

# Executive 25 January 2018

Report of the Corporate Director of Economy and Place

Portfolio of the Executive Member for Environment and the Executive Member for Transport and Planning

## A Clean Air Zone for York including Anti Idling Enforcement

## **Summary**

- 1. This report sets out options for:
  - a. The introduction of a local bus based Clean Air Zone (CAZ);
  - b. The introduction of an improved minimum emissions standard for CYC contracted local bus services;
  - c. Adoption of anti-idling measures (including enforcement).

Proposals for the introduction of a bus based CAZ and anti-idling awareness raising activities were approved in principle during the adoption of the third Air Quality Action Plan (AQAP3) (December 2016) but the Executive Member for Environment requested further assessment be undertaken prior to implementation.

#### Recommendations

- 2. The Executive is asked to note the content of the report and to:
  - a) Approve the introduction of a CAZ in 2020 subject to a consultation on the details of the proposed CAZ.
  - **b)** Consider if the Executive wishes to indicate an option preference within the consultation.
  - c) Approve a minimum Ultra Low Emission Bus standard for all CYC contracted bus services when new contracts are awarded.

d) Approve the use of enforcement to supplement the existing awareness raising activities to reduce stationary vehicle idling in York as set out in paragraphs 66 to 69 of this report

Reason: To improve air quality in York through the acceleration of improvements to bus emissions levels and the reduction of vehicle engine idling.

### **Background**

## **Local Air Quality Management in York**

- 3. Poor air quality has a detrimental impact on the health of York's residents, creates an unpleasant environment for visitors, damages historic buildings and places an additional financial burden on local health service providers. The main air pollutants of concern in York are nitrogen dioxide (NO<sub>2</sub>) and particulate matter (PM). These are linked to lung diseases (asthma, bronchitis and emphysema), heart conditions, cancer and more recently neurological conditions such as reduced IQ in children and the onset of dementia. The main source of these pollutants in York is traffic. It should be noted that even zero-tailpipe emission vehicles still produce particulate matter due to braking and tyre wear.
- 4. The Environment Act 1995 requires all local authorities to review and assess air quality in their areas and to declare Air Quality Management Areas (AQMAs) where UK health based air quality objectives are not being met.
- 5. Where an AQMA is declared, an Air Quality Action Plan (AQAP) must be developed to demonstrate how the local authority intends to improve air quality. The national air quality objectives apply at all outdoor locations where members of the public are regularly exposed to pollution over the averaging times of the various objectives.<sup>1</sup>
- 6. York declared three AQMAs due to exceedances of the NO<sub>2</sub> air quality objectives: city centre (inner ring road and radial routes), A19 Fulford and Salisbury Terrace (see maps at Annex 1). AQAPs (2004, 2006,

<sup>1</sup> For example, a short term one hour objective (set to prevent acute impacts of air pollutants) applies in busy shopping areas and at sports grounds where people spend relatively short periods of time, longer term annual average objectives (set to prevent chronic impacts of air pollution) apply at facades of buildings such as houses, hospitals and schools where people often spend prolonged periods of time.

- 2013) and a Low Emission Strategy (LES, 2012) have been adopted by CYC to deliver air quality improvement.
- 7. Since 2010-11 air quality has generally improved at most locations in York and the Salisbury Terrace AQMA has recently been revoked. Concentrations of NO<sub>2</sub> in the Fulford Road AQMA have also fallen to the objective level and the AQMA will be reviewed again in 2018. However, there are some locations in the city centre where the annual average objective for NO<sub>2</sub> is still persistently exceeded. Therefore further emission reduction measures are proposed to improve air quality and health.
- 8. The main reason for the continued exceedance of the annual average NO<sub>2</sub> objective in the city centre is emissions of NO<sub>2</sub> from diesel vehicles which have not reduced as rapidly as predicted. This is due to a combination of factors which may include:
  - Increased uptake of diesel vehicles in the national fleet (driven by carbon based tax incentives) combined with an increase in average vehicle size, weight and engine size
  - Inefficient driving techniques, inefficient operation of vehicle emission controls and vehicle idling within the urban environment
  - A number of ageing diesel buses
  - Cumulative traffic impacts of development
  - The relative cost of city centre parking versus cost of P&R (which influences the total number of vehicle trips in the city centre).
  - Failure of successive Euro emissions standards to meet emission targets in real world driving conditions
- 9. York's Low Emission Strategy (LES, 2012) introduced a number of technology based measures to help to reduce vehicle exhaust emissions. There is a particular emphasis on diesel buses, taxis, HGVs and LGVs which currently play an important role in delivering the transport needs of the city. Balancing the economic needs of York with improving air quality is a key challenge for the city. The LES aims to promote and incentivise the use of low emission vehicles, particularly

those which run on electric, compressed natural gas (CNG), biomethane and /or make use of hybrid technologies. The current AQAP3 is the main delivery document for the LES.

- 10. There has been good progress with the introduction of low emission vehicle measures in York since the adoption of the LES and AQAP3, including:
  - Provision of a public electric vehicle recharging network to encourage uptake of electric vehicles by members of the public
  - Low emission taxi incentives and improved emission standards
  - Electric buses operating at Poppleton Bar and Monks Cross P&R
  - Electric tour buses
  - Low emission car clubs (including use by CYC staff)
  - Low emission planning requirements to ensure electric vehicle recharging points are provided in new developments
  - Eco-stars fleet recognition scheme<sup>2</sup>
- 11. Buses are responsible for about 3% of the total vehicle kilometres travelled but up to 27% of the NO<sub>x</sub> emitted. Older diesel buses also emit high concentrations of diesel particulates, for which there is no known safe level. As buses have a disproportionately high impact on NO<sub>x</sub> emissions, reducing emissions from buses remains a high priority for the city. Proposals for the introduction of a bus based CAZ and anti-idling measures were accepted in principle during the adoption of AQAP3 subject to further assessment and consultation with bus operators prior to implementation.
- 12. The Air Quality Annual Status Report for the 2016 calendar year (ASR, June 2017)<sup>3</sup> provides further information on air quality in each of the AQMAs and progress with delivery of the AQAP and LES. Previous Air Quality Management (LAQM) are available for download from: <a href="http://jorair.co.uk/data-downloads/reports/">http://jorair.co.uk/data-downloads/reports/</a>

<sup>&</sup>lt;sup>2</sup> Eco-stars is a CYC funded voluntary scheme for fleet operators which enables them to access free information and advice on how to reduce emissions from their fleet and to obtain a star rating for their fleet based on emission performance.

<sup>&</sup>lt;sup>3</sup> Available online at <a href="http://jorair.co.uk/wordpress/wp-content/uploads/2017/06/ASR2017.pdf">http://jorair.co.uk/wordpress/wp-content/uploads/2017/06/ASR2017.pdf</a>

#### **Compliance with EU limit values in York**

- 13. The 'National Air Quality Action Plan for Nitrogen Dioxide July 2017' identified 29 local authorities where DEFRA has indicated that further action is needed locally to meet EU limit values for NO<sub>2</sub>. These authorities are being encouraged to introduce CAZs unless they can identify equally effective measures to deliver rapid compliance with EU limit values. Birmingham, Leeds, Nottingham, Derby and Southampton were 'mandated' by DEFRA to introduce Charging Clean Air Zones by 2020. In these CAZs vehicles that do not comply with DEFRA specified CAZ emission standards will be charged to travel through the CAZ. Leeds has just gone out to public consultation on its' proposals to improve air quality including a charging CAZ where buses, coaches and HGVs will be charged £100 and taxis / private hire vehicles charged £12.50 each time they enter the CAZ, if they do not meet the emission standards. A charging CAZ does not ban polluting vehicles from a CAZ but puts them at a considerable financial disadvantage.
- 14. These cities were identified as having potential breaches of the EU limit value for NO<sub>2</sub> using a national air quality model which only considers the UK's major road network. York was not included because the national air quality model is only required to consider a small number of major roads in York and to model locations at 4 metres from the roadside. This approach does not highlight the local air pollution issues in York. These tend to arise on smaller roads where residents often live within four metres of the roadside and there is limited opportunity for pollution dispersal. In some cases the locations identified by DEFRA as exceeding EU limit values have no residents or regular public exposure.
- 15. Comprehensive air quality monitoring in York over successive years has, however, demonstrated ongoing breaches of the annual average national air quality objective for nitrogen dioxide. Unlike the EU limit values national air quality objectives apply to all locations where there is relevant population exposure. There remains a statutory duty to work towards full compliance with all the national air quality objectives, based on accurate local monitoring and modelling data and consideration of all locations where the public are regularly exposed to air pollution. Therefore the AQMAs declared in York are a better indicator of where local air quality improvements are needed for the protection of public health.

<sup>&</sup>lt;sup>4</sup> Available online at <a href="https://www.gov.uk/government/publications/air-quality-plan-for-nitrogen-dioxide-no2-in-uk-2017">https://www.gov.uk/government/publications/air-quality-plan-for-nitrogen-dioxide-no2-in-uk-2017</a>

- 16. Following adoption of the LES, a number of studies were commissioned to determine the feasibility of some of the proposed measures in terms of air quality improvements, emission reduction and a cost benefit analysis, including:
  - a Low Emission Zone (LEZ) corridor
  - electric buses
  - anti-idling

## Low Emission Zone feasibility study (see Annex 2)

- 17. A LEZ is an area where only vehicles meeting a specified Euro emission standard are allowed to enter. CYC commissioned a LEZ feasibility study to investigate air quality improvement that might be achieved through a city centre low emission bus and coach corridor with various Euro standards for buses and coaches and hybrid buses.
- 18. The study concluded that a Euro 3 based LEZ would make air quality worse, Euro 4 and Euro 5 LEZ would reduce NO<sub>2</sub> concentrations but wouldn't meet the air quality objectives at all locations, but that electric / hybrid P&R buses would significantly improve air quality. The study indicated that applying zero emission standards to a small number of frequent bus services could be more effective at reducing NO<sub>2</sub> concentrations than blanket Euro diesel standards across all bus services.

# Low Emission Bus feasibility study (see Annex 3)

- 19. The study identified around 65 scheduled bus routes through the city centre serviced by approximately 200 individual buses of varying age and emission standards. It found 82% of all bus movements were carried out by only 49% of the bus fleet and that these buses operated on a small number of routes (including all the P&Rs). As demonstrated by the LEZ feasibility study, due to their intensive use and emissions, these 'frequent flyers' had a disproportionate impact on local air quality.
- 20. Due to their short, frequent, round trip cycles the 'frequent flyer' buses were found to be ideal for the adoption of electric drive technology, leading to zero tailpipe emissions, quieter buses and an enhanced overall passenger experience. This comprehensive evidence base was used to support external funding bids resulting in the introduction of electric buses on the Poppleton Bar and Monks Cross P&R routes. Their successful operation over 3 years has demonstrated that electric buses could be introduced more widely to reduce emissions in York.

### **Anti-idling feasibility study**

- 21. Anti-idling policies aim to prevent unnecessary emissions from stationary vehicles and can take a variety of forms ranging from provision of basic advice and signage through to adoption of anti-idling legislation and the issuing of fixed penalty notices. In 2013 CYC commissioned an anti-idling feasibility study to examine current levels of vehicle idling and to assess the cost-effectiveness of introducing various types of anti-idling policy in York (including enforcement).
- 22. The study indicated that if a vehicle is expected to be stationary (parked, waiting or loading) for more than 1 minute it is both economically and environmentally desirable to switch off the engine. Observations at a number of city centre locations identified significant idling by all vehicle types.
- 23. Anti-idling campaigns may include one or all of the following:
  - Anti-idling signage(either with or without enforcement)
  - Anti-idling promotion and marketing campaigns
  - Working with vehicle operators to achieve improvements
  - Issuing of fixed penalty notices (FPNs)
- 24. The study reviewed activities of other LAs and found promotion and marketing campaigns (either with or without signage) and a visible presence of officers was sufficient to reduce idling without the need for FPNs. However, since the study, further complaints have been received from the public and enforcement powers may be an additional deterrent to idling vehicle drivers.
- 25. Since the study was undertaken, 'stop-start' technology became available on a range of new Euro 6 buses in Autumn 2016. This functionality ensures that the engine switches off automatically when a bus is loading or unloading passengers at bus stops. Fewer than ten buses operating in the York area are currently fitted with stop-start. It is anticipated that this will increase as the number of Euro 6 vehicles in operation increases.
- 26. Much of the existing bus fleet operating in the York area is, however, fitted with cut out devices which will switch off after 2-3 minutes when the bus is stationary. Whilst many of the bus operators in York have adopted anti-idling policies, this technology can, however, be over-ridden by the individual driver so more needs to be done to ensure that this behaviour is prevented.

### AQAP3 proposals for CAZ and anti-idling measures

- 27. The feasibility studies led to the following proposals in AQAP3:
  - a) Introduction of a bus based Clean Air Zone (CAZ) within the inner ring road where bus emissions would be controlled based on frequency of entry of individual buses into the city centre.
  - b) The undertaking of a promotion and marketing campaign aimed at reducing vehicle idling emissions in the city (and an option for anti-idling enforcement, if necessary).

The Executive Member requested further assessment, consultation and approval prior to implementation of these measures.

#### 28. The term 'Clean Air Zone (CAZ)' in York means:

'an area of the city where bus emissions are controlled based on their frequency of entry'.

This is because it is not just the emissions from a vehicle, but the frequency it is used which identifies the most polluting vehicles in York and these are mainly vehicles used on registered local bus services. In targeting the most polluting vehicles, significant reductions in air pollution levels can be achieved through emission standards affecting relatively small numbers of vehicles.

The CAZ comprises a strict emissions standard for high and medium frequency bus entries and depending on the option chosen, a lesser mandatory or no standard for low frequency bus entries, thereby reducing the impact on smaller operators.

The lesser standard is also important as this sets the minimum standard for the city, and reduces the risk of older buses being cascaded into York from other areas in the UK where emissions standards are in force or due to be (see paragraph 13 above).

The main differences between York's CAZ and LEZ proposals were:

- The CAZ would apply to the whole of the inner ring road and the area within;
- The CAZ would apply only to local bus services and not to coaches nor to school bus services;
- In a CAZ emission standards for individual buses would be set depending on the frequency of their entry onto the inner ring

road. The most frequent services would be required to meet an ultra low emission standard whilst less frequent services (mainly rural services) would initially be set a lower minimum emission standard and given a longer period to upgrade to ultra low emission technology. Under the LEZ approach every bus would be required to meet the same 'blanket' emission standard irrespective of the number of times it entered the city each day.

A table showing the original emission restriction proposals for the York CAZ (as included in AQAP3) can be found at Annex 4.

### **Revised CAZ proposals for York**

- 29. The introduction of a CAZ would see the acceleration of bus emissions improvements in the York area. This would be achieved through an acceleration of capital fleet investments that the commercial bus operators might otherwise propose to make over a longer period.
- 30. A review of the current bus fleet in York has been undertaken and discussions held with operators about their anticipated fleet renewal programmes and ability to meet various emission standard options. This has taken place at the same time as applications for external funding for further electric Park& Ride buses in York and the re-issuing of the P&R contract which included minimum emission standards for buses.
- 31. In August 2017 CYC was awarded £3.3 million from DfT's Ultra Low Emission Bus Scheme to support the delivery of high capacity, fully electric buses and charging infrastructure for the remainder of York's Park & Ride sites. Subject to key deliverability assessments undertaken by the Park & Ride operator (First York) in conjunction with CYC, the Low Emission Bus Scheme will assist in delivering an electric Park & Ride network by February 2019. The new buses will join the 11 existing electric buses already operating at Poppleton Bar and Monks Cross.
- 32. Following award of the P&R contract and the successful Low Emission Bus Scheme bid, the level of future investment in York's bus fleet is now more certain than it was at the time AQAP3 was approved. The original CAZ proposals set a "roadmap" for reducing emissions from buses in York. Although there has been significant achievement in terms of electrifying York's buses the original CAZ proposals (see Annex 3) will not be met.
- 33. The definition of an Ultra Low Emission Bus (ULEB) is a bus which meets or exceeds the level of pollution abatement required for the Euro

- 6 bus standard. Example technologies are: Diesel engine, CNG engine, Electric motor or Hydrogen fuel cell.
- 34. It should be noted that Euro 6 diesel engines and exhausts require appropriate maintenance to ensure that they continue to meet the commensurate emissions standard.
- 35. First Leeds, First York's sister operation, recently announced in December 2017 an investment of £71m to introduce 284 new Euro 6 buses to meet the emissions requirements of the forthcoming Leeds CAZ.
- 36. At a value of £250k per bus and with a total of c.70 vehicles in the non-Park & Ride fleet, this would require First York to make a capital injection of c.£17.5m, if it was to do the same in York.
- 37. Alternatively, a range of retro fitting of Selective Catalytic Reuptake Technology (SCRT) exhaust systems solutions exist that can prolong the life of older buses whilst delivering emissions improvements. This solution would be likely to cost a far more modest c.£15k per bus. On the assumption that all c.70 First York vehicles could be retro-fitted, a far more modest cost of £1.05m to achieve the Euro 6 emissions standard would be required by the company.
- 38. Clearly the decision to retro-fit or to buy new would be one for First and other local bus operators to make for their respective fleets.

# **Options**

39. Two revised options for delivery of a CAZ (and timescales for introduction) have been drawn up.

# Option 1

- 40. This option proposes the introduction of a CAZ by January 2020 with a three tier approach mandating emissions standards for all vehicles operating on registered local bus services in York. Such an approach has no precedent in the UK to date.
- 41. Option 1 builds on the original CAZ proposals, focussing attention in the first instance on the highest frequency buses using or crossing the inner-ring road into the city centre. This option identifies timescales for the mandatory introduction of an Ultra Low Emission Bus service across the whole York bus fleet.
- 42. Table 1 provides details of the current baseline, as well as timescales for improvement under option 1.

Table 1

Mandatory minimum emissions standards required for:				
	High frequency	Medium frequency	Low frequency bus	
	bus entries	bus entries	entries	
	(10 times per day or	(5 – 9 times per day)	(under 5 times per	
	more)		day)	
January	1554 visits in to the	170 visits in to the city	102 visits in to the	
2018	city centre per day	centre per day (9%).	city centre per day	
(Baseline)	(85%). This represents	This represents approximately 26	(6%). This represents approximately 28	
	approximately 100	buses. All of these	buses. Some of the	
	individual buses.	buses are Euro 3 or	buses in this category	
	Some of the buses	better.	are still Euro 2. Most	
	in this category are		are Euro 5-6.	
	still Euro 2. Most are			
	Euro 3-5. 12 are			
	fully electric.			
January	ULEB (see definition	Euro 4	Euro 3	
2020 ( <u>CAZ</u>	at para 30)			
introduction				
<u>date</u> )				
January	ULEB	ULEB	Euro 4	
2022	OLLB	OLLD	Laio 4	
January	ULEB	ULEB	Euro 5	
2024				
January		ULEB	ULEB	
2028				

#### Option 2

- 43. This option proposes the introduction of a CAZ by January 2020 with a single emissions standard for a majority of vehicles operating on registered local bus services in York. Certain lower frequency buses would remain exempt from the mandatory standard.
- 44. This option is broadly based on the LEZ introduced in Oxford in January 2014. The Oxford LEZ is governed by a Traffic Regulation Condition (TRC) imposed by the Traffic Commissioner on all local bus service registrations operating on certain streets in Oxford city centre.
- 45. Should the Traffic Commissioner agree to the Council's request, an equivalent arrangement in York would see the implementation of a single emission standard applicable to all local bus services using or

- crossing the York inner-ring road (with the exception of very low frequency buses which would be exempted).
- 46. It is envisaged under this option that York would still implement a Clean Air Zone as outlined at paragraph 27 above but the controls for the least frequent services would not be mandatory as initially suggested. Table 2 provides details of the minimum emission standards for the majority of the fleet under option 2 and proposes minimum levels which operators of buses making very low numbers of entries to the CAZ should work to achieve.

Table 2

	Mandatory minimum emission standard for:	Advisory minimum emission level for:
Implementation date	CAZ required vehicles	Exempted vehicles
	(5 or more entrances to the CAZ per day)	(fewer than 5 entrances to the CAZ per day)
January 2018 (Baseline)	1724 visits in to the city centre per day (94%). This represents approximately 126 buses. Some of the buses in this category are still Euro 2. Most are Euro 3-6. 12 are fully electric.	102 visits in to the city centre per day (6%). This represents approximately 28 buses. Some of the buses in this category are still Euro 2. Most are Euro 5-6.
January 2020 ( <u>CAZ</u> introduction date)	ULEB	Euro 4
January 2022	ULEB	Euro 5
January 2024	ULEB	ULEB

# **Analysis**

- 47. Since the CAZ was first proposed, there have been a number of improvements to the environmental credentials of some of the bus fleet operating in the York area. A summary detailing approximate total fleet size for each operator, the number of ULEB (Euro 6 or better) vehicles operated by each operator and plans for improvements to their respective fleets can be found at Annex 5 to this report.
- 48. Following approval, the option selected by members will be consulted on with local bus operators. A further paper will be brought back to the Executive in Spring 2018 summarising the consultation with bus operators, the views of any other parties on the proposal, outlining any

- significant obstacles to delivery and confirming the intended CAZ introduction date.
- 49. The precise mechanism for enforcement of the preferred option will also be determined.

### Option 1

- 50. This option initially focuses attention on the highest frequency buses operating in the City Centre and is closely aligned to the division of services as defined in the previous CAZ proposal. Option 1 would also ensure continued emission improvement for all other buses over a longer period with all services reaching ULEB emission status by 2028.
- 51. Where low emission areas have already been introduced in relation to local bus services they have usually been applied to all local buses operating in the area (e.g. the Low Emission bus zones in London which commenced earlier this year), or to most buses with some low frequency exemptions (e.g. the Oxford LEZ which excludes buses entering the city making fewer than 25 visits to the zone per week). Option 1 would set standards for all buses (graduated over 3 classifications depending on frequency of entry).
- 52. Further work would need to be undertaken on the means by which a CAZ with three distinct air quality requirements could be enforced. Whilst there is no precedent for this option from elsewhere in the UK, officers are confident that this option is achievable.
- 53. The 'high frequency' category of services defined in option 1 includes the following:
  - All of First York's commercially operated local bus services, including the University of York local bus service network;
  - The York Park & Ride network operated by First York;
  - City Sightseeing operated by Transdev York;
  - Connexions commercially operated local bus service;
  - CYC contracted local bus services currently operated by Arriva, Connexions and Reliance.

#### Park & Ride & City Sightseeing

54. The Park & Ride and City Sightseeing network will meet the proposed option 1 CAZ emission standards ahead of the proposed 2020 introduction.

#### CYC contracted local bus services

55. A number of the CYC subsidised local services already operate the required Euro 6 standard vehicles. It is envisaged that Euro 6 would be set as a minimum standard for any future tendering rounds subject to agreement by the Executive. In the Council's most recent tendering round (Spring 2017), the additional cost of procuring a brand new Euro 6 single vehicle operation instead of a Euro 5 operation equated to a cost of £1,700 per annum. Clearly, this only applies when a new tender is being undertaken and cannot be introduced part way through an existing contract as an operator will have made a significant investment in vehicles previously.

#### Commercially operated local bus services

- 56. The viability of commercially operated services is dependent, often, on utilising vehicles which are purchased second hand or which have been transferred from other services within a large group. By way of example, the 'Cityzap' fleet will be modernised this year with vehicles which have been previously used on other routes within the wider Transdev operation.
- 57. First York will be making a significant capital investment in to the Park & Ride service to deliver one of the largest electric bus fleets in the UK outside London. To date, however, neither First York nor Connexions has shared any form of vehicle replacement programme for their non-contracted operated services.
- 58. In the event that a number of bus services were de-registered (or their frequency significantly reduced), CYC would have to consider what measures it would be prepared to take to ensure continuity of service. CYC would also need to consider the additional costs likely to be attributed to its existing subsidised bus network resulting from the emissions requirements.

#### Option 2

- 59. Option 2 merges the higher and medium frequency bus entries identified in option 1. This will have the effect of ensuring that medium frequency services are subjected to more stringent emissions standards, capturing almost all of the buses operating in to the York area but allowing complete exclusion of the very infrequent services. The services which would be excluded from the mandatory requirements under option 2 would be:
  - A small number of NYCC or CYC tendered services operating relatively long routes, serving rural villages;
  - Coastliner and EYMS services operating long distance inter-urban services (Leeds to the Coast and York to Hull respectively).
- 60. It should be noted that in the case of the latter category, these routes are already principally operating using Euro 6 buses.
- 61. This option takes its precedent from the Oxford LEZ, now in its fifth year of operation. The York CAZ would be applied through use of a TRC based on a single emission standard (this is a well established approach in Oxford and could be readily adopted for use in York). Whilst this would require that a greater number of buses are upgraded to the ULEB minimum standard more quickly, recognition is given to the fact that it would take longer to achieve a fully ULEB bus network as the standard for low frequency bus visits would remain advisory.
- 62. In line with option 1 (and as per the fleet improvements laid out in annex 5), it should be noted that a number of York's operators have not currently shared any form of vehicle replacement road map.

# Ongoing review

63. It is proposed that the emissions standards would be reviewed in 2020 and then on a minimum two yearly basis to ensure that the CAZ is delivering the necessary improvements to air quality levels. The review would also enable consideration to be given to technological or standards changes which could have a material impact on the minimum emissions level required.

### **Anti-idling proposals for York**

- 64. The AQAP3 report initially recommended a promotional and educational approach only to anti-idling. Following consultation the final AQAP3 was amended to include an option for anti-idling enforcement. CYC has continued to receive complaints about idling.
- 65. On National Clean Air Day (NCAD) 15 June 2017 CYC and volunteers from AMEY and the University of York undertook pro-active anti-idling awareness raising within coach parks and at other city centre locations. The approach taken was to thank drivers who had already switched off engines and to try to engage drivers of idling vehicles in a conversation about NCAD and the need to switch off engines. All approaches were made informally with no mention of legislation or potential fines. Volunteers wore high visibility vests for safety reasons but were not in uniform. The majority of drivers approached on NCAD were willing to engage in a conversation with volunteers and switched off when asked.
- 66. Currently complaints about idling emissions from identifiable vehicles are brought to the attention of the vehicle owner /operator in writing. Complaints about local buses are referred to the bus operator via the existing bus partnership. Vehicle ownership details based on number plate observations can only be obtained from DVLA if a locally adopted anti-idling enforcement policy is in place and an offence has been witnessed by an officer designated to undertake anti-idling enforcement duties. As CYC does not currently have an adopted anti-idling enforcement policy or designated officers, it is currently not possible to write to owners of unmarked vehicles. This limited approach to dealing with stationary idling complaints can be continued at no additional cost.
- 67. The current proposals in AQAP3 aim to discourage vehicle idling by highlighting the cost and health implications of idling via a variety of media, supported by periodic on street 'advisory' patrols. This would be in addition to the existing approach as outlined. Actions would include:
  - erection of permanent and temporary anti-idling signage at locations where idling has been identified as an issue (see Annex 6)
  - initial local media campaign to highlight the cost and health implications of idling followed up by periodic 'refresher' campaigns (potentially on an annual basis in conjunction with NCAD)
  - pro-active anti-idling patrols and provision of anti-idling advice by council officers (and / or trained volunteers). Frequency of patrols would be subject to other service demands and availability of

- volunteers but would include an initial period of activity (to coincide with the launch of the media campaign) and increased activity around events such as NCAD or following complaints
- ad-hoc high profile anti-idling events to be held outside schools / hospital/ station etc, including rotation of temporary anti-idling signage throughout the year
- reminders to CYC fleet drivers to lead by example
- 68. Estimated costs for the current AQAP3 proposals for the first 5 years are £13,500 (see Annex 6)
- 69. In addition to the approaches outlined in paragraphs 66 and 67, an option to designate anti-idling enforcement powers to specific officers has also been investigated. Under this option any driver failing to respond to a request by an authorised officer to switch off an engine to prevent an idling offence could be reported for a summary offence (level 3 fine) or issued with a Fixed Penalty Notice for £20 (increasing to £40 if not paid within the specified period). Enforcement action would only be taken as a last resort and would only be applicable to offences taking place on the public highway. Occasional enforcement activities can be carried out within existing resources (subject to a small amount of additional administration and officer training). There may be some legal and debt recovery costs associated with serving a small number of FPNs.

#### Council Plan

70. Poor air quality affects the health and economy of York's residents and businesses. Whilst electric buses are cheaper to operate, require less maintenance and can at least be part funded through grants, they have higher capital costs. The council's anti-idling policies are partly in response to complaints by local residents and growing concerns about air pollution and its impact on health.

## 71. Implications

# Financial (Contact – Director of Resources)

It is envisaged that enforcement of both the CAZ and the council's antiidling policies would be undertaken within existing resource. The cost of implementing a Traffic Regulation Condition is thought to be very modest and does not require on-street signage.

**Human Resources (HR)** (Contact – Head of HR) – N/A

One Planet Council / Equalities (Contact – One Planet Council Officer / Equalities Officer)

The proposals are significant measures to improve air quality and reduce emissions of carbon and traffic pollution in the city.

**Legal** (Contact – Head of Legal and Democratic Services)
Provisions for the serving of FPNs and introduction of a TRC will be undertaken in consultation with Legal Services

**Crime and Disorder** (Contact - Senior Partnerships Support Officer, Community Planning & Partnerships) - N/A

Information Technology (IT) (Contact – Head of IT) – N/A

**Property** (Contact – Property) – N/A

Other - N/A

## **Risk Management**

- 72. Air pollution is a significant risk in the local plan. Measures to reduce emissions from buses are important measures in AQAP3. Failure to introduce a CAZ could lead to older buses being moved to York from other parts of the UK or Ireland where emissions standards are in place. This could result in possible legal challenge for failure to take the swiftest and most effective action to improve air quality. It should be noted that Bristol City Council has already been threatened with legal challenge by Client Earth regarding the content of its draft air quality action plan.
- 73. There is a risk that commercial bus services which offer only a marginal return to their operators would be at risk of being withdrawn as a result of the additional investment required to bring the vehicles up to ULEB standard. If such steps were taken, the Executive would then have to consider whether it wished to use Council subsidy to ensure the continued operation of the services.

- 74. There is also the possibility that some bus operators would re-register their bus routes in such a way that they avoided the Clean Air Zone. It is believed that this would be unlikely, however, as the bus routes would no longer be connecting their customers to the city centre: a key destination.
- 75. There is a risk that the Traffic Commissioner would not agree to the introduction of a TRC. Option 2 is, however, believed to be the lowest risk as it broadly replicates an existing TRC in Oxford.

#### **Contact Details**

**Author:** Andrew Bradley

Author's name

**Title** Sustainable Transport

Manager

**Dept Name** Transport

Tel No. 1404

Co-Author's Name: Mike

Southcombe

Title: Public Protection

Manager

Dept Name: Public Protection

Tel No. 1514

Co-Author's Name: Liz Bates Title: Principal Air Quality

Officer

**Dept Name: Public Protection** 

Tel No. 1529

Chief Officer Responsible for the report:

Chief Officer's name Neil Ferris

**Title** Corporate Director of Economy and

**Place** 

Report Approved tick

**Date** 03.01.2018

**Specialist Implications Officer(s)** List information for all

Implication : Financial Implication: Legal

Name: Patrick Looker
Title: Finance Manager
Tel No: 01904 551633

Name: Alison Hartley
Title: Senior Solicitor
Tel No.: 01904 553487

Wards Affected: List wards or tick box to indicate all All tick

For further information please contact the authors of the report

## **Background Papers:**

- 1. Every breath we take The lifelong impact of air pollution Royal College of Physicians (February 2016)
- 2. Air quality A briefing for Directors of Public Health DEFRA and PHE (March 2017)
- Adoption of a Low Emission Strategy for York Executive Report (9
  October 2012)
- 4. Adoption of York's Third Air Quality Action Plan Executive Member Report (14 December 2014)
- 5. Air Quality Annual Status Report Executive Member for the Environment Report (7 August 2017)
- 6. National Air Quality Action Plan for Nitrogen Dioxide DEFRA (July 2017)
- 7. Clean Air Zone Framework DEFRA (May 2017)

#### **List of Annexes**

- 1. Map of York's Air Quality Management Areas
- 2. Low Emission Zone study 2011
- 3. Low Emission Bus feasibility study 2013
- 4. Original CAZ emission control proposals (AQAP3 Dec 2016)
- 5. Proposals for improvements to bus emissions by operator
- 6. Anti idling details

# **List of Abbreviations Used in this Report**

AQAP Air Quality Action Plan

AQMA Air Quality Management Area

CAZ Clean Air Zone

DEFRA Department for the Environment, Food and Rural Affairs

FPN Fixed Penalty Notice
LES Low Emission Strategy
LEZ Low Emission Zone
NO<sub>2</sub> Nitrogen dioxide

PHE Public Health England

PM10 particulate matter less than 10 micron diameter

TRC Traffic Regulation Condition
ULEB Ultra Low Emission Bus