

Title of meeting: Cabinet

Date of meeting: Monday 9th September

Subject: Air Quality Local Plan- Progress Update

Report by: Pam Turton- Assistant Director, Transport

Wards affected: All

Key decision: No

Full Council decision: No

1. Purpose of report

- 1.1 To provide an update on the development of the Air Quality Local Plan to deliver compliance with legal limits for nitrogen dioxide in the shortest possible time¹.

2. Recommendations

- 2.1 It is recommended that Cabinet:
- Notes the progress made in the development of the Air Quality Local Plan; and
 - Approves the proposed preferred package as set out in paragraph 5.12 as the preferred option to be taken forward to outline business case development. That is; **a Class B CAZ is combined with a number of non-charging measures to ensure that compliance is achieved within the shortest possible time i.e by 2022**

3. Background

Ministerial Directions

- 3.1 Following a High Court ruling in 2018, Portsmouth City Council has been issued with three Ministerial Directions. These place a legally binding duty on the Council to undertake a number of steps to improve air quality in the city.
- 3.2 The first Ministerial Direction was issued in March 2018 and required to Council to develop a Targeted Feasibility Study (TFS) by 31 July 2018 for two specified road links in the city: A3 Mile End Road and A3 Alfred Road. These two roads

¹ In the case of the Air Quality Local Plan this is considered to be measures that can be delivered as quickly as or more quickly than a charging Clean Air Zone can be made operational. JAQU consider that a charging CAZ could be operational in Portsmouth by the end of 2021; therefore other measure must be capable of being delivered by this date to be considered.

were selected as they were projected to have nitrogen dioxide (NO₂) exceedances in Defra's national PCM model.

- 3.3 The TFS considered a number of measures that could have the potential to bring forward the achievement of EU limit values for NO₂ which is set as an annual mean value of 40 micrograms per cubic metre (µg/m³).
- 3.4 From an initial longlist of measures three measures were identified as deliverable within the timescales set by Defra, and therefore considered to offer the best opportunity to bring forward compliance in the shortest possible time:
- Bus retrofitting to upgrade all pre-Euro VI buses that travel along the two road links identified as having projects exceedances
 - A package to reduce private car use.
 - Promoting the uptake of cleaner vehicles.
- 3.5 Whilst none of these measures alone was considered sufficient to bring forward compliance, implementation of all three measures in combination was predicted to bring forward compliance from 2020 to 2019 for A3 Mile End Road and from 2023 to 2022 for A3 Alfred Road.
- 3.6 Following the results of the TFS, PCC were issued with a further Ministerial Direction in October 2018, this time to undertake a bus retrofit programme. The Ministerial Direction stipulated that the programme should be undertaken as quickly as possible with the purpose of bringing forward compliance with legal levels of NO₂ on A3 Mile End Road and A3 Alfred Road.
- 3.7 In addition to the TFS mandated through the Ministerial Direction, PCC instructed consultants to carry out an additional TFS for Air Quality Management Area 6 (AQMA6), covering London Road, Kingston Road and Fratton Road. This study covered the four sections of part 1 (understanding the problem), part 2 (developing a long list of measures for addressing the modelling exceedances), part 3 (assessing deliverability/feasibility and delivering a short list) and part 4 (evidencing the short listed measures to identify options that could bring forward compliance).
- 3.8 This study was carried out in order to support improvements to air quality within AQMA6 due to information from PCC's continuous air quality monitoring station located within AQMA6, that London Road demonstrated a continuous exceedance of the requirements of the Ambient Air Quality Directive (AAQD). The study showed that, as with the TFS carried out for the first Ministerial Direction, a combination of measures would be the most effective way to bring forward compliance.
- 3.9 A number of further intervention measures were also considered for the AQMA 6 area, with input from the Air Quality Steering Group, and PCC appointed consultants to assess the impact of these measures. As part of this work, a 24-hour Automatic Number Plate Recognition (ANPR) survey was carried out in October 2018, for both north and southbound directions on London Road, just south of the junction with Laburnum Grove. The interventions were modelled to

determine their impact on NO₂ concentrations, with the results showing that whilst improvements were experienced in some scenarios, none of the options would achieve compliance in insolation.

- 3.10 A third Ministerial Direction was issued requiring PCC to produce an Air Quality Local Plan to set out the case for delivering compliance with legal limits for NO₂ in the shortest possible time.
2019 Annual Status Report
- 3.11 PCC has a statutory duty under the Environment Act 1995 to monitor, assess and take action to improve local air quality. As part of this duty PCC is required to produce an Annual Status Report (ASR) which provides details of the analysis of pollutant occurrences in the city, to report on progress in any air quality management areas (AQMAs) and to provide updates on actions that have been undertaken to address air pollution in the city.
- 3.12 As a result of the Ministerial Directions placed on PCC and their identification of A3 Mile End Road and A3 Alfred Road as exceedance locations PCC placed additional air quality monitoring equipment in these locations and also placed additional NO₂ diffusion monitoring tubes around the city.
- 3.13 This increased level of monitoring in new areas not previously monitored, has enabled a higher resolution picture of NO₂ concentrations that has previously been available. This means that the 2019 ASR has reported a different narrative with regards to exceedance locations than in previous years ASRs as well as an update to the evidence that was relied upon for the TFS and our proposal to develop an Air Quality Local Plan.
- 3.14 The data contained within the 2019 ASR does not change the work that the Council is required to undertake in developing our Air Quality Local Plan. However, it does highlight that measures to improve air quality in the city should be city-wide in focus, rather than focusing solely on discrete locations. This approach will help to reduce the displacement of traffic, which could lead to new exceedance locations as traffic reroutes to avoid areas of intervention.

4. Progress since the Ministerial Directions were issued

- 4.1 In November 2018 PCC submitted our proposal to develop our Air Quality Local Plan to JAQU. This proposal set out the local context and our understanding of the air pollution problems at that time. The proposal also confirmed the timescales that we would be working to in order to meet the requirements of the Ministerial Direction and the key milestones in developing our Air Quality Local Plan.
- 4.2 Following the submission of the proposal, in accordance with the Ministerial Direction, the first stage in development of the Air Quality Local Plan was the submission of the draft Strategic Outline Case (SOC) which was submitted to JAQU in January 2019. Within the SOC PCC were required to include a shortlist

of measures that were likely to be effective in bringing forward compliance in the shortest possible time.

- 4.3 The SOC made use of the most up to date evidence available at the time, which suggested that the most effective non-charging options should focus on traffic management measures on the A2047, junction improvements on the A3, as well as use of cleaner buses. However, it was noted that such measures would only be successful if accompanied by modal shift and cleaner vehicle uptake.
- 4.4 Following the submission of the SOC, PCC has moved to the next stage in the preparation of the Air Quality Local Plan which involves collecting additional evidence and undertaking further transport and air quality modelling. As part of this evidence gathering process the Council commissioned an automatic number plate recognition (ANPR) survey of the city. Cameras were installed at 110 locations around the city which recorded vehicle movements 24 hours a day for 7 days.
- 4.5 The purpose of the ANPR survey was to understand the composition of the local vehicle fleet in Portsmouth and the routes that vehicles usually take. The survey has shown that generally, the vehicle fleet in Portsmouth is older than the national average, and that diesel cars (including private cars and private hire vehicles) account for almost half of the NO₂ emissions from road traffic in Portsmouth.
- 4.6 The data collected from the ANPR survey will help to inform the next stage of transport and air quality modelling work as it provides a clear picture of the local situation, rather than relying on national assumptions in isolation.

5.0 Options Development

- 5.1 Portsmouth's Air Quality Local Plan to deliver compliance with legal limits for nitrogen dioxide must include a package of measures that PCC identify as being effective in achieving compliance in the shortest possible time. This package of measures must be benchmarked against the introducing of a charging Clean Air Zone (CAZ), as this is the means by which the Government believe compliance can be achieved in the shortest possible time. PCC must therefore demonstrate that the chosen preferred package of measures can bring forward compliance more quickly than a charging CAZ. If the evidence and case made by PCC cannot demonstrate this the Government is likely to impose a charging CAZ on the city.

Benchmark: Clean Air Zone

- 5.2 As noted above PCC is required to benchmark a charging Clean Air Zone of a suitable class to achieve compliance with legal limits for nitrogen dioxide in all identified exceedance locations in the shortest possible time. All other potential packages of measures must then be compared against the charging CAZ benchmark to establish whether they can achieve compliance as quickly as or more quickly than a charging CAZ.

- 5.3 The Clean Air Zone Framework sets out the principles and requirements for setting up charging Clean Air Zones in England. Such a zone would involve charging vehicles for travelling into and within an identified area. There are four different classes of charging CAZ which apply to older, higher-polluting models of vehicles (diesel vehicles that are older than Euro VI and petrol vehicles that are older than Euro IV), but vary by vehicle types. The vehicle types subject to a charge for each class of CAZ are as follows:
- Class A: Buses, coaches, taxis and private hire vehicles
 - Class B: Buses, coaches, taxis, private hire vehicles and heavy goods vehicles
 - Class C: Buses, coaches, taxis, private hire vehicles, heavy goods vehicles and light goods vehicles
 - Class D: Buses, coaches, taxis , private hire vehicles, heavy goods vehicles, light goods vehicles and cars
- 5.4 In order to understand the impact that a CAZ could have in Portsmouth, a stated preference survey has been distributed. This survey has asked drivers to consider how they would respond to different levels of CAZ charge (e.g. would they keep their existing car and pay the charge; change their mode of travel; not make the journey at all; reroute their journey etc.) as well as their appetite for measures that could be introduced to mitigate against the negative impacts of introducing a charging CAZ. The results of the survey will be fed into our transport and air quality modelling work to ensure that local behavioural response are captured rather than those based on national data.
- 5.5 The likely behavioural responses of drivers in Portsmouth to different levels of charging CAZ have been modelled using the Solent Sub-Regional Transport Model (SRTM). The outputs from this modelling work have then been fed into a specialist air quality model, held by consultants Aecom.
- 5.6 The results of these modelling exercises demonstrate that **a Class C CAZ should be taken forward as the benchmarking option** as this is the lowest level of charging CAZ that could achieve compliance at all exceedance links in the model year of 2022. This is compared to a Class B CAZ which is likely to result in exceedances persisting on A3 Alfred Road in 2022.

Non-charging Measures

- 5.7 As detailed in the Strategic Outline Case that was submitted to JAQU in January there are a number of non-charging measures that are being considered for inclusion in Portsmouth's Air Quality Local Plan. In considering the suitability of such measures the primary objective for assessment is whether the measures can be delivered in the shortest possible time to achieve the scale of nitrogen dioxide reduction required to achieve compliance without causing air quality problems elsewhere in the city.
- 5.8 Whilst a wide range of measures have been considered and assessed, many have been discounted because they are not considered to be deliverable within

the timescales mandated by the Ministerial Direction placed on the city Council. Others are considered to only be likely to deliver a small reduction in nitrogen dioxide emissions that cannot be quantified within a strategic level model.

- 5.9 Appendix 1 details the list of measures that have been considered and the impacts that they are considered to have on achieving compliance with legal limits for nitrogen dioxide. The air quality and transport modelling undertaken to date shows that none of these measures, either alone, or in combination would not be sufficient to achieve compliance with the Ministerial Direction.
- 5.10 Therefore the evidence suggests that a **low-level charging CAZ along with a selection of non-charging measures are presented to JAQU as the preferred package.**

Preferred Package

- 5.11 Air Quality and Transport modelling suggest that by 2022, with a Class B CAZ in place there would still be a need to reduce nitrogen dioxide emissions from traffic on A3 Alfred Road by a small amount in order to achieve compliance with legal limits from nitrogen dioxide. By this date, with a Class B CAZ, all other locations in the city² would be compliant with legal limits.
- 5.12 It is therefore suggested that a **Class B CAZ is combined with a number of non-charging measures to ensure that compliance is achieved within the shortest possible time i.e by 2022.**
- 5.13 The alternative to this is to go to the Benchmark option of implementing a Class C CAZ which it is anticipated will achieve compliance in all locations by 2022, however it is anticipated that this will have a greater negative impact on Portsmouth's residents and the local economy, given the wider range of vehicle types that would be impacted by the charge when comparing a Class C CAZ to a Class B CAZ.

6. Next Steps

- 6.1 Work is continuing to develop Portsmouth's Air Quality Local Plan for submission to JAQU by 31st October 2019. Once approval for a preferred approach is in place the measures as outlined in this report can be developed further to inform the Outline Business Case (OBC). Once this OBC has been drafted it is suggested that it is presented to Cabinet for final approval before being submitted to JAQU.

7. Reasons for recommendations

- 7.1 Portsmouth's Air Quality Local Plan to deliver compliance with legal limits for nitrogen dioxide in the shortest possible time must be submitted to the Government's Joint Air Quality Unit (JAQU) in the form of an Outline Business

² Excludes any exceedances on Highways England network, which is not under PCC's control.

Case (OBC) by 31st October 2019. In order to continue the development of the OBC, confirmation of the Cabinet's preferred approach for addressing nitrogen dioxide exceedances is required.

7.2 In developing a solution to exceedances in nitrogen dioxide levels in the city there is a balance to be struck between achieving compliance with legal requirements to reduce harm to people's health and the impact that such measures could have on the local economy and resident's livelihoods. It is considered that the proposed preferred approach strikes this balance.

8. Equality impact assessment

8.1 A preliminary Equality Impact Assessment has been completed. The proposals are not considered to have any specific negative impacts on any of the protected groups, however it is suggested that a full EIA is undertaken prior to the final outline business case being presented to Cabinet.

9. Legal implications

9.1 The Council has been issued with a Ministerial Direction to produce an Air Quality Local Plan that outlines how air quality in the city will be improved in the shortest possible time. If this Plan is not produced there is a risk of substantial fines from Government and the clawing-back previously allocated grant funding.

10. Director of Finance's comments

10.1 The cost to undertake technical studies to inform the development of the Air Quality Local Plan is being funded through a grant from JAQU.

10.2 The funding to implement and maintain the preferred package of measures will be funded by JAQU; however the amount of funding available will depend on the strength of the outline business case submitted to Government.

.....
Signed by:

Appendices:

Background list of documents: Section 100D of the Local Government Act 1972

The following documents disclose facts or matters, which have been relied upon to a material extent by the author in preparing this report:

Title of document	Location
2019 Air Quality Annual Status Report	https://www.portsmouth.gov.uk/ext/documents-external/asr-defra-final.pdf
Clean Air Zone Framework	https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/612592/clean-air-zone-framework.pdf

The recommendation(s) set out above were approved/ approved as amended/ deferred/ rejected by on

.....
Signed by: