



Bath Clean Air Plan

Bath and North East Somerset Council

Proposed System Design Features and Payment Exemptions

674726.BR.042.FBC-05 | 3

January 2020



Bath Clean Air Plan

Project No: 674726.BR.042
Document Title: Proposed System Design Features and Payment Exemptions
Document No.: 674726.BR.042.FBC-05
Revision: 3
Date: January 2020
Client Name: Bath and North East Somerset Council
Project Manager: RR
Author: CC

Jacobs Consultancy Ltd.

1 The Square, Temple Quay
2nd Floor
Bristol, BS1 6DG
United Kingdom
T +44 (0)117 910 2580
F +44 (0)117 910 2581
www.jacobs.com

© Copyright 2019 Jacobs Consultancy Ltd.. The concepts and information contained in this document are the property of Jacobs. Use or copying of this document in whole or in part without the written permission of Jacobs constitutes an infringement of copyright.

Limitation: This document has been prepared on behalf of, and for the exclusive use of Jacobs' client, and is subject to, and issued in accordance with, the provisions of the contract between Jacobs and the client. Jacobs accepts no liability or responsibility whatsoever for, or in respect of, any use of, or reliance upon, this document by any third party.

Document history and status

Revision	Date	Description	By	Review	Approved
1	13.06.2019	FBC draft	CC	RR	RR
2	17.12.2019	Updated FBC draft	CC	ML	RR
3	17.01.2020	Final FBC	CC	ML	RR

Contents

Acronyms and Abbreviations.....	3
1. Introduction.....	4
2. System Design Features.....	5
2.1 Overview.....	5
2.2 System Design Features – Recommended for Inclusion.....	5
2.3 System Design Features – Under Consideration	7
2.4 System Design Features – Recommended for Omission	7
3. Payment Exemptions/Concessions	9
3.1 Payment Exemptions – Recommended for Inclusion	9
3.2 Payment Concessions – Recommended for Inclusion	10
3.3 Payment Exemptions/Concessions – To be Omitted.....	12
4. Summary & Conclusions	16

Appendix A. List of Exemptions and Concessions

Acronyms and Abbreviations

ANPR	Automatic Number Plate Recognition
AQMA	Air Quality Management Area
B&NES	Bath and North East Somerset Council
CAP	Clean Air Plan
CAZ	Clean Air Zone
CSF	Critical Success Factor
Defra	Department for Environment, Food & Rural Affairs
DfT	Department for Transport
FBC	Full Business Case
HGV	Heavy Goods Vehicle
JAQU	Joint Air Quality Unit
LEZ	Low Emission Zone
NHS	National Health Service
OBC	Outline Business Case
PCN	Penalty Charge Notice
RPZ	Resident's Parking Zone
STGO	Special Types General Order
SOC	Strategic Outline Case
TfL	Transport for London
UTMC	Urban Traffic Management and Control
VRM	Vehicle Registration Mark

1. Introduction

Poor air quality is the largest known environmental risk to public health in the UK¹. Investing in cleaner air and doing more to tackle air pollution are priorities for the EU and UK governments, as well as for Bath and North East Somerset Council (B&NES). B&NES has monitored and endeavoured to address air quality in Bath, and wider B&NES, since 2002. Despite this, Bath has ongoing exceedances of the legal limits for Nitrogen Dioxide (NO₂) and these are predicted to continue until 2025 without intervention.

In 2017 the government published a UK Air Quality Plan for Nitrogen Dioxide² setting out how compliance with the EU Limit Value for annual mean NO₂ will be reached across the UK in the shortest possible time. Due to forecast air quality exceedances, B&NES, along with 27 other Local Authorities, was directed by Minister Therese Coffey (Defra) and Minister Jesse Norman (DfT) in 2017 to produce a Clean Air Plan (CAP). The Plan must set out how B&NES will achieve sufficient air quality improvements in the shortest possible time. In line with Government guidance B&NES is working towards implementation of a Clean Air Zone (CAZ), including both charging and non-charging measures, in order to achieve sufficient improvement in air quality and public health.

Jacobs has been commissioned by B&NES to produce an Outline Business Case (OBC) and Full Business Case (FBC) for the delivery of the CAP; a package of measures which will bring about compliance with the Limit Value for annual mean NO₂ in the shortest time possible in Bath. The OBC assessed the shortlist of options set out in the Strategic Outline Case³ and proposed a preferred option including details of delivery. The FBC develops the preferred option set out in the OBC, detailing the commercial, financial and management requirements to implement and operate the scheme. The OBC and FBC form a bid to central government for funding to implement the CAP.

The preferred option described in this document is a Class C charging Clean Air Zone (CAZ) with traffic management at Queen Square and the limited provision of additional Variable Message Signs (VMS). This scheme is described in more in detail in FBC 08 'Options Assessment Report' in Appendix C of this FBC.

This document is written to support the FBC and identifies proposed system features and charging strategies for all vehicle types, including national exemptions and local exemptions and concessions, which would apply within a Class C CAZ in Bath. The national exemptions are laid down in the Government's Clean Air Zone Framework document⁴.

Proposed charging measures have been determined based upon detailed modelling undertaken and discussions with council technical officers. The charging regime and system design are interlinked because the system must facilitate the requirements of any charging or exemptions/concessions which apply.

This report has been divided into 2 sections; system design and vehicle exemptions/concessions. Within these sections each issue under consideration has been provisionally identified, through discussions with B&NES officers, for either;

- a) Definite inclusion in the final scheme,
- b) Definite omission from the final scheme.

The rationale for decisions including supporting evidence where available, has been provided to show how these recommendations were determined. It is important to note that in order to comply with the legal direction from the Government, B&NES can only offer local exemptions/concessions in the form of discounts and/or sunset periods, where they do not alter the year in which compliance can be achieved.

¹ Public Health England (2014) Estimating local mortality burdens associated with particular air pollution.
<https://www.gov.uk/government/publications/estimating-local-mortality-burdens-associated-with-particulate-air-pollution>

² <https://www.gov.uk/government/publications/air-quality-plan-for-nitrogen-dioxide-no2-in-uk-2017>

³ Bath and North East Somerset Council Clean Air Plan: Strategic Outline Case, March 2018

⁴ (http://www.bathnes.gov.uk/sites/default/files/siteimages/Environment/Pollution/strategic_outline_case_bath_28.03.2018_with_annexes.pdf)

⁴ https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/612592/clean-air-zone-framework.pdf

2. System Design Features

2.1 Overview

A back-office system will be required for a CAZ; this system will be required to process vehicle registration marks (VRMs) passed to it from on street Automatic Number Plate Registration (ANPR) cameras. Should vehicles enter the zone, drivers will be required to pay if their vehicle has high emission levels, which exceed the relevant Euro standard permitted by the zone. Drivers either pay the appropriate tariff through a payment collection system or alternatively do not pay within the required timeframe; which will instigate the issuing of a Penalty Charge Notice (PCN), with appropriate fines to be paid. A back-office system will therefore be required to undertake and facilitate several processes, potentially involving large amounts of data.

2.2 System Design Features – Recommended for Inclusion

The design features set out in this section are proposed to be included in the design of the scheme.

2.2.1 Use of B&NES existing local payment system

B&NES currently operates a system for car parking and bus lane enforcement, which issues PCN's. This system could similarly apply to a clean air zone scheme in Bath. It is the preference of officers to utilise, via expansion or other means, the existing system, due to synergies of operation and knowledge of the system by internal staff.

Benefits would include:

- Officers enabled to cross-check all types of PCN issued by B&NES including any non-payments.
- Officers can undertake historical data analysis/trend analysis more readily.
- Integration with local enforcement staff devices regarding lack of PCN payment.
- Future integration would be possible with any Joint Air Quality Unit (JAQU) system.

Discussions are ongoing regarding the design and functionality of the central government system and B&NES has concerns regarding timescales for delivery of this system combined with the requirement they face to deliver a CAZ in the shortest timeframe possible.

2.2.2 24/7 operation with daily (24hr) charge operating midnight-to-midnight

B&NES and Jacobs have explored options regarding times of operation. It was ultimately preferred to operate the CAZ during the same period as the London Low Emission Zone (LEZ). This would charge high emission vehicles driving in the zone between midnight and midnight each day. Advantages of this particular approach include:

- Maximises behaviour change in response to the scheme by capturing all trips, therefore, affecting every journey carried out in a high emissions vehicle (peak hour operation, for example, would capture mostly commuting/school trips and exclude other trips).
- Simplified operation of the CAZ system including required processing, as there would be no time constraints to consider.
- Clearer to the public on signage and advertising when they are liable to be charged.
- Charge applies each day the vehicle is detected moving within or through the CAZ.
- Midnight-to-midnight period means there is no ambiguity and drivers will therefore be less likely to overstay.

- An informal 15-minute grace period at the start of each day (00:00-00:15) would be provided, should users slightly overstay, ensuring fairness to users. This would also reduce potential challenges to PCNs issued based upon time-stamped clock accuracy.

2.2.3 User Payments

The onus for making payments would be on the driver or vehicle owner. Drivers would not be notified in any way that they had entered the zone and been detected by an ANPR camera and must pay the appropriate tariff. They would be required to actively make contact with the central government systems (either directly or via B&NES Council website) to make the appropriate payment. In the first instance drivers would enter their registration details into the Vehicle Checker application and this would identify the Euro classification of the vehicle and the relevant tariff (if applicable) for the city entered i.e. Bath. Drivers would then proceed to the online payment portal or customer contact centre if making payment by telephone.

- Daily payment:
 - Easy to establish, making it clear that a driver would be charged for each day they enter the CAZ and any additional days would incur an additional charge.
 - Encourage users to pre-pay for entry, up to 6 days before the day of travel. They could also pay on the day of travel or alternatively up to midnight 6 days after the day of travel.
 - Users must log in every time they enter the CAZ to register a payment.
- Cash payment:
 - There would be no means of taking cash payments locally. This was proposed initially however central government insist that all payments must be through their provided infrastructure. CAZ payments therefore must be made either online via the central government payment portal service or by telephone via the CAZ customer contact centre.

2.2.4 ANPR cameras

ANPR cameras will be placed at all zone entry and exit locations. In addition, a limited number of:

- Internal cameras will be included at key locations within the zone e.g. Podium Car Park, Bath Spa Station and Sainsbury's.
- Mobile enforcement would also take place on a short-term basis if significant numbers of vehicles are believed to be driving within the zone and not crossing the boundary.

This methodology is the most cost-effective approach. Furthermore, use of occasional internal cameras would provide B&NES with useful information on how often vehicles are used within the CAZ without leaving as well as identifying popular transit routes through the CAZ. B&NES would also install a small number of monitoring only cameras outside of the CAZ at Baths 3No. Park and Ride sites as well as Bathampton village to understand changes in use at these locations, once the CAZ is introduced.

2.2.5 Charge for travel within the zone

Due to the limited size of the proposed Bath zone as well as potential issues involved with infrastructure installation, it is proposed to predominantly enforce the zone boundary only. However, the following would also apply:

- Targeted capture of key routes within the zone using mobile and strategically placed cameras to capture drivers who stay in the zone for several days making multiple trips.
- Drivers already within the zone upon its implementation could drive an uncompliant vehicle around, providing they did not leave the zone, without being charged for doing so. The use of mobile and a limited number of additional cameras would deter this. The number of trips expected to do this is minimal.

2.2.6 Zone boundary

The zone boundary has undergone a process of refinement based upon several considerations and prior engagement. It now:

- Includes individual property boundaries rather than highway boundary (previous) so properties are now either in or out of the CAZ. This especially takes account of vehicular accesses to/from properties and/or businesses.
- Ensures signage and cameras can be accommodated on each entry/exit point of the zone boundary. Warning signs are also provided at key locations on current HGV routes.
- Matches B&NES existing Residential Parking Zones (RPZ's) in more locations, see 2.2.7.
- Considers existing HGV routes within Bath and how they may change due to implementing a CAZ. The scheme would offer places to facilitate easy turning manoeuvres for HGVs at the zone boundary to avoid unwanted entry into the CAZ.
- Avoids any potential confusion and future challenge with B&NES existing enforcement restrictions e.g. 10am-6pm bus gate.
- Includes most long-term car parks in central Bath, and a large proportion of central on-street parking.
- Reduces the potential for significant residential street rat-running around the boundary edge.

2.2.7 Matching the existing B&NES Residential Parking Zones (RPZs)

Some discussions have been conducted in relation to how the CAZ boundary interacts with the existing B&NES RPZs. The advantages of matching the CAZ boundary to the existing RPZs are:

- Eliminates parking issues where an RPZ would be partially outside the CAZ boundary, possibly making some spaces in that RPZ more desirable.
- Reduces the potential for undesirable parking in residential areas on the edge of the CAZ.
- Easier to implement an exemption or discount for a person living inside the CAZ.

To fully align the CAZ and RPZ boundaries will require a comprehensive re-arrangement of a number of RPZs. Provision is therefore included with the scheme to undertake a wider strategic review of the whole RPZ system, which would require a separate consultation and could not be accommodated within the timescales of putting the zone in place in the shortest timescale possible. A review would also ascertain whether some locations may not derive the same benefits in being aligned and therefore could remain independent if preferred by residents groups.

2.3 System Design Features – Under Consideration

The items set out in this section are subject to further discussion, before deciding their status in relation to the system.

2.3.1 Data sharing into a separate B&NES journey time engine

This data will provide useful information on journeys made within the CAZ to inform network operations and future B&NES projects via microsimulation modelling. Suppliers have been engaged to provide a means of accessing and using/storing this useful data without compromising any data privacy issues. One such example is the use of encrypted VRM data to be supplied to B&NES existing UTM engine.

2.4 System Design Features – Recommended for Omission

The features discussed in this section are not proposed for inclusion within the CAZ system.

2.4.1 Geo-fencing for hybrid vehicles to offer a discount or enforce use of electric power within CAZ

Geo-fencing is not recommended for inclusion in the CAZ for the following reasons:

- Geo-fencing is not required to detect vehicles as there are ANPR cameras on entry and exit of the CAZ.
- No known commercially available system capable of receiving data from a hybrid vehicle and checking it against a database to see if it is eligible for a discount or exemption.
- Potential for fraudulent activity where the geo-referencing system could be fitted to another non-hybrid vehicle.
- Not all hybrid vehicles allow the driver to actively control whether the electric or petrol/diesel engine is operating.
- With a Charging CAZ C scheme there are not many hybrid vehicles where this technology would be applied.

3. Payment Exemptions/Concessions

3.1 Payment Exemptions – Recommended for Inclusion

3.1.1 National exemptions within the Department for Environment, Food & Rural Affairs (Defra) CAZ Framework

The following vehicles are exempted within Defra's CAZ framework and therefore, exempt within the Bath CAZ scheme:

- Euro 4+ petrol vehicles;
- Euro 6+ diesel vehicles;
- Historic vehicles in the Exempt Vehicles tax class;
- Disabled passenger vehicles (in the Exempt Vehicles tax class);
- Military vehicles by virtue of Section 349 of the Armed Forces Act 2006; and
- Ultra-Low Emission Vehicles (fully electric and hydrogen fuel cell).

3.1.2 Local exemptions based on tax class

The following vehicles will be granted a local exemption providing they are registered under the relevant tax class on the day they enter the CAZ. For further information on tax classes see 'Information leaflet on tax classes for vehicles' (V355/1)⁵:

- Gas (LPG/CNG) or hybrid electric vehicles in the Alternative Fuel Car Vehicle tax class
- Vehicles in the Special Concessionary tax class not already exempt under the CAZ Framework including:
 - Vehicles used between different parts of land;
 - Tractors and certain agricultural vehicles;
 - Agricultural machines;
 - Mowing machines;
 - Steam powered vehicles;
 - Snowploughs; and
 - Gritters.
- Vehicles in the Motorcycle tax class not already exempt under the CAZ Framework.
- Other vehicles in the Exempt Vehicles tax class not already exempt under the CAZ Framework including:
 - 'limited use' vehicles;
 - vehicles used by a disabled person (disabled tax class); and
 - National Health Service vehicles.

3.1.3 Security services, diplomatic and military vehicles

As with the TfL congestion charge, security service, diplomatic and military vehicles will be exempted by whitelisting certain VRMs where not exempted elsewhere. Some VRMs may not be included for security

⁵ Driver and Vehicle Licensing Agency - Information leaflet on tax classes for vehicles (V355/1)

reasons or being outside the local authority area, however, vehicles can be identified upon reviewing ANPR footage and manually exempted.

In addition to the exemptions listed above under Defra's CAZ framework, within the CAZ C scheme all cars (except taxis/PHVs) are exempt.

3.2 Payment Concessions – Recommended for Inclusion

In order to comply with the legal direction from the Government, B&NES can only offer concessions in the form of discounts and/or sunset periods where they do not alter the year in which compliance can be achieved. Any concessions offered are likely to be for a limited period of time only.

3.2.1 Local concessions based on tax class

The following vehicles will be granted a local concession until 31/12/2024 providing they are registered under the relevant tax class on the day they enter the CAZ:

- Recovery Vehicles:
 - A recovery vehicle or breakdown truck with a revenue weight exceeding 3,500kg; and
 - Doesn't include breakdown vans (e.g. AA, RAC).
- Emergency Vehicles:
 - Police vehicles;
 - Ambulances and health service vehicles;
 - Fire engines etc;
 - Mine rescue vehicles; and
 - Lifeboat vehicles.

It is standard practice to 'whitelist' emergency service vehicles from ANPR-based enforcement. This policy would also align with other traffic enforcement within B&NES, from which emergency services are exempt.

This concession is subject to a Memorandum of Understanding with the Police, Ambulance and Fire Services that they will undertake to station compliant vehicles in/near the CAZ. This can be found in FBC-46 'Memorandum of Understanding for Emergency Services' in Appendix V of this FBC.

- Special Vehicles tax class which includes mobile crane, mobile pump, digging machine, works truck, road roller, showman's HGV and showman's haulage.
- Special Types tax class vehicles which have been issued with a Special Types General Order (STGO) or an individual order and are used to carry or haul exceptional loads.
- General Haulage Vehicle tax class, where the vehicles are constructed and used solely for haulage.

It is only possible to identify and sort DVLA data using certain Tax Classes. For the balance B&NES are proposing to establish a 'whitelist' application and approval process whereby;

- Owners/drivers will need to pre-register their vehicle before travelling in the zone; and
- The owner/driver will need to register each day they enter the zone for fees to be waived along with the reason for entering the zone.

3.2.2 Vehicles supporting the emergency services

In order for the emergency services to be able to provide sufficient response in an emergency, emergency service support vehicles will be granted a local concession until 31/12/2024. An emergency service support vehicle will be classed as one that is acting on behalf of a voluntary organisation to support an emergency service provider (Avon Fire and Rescue Service, Avon and Somerset Police and South Western Ambulance Service) during an emergency incident.

To enforce the concession:

- Owners/drivers will need to pre-register their vehicle before travelling in the zone; and
- The owner/driver will need to register each day they enter the zone for fees to be waived along with the reason for entering the zone.

3.2.3 Wheelchair accessible vehicles (WAVs) used as taxis

There are currently only 18 WAV taxis operating in B&NES, all but one of which are Euro 4 or higher. It is imperative to maintain access opportunities for disabled people who do not own, or cannot drive, their own vehicle. Therefore, Euro 4/5 taxi and private hire vehicles would be offered an additional concession to 31/12/2022, if they are wheelchair accessible.

To enforce the concession the VRMs for these vehicles will be taken from the national taxi database.

3.2.4 Community transport providers

There is already a national exemption for disabled passenger vehicles however community transport providers use a wide range of other vehicles to provide their services. An additional concession to 31/12/2022 is therefore proposed for registered community transport providers using Euro 4/5 diesel vehicles for work purposes not subject to an exemption or concession elsewhere.

To enforce the concession:

- Owners/drivers will need to pre-register their vehicle before travelling in the zone; and
- The owner/driver will need to register each day they enter the zone for fees to be waived along with the reason for entering the zone.

3.2.5 Euro 4/5 diesel non-compliant vehicles granted a concession under the financial assistance scheme

For businesses and individuals that own non-compliant diesel vehicles (coaches, HGVs, LGV/vans and taxis/PHVs), a financial assistance scheme is proposed to allow them to upgrade or retrofit their vehicle to a compliant vehicle.

In the event that an applicant is unable to obtain finance, is waiting for the compliant vehicle to be made available for use or is waiting for the retrofit of the vehicle to be completed then, provided that the existing vehicle is a Euro 4 or 5 diesel vehicle, it will be provided with a limited concession to 31/12/2022 or the expected replacement date, whichever is sooner.

To enforce the concession:

- Owners/drivers will need to pre-register their vehicle before travelling in the zone; and
- The owner/driver will need to register each day they enter the zone for fees to be waived along with the reason for entering the zone.

3.2.6 Blue Badge holders who own and use LGVs as their regular transport to access the CAZ

Euro 4/5 diesel LGVs used by Blue Badge holders will be offered a concession to 1/1/2023, accounting for the following points:

- Approximately 7,800 blue badges are issued in B&NES and more badge holders are expected to visit from the surrounding authorities. It is expected that most blue badge holders in the surrounding area would drive into Bath, rather than using other modes of transport
- It is possible that blue badge holders have a higher than average proportion from lower socio-economic groups, which would lessen their ability to upgrade vehicles in the short term
- Blue badge holders may find it difficult to switch to another mode of transport instead of the car

To enforce the concession:

- Owners/drivers will need to pre-register their vehicle before travelling in the zone; and
- The owner/driver will need to register each day they enter the zone for fees to be waived along with the reason for entering the zone.

3.2.7 Education, health and social care providers

A local exemption is already proposed for National Health Service vehicles and a local concession to 1/1/2025 is already proposed for Emergency Vehicles. However, a further concession to 1/1/2023 is under consideration for registered education, health and social care providers providing community education, health and social care services within the proposed zone.

Education, health or social care providers include:

- Local GP practices
- Local NHS Trusts or NHS Foundation Trusts or Care Trusts
- Private sector education, health or social care providers commissioned and contracted locally by NHS England, the NHS Clinical Commissioning Group or the council e.g. Virgin Care
- Bath & NE Somerset Council or a neighbouring council with education, health and social care responsibilities
- Any other local agency with community-based education, health or social care responsibilities, such as a domiciliary care agency or voluntary sector organisation.

It does not include mainstream primary or secondary schools.

A concession will be provided for those providers using Euro 4/5 diesel vehicles, for work purposes, that are not subject to an exemption or concession elsewhere.

To enforce the concession:

- Owners/drivers will need to pre-register their vehicle before travelling in the zone; and
- The owner/driver will need to register each day they enter the zone for fees to be waived along with the reason for entering the zone.

3.3 Payment Exemptions/Concessions – To be Omitted

The payment exemptions/concessions set out in this section are not proposed to be included in a CAZ scheme.

3.3.1 Council vehicles

Council vehicles would not receive any exemption due to the implications of putting stringent regulations on the public, whilst exempting the Council from these regulations. However:

- Key parts of the council fleet are already 90% compliant and all new contracts stipulate compliant vehicles must be used so exemptions are not required or justified in any case.
- Council staff would not receive any exemption and therefore may require reimbursement from using their own vehicles on council business within the CAZ.

3.3.2 Contractors undertaking statutory duties

B&NES has several contractors that undertake statutory duties and as a result exempting all contractors would have the effect of exempting a substantial proportion of the LGV fleet on the roads in Bath. Therefore, offering an exemption would not improve air quality, so it is not proposed. Furthermore:

- This group incorporates a large number of national companies who have the ability to adjust vehicle fleets to enable compliance.
- Contractors could rearrange/schedule work more efficiently to take less trips into the CAZ.
- Contractors undertaking statutory duties are likely to also use the same vehicles for non-statutory business.

However, there remains a need to confirm the impact on existing B&NES contracts and whether there are any financial implications for the Council from charging these vehicles to enter the CAZ.

3.3.3 Low income households

A concession would not be offered to assist low income households with responding to the CAZ, as this would be against the rationale for introducing a CAZ. However, a financial assistance scheme is proposed to help businesses and individuals, whereby they will be able to apply for a grant and/or interest-free loan to upgrade their non-compliant commercial vehicle to a compliant vehicle. In the event that an applicant is unable to obtain finance then, provided that their existing vehicle is a Euro 4 or 5 diesel vehicle, they will be able to apply for a limited concession to 31/12/2022.

3.3.4 Local businesses impacted by the CAZ

This includes businesses who will fall inside the CAZ boundary and those who regularly enter the CAZ area to conduct their business. A financial assistance scheme is proposed to help businesses, whereby they will be able to apply for a grant and/or interest-free loan to upgrade their non-compliant commercial vehicles to compliant vehicles. In the event that an applicant is unable to obtain finance then, provided that the existing vehicle is a Euro 4 or 5 diesel vehicle, they will be provided with a limited concession to 31/12/2022.

3.3.5 Residents within the CAZ

The decision with regards to exempting or charging residents within the CAZ is likely to have a large impact on air quality, as every trip made will at some point be within the CAZ boundary. Furthermore, residents within the CAZ are both closest to the city centre and have the most travel choices. Therefore, the current decision is to offer them no exemptions. However, a financial assistance scheme is proposed to help businesses and individuals, whereby they will be able to apply for a grant and/or interest-free loan to upgrade their non-compliant commercial vehicle to a compliant vehicle. In the event that an applicant is unable to obtain finance then, provided that their existing vehicle is a Euro 4 or 5 diesel vehicle, they will be able to apply for a limited concession to 31/12/2022.

3.3.6 Residents within RPZs intersected by the CAZ boundary

As can be seen in Figure 1, Residents Parking Zones (RPZs) 5 and 15 are currently intersected by the CAZ boundary and hence it is possible that some areas of the RPZ will be favoured over others as residents try to

avoid the CAZ charge. Whilst there will be some natural improvement of this fleet before the CAZ is implemented, it is anticipated that enough vehicles would still remain uncompliant to cause some disruption to parking within these zones.

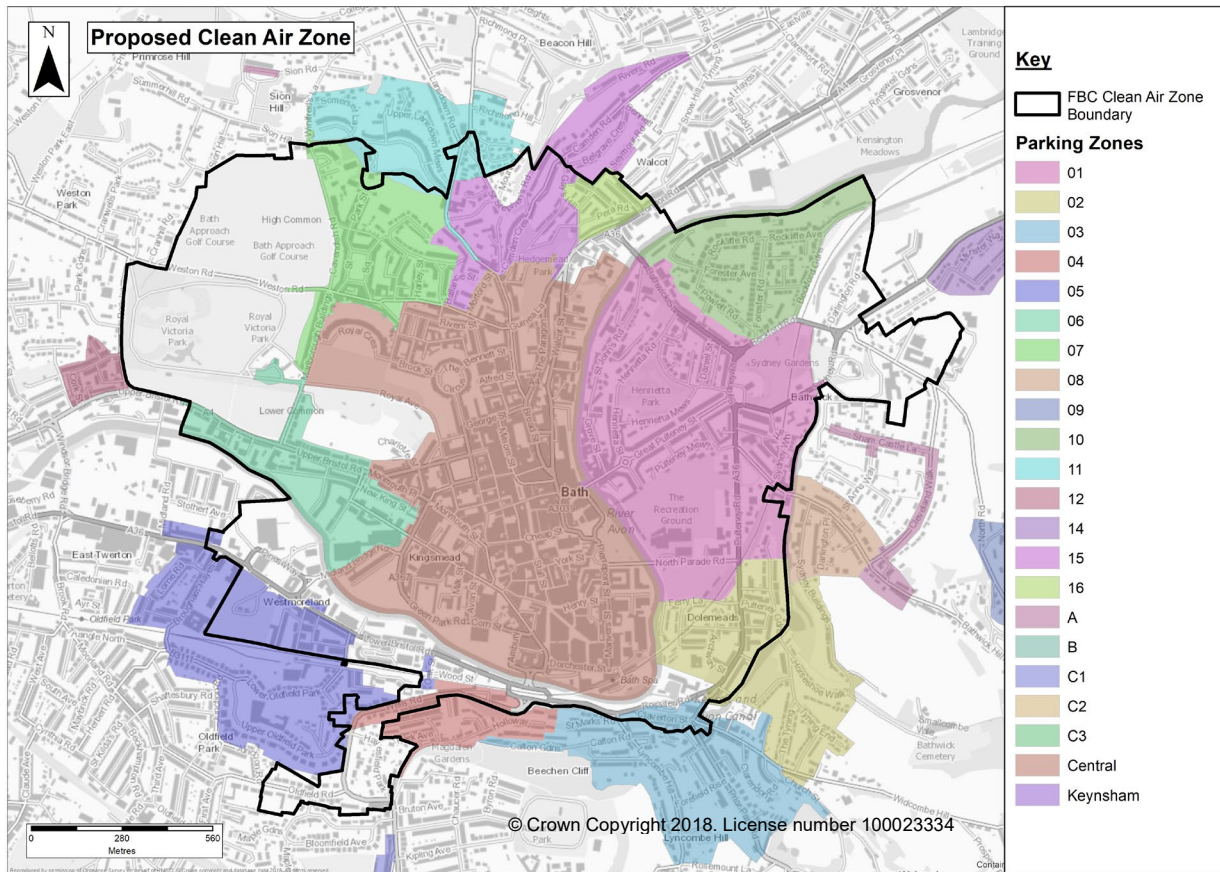


Figure 1. Bath CAZ boundary overlaid onto a map of the Resident Parking Zone (RPZ) boundaries

However, it is not considered practical to increase the CAZ zone boundary to encompass these zones entirely. A general review of the entire RPZ system is planned shortly after scheme commencement to confirm the best way forward with regards to aligning each RPZ. Consideration has been given to providing an exemption for affected residents, but the impact of this on compliance could be too great to meet B&NES legal obligations, particularly given the location of these RPZs close to ongoing air quality exceedances. Conversely, not offering any exemptions would encourage a change in behaviour that would be beneficial for air quality. Therefore, the CAZ boundary will remain in place intersecting both RPZ 5 and RPZ 15.

However, a financial assistance scheme is proposed to help businesses and individuals, whereby they will be able to apply for a grant and/or interest-free loan to upgrade their non-compliant commercial vehicle to a compliant vehicle. In the event that an applicant is unable to obtain finance then, provided that their existing vehicle is a Euro 4 or 5 diesel vehicle, they will be able to apply for a limited concession to 31/12/2022.

3.3.7 Buses, coaches and minibuses

Approximately 113 coaches and minibuses operate within B&NES undertaking trips associated with schools. This includes school runs and sports activities. Many of these vehicles are currently high polluting, and owners have limited opportunity and funds to retrofit so will likely struggle to upgrade vehicles. Following extensive discussions with local bus and coach operators the following is proposed:

- Scheduled buses are to be either upgraded to Euro 6 or replaced. There are no concessions proposed for scheduled bus services.
- No concessions are proposed for coaches and minibuses providing home to school transport or educational trips. Currently some 12 coaches provide home to school transport into the CAZ on a daily basis during term time, with an available fleet of 16 Euro 6 coaches. A financial assistance scheme is proposed to help businesses, whereby they will be able to apply for a grant and/or interest-free loan to upgrade their non-compliant commercial vehicles to compliant vehicles. In the event that an applicant is unable to obtain finance then, provided that the existing vehicle is a Euro 4 or 5 diesel vehicle, they will be provided with a limited concession to 31/12/2022.
- No concessions are to be provided for tourist trips.

3.3.8 Inter-zonal charge for Bath and Bristol

An inter-zonal charge between Bath and Bristol could provide a discount for the use of both proposed Clean Air Zones in one calendar day. This concession was omitted because:

- It would be very difficult to implement as both Clean Air Zones will be run by their respective councils
- A discount would not be proportionate to the impact on air quality of the vehicle within each CAZ
- This would reduce the impact of the two CAZs on behaviour change in the cities, and therefore, could impact negatively on the anticipated air quality benefits.

3.3.9 NHS staff

NHS staff were considered for exemption due to their occupation being critical to society. An allowance for night shift staff was also discussed, specifically due to the potential of travelling in the zone for one work shift spanning two 24-hour periods and therefore being subject to two days CAZ payments. However, a specific exemption or concession has been omitted due to:

- The large number of employees and staff turnover, requiring a potentially large database of relevant vehicle VRMs to be managed;
- Changing shift patterns, which would make it very difficult to exempt only night-shift workers for any given period;
- The low numbers of non-compliant trips between midnight and 6am when public transport is limited; and
- The range of other exemptions, concessions and supporting measures that are available.

4. Summary & Conclusions

B&NES and Jacobs have set out their initial recommendations with regards to system design features and payment exemptions/concessions. These decisions have been based upon technical input supplied by officers and consultants over several months, in relation to the scheme, as well as benchmarking other schemes such as London. A significant number of stakeholder engagement exercises, local group meetings and a period of public consultation have also taken place. Feedback has been collated to establish that the current recommendations are most suitable and take account of the Councils requirement to deliver a Clean Air Zone in the shortest timescales possible, whilst achieving an improvement in air quality within Bath.

Appendix A. List of Exemptions and Concessions

	Vehicle Class	Exemption or Concession?
Tax Classes	The Private/Light Goods Class (PLG) Graduated Vehicle Excise Duty Vehicles registered on or after 01/04/2017	No
	Heavy Goods Vehicle Class	No
	Private HGV	No
	Special Types	Concession to 1/1/2025
	General Haulage Vehicles	Concession to 1/1/2025
	Bus	No (business assistance scheme available)
	Motorcycle Electric Motorcycle	Exemption
	Special Vehicles Mobile Crane Mobile Pumping Vehicles Digging Machines Works Trucks Road Rollers Showman's HGV Showman's Haulage Vehicle	Concession to 1/1/2025
	Small Island Vehicles	No
	Recovery Vehicle	Concession to 1/1/2025
	Special Concessionary Agricultural Machine Mowing Machine Electrically Propelled Vehicle Gritter Snow Plough Steam Vehicles	Exemption
	Emergency Vehicles Ambulance Fire Engine and Fire Service Mine Rescue Lifeboat Haulage and Lighthouse Authority Vehicles Police Vehicles	Concession to 1/1/2025
	Limited Use	Exemption
	Disabled Tax Class	Exemption
	Disabled Passenger Vehicle	Exemption
	Historic Vehicles	Exemption
	National Health Service Vehicles	Exemption

	Vehicle Type	Exemption or Concession?
User / Vehicle Type	Euro 4+ petrol vehicles	Exemption
	Euro 6+ diesel vehicles	Exemption
	Fully electric or hydrogen fuel cell vehicles	Exemption
	Security Services	Exemption
	Diplomatic Vehicles	Exemption
	Military Vehicles	Exemption
	Emergency Service Vehicles	Exemption
	Construction Machinery (Special Vehicles tax class)	Exemption
	Emergency Service Support Vehicles	Concession to 1/1/2025
	Blue Badge Holders	Concession to 1/1/2023 for Euro 4/5 diesel
	Wheelchair Accessible Vehicles (WAVs) used as Taxis	Concession to 1/1/2023 for Euro 4/5 diesel
	Community Transport Providers	Concession to 1/1/2023 for Euro 4/5 diesel
	Vehicles Granted a Temporary Exemption under the Business Assistance Scheme	Concession to 1/1/2023 for Euro 4/5 diesel
	Council Vehicles	No
	Contractor Vehicles Undertaking Statutory Duties	No (business assistance scheme available)
	Low Income Households	No
	Local Businesses Impacted by the CAZ	No (business assistance scheme available)
	Residents within the CAZ	No
	Residents within RPZs Intersected by the CAZ Boundary	No
	Scheduled Buses, Home to School Transport and Tourist Trips	No (business assistance scheme available)
	Inter-zonal Charge for Bath and Bristol	No
NHS Staff	No	