

Bristol City Council Equality Impact Assessment Form



Name of proposal	Improving Public Health: Bristol Clean Air Zone (CAZ) – Interim EqlA between Outline and Full business cases
Directorate and Service Area	Growth and Regeneration
Name of Lead Officer	Mike Jackson, Chief Executive and SRO

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 NO₂ 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 NO₂ 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. From 1st July 2019 Bristol City Council carried out a six-week public consultation on two options for achieving NO₂ 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.

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 NO₂ 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 improved health to Bristol in a much shorter timescale than originally expected.

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

To ensure delivery of NO₂ 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 13th March 2020, the situation regarding COVID-19 has escalated and further Government advice is being provided.

In continuing discussions with JAQU throughout this period, Bristol City Council has continued to assess the situation and monitor the impacts of COVID-19. During this time JAQU issued a statement from the Joint Heads of Department stating that no Clean Air Zones will be implemented before January 2021 in recognition of the challenges and unknown entities that the situation presented.

A number of other authorities have signalled delays with the implementation of their Clean Air Zones, namely Greater Manchester, Leeds, Bath and Birmingham.

Despite the challenges that lockdown (which commenced on the 23 March 2020) presented, council officers made significant progress in continuing with the additional required modelling and technical assessments as set out in the letter from Minister Pow on the 13th March 2020. These were all submitted in line with the requirements placed upon us.

Following the submission of the required information and subsequent discussions with JAQU officers, the Council was issued with a new Direction on 20 August 2020 which requires the Council to:

Implement the local plan for nitrogen dioxide (NO₂) compliance, specifying a Medium Charging Clean Air Zone Class C with small Charging Clean Air Zone Class D and additional measures, subject to provision of further evidence to be submitted

4.—(1) The authority must take steps to implement the local plan for NO₂ compliance for the areas for which it is responsible.

- (2) The authority must ensure that the local plan for NO₂ compliance is implemented so that—
- (a) compliance with the legal limit value for nitrogen dioxide is achieved in the shortest possible time, and by 2023 at the latest;
 - (b) exposure to levels above the legal limit for nitrogen dioxide are reduced as quickly as possible.

Duty to submit additional documentation

5.—(1) The authority must submit to the Secretary of State further options appraisal (including transport and air quality modelling) by 4 December 2020 at the latest, in order to provide assurance that the local plan for NO₂ compliance will deliver compliance in the shortest possible time and by 2023 at the latest.

(2) The revised air quality modelling provided under paragraph (1) must demonstrate the green recovery measures and the applicable class of charging Clean Air Zone, in the medium and small zone, appropriate behavioural assumptions, and what (if any) additional measures, or adjustments to the local plan for NO₂ compliance would need to be implemented by the authority to deliver compliance in the shortest possible time.

Duty to prepare and submit a full business cases

6.—(1) The authority must as part of its feasibility study continue with the work necessary to prepare a full business case for the area for which it is responsible.

(2) The full business case must be submitted to the Secretary of State as soon as possible and by 26 February 2021 at the latest.

Submission of the full business case to the Secretary of State

8. When submitting its full business case, the authority must provide the Secretary of State with the following information—

- (a) the date on which it is proposed that the scheme identified in the full business case will start to be implemented, which must be by 29 October 2021 at the latest;

This is a requirement to have undergone the necessary procurement activities, to have installed infrastructure and be ready to go live with the CAZ from this date for at least one of the charging CAZs. In order to achieve this, the FBC must be submitted well in advance to allow for the continued dialogue with JAQU to take place, agreeing the way forward at every gateway review. This new Direction is as a direct result of intense engagement with JAQU which will continue in order to satisfy both parties that the Bristol Clean Air Zone is the right strategic fit for Bristol that will meet the legal requirements.

Post COVID-19 emerging situation:

The Outline Business Case (OBC) that was submitted to JAQU in November 2019 included a set of proposals that offered the most appropriate measures for Bristol at that time and that were aligned with the Mayor's strategic vision for the future development and direction of the city. However, the situation changed dramatically, without warning, due to the global pandemic caused by COVID-19.

The council has reviewed the impact of the pandemic and the inevitable change to the project baseline that this presents, the baseline which included previously modelled results and data analysis having been set in 2018 has now dramatically changed. The methodologies, modelling and assumptions that have been used up until the outbreak of COVID-19 are now outdated and do not take into account the effects of COVID-19 on our city. As such, consideration has been given to how we move forward in a way that delivers clean air and improved health benefits to Bristol, recognising

the unprecedented times we are in while also seeking to protect and enhance our economy.

In July 2020 the Government announced funding of £2bn to create 'a new era' for cycling and walking. It has been a long held ambition for Bristol to create more liveable neighbourhoods that are free from traffic congestion and pollution, giving more space to residents and businesses and improving walking and cycling journeys. This ambition is more important than ever in the context of Covid-19.

Officers have been in continual dialogue with JAQU to consider the most suitable manner in which Bristol can respond to the pandemic and take into account the new environment. Our bold plans to reallocate through traffic away from the city centre in response to Covid-19 is testament to the level of ambition we hold in transforming how people get around the city. In a short space of time and with the help of enabling legislation from Government, we have made some radical changes to some of the most polluting areas in Bristol. We closed Baldwin Street to help insulate and promote local bus services and ensure that residents are encouraged to adopt public transport and active modes of travel. Other recent measures include the closure of Bristol Bridge to through traffic other than buses, motorbikes, taxis and cyclists, new segregated cycle routes on Park Row, Upper Maudlin St and Lewin's Mead. Access to the central hospital and Bristol University has also been improved with new segregated cycle routes and our plans for the autumn and winter will expand the area of focus to our local neighbourhoods, improving liability and air quality in several neighbourhoods while protecting local businesses.

The new proposals seek to build on these measures and develop further schemes to ensure we are successful in improving air quality on our most polluted corridors, making schemes permanent or extended as required.

The fact that we now need to take account of the radical changes that have occurred as a result of the pandemic inevitably means that the baseline data has changed as a result of changed working patterns, altered and travel behaviours; these changes must now be factored into the evidence base for future decision making. In order to do this we have agreed a new three-staged modelling approach with JAQU to update the baseline and provide the most current evidence to make decisions.

A methodology has been adopted that carries out modelling and sensitivity testing (reports that test the modelling results against different scenarios) as well as capturing real time information from existing air quality monitoring units and the automatic number plate recognition (ANPR) data. As an essential element of the proposals, additional new air quality monitoring units will be installed to capture as much accurate and real time data as possible.

This new methodology is largely due to an emerging change in air quality readings. During the lockdown period, air quality and traffic levels were continuously monitored at our five continuous sites and 100 diffusion tubes sites. As compliance is based on an annual mean, it is not possible to fully predict if we are currently compliant with legally defined NO₂ levels (as we are only able to do this annually), but it is possible to see an improvement in air quality measures recorded during this time that suggest we are at the very least, close to compliance. For example, in June it was reported that daily traffic had declined by at least 50% compared to pre-lockdown recordings; and although we are seeing numbers rise, they are lower than the same levels as pre-lockdown. Roadside NO₂ has declined by around half (53%) when compared to the same period in 2019. Despite the relaxation of lockdown restrictions, numbers are not climbing to the same levels. This could in part be due to behavioural, lifestyle and working changes, such as working from home and therefore not needing to travel into the city centre. The changes to road layout are expected to have a further positive

impact on these readings.

As a result of this and the implementation of the new Bristol Street Space transport improvements that have been funded using the Department for Transport (DfT) emergency funding, a new approach has been agreed with JAQU. Further details can be found [here](#).

There will be a further consultation in the Autumn on the new options being considered for a small area CAZ D or a Medium area CAZ C and a small area CAZ D together, with additional measures.

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 that could arise depending on the decision taken in relation to the FBC:

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

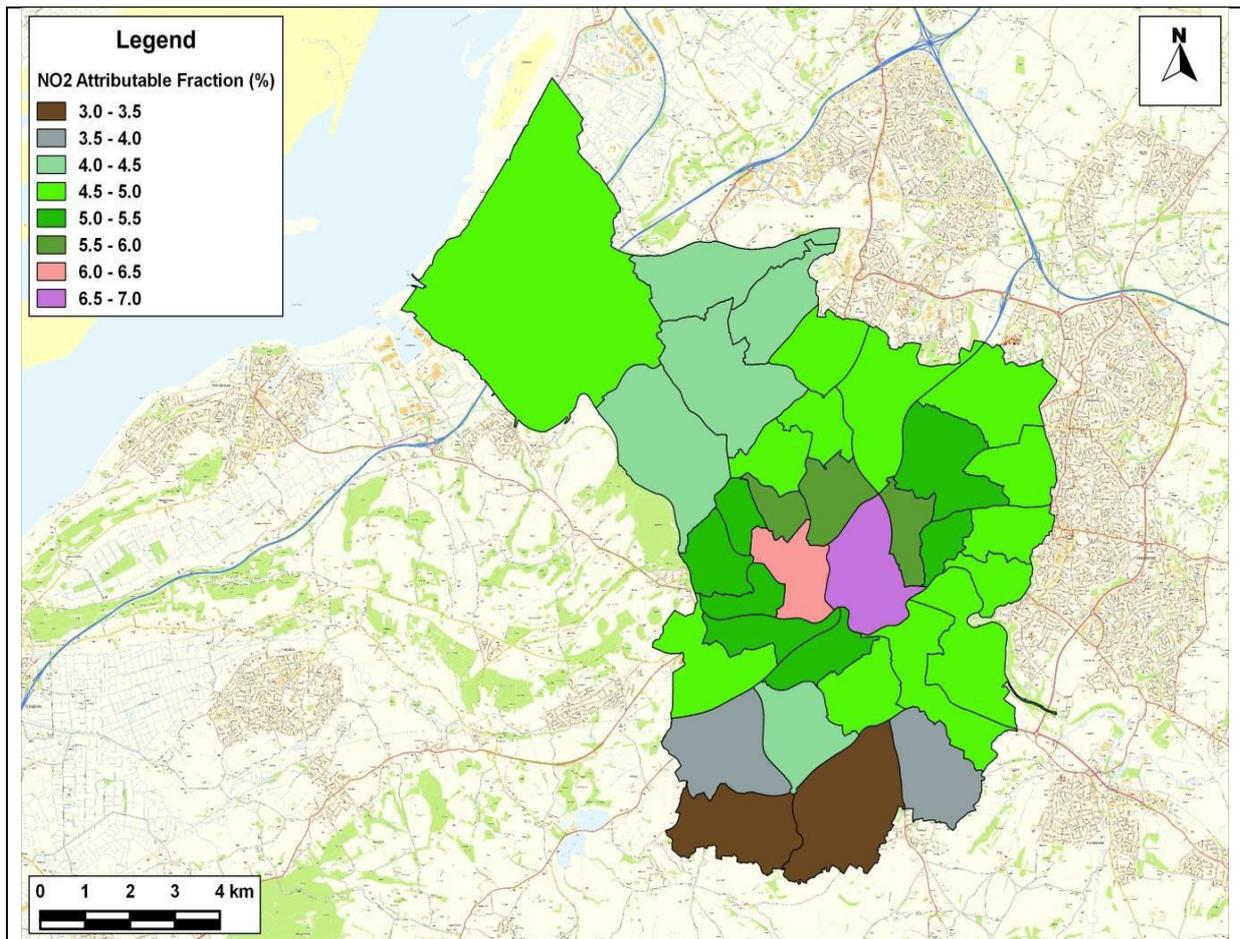
Impact of Reducing Air Pollution

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 if implemented

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

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
Equalities Group	Percentage
16 to 24 years	8.1%
50 years and older	4.0%
65 years and older	4.4%
Female	5.2%
Male	6.2%
Black Asian and minority ethnicity	5.3%
White minority ethnicity	7.9%
Single Parent	4.7%
Carer	7.2%
Disabled	9.9%
Lesbian Gay or 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
Ward Name	Percentage
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 & Witherwood	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 first 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.

Black, Asian and minority ethnic respondents were under-represented in the response rates compared to the proportion of citizens living in Bristol, despite targeted efforts to increase participation in areas with high Black, Asian and minority ethnic 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.

It should be noted that on 1 September 2020, the council's Cabinet will consider details for a public consultation planned for this autumn, on the new proposals for charging zones, to accompany new evidence being collected. Depending on the outcome of the consultation and new evidence being collected, a small zone could be implemented in 2021 - depending on what the evidence shows, potentially going live to the public from October 2021, if evidence determines a need for a CAZ.

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

As before, a full consultation programme will be 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. A series of engagement activity will be proposed with key city stakeholders (residents, 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 will use 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 will engage with equalities groups to understand the likely impacts on people on the basis of their protected characteristics. This will include working with community organisations to address underrepresentation, and incorporating lessons learnt from the previous consultation and any additional lessons from other council led consultations carried in the last year as well as any new national guidance now available.

As noted above, a further public consultation is being discussed on the 1st September, this section

will be updated once this is confirmed and more information is known.

Step 3: Who might the proposal impact?

3.1 Do the proposed options have any potentially adverse impacts on people with protected characteristics?

We now are no longer required to pursue or model a diesel ban as a result of a new Ministerial Direction received and are now asked to set out and model the Small area CAZ D and Medium area Caz Options.

The full modelling of the impact of a small CAZ D will be carried out as part of the wider modelling work and analysis that will take place as a result of the new Direction received on 20 June 2020 and will be reported for consideration in February 2021 as part of the Full Business Case submission.

There will be a further consultation in the Autumn on the new options being considered for a small area CAZ D and a Medium area CAZ C with a small area CAZ D together with additional measures.

With the work that is now being undertaken, the impacts aren't clear as yet. However, initial analysis shows that air quality likely improves for most residents across all the options assessed. Distributional impacts of air quality changes are also broadly even, though exceptions again exist, with impacts likely for some combinations of options and demographic groups not being evenly distributed.

Accessibility impacts are likely to be mixed. Trip-making propensity impacts are evenly distributed in comparison with population distributions but are most heavily on the middle and lower quintiles of income deprived areas, areas with the most children and those that have the lowest proportions of females. Impacts are disproportionately felt by the higher quintiles of the concentration of Black, Asian and ethnic minority resident, middle quintiles for disabled residents and more evenly for older residents. TUBA *(transport users benefit appraisal) time benefits are also used as a proxy for accessibility; these are largely beneficial and the distributional impact broadly even.

The CAZ C (commercial vehicle charging zone for non-compliant vehicles) may also adversely impact disabled people, older people and children. These groups are more likely to use taxis, buses, or home-to-school transport. The financial effects of a 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.

Affordability impacts are likely to be negative across the socio-economic and business groups that directly interact with CAZ areas, especially where there are either charges for non-compliant cars or bans on access. Impacts are disproportionately felt by the second most and least income deprived communities. They also fall on businesses operating non-compliant LGVs and HGVs who are either based in the CAZ areas or operate within central Bristol. Using TUBA vehicle operating cost benefits as a proxy for affordability indicates that the impacts are generally positive, and distributional impacts are reasonably even, though there are some exceptions.

* The TUBA software undertakes the economic appraisal of transport schemes in accordance with the Department for Transport's cost benefit analysis guidance.

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 for people on the basis of their protected characteristics, and for 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 and more recently this has been revised to a Direction that includes a Medium CAZ C and small CAZ D (unless evidence shows that a charging CAZ is no longer required to meet legal compliance). The Hybrid Option with a small diesel ban area is no longer to be pursued. Although adverse impacts upon protected groups likely remain if a charging CAZ is implemented, these will be mitigated by the following measures:

The key proposed mitigations for the CAZ zones (charging zones) 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, older users, disabled passengers, and children.
- c) Traffic signal changes
- d) Concessions and exemptions are still being considered and will be further considered following the proposed consultation; 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 both zones for community transport vehicles. This will mitigate negative accessibility impacts upon disabled and older 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 both zones 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 in light of the recent changes noted above 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.

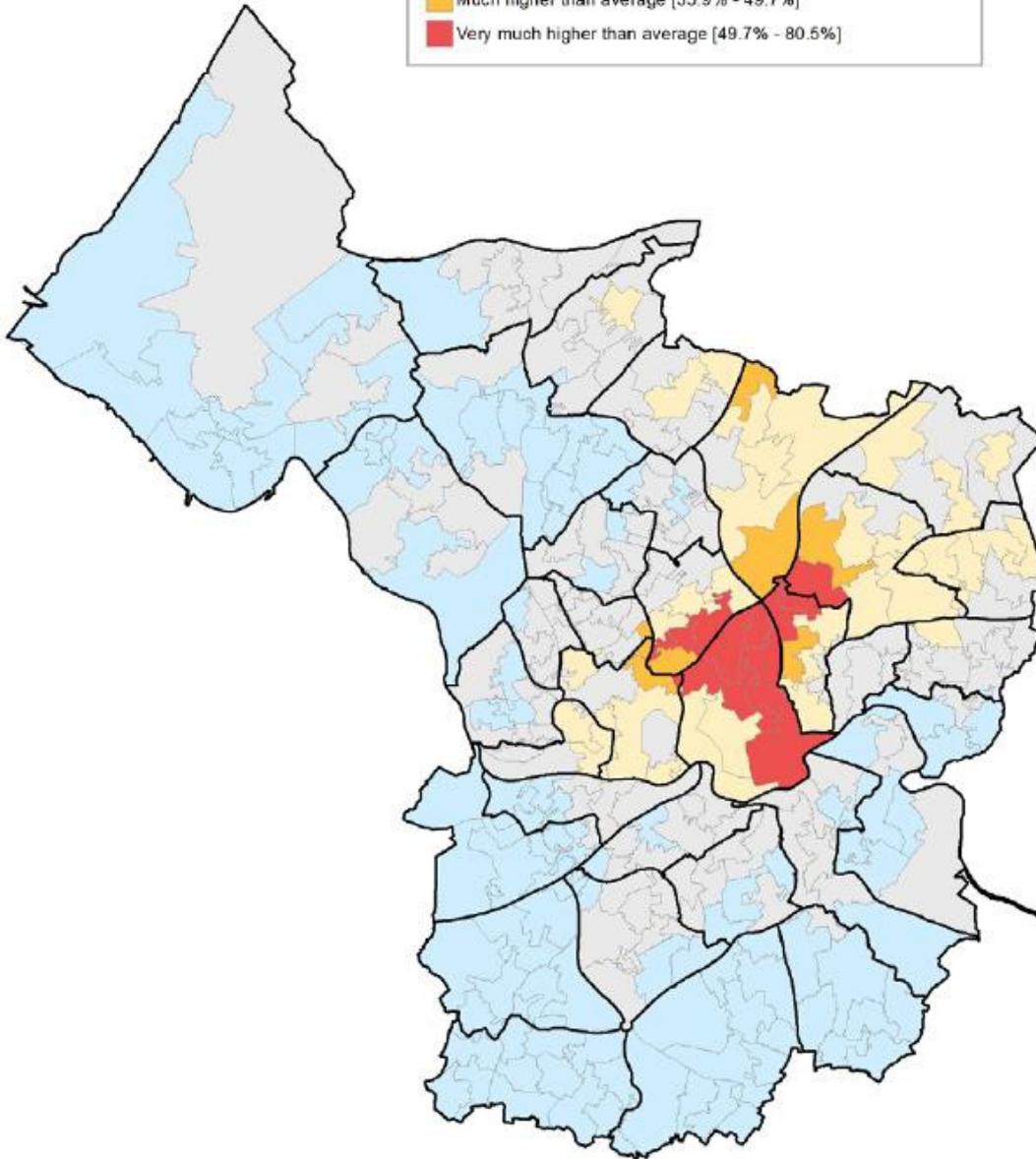
Due to the legal timeframes set in place for this project, we may not be able to offer as many exemptions and concessions as we would have liked. We are aware that there may be potential issues for our most vulnerable residents that could arise as a result of the scheme being implemented and will continue 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 February 2021.

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

Considering air pollution in relation to protected characteristics:

- Race: Black, Asian and minority ethnic 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 they experience greater exposure to air pollution. Successful interventions to improve air quality should contribute to improving the citywide health of Black, Asian and minority ethnic people.

**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.
- We do not have evidence to indicate that people are differentially exposed or vulnerable to air pollution on the basis of their: marriage / civil partnership; gender reassignment; or religion and belief.

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 Black, Asian and minority ethnic people, 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?

- The preferred outcome is to implement a range of other measures which will mean no charging CAZ zone if evidence supports this. If a scheme is needed the preference is for a small area CAZ D however this will depend on the outcome of further modelling and consultation.
- In identifying potential mitigation targets, it has noted potential exemptions and concessions for groups with protected characteristics. For example, the potential concessions for drivers with a registered disabled vehicle class, and exemptions from both charging zones 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?

Following the recent Direction and Cabinet consideration, further engagement and consultation will take part in respect of the options in the direction should they be required.

The key mitigation measures, exemptions and concessions for the proposed options 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 currently being updated following the new legal direction received on the 20th August 2020. This will include working with equalities stakeholders to target groups that were underrepresented in previous engagement and consultation.

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

As part of the OBC, an Evaluation & Monitoring Plan was drawn up. 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. Given all the recent changes, this is currently being re-drafted and will become available.

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 February 2021

Service Director Sign-Off:	Equalities Officer Sign Off: <i>Reviewed by Equality and Inclusion Team</i>
	Date: 25/8/2020