

REPORT TITLE: AIR QUALITY ACTION PLAN PROGRESS REPORT

19 SEPTEMBER 2018

REPORT OF PORTFOLIO HOLDER: Cllr Jan Warwick

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WARD(S): ALL

PURPOSE

To set out progress to date in the implementation of the core and complementary measures of the Air Quality Action Plan “the Plan” and for Cabinet to make recommendations as to further work required to ensure its delivery.

RECOMMENDATIONS:

1. That Cabinet note the progress made in the delivery of the Air Quality Action Plan.
2. That data continue to be gathered on whether additional enforcement of the Traffic Regulation Order on St Georges Street will have a positive impact on traffic flow at peak times.
3. That the work of the Winchester Movement Study be recognised, which will inform on whether the City’s air quality would benefit from a northern park and ride site and the implementation of a ‘Clean Air Zone’.
4. That ‘smart’ ticket machine options be further evaluated and that a future report with recommendations, be brought back to Cabinet.
5. That in view of the considerable capital costs associated with the delivery of a charging Clean Air Zone (CAZ), that Members await the findings of the Winchester Movement Strategy before deciding whether to adopt a CAZ.
6. That it be ensured that air quality is sufficiently reflected within the City Council’s updated Procurement Policy.

7. That work continues in partnership with Southampton City Council on an Air Quality Supplementary Planning Document for the district.
8. That it be noted that an Electric Vehicle Charging Strategy will be presented to Cabinet later in the year.

IMPLICATIONS:

1 COUNCIL STRATEGY OUTCOME

- 1.1 The City Council's strategy places improving the quality of the district's environment, as one of its key outcomes, recognising that people expect a clean and safe environment to live and work. The strategy pledges to 'reduce harmful emissions through holistic transport planning', which is a central driver for improved air quality. Further, air quality is widely recognised as critical to the delivery of good public health, with the Council's strategy acknowledging that health is essential for enjoying a good quality of life.

2 FINANCIAL IMPLICATIONS

- 2.1 For each of the core and complementary measures that has been identified as having a financial cost, background detail has been set out in the Supporting Information below. This report is not recommending the approval of any additional budgets; these would be subject to further investigation and a future report.
- 2.2 However, some actions would have significant capital and on going revenue costs, such as the implementation of 'smart' ticket machines, which would deliver an emissions' based tariff solution.
- 2.3 Further, for the implementation of a charging Clean Air Zone for heavy duty vehicles, initial broad cost estimates are in the millions of pounds and that in order to obtain a more refined estimate, a detailed study at an estimated cost of £45,000 would be necessary. Should Cabinet decide, subsequent to any findings from the Movement Study, that further work needs to be undertaken then this will be subject to a future report and associated recommendation.

3 LEGAL AND PROCUREMENT IMPLICATIONS

- 3.1 The Environment Act 1995 sets out the national air quality strategy, which requires Local Authorities to 'from time to time' assess their air quality and where it fails to meet the national standards, the Local Authority has a statutory duty to designate an Air Quality Management Area (AQMA). All Air Quality Management Areas must be accompanied by a corresponding Air Quality Management Plan (AQAP), which sets out what action the Local Authority proposes to take in order to ensure that the [national air quality standards](#) are met within the statutory time scales.
- 3.2 Failure to meet the national air quality standards, as set down in the Air Quality (England) Regulations 2010 (EU Directive 2008/50/EC), exposes the UK government to possible fines imposed by the European Court of Justice. However under the Localism Act 2011, the UK government can hand down these fines to those local authorities failing to meet these standards, thereby providing a direct risk of financial sanction to Winchester City Council for non compliance.

4 WORKFORCE IMPLICATIONS

- 4.1 The primary focus of delivering much of the AQAP, including the monitoring and review of emissions is already accommodated within the Environmental Health and Licensing Team.
- 4.2 Further the project teams which are challenged with either delivering a core or complementary measure will continue to draw on the time, skills and expertise of officers from across the Council, and potentially key stakeholders and partner organisations.

5 PROPERTY AND ASSET IMPLICATIONS

- 5.1 Much of the measures outlined in the AQAP have no direct impact on the Council's property interests, because they seek to affect traffic accessing the town centre. However there are core measures setting out proposals to upgrade the ticket machines for 'smart' machines and additional proposals to install electric vehicle charging points in Winchester City Council car parks. Both will be subject to additional reports, setting out the specific asset implications.

6 CONSULTATION AND COMMUNICATION

- 6.1 The development of the Air Quality Action Plan was undertaken through an Air Quality Steering Group (AQSG), which comprised of cross party members, WCC technical Officers, business and environmental stakeholders. Prior to adoption, the Plan was subject to a formal public and stakeholder consultation process to determine the core and complementary measures (CAB2906). Subsequent to the adoption of the Plan, each 'Task and Finish' Group assigned to the delivery of a core measure, is required to report its progress back to the AQSG. In addition the Chair of the AQSG also sits on the City Council's Low Carbon Board to reflect the synergies between the objectives of both groups. The AQSG Chair also gave a briefing on the Plan's progress to the Overview and Scrutiny Committee on the 9th July 2018.
- 6.2 Further, where it is identified that a core or complementary measure will have demonstrable impact upon a particular profile of Winchester's community, or where it is subject to a formal adoption process, such as the adoption of an Air Quality Supplementary Document, each measure has or will be subject to a formal consultation exercise prior to adoption, the findings of which will be set out in the corresponding report and Cabinet Paper. Examples include delivering on parking pricing differential (CAB2855) and more recently consultation with the taxi community in the development of the Electric Vehicle Charging Strategy, which will be brought before the Cabinet in October.

7 ENVIRONMENTAL CONSIDERATIONS

7.1 This paper is central to the delivery of the City Council's air quality objectives and its core expectation in delivering on its Environmental and Health objectives as set out in the Council Strategy 2018 - 2020.

8 EQUALITY IMPACT ASSESSEMENT

8.1 None

9 DATA PROTECTION IMPACT ASSESSMENT

9.1 None

10 RISK MANAGEMENT

Risk	Mitigation	Opportunities
<p><i>Property</i></p> <p>Consideration of any impact arising from the installation of electric vehicle charging network on Council Estate, will be set out in a later report.</p>		
<p><i>Community Support</i></p> <p>That the core and complementary measures will not be given wider community support, due to the perception of inconvenience, costs and economic impact.</p> <p>Equally in not delivering the core measures, the Council could be seen as incapable of tackling the city's air quality issue, with all the inherent Public Health and reputational concerns.</p>	<p>Involvement of local stakeholder groups in delivering the measures set out in the plan.</p> <p>AQAP based on robust evidence of impacts.</p> <p>Public engagement offers opportunity to consider unforeseen impacts</p>	<p>An education programme aimed at supporting behavioural change / perceptions over the early years of the AQAP could be considered.</p> <p>Wider community support for better air quality leading to an investment toward a collective behavioural change.</p>
<p><i>Timescales & Project capacity</i></p> <p>There are time limitations in terms of expected compliance with</p>	<p>Some dedicated support for development of the AQAP was secured, through an internal</p>	<p>Where necessary specific additional resource requirements have been identified through the task</p>

<p>government standards by 2020 i.e. a compressed time period. This represents a significant challenge not only in terms of delivering what the plan has said but also in working with delivery partners over whom the city council has no control.</p>	<p>secondment to provide administration and project management assistance. Otherwise the plan draws upon the input of relevant officer resource across the Council and where possible external consultant support.</p>	<p>and finish groups, who report back to the Air Quality Steering Group and subsequent submission to members with any budget implications.</p>
<p><i>Financial / VfM</i></p> <p>Several Core Measures have been assigned high level costing estimates, which may not be deliverable from within existing budgets, which could present an impact on progressing the Plan.</p>	<p>The Air Quality Steering Group and associated 'task and finish groups' can undertake further work to refine these costs further and thereby give greater confidence in position prior to any subsequent spend being agreed.</p>	<p>A 'clean air city' will make Winchester a more attractive and health location to live work, and visit making the city more vibrant and thereby economically prosperous.</p>
<p><i>Legal</i></p> <p>Failure to comply with national air quality standards presents the City Council with a risk of financial penalties handed down by Central Government. Further failure to comply may also pose additional risk from private action, where individuals are adversely affected by air quality.</p>	<p>The AQAP has been prepared with the assistance of specialist consultants and which proposes measures which are deliverable whilst seeking to achieve the greatest benefits to air quality. Task and finish groups are working towards the delivery of these measures, and officers are continually monitoring air quality to establish current levels of nitrogen dioxide.</p>	<p>In complying with national air quality standards, Winchester City Council can ensure that it will not be subject to any central government fines.</p>
<p><i>Innovation</i></p> <p>In seeking to address air quality, the Council could overlook opportunities to adopt innovative ways of tackling traffic congestion and ensuring that the city</p>	<p>Winchester City Council is working with HCC on the delivery of the Movement Strategy which will propose new ways of controlling the access and</p>	<p>Similarly the Strategy will identify further innovative opportunities which could be delivered, subject to feasibility and cost assessments.</p>

centre remains fit for purpose and an attractive place to live, work and visit, well into the 21 st Century.	flow of traffic through the City including making use of technology.	
<i>Reputation</i> In failing to meet national air quality standards, Winchester City Council continues to suffer reputational damage as a good place to live and to locate business. Further, the City has an active environmental lobby, which continues to seek to expose environmental shortcomings such as air quality. Failure to meet air quality standards by 2020 could harm the Council's reputation.	The City Council engages with WinACC and Winchester BID, both of whom sit on the Air Quality Steering Group. Further the City Council adopts an open and transparent when reporting on air quality and monitoring progress on the AQAP.	In ensuring that Winchester complies with clean air standards, the city can capitalise on this status as a better place to live work and visit.
<i>Other</i>		

SUPPORTING INFORMATION:

Background

- 10.1 Subsequent to discharging its duty to undertake air quality monitoring, it was established that the City Centre's air quality did not comply with the legal standards for particulate (PM₁₀) and Nitrogen Dioxide (NO₂). Winchester City Council declared its first and only AQMA in 2003 from which it adopted its first AQAP in 2006. In 2012 the City Council was able to determine the AQMA's compliance with the national particulates standards and successfully applied to the Government to 'un declare' on its duty to monitor for PM₁₀. Throughout 2016 detailed work was undertaken to review the current status of NO₂ within the AQMA, including source apportionment, from which a new AQAP was adopted by Cabinet in the Spring of 2017. This report sets out the progress made against this 2017 AQAP, a map of which can be found in in Appendix 1.
- 10.2 Through an Air Quality Steering Group and with the assistance of the consultants TRL (Transport Research Laboratory), a new Air Quality Action Plan was drafted and subsequent to a public and stakeholder consultation process, adopted by Cabinet on the 26th April 2017 (CAB2906). The Plan incorporates 9 core and 9 complementary measures to be delivered in

accordance with a set of prescribed dates. These measures are set out in more detail below.

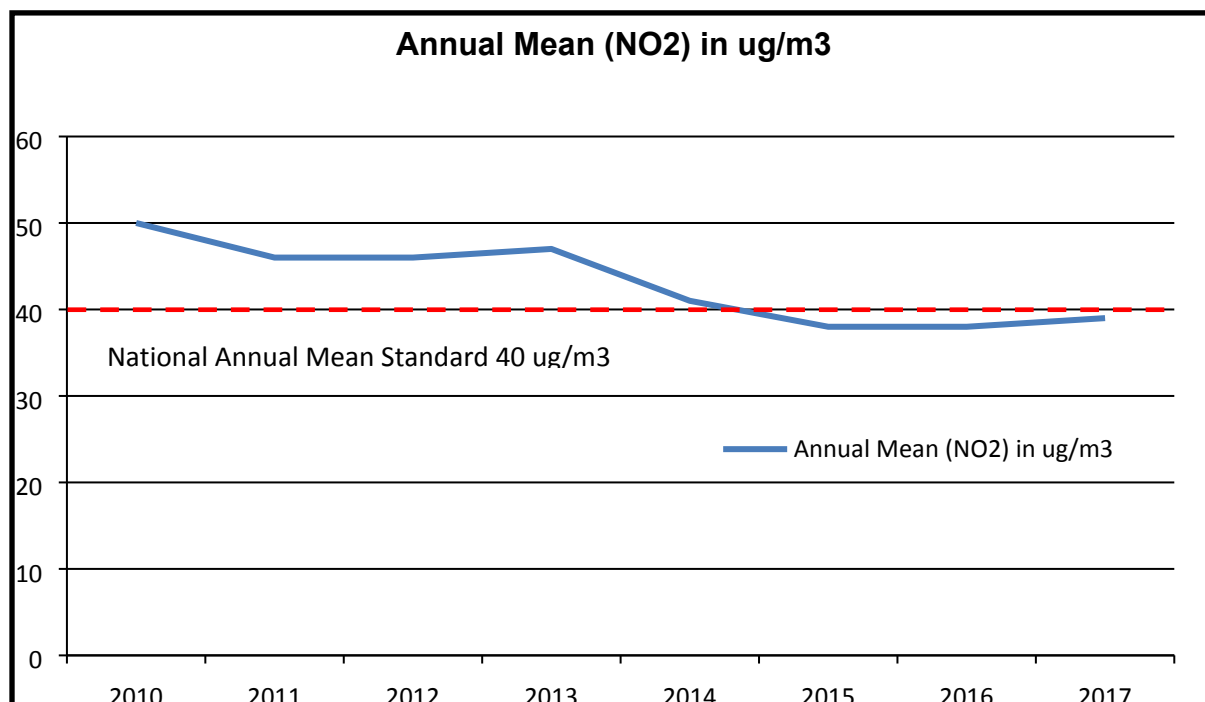
10.3 Initially there has been a focus on the Core Measures as these have been modelled as delivering the greatest benefits in improved air quality. Each Core Measure has been assigned a relevant officer to lead a small project group focused on its delivery. Some core measures have already been actioned, whilst others have yet to be implemented because this necessitates a capital investment and thereby Cabinet approval.

11 Current NO_x levels inside the AQMA

11.1 The AQAP is focused on delivering the NO_x levels to within the national annual mean standard 40 micro grams per metre cubed and all Annual Status Reports (ASRs) can be found on the City Council's air quality web pages. Currently Winchester has two static road side air quality monitoring stations:

- a) St Georges Street
- b) Chesil Street

11.2 These stations monitor real time NO_x data and collate this data in 15 minute averages, from which an annual mean is derived. Since 2010 the St Georges Street Station has revealed the following trend based on annual mean readings:



St Georges Street NO₂ since 2010

- 11.3 This graph illustrates that there has been a positive and steady downward trend in NO_x levels within the AQMA and that since 2015, St Georges Street has demonstrated compliance with the 40ug/m³ standard.
- 11.4 Further, after recommendation by a Bureau Veritas Air Quality Consultant's report conducted in 2015, a new road side air quality monitoring station was installed in Chesil Street, adjacent to the Chesil Rectory. The first full year's results in 2017, indicated an annual NO₂ mean of 30 ug/m³, which is very encouraging because it is significantly below the national standard.
- 11.5 In addition, there are 26 NO_x tubes located across the City, which are collected on monthly basis and from which an indicative (weighted) annual mean is derived. The majority of these tubes demonstrate annual NO₂ means well below the 40 ug/m³ standard and whilst the Romsey Road location showed an annual NO₂ level that exceed the standard, this site will be subject to additional more detailed monitoring.

12 **Update on the measures within the AQAP**

- 12.1 It is not possible at this stage to directly assess the impact of specific progress against individual core measures set out in the AQAP. However, it is clear that the combined action taken to date (such as implementing a parking pricing differential as part of promoting wider use of park and ride and taking targeted action/additional enforcement in regard to city centre goods deliveries at peak times) is having a positive impact on air quality in the city centre as set out in 11.2 above. Commentary on progress against all core measures included in AQAP is set out in Appendix 2 to this report.
- 12.2 Progress against many of the core measures is reliant on the work of the Winchester Movement Study and it is recommended that further consideration of issues such as implementing a "Clean Air Zone" be deferred until the results of the Study are published.
- 12.3 Further, there are complementary measures which have been identified to demonstrate good practice in support of Winchester City Council's community leadership responsibilities. These are:
- a) Work with authorities towards adoption of a regional Low Emissions Strategy (LES);
 - b) **Seek to commit to introduce more electric charging points within WCC car parks (see below);**
 - c) Ensure that air quality is a standard consideration as part of procurement practice and is reflected in the Council's Procurement Policy;

- d) Continue to improve public access to live parking information and signage and better signage to encourage drivers to use the car park best suited to their journey;
- e) To continue to work on the delivery and promotion of car club schemes operating in the city;
- f) Consider the introduction and promotion of additional cycle stands, in consultation with local cycling groups, as part of planned developments in the AQMA;
- g) Work with stakeholder organisations and maintain a programme of regular communication to encourage behavioural change;
- h) Review and refresh the Council's Travel Plan to promote more sustainable travel for staff;
- i) Provide web based information and sign posting resources that will assist and encourage workplaces and schools in the City to adopt Travel Plans.

12.4 Whilst none of these measures have been assigned a modelled reduction in NO₂, they have the collective potential to present improvements in air quality by driving behavioural change. The Low Emission Strategy commits Winchester City Council to work with regional authorities and other stakeholders, to agree a common set of standards e.g. for buses, HGV's as well as planning standards. We are working towards better dynamic signage to inform customers on parking occupancy rates to mitigate against vehicles from space hunting, and we are seeking to improve on how our own workforce accesses the city during the working week, recognising that as one of the major employers in the city, WCC has a role to play in mitigating traffic congestion from its own staff. Furthermore officers have been working with city schools on air quality projects to raise awareness and to encourage behavioural change.

12.5 One of the more significant complementary measures, as highlighted above, is a commitment to introduce more electric vehicle (EV) charging points within WCC car parks. Horizon Power and Energy have been commissioned to write a strategy in order to inform how the City Council can best introduce an EV charging network in Winchester and the wider District. This measure is considered 'complementary' because it has only been determined as having a marginal affect on air quality between now and 2020, which is the life of the plan. The reason for this is simply because of the predicted uptake of EV vehicles in the next two years.

- 12.6 However EV technology is a major pillar in the government's strategy towards improved air quality and with a lack of EV charging points in car parks is often cited as a barrier in its take up, the plan proposes to address this issue.
- 12.7 Furthermore, EV charging is seen as critical in delivering the core measure of introducing parking charges/incentives which favour low emission vehicles over those which produce higher emission and more pollution as a result (see 11.4 – 11.10 above). Without the support of installed EV charge points, this core measure would be harder to deliver. Moreover it seeks to support central government strategy and would again provide a positive visible infrastructure to the public in support of the Plan's objectives.
- 12.8 Although the full details of the strategy and associated costs estimates will be set out in a subsequent Cabinet paper scheduled for later this year, the current strategy draft is recommending 49 EV chargers in the city and across the District, with an estimated capital expenditure of £250k. The report will set out various delivery options and recommendations.

13 OTHER OPTIONS CONSIDERED AND REJECTED

13.1 None

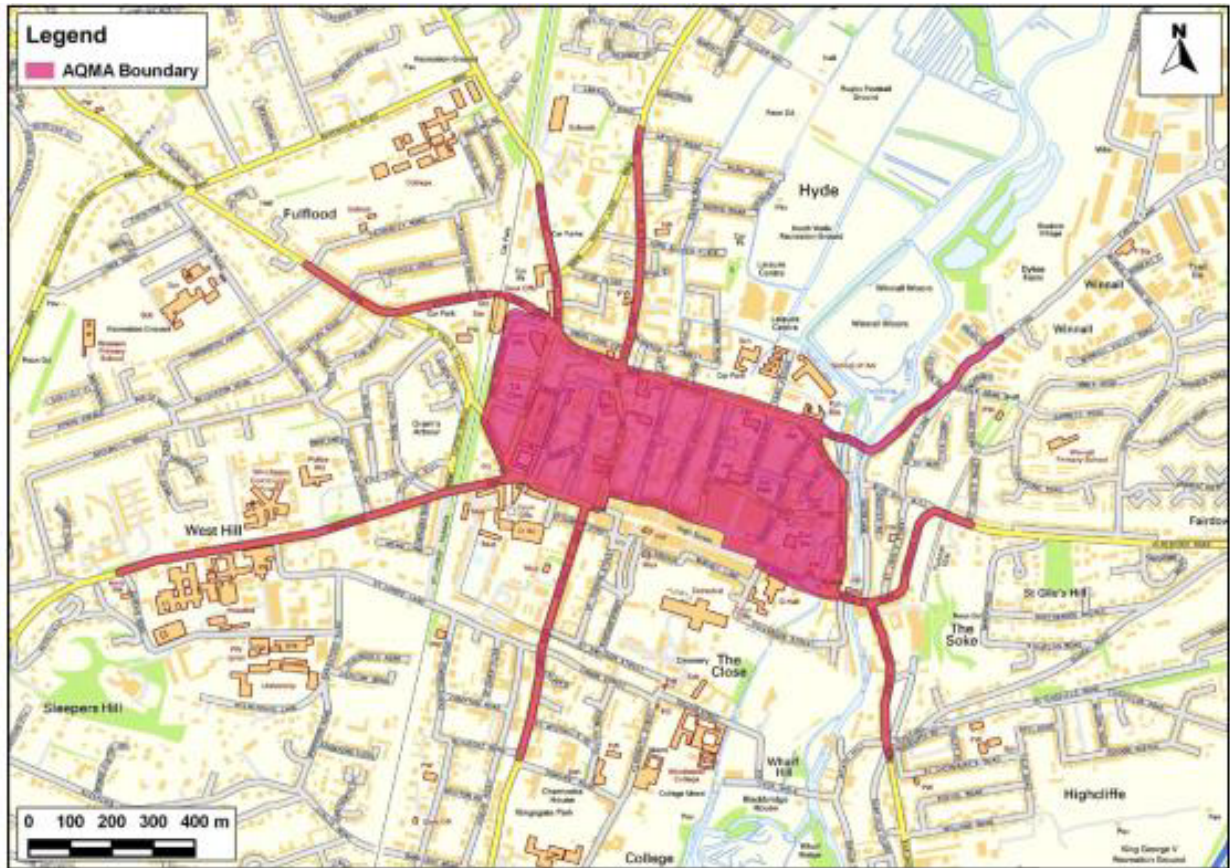
BACKGROUND DOCUMENTS:-

Previous Committee Reports:-

- [CAB2885](#) Car Parking Charges and Operation Review
- [CAB2906](#) The Adoption of the Winchester Air Quality Action Plan

Other Background Documents:- None

Appendix 1 – Map of the current Air Quality Management Area



Appendix 2 – Further Background Information

Core Measure	Implement'n Phase	Estimated Completion Date	Action Taken To Date
1. Build on car parking pricing differential (Modelled 2% reduction in NOx)	May 2017	April 2018	Adopted to discourage traffic accessing the AQMA and encourage the update of Park and Ride. This measure has already been implemented and after 12 months has demonstrated a strong trend toward an uptake in use of the P&R sites and a consequential freeing up of city centre parking capacity.
2. Review of enforcement of goods deliveries by time of day (Modelled 2% reduction in NOx)	April 2018	Ongoing	Adopted to encourage a smooth traffic flow through the one way system during peak periods. After an initial targeted data gathering and enforcement programme by the CEOs several parking tickets have been served. Further data collection is expected to better inform on whether targeted enforcement poses a demonstrable improvement on traffic flow.
3. Introduce a Park and Ride Site to the north of Winchester (Modelled 3% reduction in NOx)	Tbc	Tbc	The south P&R sites already have a proven benefit to Winchester, and a further study is being undertaken with the County Council to develop a Movement Strategy. This will clarify whether the city could also benefit from a site to the north or elsewhere. The Study is making good progress and is now embarking on a detailed set of options for further modelling. Should the study identify the need for additional P&R facilities at the northern approaches or in other locations on the edge of the city, this will inevitably be subject to a capital investment programme and will not be realistically delivered in accordance with the relatively short time scales set out in the AQAP.
4. Introduce new parking charges/incentives to reduce diesel car parking and high polluting petrol cars (older than Euro 4) from parking in central car parks in favour of low	June 2018	April 2019	The AQAP modelled the impact of diesel cars at contributing 58% of the NOx emissions from all vehicles entering the AQMA, many of which will elect to use the City Centre car parks. This measure seeks to adopt 'smart' ticket machine technology to implement differential charging tariffs for higher polluting vehicles, primarily diesels. Such technology is still in its developmental phase within the parking industry and currently only one company can claim to deliver a robust solution. Parking Services continues to closely monitor developments and will,

<p>emission vehicles. (Modelled 10% reduction in NOx)</p>			<p>present a further new report setting out proposals to introduce an emissions based charging regime as part of the wider parking strategy for the city.</p>
<p>5. Ensure that all heavy duty vehicles that enter the AQMA meet Euro VI Stage II Standard by 2020. (Modelled 10% reduction in NOx)</p>	2020	Ongoing	<p>Modelling revealed that diesel buses and coaches contribute an estimated 15.6% of the NOx emissions and 'heavy goods vehicles' contributing 10.9% of all NOx emissions from vehicles entering the AQMA. Since drafting the AQAP it has been determined that WCC cannot 'ban' non Euro VI heavy duty vehicles from entering the city, it is therefore recommended that this wording is amended to say '<i>Investigate the feasibility of introducing a CAZ for heavy duty vehicles that enter the AQMA, which do not meet Euro VI Standards</i>'. Initial findings from similar feasibility studies, have identified that the costs in delivering what is a Charging Zone, are considerable and the City Council should take a realistic and balanced view when weighing up the likely benefits in relation to costs. When assessing the profile of vehicles that would be affected, this should include the limited time period in which any such benefits would be realised, after which all such vehicles would otherwise comply with the standards. It is recommended that the feasibility of alternative measures, such as bus retrofitting, freight consolidation centres, restrictions on last mile HGV deliveries and the use of bus gates, be investigated. These should also be considered as part of the Movement Study and that Cabinet should await the final findings of the Study before making a decision on how best to proceed.</p>
<p>6. Ensure that all Council owned leased, contracted or influenced vehicles that enter the AQMA meet the OLEV standards for ULEV's and are not diesel fuelled by 2020. (Modelled 2% reduction in NOx)</p>	2020	2020	<p>Proposed to ensure that Winchester City Council adopts a proportionate leadership role and to ensure that where it can, it will seek to influence best practice through policy. The Council's current procurement policy is currently under review, with a new policy expected by the end of the year, to be updated in line recently amended Government guidance. Air quality shall be considered as part of this review and it is expected will feature in the new policy.</p>
<p>7. Development of an Air Quality Supplementary</p>	2017	2018	<p>The measure seeks to 'future proof' air quality as a core consideration when considering the impact from planning applications. Winchester City Council has</p>

Document.			partnered with Southampton City Council to engage a consultant to draft a region wide AQ SPD. It is expected that a draft SPD will be received by the end of the year, after which it will then be subject to WCC's own consultation and adoption processes.
8. Continue to work with and lobby Hampshire County Council to identify projects to improve air quality	2017	Ongoing	Winchester City Council continues to work with HCC as the delivery partner for the Winchester Movement Strategy, which seeks to identify opportunities to improve Winchester's transport systems and infrastructure over the next 20 plus years by defining options designed to improve all forms of movement in and around the city, which will be aimed in part at delivering improved air quality.
9. Monitor the performance of the Action Plan and reassess whether additional measures are required to meet the objective	2018	Ongoing	Officers continue to maintain the static monitoring stations and deploy NOx tubes in the City and throughout the District. Both static stations have in recent years shown levels of NOx to be within statutory limits, whilst the majority of NOx tubes have are well below the statutory standards and show a downward trend in NOx across the City. Further studies are being undertaken in Romsey Road.