

MEETING: Cabinet DATE: 06/03/2018

Title: Improving Public Health - A Clean Air Plan for Bristol	
Ward(s):	<i>Citywide</i>
Author: Alex Minshull	Job title: City Innovation and Sustainability Service Manager
Cabinet lead: Cllr Kye Dudd	Director lead: Zoe Willcox
Proposal origin: <i>Other</i>	
Decision maker: Mayor Decision forum: Cabinet	
Timescales: <i>6th March 2018</i>	
Cabinet Member / Officer Recommendations: <i>To:</i> <ol style="list-style-type: none"> <i>A. Approve the submission to Government of the Strategic Outline Case for the Bristol Clean Air Action Plan.</i> <i>B. Approve the project plan to complete the development of the Clean Air Action Plan, including engagement and consultation.</i> <i>C. Approve submission of funding bids and spending of any funding secured from Government on the development of the Clean Air Action Plan up to a limit of £2m.</i> <i>D. Approve submission of funding bids and spending of any funding secured from the Government's Early Measures Fund for Local NO2 Compliance.</i> 	
Evidence Base: <i>Bristol has a long standing air quality problem and significant areas of the city have nitrogen dioxide pollution levels higher the EU Limit Value and UK Objective. The City Council has been directed by Government to develop plans by 31st December 2018 to achieve compliance with the Limit Value and Objective in the shortest possible time.</i>	
Purpose of Report: <i>Air pollution causes harm to people's health – known effects include low birth weight in babies and poor lung development in small children to breathing and heart problems in older adults. Bristol is in breach of the European Limit Value and UK Objectives for nitrogen dioxide in large parts of the city and approximately 100,000 people live in the affected area and there are 35 schools. Some 72% of people in the city consider that air pollution and traffic pollution is a problem (36%) or a serious problem (36%) in their neighbourhoods (Quality of Life Survey 2017). The main source of nitrogen dioxide pollution is road traffic; with diesel cars the largest source responsible for 40% of the emissions. Alongside its transport plans, Bristol City Council is committed to create a Clean Air Plan.</i> <p><i>In July 2017 Government formally directed Bristol City Council ("Direction"), to:</i></p> <ul style="list-style-type: none"> <i>• By 31 March 2018 undertake a feasibility study and identify options which would deliver compliance with legal limits for nitrogen dioxide in the shortest possible time.</i> <i>• By 31 December 2018 to identify a preferred option, including value for money considerations and implementation arrangements.</i> <p><i>These proposals meet the City Council's responsibilities under this Direction and commitments made in the Corporate Strategy and the Mayor is asked to approve the proposals.</i></p> <p><i>The Government has created an Early Measures Fund for Local NO2 Compliance and Bristol City Council has submitted a bid – See Appendix A for details.</i></p> <p><i>Alongside the development of the Clean Air Plan there are many other initiatives to improve walking, cycling and public transport in the city which will contribute to reducing pollution from our transport system.</i></p>	
Revenue Cost: <i>£ 1.3m-£2m</i>	Source of Revenue Funding: <i>Grant from Government</i>

Capital Cost: n/a		Source of Capital Funding: n/a.	
One off cost <input checked="" type="checkbox"/> Ongoing cost <input type="checkbox"/>		Saving Proposal <input type="checkbox"/> Income generation proposal <input type="checkbox"/>	
<p>Finance Advice: <i>This proposal seeks approval to proceed with the application, acceptance and spending of further grant funding from Defra to carry out the new statutory direction set by the Government in relation to a clean air action plan, according to the detailed guidance and timetable issued by Defra.</i></p> <p><i>In 2016, the Council received c£550k funding from Defra to carry out a Clean Air Zone feasibility study however the subsequent new directive has broadened and superseded the original grant funded project scope to include the production of a clean air action plan and business case. A further £400k of funding has been approved by Government as a contribution to the project.</i></p> <p><i>The total revised cost is estimated around £1.3m which includes direct staffing costs, external consultancy costs and 10% contingency. The time scale for the bulk of this expenditure will incur in financial year 18/19.</i></p> <p><i>Please also note, this phase of the work will eventually lead to next stage implementation of the action plan, the costs and funding source are not yet clear.</i></p>			
Finance Business Partner: Chris Holm			
Corporate Strategy alignment: <i>The Corporate Strategy 2018-2021 commits the City Council to: “ Keep Bristol on course to be run entirely on clean energy by 2050 whilst improving our environment to ensure people enjoy cleaner air...”.</i>			
Legal Advice: <i>The proposals in this Report seek to achieve compliance with Minister’s Direction of 27 July 2017, and the other statutory legal duties of the Council. Failure by the Council to comply with its legal obligations could carry the risk of challenge from third parties including challenge by judicial review. The Council could mitigate these risks by using any funding that may be secured for the preparation of and public consultation on an appropriate and effective Clean Air Action Plan, by adhering to the latest guidance issued by Defra and by applying correctly the legal test in the ClientEarth (No.2) case and referred to in the ClientEarth (No.3) case (see Appendix H).</i>			
Legal Team Leader: Joanne Mansfield 23.02.2018			
City Benefits: <i>This proposal will improve public health by achieving legal nitrogen dioxide Objectives in the shortest possible time.</i>			
Consultation Details: <i>Public and stakeholder engagement and consultation are key parts of the project plan in 2018, see Appendix A.</i>			
DLT Sign-off	Alison Comley	06/12/17	
SLT Sign-off	Alison Comley	12/12/17	
Cabinet Member sign-off	Kye Dudd	15/02/18	
Mayor’s Office sign-off	Kevin Slocombe	20/12/17	
Appendix A – Further essential background / detail on the proposal			YES
Appendix B – Details of consultation carried out - internal and external			YES
Appendix C – Summary of any engagement with scrutiny			YES
Appendix D – Risk assessment			YES
Appendix E – Equalities screening / impact assessment of proposal -			YES
Appendix F – Eco-impact screening/ impact assessment of proposal -			YES
Appendix G – Exempt Information			NO
Appendix H – Legal Advice			YES
Appendix I – Combined Background papers			YES

Appendix A: Proposals to Develop a Clean Air Plan for Bristol

1 Introduction

- 1) Bristol City Council is developing a Clean Air Plan for Bristol to improve public health and meet its legal requirements. This Appendix sets out:
Section 2 - The background to air quality issues in Bristol
Section 3 - The proposed project approach to be approved
Section 4 - A summary of the Strategic Outline Case to be submitted to Government
Section 5 – A summary of Bristol’s bid to the Government’s Clean Air Fund.

2 Background

2.1 Public Health impacts of Air Pollution

- 2) Air pollution affects people’s health. There are a range of known health effects which could affect people from before birth to old age including:
 - low birth weight of babies
 - impaired lung development in small children, smaller lungs
 - a contributing factor in the onset of heart disease
 - acute respiratory exacerbations and
 - premature death.Air pollution particularly affects the most vulnerable in society: children and older people, and those with heart and lung conditions.

2.2 Legal Requirements

- 3) To protect people’s health the European Union and the UK Government has set legal standards for a range of air pollutants. Bristol’s compliance with these standards for nitrogen dioxide needs to improve.
- 4) Bristol City Council declared an Air Quality Management Area in 2001 for Nitrogen Dioxide (NO₂) and Particulates (PM₁₀). The boundary has been amended slightly but still covers the central area of the city and arterial routes. See Figure 1. Approximately 100,000 people live in this area and there are 35 schools.
- 5) In July 2017, Government formally directed Bristol City Council, to:
 - By 31 March 2018 undertake a feasibility study and identify options which will deliver compliance with legal limits for nitrogen dioxide in the shortest possible time; and
 - By 31 December 2018 to identify a preferred option, including value for money considerations and implementation arrangements.
- 6) The proposed approach takes into account this Direction and the detailed Government guidance issued subsequently. A key aspect of this is the need to identify the option (s) which would deliver compliance with legal limits for nitrogen dioxide in the area for which the Council is responsible, in the shortest possible time.

2.3 Air Pollution Monitoring and Trends

- 7) Bristol City Council has a comprehensive monitoring network for nitrogen dioxide, at over 100 sites around the city, including continuous analysers which publish data in real time to the internet. See Figure 1. In September 2017 the City Council published the Annual Status Report and submitted it to Government. The report is available at www.bristol.gov.uk/airquality

- 8) In response to citizens' concerns Bristol City Council is expanding this monitoring network to include all the schools within the Air Quality Management Area and other schools in the city which lie within 100m of a busy road. See Figure 2.

Figure 1 Air Quality Management Area and existing monitoring sites

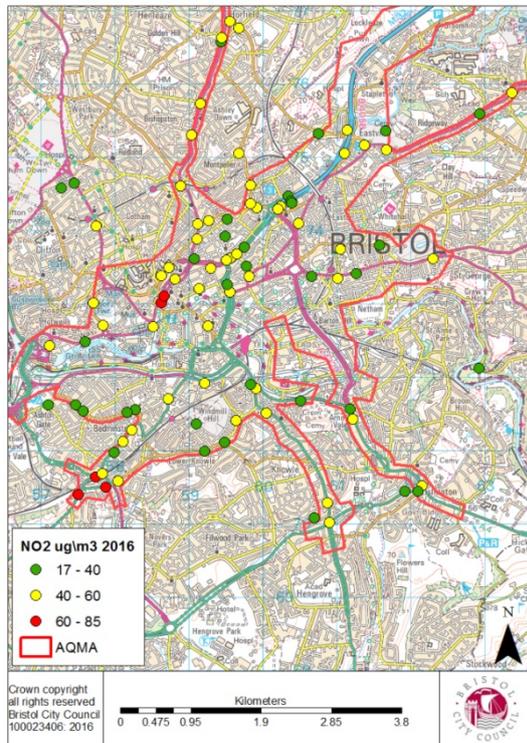
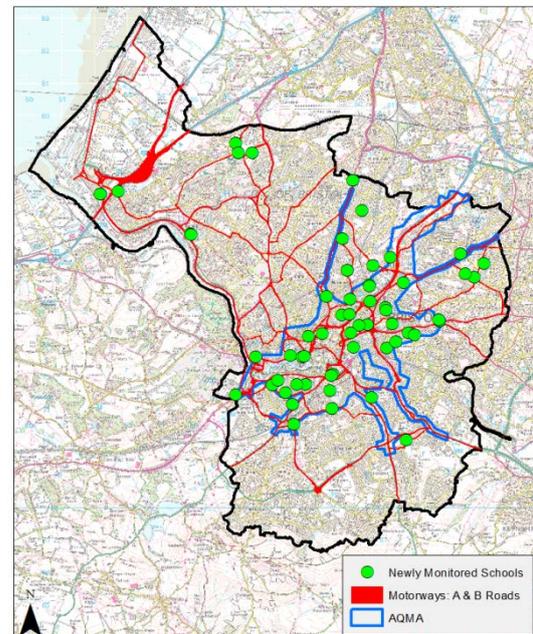


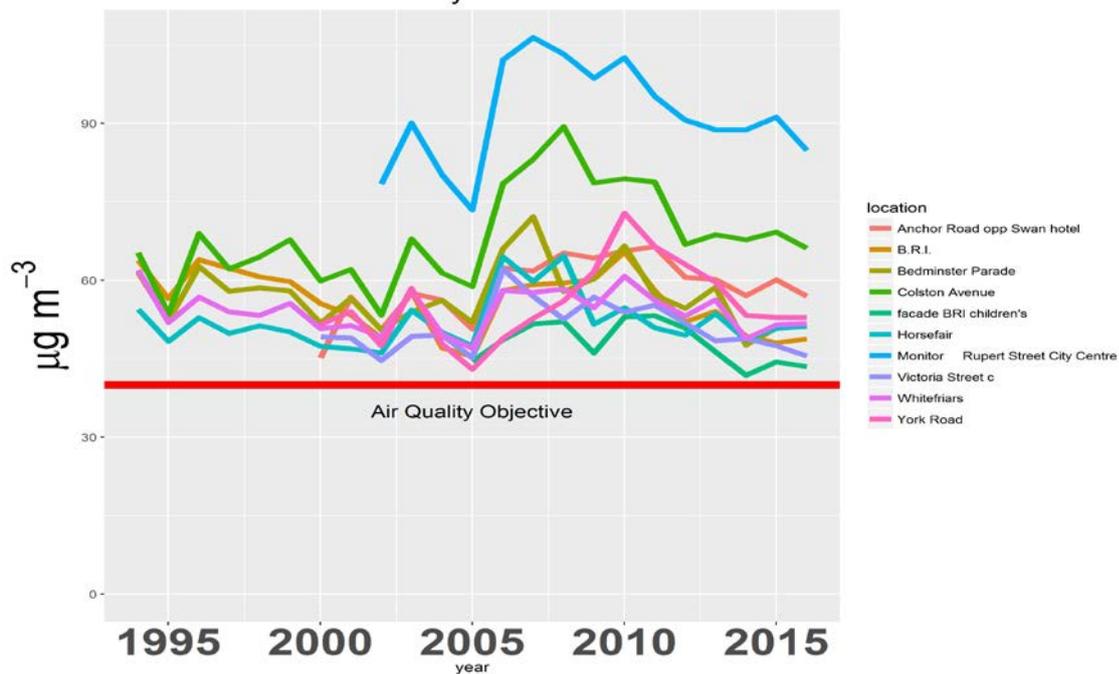
Figure 2 Newly Monitored Schools (from January 2018)



(Nb. Green colour does not indicate air quality as per Figure 2)

- 9) Trends in nitrogen dioxide have remained stable over the last 20 years, but show slight improvement over the last five years. At some locations annual mean concentrations exceed 60 ug m⁻³ and widespread breaches of the annual mean EU Limit Value and UK Objective for nitrogen dioxide exist.

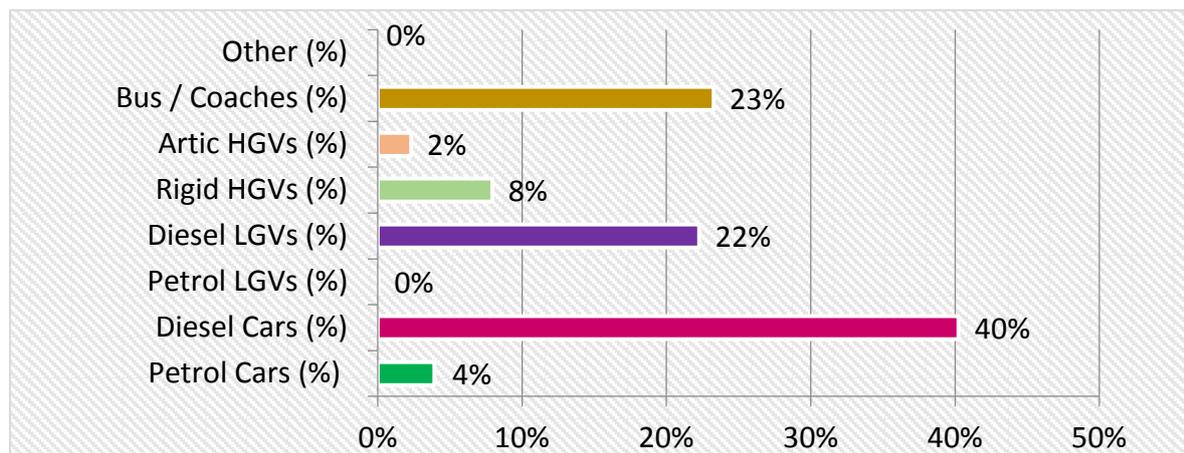
Figure 3 Trends in nitrogen dioxide pollution at city centre sites



2.4 Sources of Nitrogen Dioxide Pollution in Bristol

- 10) The main source of nitrogen dioxide, derived from nitrogen oxides pollution is road traffic. The estimated contribution which different types of vehicles make to this pollution is shown in Figure 4. Diesel vehicles contribute 96% of the nitrogen oxide pollution from the transport sector with the biggest source of pollution being diesel cars (40%) followed by Buses and Coaches (23%) and Diesel Vans (22%). Significant investment, with support from the Council and Government, is taking place within the commercial bus fleet to reduce the pollution it creates.

Figure 4 Nitrogen Dioxide emissions from traffic in central Bristol

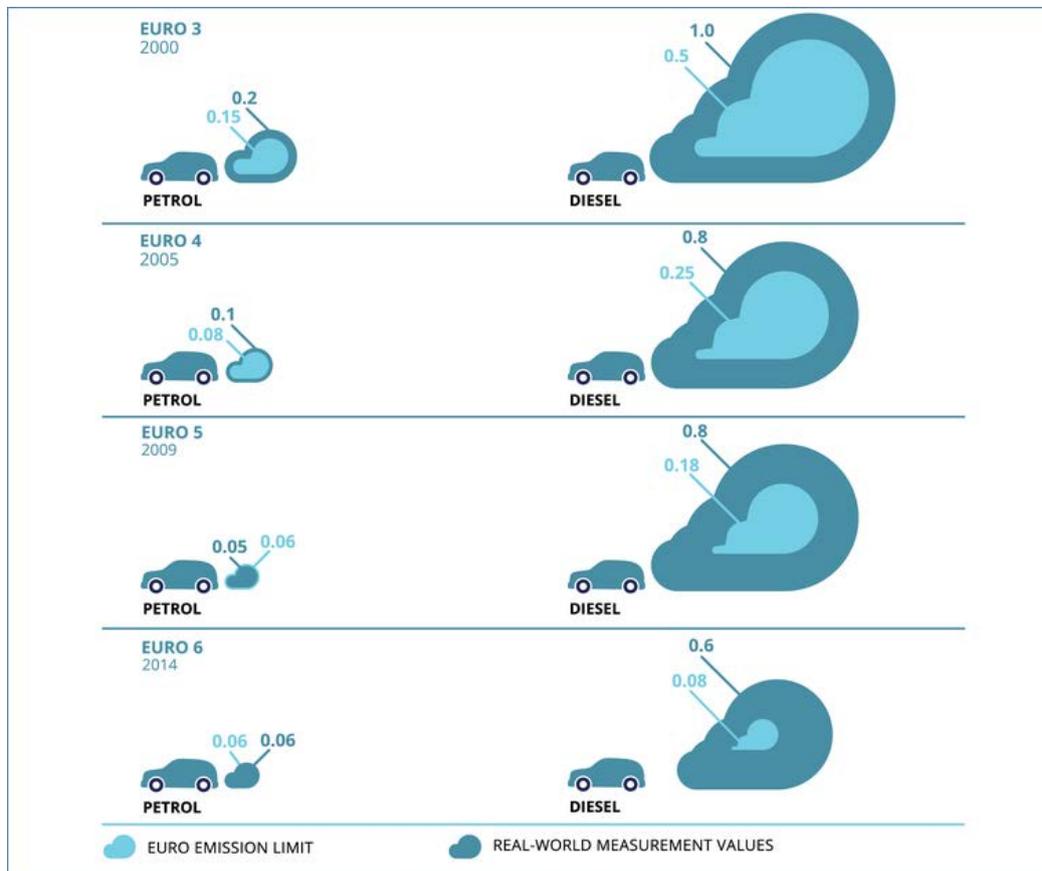


2.5 Pollution Contribution of Different types of vehicles

- 11) Vehicles sold in the UK need to comply with European regulations for air pollution. These are referred to as the EURO standards and have reduced the allowable pollution emitted from vehicle exhausts at each revision. The current standards for the newest cars are Euro 6.

- 12) Many vehicles emit more pollution when driven in the real world than they do in the laboratory tests. Figure 4 shows the UK government's data on emissions from different car types. It shows that diesels emit much more pollution than petrol cars and that the gap between the test standard and average real world performance is much greater for diesels.

Figure 5 Nitrogen Dioxide emissions from different car types



2.6 Clean Air Zones

- 13) The Government has set out a new policy in 2016 for Clean Air Zones. The Government's vision is:

“Clean Air Zones improve the urban environment to support public health and the local economy, making cities more attractive places to live, work, do business and spend leisure time. They support cities to grow and transition to a low emission economy thus ensuring these benefits are sustainable for the long term.”

- 14) The Government's framework for clean air zones states:

“A Clean Air Zone defines an area where targeted action is taken to improve air quality and resources are prioritised and coordinated in order to shape the urban environment in a way that delivers improved health benefits and supports economic growth.

Clean Air Zones aim to address all sources of pollution, including nitrogen dioxide and particulate matter, and reduce public exposure to them using a range of measures tailored to the particular location.

Within a Clean Air Zone there is also a particular focus on measures to accelerate the transition to a low emission economy. This will ensure improvements are ongoing and sustainable, support future development and decouple local growth from air pollution.

Clean Air Zones bring together local measures to deliver immediate action to improve air quality and health with support for cities to grow while delivering sustained reductions in pollution and a transition to a low emission economy. Where there are the most persistent pollution problems, this is supported by restrictions to encourage only the cleanest vehicles to operate in the city.”

- 15) Clean Air Zones fall into two categories:
1. **Non-charging Clean Air Zones** – These are defined geographic areas used as a focus for action to improve air quality, but does not include the use of charge based access restrictions.
 2. **Charging Clean Air Zones** – These are zones where, in addition to the above, vehicle owners are required to pay a charge to enter, or move within, a zone if they are driving a vehicle that does not meet the particular standard for their vehicle type in that zone.
- 16) The Government has set out 4 different classes of Charging Clean Air Zones:
- Class A – buses, coaches, taxis, private hire vehicles
 - Class B – buses, coaches, taxis, private hire vehicles and HGVs
 - Class C – buses, coaches, taxis, private hire vehicles, HGVs and LGVs
 - Class D– buses, coaches, taxis, private hire vehicles, HGVs, LGVs and cars.
- 17) In a Charging Clean Air Zone some vehicles would be exempt from a charge. Exempted vehicles are defined by their EURO class – a designation which relates to their emissions of key pollutants – see section 2.5 above. EURO 6\VI diesel vehicles and EURO 4\IV petrol vehicles would be exempt from charges. EURO 6\VI vehicles are generally registered after 2014, while EURO 4\IV vehicles are those usually registered after 2006. Zero or “Ultra Low” emissions vehicles such as electric vehicles would also be exempt from charges.

3 Proposed Approach to Develop the Bristol Clean Air Plan

- 18) Bristol City Council was awarded funding from Government in 2017 to conduct a feasibility study for a Clean Air Zone. An assessment of options was undertaken and a short list of options for further study were taken to a Cabinet meeting in August 2017, but the decision to proceed was deferred due to comments received from Clientearth. This project has now been re-scoped to comply with the new duty laid out through a Government Direction imposed on Bristol City Council in July 2017, and new guidance from Government.
- 19) The project requires a significant amount of technical expertise and consultants, CH2M (now Jacobs), have been engaged by Bristol City Council following BCC Commissioning and Procurement Group approval.

3.1 Project Costs

- 20) Additional funding has been sought from Government to fulfil this new duty. Table 1 summarises the funding requirements for the development of Bristol’s Clean Air Plan and estimated costs for key activities in the project.

Table 1 Project budget

Activity	Cost £k
Data collection	85
Assessment of options, including reporting	446
Business Case	62
Detailed design of scheme	125
Communications, Consultation and Engagement	240
Project management and support costs	246
Contingency	120
Total	1,327

3.2 Project Delivery

- 21) The Mayoral Air Pollution Working Group provides the strategic direction for air quality policy and development of the Clean Air Plan. It is chaired by Cllr Kye Dudd, Cabinet Member for Energy, Waste and Regulatory Services and Cabinet Member for Transport, Cllr Mhairi Threlfall.
- 22) Bristol City Council Project Governance is provided by the Air Quality Board which includes Directors responsible for Public Health, Planning and Transport. The Air Quality Board is responsible for project sign off, including change control and strategic oversight.
- 23) An officer steering group oversees the operational and technical aspects of the project. This group comprises technical officers from transport planning, air quality and public health as well as consultants CH2M, University of the West of England and Air Quality Consultants - who have been retained for the work on assessing public health impact.
- 24) Close liaison is maintained with the West of England Combined Authority, South Gloucestershire Council and Bath and North East Somerset.

3.3 Project Timetable

- 25) The project is proceeding rapidly to meet the requirements of the Government Direction of July 2017. The indicative timetable is shown in Table 2.

Table 2 Indicative Timings

	2017	2018			
	Oct-Dec	Jan-Mar	Apr-Jun	Jul-Sept	Oct-Dec
Planning and funding					
Strategic Outline Case					
Outline Business Case					
Public and stakeholder engagement					
Public Consultation					
Full Business Case					

3.4 Public and Stakeholder Engagement

- 26) The majority of Bristol's residents are concerned about air quality and traffic pollution in their neighbourhood. In the 2017 Quality of Life Survey some 72% said it was a problem or a serious problem.
- 27) The Clean Air Plan will include policies and projects to reduce pollution which will require change in peoples' and businesses' travel choices. We need to ensure that, prior to formal consultation on specific proposals, there is good understanding of the air quality problem in Bristol and potential solutions. We also aim to ensure that residents and businesses can engage with the process of identifying policies to support the key interventions and mitigate some of the adverse effects.
- 28) The work will be in two parts:
 - Engagement – February to September 2018: conversations with key audiences and stakeholders
 - Formal Consultation on the preferred proposal towards the end of 2018.
- 29) A range of stakeholders will be engaged, including:
 - Politicians/ local government
 - Transport – operators/ projects
 - Transport users groups
 - Key businesses/ business groups
 - Key service providers
 - Key population groups and equalities groups.
- 30) The engagement activities will work alongside an existing Project – ClairCity which led by the University of the West of England and aims to reach a range of residents to raise awareness of the impacts of air pollution and solutions. This is a European Commission funded research project and will be running throughout 2018. The output from the project will be used to inform the Clean Air Plan and transport plans.

4 Summary of the Strategic Outline Case

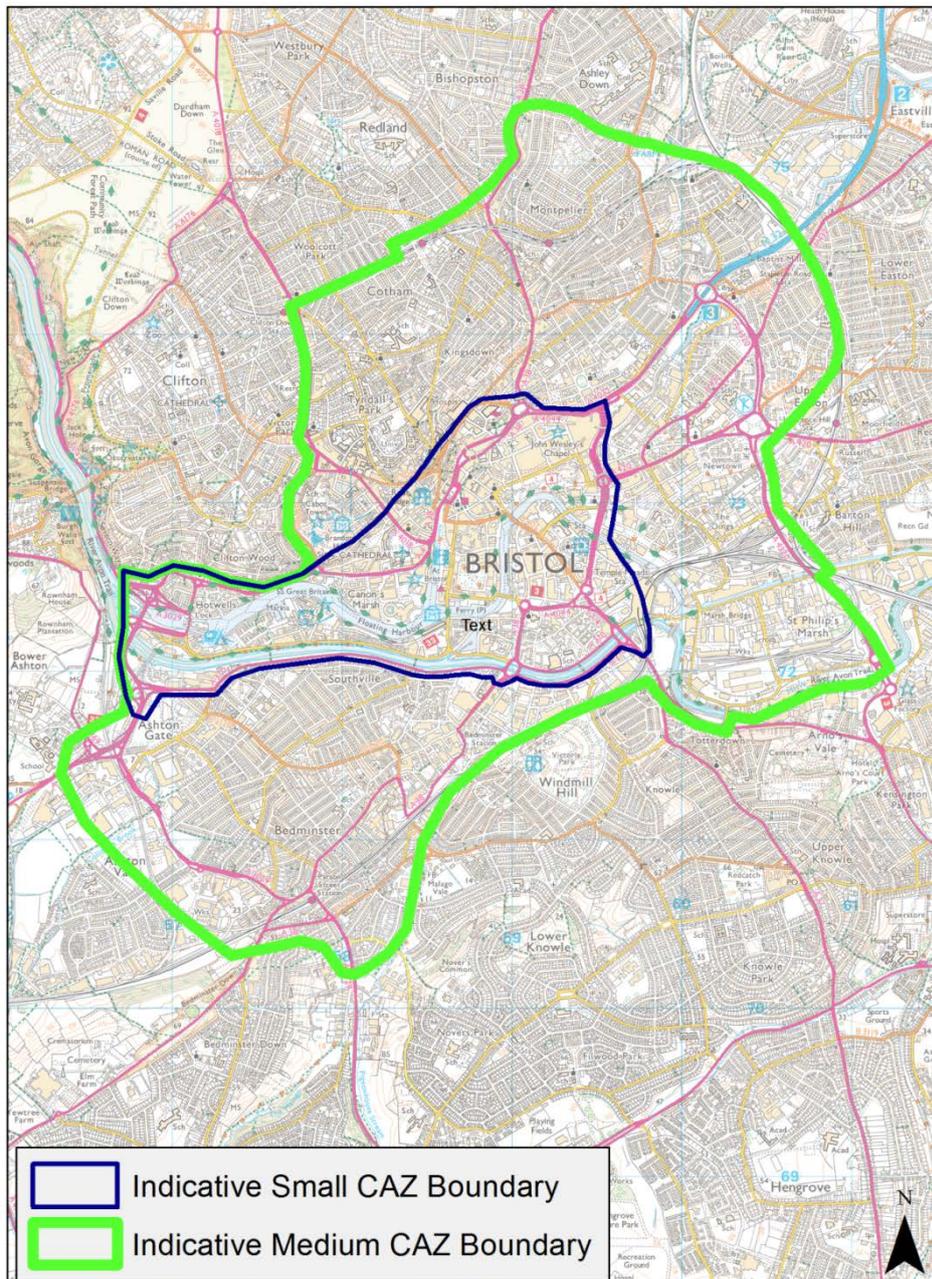
- 31) The Government has directed Bristol City Council to submit the “Strategic Outline Case” (SOC) for a package of measures which will bring about compliance with legal limits for nitrogen dioxide in Bristol, in the shortest possible time. It has been produced in line with their corresponding Inception, Evidence and Options Appraisal packages of Guidance issued by the Joint Air Quality Unit (JAQU) in 2017, and the HM Treasury Green Book five-case framework.
- 32) To develop the Strategic Outline Case we have:
 - Developed a list of over 70 possible options to improve air quality in Bristol which include investment in public transport and cycling, changes in traffic management, greater use of existing regulatory powers and measures to support and encourage a shift to cleaner vehicles, including the creation of various charging Clean Air Zones;
 - Assessed these options against a list of critical success factors to identify those most likely to contribute to the aim of achieving compliance with the European Limit Value and UK Objective for annual mean nitrogen dioxide in the shortest time possible in Bristol;
 - Considered the feedback received from stakeholders and in Public Forum Statements made at Cabinet in August 2017;
 - Developed a set of Options which comprise packages of measures to be taken forward for more detailed assessment from which a final option can be recommended for the Outline Business Case, as set out below..

- 33) These Options are:
1. A Non-Charging Clean Air Zone with complementary non-charging interventions
 2. A Charging Clean Air Zone (Medium size, Class C – all vehicles except cars) with complementary interventions
 3. A Charging Clean Air Zone (Medium size, Class D – all vehicles) with complementary interventions
 4. A Charging Clean Air Zone (Small size, Class C – all vehicles except cars) with complementary interventions
 5. A Charging Clean Air Zone (Small size, Class D – all vehicles) with complementary interventions.
- 34) The complementary interventions in Options 2-5 are the same and are a sub-set of the interventions in Option 1. Further details on charging classes is set out in Section 2.6 and in the draft Strategic Outline Case – www.bristol.gov.uk/airquality
- 35) A standalone medium Class D CAZ will be tested as a “benchmark” option following guidance from JAQU.
- 36) The initial analysis of the options has assessed them against the requirement to deliver compliance with nitrogen dioxide Limit Values and Objectives in the “shortest possible time”. The 5 options recommended for further assessment above are estimated to achieve compliance in 2023. The next stage of analysis will consider this in much more detail.
- 37) In considering the long list of options we have carefully considered the option of a Large Zone which covers the whole of the Bristol urban area to the M4 and M5 including areas of Bristol City Council and South Gloucestershire Council. Several stakeholders identified this as their preferred option. However it has not been chosen as an option to progress to the next phase of study because of the time taken to implement the zone which would mean that it would not achieve compliance with the nitrogen dioxide Limit Values and Objectives in the “shortest possible time”.
- 38) The Strategic Outline Case will be submitted to Government for their consideration and further progressed to create the Outline and Full Business Cases.

- 39) Indicative boundaries for the Small (blue line) and Medium (green line) Charging Zone are shown in Figure 6. These are intended as a guide only and detailed design will be undertaken prior to formal public consultation. The boundaries have been drawn to indicate which main roads are included in each option. In some cases this means that some residential areas are shown as within the charging zone when in reality they would not need to be included for the zone to be effective. One of the design principles was to minimise the costs of implementation by using natural boundaries and hence the number of cameras needed for enforcement.

Figure 6 Indicative boundaries for further study

Indicative CAZ Boundaries - Subject to Consultation



5 Bristol's Bid to the Government's Early Measures Fund for Local NO2 Compliance.

- 40) The Government has established an Early Measures Fund for Local NO2 Compliance and has invited bids from local authorities for measures which could be implemented within the 18/19 financial year and which have an immediate impact on improving air quality.
- 41) Bristol City Council has submitted a bid with two components:
 - To improve cycling in South Bristol by providing a new dedicated cycle and pedestrian cycle route in Wedmore Vale.
 - To support the uptake of Ultra Low Emission Hackney Carriages, for example electric hybrid vehicles.
- 42) The implementation of these proposals will depend on success of this funding bid and Bristol City Council does not have funds of its own to implement them. A decision on these bids is expected in March.

Appendix B – Details of consultation carried out so far

The development of the Clean Air Plan has been considered by:

1. Mayoral Air Pollution Working Group – meeting monthly throughout 2017.
2. Congestion Working Group – presentation to meeting in September 2017 and subsequent liaison through BCC Officers
3. BCC Scrutiny – A Scrutiny Task and Finish group has been established. It met in September 2017.
4. Some initial stakeholder engagement has taken place including with some transport operators, South Gloucestershire Council, Bath and North East Somerset Council and West of England Combined Authority.

Appendix C – Details of engagement with Scrutiny and Members

The development of the Clean Air Plan was initially considered by **Place Scrutiny Commission** (February 2017): The Commission received a report on the latest Government Air Quality Plans, the submission by BCC of the grant application for funding for the Clean Air Zone Feasibility study and a communication and engagement project. <https://democracy.bristol.gov.uk/ieListDocuments.aspx?CId=133&MId=205&Ver=4> The Commission noted the progress, noted that all four main political parties in Bristol supported the idea of a Clean Air Zone in principle and further engagement.

To provide additional scrutiny input air quality was selected by the Overview and Scrutiny Management Board as a topic for a **Scrutiny Task and Finish Group**. It met in September 2017 and received an update on:

- The air quality challenge in Bristol
- The feasibility study work undertaken
- The Direction from Government
- The changing scope and the initial plan to comply with the Direction and to create a Clean Air Action Plan for Bristol.

On the 5th December 2017 the Air Quality Task and Finish Group met to be updated on the current progress of the study.

On the 8th January 2018 an enlarged Air Quality Task and Finish Group considered the proposals and the options recommend for further investigation in this Cabinet Report. Present at that meeting were: Councillors Tony Carey (Chair), Mike Langley, John Wellington, Charlie Bolton, Fabian Breckels, Jo Sergeant, Jerome Thomas, Gill Kirk, Mark Wright, Kye Dudd (Cabinet Member for Energy, Waste and Regulatory Services) and apologies were received from Councillor Tom Brook.

The Task and Finish group received a presentation on the technical work undertaken and the content of the Cabinet Report 'Improving Public Health - A Clean Air Plan for Bristol'. Following consideration of the proposals the views of the Scrutiny Task and Finish Group were:

- Overall the group supported the approach being taken by the city council to improve air quality and improve public health, taking into account the legal duties imposed on the city council and the council's powers and resources available.
- The group supported the Council's action to secure and spend additional funding from Government on the development of the Clean Air Plan and Business Case. (Decision 1).

- The group supported the council's approach to the project and in particular the emphasis on early engagement with the public and stakeholders prior to the formal consultation planned for Autumn 2018. A member stated that it is important for BCC to be clear what the public health benefits are going to be from this. (Decision 2).
- The group discussed the preferred options identified in the Strategic Outline Case to be submitted to Government (Decision 3). They discussed the air quality effects and the wider advantages and disadvantages of both charging and non-charging options. The Group asked that these be fully explored in the next phase of the project. Members considered the indicative map of the potential charging zones and suggested amending it to include St Philips Marsh Trading Estate. This has been amended and the updated version is shown in Figure 6.
- Members suggested the following additional measures be considered in the development of the wider Clean Air Plan:
 - Safe Routes to School
 - Introducing a levy on work place parking
 - Home working – promotion of
 - Installing more electric charging points, particularly in public car parks
 - Freight consolidation centre
- Members considered that the approach needs to be a mixture of incentives and regulatory measures.
- Some Members questioned whether the Government are doing enough to support local authorities achieve the necessary results. It was noted that the car scrappage schemes appears to have currently stalled.

In addition all Councilors were invited to briefings prior to the Cabinet consideration of the proposals for a Clean Air Zone feasibility study in August 2017. Approximately 20 Councilors attended.

Appendix D: Risk management / assessment

The Clean Air Plan project has a detailed risk management process as part of the Project Management process. The key risks arising from this decision are:

The risks associated with the implementation of the decision:							
No	RISK Threat to achievement of the key objectives of the report	INHERENT RISK (Before controls)		RISK CONTROL MEASURES Mitigation (ie controls) and Evaluation (ie effectiveness of mitigation).	CURRENT RISK (After controls)		RISK OWNER
		Impact	Probability		Impact	Probability	
1	That the funding provided by Government is insufficient to complete the project to the required standard and in particular that the costs of consultation are greater than anticipated.	High	Medium	The work has been costed in detail against the guidance available at the time. Work will be reduced to fit within the budget available and further funding will be sought from Government.	Medium	Low	Alex Minshull
2	That the Project deadline imposed by Government requires the multi-tracking of project components, creating additional project delivery risks	Medium	Medium	Project management and governance arrangements are being strengthened to support this additional complexity.	Medium	Low	Alex Minshull
3	Deadline requires multi-tracking in particular that procurement work runs parallel to the consultation process risking the undermining of faith in the consultation process.	High	Medium	Clear communication around the project and in particular the terms of the consultation is being planned	High	Medium	Alex Minshull
4	That some work packages take longer than anticipated and the city council is unable to meet the tight timetable set by the Direction	High	High	Project management arrangements are in place.	High	Medium	Alex Minshull
5	That the Government guidance requires additional work which affects the timetable or costs.	High	High	Regular liaison with Government is taking place to understand the evolving guidance and apply the mitigation controls above.	High	Medium	Alex Minshull
6	That an effective and acceptable package of measures (Plan) cannot be arrived at.	High	High	The project provides for early engagement with stakeholders, consultation on the proposals and extensive Councillor	High	Medium	Alex Minshull

				engagement.			
7	That the project is subject to legal challenge	High	High	The project will follow the guidance developed by Government, take appropriate legal advice and engage and consult widely	High	High	Alex Minshull
The risks associated with not implementing the decision:							
No	RISK Threat to achievement of the key objectives of the report	INHERENT RISK (Before controls)		RISK CONTROL MEASURES Mitigation (ie controls) and Evaluation (ie effectiveness of mitigation).	CURRENT RISK (After controls)		RISK OWNER
		Impact	Probability		Impact	Probability	
1	To not submit the Strategic Outline Case by 31 st March 2018, would place the city council in breach of Environment Act 1995 (Feasibility Study for Nitrogen Dioxide Compliance) Air Quality Direction 2017	High	Low	City Councillors unanimously supported the development of an air quality action plan and there has been extensive member engagement including support from the cross party Air Quality Scrutiny Working Group.	High	Low	Alex Minshull
2.	To not approve the project plans, resulting in delay to the project and thus risk to failing to comply with the Direction.	Medium	Low	The proposals have been developed through the Mayoral Air Pollution Working Group chaired by the Cabinet Member for Energy, Waste and Regulatory Services and Cabinet Member for Transport, and with input from Scrutiny group. The proposals would be amended.	Medium	Low	Alex Minshull
3.	To not approve spending on the next phase of the project, resulting cessation of the project and failure to comply with the Direction.	High	Low	The proposals have been developed through the Mayoral Air Pollution Working Group chaired by the Cabinet Member for Energy, Waste and Regulatory Services and Cabinet Member for Transport, and with input from Scrutiny group.	High	Low	Alex Minshull

In addition there are risks arising from the implementation of the Projects presented in the bid to the Government's Early Measures Fund for Local NO2 Compliance. Separate risk management arrangements will be put in place for those projects..

Bristol City Council Equality Impact Assessment Form

(Please refer to the Equality Impact Assessment guidance when completing this form)



Name of proposal	Clean Air Plan
Directorate and Service Area	Growth and Regeneration
Name of Lead Officer	Alex Minshull

Step 1: What is the proposal?

Please explain your proposal in Plain English, avoiding acronyms and jargon. This section should explain how the proposal will impact service users, staff and/or the wider community.

1.1 What is the proposal?

The City Council has been placed under a Statutory Direction of the Secretary of State to develop a Plan to achieve compliance with the standards for nitrogen dioxide in the shortest possible time. This decision is one step in development of this Clean Air Plan – moving from a long list of possible options to improve air quality to a shortlist of options for further study, with one subsequently becoming a preferred option for consultation and implementation.

Prior to this decision the city council has developed a long list of possible measures using the powers that are available to it and which it considers could contribute to achieving compliance in the shortest possible time. These can be grouped into two groups:

- a range of options for a Clean Air Zone – which would result in a daily charge for certain (more polluting) vehicles for entering various specified areas of the city.
- a range of “other measures” to encourage the adoption of cleaner vehicles and encourage more sustainable modes of transport.

The scope of this EQIA is to therefore to consider:

- whether there are options which have been excluded from further consideration which would offer a better outcome from an equalities point of view
- whether the options included for further study create impacts on equalities groups which need to be considered in the next stage in more detail.

Step 2: What information do we have?

Decisions must be evidence-based, and involve people with protected characteristics that could be affected. Please use this section to demonstrate understanding of who could be affected by the proposal.

2.1 What data or evidence is there which tells us who is, or could be affected?

There are broadly three main types of impacts arising from this decision:

1. Impacts on public health from reducing air pollution
2. Impacts of charging clean air zones arising from expenditure of individuals and businesses paying a charge
3. Impacts of other measures which improve and encourage sustainable transport options for people

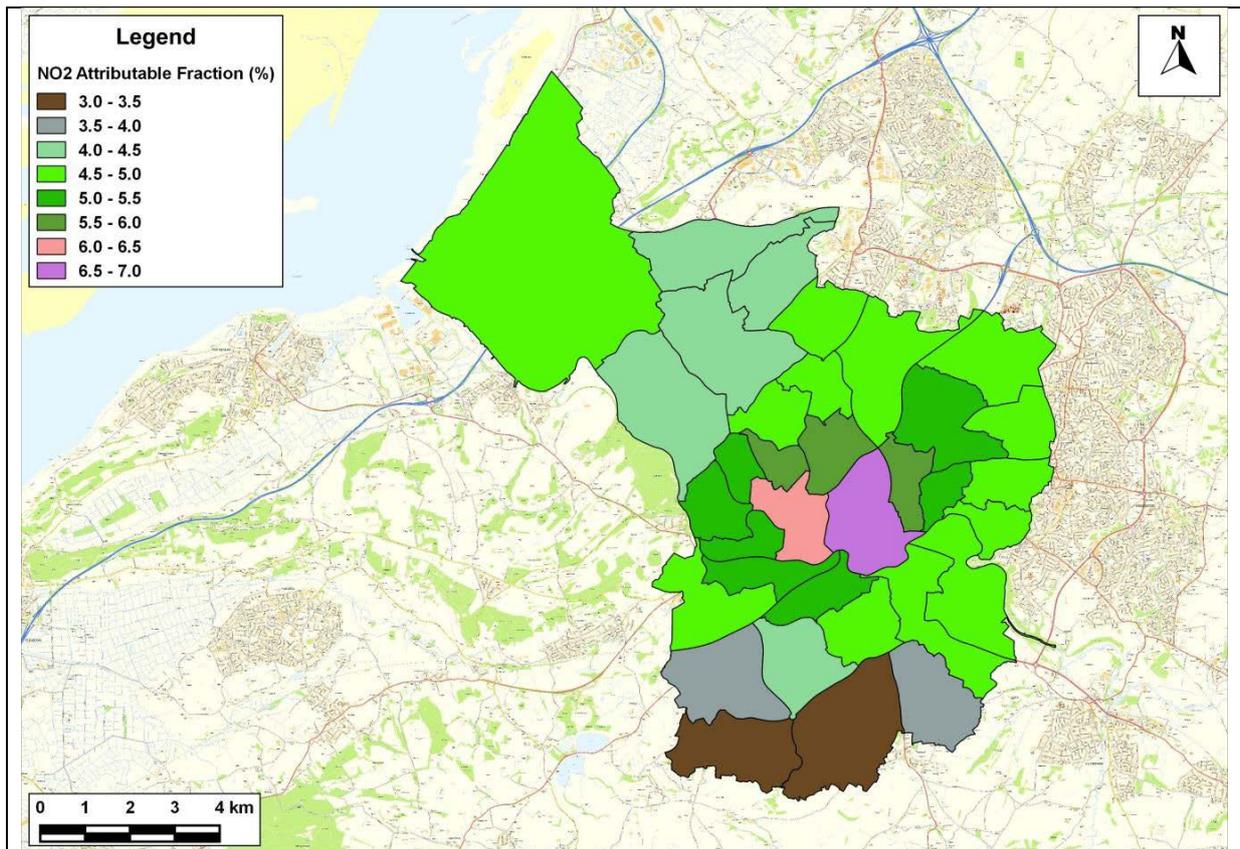
1. Impacts of Reducing Air Pollution

We manage air pollution in order to protect public health. Reductions in pollution lead to a reduction in both morbidity and mortality. The most recent analysis commissioned by Bristol City Council, based on evidence from the Committee on the Medical Effects of Air Pollutants (COMEAP), calculated that around 300 deaths each year in the City of Bristol can be attributed to exposure to both nitrogen dioxide and fine particulate matter.

Significant parts of the city are affected by air pollution in excess of the UK and EU standards for nitrogen dioxide – this is called the Air Quality Management Area (AQMA). This covers the city centre, central residential areas and main roads. Approximately 100,000 people live in this area and many more study, work and travel through this area.

Air pollution affects the whole of the city and health impacts from poor air quality will be experienced outside the AQMA.

The figure below shows the fraction of deaths (%) attributable to nitrogen dioxide in Bristol wards in 2013.



1. Impacts of Charging Zones

No UK city has yet introduced a clean air zone with charges so we do not have direct experience of the impacts. However it is reasonable to assume that households on low income that are required to pay a charge may be negatively impacted, and this may have impacts on life chances and health.

The Government undertook an assessment of the impacts of implementing Clean Air Zones in 5 cities it instructed to do so in 2016. https://consult.defra.gov.uk/airquality/implementation-of-cazs/supporting_documents/161012%20%20CAZ%20Impact%20Assessment%20%20FINAL%20consultation.pdf

2. Impacts of Other Measures

This is a wide group of measures which broadly make it easier to walk, cycle or use public transport and more difficult to use the private car and encourage the conversion from more polluting vehicles to less polluting equivalents.

There is a significant body of evidence on the health effects of many of these measures but this is rarely related to protected characteristics.

2.2 Who is missing? Are there any gaps in the data?

There is a high level of uncertainty about the impacts at this screening stage, but the key areas of likely impact have been identified. The detailed distributional impact analysis will take place at the Outline Business Case stage in accordance with the Options Appraisal guidance.

2.3 How have we involved, or will we involve, communities and groups that could be affected?

A full engagement programme is being designed and planned with our framework consultants to ensure that people in the West of England region understand the air quality problem and the potential solutions. We will build on our existing relationships with local universities, WECA, community groups and the Green Capital Partnership to plan activities and communications that reach all relevant communities. We will engage with particular equalities groups including BME, age and disability to understand the likely impacts on people with protected characteristics.

When a preferred scheme is identified through the Outline Business Case, we will fully consult in line with BCC and government policy.

Step 3: Who might the proposal impact?

Analysis of impacts on people with protected characteristics must be rigorous. Please demonstrate your analysis of any impacts in this section, referring to all of the equalities groups as defined in the Equality Act 2010.

3.1 Does the proposal have any potentially adverse impacts on people with protected characteristics?

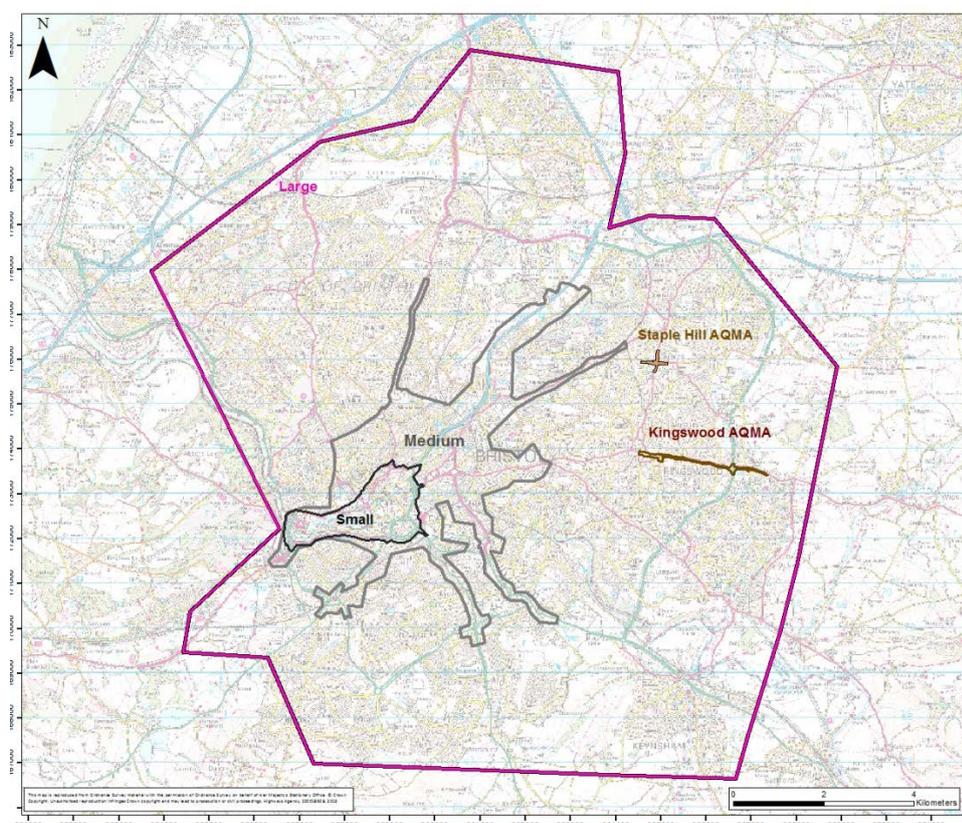
Charging Clean Air Zone

The scale of the adverse impacts is related to the scope (class) of vehicles included and area of the zone.

Range of Vehicles ↑

	Highest level of Impacts
Lowest Level of Impacts	

Geographical Scale →



Classes of vehicle liable for charging Clean Air Zones

Clean Air Zone class	Vehicles included
A	Buses, coaches and taxis ²³
B	Buses, coaches, taxis and heavy goods vehicles (HGVs)
C	Buses, coaches, taxis, HGVs and light goods vehicles (LGVs)
D	Buses, coaches, taxis, HGVs, LGVs and cars

Vehicles exempt from charging in a Clean Air Zone

Vehicle type	NO _x Emissions limit
Bus/coaches	Euro VI
HGV	Euro VI
Van (1305-3500kg)	Euro 6 (diesel) Euro 4 (petrol)
Car/light commercial (up to 1305kg)	Euro 6 (diesel) Euro 4 (petrol)

Charging may have the following impacts:

- Buses – it is unknown whether there will be any change in ticket prices and in drawing up the Clean Air Zone Framework the Government concluded that this was unlikely.
- Taxis – fares are regulated and it is unlikely that the fares would change but costs to operators of vehicles subject to a charge would rise.
- HGVs and Vans – these are primarily operated by businesses and costs would be absorbed or passed to customers but unlikely to have any impacts on groups with protected characteristics.
- Cars – the charges would particularly impact on older cars which are more likely to be owned by people on lower incomes, and these may correlate with some equalities groups such as older people, and may also disproportionately affect those people who need to use a car more, such as disabled people. However we also note that DfT data shows that 50% of low income households do not have access to a car and 62% of the lowest quintile do not have access to a car.

Decision to include CAZ Options

Four CAZ options are proposed for further study and include small and medium zones charging either all vehicles including cars or all vehicles excluding cars. The equalities impact of these proposals will be considered in more detail in the next stage of the study.

Decision to exclude Options from Further Study

The analysis of the options has considered their ability to achieve improvements in air quality sufficient to achieve compliance with the nitrogen dioxide standards in the “shortest possible time” as we are required to by Direction from the Secretary of State for the Environment.

The options which only included Buses, Taxis and HGVs are not predicted to deliver compliance in the shortest possible time, and therefore have been excluded from further consideration.

The options for the large area zone (approximately the whole urban area) were excluded because it would take a longer time to implement than other options considered and therefore would not achieve compliance in the shortest possible time. The achievement of compliance in the shortest possible time is defined as a primary “Critical Success Factor” according to government guidance. This means that any options that fail the test of compliance in the shortest possible time must be excluded from our analysis.

The large zone therefore does not meet the objectives of the project, the requirements of the CAZ framework in regard to proportionality and the statutory Direction placed on the city council.

However, it has been suggested that the Large Zone would improve air quality more generally in the longer term and therefore improve public health more than simply achieving compliance with the legal standards. It is therefore worth considering whether this would represent a better outcome overall.

The principal adverse effect of the charging zone will be to increase the costs of travel in older cars, and potentially on public transport and businesses. Households on low incomes are most susceptible to an increase in costs as they tend to drive older cars and therefore we have examined the impacts of a charging zone on low income households.

People who drive cars that are liable to a charge will have three options:

- Change their car for a vehicle that is not charged
- Change the mode of a particular journey – bus, cycle etc
- Avoid the charging zone by not making the journey or changing the route

As the size of the zone increases the more people will be affected, either because their home or destination is within the zone, or because they cannot take an alternative route to it. Approximately 6 times as many people live in the

large zone and an estimated 50% of the journeys in the city only occur within the large zone. Thus increasing the size of zone from medium to large would increase the impact on low income households by several times. In particular as many low income households living in outer suburban areas of the city who may drive infrequently into the city centre would be liable to the charge every day they drove their cars, even if they were doing relatively short journeys in relatively unpolluted areas, for example a school run.

Decision to exclude Other Options from the shortlist

The long list of possible interventions to improve air quality were considered and assessed as to whether they could contribute to achieving compliance in the shortest possible time as this is the objective of the project and the basis of future government funding for the implementation of the Clean Air Plan.

3.2 Can these impacts be mitigated or justified? If so, how?

Decision to exclude Large Options from Further Study

Negative Effects:	Positive Effects:
<ul style="list-style-type: none"> • Reduction in the long term city wide improvements in Air Quality 	<ul style="list-style-type: none"> • Faster improvements in Air Quality in the most polluted areas by implementation of a medium zone • Fewer people and businesses are subject to the adverse impacts of charging vehicles

On balance we conclude that the negative effects of the large zones are offset by the positive effects.

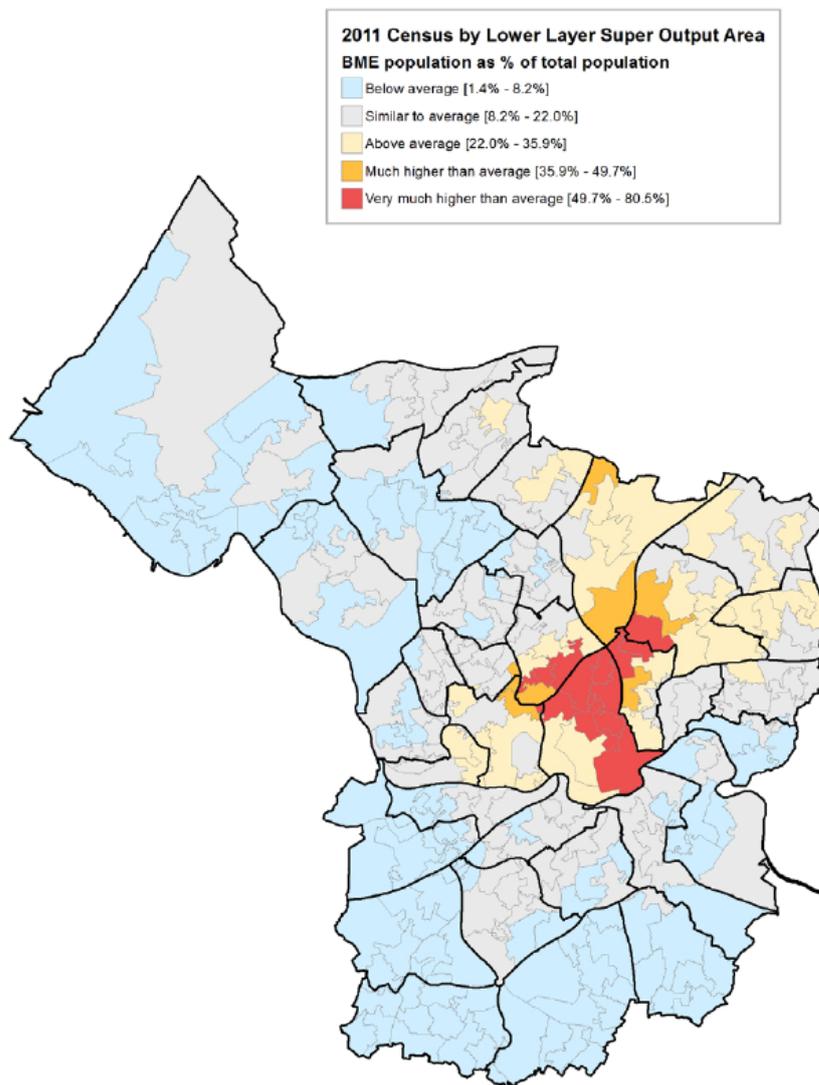
We will consider mitigation of distributional impacts, including on lower income households and businesses at the outline Business Case stage. The government has identified a £220m Clean Air Fund to help authorities mitigate impacts of air quality plans and Bristol has, and will continue to, bid for funding to ensure that people are protected as far as possible from the negative impacts of charging schemes or other interventions.

3.3 Does the proposal create any benefits for people with protected characteristics?

Considering air pollution in relation to protected characteristics:

- BME people make up a larger proportion of the population living in the more polluted areas – the AQMA - than the city as a whole and therefore it is reasonable to assume that the BME population experiences greater exposure to air pollution. Hence successful interventions to improve air quality will improve

the citywide health of BME communities relative to non BME citizens.



- Age – some age groups of people, the very young and older people, are more likely to be vulnerable to air pollution. Their relative geographical distribution is not strongly aligned to polluted areas or potential charging zones.
- Disability – some people, for example, if they have breathing difficulties are more vulnerable to air pollution.
- Other characteristics are not considered to be differentially exposed or vulnerable to air pollution.

Our conclusion therefore is that improving air quality to meet the legal standards for nitrogen dioxide is likely to be beneficial to the whole population with more positive impacts on BME people, children, older people and people with breathing conditions. It is not likely to have a negative impact on any group of people with protected characteristics, though this will be fully assessed at the next stage of analysis.

3.4 Can they be maximised? If so, how?

The benefits can be maximised by achieving compliance in the shortest possible time. The shortlisted options aim to do this.

Consideration should also be given to whether, in achieving compliance in the shortest possible time, wider improvements in air quality can be delivered in areas that are already compliant but still experience health impacts from air pollution.

Step 4: So what?

The Equality Impact Assessment must be able to influence the proposal and decision. This section asks how your understanding of impacts on people with protected characteristics has influenced your proposal, and how the findings of your Equality Impact Assessment can be measured going forward.

4.1 How has the equality impact assessment informed or changed the proposal?

- It has tested whether we should include or exclude a large zone from further study.
- It has identified the issues which we need to consider the next stage of the study.

4.2 What actions have been identified going forward?

The shortlisted options will be tested in detail through modelling approaches. A full distributional impact analysis will be conducted in line with the government's Options Appraisal guidance for this project.

4.3 How will the impact of your proposal and actions be measured moving forward?

The guidance referenced above requires assessment of air quality, affordability and accessibility as a minimum and prescribes the way these should be measured. We will follow this guidance.

Service Director Sign-Off:

Equalities Officer Sign Off:



Duncan Fleming

Date:

Date: 9th February 2018

Appendix F: Summary of Eco impact assessment

The decision being taken is to undertake a feasibility study and develop a Clean Air Plan. The study will consider the impacts of the implementation of the action plan and provide that information for decision makers. Environmental assessment of the proposed measure is an intrinsic component of the scheme. Any decision to implement proposals in the Clean Air Action Plan will be subject to a separate decision and eco-impact assessment.

Summary of impacts and Mitigation

The significant impacts of this proposal are...

This proposal seeks approval to complete the development of a Clean Air Plan, with appropriate engagement and consultation. The purpose of the plan is to reduce nitrogen dioxide pollution levels within the city, following central government direction to develop plans to comply with the EU Limit Value and UK Objective. It provides for highly significant long-term benefits, in particular improved public health and compliance with national obligations.

The proposals include the following measures to mitigate the impacts:

The proposal is not seeking to implement any specific measures, as these will be subject to separate approval following completion of the plan.

Direct impacts related to the proposal are limited and are not considered to be significant, so no mitigation measures are proposed.

There will be some direct effects arising from the implementation of the Wedmore Vale cycle scheme but this has already received planning permission and those impacts have been considered. The details of the taxi scheme are not yet well enough understood to be able to assess.

The net effects of the proposals are positive

Checklist completed by:

Name:	Steve Ransom
Dept.:	Energy Service
Extension:	X24659
Date:	20/02/2017
Verified by	Environmental Performance Team

Appendix H: Legal Advice

Cabinet is being to ask to approve (i) the expenditure of additional funding to be secured from Defra for the development of the Clean Air Action Plan, (ii) the outcome of the initial feasibility study identifying measures for further study (**'Strategic Outline Case'**) and (iii) plans for public engagement and consultation.

The above approvals are sought in order to secure compliance with the Minister's Direction of 27 July 2017 (**"Direction"**), requiring specified local authorities including the Council in whose areas EU air quality limit values are currently being exceeded, to identify the option(s) which would deliver compliance with legal limits for nitrogen dioxide (NO₂) and particulate matter in the Council's area, in the shortest possible time, reflecting legal duties on central and local government imposed by European law (Air Quality Directive 2008/50), section 85(5) of the Environment Act 1995, and in England the Air Quality Standards Regulations 2010, and the duties on local authorities (**"legal test"**) set out in the High Court case of ClientEarth (No.2) v. Secretary of State for the Environment, Food and Rural Affairs [2016] EWHC 2740 (Admin) and referred to in the subsequent High Court Case of ClientEarth (No.3)v Secretary of State for the Environment, Food and Rural Affairs (1) Secretary of State for Transport (2) and Welsh Ministers (3) and Mayor of London (Interested Party) [2018] EWHC315 (Admin).

Failure by the Council to comply with the Direction and meet its legal obligations in relation to improving air quality and protect public health, would carry the risk of challenge from third parties and incur possible financial penalties. Additionally, failure by the Council to identify appropriate measures which would secure compliance with reduction in legal limits for NO₂ and particulate matter could carry the risk of challenge by judicial review.

The Council could mitigate the above risks by ensuring that funding is secured from the Department for Environment, Food and Rural Affairs (Defra) for the development of an appropriate and effective CAA Plan, the carrying out of a further feasibility study of the most effective and fastest options for compliance, formulation of plans for public engagement and consultation, adherence to the guidance issued by Defra in relation to compliance with the Direction and ensuring that the legal test in the ClientEarth case is applied by the Council in respect of its consideration and decisions relating the development and implementation of the CAA Plan.

Joanne Mansfield, Legal Services, Bristol City Council, 23.02.2018

Appendix I – Combined Background papers

Bristol City Council

2017 Air Quality Annual Status Report

In fulfilment of Part IV of the Environment Act 1995 Local Air Quality Management
September, 2017

www.bristol.gov.uk/airquality

Bristol City Council

Bristol City Council Clean Air Plan: Strategic Outline Case

www.bristol.gov.uk/airquality