

## Bristol City Council Equality Impact Assessment Form



Name of proposal	<b>Improving Public Health: Bristol Clean Air Zone (CAZ) – Interim EqIA between Outline and Full business cases</b>
Directorate and Service Area	Growth and Regeneration
Name of Lead Officer	Adam Crowther / Mike Jackson

### 1.1 What is the proposal?

Bristol City Council is wholly committed to enabling clean air in the city and to achieving this as quickly as possible, whilst making sure that we put in place measures that will mitigate the impact on people with protected characteristics (and/or from low income households).

Due to the scale of the issue in urban areas nationally, Her Majesty's Government in 2017 formally directed 24 local authorities (including Bristol City Council) to submit plans for how they will achieve compliance to the legal NO<sub>2</sub> limits and how they would implement these plans by the end of March 2021.

Local authorities are therefore required to model various options for achieving clean air and to take forward the option that delivers compliance against the NO<sub>2</sub> legal limits within the shortest possible time, reduces exposure the quickest and ensures that compliance is not just possible but likely.

There have been a number of key changes to the project since the document was last circulated. These are summarised below.

From 1st July 2019 Bristol City Council carried out a six-week public consultation on two options for achieving NO<sub>2</sub> compliance: option 1: a Medium CAZ C charging scheme with additional non-charging measures and mitigations; option 2, a Small Area Diesel Car Ban with mitigations. The details of both these options are set out in further detail in the Outline Business Case (OBC) Options Appraisal Report (OAR), appendix A. It should be noted that an updated OAR is being prepared for the full business case which reflects the most recent option developments. The outcomes of the consultation are set out in a separate consultation report.

Following consultation and further technical analysis on both options, officers recommended that we progress with a 'Hybrid' option, which merged options 1 and 2 described above. This was the option that achieved compliance in line with our legal obligations.

Since the Council submitted the OBC in November 2019, further modelling and evaluation work has continued as part of refinement work and there have been regular discussions between Bristol City Council and JAQU. The main discussions being;

1. Technical questions relating to the Diesel Ban, in particular the area of the ban and assumptions around behaviour change;
2. Additional technical work that has been carried out that now shows a compliance date for the Hybrid scheme of 2023;

3. Matters relating to the ability to deliver Diesel Ban as Government has not yet provided the appropriate powers to Bristol City Council to implement a ban by passing the necessary secondary legislation and;

4. The Joint Air Quality Unit (JAQU) requiring further modelling work to ensure that other viable options are being considered by the Council, should they be required. This includes modelling a medium CAZ C with a small CAZ D. Further analysis and sensitivity testing is continuing on this option to ensure that the option that is put forward in the Full Business Case fully complies with the Government Direction of achieving compliance with the legal NO<sub>2</sub> limits in the shortest possible time.

The further modelling work has enabled good progress to be made on refining the data and has enabled us to move forward positively. The most important aspect to note is that as a result of this additional refinement work, the compliance year has moved from 2025 to 2023. This will bring clean air improved health to Bristol in a much shorter timescale than originally expected.

In response to the submission of the OBC and the ongoing work that has been undertaken as set out above, the Government have now formally Directed Bristol City Council, as set out in Appendix B,

In addition to the formal Direction received, the Rt Hon Rebecca Pow has written to Mayor Rees on the 13th March 2020 stating the following:

To ensure delivery of NO<sub>2</sub> compliance in the shortest possible time, I attach to this letter a Ministerial Direction requiring Bristol City Council to:

- Implement a charging Clean Air Zone Class C with additional measures as soon as possible and at least in time to bring forward compliance to 2023. I expect this to begin to be in place by 1 April 2020 at the latest; and
- Submit to JAQU a Full Business Case by 18 September 2020 at the latest.

'In the event that your preferred option of a medium CAZ C with additional measures, which could be either a diesel ban or small area CAZ D, is either not deliverable or is shown through further modelling to not deliver compliance in the shortest possible time, I expect you to pursue an alternative option for compliance, including a medium size class D CAZ.'

It is important to note that since receiving the Government Direction and letter from the Rt. Hon Rebecca Pow MP on the 13<sup>th</sup> March 2020, the situation regarding COVID-19 has escalated and further Government advice is being provided daily. At this point in time officers are working with JAQU to understand the wider implications of the virus and the impacts that will adversely affect delivery of the Clean Air Zone project. There is however a significant and likely risk that it will have an adverse effect on timescales for full delivery and implementation of the CAZ scheme.

It is also acknowledged that COVID-19 may potentially create further risk for those organisations impacted in Bristol who will also be required to comply with the implementation of the Clean Air Zone. Businesses that currently have non complaint vehicles, such as buses, taxis, HGVs and LGVs that will be impacted by the introduction of the Clean Air Zone Class C may now need further support from the Government due to potential adverse pressures facing their organisations already as a result of COVID-19.

Officers will continue to work with JAQU to understand the impact, risks and implications associated with COVID-19 as they emerge.

## Step 2: What information do we have?

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

Broadly, there are three types of impact arising from this decision:

1. Impact on public health from reducing air pollution
2. Impact on individuals through charging; impact on businesses through enforcement of the CAZ
3. Impact of additional measures aimed at improving and encouraging sustainable transport options for the residents and visitors to Bristol.

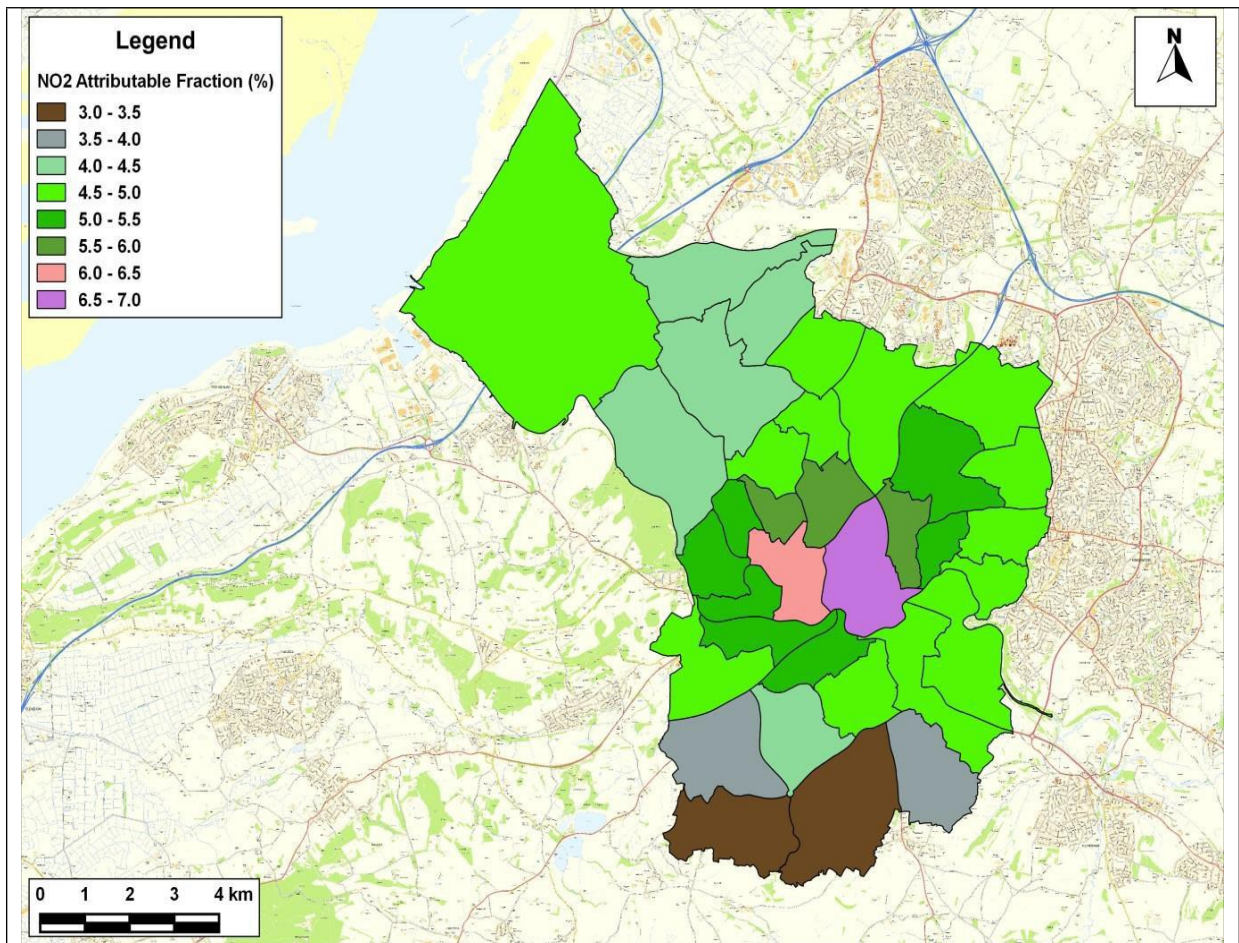
#### Impact of Reducing Air Pollution

We manage air pollution levels in order to protect public health. Reducing air pollution leads 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 the city centre 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.



### Impacts of Charging Zones

London has introduced an Ultra-Low Emissions Zone (ULEZ) which charges most vehicle types including cars, taxis, buses, motorcycles and vans. This has been in place since April 2019 and covers the same area that London’s pre-existing congestion charging zone covered. However, as it has only been in place for a short time, we cannot reliably assess its full impact.

Aside from London’s ULEZ, no other UK city has introduced a clean air zone with charges at the time of writing. Therefore, we do not have direct experience of the impact. However, it is reasonable to assume that people with protected characteristics and/or from low income groups that are required to pay a charge may be negatively affected, and this may have a detrimental impact on life chances and health. This is further explored in section three of this report.

In 2016, a government assessment of the impact of Clean Air Zones was undertaken in five of the cities that were directed to implement CAZs, the findings of which can be read here:

[https://consult.defra.gov.uk/airquality/implementation-of-cazs/supporting\\_documents/161012%20%20CAZ%20Impact%20Assessment%20%20FINAL%20consultation.pdf](https://consult.defra.gov.uk/airquality/implementation-of-cazs/supporting_documents/161012%20%20CAZ%20Impact%20Assessment%20%20FINAL%20consultation.pdf)

### Quality of Life Survey

In relation to the proportion of people who say air pollution prevents them leaving their house when they want to, the council’s Quality of Life Survey 2019 / 20 shows there are clear differences

between both equality groups and where people live:

Indicator	% for whom air pollution prevents them from leaving their home when they want to
<b>Equalities Group</b>	<b>Percentage</b>
16 to 24 years	8.1%
50 years and older	4.0%
65 years and older	4.4%
Female	5.2%
Male	6.2%
BAME (Black and Minority Ethnicity)	5.3%
WME (White Minority Ethnicity)	7.9%
Single Parent	4.7%
Carer	7.2%
Disabled	9.9%
LGB (Lesbian Gay Bisexual)	8.2%
No religion or faith	4.9%
Religion or faith	5.1%
Deprivation (People living in 10% most deprived areas)	6.8%
Bristol Average	5.8% (increase from 4.6% in 2018-19)

*Source: Quality of Life in Bristol survey 2019-20*

Indicator	% for whom air pollution prevents them from leaving their home when they want to
<b>Ward Name</b>	<b>Percentage</b>
Ashley	8.3%
Avonmouth & Lawrence Weston	3.4%
Bedminster	4.2%
Bishopston & Ashley Down	12.9%
Bishopsworth	4.8%
Brislington East	2.0%
Brislington West	3.7%
Central	7.4%
Clifton	5.1%
Clifton Down	2.9%
Cotham	2.2%
Easton	7.3%
Eastville	5.4%
Filwood	6.2%
Frome Vale	7.1%

Hartcliffe & Withywood	5.6%
Henbury & Brentry	4.6%
Hengrove & Whitchurch Park	2.1%
Hillfields	2.0%
Horfield	7.6%
Hotwells & Harbourside	8.8%
Knowle	5.4%
Lawrence Hill	13.2%
Lockleaze	9.7%
Redland	6.1%
Southmead	4.5%
Southville	5.8%
St George Central	7.3%
St George Troopers Hill	0.45%
St George West	6.75%
Stockwood	3.6%
Stoke Bishop	3.6%
Westbury-on-Trym & Henleaze	6.4%
Windmill Hill	4.4%

*Source: Quality of Life in Bristol survey 2019-20*

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

The consultation received responses from a wide range of groups and residents. Overall, the survey received 5,034 responses, of which 4,835 (96%) were self-completed online, 110 (2%) were completed online as interview surveys or at drop-ins or events and 89 (2%) were self-completed using paper surveys.

Geography - 3,512 responses (70%) were received from postcodes within the Bristol City Council area, 342 (7%) responses were from South Gloucestershire, 175 (3%) were from North Somerset, and 46 (1%) were from Bath & North East Somerset (B&NES). A further 22 (less than 1%) were from unspecified locations within the four West of England authorities and 84 (2%) responses were from further afield.

Deprivation - The home location of respondents in Bristol was compared with nationally published information on levels of deprivation across the city to review if the responses received include a cross-section of people living in more deprived and less deprived areas. The comparison looked at levels of deprivation in 10 bands (known as 'deciles') from decile 1 (most deprived) to decile 10 (least deprived). The response rate from the most deprived third of Bristol (deciles 1, 2 and 3) is less than the proportion of citizens living in those areas. The proportion of respondents in deprivation deciles 4 and 5 closely matches the proportion of Bristol citizens living in deprivation deciles 4 and 5. Response rates from the least deprived half of the city (deciles 6 to 10) are higher than the proportion of Bristol citizens living in those areas.

Although, the more deprived areas are under-represented as a proportion of the population, the large number of responses in all deciles enables meaningful comparison of the views of people living in the most deprived and least deprived areas.

Age - The most common age of respondents was 35-44 years (29%), followed by 25-34 (21%) and 45-

54 (20%). The proportion of responses in the age categories 25-34 years, 35-44, 45-54, 55-64 and 65-74 were higher than these age groups' proportion of the population in Bristol. Survey responses from children (under 18), young people aged 18-24 and people aged 75 and older were under represented. In each age category, the proportions of all respondents and Bristol respondents were very similar; the greatest difference being in people aged 45-54 which made up 20% of all respondents and 18% of Bristol respondents.

Sex - 45% of all responses were from women (47% for Bristol respondents) and 54% were from men (52% for Bristol respondents). 0.7% was from people who identified as 'other' (0.8% for Bristol respondents).

Disability - The proportion of disabled respondents (8%) and disabled Bristol respondents (8%) matched the proportion of disabled people living in Bristol.

Ethnicity - The proportions of White British respondents (87%) and White British respondents from Bristol (86%) are higher than the proportion of White Bristol people in the Bristol population. The response rates from White Irish (2%) and Other White respondents (7%) were also higher than the proportion of these groups living in Bristol. The responses rate from Gypsy / Roma / Traveller people (0.1%) closely matches proportion of these citizens in the Bristol population.

All other Black, Asian and Minority Ethnic respondents were under-represented in the response rates compared to the proportion of BAME citizens living in Bristol, despite targeted efforts to increase participation in areas with high BAME populations.

Religion/faith - People with no religion (69% of respondents and 70% of Bristol respondents) responded in higher proportions than people of no religion in Bristol's population. Christians (26%), Muslims (0.6%), Hindus (0.2%) and Sikhs (0.1%) were under-represented compared to the proportions of these faiths living in Bristol. The proportion of Jewish respondents (0.2%) closely matches the Bristol population. Buddhists (1%) and people of other faith (2%) responded in greater numbers than the proportions of these faiths in the Bristol population.

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

A full consultation programme was designed and planned with our framework consultants to ensure that people in the West of England region understood the issues surrounding air quality as well as the potential solutions. The proposed Hybrid option builds upon this. A series of engagement activity is proposed including a city summit with key city stakeholders (businesses, community groups and the city's partnership boards) and communications campaigns to enable residents to ask questions and further consultation will take place as part of detail of the implementation of the preferred option

We used our existing relationships with local universities, NHS, WECA, community groups and the Green Capital Partnership to plan activities and communications that reach all relevant communities.

We engaged with particular equalities groups including BAME, age and disability to understand the likely impacts on people with protected characteristics.

Further details of our engagement and consultation are available in the appendices of the outline business case.

### Step 3: Who might the proposal impact?

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

The table below contains a brief qualitative summary of the distributional impacts of the four CAP options considered to date:

	1: Option 1	2: Option 2	3: Medium area CAZ 'D'	4: Hybrid option
Air quality	Improvements across the city for both NO2 and PM10. Distribution impact is generally even across social groups, though impacts on children are a little uneven.	Air quality improves in some areas but worsens in others. With improvements focused on the car diesel ban area, distributional impact is uneven for a number of groups.	Improvements across the city for both NO2 and PM10. Distribution impact is generally even across social groups.	Improvements across the city for both NO2 and PM10, though not as much as either options 1 or 2. Distribution impact is generally even across social groups, with slightly uneven impacts on younger and older residents.
Accessibility	Time benefit calculations indicate a mix of positive and negative benefits, so the distributional impact is uneven.  Trip-making propensity by people with non-compliant cars related to the Medium CAZ area is evenly distributed.	Time benefit calculations indicate mostly positive benefits; the distributional impact is not particularly even though.  Trip-making propensity by people with non-compliant cars related to the car diesel ban area is slightly less evenly distributed than the Medium area.	Time benefit calculations indicate mostly positive benefits; the distributional impact is not particularly even though.  Trip-making propensity by people with non-compliant cars related to the Medium CAZ area is evenly distributed.	Time benefit calculations indicate mostly positive benefits; the distributional impact is reasonably even.  Trip-making propensity by non-compliant cars related to the Medium CAZ area is evenly distributed, but the option also includes measures related to the car diesel ban area for which trip-making propensity is less evenly distributed.
Affordability	Vehicle operating	Vehicle operating	Vehicle operating	Vehicle operating



	cost benefits are a mixture of positive and negative values. Distribution is not particularly even.	cost benefits are positive and the distributional is reasonably even.	cost benefits are a mixture of positive and negative values. Distribution is not particularly even.	cost benefits are a mixture of positive and negative values. Distribution is not particularly even.
Businesses	Option has direct impact on costs of LGV/HGV reliant businesses. Trips by non-compliant LGV/HGV reliant businesses are reasonably spread around the city. The Medium CAZ area impacts more than the car diesel ban area on such trips.	Option has less direct impact on LGV/HGV reliant businesses. Area of impact is smaller, but the diesel car ban area could deter customer trips and impact on taxi availability.	Option has direct impact on costs of LGV/HGV reliant businesses. Trips by non-compliant LGV/HGV reliant businesses are reasonably spread around the city. The Medium CAZ area impacts more than the car diesel ban area.	Option has direct impact on costs of LGV/HGV reliant businesses. Trips by non-compliant LGV/HGV reliant businesses are reasonably spread around the city. Inclusion of car diesel ban area measures potentially impacts more than the Medium CAZ area alone.
Car owners	Impact on car owners is limited with CAZ 'C', so distributional impact is likewise limited and even.	Impact on diesel owners is significant with a ban. Distribution of diesel ownership is even across income groups. However, (in)ability to react to restrictions is unevenly felt by lower income groups (e.g. with fewer multi-car households)..	Impact on all non-compliant car owners. Distribution of non-compliant car ownerships is slightly skewed to lower income groups, but ability to react to charges more so (such as households with more than one vehicle).	Impact on all non-compliant car owners and owners of diesel cars. Distribution of non-compliant car ownerships is slightly skewed to lower income groups, but ability to react to charges more so (such as households with more than one vehicle).

The table below indicates some of the potential mitigation target groups that could arise from the four potential Clean Air Zone options discussed in 1.1 above. The table also provides a summary showing the potential mitigation targets.

Potential mitigation target group <sup>a</sup>	1: Option 1	2: Option 2	3: Medium CAZ D	4: Hybrid Option
<b>Residents</b>				
Residents of the	✘	✘	✓	✘

Medium CAZ area (outside the car diesel ban area)				
Residents of the car diesel ban area	x	✓	✓	✓
<b>Specific trip needs</b>				
Disabled people – blue badge	x	✓ <sup>b</sup>	✓	✓ <sup>b</sup>
Disabled people – with specialist vehicle adaptations	x	✓ <sup>b</sup>	✓	✓ <sup>b</sup>
Out-patient access to hospital	x	✓ <sup>b</sup>	✓	✓ <sup>b</sup>
<b>Car owners</b>				
Low income non-compliant petrol car owners	x	x	✓	x
Low-income non-compliant diesel car owners	x	✓	✓	✓
Low-income compliant diesel car owners	x	✓	x	✓
1-car households	x	✓	x	✓
<b>Businesses</b>				
SMEs located in the Medium CAZ area (outside the car diesel ban area)	✓	x	✓	✓
SMEs located in the car diesel ban area	✓	✓	✓	✓
LGV/HGV-dependent businesses, not specifically located in the Medium CAZ area (outside car diesel ban area) but that need to travel into it	✓	x	✓	✓
LGV/HGV-dependent businesses not specifically located in the car	✓	✓	✓	✓

diesel ban area but that need to travel into it				
Taxi owners/drivers – BCC registered	✓	✓ <sup>c</sup>	✓	✓
Taxi owners/drivers – other authority registration	✓	✓ <sup>c</sup>	✓	✓

**Note:**

- a. Groups that could be potential mitigation targets are cross-referenced with the four CAP options; '✓' indicates there is the potential for mitigation to be sought by or on behalf of the group, though not necessarily that it would be granted as part of implementing the CAP; '✗' indicates that it is less likely that any mitigation would be applicable to this group/option. However, both are indicative, and neither a positive nor negative indication in this table is a definitive indicator of future proposals.
- b. With a destination in the car diesel ban area and owning/using a diesel car.
- c. Diesel-powered only.

For the consultation two options were presented which were Option 1 and Option 2. These were later combined to become the Hybrid Option.

Analysis shows that both options consulted on as separate interventions would have a disproportionate financial impact on some equalities groups and low income households. This is also true of the Benchmark (CAZ D general charging) option that was initially considered. The Hybrid option does not have as proportionately disparate affect; however we recognise that this option does not fully mitigate the negative impacts.

A ban on diesel cars 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 and elderly people. The requirement to replace a diesel vehicle to continue trip-making may have a more significant impact, especially for households with only one diesel car.

Further, there may be an impact on disabled people and / or carers who have had adaptations to existing diesel vehicles via grants etc. in order to make their vehicles accessible. Such groups may not be able to afford or be sufficiently reimbursed if they are then required to get further adaptations to a replacement vehicle.

In the event that a new version of the Hybrid is progressed so that the small zone charged non-compliant cars (a CAZ D) rather than banning all diesels, the impacts would change. They would likely become more focussed on the ability of the public to pay the charge and adapt their vehicles. With this work still being undertaken, the impacts aren't clear as yet. However, it is unlikely this scheme would have the wide impact on low income households due to the reduction in size from the Medium CAZ D. The grant and loan scheme would also help to mitigate the impacts as with the Medium zone.

The CAZ C (commercial vehicle charging zone for non-compliant vehicles) may also adversely impact disabled persons, elderly persons and children. These groups are more likely to use taxis, buses, or home-to-school transport. The financial effects of the CAZ upon operators who need either to pay the charges to enter, or to replace or retrofit older vehicles, are therefore more likely to impact

upon these groups in the form of raised prices. Accessibility for these groups could also be reduced if operators choose to change or lower service levels as a result of the proposals.

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

Bristol City Council is committed to delivering an option that complies with the legal tests while at the same time seeking to put in place measures that will mitigate any disproportionate adverse impact on people with protected characteristics and low income households. To develop Bristol's proposed option, officers from the Council have been in regular contact with officials from JAQU since 2018, holding weekly catch up calls. Initially the Council developed a shortlist of options in line with JAQU assessment criteria reported to council in March 2018. The subsequent assessment of these options produced 2 'preferred options' based on the year they would be likely to reach compliance.

Initial modelling showed the options having different compliance dates; 2030 for the Medium CAZ D (charging all non-compliant modes) and 2024 for a Small Area Diesel Car Ban. The first option raised concerns about time to compliance and both options raised concerns about the impact on some equalities groups (in particular disabled people) and low income households, so further consideration was given to options that would meet the terms of the directive and legal tests, while at the same time mitigating the impact.

This led to the development of the Hybrid option as detailed above. Although adverse impacts upon protected groups remain with this option, these will be mitigated by the following measures:

The key mitigations for the Small Area Diesel Car Ban and CAZ C (commercial charging zone) from an equalities perspective are:

- a) A loan and grant scheme, provided to all but with a priority for lower income households, disabled people, and local businesses to maintain their mobility. This replaces the scrappage scheme that was originally proposed. It was removed following consultation and feedback from Scrutiny and stakeholders. Following a review, it is deemed that the loan and grant scheme provides wider benefits and removes the need to scrap newer vehicles unnecessarily, it also includes the ability to support adaptations to vehicles to make them compliant which the scrappage scheme didn't provide adequate support for.
- b) Council-led improvements to buses and taxis to bring them to the compliant Euro standards. This should reduce the charging / vehicle replacement costs placed upon operators by the CAZ C. This in turn will reduce any costs passed on to public transport users, including users from low income households, elderly users, disabled passengers, and children.
- c) Bus and local traffic interventions in the most polluting areas; including a proposed bus lane on the M32. This will improve service reliability for operators, mitigating the impact of the charging zone. Improved public transport reliability will also mitigate the accessibility impacts of both the small area diesel ban and commercial charging zone.
- d) Concessions and exemptions are still being considered following the consultation and refinement work taking place; these are likely to include but are not limited to concessions for low income households and those drivers with the registered disabled vehicle class.
- e) Exemption from the Small Area Diesel Car Ban area and CAZ C for community transport vehicles. This will mitigate negative accessibility impacts upon disabled and elderly people who rely upon these services for their mobility. It will also mitigate the financial impacts upon these groups from potentially replacing these services with more expensive modes, such as taxis.
- f) Exemption from the Small Area Diesel Car Ban area and CAZ C for home-to-school transport vehicles. This will mitigate adverse financial and accessibility impacts upon children and young

people by preventing their mobility from being disrupted and avoiding extra cost for alternative modes.

Exemptions and concessions are still being worked up and will be balanced against the need to achieve legal compliance in the shortest possible time. If too many exemptions are included, this could impact the compliance date. In turn, this would weaken the positive impact of the proposal on groups with protected characteristics.

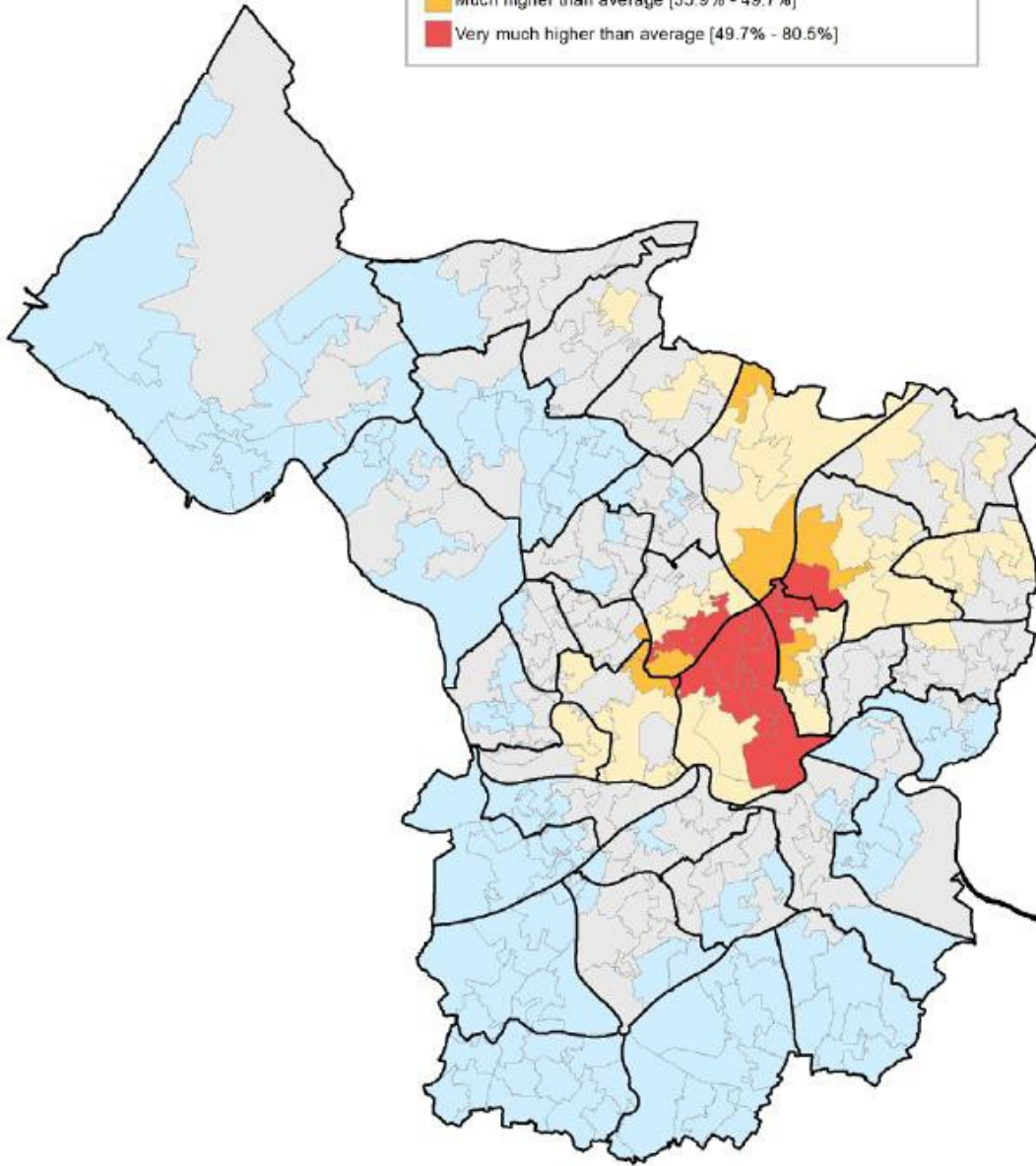
Due to the legal timeframes set in place for this project, we may not be able to offer as many exemptions and concessions as we would have liked. We are aware of the potential issues for our most vulnerable residents that could arise as a result of the scheme being implemented and will continue to consider all possible impacts. We will work with local residents to best understand their issues. This is caveated with the need to meet legal timescales and make sure we are improving air quality. We may not be able to offer all exemptions but we will continually review the mitigation measures offered and make sure what we're offering are the right measures for all affected. This is all going to be reviewed in the coming months with a final list being included in the full business case in September 20.

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

Considering air pollution in relation to protected characteristics:

- Race: 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 BME groups experience greater exposure to air pollution. Successful interventions to improve air quality will improve the citywide health of BME communities relative to non-BME citizens.

**2011 Census by Lower Layer Super Output Area  
BME population as % of total population**



- Age: some age groups – the very young and older people – are more likely to be vulnerable to the effects of air pollution. As a result, general improvements will benefit these age groups more. Their relative geographical distribution is not strongly aligned to polluted areas or potential charging zones.
- Disability: some disabled people, for example those with breathing difficulties are more vulnerable to air pollution.
- Other groups with protected characteristics (such as marriage; gender reassignment; religion) are not considered to be differentially exposed or vulnerable to air pollution.

Our conclusion therefore is that improving air quality to meet legal compliance for nitrogen dioxide is likely to be beneficial to the whole population with more positive impacts on BME

groups, children, older people and people with breathing conditions.

### **3.4 Can they be maximised? If so, how?**

The benefits can be maximised by achieving legal compliance and reducing exposure in the shortest possible time. Consideration should also be given as to whether, in achieving legal 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?**

### **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.
- The Distributional Impact Assessment that has informed this EQIA has also informed the detailed consideration and evolution of proposals. Results of the Distributional Impact Assessment have also suggested that combining two options provides better overall outcome for low income households and groups with protected characteristics than them being applied in isolation.
- In identifying potential mitigation targets, it has noted potential exemptions and concessions for groups with protected characteristics. For example, the potential concessions in the Small Area Diesel Car Ban area for drivers with a registered disabled vehicle class, and exemptions from both the Diesel Ban and CAZ C (commercial charging) for community and home-to-school transport vehicles.
- In identifying potential mitigation targets, it has endorsed the inclusion of mitigation measures, such as a loan and grant scheme to enable people with protected characteristics and low-income households with polluting vehicles to enable alternative transport solutions under the scheme.

### **4.2 What actions have been identified going forward?**

Once a decision has been made in respect of the preferred option, and the Government has accepted the Council's OBC, further engagement and consultation will take part in respect of the detail implementation of the plan.

The key mitigation measures, exemptions and concessions for the proposed plan are being developed to ensure the disproportionate impact on low income households and people with protected characteristics is effectively managed. This includes ongoing engagement with communities and key stakeholders across Bristol to raise awareness of the impacts in order to plan around them, draw attention to air quality benefits for the city, and raise awareness of mitigation of adverse impacts by the council.

This future engagement plan is included in appendix C.

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

As part of the OBC, an Evaluation & Monitoring Plan has been drawn up, which is included as. This lays out how the project's benefits will be monitored through the sensor network in order to show

that air pollution levels have reached legal compliance in the directed timeframe. Through the network of sensors, the council will be able to monitor air quality improvements by area, and evaluate the degree to which lower income neighbourhoods, and areas with a higher proportion of residents with protected characteristics, are improving compared to the mean. It is expected that the majority of this work will be carried out by the sustainability team.

The monitoring of the proposal's financial and accessibility impacts upon groups with protected characteristics are difficult to monitor independently, as the future Quality of Life Survey results on accessibility and transport will be affected by a range of inter-dependent factors outside the scope of this project. However, appropriate conversations about this monitoring will be developed with the equalities team as the project moves towards Full Business Case submission to JAQU in September 2020.

Service Director Sign-Off: Mike Jackson	Equalities Officer Sign Off:  <i>Reviewed by Equality and Inclusion Team 23/3/2020</i>
Date:20 <sup>th</sup> March 2020	Date: