WOKINGHAM
BOROUGH COUNCIL

Wokingham Borough Council
Air Quality Action Plan

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

November 2017

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1 Executive Summary

This Air Quality Action Plan (AQAP) has been produced as part of our statutory duties required by the Local Air Quality Management framework. It outlines the action we will take to improve air quality in Wokingham Borough Council (WBC) between 2017 – 2026.

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

The annual health cost to society of the impacts of particulate matter alone in the UK is estimated to be around £16 billion[3]. Wokingham Borough Council is committed to reducing the exposure of people in the Borough to poor air quality in order to improve health.

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

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

Our priorities are in Twyford are sustainable travel, alternative vehicle routes and access to the railway station. Our priorities in Wokingham are sustainable travel and provision of distributor roads.

[1] Environmental equity, air quality, socioeconomic status and respiratory health, 2010
[2] Air quality and social deprivation in the UK: an environmental inequalities analysis, 2006
[3] Defra. Abatement cost guidance for valuing changes in air quality, May 2013

In this AQAP we outline how we plan to effectively tackle air quality issues within our control. However, we recognise that there are a large number of air quality policy areas that are outside of our influence (such as vehicle emissions standards agreed in Europe), but for which we may have useful evidence, and so we will continue to work with regional and central government on policies and issues beyond Wokingham Borough Council's direct influence.

Responsibilities and Commitment

This AQAP was prepared by the Environmental Quality Team of the Public Protection Partnership on behalf of the unitary authority Wokingham Borough Council with the support and agreement of the following officers and departments:

- Environmental Health
- Public Health (WBC and Berkshire Shared Teams)
- Highways and Transport (Transport Planning, Active Travel, Travel Planning, Street Works, Development Management, and Highway Assets Teams)
- Planning Policy (Growth and Delivery)
- Development Control
- Wokingham Town Centre Regeneration Management
- PR / Communications

Once this draft AQAP is completed it will be taken to the Joint Public Protection Committee for approval.

Once implemented this AQAP will be subject to an annual review, an appraisal of progress and reporting to the Joint Public Protection Committee.

Progress each year will be reported in the Annual Status Reports (ASRs) produced by Wokingham Borough Council, as part of our statutory Local Air Quality Management duties.

If you have any comments on this AQAP please send them to:

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Table of Contents

List of Tables

List of Figures

2 Introduction

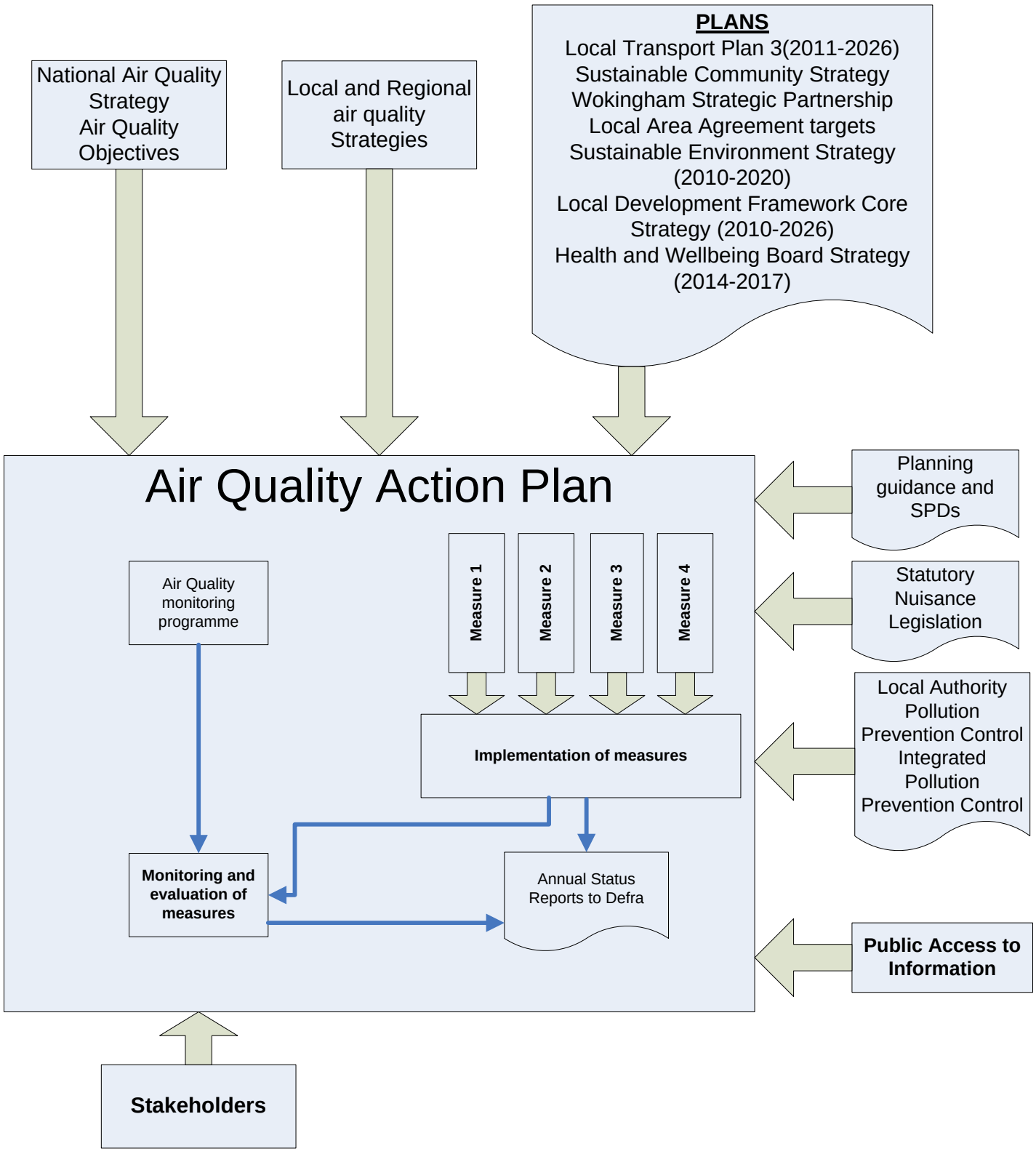
This report outlines the actions that Wokingham Borough Council will deliver between 2017-2026 in order to reduce concentrations of air pollutants and exposure to air pollution; thereby positively impacting on the health and quality of life of residents and visitors to the Wokingham Borough's administrative area.

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

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

There is a level of synergy between the aims and objectives of the AQAP and existing plans and strategies to which Wokingham Borough Council contribute or manage. A list of these plans and their strategic links with the Action Plan are show diagrammatically in Figure 1.

Figure 1 AQAP and its links with other WBC Plans and Strategies



3 Summary of Current Air Quality in Wokingham Borough Council

Within this AQAP the two AQMAs for Twyford Crossroads and Wokingham Town Centre are being addressed. Refer to Appendix C for the map showing the extent of the Twyford AQMA and Appendix D for the map showing the extent of the Wokingham Town Centre AQMA.

The latest ASR (August 2016 for the year 2015) can be found on our website at http://info.westberks.gov.uk/CHttpHandler.ashx?id=43163&p=0

Local Priorities and Challenges for Wokingham Borough were identified as:

- Exploring the link between public health and $PM_{2.5}$;
- Joint working between the Public Health and Environmental Health teams and links within the Berkshire Public Health Shared Team, considering the inclusion of air quality in the Public Health Work Plan and the Health and Wellbeing Strategy;
- Continuing to work within the unitary authority with the Transport Policy and Highways Teams;
- Progress the 'Further Assessments' for the Wokingham Town Centre and Twyford Town Centre AQMAs;
- Develop the AQAPs for the Wokingham Town Centre and Twyford Town Centre AQMAs;
- Consider revocation of the M4 AQMA following the opening of the new motorway bridge as part of the Shinfield Eastern Relief Road Scheme; and
- Continue the continuous and passive air quality monitoring programmes.

The following challenges have been identified:

- Budget allocation for progressing measures and actions; and
- Linking of the Public Health Outcome Framework and health profiles to air quality to show any causal relationship.

4 Wokingham Borough Council's Air Quality Priorities

4.1 Public Health Context

The link between air quality, particularly from $PM_{2.5}$, and public health in the Borough requires exploration and this has been set as one of the priorities. Further joint working the between Public Health and Environmental Health Teams and links within the Berkshire Public Health Shared Team has also commenced. These are to follow on from the Joint Strategic Needs Assessment (JSNA) (http://jsna.wokingham.gov.uk/people-and-places/environmental-health-and-licensing/) and the Health and Wellbeing Strategy 2014-2017 (http://www.wokingham.gov.uk/council-and-meetings/open-data/plans-policies-and-strategies/?assetdet7653806=345516&categoryesctl8486112=7736&assetdet8733745=345516&categoryesctl9084667=7736). The JSNA uses data and evidence from the current health and wellbeing in the Borough to highlight the health needs of the whole community. It shows how needs might vary for different age groups and identifies health differences in disadvantaged or vulnerable groups. The JSNA also looks at a wider range of factors that help shape the health and wellbeing of individuals, families and local communities such as education, employment and the environment. Air Pollution is under the Environmental Health and Licensing section.

4.2 Planning and Policy Context

Environmental Health has continued to work in conjunction with the Transport Policy Team with the implementation of Local Transport Plan 3 (2011 – 2026). The Plan includes a Transport Vision setting out the long-term transport strategy for the borough, particularly for the four new communities being created to accommodate the majority of the construction of over 13,000 new houses in Wokingham Borough as identified in the Local Development Framework Core Strategy. The vision is to provide a cost-effective, inclusive transport network that enhances the economic, social and environmental prospects of the Borough whilst promoting the safety, health and wellbeing of those that use it. The key goals are:

Highways – to have a resilient safe highway network that balances capacity for all users, enhances the economic prospects of the borough, and promotes sustainable travel;

Active travel – to work with partners to promote walking and cycling as a health-enhancing physical activity for all of our resdients;
Public transport - to promote an integrated and inclusive public transport network that provides a convenient , acceptable reliable and affordable alternative to car travel;
Smarter choices and demand management – to enable people who live, visit and work in the borough to make informed safe and sustainable travel decisions from a range of transport options; and
Strategic projects – to manage the demand for travel in order to ensure that people have a high level of access to different destinations, with sufficient choice, whilst minimising the adverse effects of congestion. The Plan acknowledges the link with the M4 AQMA and any future AQAP's. There is also a specific Policy on Air Quality (Policy LTP HW10) which states that the Council will continue to develop and implement our Draft Air Quality Action Plan in response to pollution caused by vehicle emissions. Furthermore, a key objective of the Strategic Environmental Assessment for LTP3 was to improve air quality. LTP Strategies continue to be reviewed and/or implemented.

Currently Environmental Health is developing a planning policy guidance document to be called "Planning for Air Quality (including Good Design, Emissions Mitigation Assessments and Air Quality Assessments)". This is being carried out in close consultation with Public Health and Planning colleagues. The document will be for new developments and will encourage all developments to adopt good practice design principles to protect local air quality. Additionally, it sets out when an emissions mitigation assessment and/or an air quality assessment is required. An emissions mitigation assessment is required for all major developments, and an air quality assessment for all developments that meet 'relevant criteria' i.e. developments with the potential for/to cause public exposure to elevated levels of air pollution. The emissions mitigation assessment is to assess the likely additional traffic emissions generated by the development over a 5 year period to determine an appropriate monetary value of mitigation to be adopted (preferably on site) to help reduce potential effects on local air quality. If mitigation measures cannot be accommodated within the development then mitigation could be provided through compensation via planning conditions or other formal agreement towards mitigation

elsewhere. The purpose of an air quality assessment is to predict the likely impacts of the development on air quality, help guide appropriate mitigation measures, and to ensure Local Planning Authorities can make an 'informed decision' about the development with regard to impacts on air quality. It is considered that this type of policy could be an important way for the three Councils within the Public Protection Partnership (Bracknell Forest, Wokingham and West Berkshire) to encourage and facilitate actions to protect local air quality. Mitigation measures (based on likely costs of air quality impacts) would either be adopted on site or generate funds that could be used towards mitigation measures elsewhere, with the aim of helping to facilitate actions to improve air quality in Air Quality Management Areas.

4.3 Source Apportionment

The AQAP measures presented in this report are intended to be targeted towards the predominant sources of emissions within Wokingham Borough Council's area.

A source apportionment exercise was carried out for Wokingham Borough Council in February 2017 by Peter Brett Associates as part of the Updated Detailed Assessment. The source apportionment included the following categories: Ambient background, cars, light goods vehicles, heavy goods vehicles, bus and motorcycles. The most significant components in both Twyford and Wokingham were ambient background followed by emissions from passenger cars.

This identified that within the AQMAs, the percentage source contributions were as follows:

For Twyford Crossroads, at receptors 4, 5 and 6 (19, 23a and 25 High Street) the predicted concentrations have the highest influence from road sources, representing approximately 65% of total annual mean concentration. Passenger cars are the source that contributes most to this result with approximately 30% of the emissions. The remaining receptors have more than 50% contribution from background concentrations.

For Wokingham Town Centre, at receptors 4, 5, 13 to 21 (14 Shute End, 1-3 Shute End, 1 Wiltshire Road, Queen Victoria House, 65 Peach Street, Flats above 54, 45, 26 and 18 Peach Street) the predicted concentrations have the highest influence from road sources concentrations, being the total road emission concentration from all the vehicles more than 55%.

4.4 Required Reduction in Emissions

4.4.1 Twyford Crossroads

For the annual mean NO_2 objective to be achieved concentrations need to be below 40 µg/m$^{3.}$ The required NO_2 and NOx reductions at those receptors where exceedances are predicted are in Table 4.

Table 4.1 Twyford reductions in NO_2 concentrations and NOx emissions required

Receptor / address	NO_2 annual mean concentration (µg/m^3)	NO_2 reduction required (µg/m^3)	NOx emissions reduction required (%)
R4 19 High Street	51.8	11.8	36.6
R5 23a High Street	52.1	12.1	37.2
R6 25 High Street	51.7	11.7	36.4

The highest predicted concentration is 52.1µg/m^3 at R5 where a reduction of 12.1 µg/m^3 would be required in order to meet the annual mean objective of 40 µg/m^3. A reduction of NOx emissions of 37% would be required in order to bring about a reduction in NO_2 concentrations below the objective.

Predicted hypothetical reductions in flow show that reductions in emission from individual vehicle types in isolation are unlikely to bring about the required reductions. The only reductions which bring about the required air quality improvements at the 3 receptors is a reduction in total vehicle (all vehicles – cars, LDV, HGV, Bus, MCL) emissions of 50%. A 50% car reduction is the individual vehicle type with the highest reduction although it is insufficient to bring compliance with the objective.

A reduction HGVs and buses emissions would contribute significantly in the emissions reduction as they contribute over 23% of the pollutant levels.

4.4.2 Wokingham Town Centre

The required NO_2 and NOx reductions at those receptors where exceedances are predicted are in Table 4.2 below.

Table 4.2 Wokingham Town Centre reductions in NO_2 concentrations and NOx emissions required

Receptor / address	NO_2 annual mean concentration ($\mu g/m^3$)	NO_2 reduction required ($\mu g/m^3$)	NOx emissions reduction required (%)
R13 1 Wiltshire Road	40.6	0.6	1.5
R14 Queen Victoria House	41.0	1.0	3.2
R16 65 Peach Street	55.5	15.5	44.3
R17 Flat above 54 Peach Street	42.1	2.1	8.1
R18 Flat above 45 Peach Street	44.7	4.7	17.8
R19 Flat above 26 Peach Street	52.8	11.8	39.2
R20 Flat above 17 Peach Street	52.7	12.7	39.0
R21 Flat above 18 Peach Street	52.9	12.9	39.5

The highest predicted concentration in Wokingham is 55.5 µg/m^3 at R16 where a reduction of 15.5 µg/m^3 would be required to meet the annual mean objective. A reduction of NOx emissions of approximately 44% would be required in order to bring about a reduction in NO_2 concentrations to below the objective.

Predicted hypothetical reductions in flow show that the reductions in emissions from individual vehicle types in isolation are unlikely to bring about the required reductions. The only reductions which will bring about the required air quality improvements at the receptors are a reduction in total emissions of 50%. A 50% cars reduction scenario is the individual vehicle type with the highest reduction although it not enough to bring about compliance with the objective.

A reduction in HGVs and buses combined would also assist in the emissions reduction as they contribute to 11% of the pollutant levels.

4.5 Key Priorities

Based in the details above the areas prioritised for action for Twyford Crossroads are:

- Priority 1 – reduction in passenger cars
- Priority 2 – reduction in total vehicles
- Priority 3 – encourage sustainable travel

Based on the details above the areas prioritised for action for Wokingham Town Centre are:

- Priority 1 – reduction in passenger cars
- Priority 2 – reduction in HGVs
- Priority 3 – reduction in buses or increase in hybrid or electric buses
- Priority 4 – encourage sustainable travel

5 Development and Implementation of Twyford Crossroads and Wokingham Town Centre AQAP

5.1 Consultation and Stakeholder Engagement

In developing this AQAP, we have worked with other local authorities, businesses and the local community to improve local air quality. Schedule 11 Environment Act 1995 requires local authorities to consult the bodies listed in

Table 5.1 below. In addition, we have undertaken the following stakeholder engagement:

- All Air Quality reports are available on the Council's website
- Stakeholder Workshop held on 31/01/17 at Council Offices, advertised on social media and letter drop to all residential and commercial premises with AQMAs, and invitations sent to public transport operators, Chamber of commerce, freight association and other local interest groups. Attendance from town and parish councils, Berkshire Public Health, cycle campaign group and local media as well as many internal service areas including highways, transport, planning and public health
- WBC Internal officer working group
- Engagement with Director of Public Health and local and shared public health teams
- Consultation carried out in line with Council's corporate consultation process on website as well as promotion via a media release, social media and other targeted bodies.

The response to our consultation stakeholder engagement will be given in Appendix A.

Table 5.1 – Consultation Undertaken

Yes/No	Consultee
Yes	the Secretary of State (Air and Environment Quality Division)
Yes	the Environment Agency (External Relations dept)
Yes	the highways authority (Wokingham Borough Council)
Yes	all neighbouring local authorities (Reading BC, Bracknell Forest Council, RB Windsor & Maidenhead, West Berkshire Council, , Basingstoke & Deane BC, Hart DC, Hampshire CC, South Oxfordshire DC, Oxfordshire CC, Wycombe DC, and Buckinghamshire CC)
Yes	other public authorities as appropriate, such as Public Health officials
Yes	bodies representing local business interests and other organisations as appropriate (including town and parish councils, public transport operators, Chamber of commerce, freight association, cycle groups)

5.2 Steering Group

The internal officer working group is attended by the following teams:

- environmental health;
- public health;
- transport planning including travel planning and active travel
- highways assets;
- highways development control:
- development management;
- planning policy (growth and delivery) and transport;
- Wokingham town centre regeneration;
- PR/communications- separately involved for press releases, other publications and consultation process

The Chair is Environmental Quality Team Manager who feeds back to the Head of Development Management and Regulatory Services (Development Management, Planning Enforcement and Compliance, Trees and Landscape, Building Control, Shared Service (Environmental Health, Licensing and Trading Standards) and keeping lead members for Environmental Health, Highways and Transport and Public Health informed.

Engagement with the Director of Public Health and Berkshire Public Health team has taken place and on a wider basis discussion with representatives from the Environmental Hazards & Emergencies Department at the Centre for Radiation, Chemical & Environmental Hazards at Public Health England.

Prior to this consultation there has not been involvement with Environment Agency and Highways England as the source of the exceedances of the annual mean nitrogen dioxide objective is from the local authority controlled roads only, however they have been included in the consultation process.

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6 AQAP Measures

Table 6.1 below details the Wokingham Borough Council Twyford Crossroads AQAP measures.

Table 6.2 below details the Wokingham Borough Council Wokingham Town Centre AQAP measures.

Table 6.3 below details the Wokingham Borough Council generic measures.

They contain:

- a list of the actions that form part of the plan, which have NOT been prioritised and are grouped within the EU categories and EU classifications
- the responsible individual and departments/organisations who will deliver this action
- estimated cost of implementing each action (overall cost and cost to the local authority)
- expected benefit in terms of pollutant emission and/or concentration reduction
- the timescale for implementation
- how progress will be monitored

NB: Please see future ASRs for regular annual updates on implementation of these measures

Table 6.1 – Air Quality Action Plan Measures for Twyford Crossroads

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	Comments
1	Investigate the feasibility of alternative traffic routes around Twyford	Transport planning and infrastructure	Other	WBC	2017-2019	Post 2026	Feasibility study carried out	12.1 µg/m^3	Local Plan update is ongoing. This will make recommendations regarding development and supporting infrastructure needs.	Local Plan Update process will conclude in 2020/21	Aim for some through traffic avoided from going through AQMA
2	Twyford railway station 1.Consider access for vehicles, buses, taxis, cyclists and pedestrians 2. Consider integration of public transport links 3. Consider car parking and cycling provisions	Transport planning and infrastructure	Public transport improvements-interchanges stations and services	WBC GWR Twyford PC	2017-2019 onwards	2019 onwards	Changes incorporated	12.1 µg/m^3	Preliminary studies have been undertaken by GWR &WBC to understand costs and option available for development	Long term project	To work with all partners to further promote and encourage sustainable transport to and from stations, this includes soft measures as well as infrastructure delivery. Additionally to work with the Local Plans Team to provide wider solutions that will allow alternative routes around Twyford Crossroads. Western Rail Access to Heathrow coming also.

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	Comments
3	Review cycle paths	Transport planning and infrastructure	Cycle network	WBC	2016/17/18	2018 onwards	Increase in usage	12.1 µg/m^3	On-going project	On-going project	Cycleway delivery is part of the yearly capital programme
4	Investigate options of A4 and A3032 junction at Hare Hatch	Traffic management	Strategic highway improvements	WBC	2018/19	2018/19	Investigation carried out	12.1 µg/m^3	No progress to date. Budget needs to be agreed and allocated.	2018/19	Traffic more likely to travel east of village so avoiding AQMA
5	Continue to monitor traffic lights and crossings to maximum efficiency and consider their functionality including left turns and peak hour use	Traffic management	Strategic highway improvements	WBC	tbc	tbc	Review of phases with traffic flow data and real time air quality data	12.1 µg/m^3	No progress to date. Budget needs to be agreed and allocated.	tbc	Determine effect on air quality with different phases. Linked with traffic monitoring to be set up and new continuous monitoring site.
6	Carry out a feasibility study for a Low Emission Zone for the crossroads	Promoting low emission transport	Low Emission Zone (LEZ) or Clean Air Zone (CAZ)	WBC	tbc	tbc	Feasibility study carried out	12.1 µg/m^3	No progress to date	tbc	Business case for a LEZ needs developing. Consider implications of the transfer of Criminal Parking Enforcement powers to Local Highway Authority.
7	Review bus fleet and consider alternative fuels.	Vehicle fleet efficiency	Promoting Low Emission Public Transport	Bus companies as contracted by WBC	2016/17	2017/18	Increase in number of buses run on alternative fuels	12.1 µg/m^3	2017 -RTL run hybrid buses, CNG all low emission	Ongoing with other operators	Reducing emissions within AQMA

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	Comments
8	Install "Cut Pollution, Turn off your engine" signs when queuing at traffic lights.	Public information	Other	WBC	tbc	tbc	Drivers do follow the advice	12.1 µg/m^3	No progress to date, programme of signing needs to be included in the highways capital programme.	tbc	This is a quick win that could be delivered quickly depending on the nature of the signs.
9	Consider feasibility of Park and Ride strategy for Twyford	Alternatives to private vehicle use	Bus based park & ride	WBC	2017-2019	Linked to development	Feasibility study carried out	12.1 µg/m^3	No progress to date, Budget needs to be agreed and allocated	tbc	A study needs to be undertaken, including the business case
10	School Travel Plans (Mode Shift Stars)	Promoting travel alternatives	School travel plans	WBC	2016	2017 and ongoing	Continue to be developed and reviewed	12.1 µg/m^3	On going	Open ended	Reduction in cars travelling through AQMA

Table 6.2 – Air Quality Action Plan Measures for Wokingham Town Centre

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	Comments
1	Intelligent traffic signals at Shute End	Traffic management	Strategic highway improvements	WBC	tbc	tbc	Installation of MOVA	15.5 µg/m^3	No progress to date, Budget needs to be agreed and allocated	tbc	Intelligent signs are more costly than regularly signing and budget will have to be allocated
2	Consider speed reduction through town centre	Traffic management	Reduction in speed limits, 20 mph zones	WBC Highways TVP	tbc	tbc	tbc	15.5 µg/m^3	No progress to date	tbc	Requires a TRO supported by TVP. Consider design speed as well as speed limit.

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	Comments
3	Review traffic routes in the town centre, and consider if any roads require restricted access	Traffic management	Strategic highway improvements, reprioritising road space away from cars, inc Access management, selective vehicle priority, bus priority, high vehicle occupancy lane	WBC	ongoing	ongoing	Review carried out	15.5 µg/m^3	No progress to date Business case needs to be developed	tbc	This action requires a major remodelling of the highway. Scenarios will have to be modelled to make sure that the problem is not simply transferred to another part of the network.
4	North Wokingham distributor road	Traffic management	Strategic highway improvements, reprioritising road space away from cars, inc Access management, selective vehicle priority, bus priority, high vehicle occupancy lane	WBC	completed	2017 onwards	Completion	15.5 µg/m^3	Under construction	2020/21	Includes bus stops and cycle ways
5	South Wokingham distributor road	Traffic management	Strategic highway improvements, reprioritising road space away from cars, inc Access management, selective vehicle priority, bus priority, high vehicle occupancy lane	WBC	commenced	ongoing	Completion	15.5 µg/m^3	Commenced At Montague Park	2020/21	Includes bus stops and cycle ways

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	Comments
6	Reconfiguration of Shute End/Broad Street/ Rectory Road junction	Traffic management	Strategic highway improvements, reprioritising road space away from cars, inc Access management, selective vehicle priority, bus priority, high vehicle occupancy lane	WBC	tbc	tbc	Reduction in NO2	15.5 µg/m^3	No progress to date Business case needs to be developed	tbc	Land availability at Shute End is limited to provide any new solution
7	Consider outcome of Feasibility study of improvements to Rectory Road/ Wiltshire Road	Traffic management	Strategic highway improvements, reprioritising road space away from cars, inc Access management, selective vehicle priority, bus priority, high vehicle occupancy lane	WBC	tbc	tbc	Feasibility study carried out	15.5 µg/m^3	No progress to date Business case needs to be developed	tbc	Historically there have been a number of studies into this issue and land availability has always been a limiting factor
8	Active management of car parking	Traffic management	other	WBC	completed	October 2017	Implementation	15.5 µg/m^3	Introduction of civil parking enforcement	2018	This will actively manage car parking in the town centre and across the borough
9	Alternative arrangement for access to car parks	Traffic management	other	WBC	2017/18	tbc	Implementation	15.5 µg/m^3	This is part of the town centre regeneration process.	tbc	Parking Strategy e.g. Easthampstead Road car park
10	Workplace and school travel planning	Promoting travel alternatives	Workplace travel planning and school travel plans	WBC	commenced	ongoing	Continue to implement. Number of plans	15.5 µg/m^3	Long standing programme of schools travel plans	My Journey Wokingham is an on-going project	Model shift Stars programme

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	Comments
11	Residential travel planning	Promoting travel alternatives	Personalised travel planning	WBC	commenced	ongoing	Continue to implement. Number of plans	15.5 µg/m^3	Programme started 2017/18	My Journey Wokingham is an on-going project	Personalised travel planning Promoting the benefits of sustainable travel
12	Carry out feasibility study for a Low Emission Zone	Promoting low emission transport	Low emission zone or Clean Air Zone	WBC	tbc	tbc	Feasibility study carried out	15.5 µg/m^3	No progress to date Business case needs to be developed	tbc	This action also requires transport modelling to understand likely impacts
13	Park and Ride for Wokingham Town centre	Alternatives to private vehicle use	Bus based park and ride	WBC	2016/17/18	2019/20	Installation and number of journeys	15.5 µg/m^3	Outline plans being developed	Dec 2019	Using RTL's existing hybrid buses (Lion 4)

Table 6.3 – Air Quality Action Plan Measures for Wokingham Borough - generic / Borough wide

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	Comments
1	Review locations and publication of EV charging points, and increase provision	Promoting low emission transport	Procuring alternative refuelling infrastructure to promote low emission vehicles, EV recharging , gas fuel recharging	WBC	tbc	tbc	Number of charging points	15.5 µg/m^3	No progress to date Business case needs to be developed	tbc	Preparing for the future with increase in update of EV use. Decrease in car emissions. Mitigation at planning stage within new local plan.

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	Comments
2	Consider implementation of parking charges related to vehicle type e.g. Free for electric vehicles	Promoting low emission transport	Priority parking for LEV's	WBC	tbc	tbc	Policy agreed and implemented	15.5 µg/m^3	No progress to date	tbc	Encouraging residents and commuters to consider EV vehicle
3	Low emission vehicles – consider implementation in Council contracts, fleet cars etc EV pool cars for WBC staff	Promoting low emission transport	Company vehicle procurement – prioritising uptake of low emission vehicles	WBC	16/17	16/17	Vehicle usage	15.5 µg/m^3	WBC EH and TP/WSP have zero emission hybrid company vehicles	tbc	Requirements to have low and zero emission vehicles and plant need to be included in any new WBC lets contracts
4	Consider removal of on street parking, to provide more space for cycle lanes, EVs, car clubs, provision of on street charging points	Traffic management	Strategic highway improvements, reprioritising road space away from cars, inc Access management, selective vehicle priority, bus priority, high vehicle occupancy lane	WBC	tbc	tbc	tbc	15.5 µg/m^3	No progress to date	tbc	This action would be considered politically and economically sensitive
5	No idling signs - for buses and taxis in waiting areas and at level crossings.	Traffic management	Anti-idling enforcement	WBC	tbc	tbc	tbc	15.5 µg/m^3	No progress to date	tbc	This action would need enforcement and co-operation of TVP

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	Comments
6	Roadside emission testing , detecting and fining polluting vehicles	Traffic management	Testing vehicle emissions	WBC TVP	tbc	tbc	Number of vehicles failed	15.5 µg/m^3	No progress	tbc	Link with work by Trading Standards re overloaded vehicles Will require implementation of legislation
7	Improvements of cycle routes to ensure continuous and integrated	Transport planning and infrastructure	Cycle network	WBC	17/18	2018/19	Length of cycle ways provided	15.5 µg/m^3	On going	On going	Capital funding for improvements and updating cycle network borough wide
8	Residential Travel Planning	Promoting travel alternatives	Personalised travel planning	WBC	2016/17	commenced	Number of plans	15.5 µg/m^3	Programme started 2017/18	Open ended	Personalised travel planning Promoting the benefits of sustainable transport through My Journey project. Linked to future development.
9	Encourage WBC staff to travel more sustainably	Promoting travel alternatives	Workplace travel planning	WBC	2017	ongoing	Increase in commuting by alternative means	15.5 µg/m^3	WBC offices have adopted a travel plan	On going	WBC offices have adopted a travel plan that is supported by My Journey Wokingham project
10	Secure and sheltered bike parking provisions	Promoting travel alternatives	Promotion of cycling	WBC	ongoing	ongoing	Provided	15.5 µg/m^3	On going	On going	Business and residential travel plans often have bike shelters provided as part of planning permission
11	Partnership with Sustrans	Promoting travel alternatives	Promotion of cycling	WBC	2016	ongoing	No of events	15.5 µg/m^3	Officer started in 2016 as part of My Journey Wokingham project	2020/21	Active Travel Officer promotes all forms of sustainable transport doing public demonstrations and events

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	Comments
12	Promoting active travel via My Journey website	Promoting travel alternatives	Intensive active travel campaign and infrastructure	WBC	2017	ongoing	Projects implemented	15.5 µg/m^3	Variety of projects implemented	tbc	
13	Thames Valley Park Park and Ride	Alternatives to private vehicle use	Bus based park and ride	WBC/RBC	2016/17	2017 - 2019	Opening of scheme	15.5 µg/m^3	Planning permission granted 2017	2019	Delivered in partnership with RBC and funded through the Local Growth Fund
14	Provision of Car Clubs with or without EVs	Alternatives to private vehicle use	Car clubs	WBC	2015 feasibility study	2017 onwards	Usage of vehicles	15.5 µg/m^3	One car club operational at Montague Park	On going	Developers required to deliver car clubs as part of their commitments to residential travel plans
15	Awareness campaign for the risks of poor air quality and promoting active and sustainable travel	Public information	other	WBC PH	2017/18	tbc	Increased awareness	15.5 µg/m^3	No progress	tbc	Use apps or technology to show people how to avoid exposure to pollution
16	Air quality included in to JSNA and Health and Wellbeing Strategy	Policy guidance and Development control	Other policy	WBC PH Berkshire	2016/17	2017/18	Inclusion in JSNA reviews and Health and Wellbeing Strategy	15.5 µg/m^3	Meetings with Director of Public Health and Berkshire Shared Team held	2017/18	Link with Director of PH for Berkshire
17	New Local Plan and LTP4 – Sustainable Transport, include EV charging points for new developments	Policy guidance and Development control	Other	WBC	TBC	Plan period will cover 2019-2036	Implementation	15.5 µg/m^3	No progress to date	tbc	PH team must make the correct representation to support the Planning Policy team through the EIP process, proving it is not an unnecessary burden on developers.

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	Comments
18	Linking with Highway Asset Management Plans	Policy Guidance and Development Control	Other	WBC	tbc	tbc	tbc	15.5 µg/m^3	No progress	tbc	
19	Neighbour-hood Development Plans to consider air quality	Policy Guidance and Development Control	Other	WBC with town and parish councils	TBC	TBC	Inclusion in Plans	15.5 µg/m^3	No progress	tbc	Inform Parish and Town Councils
20	Freight Management Plan	Freight and delivery management	Delivery and service plans	WBC	2019/20	2019/20	Review and implementation	15.5 µg/m^3	No progress to date Business case needs to be developed		Consider freight access to town centre, including destination and delivery times Link with Freight Route Network

7 Appendix A: Response to Consultation

Summary of Responses to Consultation and Stakeholder Engagement on the AQAP

Consultee	Category	Response
Workshop 31/01/17 feedback	All stakeholders attending	Results from prioritisation exercise of measures suggested at workshop were: • Highest number "for" the reduction the number of cars used for school journeys followed by the early adoption of the new relief roads in Wokingham to enable traffic to flow, education and behavioural changes, and introduction of time zones for deliveries. • Highest number "against" was to reduce speed limits, followed by SMART traffic lights and preventing rat running by stopping up secondary roads.
Public consultation summer 2017	23 individuals and 1 organisation representing cycling	General consensus that this is a step in the right direction but could more be done. For both locations the actions to investigate the feasibility of traffic routes around the AQMAs were most popular along with changes to the traffic lights. Across the whole borough the increased provision of electric vehicle charging points is encouraged as well as in new developments. Other measures recommended to include are: improvements to the cycle network, more consideration of the impact of car journeys to school, and the introduction of signage at Twyford Crossroads traffic lights to switch of engines whilst waiting.
Members meeting	Elected members	• Ward member for Twyford suggested the following: We currently have 4 way

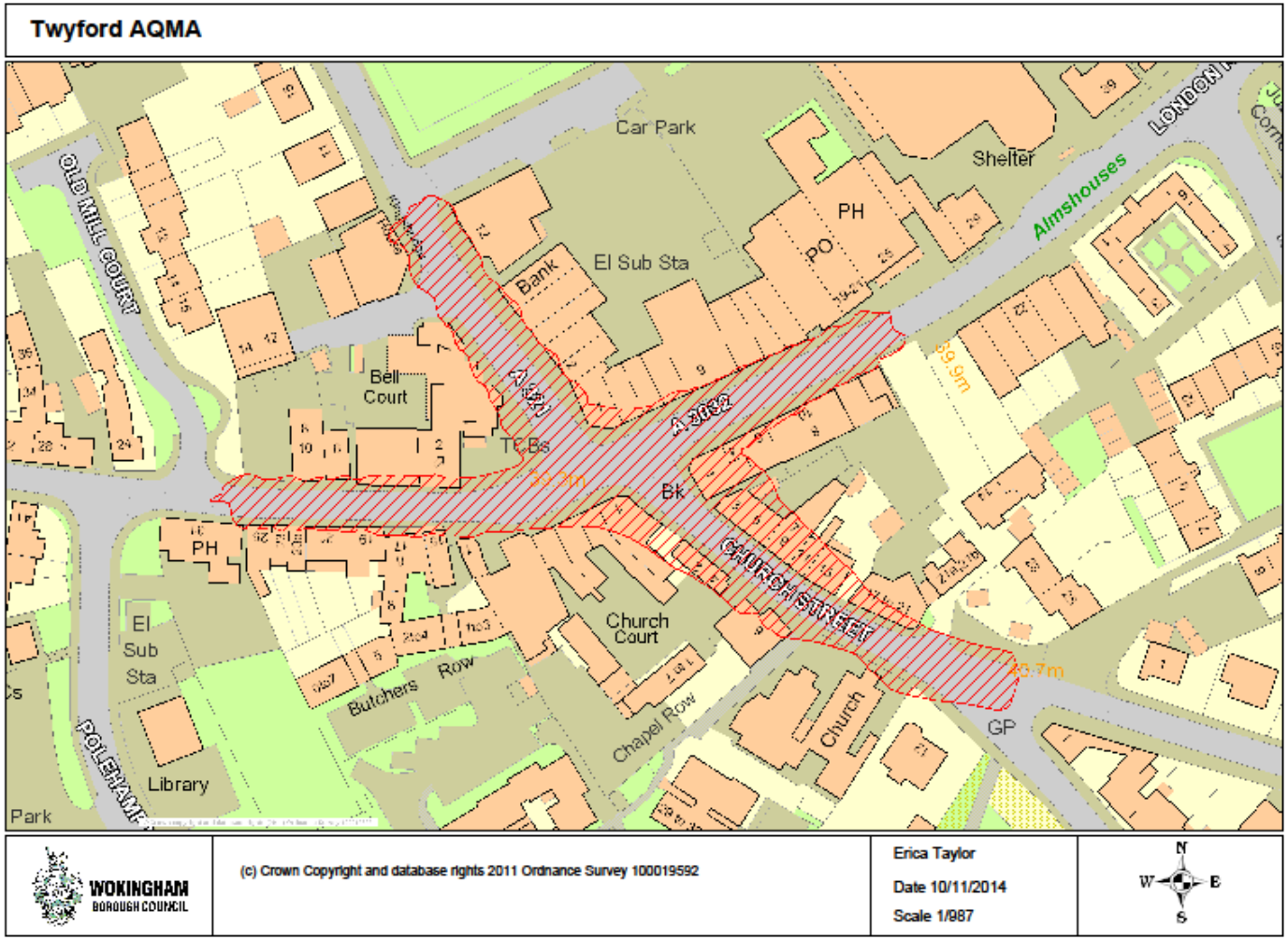
autumn 2017		Traffic Lights with vehicles able to go both ways along all 4 roads at the crossroads. If we were to alter one road to allow traffic to leave the crossroads but not approach the crossroads i. e. One way. This would reduce the traffic to only 3 stops and thereby reduce the waiting time and thereby reduce emissions. As the High Street going towards Charvil appears to be the worst road and the pavements are particularly narrow this would appear to be the obvious road to make one way up to the Old Mill Court Road. I would note that traffic from Charvil would then have to travel along the A4 and down Wargrave Road to get into the village centre. I would also note that for in excess of 6 months this road was closed to all traffic when the bridge was repaired and did not appear to cause too many problems. Finally if this were to be adopted we could widen the pavements along the High Street and allow pedestrians from Bridge House to use wheelchairs to get into the village. • Discussion resulted in a number of minor changes to the wording of some actions and the inclusion of the words “and crossings” to Twyford action number 5 • Suggestion to add Market Place, Peach Street and Broad Street to Wokingham Town Centre action number 1 • Suggestion to add changes to Taxi licensing regarding emission standards • Suggestion to consider the permanent closure of Luckley Path in Wokingham Town Centre action number 3
Internal Officer working group autumn 2017	Internal stakeholders	• Feedback for Planning Policy (Growth and Delivery) Team which resulted in minor changes to wording. • Feedback from Transport Policy Team in advance of meeting which resulted in the confirmation of many updates to progress on existing actions as well as actions in planning or implementation phases.

8 Appendix B: Reasons for Not Pursuing Action Plan Measures

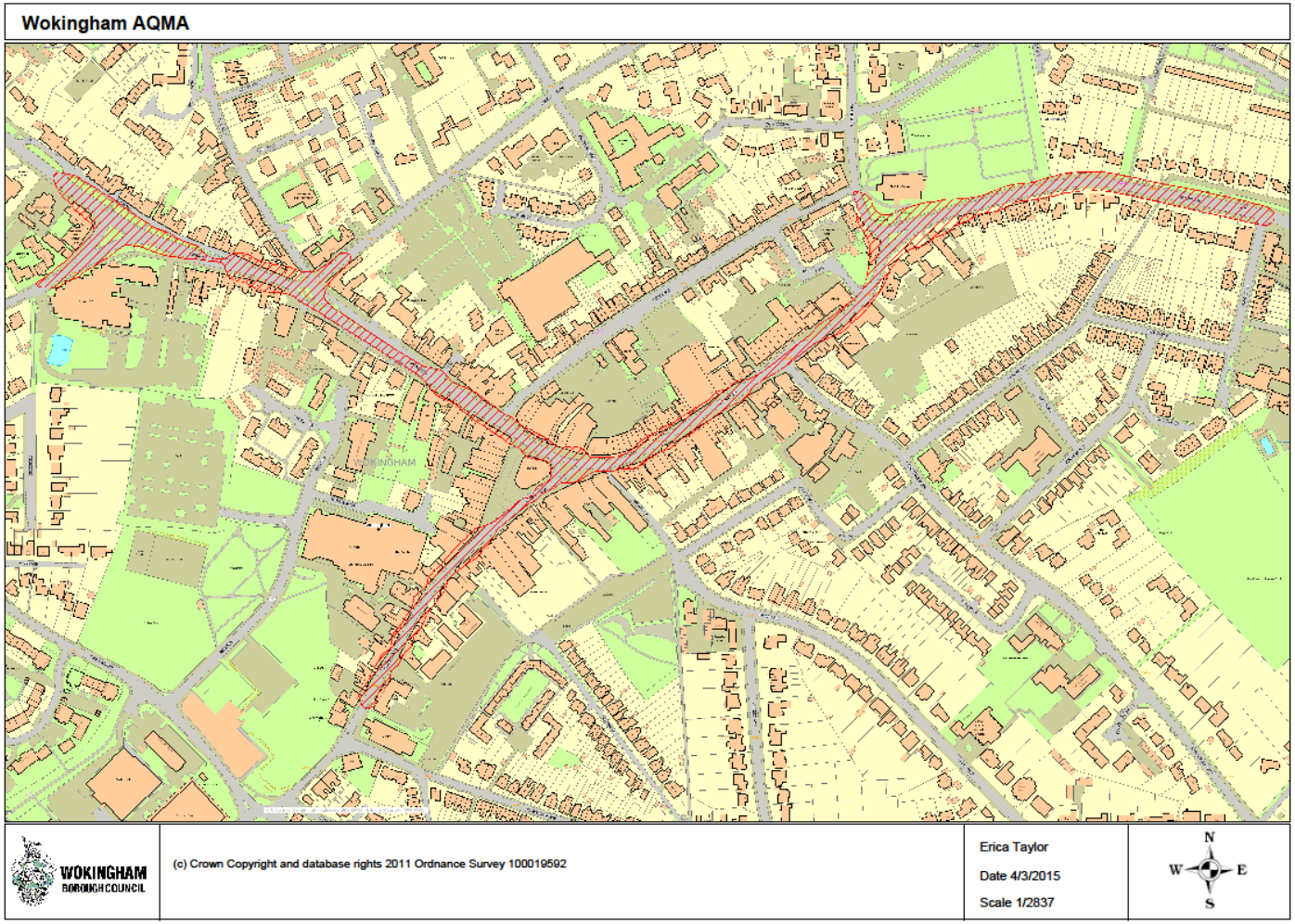
Action Plan Measures Not Pursued and the Reasons for that Decision

Action category	Action description	Reason action is not being pursued (including Stakeholder views)
Twyford action number 13	Consideration of the designation of A3032 (to B class)	Internal Officer stakeholder feedback advised that this would not be effective as sat nav's would not be updated.

9 Appendix C: Twyford Crossroads AQMA



10 Appendix D: Wokingham Town Centre AQMA



11 Glossary of Terms

Abbreviation	Description
AQAP	Air Quality Action Plan - A detailed description of measures, outcomes, achievement dates and implementation methods, showing how the local authority intends to achieve air quality limit values'
AQMA	Air Quality Management Area – An area where air pollutant concentrations exceed / are likely to exceed the relevant air quality objectives. AQMAs are declared for specific pollutants and objectives
AQS	Air Quality Strategy
ASR	Air quality Annual Status Report
Defra	Department for Environment, Food and Rural Affairs
EU	European Union
LAQM	Local Air Quality Management
NO_2	Nitrogen Dioxide
NO_x	Nitrogen Oxides
PM_{10}	Airborne particulate matter with an aerodynamic diameter of 10µm (micrometres or microns) or less
$PM_{2.5}$	Airborne particulate matter with an aerodynamic diameter of 2.5µm or less
$\mu g/m^3$	Microgrammes per metre cubed

12 References

ASR 2016

Detailed Assessment, Peter Brett Associates, May 2014

Updated Detailed Assessment, Peter Brett Associates, February 2017