester A4440 improvement works. The 3<sup>rd</sup> phase of A4440 improvement works is currently underway and the 4<sup>th</sup> phase to make improvements to the stretch between Carrington Bridge and Powick to the south west of the city is at the planning stage.

Additionally, Worcestershire County Council are installing Variable Messaging Systems (VMS) around Worcester City to be completed in 2016. As of November 2015 6 VMS signs had been emplaced in a ring around the City.

### **Progress with action 5.2.1 – Bus quality partnership**

Worcestershire County Council no longer subsidise local bus operators so no longer have any control or influence over how the operators work. In 2015 Worcestershire County Council and WRS attempted to develop a Low Emission Bus Scheme (LEBS) bid for the Worcester City area; however we were unable to secure any commitment, either formal or informal, from First Group who operates the vast majority of buses across Worcestershire.

Potentially another attempt could be made in the future should further LEBS funding be made available to local authorities in future years. At this time no funding has been announced for 2016/17. Furthermore, a commitment from First Group and current bus fleet data is required prior to initiating a bid, neither of which has been forthcoming to date.

In April 2016 Worcestershire County Council confirmed that First Group had introduced some modern vehicles (Euro VI) into its fleet of buses in the Worcester network in October 2015. WRS currently have no details of the roll out program for new vehicles to the fleet or which routes these will apply to.

In light of the above, resources are currently focused on the development of the Masterplan. A relocation of the current bus station at the centre of the city, adjacent to the Dolday AQMA to an area more distant from areas of poor air quality could be considered as part of the Masterplan and regeneration of the City. In addition to changes to traffic flows via redesign of routes through the City this has the potential to effectively achieve the required reduction in impact on the current AQMAs from public transport. However, it should be noted the detail and progression of the Masterplan is currently in its infancy.

### **Progress with action 5.2.2 – Freight quality partnership**

It has previously been identified that use of the Worcestershire County Council Lorry Route Advisory Map has declined significantly in recent years due to now almost universal use of satellite navigation systems. The Steering Group agreed that focus should be on working with satellite navigation data providers to ensure that HGVs are routinely routed around AQMAs.

Worcestershire County continues to regularly inform the satellite navigation companies of banned and sensitive routes, including AQMAs. They acknowledge that it can take some time for the information to filter down to users. Provision of relevant information to satellite navigation companies will continue going forward.

### **Timeline for Implementation**

Priorities for 2016/17 for air quality improvements in Worcester City in 2016 - 17 are:

- Continuing to promote requirement and gain political agreement for a 'Worcester City centre transport strategy and Masterplan' incorporating a 'Lowering Emissions Strategy'.
- Develop the city centre masterplan between key representatives of Worcestershire County Council Highways and Worcester City Council.
- Completion and adoption of 'Supplementary Planning Document for Air Quality' to enshrine current air quality recommendations in policy.
- Upgrade of signals in St Johns AQMA.
- Completion of installation of Variable Messaging Signage around the city.
- Engage with First group on prioritising routes through Air Quality Management Areas as destination for latest Euro code vehicles as part of any current or future update of local fleet program.

**Table 3.5 - Progress on Measures to Improve Air Quality in Lowesmoor AQMA IN REPORTING YEAR**

Measure No.	Measure	EU Category	EU Classification	Lead Authority	Planning Phase	Implementation Phase	Key Performance Indicator	Target Pollution Reduction in the AQMA	Progress to Date	Estimated Completion Date
Priority Actions										
5.2.1	Bus Quality Partnership	Promoting Low Emission Transport	Public Vehicle Procurement - Prioritising uptake of low emission vehicles	Worcester City Council / Worcestershire County Council	2016 - 17	2018 onwards	Elimination of lower Euro standard buses on key city centre routes.	5-25%	See text above (Section 3.5)	Currently unknown
5.2.2	Freight Quality Partnership – work with satellite navigation companies to route HGVs around AQMAs	Traffic Management	UTC, congestion management, traffic reduction	Worcestershire County Council	COMPLETED 2014 - 15	On-going.	Fewer HGVs travelling through AQMA	5-10%	See text above (Section 3.5)	On-going duty under Traffic Management Act 2004
5.1.5 /LRH5	Loading and unloading restrictions during peak traffic times	Traffic Management	Workplace Parking Levy, Parking Enforcement on highway	Worcester City Council	2015-2016	2018-2019	Introduction and implementation of TRO. Reduced incidence of loading and unloading during peak times	5-10%	See text above (Section 3.5)	2019
5.1.7	Signage to avoid AQMA	Traffic Management	Other	Worcestershire County Council	Phase 3 of A4440 works COMPLETED 2013. Phase 4 2016 - 17	2014 - 2031	Decrease in number of strategic journeys through AQMA	5-10%	See text above (Section 3.5)	2031

Non Priority Actions

Non Priority Actions										
5.1.4	Variable Message Systems	Traffic Management	Other	Worcestershire County Council	2015	2015 - 2016	Decrease in traffic movements through AQMA		See text above (Section 3.5)	2016
5.2.5	Greening Council and Business Fleets	Promoting Low Emission Transport	Procuring alternative Refuelling infrastructure to promote Low Emission Vehicles, EV recharging, Gas fuel recharging	Bromsgrove District Council, Worcestershire County Council	2015-2017	2018 Onwards	Increase in number of Council and business fleet vehicles of higher Euro Standard and/or utilising alternative fuels	1%	Proposed Compressed Natural Gas Station in Bromsgrove/Redditch has stalled due to a number of obstacles (financial, strategic, political) plus specific industrial constraints and limitations of the existing highway network. WCC have indicated that development of such a facility would need to be supported by relevant policy before the case would be explored any further.	It is anticipated that the Local Transport Plan 2017 will be developed to incorporate policy on alternative fuels and associated infrastructure.
5.2.10	Installing electric vehicle charging points	Promoting Low Emission Transport	Procuring alternative Refuelling infrastructure to promote Low Emission Vehicles, EV recharging, Gas fuel recharging	Worcester City Council, Worcestershire County Council	2013	2014 onwards	Increase in availability of EV charging points and corresponding increase in use of electric vehicles	1%	Recommendations for installation of EV Charging Points routinely recommended by WRS on relevant planning consents. To be formalised in SPD currently being drafted by WRS officers. Progress delayed by approx. 15 months due to conflicting priorities	Estimate formal adoption by District Council by end 2017.
5.3.1	Travel Planning	Promoting Travel Alternatives	Personalised travel planning	Worcestershire County Council	Currently taking place	2017 onwards	Increased uptake of alternative modes of transport	<1%	The development of a 'one-stop-shop' online travel portal is well underway and it is envisaged that the program will be rolled out in 2017.	Estimated end 2017
5.3.2	Car Sharing	Alternatives to private car use	Car and lift sharing schemes	Worcestershire County Council	2014 – 2015 COMPLETED	Liftshare Scheme launched Autumn 2015	Increase in number of people car sharing	<1%	Liftshare Scheme launched in Autumn 2015	Liftshare website scheme launched Autumn 2015. Currently operating

5.3.4	Promote flexible working arrangements	Promoting travel alternatives	Encourage/facilitate home-working	Worcestershire County Council	N/A	On-going	Increase in number of people able to work from home	<1%	To date the main promotion of flexible working arrangements is a continued push by Worcestershire County Council to get the entire County connected to high speed broadband to enable successful working from home. Currently the total fibre optic broadband coverage across the County is 94% with 49,737 properties currently able to connect to superfast speeds	Currently unknown
5.5.1	Produce Air Quality Supplementary Planning Document	Policy Guidance and Development	Air quality planning and policy guidance	WRS and District Councils	Currently on-going. SPD currently being drafted by WRS officers	Draft due for completion by October 2016. Start of formal adoption processes by November 2016	Formally adopted and utilised SPD at all six LPAs across County	<1%	SPD currently being drafted by WRS officers. Progress delayed by approx. 15 months due to conflicting priorities	Estimate formal adoption by District Council by end 2017.
5.5.4	Encourage developers to provide sustainable transport facilities and links serving new developments	Policy Guidance and Development	Air quality planning and policy guidance	WRS and District Councils	Currently on-going, SPD currently being drafted by WRS officers	Draft due for completion by October 2016. Start of formal adoption processes by November 2016	Formally adopted and utilised by all six LPAs across County	<1%	SPD currently being drafted by WRS officers. Progress delayed by approx. 15 months due to conflicting priorities	Estimate formal adoption by District Council by end 2017.
5.6.3	Air Quality Networks	Policy Guidance and Development Control	Regional Groups Co-ordinating programmes to develop Area wide Strategies to reduce emissions and improve air quality	Worcestershire Regulatory Services	2014	2014 onwards	Improved cross boundary working between local authorities in Worcestershire	1%	WRS hold position of Air Quality technical coordinator for the Midlands Joint Advisory Council (MJAC). Provision of AQ services to Tewkesbury DC & Herefordshire Council 2015-16	On-going.

5.6.8	Forge closer links with local health agencies	Other	Other	WRS and Worcestershire County Council	N/A	On-going	Participation of relevant health agencies in the Worcestershire Air Quality Steering Group	<1%	WRS officers have met with the Director of Public Health at Worcestershire County Council to highlight the air quality agenda in relation to NO2 and PM2.5. Discussions are on-going as role of DoPH is considered	On-going
LRH7 / 5.1.1	Alteration to traffic light phasing / Traffic lights onto Lowesmoor Terrace cause congestion	Traffic Management	Strategic highway improvements and congestion reduction	Worcestershire County Council	2013 - 14	COMPLETED 2015	Improved flow of traffic through Lowesmoor. Reduced congestion. Reduced volume of traffic.	5 – 10%	Renewed enforcement of an existing traffic regulation order restricting all vehicles, with the exception of buses, traversing Lowesmoor eastbound out of the city centre during peak afternoon times as part of Lowesmoor Improvement scheme implemented January 2015. Initial data indicated a 74% reduction in non-permitted vehicles travelling along AQMA during restricted peak times. County Council looking to progress the installation of enforcement cameras in the area	No date currently for enforcement cameras
NAWC1	Develop and implement Worcester City Centre Masterplan and combined Low Emission Strategy	Traffic Management	UTC, Congestion management, traffic reduction	Worcestershire County Council, Worcester City Council, WRS	2015 - 16	2016 - 17	Formal adoption and implementation of City Centre Masterplan and Low Emission Strategy	Not yet determined	See text above (Section 3.5)	2017 – 18



**Table 3.6 Lowesmoor AQMA Action Plan Update Non-Feasible Actions 1<sup>st</sup> May 2015 to 31<sup>st</sup> August 2016**

These actions were not identified as priority actions following completion of the prioritisation matrix and have been discounted as unfeasible for the Dolday/Bridge Street AQMA following further consideration. These actions will not be reported on in the future.

No	Measure	Focus	Reasons Why Action Not Feasible
5.2.7	Introduce fixed penalty notices for stationary idling	Enforce penalty notices for parked drivers who refuse to turn off engines	No enforceable situations e.g. taxi ranks or outdoor bus depot in AQMA
LRH10	Recorded data needs working back to facades of properties	Reassessment of data back to facades to give more accurate representation of situation	Has been applied to more recent data since publication of AQAP in 2013 and will continue. Action will not be considered for historic data due to resource implications.

## **3.6 Rainbow Hill AQMA**

### **Progress with action 5.2.1 – Bus quality partnership**

Worcestershire County Council no longer subsidise local bus operators so no longer have any control or influence over how the operators work. In 2015 Worcestershire County Council and WRS attempted to develop a Low Emission Bus Scheme (LEBS) bid for the Worcester City area; however we were unable to secure any commitment, either formal or informal, from First Group who operates the vast majority of buses across Worcestershire.

Potentially another attempt could be made in the future should further LEBS funding be made available to local authorities in future years. At this time no funding has been announced for 2016/17. Furthermore, a commitment from First Group and current bus fleet data is required prior to initiating a bid, neither of which has been forthcoming to date.

In April 2016 Worcestershire County Council confirmed that First Group had introduced some modern vehicles (Euro VI) into its fleet of buses in the Worcester network in October 2015. WRS currently have no details of the roll out program for new vehicles to the fleet or which routes these will apply to.

In light of the above, resources are currently focused on the development of the Masterplan. A relocation of the current bus station at the centre of the city, adjacent to the Dolday AQMA to an area more distant from areas of poor air quality could be considered as part of the Masterplan and regeneration of the City. In addition to changes to traffic flows via redesign of routes through the City this has the potential to effectively achieve the required reduction in impact on the current AQMAs from public transport. However, it should be noted the detail and progression of the Masterplan is currently in its infancy.

### **Progress with action 5.1.5/LRH5 - Loading and unloading restrictions during peak traffic times**

Identified as priority action and discussed by Steering Group who agreed action to be investigated further in December 2014. No further action to date as focus has been on other priorities such as Low Emission Bus Scheme (LEBS) bid.

### **Progress with action 5.3.4 – Promote flexible working arrangements**

To date the main promotion of flexible working arrangements is a continued push by Worcestershire County Council to get the entire County connected to high speed broadband to enable successful working from home. Currently the total fibre optic broadband coverage across the County is 94% with 49,737 properties currently able to connect to superfast speeds. Further information can be found at :

[www.superfastworcestershire.com](http://www.superfastworcestershire.com)

### **Progress with action 5.1.4 – Variable Message Signage**

Currently progressing: In Oct 2015 Worcestershire County Council confirmed plans to install Variable Messaging Systems (VMS) signs across the County. The strategy is to complete a ring of VMS signs around Worcester City in 2016 before progressing to other parts of the County.

### **Timeline for Implementation**

Priorities for 2016/17 for air quality improvements in Worcester City in 2016 - 17 are:

- Continuing to promote requirement and gain political agreement for a 'Worcester City centre transport strategy and Masterplan' incorporating a 'Lowering Emissions Strategy'.
- Develop the city centre Masterplan between key representatives of Worcestershire County Council Highways and Worcester City Council.
- Completion and adoption of 'Supplementary Planning Document for Air Quality' to enshrine current air quality recommendations in policy.

- Upgrade of signals in St Johns AQMA.
- Completion of installation of Variable Messaging Signage around the city.
- Engage with First group on prioritising routes through Air Quality Management Areas as destination for latest Euro code vehicles as part of any current or future update of local fleet program.

**Table 3.7 - Progress on Measures to Improve Air Quality in Rainbow Hill AQMA IN REPORTING YEAR**

Measure No.	Measure	EU Category	EU Classification	Lead Authority	Planning Phase	Implementation Phase	Key Performance Indicator	Target Pollution Reduction in the AQMA	Progress to Date	Estimated Completion Date
Priority Actions										
5.2.1	Bus Quality Partnership	Promoting Low Emission Transport	Public Vehicle Procurement - Prioritising uptake of low emission vehicles	Worcester City Council / Worcestershire County Council	2016 - 17	2018 onwards	Elimination of lower Euro standard buses on key city centre routes.	5-25%	See text above (Section 3.6)	Currently unknown
5.1.5 /LRH5	Loading and unloading restrictions during peak traffic times	Traffic Management	Workplace Parking Levy, Parking Enforcement on highway	Worcester City Council	2015-2016	2018-2019	Introduction and implementation of TRO. Reduced incidence of loading and unloading during peak times	5-10%	See text above (Section 3.6)	2019
5.1.4	Variable Message Systems	Traffic Management	Other	Worcestershire County Council	2015	2015 - 2016	Decrease in traffic movements through AQMA	1 – 2 %	See text above (Section 3.6)	2016
5.3.4	Promote flexible working arrangements	Promoting travel alternatives	Encourage/facilitate home-working	Worcestershire County Council	N/A	On-going	Increase in number of people able to work from home	<1%	See text above (Section 3.6)	Currently unknown

Non Priority Actions

5.2.5	Greening Council and Business Fleets	Promoting Low Emission Transport	Procuring alternative Refuelling infrastructure to promote Low Emission Vehicles, EV recharging, Gas fuel recharging	Bromsgrove District Council, Worcestershire County Council	2015-2017	2018 Onwards	Increase in number of Council and business fleet vehicles of higher Euro Standard and/or utilising alternative fuels	1%	Proposed Compressed Natural Gas Station in Bromsgrove/Redditch has stalled due to a number of obstacles (financial, strategic, political) plus specific industrial constraints and limitations of the existing highway network. WCC have indicated that development of such a facility would need to be supported by relevant policy before the case would be explored any further.	It is anticipated that the Local Transport Plan 2017 will be developed to incorporate policy on alternative fuels and associated infrastructure.
5.2.10	Installing electric vehicle charging points	Promoting Low Emission Transport	Procuring alternative Refuelling infrastructure to promote Low Emission Vehicles, EV recharging, Gas fuel recharging	Worcester City Council, Worcestershire County Council	2013	2014 onwards	Increase in availability of EV charging points and corresponding increase in use of electric vehicles	1%	Recommendations for installation of EV Charging Points routinely recommended by WRS on relevant planning consents. To be formalised in SPD currently being drafted by WRS officers. Progress delayed by approx. 15 months due to conflicting priorities	Estimate formal adoption by District Council by end 2017.
5.3.1	Travel Planning	Promoting Travel Alternatives	Personalised travel planning	Worcestershire County Council	Currently taking place	2017 onwards	Increased uptake of alternative modes of transport	<1%	The development of a 'one-stop-shop' online travel portal is well underway and it is envisaged that the program will be rolled out in 2017.	Estimated end 2017
5.3.2	Car Sharing	Alternatives to private car use	Car and lift sharing schemes	Worcestershire County Council	2014 – 2015 COMPLETED	Liftshare Scheme launched Autumn 2015	Increase in number of people car sharing	<1%	Liftshare Scheme launched in Autumn 2015	Liftshare website scheme launched Autumn 2015. Currently operating
5.5.1	Produce Air Quality Supplementary Planning Document	Policy Guidance and Development	Air quality planning and policy guidance	WRS and District Councils	Currently on-going. SPD currently being drafted by WRS officers	Draft due for completion by October 2016. Start of formal adoption processes by November 2016	Formally adopted and utilised SPD at all six LPAs across County	<1%	SPD currently being drafted by WRS officers. Progress delayed by approx. 15 months due to conflicting priorities	Estimate formal adoption by District Council by end 2017.

5.5.4	Encourage developers to provide sustainable transport facilities and links serving new developments	Policy Guidance and Development	Air quality planning and policy guidance	WRS and District Councils	Currently on-going, SPD currently being drafted by WRS officers	Draft due for completion by October 2016. Start of formal adoption processes by November 2016	Formally adopted and utilised by all six LPAs across County	<1%	SPD currently being drafted by WRS officers. Progress delayed by approx. 15 months due to conflicting priorities	Estimate formal adoption by District Council by end 2017.
5.6.3	Air Quality Networks	Policy Guidance and Development Control	Regional Groups Co-ordinating programmes to develop Area wide Strategies to reduce emissions and improve air quality	Worcestershire Regulatory Services	2014	2014 onwards	Improved cross boundary working between local authorities in Worcestershire	1%	WRS hold position of Air Quality technical coordinator for the Midlands Joint Advisory Council (MJAC). Provision of AQ services to Tewkesbury DC & Herefordshire Council 2015-16	On-going.
5.6.8	Forge closer links with local health agencies	Other	Other	WRS and Worcestershire County Council	N/A	On-going	Participation of relevant health agencies in the Worcestershire Air Quality Steering Group	<1%	WRS officers have met with the Director of Public Health at Worcestershire County Council to highlight the air quality agenda in relation to NO2 and PM2.5. Discussions are on-going as role of DoPH is considered	On-going
NAWC1	Develop and implement Worcester City Centre Masterplan and combined Low Emission Strategy	Traffic Management	UTC, Congestion management, traffic reduction	Worcestershire County Council, Worcester City Council, WRS	2015 - 16	2016 - 17	Formal adoption and implementation of City Centre Masterplan and Low Emission Strategy	Not yet determined	See text above (Section 3.6)	2017 – 18

**Table 3.8 Rainbow Hill AQMA Action Plan Update Non-Feasible Actions 1<sup>st</sup> May 2015 to 31<sup>st</sup> August 2016**

These actions were not identified as priority actions following completion of the prioritisation matrix and have been discounted as unfeasible for the Dolday/Bridge Street AQMA following further consideration. These actions will not be reported on in the future.

No	Measure	Focus	Reasons Why Action Not Feasible
5.2.7	Introduce fixed penalty notices for stationary idling	Enforce penalty notice for parked drivers who refuse to turn off engines	No enforceable situations e.g. taxi ranks or outdoor bus depot in AQMA
LRH10	Recorded data needs working back to facades of properties	Reassessment of data back to facades to give more accurate representation of situation	Has been applied to more recent data since publication of AQAP in 2013 and will continue. Action will not be considered for historic data due to resource implications.



## **3.7 St. Johns AQMA**

Currently there is no action plan for St Johns AQMA. This will be completed following source apportionment analysis later in 2016 - early 2017. Traffic surveys were completed in July 2016 to enable the source apportionment analysis to be undertaken.

### **Timeline for Implementation**

Priorities for 2016/17 for air quality improvements in Worcester City in 2016 - 17 are:

- Continuing to promote requirement and gain political agreement for a 'Worcester City centre transport strategy and Masterplan' incorporating a 'Lowering Emissions Strategy'.
- Develop the city centre master plan between key representatives of Worcestershire County Council Highways and Worcester City Council.
- Completion and adoption of 'Supplementary Planning Document for Air Quality' to enshrine current air quality recommendations in policy.
- Upgrade of signals in St Johns AQMA.
- Completion of installation of Variable Messaging Signage around the city.
- Engage with First group on prioritising routes through Air Quality Management Areas as destination for latest Euro code vehicles as part of any current or future update of local fleet program.

## 4. WYCHAVON DISTRICT COUNCIL

### 4.1 Air Quality Management Areas

Air Quality Management Areas (AQMAs) are declared when there is an exceedance or likely exceedance of an air quality objective. Following declaration, the authority must prepare an air quality action plan (AQAP) within a 12-18 month period setting out measures it intends to put in place in pursuit of the objectives.

A summary of AQMAs declared by Wychavon District Council can be found in Table 4.1. Further information related to declared or revoked AQMAs, including maps of AQMA boundaries are available online at

<http://www.worcsregservices.gov.uk/pollution/air-quality/air-quality-management-areas.aspx>.

**Table 4.1 – Declared Air Quality Management Areas**

AQMA Name	Pollutants and Air Quality Objectives	City / Town	One Line Description	Action Plan
Port Street AQMA	NO <sub>2</sub> annual mean	Evesham	Mixed residential and retail street canyon. Main route into the town centre from the east.	Air Quality Action Plan for Worcestershire, 2013 and subsequent Air Quality Action Plan for Worcestershire Progress Report 2013-2015

## 4.2 Priority Actions for the AQMAs within Wychavon District

The action plan for Worcestershire identified many potential air quality solutions for each AQMA but it is recognised that some are not actionable simultaneously due to a variety of constraints. With this in mind WRS conducted a “priority actions” process in 2014 for each AQMA. The priority actions established for the Port Street AQMA are outlined in Table 4.2 below.

Further detail on these measures and the prioritisation methodology can be found in the full Air Quality Action Plan for Worcestershire (September 2013) document and the Air Quality Action Plan for Worcestershire Progress Report 2013-2015 (October 2015), both available online at

<http://www.worcsregservices.gov.uk/environmental-health/pollution/air-quality/air-quality-action-plan.aspx>

Details of the current top five prioritised actions for the Port Street AQMA are provided in Table 4.2 below:

**Table 4.2 Priority actions for Port Street AQMA**

AQAP Action Ref Number	Action Description
5.1.8	Introduction of signals at roundabouts
5.1.1	Removal of signals at Port Street/Bridge Street and Waterside Junction
5.2.1	Bus Quality Partnership
PS5	Improvement to pedestrian crossing management

### 4.3 Progress and Impact of Measures to Address Air Quality in the Wychavon District

Details of progress made against priority actions for the two Wyre Forest AQMAs are provided below

#### 4.4 Port Street AQMA

##### **Progress with action 5.1.8 – introduction of signals at roundabouts**

During sub-group discussions in early 2015 local councillors felt that AQAP Action 5.1.8 was “too much” for local residents and it was suggested there was little public support for such a scheme. Therefore this option has not been pursued further in 2015/16. However it remains in place as a priority action for future consideration.

##### **Progress with action 5.1.1 – removal of signals**

In February 2015 Worcestershire County Council obtained a transport model for the Port Street AQMA area and completed modelling of the various scenarios. Following this a scheme for implementation was agreed and funding secured for the removal of the traffic signals at the Port Street/Bridge Street and Waterside junction. A trial of the signal removal (involving bagging of the existing signals) had been agreed and was planned to commence in 2016.

Dependant on the trial being a success it was anticipated that, work to remove the signals and remodel the junction would commence at the end of 2016. WRS predicted that this change to the junction would result in levels of NO<sub>2</sub> dropping below the AQO due to reductions in the volume of congestion and idling traffic along Port Street. However, due to the shortcomings in the modelling undertaken and other

strategic plans superseding this work, the actions have been suspended for the time being.

Other developments in transport planning for Evesham are outlined below:

In 2016 Worcestershire County Council, Wychavon District Council and Highways England commenced a major DfT compliant transport model for Evesham. Worcestershire County Council have advised that options for the Port Street AQMA will be assessed using this model as part of wider options assessment for Evesham.

Data collection has now been completed and model development is underway with an estimated completion in 2017. This model will be used to test and determine a multimodal investment strategy for Evesham transport infrastructure. Worcestershire County Council have confirmed that remediation of the Port Street AQMA is one of the main objectives of this exercise as it comprises the principle route into the town centre from the east.

WRS will be engaging the County Transport Strategy Steering Group for Evesham in order to promote the air quality agenda and ensure that resolution of the Port Street AQMA remains a key focus in the development of the wider transport strategy.

WRS will aim to ensure that any future infrastructure plans for Port Street will result in a 5-10% reduction in emissions as this is required to meet the Air Quality Objective for NO<sub>2</sub> in this AQMA. The issues that result in the AQMA in Port Street relate to congestion and idling traffic, the improvement of which will need to be the focus of any future schemes for the area.

WRS has advised the County Council of its conclusions that the removal of signals at the Port/Bridge Street, Waterside junction and remodelling of the intersection would resolve the AQMA. WRS anticipates that the County Council proposal for resolving the AQMA as part of the wider Evesham Transport Strategy and will insist that first priority is given to these improvements upon implementation.

### **Progress with action 5.2.1 – bus quality partnership**

Worcestershire County Council no longer subsidise local bus operators so no longer have any control or influence over how the operators work. In 2015 Worcestershire County Council and WRS attempted to develop a Low Emission Bus Scheme (LEBS) bid for the Worcester City area; however we were unable to secure any commitment, either formal or informal, from First Group who operates the vast majority of buses across Worcestershire. It is therefore extremely unlikely that First Group will consider such programs for the smaller outlying towns in Worcestershire, such as Evesham.

It was anticipated that the implementation of action 5.1.1 would result in the resolution of the AQMA and it continues to be the case that local network and junction changes resulting from the development of an Evesham Transport Strategy will deliver the required improvements. Nevertheless, following the failed attempt at a LEBS bid in Worcester City resources have been re-focused on the development of the Evesham Transport Strategy with WRS specifically prioritising the actions required in Port Street.

It is acknowledged that implementation of the wider Evesham Transport Strategy will not be completed for several years for this reason WRS will continue to explore alternative options with First Group, namely the use of newer buses within the existing fleet on any routes involving travel through the AQMA.

### **Progress with action PS5 – improvement to pedestrian crossing management**

During 2015 Worcestershire County Council confirmed that plans to improve pedestrian crossings along Port Street have been formally adopted in the South Worcestershire Development Plan. To date no implementation has taken place. In addition to the formal adoption of this action as part of the South Worcestershire Development Plan, WRS will ensure that the Evesham Transport Strategy Steering Group considers this action for incorporation into any wider improvement plan for the Port Street area. This approach will provide two avenues by which implementation of this action can be achieved.

## **Progress with action 5.1.5/PS7 – loading and unloading restrictions during peak traffic times**

In early 2015 Steering Group members agreed to pursue vehicle restrictions on loading and unloading restriction within the AQMA. To date no further progress has been made with the implementation of this action as resources had been focussed on the planned removal of signals at the Waterside and Workman Bridge junction. WRS will ensure that the Evesham Transport Strategy Steering Group considers this action for incorporation into any wider improvement plan for the Port Street area.

Details have only been provided above for actions that are priority actions. For details of progress made with both priority and non-priority actions during the reporting year please see Table 4.3. For actions where no progress has been made in the reporting year the details of progress made to date can be found in the Air Quality Action Plan for Worcestershire Progress Report 2013-2015 (October 2015, available online at

<http://www.worcsregservices.gov.uk/environmental-health/pollution/air-quality/air-quality-action-plan.aspx>

## **Timeline for Implementation**

An **indicative** timeline for development of the Evesham Transport Strategy has been provided by Worcestershire County Council as follows:

- Model construction and development will be completed by Easter 2017. This process is a time consuming one which involves coding all the data collected into the model link by link until it accurately simulates existing traffic flows.
- Formation of the Evesham Transport Strategy Steering Group is likely to occur in early 2017. Initially the group will agree aims and objectives followed by a meeting to determine which of the various transport scenarios will be tested in the model.

- Validation of the model is likely to take place around Easter 2017 with model testing taking place in May/June 2017
- Results submitted to the Steering Group in June/July 2017 with pursuit of bids for investments to support the Strategy taking place from August 2017 onwards.

Wychavon District Council's priorities for the coming year are to drive the air quality agenda through continued partnership working with Worcestershire County Council in the development and implementation of the Evesham Transport Strategy. This will include participation in the creation of, and attendance at, the Evesham Transport Strategy Steering Group. The role of WRS at this group will be to ensure that resolution of the Port Street AQMA remains a primary focus in the development of the Transport Strategy. WRS will also monitor the progress of the Steering Group and, should delays be experienced, move to pursue the initial planned removal of the signals at the Port Street/Bridge Street and Waterside junction to resolve the AQMA.

WRS will continue to support Worcestershire County Council as necessary in pursuit of funding for the implementation of walking and cycling initiatives for the Evesham area.



**Table 4.3 – Progress on Measures to Improve Air Quality at Port Street AQMA IN REPORTING YEAR**

Measure No.	Measure	EU Category	EU Classification	Lead Authority	Planning Phase	Implementation Phase	Key Performance Indicator	Target Pollution Reduction in the AQMA	Progress to Date	Estimated Completion Date
PRIORITY ACTIONS										
5.1.8	Introduction of signals at roundabouts – now linked to development of Evesham Transport Strategy	Traffic management	Strategic highway improvements and congestion reduction	Worcestershire County Council	Planning stage of development of Transport Strategy COMPLETED	Data collection COMPLETED. Model development taking place between July 2016 and Easter 2017	Revocation of AQMA	5-10%	See text summary above (Section 4.4)	Implementation of funding bids to support Strategy from August 2017, implementation of agreed schemes MEDIUM TERM
5.1.1	Removal of signals at Port Street/Bridge Street and Waterside junction – now linked to development of Evesham Transport Strategy	Traffic Management	Strategic highway improvements and congestion reduction	Worcestershire County Council	Planning stage of development of Transport Strategy COMPLETED	Data collection COMPLETED. Model development taking place between July 2016 and Easter 2017	Revocation of AQMA	5-10%	See text summary above (Section 4.4)	Implementation of funding bids to support Strategy from August 2017, implementation of agreed schemes MEDIUM TERM
5.2.1	Bus Quality Partnership	Vehicle Fleet Efficiency	Vehicle retrofitting programmes	Worcestershire County Council	N/A	N/A	N/A	N/A	See text summary above (Section 4.4)	N/A
PS5	Improvement to pedestrian crossing management – now linked to development of Evesham Transport Strategy	Traffic management	UTC, congestion management, traffic reduction	Worcestershire County Council	Planning stage of development of Transport Strategy COMPLETED	Data collection COMPLETED. Model development taking place between July 2016 and Easter 2017	Revocation of AQMA	5-10%	See text summary above (Section 4.4)	Implementation of funding bids to support Strategy from August 2017, implementation of agreed schemes MEDIUM TERM

Measure No.	Measure	EU Category	EU Classification	Lead Authority	Planning Phase	Implementation Phase	Key Performance Indicator	Target Pollution Reduction in the AQMA	Progress to Date	Estimated Completion Date
5.1.5/PS7	Loading and unloading restrictions during peak traffic times – now linked to development of Evesham Transport Strategy	Traffic management	UTC, congestion management, traffic reduction	Worcestershire County Council and District Council	Planning stage of development of Transport Strategy COMPLETED	Data collection COMPLETED. Model development taking place between July 2016 and Easter 2017	Revocation of AQMA	5-10%	See text summary above (Section 4.4)	Implementation of funding bids to support Strategy from August 2017, implementation of agreed schemes MEDIUM TERM

NON-PRIORITY ACTIONS										
5.2.2	Freight Quality Partnership – work with satellite navigation companies to route HGVs around AQMAs	Traffic Management	UTC, congestion management, traffic reduction	Worcestershire County Council		On-going.	Fewer HGVs travelling through AQMA	5-10%	Worcestershire County Council regularly inform sat nav companies of banned and sensitive routes. Acknowledged can take some time for information to filter down to users.	On-going duty under Traffic Management Act 2004
5.2.5	Greening Council and Business Fleets	Promoting Low Emission Transport	Procuring alternative Refuelling infrastructure to promote Low Emission Vehicles, EV recharging, Gas fuel recharging	Bromsgrove District Council, Worcestershire County Council	2015-2017	2018 Onwards	Increase in number of Council and business fleet vehicles of higher Euro Standard and/or utilising alternative fuels	1%	Proposed Compressed Natural Gas Station in Bromsgrove/Redditch has stalled due to a number of obstacles (financial, strategic, political) plus specific industrial constraints and limitations of the existing highway network. WCC have indicated that development of such a facility would need to be supported by relevant policy before the case would be explored any further.	It is anticipated that the Local Transport Plan 2017 will be developed to incorporate policy on alternative fuels and associated infrastructure.
5.2.10	Installing electric vehicle charging points	Promoting Low Emission Transport	Procuring alternative Refuelling infrastructure to promote Low Emission Vehicles, EV recharging, Gas fuel recharging	Wychavon District Council, Worcestershire County Council	2013	2014 onwards	Increase in availability of EV charging points and corresponding increase in use of electric vehicles	1%	Recommendations for installation of EV Charging Points routinely recommended by WRS on relevant planning consents. To be formalised in SPD currently being drafted by WRS officers. Progress delayed by approx. 15 months due to conflicting priorities	Estimate formal adoption by District Council by end 2017.

5.3.1	Travel Planning	Promoting Travel Alternatives	Personalised travel planning	Worcestershire County Council	Currently taking place	2017 onwards	Increased uptake of alternative modes of transport	%	Personalised travel planning program planned as part of wider health improvement drives from County Council who are currently preparing a bid for the DfT's Access Fund to move project forward. County Council currently developing a "one-stop-shop" online travel portal due to be rolled out in 2017.	Estimated end 2017
5.3.2	Car Sharing	Alternatives to private car use	Car and lift sharing schemes	Worcestershire County Council	2014 – 2015 COMPLETED	Liftshare Scheme launched Autumn 2015	Increase in number of people car sharing	<1%	Liftshare Scheme launched in Autumn 2015	Liftshare website scheme launched Autumn 2015. Currently operating
5.3.4	Promote flexible working arrangements	Promoting travel alternatives	Encourage/facilitate home-working	Worcestershire County Council	N/A	On-going	Increase in number of people able to work from home	<1%	To date the main promotion of flexible working arrangements is a continued push by Worcestershire County Council to get the entire County connected to high speed broadband to enable successful working from home. Currently the total fibre optic broadband coverage across the County is 94% with 49,737 properties currently able to connect to superfast speeds	Currently unknown
5.5.1	Produce Air Quality Supplementary Planning Document	Policy Guidance and Development	Air quality planning and policy guidance	WRS and District Councils	Currently on-going. SPD currently being drafted by WRS officers	Draft due for completion by October 2016. Start of formal adoption processes by November 2016	Formally adopted and utilised SPD at all six LPAs across County	<1%	SPD currently being drafted by WRS officers. Progress delayed by approx. 15 months due to conflicting priorities	Estimate formal adoption by District Council by end 2017.

5.5.4	Encourage developers to provide sustainable transport facilities and links serving new developments	Policy Guidance and Development	Air quality planning and policy guidance	WRS and District Councils	Currently on-going, SPD currently being drafted by WRS officers	Draft due for completion by October 2016. Start of formal adoption processes by November 2016	Formally adopted and utilised by all six LPAs across County	<1%	SPD currently being drafted by WRS officers. Progress delayed by approx. 15 months due to conflicting priorities	Estimate formal adoption by District Council by end 2017.
5.6.3	Air Quality Networks	Policy Guidance and Development Control	Regional Groups Co-ordinating programmes to develop Area wide Strategies to reduce emissions and improve air quality	Bromsgrove District Council, Worcestershire Regulatory Services	2014	2014 onwards	Improved cross boundary working between local authorities in Worcestershire	1%	WRS hold position of Air Quality technical coordinator for the Midlands Joint Advisory Council (MJAC). Provision of AQ services to Tewkesbury DC & Herefordshire Council 2015-16	On going.
5.6.8	Forge closer links with local health agencies	Other	Other	WRS and Worcestershire County Council	N/A	On-going	Participation of relevant health agencies in the Worcestershire Air Quality Steering Group	<1%	WRS officers have met with the Director of Public Health at Worcestershire County Council to highlight the air quality agenda in relation to NO2 and PM2.5. Discussions are on-going as role of DoPH is considered	On-going
New Action	Signage on A44 routing traffic away from AQMA	Traffic Management	Other	Worcestershire County Council	COMPLETED	Signage installed and operational	Fewer vehicles travelling through AQMA	<1%	Signage installed and operational.. Currently unclear how much impact this will have as lot of traffic through AQMA is local people travelling into the town centre.	COMPLETED and on-going

**Table 4.4 Port Street, Evesham Action Plan Update Non-Feasible Actions April 2015 to March 2016**

These actions were not identified as priority actions following completion of the prioritisation matrix and have been discounted as unfeasible for the Kidderminster Road AQMA following further consideration. These actions will not be reported on in the future.

No	Measure	Focus	Reasons Why Action Not Feasible
5.1.12	Removal of parking bays in affected streets	Improve flow by removing any existing parking bays	No parking bays in AQMA
5.1.14	Traffic calming measures (aim is to deter drivers using route)	Employ speed bumps or other measures to deter traffic from using the route	Not desirable on key corridor into town. Likely worsen concentrations
5.2.7	Introduce fixed penalty notices for stationary idling	Enforce penalty notices for parked drivers who refuse to turn off engines	No enforceable situations e.g. taxi ranks or outdoor bus depot in AQMA
PS1	Current boundary of AQMA requires amendment to conform with best practice guidance	Amendment of AQMA boundary to exclude open areas in accordance with guidance	No benefit from undertaking at this time. Anticipate AQMA will be revoked following implementation of other actions.
PS12	No automatic monitoring has previously been undertaken	Undertaken minimum 6 months automatic monitoring as part of any revocation process and to inform any future detailed assessment	Detailed assessments and auto monitoring for revocation no longer required under LAQM.PG.16. No additional benefit considered from auto monitoring at this time

## 5. WYRE FOREST DISTRICT COUNCIL

### 5.1 Air Quality Management Areas

Air Quality Management Areas (AQMAs) are declared when there is an exceedance or likely exceedance of an air quality objective. Following declaration, the authority must prepare an air quality action plan (AQAP) within a 12-18 month period setting out measures it intends to put in place in pursuit of the objectives.

A summary of AQMAs declared by Wyre Forest District Council can be found in Table 2.1. Further information related to declared or revoked AQMAs, including maps of AQMA boundaries are available online at

<http://www.worcsregservices.gov.uk/pollution/air-quality/air-quality-management-areas.aspx>.

**Table 5.1 – Declared Air Quality Management Areas**

AQMA Name	Pollutants and Air Quality Objectives	City / Town	One Line Description	Action Plan
Horsefair/ Coventry Street	NO <sub>2</sub> annual mean	Kidderminster	A key corridor into the town centre. Mixed residential and retail street canyon	Air Quality Action Plan for Worcestershire, 2013 and subsequent Air Quality Action Plan for Worcestershire Progress Report 2013-2015
Welch Gate		Bewdley	A key corridor into the town centre. Residential street canyon	

## 5.2 Priority Actions for the AQMAs in Wyre Forest District

The action plan for Worcestershire identified many potential air quality solutions for each AQMA but it is recognised that some are not actionable simultaneously due to a variety of constraints. With this in mind WRS conducted a “priority actions” process in 2014 for each AQMA. The priority actions established for the Horsefair/Coventry Street and Welch Gate AQMAs are outlined in Table 5.2 below.

Further detail on these measures and the prioritisation methodology can be found in the full Air Quality Action Plan for Worcestershire (September 2013) document and the Air Quality Action Plan for Worcestershire Progress Report 2013-2015 (October 2015), both available online at

<http://www.worcsregservices.gov.uk/environmental-health/pollution/air-quality/air-quality-action-plan.aspx>

Details of the current top five prioritised actions for each of the Wyre Forest District AQMAs are provided in Table 5.2 below:

**Table 5.2 Priority actions for the AQMAs in Wyre Forest District**

AQMA	AQAP Action Ref Number	Action Description
Horsefair / Coventry Street	5.1.5	Loading and unloading restrictions during peak traffic times
	5.3.4	Promote flexible working arrangements
	5.2.2	Freight Quality Partnership
	5.1.1	Alteration to phasing of traffic light systems
	5.1.8	Introduction of traffic signals at roundabouts



Welch Gate	5.1.1	Alteration to phasing of traffic light systems
	5.1.3	HGV or weight restrictions on affected roads
	5.1.5	Loading and unloading restrictions during peak traffic times
	WG4	Normal length buses block road in narrow bends

### 5.3 Progress and Impact of Measures to Address Air Quality in the Wyre Forest District

Details of progress made against priority actions for the two Wyre Forest AQMAs are provided below.

#### 5.4 Horsefair/Coventry Street AQMA

##### **Progress with action 5.1.5 – Loading and unloading restrictions during peak traffic times**

Loading and unloading restrictions at peak traffic times currently exist along Horsefair and are generally being observed. WRS will seek confirmation from Wyre Forest District Council's parking enforcement team that this is the case and if so this action will be re-prioritised.

##### **Progress with action 5.3.4 - Promote flexible working arrangements**

Worcestershire County Council plan to roll out travel choices initiatives throughout the Wyre Forest area in 2017 including the development of a 'one stop shop' online travel portal. The portal will include advice on home working and reduction in the need to travel, as well as bus times, rail times, walking and cycling journey planners.

##### **Progress with action 5.2.2 - Freight Quality Partnership**

Worcestershire County Council regularly informs sat nav companies of banned and sensitive routes including AQMAs. It is acknowledged that it can take some time for the information to filter down to users.

### **Progress with action 5.1.1 - Alteration to phasing of traffic light systems**

### **Progress with action 5.1.8 - Introduction of traffic signals at roundabouts**

Both of these actions are linked to the implementation of the Churchfields Masterplan; however there has been no significant progress in meeting the Masterplan's aspirations in the reporting year. A planning application was submitted in October 2015 for 95 dwellings in Churchfields. It does not propose any alterations to the highway or any other potential air quality related improvements and has yet to be determined. However, this application is seen as the next step towards regenerating the Churchfields/Clensmore Street area and will assist in attracting inward investment and the redevelopment of the larger sites in the immediate vicinity, which in turn will deliver improved air quality through highway redesign. Wyre Forest District Council is instructing consultants to assist in the design of a highway solution to the area, utilising previously secured S106 Obligation funding.

### **Timeline for Implementation**

Worcestershire County Council developed a Wyre Forest Transport Model (WFTM) in 2014/2015 for the purposes of strategic modelling of the highway network in the Wyre Forest area including the overhaul of the Kidderminster Ringway. Using the model it is proposed to develop a Kidderminster Transport Strategy which will involve a series of phased works, one of which will involve the comprehensive re-engineering of the Kidderminster Ringway to balance traffic flow with improving accessibility for non-car modes of transport. The Horsefair/Coventry Street AQMA is intrinsically linked to the Kidderminster Ringway with the vast majority of traffic travelling through the AQMA doing so either from or towards the Kidderminster Ringway. By improving the efficiency of the Ringway whilst simultaneously encouraging travel to the town centre via alternative methods it is envisaged that levels of congestion within the AQMA will reduce in combination with improvements in flow of traffic. This should result in a significant improvement in air quality.

Wyre Forest District Council's priorities for the coming year are to drive the air quality agenda through continued partnership working with Worcestershire County Council in the implementation of the Wyre Forest Core Strategy and the Churchfields Masterplan. This includes participation in the Horsefair/Coventry Street AQMA Sub Group. The role of WRS at this group will be to ensure that resolution of the Horsefair/Coventry Street AQMA remains a primary focus.

Details have only been provided above for actions that are priority actions. For details of progress made with both priority and non-priority actions during the reporting year please see Table 5.3. For actions where no progress has been made in the reporting year the details of progress made to date can be found in the Air Quality Action Plan for Worcestershire Progress Report 2013-2015 (October 2015, available online at

<http://www.worcsregservices.gov.uk/environmental-health/pollution/air-quality/air-quality-action-plan.aspx>

**Table 5.3 – Progress on Measures to Improve Air Quality at Horsefair/Coventry Street AQMA IN REPORTING YEAR**

Measure No.	Measure	EU Category	EU Classification	Lead Authority	Planning Phase	Implementation Phase	Key Performance Indicator	Target Pollution Reduction in the AQMA	Progress to Date	Estimated Completion Date
PRIORITY ACTIONS										
5.1.5	Loading and unloading restrictions during peak traffic times	Traffic Management	UTC, Congestion Management, Traffic Reduction	Worcestershire County Council, Wyre Forest District Council	2015	2016	Increase in number fixed penalty notices served. Reduction in number non-permitted loading/unloading incidents. Reduced congestion.	2-5%	See text summary above (Section 5.4)	Currently in operation
5.3.4	Promote flexible working arrangements	Promoting Travel Alternatives	Encourage / Facilitate home-working	Worcestershire County Council, Wyre Forest District Council	2015-2016	2017	Increase in uptake of personal travel planning services. Change in behaviour towards more sustainable modes of transport.	<1%	See text summary above (Section 5.4)	On-going
5.2.2	Freight Quality Partnership – work with satellite navigation companies to route HGVs around AQMAs	Traffic Management	UTC, congestion management, traffic reduction	Worcestershire County Council		On-going.	Fewer HGVs travelling through AQMA	5-10%	See text summary above (Section 5.4)	On-going duty under Traffic Management Act 2004

Measure No.	Measure	EU Category	EU Classification	Lead Authority	Planning Phase	Implementation Phase	Key Performance Indicator	Target Pollution Reduction in the AQMA	Progress to Date	Estimated Completion Date
5.1.1	Alteration to phasing of traffic light systems	Traffic Management	UTC, congestion management, traffic reduction	Worcestershire County Council	2015-2017	2018 onwards	Improved flow through AQMA, reduction in congestion	10-40%	See text summary above (Section 5.4)	Unknown – currently on-going
5.1.8	Introduction of traffic signals at roundabouts	Traffic Management	UTC, congestion management, traffic reduction	Worcestershire County Council	2016-2018	2018 onwards	Improved flow around ring road, significant reduction in stationary idling traffic at peak times.	10-40%	See text summary above (section 5.4)	Unknown – currently on-going
NON-PRIORITY ACTIONS										
5.2.5	Greening Council and Business Fleets	Promoting Low Emission Transport	Procuring alternative Refuelling infrastructure to promote Low Emission Vehicles, EV recharging, Gas fuel recharging	Bromsgrove District Council, Worcestershire County Council	2015-2017	2018 Onwards	Increase in number of Council and business fleet vehicles of higher Euro Standard and/or utilising alternative fuels	1%	Proposed Compressed Natural Gas Station in Bromsgrove/Redditch has stalled due to a number of obstacles (financial, strategic, political) plus specific industrial constraints and limitations of the existing highway network. WCC have indicated that development of such a facility would need to be supported by relevant policy before the case would be explored any further.	It is anticipated that the Local Transport Plan 2017 will be developed to incorporate policy on alternative fuels and associated infrastructure.

Measure No.	Measure	EU Category	EU Classification	Lead Authority	Planning Phase	Implementation Phase	Key Performance Indicator	Target Pollution Reduction in the AQMA	Progress to Date	Estimated Completion Date
5.2.10	Installing electric vehicle charging points	Promoting Low Emission Transport	Procuring alternative Refuelling infrastructure to promote Low Emission Vehicles, EV recharging, Gas fuel recharging	Wyre Forest District Council, Worcestershire County Council	2013	2014 onwards	Increase in availability of EV charging points and corresponding increase in use of electric vehicles	1%	Recommendations for installation of EV Charging Points routinely recommended by WRS on relevant planning consents. To be formalised in SPD currently being drafted by WRS officers. Progress delayed by approx. 15 months due to conflicting priorities	Estimate formal adoption by District Council by end 2017.
5.3.1	Travel Planning	Promoting Travel Alternatives	Personalised travel planning	Worcestershire County Council	Currently taking place	2017 onwards	Increased uptake of alternative modes of transport	%	Personalised travel planning program planned as part of wider health improvement drives from County Council who are currently preparing a bid for the DfTs Access Fund to move project forward. County Council currently developing a "one-stop-shop" online travel portal due to be rolled out in 2017.	Estimated end 2017
5.3.8	Measures linked to walking and cycling initiatives	Promoting travel alternatives	Promotion of cycling and promotion of walking	Wyre Forest District Council, Worcestershire County Council	2014 - 2015	Easter 2015 onwards	Increased uptake of walking and cycling in Wyre Forest	<1%	Wyre Forest District Council has a web page dedicated to the promotion of walking and cycling. <a href="http://www.wyreforestdc.gov.uk/things-to-see-do-and-visit/cycling-walking-and-running.aspx">www.wyreforestdc.gov.uk/things-to-see-do-and-visit/cycling-walking-and-running.aspx</a>	On-going

Measure No.	Measure	EU Category	EU Classification	Lead Authority	Planning Phase	Implementation Phase	Key Performance Indicator	Target Pollution Reduction in the AQMA	Progress to Date	Estimated Completion Date
5.3.2	Car Sharing	Alternatives to private car use	Car and lift sharing schemes	Worcestershire County Council	2014 – 2015 COMPLETE	Liftshare Scheme launched Autumn 2015	Increase in number of people car sharing	<1%	Liftshare Scheme launched in Autumn 2015	Liftshare website scheme launched Autumn 2015. Currently operating
5.5.1	Produce Air Quality Supplementary Planning Document	Policy Guidance and Development	Air quality planning and policy guidance	WRS and District Councils	Currently on-going. SPD currently being drafted by WRS officers	Draft due for completion by October 2016. Start of formal adoption processes by November 2016	Formally adopted and utilised SPD at all six LPAs across County	<1%	SPD currently being drafted by WRS officers. Progress delayed by approx. 15 months due to conflicting priorities	Estimate formal adoption by District Council by end 2017.
5.5.4	Encourage developers to provide sustainable transport facilities and links serving new developments	Policy Guidance and Development	Air quality planning and policy guidance	WRS and District Councils	Currently on-going, SPD currently being drafted by WRS officers	Draft due for completion by October 2016. Start of formal adoption processes by November 2016	Formally adopted and utilised by all six LPAs across County	<1%	SPD currently being drafted by WRS officers. Progress delayed by approx. 15 months due to conflicting priorities	Estimate formal adoption by District Council by end 2017.
5.6.1	Air Quality Policy in Local Development Plans	Policy Guidance and Development	Air quality planning and policy guidance	Wyre Forest District Council	On-going	Due to come into effect on 13 <sup>th</sup> August 2015	Formal adoption of revised LDO	<1%	WRS consulted on revised South Kidderminster Enterprise Park Revised Development Order. WRS recommended air quality condition updated to reflect current local and national policies	13 <sup>th</sup> August 2015

Measure No.	Measure	EU Category	EU Classification	Lead Authority	Planning Phase	Implementation Phase	Key Performance Indicator	Target Pollution Reduction in the AQMA	Progress to Date	Estimated Completion Date
5.6.3	Air Quality Networks	Policy Guidance and Development Control	Regional Groups Co-ordinating programmes to develop Area wide Strategies to reduce emissions and improve air quality	Bromsgrove District Council, Worcestershire Regulatory Services	2014	2014 onwards	Improved cross boundary working between local authorities in Worcestershire	1%	WRS hold position of Air Quality technical coordinator for the Midlands Joint Advisory Council (MJAC). Provision of AQ services to Tewkesbury DC & Herefordshire Council 2015-16	On going.
5.6.8	Forge closer links with local health agencies	Other	Other	WRS and Worcestershire County Council	N/A	On-going	Participation of relevant health agencies in the Worcestershire Air Quality Steering Group	<1%	WRS officers have met with the Director of Public Health at Worcestershire County Council to highlight the air quality agenda in relation to NO2 and PM2.5. Discussions are on-going as role of DoPH is considered	On-going



**Table 5.4 Horsefair/Coventry Street AQMA Action Plan Update Non-Feasible Actions April 2015 to March 2016**

These actions were not identified as priority actions following completion of the prioritisation matrix and have been discounted as unfeasible for the Kidderminster Road AQMA following further consideration. These actions will not be reported on in the future.

No	Measure	Focus	Reasons Why Action Not Feasible
5.1.11	Remove build-out in streets to allow cars to pass simultaneously	Remove build-out in streets to allow cars to pass simultaneously	No build-out identified within AQMA
5.1.14	Traffic calming measures (aim is to deter drivers using route)	Employ speed bumps or other measures to deter traffic from using the route	Not appropriate for this key corridor into/out of town. Likely worsen concentrations
5.2.7	Introduce fixed penalty notices for stationary idling	Enforce penalty notices for parked drivers who refuse to turn off engines	No enforceable situations e.g. taxi ranks or outdoor bus depot in AQMA
HF2	Current boundary of AQMA requires amendment to conform with best practice guidance	Current boundary of AQMA requires amendment to conform with best practice guidance	No benefit from undertaking at this time.

## 5.5 Welch Gate AQMA

### **Progress with action 5.1.1 - Alteration to phasing of traffic light systems**

Previous trials in relation to traffic light phasing in Bewdley have yielded little success and any changes to the two pedestrian crossings in Bewdley High Street would not be possible because of very high costs and technological limitations due to the layout of the site. It was decided that this action would not be progressed further as it is non-feasible. This action will not be reported on in the future. Details of the trial carried out in 2012 can be found in the 'Bewdley Transport Package Consultation and AQMA Report 2012'. The report is available upon request.

The priority action list will be reviewed and an alternative action to 5.1.1 will be determined for the next reporting year.

### **Progress with action 5.1.3 - HGV or weight restrictions on affected roads**

Consultation with Worcestershire County Council has confirmed that this is a viable action. WRS will engage with Worcestershire County Councillors to pursue this action. A 7.5 tonne weight limit and access only restriction is currently in operation on the B4190 Cleobury Road leading into Welch Gate.

### **Progress with action 5.1.5 - Loading and unloading restrictions during peak traffic times**

Consultation with Worcestershire County Council has confirmed that this is a viable action. Loading and unloading restrictions during peak traffic times are currently in operation in Load Street. WRS have engaged with Wyre Forest District Councillors to pursue enforcement of this action.

### **Progress with action WG4 - Normal length buses block road in narrow bends**

Consultation with Worcestershire County Council has indicated that the County Council has no control over commercial bus companies and any commitment to using shorter length buses would be purely on a voluntary basis on the part of the bus companies.

WRS and Wyre Forest District Council will approach the bus company responsible for the bus service using Welch Gate directly to discuss the feasibility of using shorter length buses along the route.

Details have only been provided above for actions that are priority actions. For details of progress made with both priority and non-priority actions during the reporting year please see Table 5.4. For actions where no progress has been made in the reporting year the details of progress made to date can be found in the Air Quality Action Plan for Worcestershire Progress Report 2013-2015 (October 2015, available online at

<http://www.worcsregservices.gov.uk/environmental-health/pollution/air-quality/air-quality-action-plan.aspx>

### **Timeline for Implementation**

WRS with local District and County Councillor support will discuss with Wyre Forest District Council's parking enforcement team the prioritisation of enforcement of waiting times/ loading and unloading time restrictions in the Load Street parking bays and parking in bus stop bays and the enforcement of the 7.5 tonne weight limit on the B4190 Cleobury Road and Welch Gate.

WRS and Wyre Forest District Council will approach the bus company responsible for the bus service using Welch Gate directly to discuss the feasibility of using shorter length buses along the route.

Wyre Forest District Council's priorities for the coming year are to drive the air quality agenda through continued partnership working with Worcestershire County Council This includes participation in the Welch Gate AQMA Sub Group. The role of WRS at this group will be to ensure that resolution of the Welch Gate AQMA remains a primary focus.

**Table 5.5 – Progress on Measures to Improve Air Quality at Welch Gate AQMA IN REPORTING YEAR**

Measure No.	Measure	EU Category	EU Classification	Lead Authority	Planning Phase	Implementation Phase	Key Performance Indicator	Target Pollution Reduction in the AQMA	Progress to Date	Estimated Completion Date
PRIORITY ACTIONS										
5.1.1	Alteration to phasing of traffic light systems	Traffic Management	UTC, congestion management, traffic reduction	Worcestershire County Council	2014-2015	N/A	Improved flow through AQMA, reduction in congestion	3%	See text summary above (section 5.5)	Action not progressed further
5.1.3	HGV or weight restriction on affected roads	Freight and Delivery Management	Route Management Plans/ Strategic routing strategy for HGV's	Worcestershire County Council	2015-2016	2018	Less HGV's travelling through AQMA	2%	See text summary above (section 5.5)	Unknown – currently on-going
5.1.5	Loading and unloading restrictions during peak traffic times	Traffic Management	UTC, Congestion Management, Traffic Reduction	Wyre Forest District Council	2015-2016	2018	Decrease in illegally parked vehicles	2%	See text summary above (section 5.5)	Unknown – currently on-going
WG4	Normal length buses block road in narrow bends	Transport Planning and Infrastructure	Bus route improvements	Wyre Forest District Council (WCC no longer manages any bus fleet other than school buses, all operators are private companies)	2015-2016	N/A	More shorter length buses seen in AQMA area	2%	See text summary above (section 5.5)	Worcestershire County Council advised they have no influence over bus networks.

Measure No.	Measure	EU Category	EU Classification	Lead Authority	Planning Phase	Implementation Phase	Key Performance Indicator	Target Pollution Reduction in the AQMA	Progress to Date	Estimated Completion Date
NON-PRIORITY ACTIONS										
5.2.2	Freight Quality Partnership – work with satellite navigation companies to route HGVs around AQMAs	Traffic Management	UTC, congestion management, traffic reduction	Worcestershire County Council		On-going.	Fewer HGVs travelling through AQMA	5-10%	Worcestershire County Council regularly informs sat nav companies of banned and sensitive routes. Acknowledged can take some time for information to filter down to users.	On-going duty under Traffic Management Act 2004
5.2.5	Greening Council and Business Fleets	Promoting Low Emission Transport	Procuring alternative Refuelling infrastructure to promote Low Emission Vehicles, EV recharging, Gas fuel recharging	Bromsgrove District Council, Worcestershire County Council	2015-2017	2018 Onwards	Increase in number of Council and business fleet vehicles of higher Euro Standard and/or utilising alternative fuels	1%	Proposed Compressed Natural Gas Station in Bromsgrove/Redditch has stalled due to a number of obstacles (financial, strategic, political) plus specific industrial constraints and limitations of the existing highway network. WCC has indicated that development of such a facility would need to be supported by relevant policy before the case would be explored any further.	It is anticipated that the Local Transport Plan 2017 will be developed to incorporate policy on alternative fuels and associated infrastructure.

Measure No.	Measure	EU Category	EU Classification	Lead Authority	Planning Phase	Implementation Phase	Key Performance Indicator	Target Pollution Reduction in the AQMA	Progress to Date	Estimated Completion Date
5.2.10	Installing electric vehicle charging points	Promoting Low Emission Transport	Procuring alternative Refuelling infrastructure to promote Low Emission Vehicles, EV recharging, Gas fuel recharging	Wyre Forest District Council, Worcestershire County Council	2013	2014 onwards	Increase in availability of EV charging points and corresponding increase in use of electric vehicles	1%	Recommendations for installation of EV Charging Points routinely recommended by WRS on relevant planning consents. To be formalised in SPD currently being drafted by WRS officers. Progress delayed by approx. 15 months due to conflicting priorities	Estimate formal adoption by District Council by end 2017.
5.3.1	Travel Planning	Promoting Travel Alternatives	Personalised travel planning	Worcestershire County Council	Currently taking place	2017 onwards	Increased uptake of alternative modes of transport	<1%	Personalised travel planning program planned as part of wider health improvement drives from County Council who are currently preparing a bid for the DfT's Access Fund to move project forward. County Council currently developing a "one-stop-shop" online travel portal due to be rolled out in 2017.	Estimated end 2017

Measure No.	Measure	EU Category	EU Classification	Lead Authority	Planning Phase	Implementation Phase	Key Performance Indicator	Target Pollution Reduction in the AQMA	Progress to Date	Estimated Completion Date
5.3.8	Measures linked to walking and cycling initiatives	Promoting travel alternatives	Promotion of cycling and promotion of walking	Wyre Forest District Council, Worcestershire County Council	2014 - 2015	Easter 2015 onwards	Increased uptake of walking and cycling in Wyre Forest	<1%	Wyre Forest District Council has a web page dedicated to the promotion of walking and cycling. <a href="http://www.wyreforestdc.gov.uk/things-to-see-do-and-visit/cycling-walking-and-running.aspx">www.wyreforestdc.gov.uk/things-to-see-do-and-visit/cycling-walking-and-running.aspx</a>	On-going
5.3.2	Car Sharing	Alternatives to private car use	Car and lift sharing schemes	Worcestershire County Council	2014 – 2015 COMPLETED	Liftshare Scheme launched Autumn 2015	Increase in number of people car sharing	<1%	Liftshare Scheme launched in Autumn 2015	Liftshare website scheme launched Autumn 2015. Currently operating
5.3.4	Promote flexible working arrangements	Promoting Travel Alternatives	Encourage / Facilitate home-working	Worcestershire County Council, Wyre Forest District Council	2015-2016	2017	Increase in uptake of personal travel planning services. Change in behaviour towards more sustainable modes of transport.	<1%	See text above (section 5.5)	On-going
5.5.1	Produce Air Quality Supplementary Planning Document	Policy Guidance and Development	Air quality planning and policy guidance	WRS and District Councils	Currently on-going. SPD Currently Being drafted by WRS officers	Draft due for completion by October 2016. Start of formal adoption processes by November 2016	Formally adopted and utilised SPD at all six LPAs across County	<1%	SPD currently being drafted by WRS officers. Progress delayed by approx. 15 months due to conflicting priorities	Estimate formal adoption by District Council By end 2017.

Measure No.	Measure	EU Category	EU Classification	Lead Authority	Planning Phase	Implementation Phase	Key Performance Indicator	Target Pollution Reduction in the AQMA	Progress to Date	Estimated Completion Date
5.5.4	Encourage developers to provide sustainable transport facilities and links serving new developments	Policy Guidance and Development	Air quality planning and policy guidance	WRS and District Councils	Currently on-going, SPD currently being drafted by WRS officers	Draft due for completion by October 2016. Start of formal adoption processes by November 2016	Formally adopted and utilised by all six LPAs across County	<1%	SPD currently being drafted by WRS officers. Progress delayed by approx. 15 months due to conflicting priorities	Estimate formal adoption by District Council by end 2017.
5.6.1	Air Quality Policy in Local Development Plans	Policy Guidance and Development	Air quality planning and policy guidance	Wyre Forest District Council	On-going	Due to come into effect on 13 <sup>th</sup> August 2015	Formal adoption of revised LDO	<1%	WRS consulted on revised South Kidderminster Enterprise Park Revised Development Order. WRS recommended air quality condition updated to reflect current local and national policies	13 <sup>th</sup> August 2015
5.6.3	Air Quality Networks	Policy Guidance and Development Control	Regional Groups Co-ordinating programmes to develop Area wide Strategies to reduce emissions and improve air quality	Bromsgrove District Council, Worcestershire Regulatory Services	2014	2014 onwards	Improved cross boundary working between local authorities in Worcestershire	1%	WRS hold position of Air Quality technical coordinator for the Midlands Joint Advisory Council (MJAC). Provision of AQ services to Tewkesbury DC & Herefordshire Council 2015-16	On going.



Measure No.	Measure	EU Category	EU Classification	Lead Authority	Planning Phase	Implementation Phase	Key Performance Indicator	Target Pollution Reduction in the AQMA	Progress to Date	Estimated Completion Date
5.6.8	Forge closer links with local health agencies	Other	Other	WRS and Worcestershire County Council	N/A	On-going	Participation of relevant health agencies in the Worcestershire Air Quality Steering Group	<1%	WRS officers have met with the Director of Public Health at Worcestershire County Council to highlight the air quality agenda in relation to NO2 and PM2.5. Discussions are on-going as role of DoPH is considered	On-going

**Table 5.6 Welch Gate AQMA Action Plan Update Non-Feasible Actions April 2015 to March 2016**

These actions were not identified as priority actions following completion of the prioritisation matrix and have been discounted as unfeasible for the Kidderminster Road AQMA following further consideration. These actions will not be reported on in the future.

No	Measure	Focus	Reasons Why Action Not Feasible
5.2.7	Introduce fixed penalty notices for stationary idling	Enforce penalty notices for parked drivers who refuse to turn off engines	No enforceable situations e.g. taxi ranks or outdoor bus depot in AQMA
WG9	There are three local schools in vicinity	Action relates to generic actions - school travel planning, signage	Action relates to generic actions included as part of action plan. Action will not be considered further.

## REFERENCES

Defra (2007) The Air Quality Strategy for England, Wales, Scotland and Northern Ireland

Defra (2009) Local Air Quality Management Technical Guidance LAQM.TG(16)

Defra (2009b) Local Air Quality Management Policy Guidance LAQM.PG(16)

WRS (2013) Air Quality Action Plan for Worcestershire

WRS (2015) Air Quality Action Plan for Worcestershire Progress Report