

# Consultation and Engagement



## Traffic Clean Air Zone



## Traffic Clean Air Zones Consultation

Consultation Report v1.6

11 February 2021

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## Executive Summary

### ES1 Clean Air Plan and legal framework

To address the need to improve air quality in UK urban areas, in 2017 the government formally directed 24 local authorities, including Bristol City Council, to submit plans for how they will achieve compliance with legal Nitrogen Dioxide (NO<sub>2</sub>) limits and how they would implement these plans by March 2021. Local authorities are required to model various options for achieving clean air and to take forward the option that delivers compliance using the following three legal tests:

1. Achieves compliance with the legal NO<sub>2</sub> limits in the shortest period of time;
2. Reduces human exposure as quickly as possible;
3. Ensures that compliance is not just possible but likely.

### ES2 The 2020 new Traffic Clean Air Zone options consultation

In 2019, we consulted on two options to reduce air pollution from traffic in Bristol city centre. Since then, changes in lifestyle, work and travel behaviours during the COVID-19 pandemic have led to some improvements in air quality. We have now carried out further air quality modelling to explore alternative ways to reduce traffic pollution, taking into consideration the effects of the COVID-19 pandemic.

Between 8 October and 13 December 2020, the council consulted on two new options for a Traffic Clean Air Zone (CAZ) which are designed to achieve compliance with legal NO<sub>2</sub> limits in line with legal obligations whilst mitigating the impact on vulnerable and low income households. The options were:

- **2020 option 1: a Clean Air Zone (CAZ) covering a small area of central Bristol**  
Non-compliant (older, more polluting) types of Heavy Goods Vehicles<sup>1</sup> (HGVs), buses, coaches, light goods vehicles (LGVs<sup>2</sup>), taxis and private cars would be charged to drive in the zone. This is referred to below as a small CAZ D.
- **2020 option 2: a small CAZ D surrounded by a larger charging zone (a medium CAZ C).** Vehicles would be charged to drive into the small CAZ D as outlined in option 1. Non-compliant (older, more polluting) types of HGVs, buses, coaches, LGVs and taxis would be charged to drive in the surrounding medium CAZ C. Private cars would not be charged to drive in the CAZ C. A vehicle that is charged to enter the CAZ C (outer zone) would not be charged again if they also enter the CAZ D (inner zone).

The proposed zones are shown in Figures ES1 (option 1) and ES2 (option 2).

The 2020 new Traffic Clean Air Zone options consultation used an [online survey](#) to ask respondents how concerned they are about the health impacts of poor air quality in Bristol and it sought feedback from citizens, businesses and other stakeholders on the two options. Respondents were also asked for their views on a range of financial support measures which could be considered to encourage people to change non-compliant vehicles to less-polluting travel options and/or to exempt specific groups from paying charges.

Paper copies of the survey and alternative accessible formats, including language translations, were available on request.

To boost response rates and to target low-responding parts of Bristol, 23,500 paper surveys were delivered direct to addresses in areas which have historically low response rates to consultations and high levels of deprivation. This generated 11% of responses.

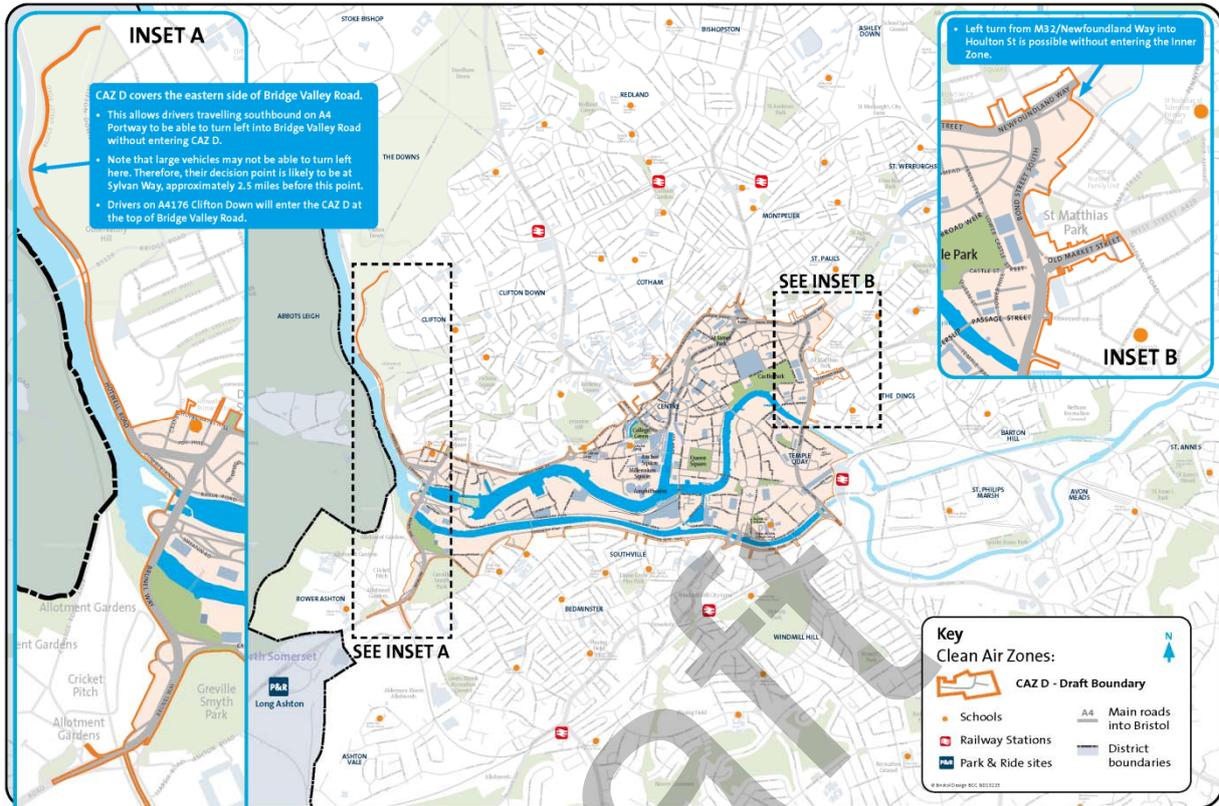
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<sup>1</sup> HGVs are goods vehicles over 3,500 kg

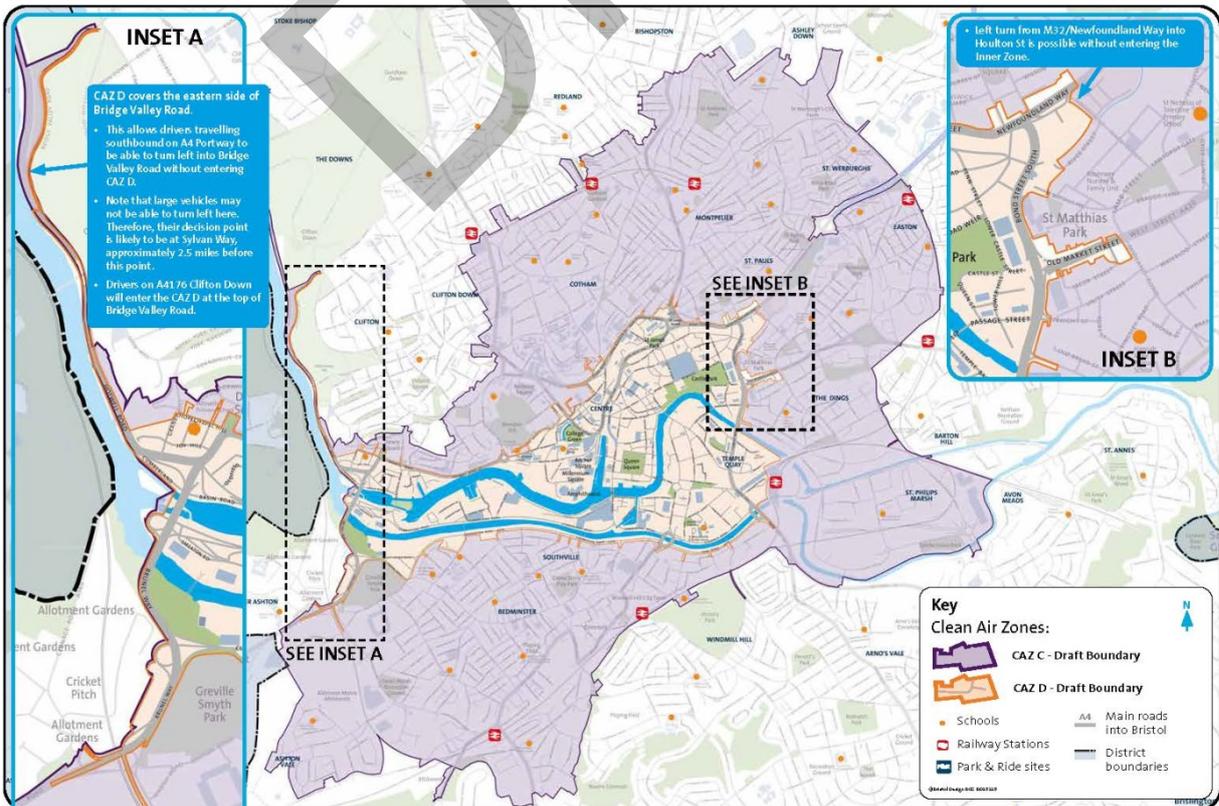
<sup>2</sup> LGVs are goods vehicles not exceeding 3,500 kg

The consultation was widely publicised through media, social media and communications with the public, partner organisations and other stakeholders, as described in Section 2.3.

**Figure ES1: Map of option 1 CAZ D boundary**



**Figure ES2: Map of option 2 CAZ D and CAZ C boundaries**



## ES3 Scope and use of this report

This consultation report describes the consultation methodology and the feedback received, including quantitative data and analysis of free text comments from the consultation survey responses. The report also summarises the points raised in 19 letters and emails which were submitted as responses to the consultation.

This consultation report does not contain the council's recommendations for a preferred CAZ option, nor an assessment of the feasibility of any suggestions received.

The final proposals for a preferred CAZ option will take into consideration responses to this consultation. The final recommendations will be included in a separate report which, together with this consultation report, will be considered by the council's Cabinet on 25 February 2021. Cabinet will then make a decision on a preferred CAZ option to present to government as part of a Full Business Case on 26 February 2021.

Cabinet decisions will be published through normal procedures for Full Council and Cabinet decisions at [democracy.bristol.gov.uk](https://democracy.bristol.gov.uk)

## ES4 Traffic Clean Air Zones Consultation - Key findings

### ES4.1 Response rate

The Traffic Clean Air Zones Consultation survey received 4,225 responses of which 3,748 (89%) were completed online and 477 (11%) were completed using paper surveys.

3,431 responses (81%) were received from postcodes within the Bristol City Council area, 356 (8%) responses were from the three other West of England authority areas and 49 (1%) were from further afield. 389 (9%) respondents did not provide an identifiable postcode.

Analysis of respondents' postcodes indicates that the 30% most deprived parts of the city<sup>3</sup> (deprivation deciles 1, 2 and 3) were under-represented in the responses, whereas response rates in the least deprived 40% of the city (deciles 7, 8, 9 and 10) are higher than the proportion of Bristol citizens living in those areas. Although the more deprived areas are under-represented, 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.

Black, Asian and mixed/multi ethnic respondents were under-represented in the response rates compared to the proportion of BAME citizens living in Bristol. We were not able to carry out some of the engagement methods we have used previously to encourage participation in these communities due to COVID-19 restrictions.

A map of response rate by ward for the Bristol respondents is presented in Chapter 3 along with the details of age profile, gender and other respondent characteristics.

### ES4.2 Concern about the health impacts of poor air quality

4,148 (98%) of the 4,225 respondents answered the question 'how concerned are you about the impacts of poor air quality in Bristol on your health and the health of your family?'

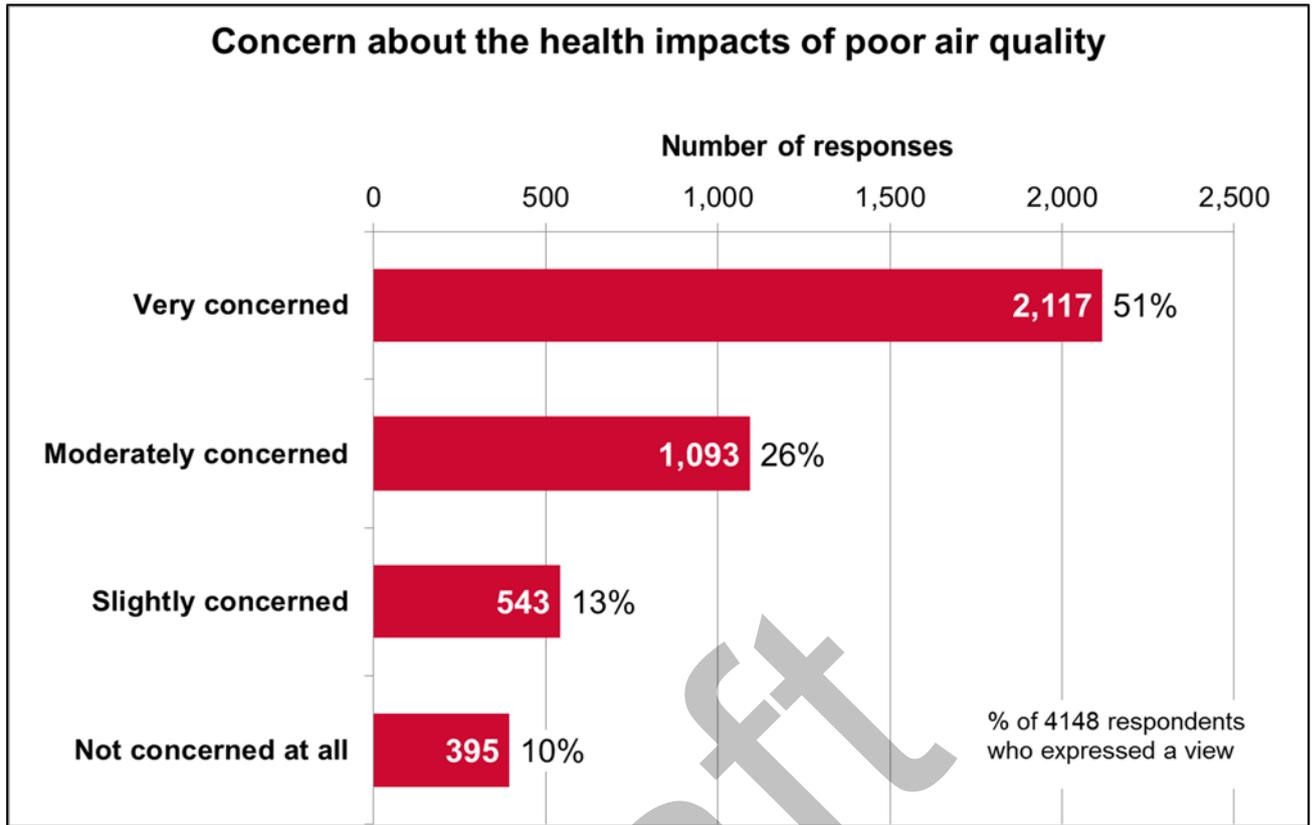
There is a high level of concern about the health impacts of poor air quality among respondents (Figure ES3):

- 77% of all respondents are very concerned (51%) or moderately concerned (26%);
- 13% of all respondents are slightly concerned;
- 10% of all respondents are not concerned.

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<sup>3</sup> Based on the 'Indices of Multiple Deprivation' (IMD) measure published by the Office for National Statistics for 263 Census areas (Lower Super Output Areas) in Bristol.

**Figure ES3: Concern about health impacts of poor air quality**



Concern about health impacts of poor air quality were compared for respondents from areas of Bristol with different levels of deprivation. At least 40% of respondents are very concerned about health impacts in all deprivation deciles. Respondents in the most deprived 10% of Bristol (decile 1) showed the lowest level of concern about health impacts of air pollution, but overall there is no clear trend in how health concerns vary between areas of high and low deprivation.

### ES4.3 Willingness to change travel methods

Respondents were asked if they would be prepared to change how they travel into central Bristol if it would avoid the need for a clean air charging zone. Of the 4,225 respondents to the new Traffic Clean Air Zone options consultation, 4,180 (99%) answered this question (Figure ES 4).

1,574 (38%) said they were prepared to change how they travel, while 537 (13%) said they would not change, and 440 (11%) said they were not sure. 1,629 (39%) said that they already walk, cycle, use public transport or a low emission vehicle.

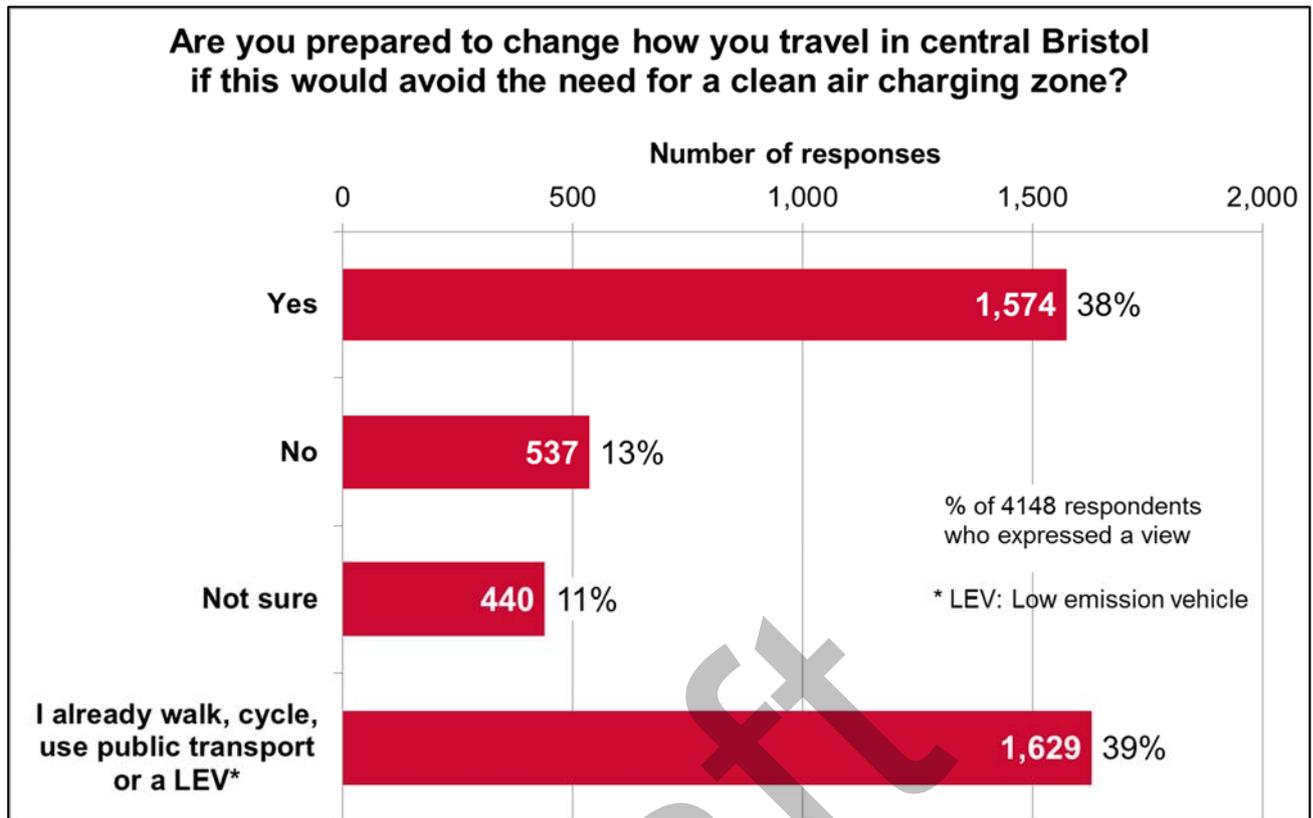
2,708 people answered the follow-up question on **how** they would change their travel. Respondents could select as many choices as they wanted.

The three most common options were switching from driving to walking (53%), using a bus instead of driving (52%) and switching to cycling (50%). The proportions of Bristol respondents selecting these options was higher than for respondents living elsewhere.

Around a third of respondents stated that they would drive a different route to avoid central Bristol (36%), use a train instead of driving (34%), use an electric vehicle (32%) or work from home to avoid driving in central Bristol (31%).

612 (23%) said they would replace their non-compliant vehicle with a compliant one, 248 (9%) said they would car share and 7% said they would use a motorbike or moped.

**Figure ES 4: Respondents’ willingness to change how they travel into central Bristol**



#### ES4.5 Views on whether each option is a good way to improve air quality

##### Overview

Of the 4,225 people who responded to the new Traffic Clean Air Zone options consultation, 4,149 (98%) stated how strongly they agree or disagree that option 1<sup>4</sup> is a good way to improve air quality in Bristol. 4,143 respondents (98%) stated how strongly they agree or disagree that option 2<sup>5</sup> is a good way to improve air quality in Bristol (Figure ES5).

The majority of respondents agree or strongly agree with both options (54% for option 1, 60% for option 2). Support is higher for option 2 and more people strongly agree with option 2 than option 1 (20% strongly agree with option 1, 32% with option 2).

A higher proportion of respondents disagree or strongly disagree with option 1 (30%) than option 2 (26%). 16% neither agree nor disagree with option 1 and 14% with option 2.

##### Differences in views on the merits of the options in areas of high and low deprivation

Views on the merits of each option were compared for respondents from areas of Bristol with different levels of deprivation.

There is higher support<sup>6</sup> for option 2 than option 1 for respondents in all deprivation deciles.

The lowest support for both options 1 and 2 is in the most deprived 20% of areas (deciles 1 and 2). There is no consistent trend in the views of respondents on the merits of option 1 or option 2 across the other deprivation deciles (deciles 3 to 10); with support being lower than the average for each option in deciles 3, 6 and 10.

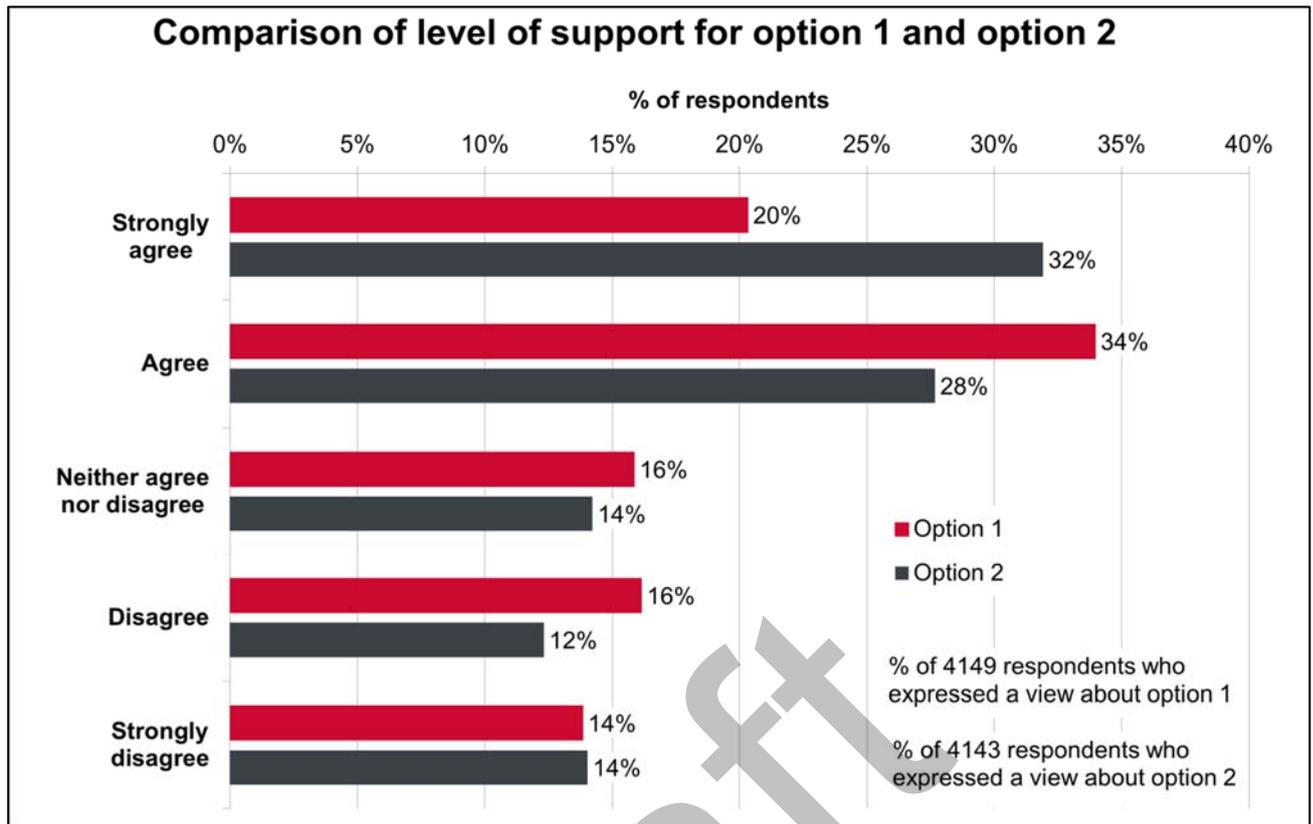
More information on views by deprivation is provided in Section 6.4.

<sup>4</sup> Option 1 is a small CAZ D covering a central area of Bristol

<sup>5</sup> Option 2 is a small CAZ D surrounded by a medium CAZ C

<sup>6</sup> Respondents who agree or strongly agree that an option is a good way to improve air quality in Bristol

**Figure ES5: Comparison of the views of all respondents on option 1 and option 2**



Forecast compliance dates were not available during the consultation and reasons given as free text indicate that the higher level of support for option 2 is due in part to respondents' assumption that option 2 would be more effective than option 1 at improving air quality.

**Reasons for respondents views on the merits of each option**

3,153 respondents (75%) provided free text feedback on option 1 and 3,144 (74%) provided free text feedback on option 2.

50% of respondents expressed reservations about aspects of option 1 and 39% mentioned reservations about option 2. The most numerous of these were:

- Neither option would create the desired behaviour change;
- Neither option 1 nor option 2 would sufficiently improve air quality;
- Concerns about unfair implications for certain demographics;
- Concerns about negative implications for certain areas;
- Concerns about negative implications for businesses.

39% of respondents mentioned aspects of option 1 they support and 46% identified things they support about option 2.

Suggested **alterations** and alternatives to each option included:

- Changes to the scheme areas;
- The options should do more to incentivise behaviour change;
- Sustainable transport infrastructure should be improved;
- Higher impact charges should be used;
- Traffic flow should be improved.

More information on reasons for why people agreed or disagreed with each option is in Section 6.5.

## ES4.6 Views on financial assistance to change or convert non-compliant vehicles

To explore the potential for financial support to encourage vehicle owners to replace or convert non-compliant vehicles to a less polluting option, respondents were asked if they would use a repayable **loan** of various amounts or a **grant** or **mobility credit** of £2000 to change their non-compliant vehicles.

### Loans

Respondents were asked to state what level of loan they think they might borrow (noting that a loan would need to be paid back), selecting from the following suggested loan amounts for each type of vehicle:

- Private cars, LGVs, private hire vehicles: loan options of £1,000, £2,000, £3,000;
- Hackney carriages (taxi): options of £4,000, £5,000, £6,000;
- HGVs: options of £10,000, £13,000, £16,000;
- Buses and coaches: options of £20,000, £25,000, £30,000.

In order to determine if people who own each vehicle type would take loans, respondents who selected 'I don't have this vehicle' have been removed from the following analysis.

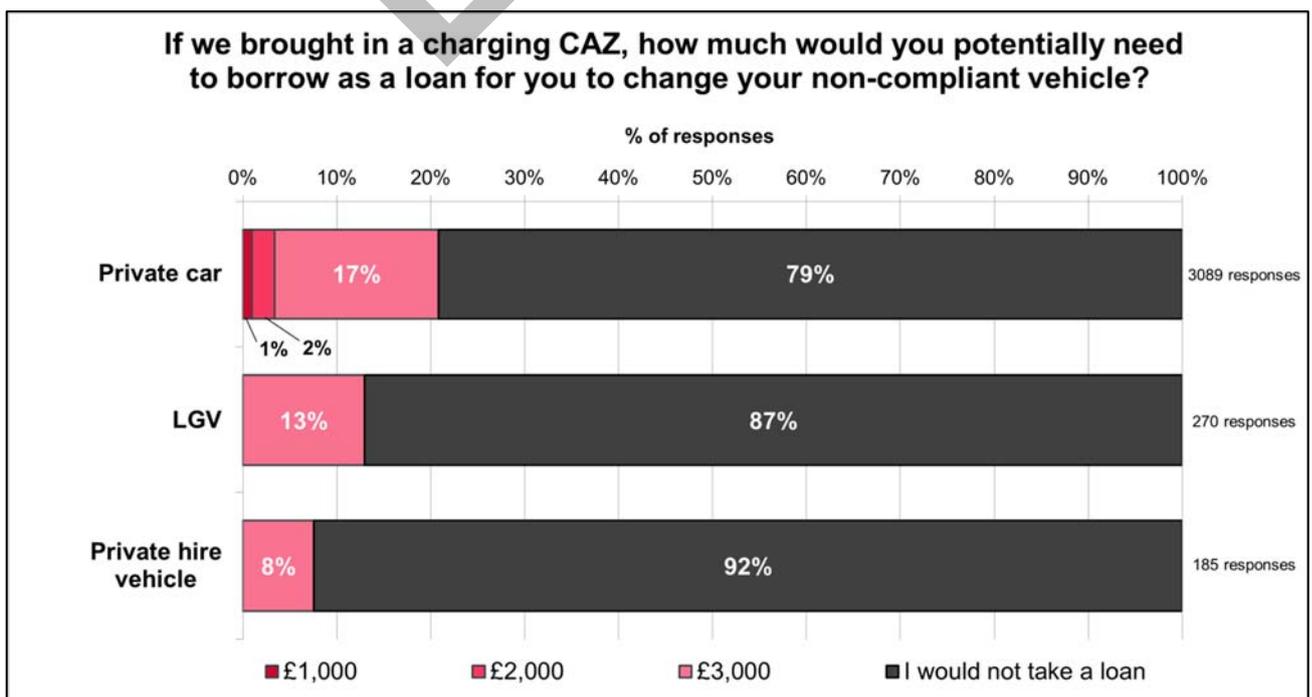
For all vehicle types, the majority of respondents would not take a loan. Of those who would take a loan, the majority selected the highest loan amount.

Owners of private cars (21%) and LGVs (13%) are the most likely to take a loan. The proportion of respondents who would take a loan for other vehicle types is:

- Private hire vehicles: 8% (all at the maximum 8%);
- Hackney carriages (taxis): 7%;
- HGVs: 11%;
- Buses: 8%;
- Coaches: 7%.

Figure ES6 shows the responses for private cars, LGVs and private hire vehicles. The equivalent results for other vehicle types is described in Section 7.2.

**Figure ES6: Views on loans for private cars, LGVs and private hire vehicles**



## Grants and mobility credits

Respondents were asked whether they would replace their non-compliant vehicle if a £2,000 grant<sup>7</sup> or mobility credit<sup>8</sup> was available. The question asked about four vehicle types; petrol cars, diesel cars, LGVs and taxis.

Respondents were much more likely to use a grant than a mobility credit for all four vehicle types. More than half of people who stated their intentions would use a grant to replace a petrol car (52%) or diesel car (57%). Fewer respondents would use a grant to replace an LGV (35%) or taxi (22%). This level of uptake for grants is much higher than for loans for all four vehicle types. The breakdown of responses follows.

- **Petrol cars:** 1,967 respondents stated their intentions for petrol cars, of whom 52% said they would replace their vehicle using a £2,000 grant and 14% said they would replace it using a £2,000 mobility credit. 44% said they would not replace their vehicle.
- **Diesel cars:** 1,345 respondents stated their intentions for diesel cars, of whom 57% said they would replace their vehicle using a grant and 12% said they would replace it using a £2,000 mobility credit. 40% said they would not replace their vehicle.
- **LGVs:** 176 respondents stated their intentions for LGVs, of whom 35% said they would replace their vehicle using a grant and 7% said they would replace it using a £2,000 mobility credit. 63% said they would not replace their vehicle.
- **Taxis:** 85 respondents stated their intentions for taxis, of whom 22% said they would replace their vehicle using a grant and 8% said they would replace it using a £2,000 mobility credit. 72% said they would not replace their vehicle.

### ES4.7 Views on exemptions and concessions for selected groups

Respondents were asked if they thought specified groups should receive an exemption (pay no charge), a concession (pay no charge for a limited period), or pay the full charge to drive a non-compliant vehicle into the proposed CAZ areas.

Respondents were asked to give their views on four groups: bus operators, coach operators, people living in the CAZ D area using private cars, and 'other' specified by the respondent<sup>9</sup>.

Figure ES7 summarises the views on exemptions and concessions.

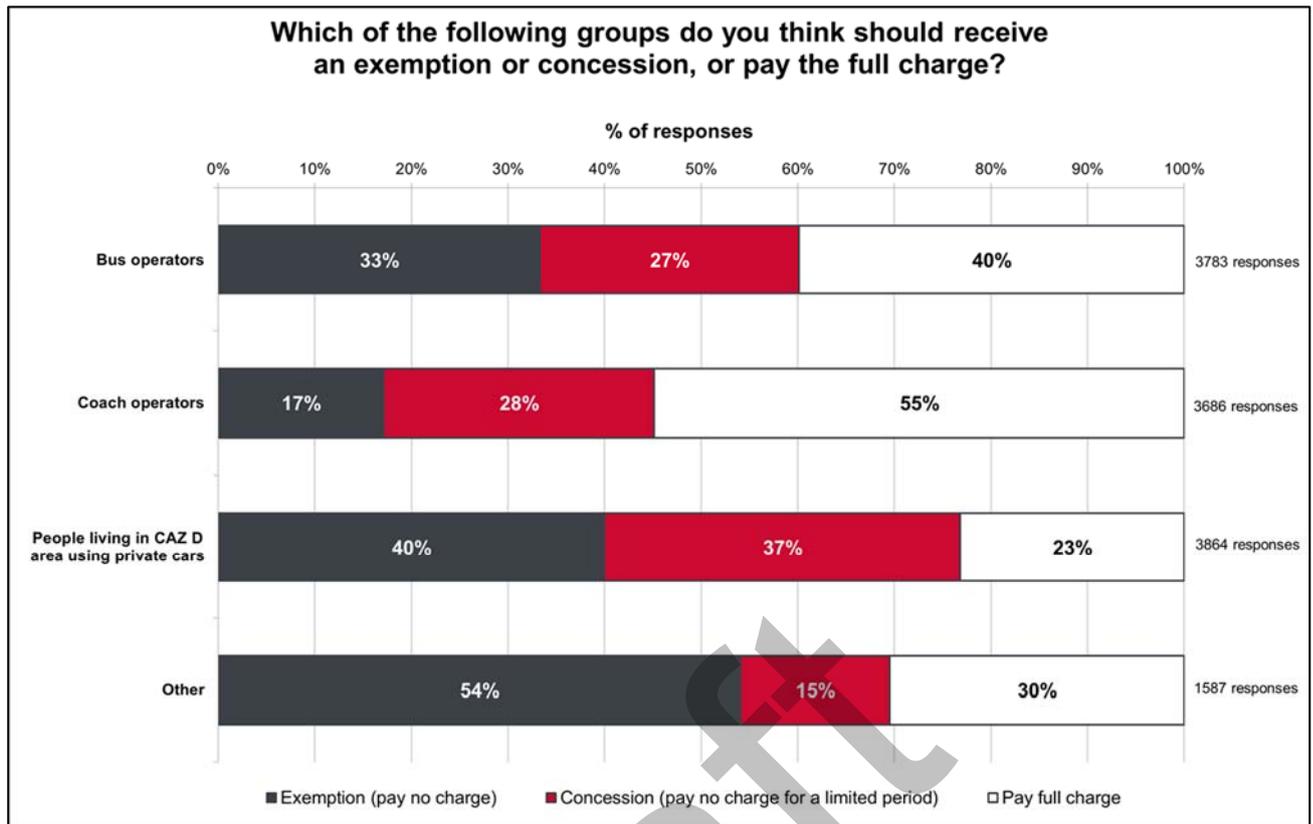
- Over three quarters of respondents thought the people living in the CAZ D area using private cars should be eligible for exemptions (40%) or concessions (37%).
- Fewer thought eligibility should apply to bus operators (33% for exemptions and 27% for concessions) or coach operators (17% for exemptions and 28% for concessions).
- 1,472 respondents provided free text answers for the 'other' category. Of these, the most frequently suggested were disabled people, people who need to drive for their work, people on low incomes, hospital users and taxis. This aligns with several of the concessions and exemptions being considered following the 2019 consultation.

<sup>7</sup> A **grant** is money provided by the government to replace or convert a non-compliant vehicle.

<sup>8</sup> A **mobility credit** is money provided by the government to change your mode of transport. The money can be spent on other transport options, for example potentially supporting the purchase of a new bike or towards public transport fares.

<sup>9</sup> The consultation explained that, following feedback to the 2019 Traffic Clean Air Zones consultation, exemptions are being considered for emergency service vehicles, NHS patient transport ambulances, community transport vehicles and vehicles registered for the disabled passenger vehicle tax class. Concessions are being considered for low income households, small businesses and taxi owners. Potential exemptions and concessions would be finalised as part of the full business case for the preferred scheme in early 2021.

**Figure ES7: Exemptions and concessions for selected groups – all respondents**



More information about feedback on exemptions and concessions is provided in Chapter 8.

#### ES4.8 Survey responses: other comments and suggestions

Respondents were invited to provide any other comments or suggestions about the new Traffic Clean Air Zone proposals as free text (Question 12).

Of the 2,034 (48%) respondents who provided further comments on the proposals:

- 876 (43%) made suggestions for **additional measures to improve air quality**. The main comments included requests for more public transport improvements (434 respondents, 21%), more improvements to facilitate cycling and walking (215 responses, 11%), encouraging the use of electric vehicles (136 responses, 7%), and improving the traffic and road layout (88 responses, 4%);
- 590 (29%) provided comments detailing **general support or lack of support for the proposals and/or air quality improvements**. Most of these comments stated respondents' concerns that the proposals are not ambitious enough and changes need to be made immediately, but generally support the need to improve air quality in Bristol;
- 365 (18%) **proposed changes** to the proposals, specifically inclusion of exemptions and concessions, targeting of specific vehicles, and changes to the scheme boundaries;
- 275 (14%) expressed concern about **impacts of a CAZ** on specific groups, journeys and places;
- 105 (5%) commented on **loans, grants and other financial incentives**;
- 65 (3%) outlined **alternative scheme suggestions** to a CAZ, such as pedestrianising the city centre, implementing more road closures, or bringing in a congestion charge;
- 74 (4%) commented on aspects of **the consultation**.

More information on the free text comments and suggestions is provided in Chapter 9.

## **ES5 Other correspondence on the Traffic Clean Air Zones Consultation**

19 letters and emails were received, providing responses to the consultation. These were from other local authorities, business groups and individual businesses, including transport operators, emergency services, healthcare providers, transport/environment interest groups, and community groups.

This feedback is summarised in Chapter 10.

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# 1 Introduction

## 1.1 Context

### 1.1.1 A Clean Air Plan for Bristol

Air pollution is made up of gases and particles in the air which are harmful to humans and other living things. To protect people's health the European Union and the UK Government has set legal standards for a range of air pollutants. In Bristol, levels of nitrogen dioxide (NO<sub>2</sub>) exceed the legal standard of 40 µg/m<sup>3</sup> in the central area and on main roads into the city.

The government has directed Bristol and several other UK towns and cities to take action which will reduce levels of NO<sub>2</sub> to within legal limits in the shortest possible time. This is known as 'achieving compliance'. The legal tests are that the preferred option to do this should:

1. Achieve compliance with legal limits in the shortest possible time;
2. Reduce human exposure as quickly as possible;
3. Ensure that compliance is not just possible but likely.

In order to clean up Bristol's air quickly, Bristol is developing a clean air plan. A major source of NO<sub>2</sub> in cities is from road traffic, particularly diesel engines. This is why we must tackle road traffic emissions as a major part of our plan.

Since 2017, we have been investigating various options.

### 1.1.2 Options to reduce air pollution from traffic

In 2019, [we consulted on two options](#) to reduce air pollution from traffic in Bristol city centre. Since then, the world around us has changed due to the COVID-19 global pandemic. This has led to some changes in lifestyle, work and travel behaviours, resulting in improvements in air quality. During the first lockdown in spring 2020, traffic levels fell sharply, largely as a result of the closure of schools, non-essential shops, and other activities. When schools and businesses reopened, there was a gradual increase in traffic volumes although not to levels experienced in previous years.

We have now carried out further air quality modelling to explore alternative ways to reduce traffic pollution, taking into consideration the effects of the COVID-19 pandemic.

We want an approach to improving air quality that does not compound the challenges already facing citizens and businesses during the COVID-19 pandemic. The council's preferred approach is to encourage citizens and businesses to sustain the recent, less polluting travel behaviour, and we are working to support this with modifications to roads around the city that make it easier to walk, cycle or use public transport.

We must also consider additional measures in case the recent positive travel behaviours are not sustained or are not sufficient to reduce pollution to within legal limits in the shortest possible time. Between 8 October and 13 December 2020, the council consulted on two new options for a Traffic Clean Air Zone (CAZ), which are designed to achieve compliance with legal NO<sub>2</sub> limits in the shortest possible time. The options were:

- **2020 option 1: a small CAZ Class D<sup>10</sup> covering a small area of central Bristol;**
- **2020 option 2: a small CAZ Class D surrounded by a medium CAZ Class C<sup>11</sup>.**

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<sup>10</sup> In a CAZ Class D (CAZ D), non-compliant (older, more polluting) types of Heavy Goods Vehicles (HGVs), buses, coaches, light goods vehicles (LGVs), taxis and private cars would be charged to drive in the zone. HGVs are goods vehicles over 3,500 kg; LGVs are goods vehicles not exceeding 3,500 kg.

<sup>11</sup> In the CAZ Class C (CAZ C), non-compliant (older, more polluting) types of HGVs, buses, coaches, LGVs and taxis would be charged to drive in the zone. Private cars would not be charged to drive in the CAZ C.

The two options are described in Section 1.2.

The consultation asked respondents how concerned they are about the health impacts of poor air quality in Bristol and it sought feedback from citizens, businesses and other stakeholders on the two options. Respondents were also asked for their views on a range of financial support measures which could be considered to encourage people to change non-compliant vehicles to less-polluting travel options and/or to exempt specific groups from paying charges.

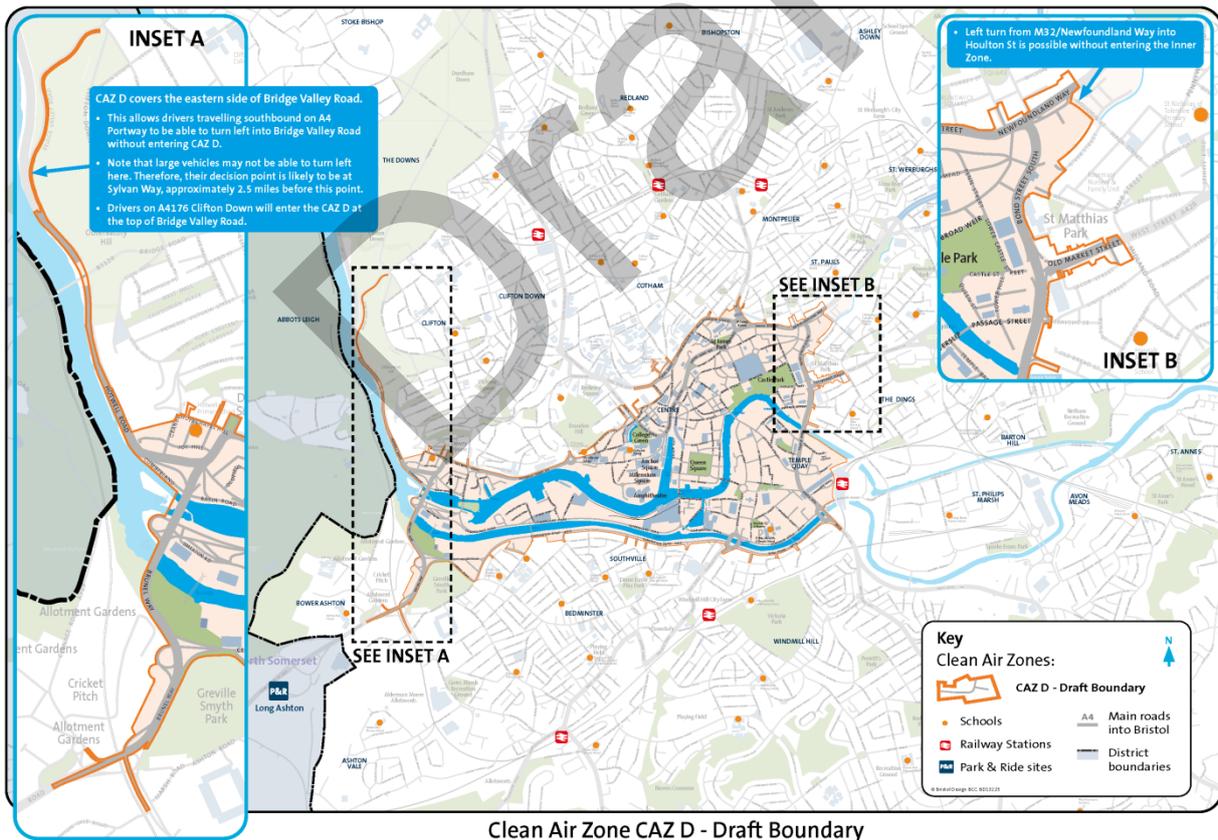
This consultation report describes the consultation methodology and the feedback received, which will be considered by the council’s Cabinet on 25 February 2021. Cabinet will then make a decision on a preferred CAZ option to present to government as part of a Full Business Case on 26 February 2021.

## 1.2 Description of the 2020 Traffic Clean Air Zone options in the consultation

### 1.2.1 Proposed Clean Air Zone (CAZ) boundaries

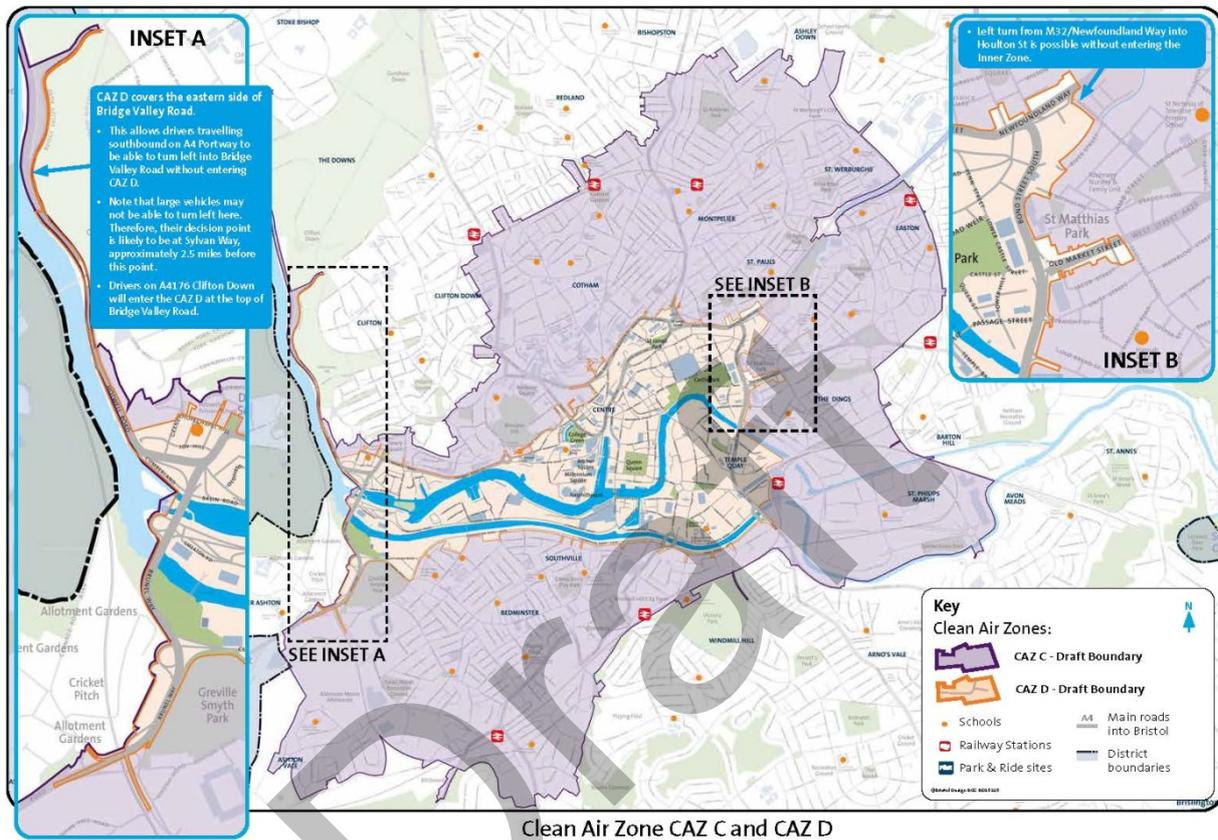
In **2020 option 1**, non-compliant (older, more polluting) types of Heavy Goods Vehicles (HGVs), buses, coaches, light goods vehicles (LGVs), taxis and private cars would be charged to drive in the small central zone shown in Figure 1. This is referred to below as a small CAZ D.

Figure 1: Map of option 1 CAZ D boundary



**2020 option 2** comprises a small central CAZ D surrounded by a medium CAZ C. In 2020 option 2, vehicles would be charged to drive into the small CAZ D as outlined in option 1. Non-compliant (older, more polluting) types of HGVs, buses, coaches, LGVs and taxis would be charged to drive in the CAZ C. Private cars would not be charged to drive in the CAZ C. The boundaries of the small CAZ D and the surrounding medium CAZ C are shown in Figure 2.

**Figure 2: Map of option 2 CAZ D and CAZ C boundaries**



### 1.2.2 Proposed charges in 2020 option 1 and 2020 option 2

The level of potential charges is not finalised. Charges would be set at a level needed to change travel behaviour and improve air quality to achieve compliance in the shortest possible time. This will be refined as part of the ongoing modelling work, which will also identify if a charging CAZ is needed. The effect of any charges, if needed, would be monitored and evaluated once in place and could be subject to change depending on vehicle and air quality levels.

Table 1 shows our estimate of proposed charges included in the consultation and the types of vehicles that would be charged to drive into the charging zones for 2020 option 1 (small CAZ D) and 2020 option 2 (small CAZ D surrounded by medium CAZ C).

For both options, the charges would apply 24 hours a day, seven days a week to non-compliant (older, more polluting) models of each type of vehicle. Any vehicle would only be charged once in each 24-hour period. For 2020 option 2, a vehicle that is charged to enter the CAZ C (outer zone) would not be charged again if they also enter the CAZ D (inner zone).

In 2020 option 1 and 2, the charges would apply to diesel vehicles which are Euro 5 or older and petrol vehicles which are Euro 3 or older – known as ‘non-compliant vehicles’. Charges would not apply to Euro 6 diesel vehicles and Euro 4, 5 and 6 petrol vehicles.

**Table 1: minimum Euro standards for compliant vehicles in 2020 option 1 and 2**

<b>Vehicle type</b>	<b>Euro category</b>	<b>Euro standard</b>
Bus	M3 (GVW over 5000 kg and more than eight seats in addition to the driver)	Euro VI
Coach	M2 (GVW not exceeding 5000 kg, ref. mass exceeding 2610 kg and more than eight seats in addition to the driver)	Euro VI
HGV	N2 (GVW over 3500 kg and ref. mass over 2610 kg) N3 (GVW over 5000 kg)	Euro VI
Large van	N1 (GVW not exceeding 3500 kg and ref. mass over 1305 kg but not exceeding 2840 kg)	Euro 6 (diesel)
	N2 (GVW over 3500 kg and ref. mass not exceeding 2840 kg)	Euro 4 (petrol)
Minibus	M2 (GVW not exceeding 5000 kg, ref. mass not exceeding 2840 kg and more than eight seats in addition to the driver)	Euro 6 (diesel) Euro 4 (petrol)
Small van/ light commercial	N1 (GVW not exceeding 3500 kg and ref. mass not exceeding 1305 kg)	Euro 6 (diesel)
		Euro 4 (petrol)
Taxi and private hire	Minibus - M2 (GVW not exceeding 5000 kg, ref. mass not exceeding 2840 kg and more than eight seats in addition to the driver)  Passenger vehicle with up to eight seats in addition to the driver	Euro 6 (diesel)
		Euro 4 (petrol)
Private car	Passenger vehicle with up to eight seats in addition to the driver  (Please note - private cars which do not meet these Euro standards would be charged in a CAZ D. No charges apply to private cars in a CAZ C)	Euro 6 (diesel)
		Euro 4 (petrol)
Ultra low emission vehicles with significant zero emission range will never be charged for entering or moving through a CAZ. Motorcycles would not be charged.		

The consultation information and questions are summarised in Section 2.1 and the full [consultation survey](#) can be viewed online.

### 1.3 Structure of this report

**Chapter 2** of this report describes the new Traffic Clean Air Zones Consultation methodology.

**Chapter 3** presents the survey response rate and respondent characteristics.

**Chapters 4 to 9** describe the survey feedback on the new Traffic Clean Air Zone options. This comprises quantitative data and analysis of free text comments from the survey responses:

- Chapter 4: concern about the health impacts of poor air quality;
- Chapter 5: respondents' willingness to change how they travel;
- Chapter 6: views on whether each option is a good way to improve air quality;
- Chapter 7: views on financial assistance for replacing non-compliant vehicles;
- Chapter 8: views on exemptions and concessions for selected groups;
- Chapter 9: other comments and suggestions received in survey responses.

**Chapter 10** describes feedback received in other correspondence (19 letters and emails).

**Chapter 11** describes how this report will be used and how to keep updated on the decision-making process.

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## 2 Methodology

### 2.1 Survey

#### 2.1.1 Online survey

The [consultation on new Traffic Clean Air Zone options survey](#) was available online on the council's Consultation & Engagement Hub ([bristol.gov.uk/consultationhub](http://bristol.gov.uk/consultationhub)) between 8 October and 13 December 2020.

#### Survey information

The survey contained the following information as context for the survey questions:

- An overview of the health impacts of poor air quality;
- The effects of COVID-19 on air quality;
- An explanation of the council's legal duty to reduce levels of NO<sub>2</sub> to within [legal limits](#) in the shortest possible time;
- An explanation of the Council's preferred approach to managing air pollution through encouraging sustained less-polluting travel patterns;
- A description of the Traffic Clean Air Zone 2020 options 1 and 2, including:
  - The proposed zone boundary and times of operation for each option;
  - The types of vehicles which would pay a charge for both options;
  - The proposed scale of charges for both options.

A summary of the above information was also provided in a short subtitled video on the first page of the consultation.

#### Survey questions

The survey questions sought feedback on:

- How concerned respondents are about the impacts of poor air quality in Bristol on their health and the health of their family;
- Whether respondents are prepared to change how they travel in central Bristol if it would avoid the need for a clean air charging zone and, if so, what they would be prepared to do;
- Whether each option would be a good way to improve air quality in Bristol. The question structure (a five-point Likert scale from 'strongly agree' to 'strongly disagree' for each option) made it possible for respondents to indicate if they agreed with both options, disagreed with both options or agreed with one option and disagreed with the other;
- Why respondents agreed or disagreed with options 1 and 2;
- Whether respondents would need a loan to change their non-compliant vehicle, and if so what amount of loan would be required. We asked this about private cars, LGVs, private hire vehicles, hackney carriages (taxis), HGVs, buses and coaches;
- Whether respondents would replace their non-compliant vehicle if a £2,000 grant<sup>12</sup> or mobility credit<sup>13</sup> was available. We asked this about petrol cars, diesel cars, LGVs and taxis;

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<sup>12</sup> a grant is used to help replace a non-polluting vehicle with a less polluting one.

<sup>13</sup> a mobility credit is used to help pay for other transport options, e.g. buying a bike or public transport fares.

- Whether there should be exemptions (pay no charge) or concessions (pay no charge for a limited period) in option 1 and 2 for bus operators, coach operators, people living in the CAZ D area using private cars, and any other groups respondents could specify.
- Any other comments or suggestions about the Traffic Clean Air Zone proposals.

The 'About you' section requested information which helps the council to check if the responses are representative of people across the city who may have different needs:

- Respondents' postcode – this identifies if any parts of the city are under-represented in responding to the consultation and it can show if people from more deprived areas of the city have different views compared to people living in less deprived areas;
- How respondents normally travel for most of their journeys in Bristol;
- Equalities monitoring information – this enables the council to check if we receive responses from people with protected characteristics under the Equality Act 2010;
- Other information about respondents; for example whether they are a council employee, a councillor, or represent a local business;
- How respondents found out about the consultation – to help the council publicise future consultations effectively.

Respondents could choose to answer some or all of the questions in any order and save and return to the survey later.

### **2.1.2 Paper surveys and alternative formats**

23,500 paper copies of the survey with Freepost return envelopes were delivered to areas in the city with typically low response rates to public consultations. Because response rates from more deprived parts of Bristol tend to be lower than from less deprived areas, the distribution areas targeted the more deprived parts of each ward, as shown in Figure 3.

Paper copies were also sent out on request.

Alternative accessible formats (easy read, braille, large print, audio, British Sign Language (BSL) and translation to other languages) were available on request.

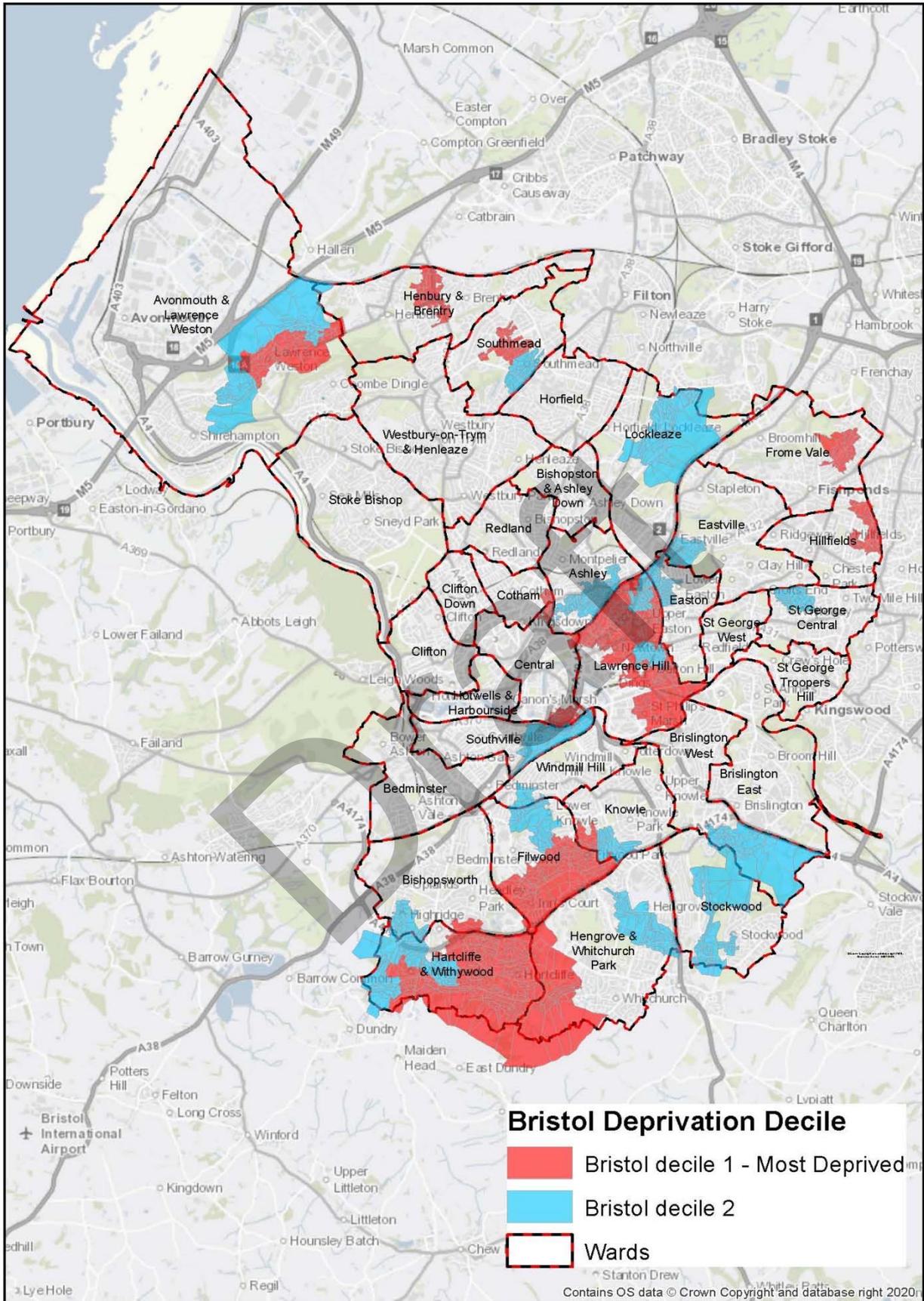
### **2.1.3 Meetings with specific groups**

Council officers briefed the following organisations on details of the 2020 Traffic Clean Air Zones consultation, answered questions and invited survey responses:

- University Hospitals Bristol NHS Foundation Trust;
- Southmead Hospital;
- University of Bristol;
- University of the West of England;
- Bristol Workplace Travel Network;
- Business West (with 55 businesses joining the call);
- Bristol Clean Air Alliance;
- Bristol Walking Alliance;
- Bristol Physical Access Chain;
- Waste contractors.

The officers also briefed officers in neighbouring councils.

**Figure 3: Distribution areas for paper surveys**



## 2.2 Other correspondence

19 emails and letters were received in response to the consultation. These are reported in Chapter 10, separately to the survey responses.

## 2.3 Publicity and briefings

### 2.3.1 Objective

The following programme of activity was undertaken to publicise and explain the new Traffic Clean Air Zone options consultation. The primary objective was to ensure that information was shared across a wide range of channels, reaching as broad a range of audiences as possible in order to maximise response rates, including feedback by groups that tend to be under-represented in surveys.

### 2.3.2 Publicity materials

A **Communications Toolkit** was prepared for distribution to partner organisations and stakeholders to help them publicise the consultation. The five-page toolkit included:

- a description of the consultation and how to take part;
- downloadable posters;
- suggested copy for newsletters and websites;
- images and suggested posts for Twitter and Facebook.

120 **posters** were displayed in shops in central Bristol and main shopping centres on busy high streets.

### 2.3.3 Bristol City Council channels

The consultation and promotional tools were shared via the following council channels and networks:

- Bristol City Council's website;
- Clean Air for Bristol website which also had a wealth of further information about the consultation and air quality in the city;
- E-newsletters: Citizen COVID-19, Ask Bristol, Bristol Older People's Forum newsletter;
- Emails to Citizens' Panel members;
- All members / councillors;
- Tier 1 stakeholders (sent by Mike Jackson) and list of other key stakeholders;
- Voice and Influence Partnership and equalities groups;
- CAZ & transport email subscribers;
- Can Do volunteers;
- Community development team;
- Businesses, schools and community groups;
- Other local authorities;
- Staff-led groups;
- Youth organisations;
- Internal communication channels.

### 2.3.4 Bristol City Council Partners and other stakeholders

The communications toolkit was shared with partner organisations and other stakeholders with a request to complete the online survey and publicise the consultation via their networks. Emails were followed up with phone calls to many stakeholders by the council's Travel Advisors. The distribution list included:

- MPs;
- All 70 ward councillors;
- Police, fire and ambulance services;
- Highways England and Environment Agency;
- NHS providers and commissioners, including 42 GP practices;
- The University of the West of England (UWE) and University of Bristol;
- 161 primary and secondary schools;
- 19 trade associations including Business West, the CBI, the Federation of Small Businesses and Destination Bristol;
- Business Improvement Districts;
- Transport user groups;
- 112 equalities groups and 26 faith groups;
- Local community associations and voluntary and community sector organisations.

In addition, the council's travel advisors emailed and phoned 1,385 businesses:

- 592 businesses identified to be as most likely to be affected by the proposals, including:
  - 316 general businesses (Bristol markets, builders merchants, catering, cleaning, distribution, engineering, financial, housing associations, legal, manufacturing, trade and membership organisations);
  - 116 retail businesses;
  - 132 transport businesses (car clubs, car hire, taxi, driving schools, transport operators, garages);
  - 28 utilities companies (energy, water, telecoms);
  - Waste and recycling companies.
- 446 additional business contacts with whom the council has established working relationships via the Access West project;
- 347 other businesses in business parks across Bristol.

### 2.3.5 Public engagement events

During the early part of the consultation, officers gave out postcards and paper surveys and held four engagement events where people could fill in the online survey using tablets:

- College Green;
- Queen Square;
- Crow Lane and Blaise Castle;
- Gainsborough Square.

It was not possible to complete the programme of planned engagement events when more restrictive COVID-19 protocols were introduced in the autumn.

### **2.3.6 Media engagement**

A press release with details of the consultation was issued to coincide with Clean Air Day on 8 October 2020.

This resulted in coverage in all regional media outlets including TV, radio and print.

Information about the consultation was also shared with Bristol's local community newsletters and hyperlocal publications, including advertisements in the Voice magazines, Up Our Street and The Pigeon.

### **2.3.7 Social Media – posts, outreach and advertising**

Regular posts were placed on Bristol City Council's social media channels (Twitter, Facebook, Instagram, Nextdoor and LinkedIn) throughout the consultation, with increased posts at launch, 'two weeks left' and in the final days. The Clean Air For Bristol Twitter account was also used to raise awareness of the consultation.

Targeted posts used wording to appeal to specific audiences. Relevant organisations, groups and other influencers were also tagged in social media posts.

A bespoke infographic and a video of Councillor Dudd talking about the consultation were shared via the Bristol City Council (BCC) and Clean Air For Bristol (CAFB) Twitter accounts.

### **2.3.8 Radio**

The consultation was advertised on local radio stations:

- A five week radio advertising campaign on Ujima Radio and BCFM;
- Live reads on Ujima Radio and BCFM in the final weeks of consultation;
- Promotion on the Ujima social media network.

### 3 Survey response rate and respondent characteristics

#### 3.1 Response rate to the survey

The Traffic Clean Air Zones Consultation survey received 4,225 responses of which 3,748 (89%) were self-completed online and 477 (11%) were self-completed using paper surveys.

#### 3.2 Geographic distribution of responses

3,431 responses (81%) were received from postcodes within the Bristol City Council area.

214 (5%) responses were from South Gloucestershire, 105 (2%) were from North Somerset, and 37 (1%) were from Bath & North East Somerset (B&NES). 49 (1%) responses were from further afield (Figure 4).

23 (less than 1%) respondents provided unidentifiable postcodes and 366 (9%) did not provide a postcode.

**Figure 4: geographic distribution of responses**

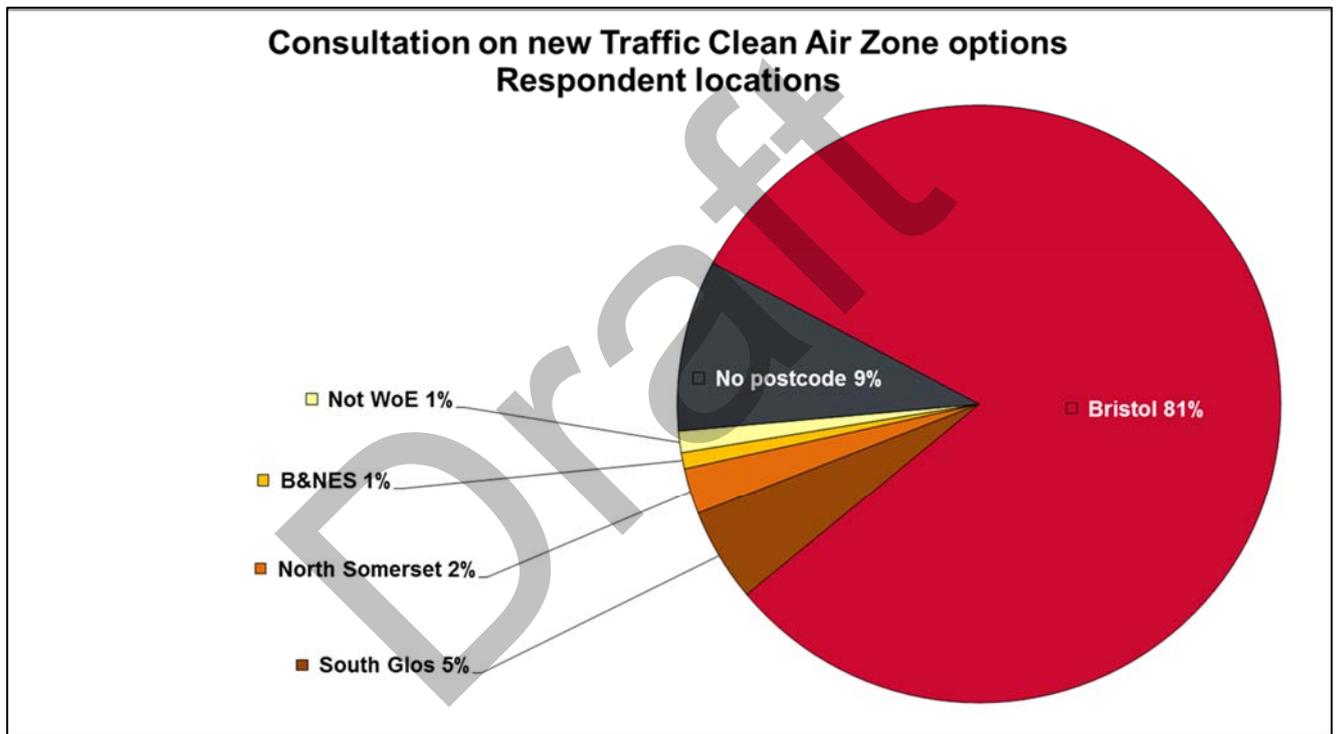


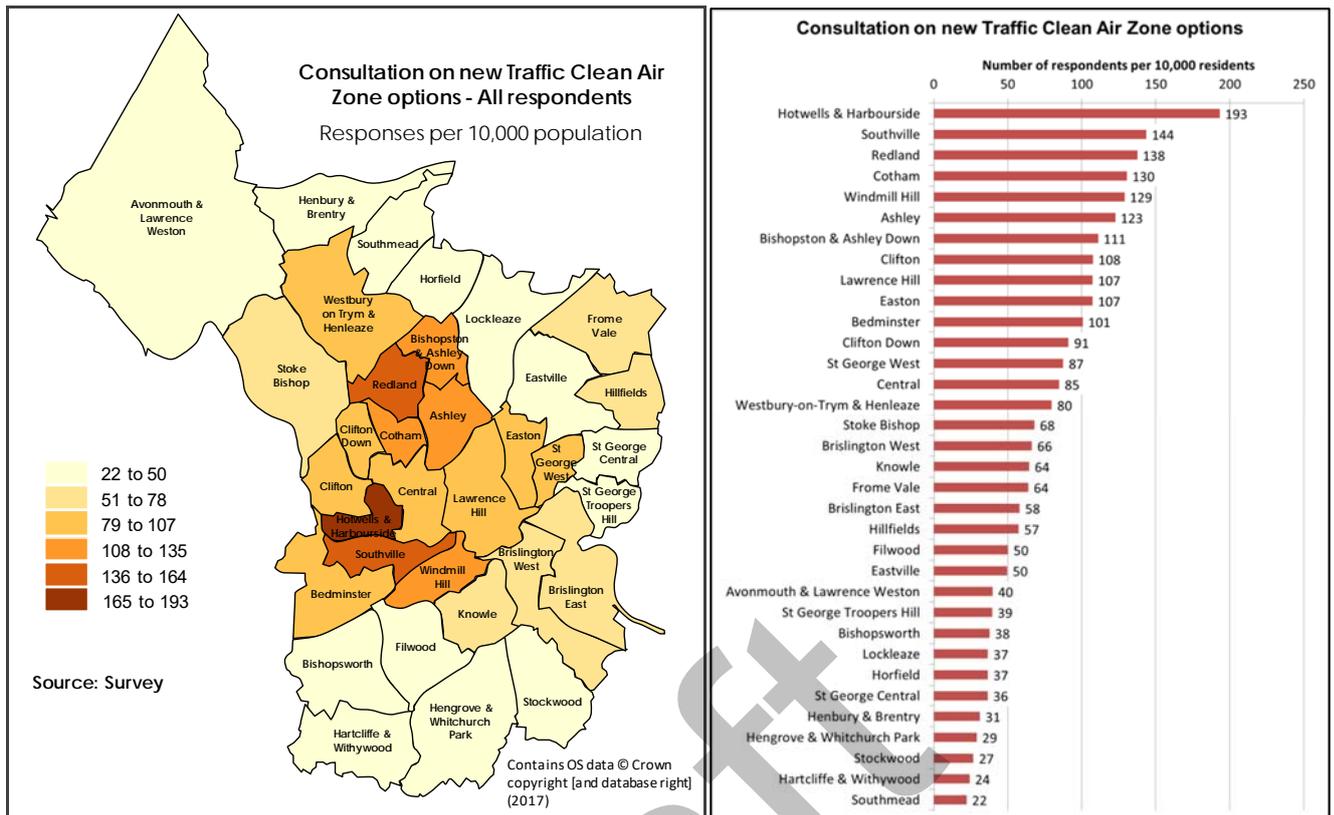
Figure 5 shows the response rates per 10,000 citizens for each ward, based on the 3,431 responses from Bristol postcodes.

The highest response rates are from Hotwells and Harbourside ward which would be within the proposed CAZ D boundary and Southville ward which borders the southern boundary of the proposed CAZ D.

High response rates were received from wards in central and west areas of the city, within or bordering the proposed CAZ C in option 2.

The lowest response rates are from the outer wards in the north and south of Bristol.

**Figure 5: geographic distribution of responses in Bristol**



### 3.3 Response rate from areas of high and low deprivation

The home location of respondents in Bristol was compared with nationally published information on levels of deprivation across the city<sup>14</sup> to review if the responses received include a cross-section of people living in more deprived and less deprived areas. This helps the council to know if the views of citizens in more deprived areas differ from people living in 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). Figure 6 compares the percentage of Bristol respondents<sup>15</sup> living in each of the deprivation deciles (red bars) to the percentage of all Bristol citizens who live in each decile (grey bars).

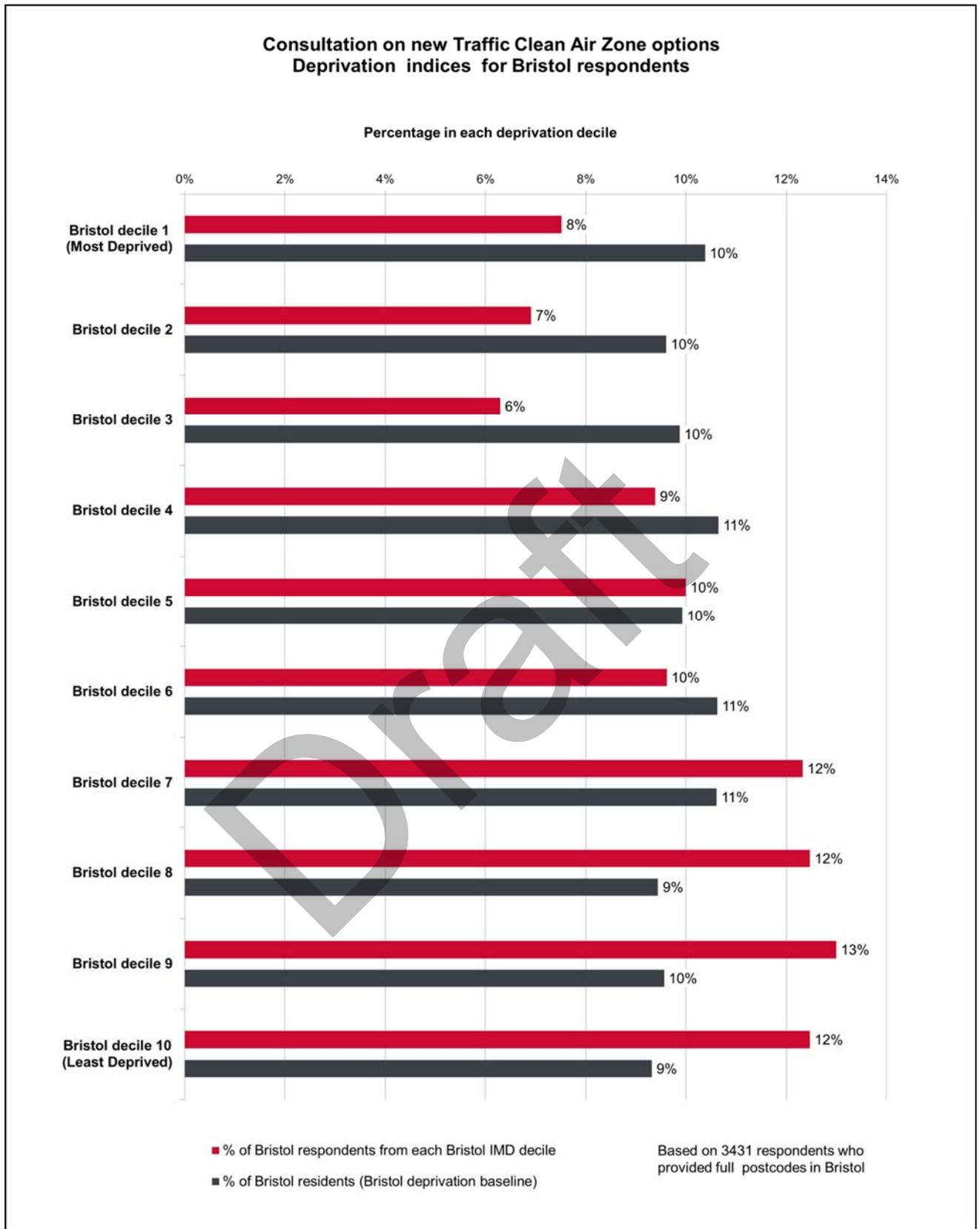
Figure 6 shows the response rate from the most deprived parts of Bristol (deciles 1, 2, 3) is less than the proportion of citizens living in those areas. The proportion of respondents in deprivation deciles 4, 5 and 6 broadly matches the proportion of Bristol citizens living in deciles 4, 5 and 6. Response rates from the least deprived areas of the city (deciles 7 to 10) are higher than the proportion of Bristol citizens living in those areas.

The programme of targeted communications substantially increased responses from the most deprived 20% of the city. Although the more deprived areas are under-represented, 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.

<sup>14</sup> The Office for National Statistics (ONS) publishes information about deprivation for 32,844 small areas - known as ‘Lower Super Output Areas’ (LSOAs) - throughout England. For each of these areas, a measure of deprivation is published called ‘Indices of Multiple Deprivation’ (IMD), which takes into account 37 aspects of each area that cover income, employment, education, health, crime, barriers to housing and services, and living environment. The home location of respondents to the consultation was compared with the IMD scores for the 263 Lower Super Output Areas that cover the Bristol City Council area.

<sup>15</sup> Based on 3,431 respondents who provided full postcodes in the Bristol administrative area.

**Figure 6: Comparison of response rate from areas of high and low deprivation**



(Percentages in Figure 6 are given to the nearest integer. The length of bars in the chart reflects the unrounded percentage; hence bars shown as 10% may be slightly different in length.)

### 3.4 Characteristics of respondents

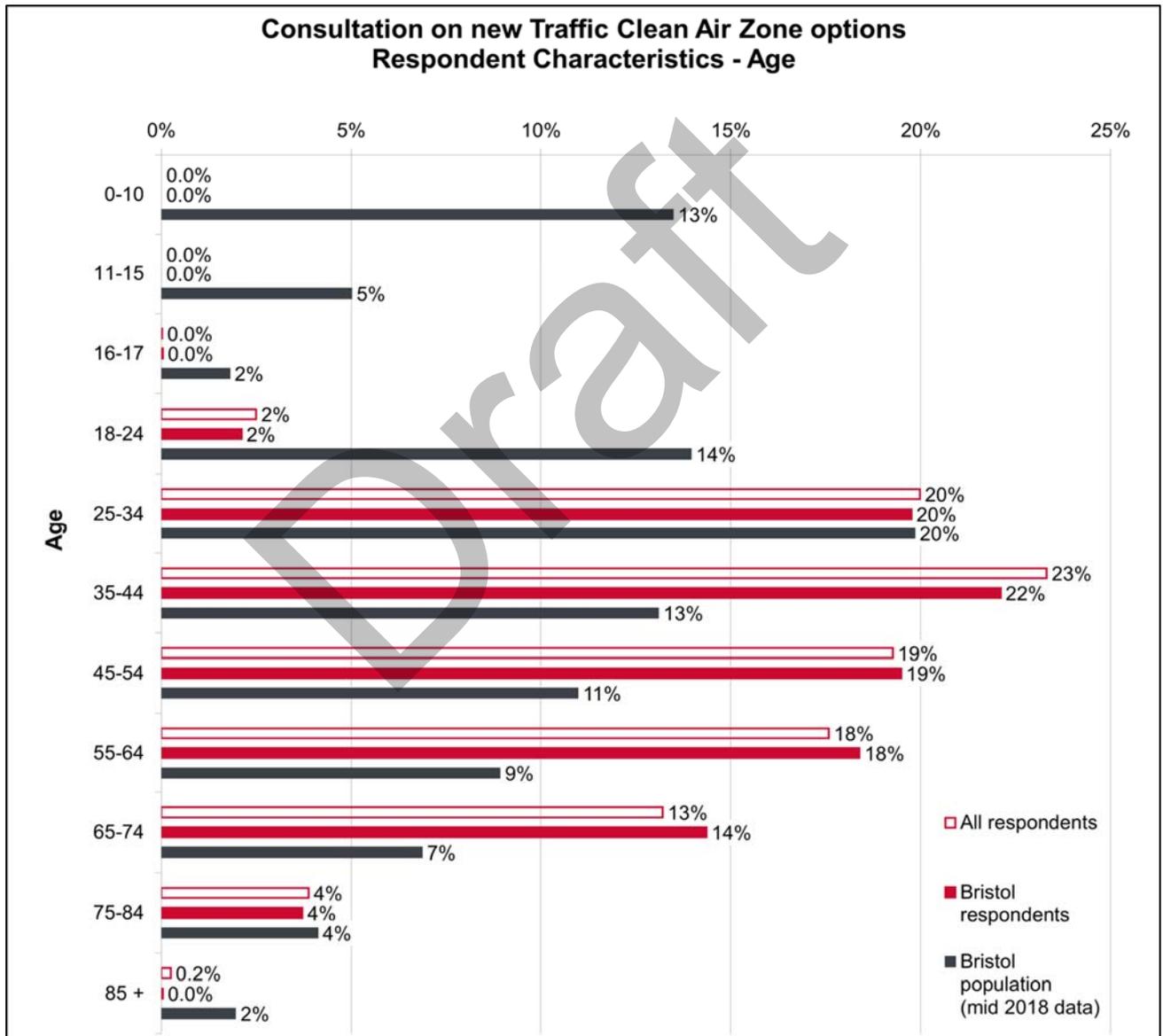
4,192 (99%) people answered one or more of the equalities monitoring questions.

#### Age

The most common age of respondents was 35-44 years (23%), followed by 25-34 (20%) and 45-54 (19%). The proportion of responses in the age categories 25-34 and 75-84 closely match these age groups' proportion of the population in Bristol. The proportion of responses in the age categories 35-44, 45-54, 55-64 and 65-74 was higher than the proportions of these age groups living in Bristol. Survey responses from children (under 18), young people aged 18-24 and people aged 85 and older were under-represented.

In each age category, the proportions of all respondents and Bristol respondents were similar.

**Figure 7: Age of respondents**

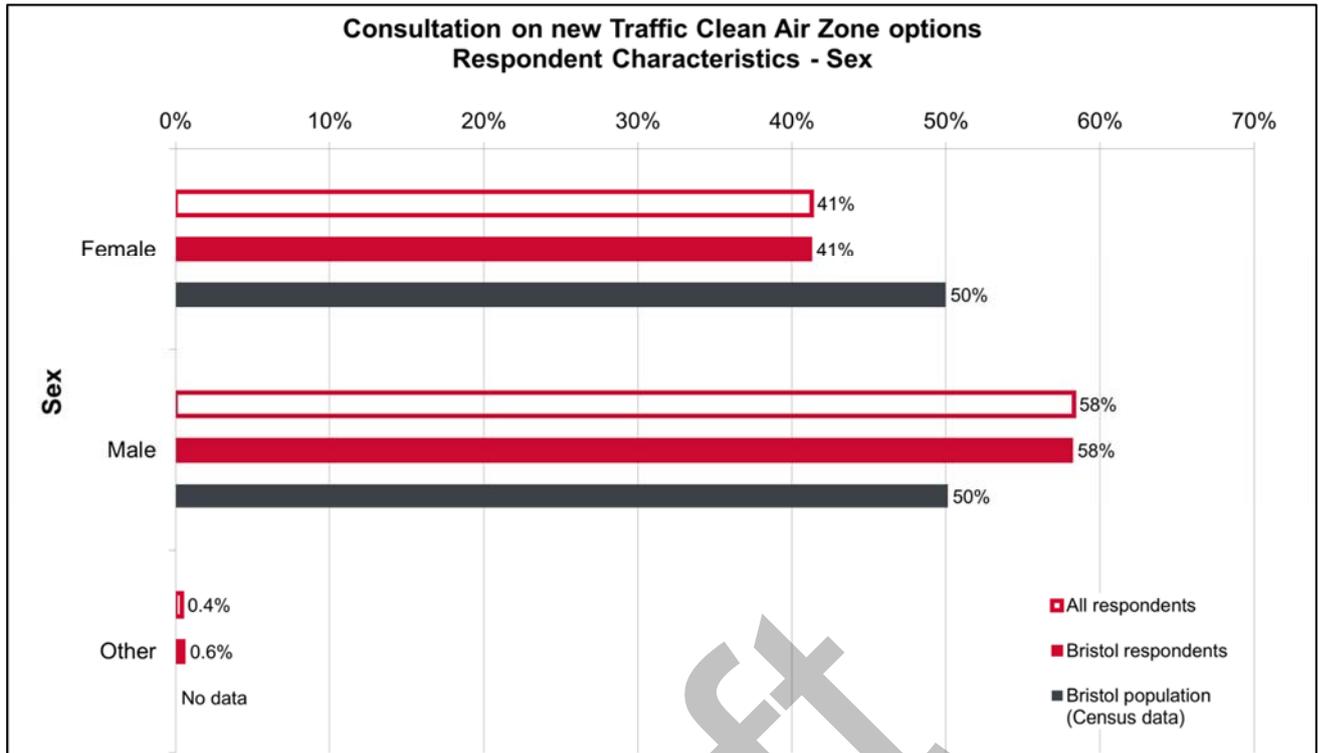


#### Sex

41% of all responses were from women and 58% were from men. 0.4% were from people who identified as 'other' (0.6% for Bristol respondents).

These percentages exclude the 8% of respondents (7% of Bristol respondents) who answered 'prefer not to say'.

**Figure 8: Sex of respondents**

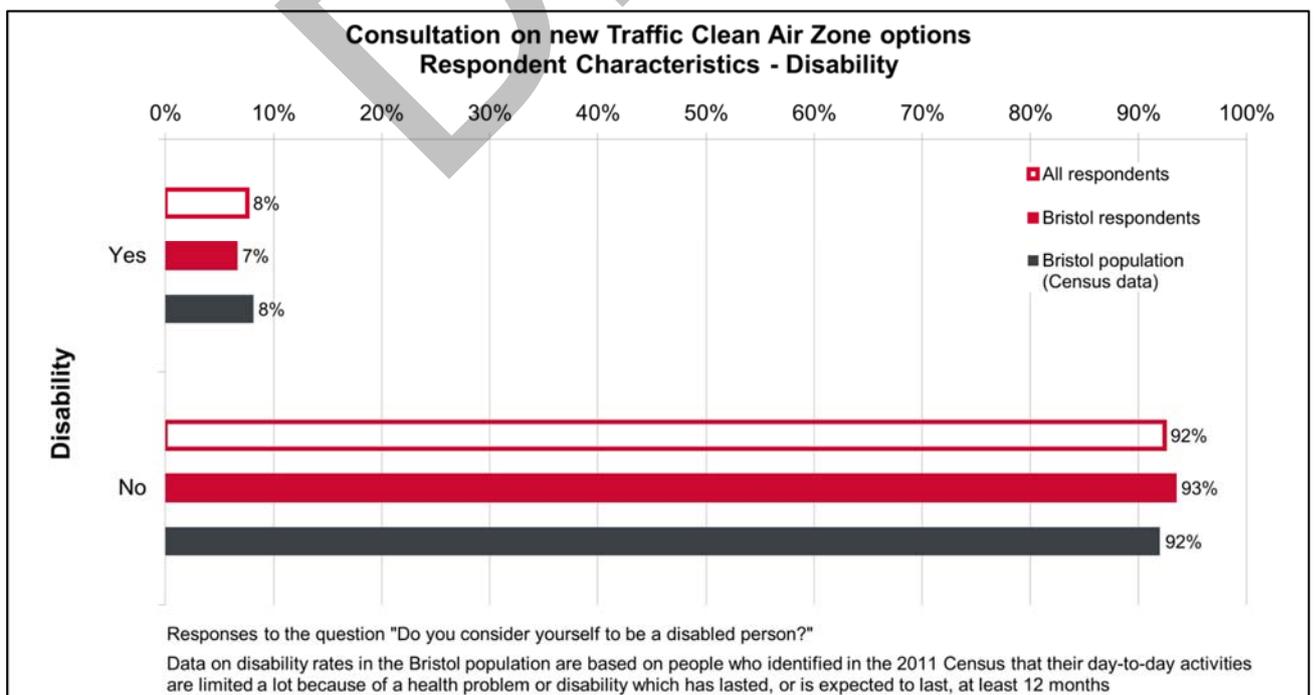


**Disability**

The proportion of disabled respondents (8%) matched the proportion of disabled people living in Bristol<sup>16</sup>. The proportion of disabled respondents from Bristol was 7%.

These percentages exclude the 5% of respondents (5% of Bristol respondents) who answered ‘prefer not to say’)

**Figure 9: Disability**



<sup>16</sup> Data on disability rates in the Bristol population are based on people who identified in the 2011 Census that their day-to-day activities are limited a lot because of a health problem or disability which has lasted, or is expected to last, at least 12 months.

## Ethnicity

The proportions of White British respondents (85%) and White British respondents from Bristol (84%) are higher than the proportion of White British people in the Bristol population.

The response rates from White Irish (2%) and Other White respondents (8%) were also higher than the proportion of these groups living in Bristol.

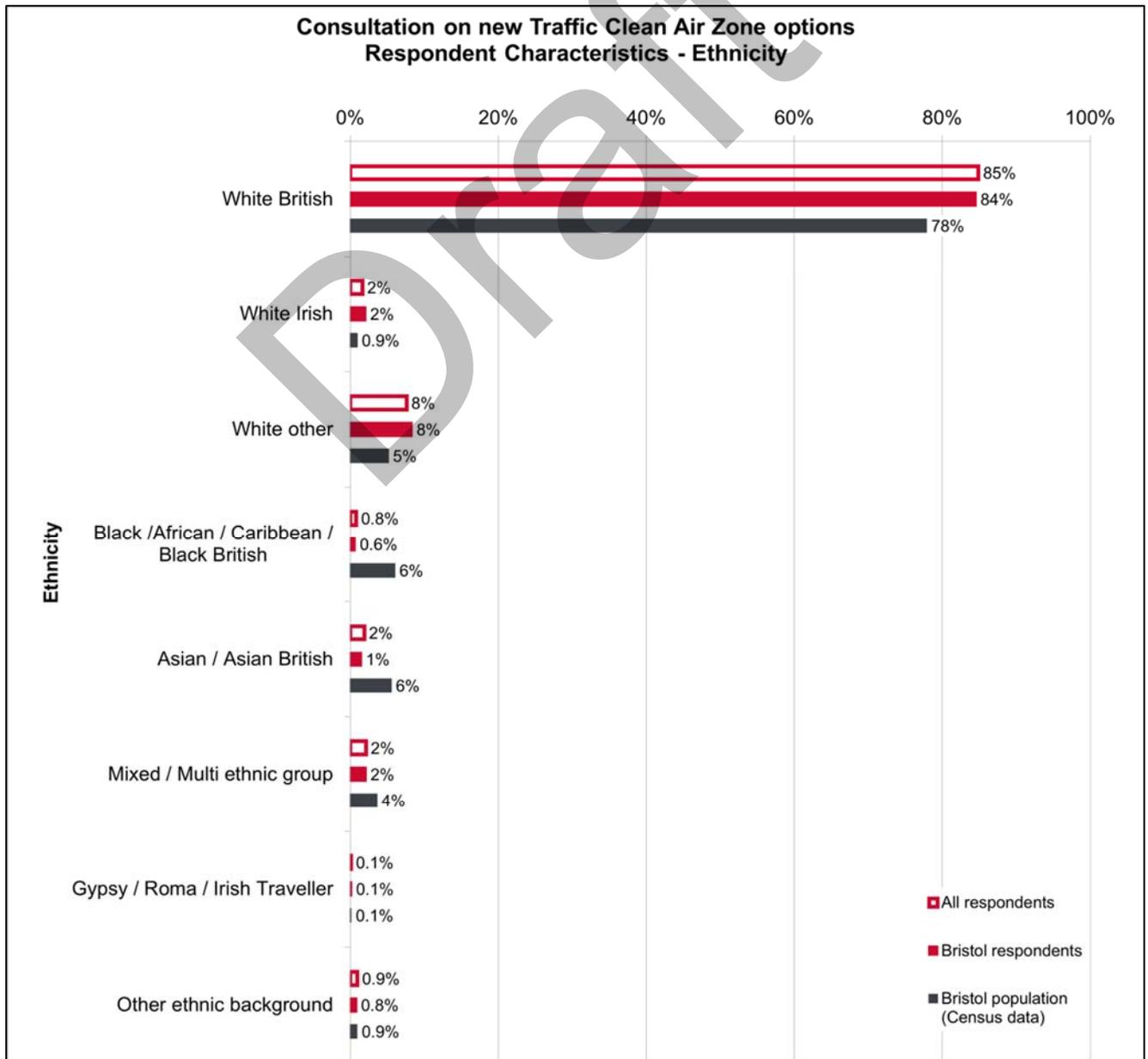
Black, Asian and mixed/multi ethnic respondents were under-represented in the response rates compared to the proportion of BAME citizens living in Bristol. We were unable to carry out some of the engagement methods we have used previously to encourage participation in these communities due to COVID-19 restrictions.

The response rates from Gypsy / Roma / Irish Traveller people (0.1%) and other ethnic backgrounds (0.9%) closely matches the proportions of these citizens living in Bristol.

These percentages exclude the 9% of respondents (8% of Bristol respondents) who answered ‘prefer not to say’)

The proportion of each ethnicity for all respondents closely matches Bristol respondents, with the exception of Asian/Asian British, for whom the response rate for citizens giving Bristol postcodes (1%) is lower than for all respondents (2%).

**Figure 10: Ethnicity of respondents**



## Religion/Faith

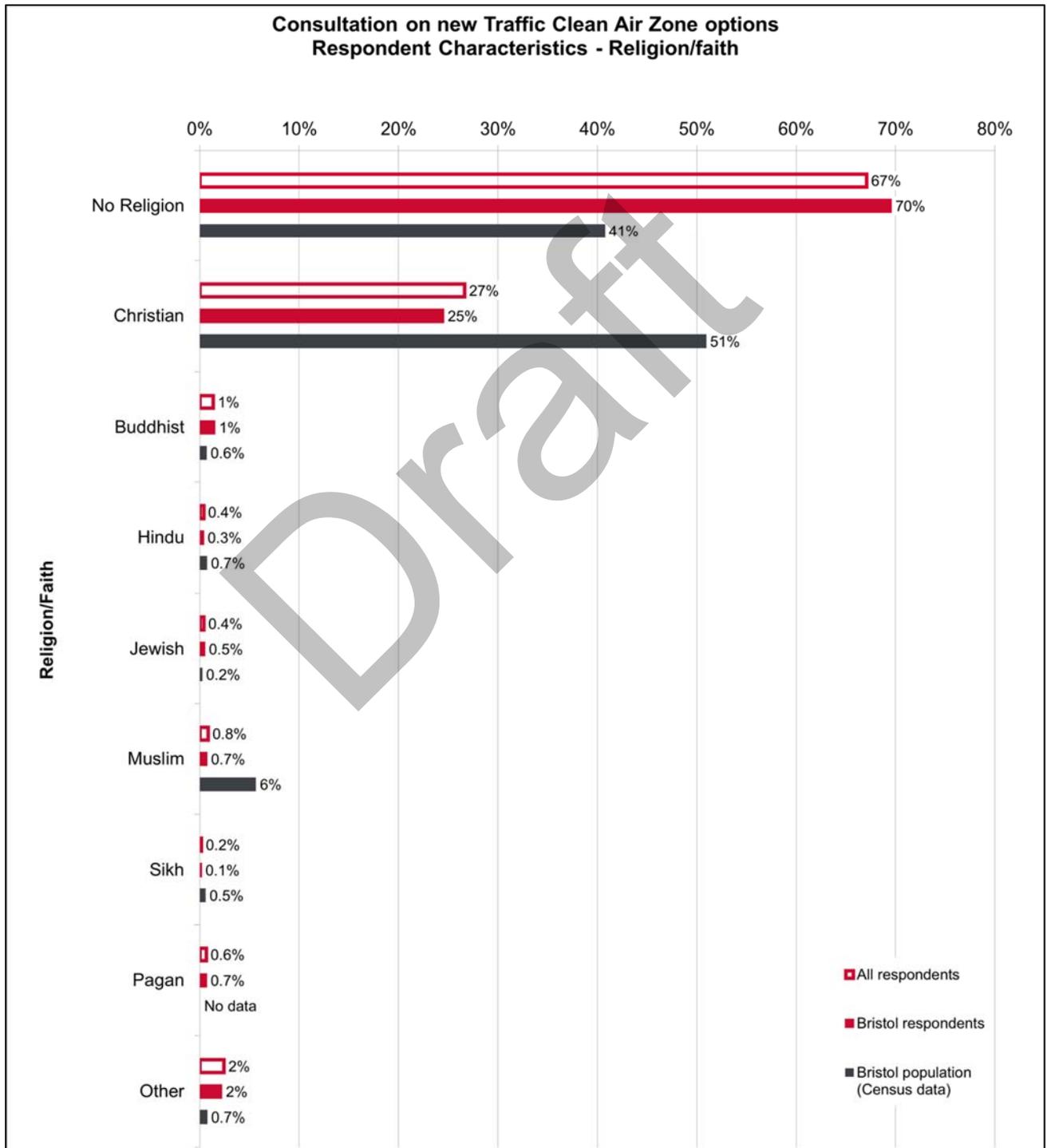
Religion/faith - People with no religion (67% of respondents and 70% of Bristol respondents) responded in higher proportions than people of no religion in Bristol’s population.

Christians (27%), Muslims (0.8%), Hindus (0.4%) and Sikhs (0.2%) were under-represented compared to the proportions of people with these faiths living in Bristol.

The proportion of Jewish respondents (0.4%), Buddhists (1%) and people of other faith (2%) were higher than the Bristol population.

The proportion of each religion/faith for all respondents is similar to Bristol respondents.

**Figure 11: Religion / faith of respondents**

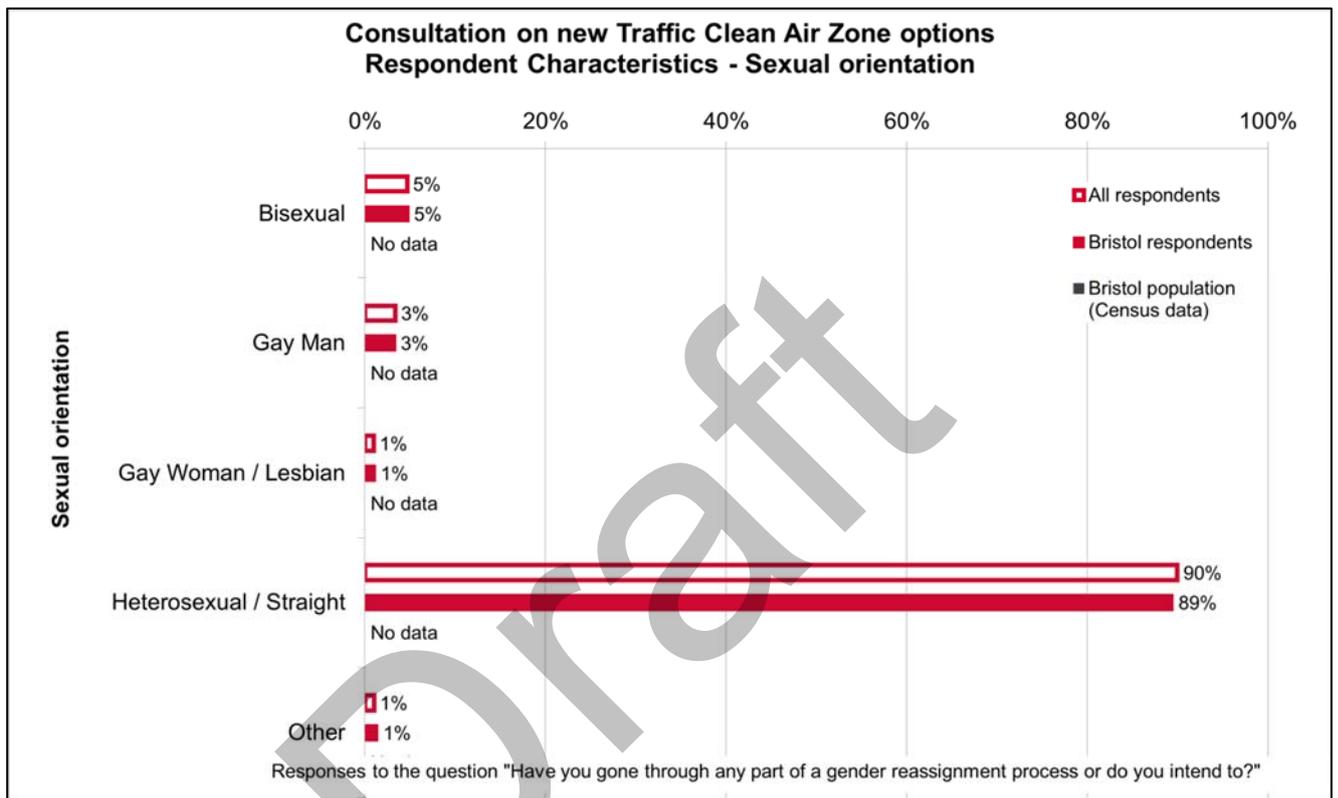


### Other protected characteristics and refugee/asylum status

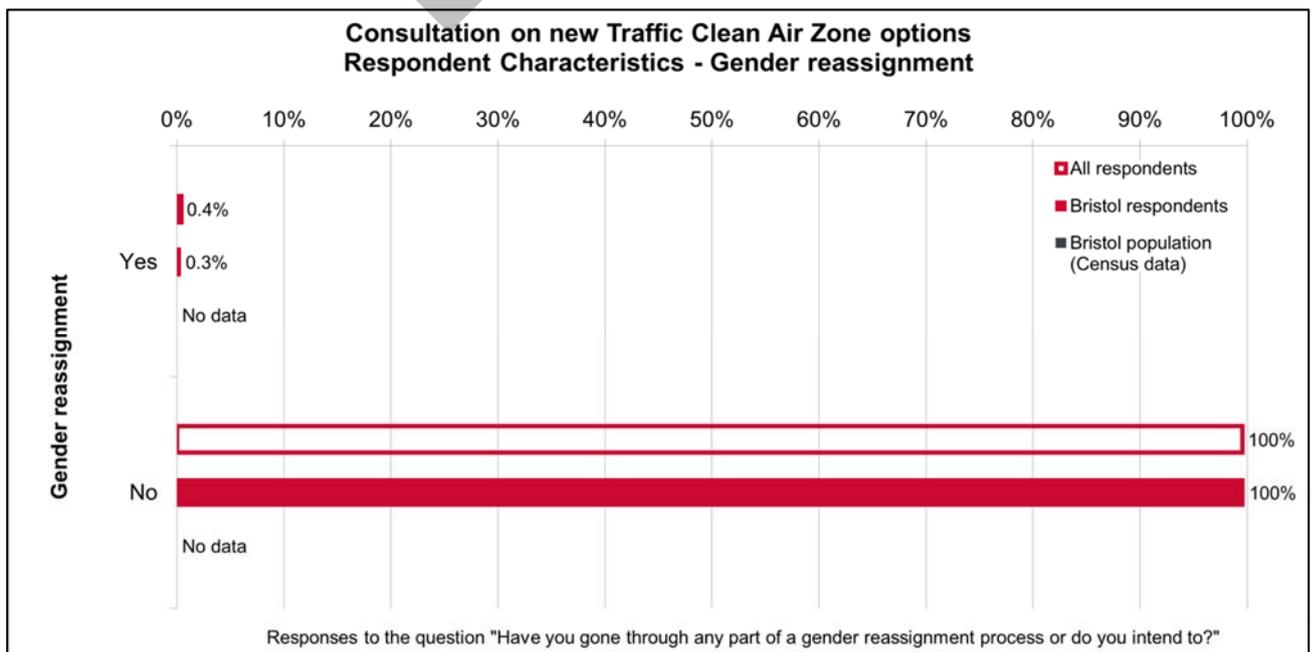
The survey also asked respondents about three other protected characteristics (sexual orientation, gender reassignment, pregnancy and recent maternity) and if they are a refugee or asylum seeker.

Census data are not available for the proportion of people with these characteristics living in Bristol. Figures 12, 13, 14 and 15 show the proportions of all respondents and Bristol respondents for each of these characteristics. The proportion of each characteristic for all respondents closely matches the proportion for Bristol respondents.

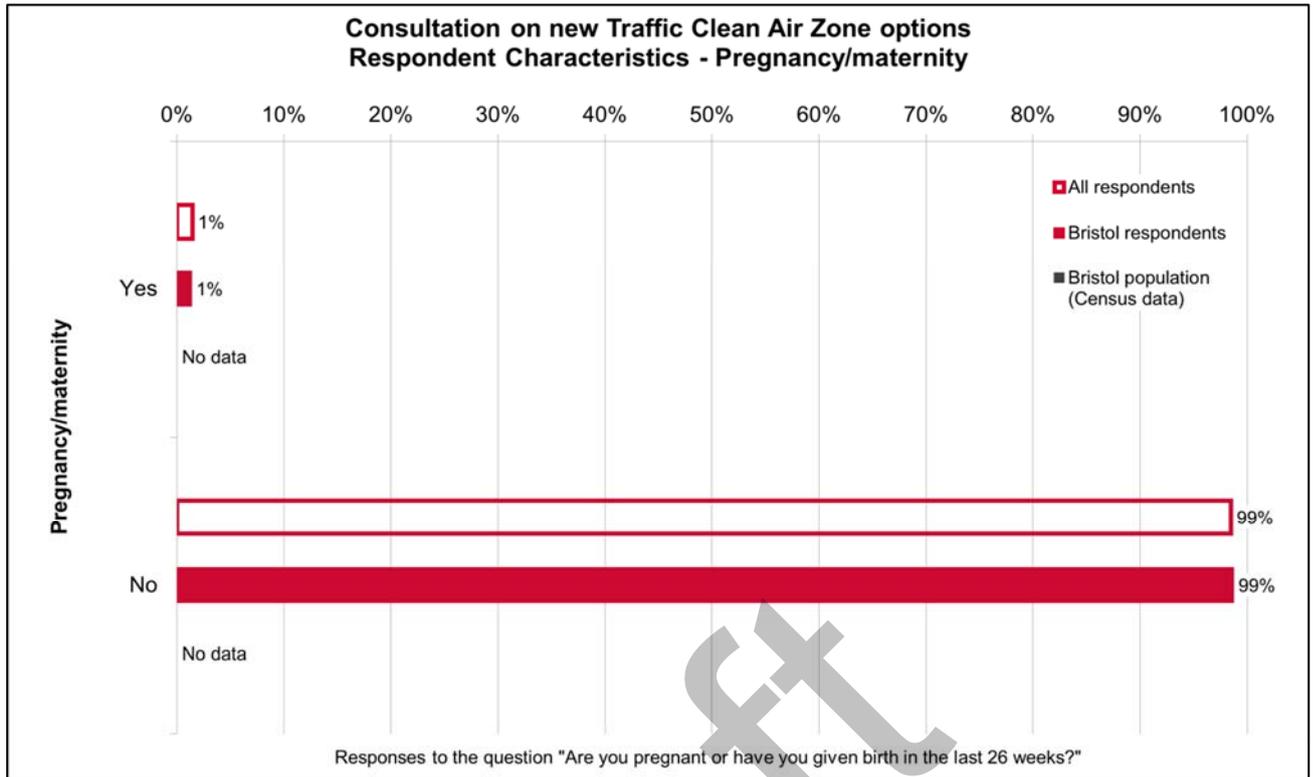
**Figure 12: Sexual orientation**



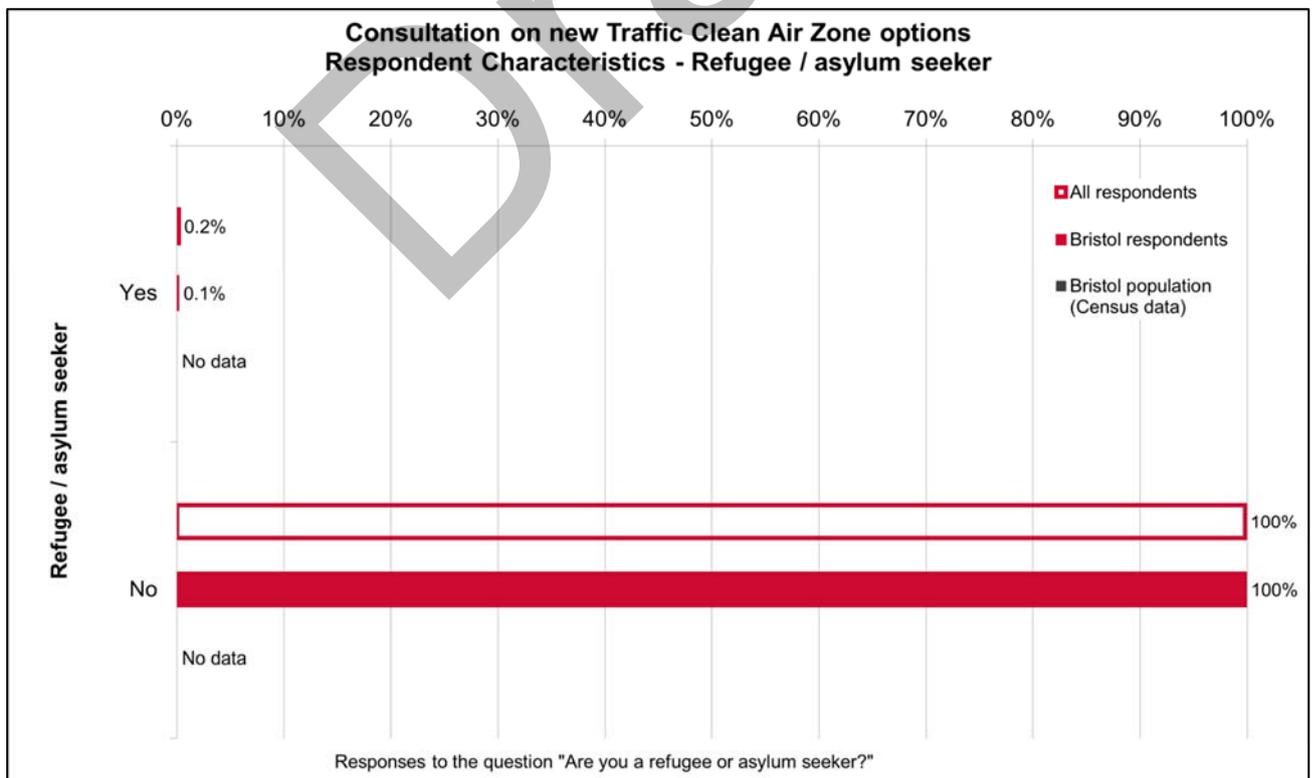
**Figure 13: Gender reassignment**



**Figure 14: Pregnancy / Maternity**



**Figure 15: Refugee or asylum seeker**



### Other respondent characteristics

4,145 (98%) respondents provided other details of their personal situation, selecting from the following list of 13 options<sup>17</sup>:

- 3,752 (90% of the 4,145 respondents who answered the question) are residents;
- 344 (8%) work in Bristol but live elsewhere;
- 289 (7%) represent and/or own a local business;
- 80 (3%) drive a van (LGV) for work;
- 18 (0.4%) drive an HGV for work;
- 11 (0.3%) drive a taxi/private hire vehicle;
- 9 (0.2%) were responses on behalf of a public transport provider;
- 8 (0.2%) were responses on behalf of a coach operator;
- 13 (0.3%) were responses on behalf of a Voluntary/Community/Social Enterprise;
- 9 (0.2%) were responses on behalf of a health or social care provider;
- 6 (0.1%) are councillors;
- 1 (0.02%) are MPs;
- 118 (3%) selected 'other'.

Of the 118 respondents who selected 'other':

- 24 provided information about their employment role and 9 stated that they are retired;
- 17 defined themselves in terms of how they travel (e.g. diesel driver);
- 3 said that they were responsible for a fleet of vehicles;
- 26 are visitors to Bristol;
- 19 stated where they live outside of Bristol;
- 16 stated that they both live and work in Bristol;
- 13 stated that they commute out of Bristol;
- 8 stated that they are disabled;
- 4 said that they are students;
- 3 said they have children;
- 2 are carers;
- 24 provided other details.

### 3.5 Respondents main travel mode in Bristol

4,140 (98%) respondents provided details of how they normally travel for most of their journeys in Bristol. 3,402 of these respondents live in Bristol (81% of all 4,225 respondents to the survey and 99.2% of the Bristol respondents).

The survey required respondents to select one method of travel from a list of 10 options, which they use for most of their journeys in Bristol.

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<sup>17</sup> Because respondents could select more than one option, the total percentages exceed 100%

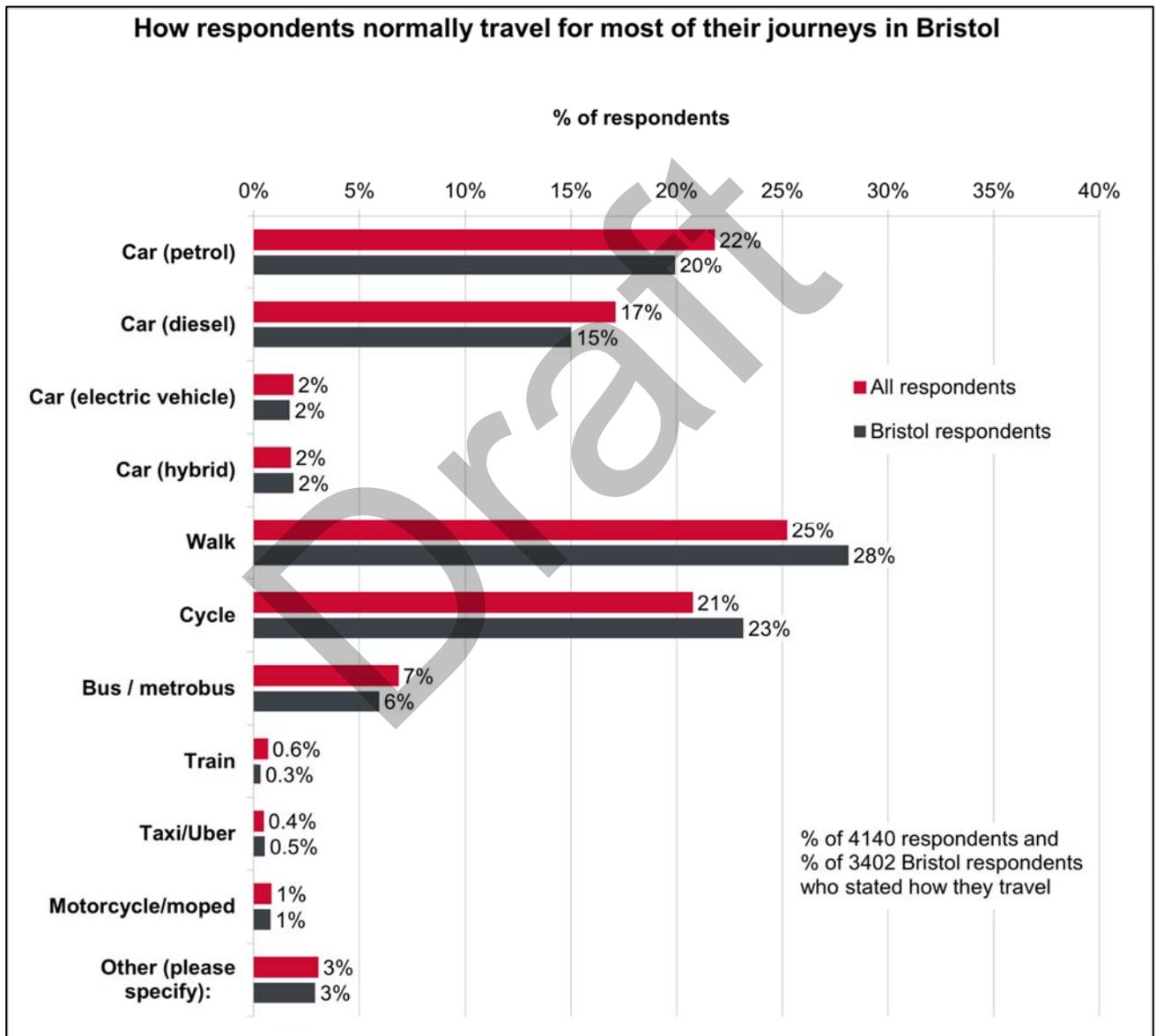
Figure 16 compares the proportion of respondents who travel by each travel mode, for all respondents and for Bristol respondents.

A lower proportion of Bristol respondents use diesel cars (15%) or petrol cars (20%), compared to all respondents (17% diesel cars and 22% petrol cars) and a higher proportion of Bristol respondents walk (28%) or cycle (23%) as their main travel mode in the city.

125 respondents (98 Bristol respondents) selected ‘other’. Of these:

- 71 stated that they use multiple travel modes for different journeys;
- 28 said they used an LGV as their main travel mode;
- 7 said they did not travel into Bristol.

**Figure 16: Respondents’ main travel mode in Bristol**



## 4 Survey responses: concern about the health impacts of poor air quality

### 4.1 Comparison of the views of all respondents and Bristol respondents

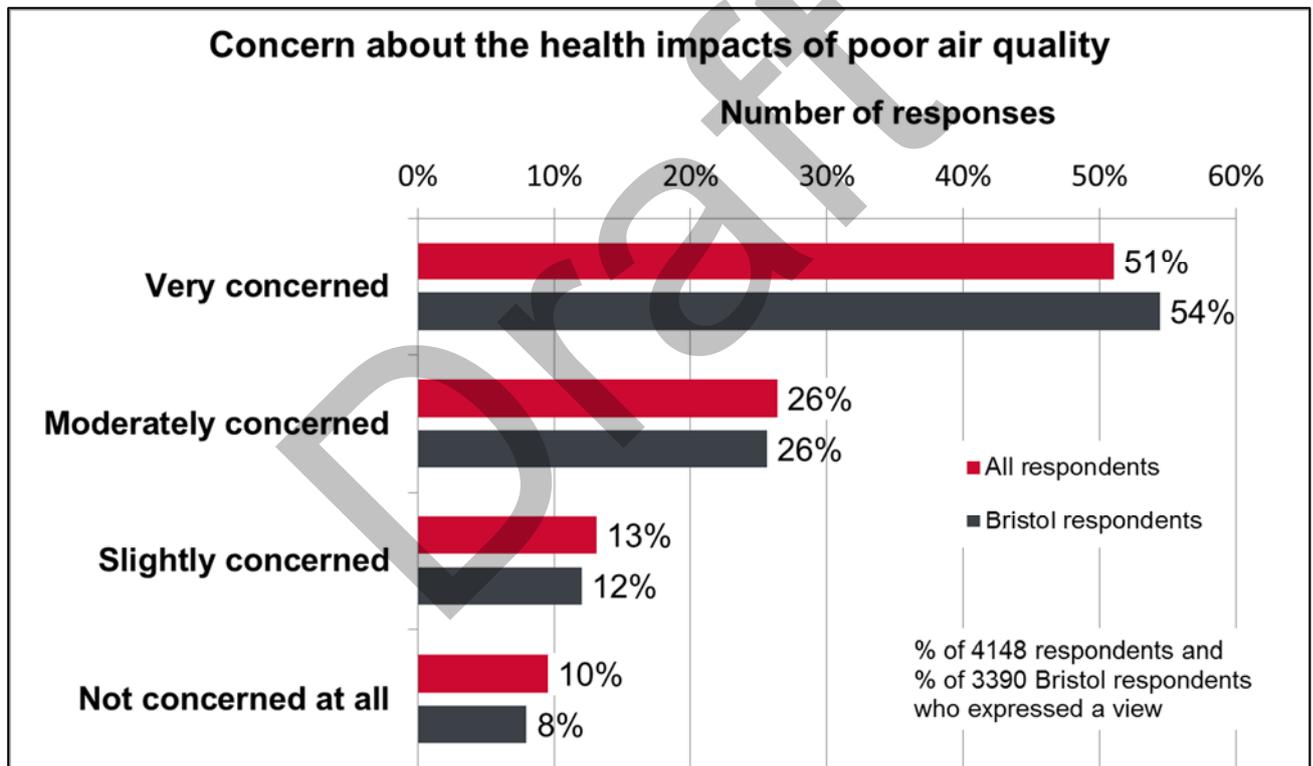
Respondents were asked to state how concerned they are about the impacts of poor air quality in Bristol on their health and the health of their family, choosing from the following four options:

- Very concerned;
- Moderately concerned;
- Slightly concerned;
- Not concerned at all.

Of the 4,225 people who responded to the Traffic Clean Air Zones consultation, 4,148 (98%) stated their level of concern. 77 people did not answer this question.

Figure 17 compares the percentage of all respondents and Bristol respondents who are very concerned, moderately concerned, slightly concerned and not concerned at all.

**Figure 17: Concern about health impacts of poor air quality**



There is a high level of concern about the health impacts of poor air quality among respondents, and health concerns are higher still among Bristol respondents.

77% of all respondents to the question (3,210 respondents) are very concerned or moderately concerned, with 51% (2,117 respondents) stating they are very concerned and 26% (1,093 respondents) being moderately concerned.

A higher proportion of Bristol respondents (80%) are very concerned or moderately concerned, with 54% being very concerned and 26% being moderately concerned.

13% of all respondents (543 people) and 12% of Bristol respondents are slightly concerned.

10% of all respondents (395 people) and 8% of Bristol respondents are not concerned at all.

## 4.2 Differences in concerns about health by level of deprivation

Concern about health impacts of poor air quality were compared for respondents from areas of Bristol with different levels of deprivation<sup>18</sup> (Figure 18). The comparison used the postcodes provided by respondents in Bristol to match each response to one of 10 deprivation bands (deciles) as described in Section 3.3.

**Figure 18: Concern about health impacts of poor air quality in each deprivation decile**

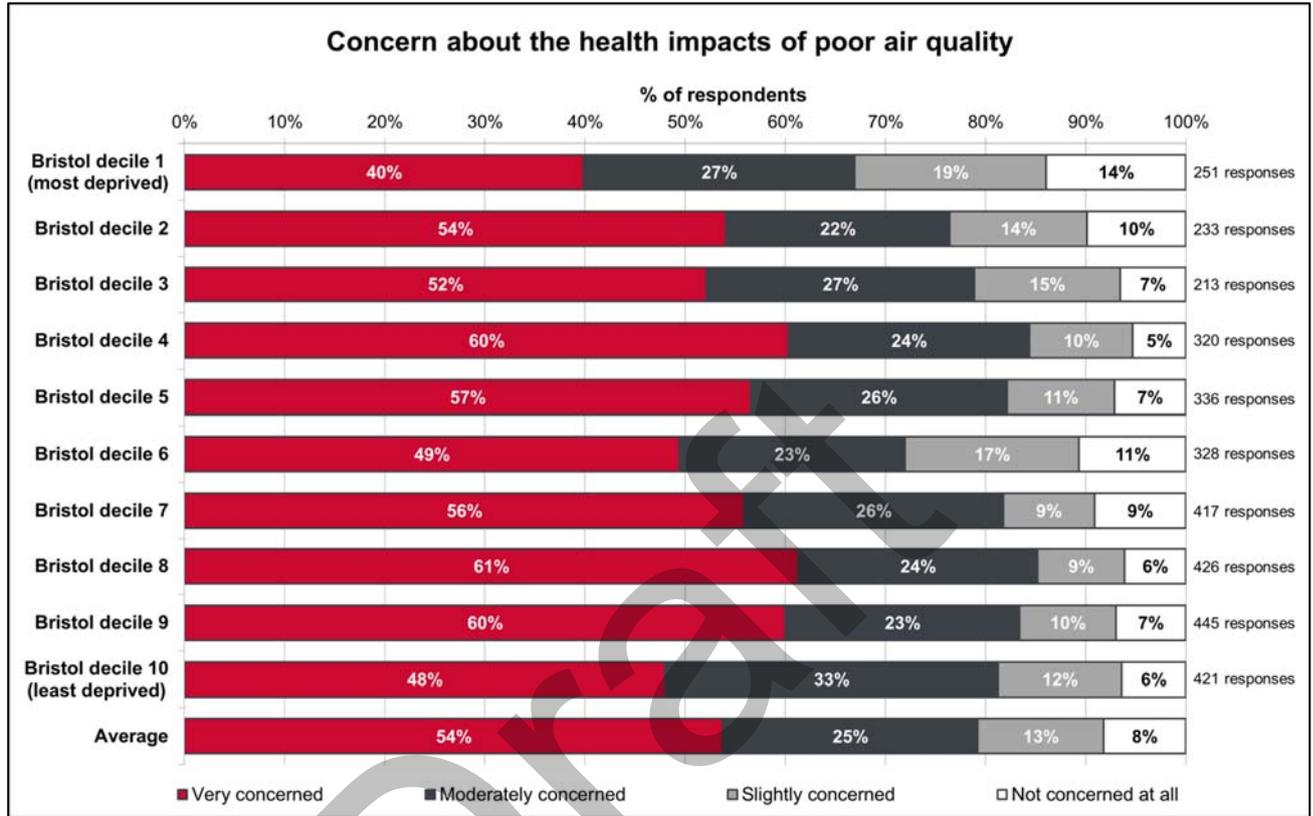


Figure 18 shows that there is a high proportion (at least 40%) of respondents in Bristol who are very concerned about health impacts in all deprivation deciles.

The most deprived 10% of Bristol (decile 1) has the lowest proportion of very concerned respondents (40%) and the highest proportion who are not concerned at all (14%).

However the least deprived 10% (decile 10) has the second lowest proportion of very concerned respondents (48%).

Overall there is no strong trend in how health concerns vary between areas of high and low deprivation.

<sup>18</sup> The Office for National Statistics (ONS) publishes information about deprivation for 32,844 small areas - known as 'Lower Super Output Areas' (LSOAs) - throughout England. For each of these areas, a measure of deprivation is published called 'Indices of Multiple Deprivation' (IMD), which takes into account 37 aspects of each area that cover income, employment, education, health, crime, barriers to housing and services, and living environment. The home location of respondents to the consultation was compared with the IMD scores for the 263 Lower Super Output Areas that cover the Bristol City Council area.

## 5 Respondents’ willingness to change how they travel

### 5.1 All respondents

Respondents were asked if they would be prepared to change how they travel into central Bristol if it would avoid the need for a clean air charging zone.

Of the 4,225 people who responded to the new Traffic Clean Air Zone options consultation, 4,180 (99%) answered this question. Of these:

- 1,574 (38%) said they were prepared to change how they travel;
- 537 (13%) said they would not change;
- 440 (11%) said they were not sure;
- 1,629 (39%) already walk, cycle, use public transport or a low emission vehicle (LEV)<sup>19</sup>.

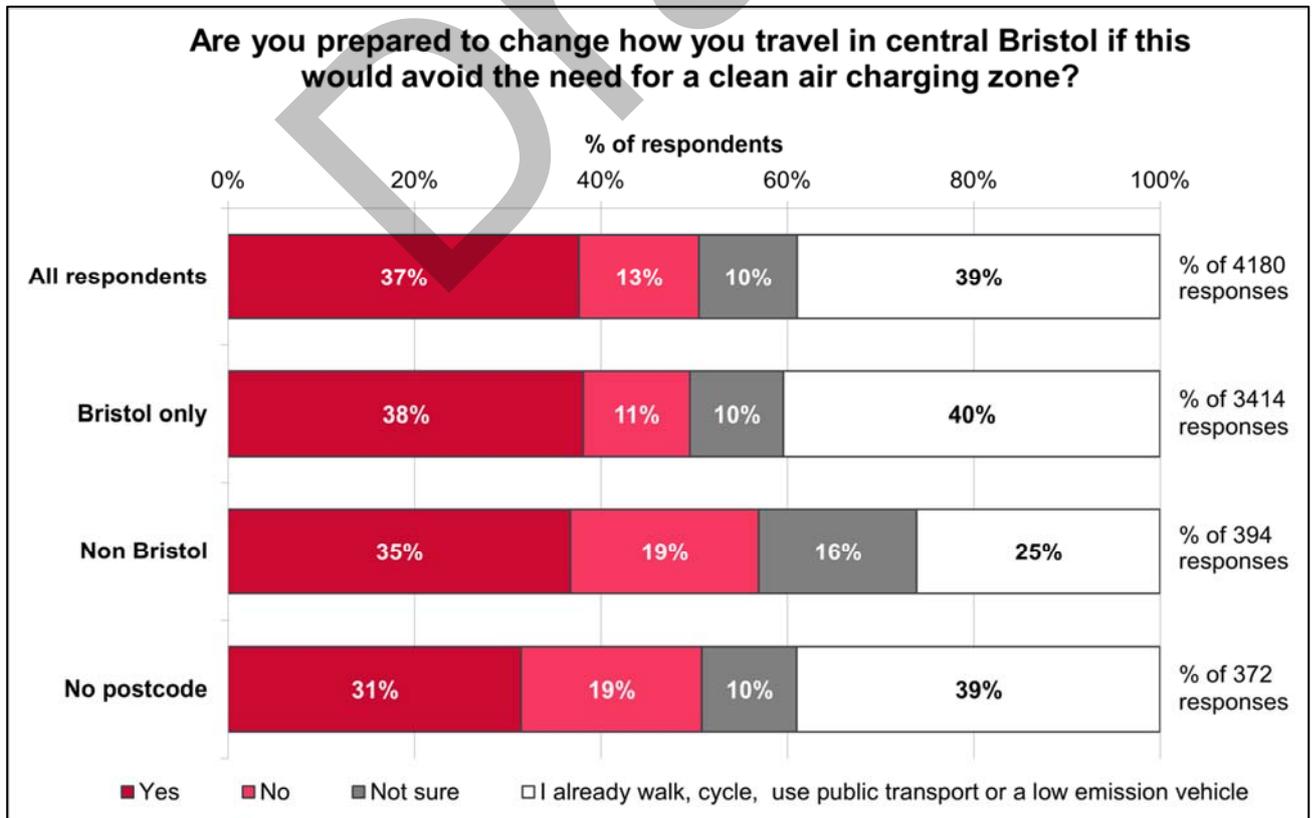
### 5.2 Comparison of Bristol and non-Bristol respondents

Figure 19 compares respondents’ willingness to change how they travel into central Bristol for three groups of respondents; 3,414 respondents living in Bristol, 394 respondents living outside Bristol and 372 respondents who did not state where they live.

At least 31% of respondents in each of the geographical groups stated they are willing to change how they travel. Similar proportions of Bristol respondents (38%) and non-Bristol respondents (35%) say they are prepared to change how they travel.

However, higher proportions of the non-Bristol respondents said they were not prepared to change how they travel (19%, compared to 11% of Bristol respondents) or were not sure (16%, compared to 10% of Bristol respondents), and a smaller proportion already walk, cycle, use public transport or a LEV (25%, compared to 40% for Bristol respondents).

**Figure 19: Respondents’ willingness to change how they travel into central Bristol**



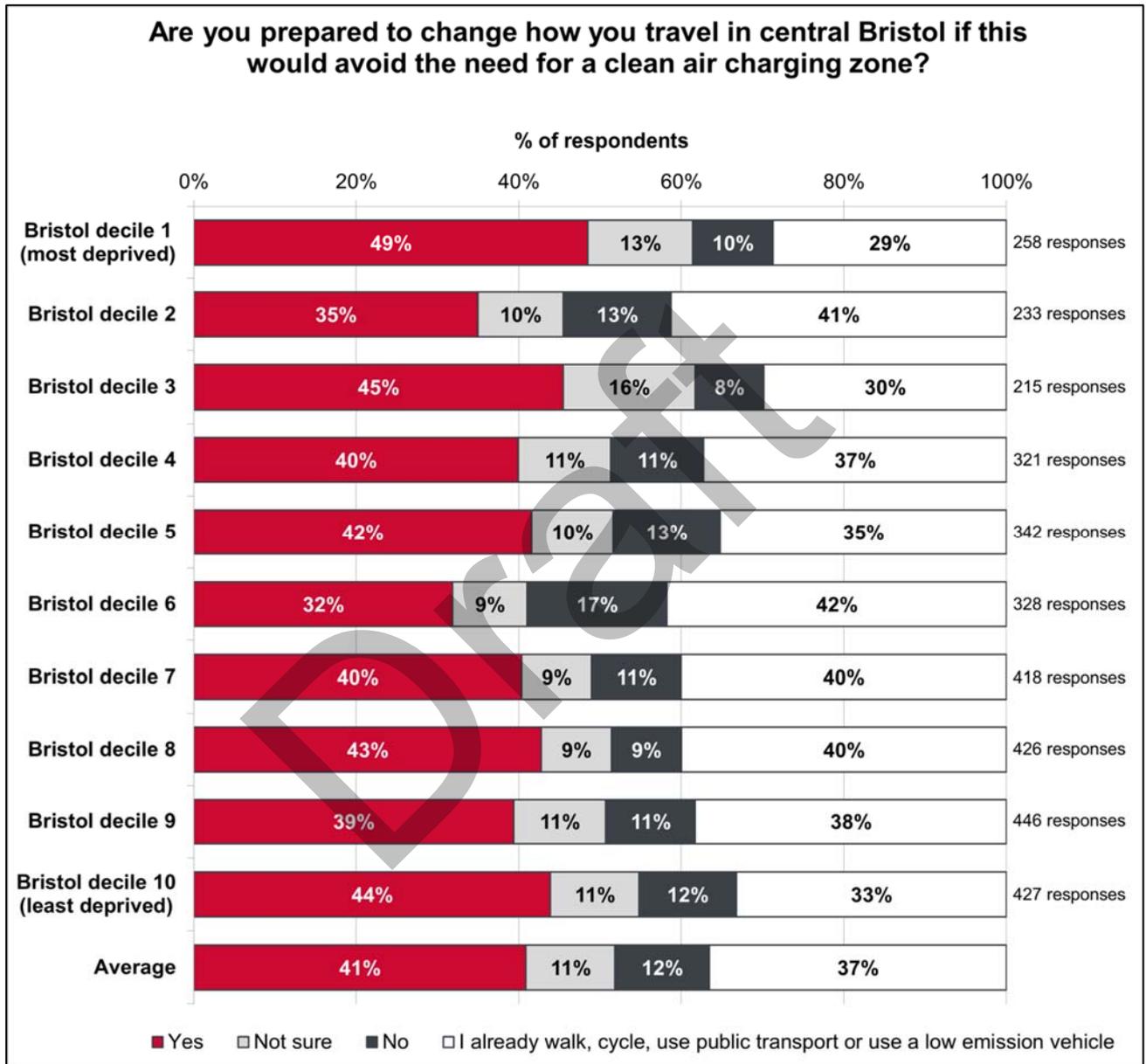
<sup>19</sup> The “I already walk, cycle, use public transport or use an LEV” option was added on 20 October 2020. Of 1,075 responses that had already been submitted by that date, 71 stated as free text that they currently walk, cycle, use public transport or use an LEV, so their response was amended to the new answer option.

### 5.3 Variation in willingness to change travel by level of deprivation

Respondents’ willingness to change how they travel into central Bristol was compared for respondents from areas of Bristol with different levels of deprivation (Figure 20).

Respondents living in decile 1 (the most deprived 10% of Bristol) and decile 3 were the most prepared to change how they travel if it would avoid the need for a charging CAZ (49% in decile 1; 45% in decile 3). There is no trend across the other deprivation deciles.

**Figure 20: Willingness to change travel for respondents in each deprivation decile**



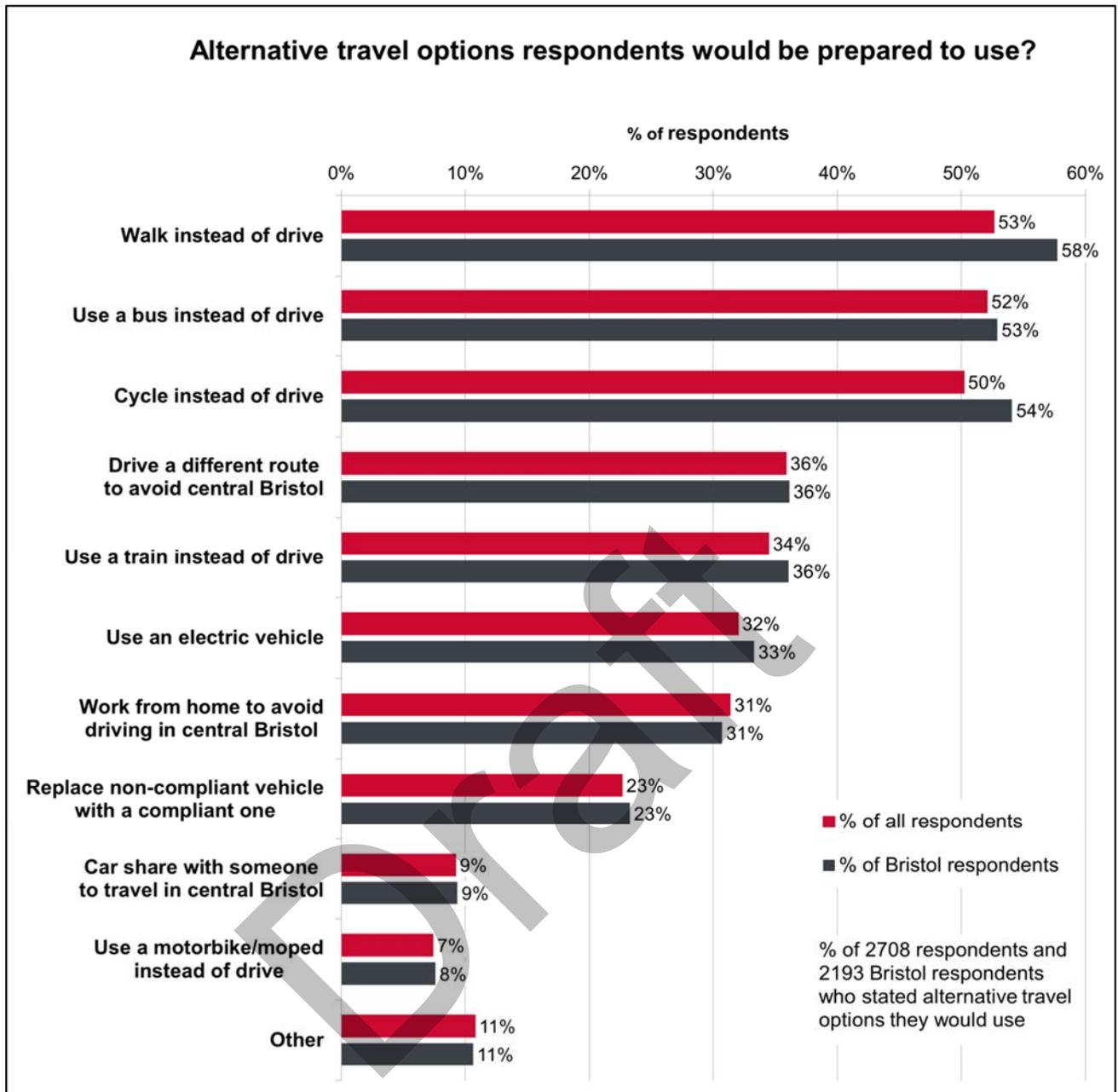
### 5.4 Alternative travel options respondents would be prepared to use

2,708 people answered the follow-up question on **how** they would change their travel. Respondents could select as many choices as they wanted<sup>20</sup>.

Figure 21 shows the alternative travel options respondents would be prepared to use for all respondents and respondents who gave a Bristol postcode.

<sup>20</sup> The sum of the percentages for the alternative travel options exceeds 100% because respondents could select more than one option.

**Figure 21: Alternative travel options respondents would be prepared to use**



The three most common options, each selected by at least half the respondents, were:

- Switching from driving to walking (1,424 respondents; 53%);
- Using a bus instead of driving (1,409 respondents; 52%);
- Switching to cycling (1,358 respondents; 50%).

The proportions of Bristol respondents selecting these options was higher than for respondents living elsewhere.

Around a third of respondents stated that they would:

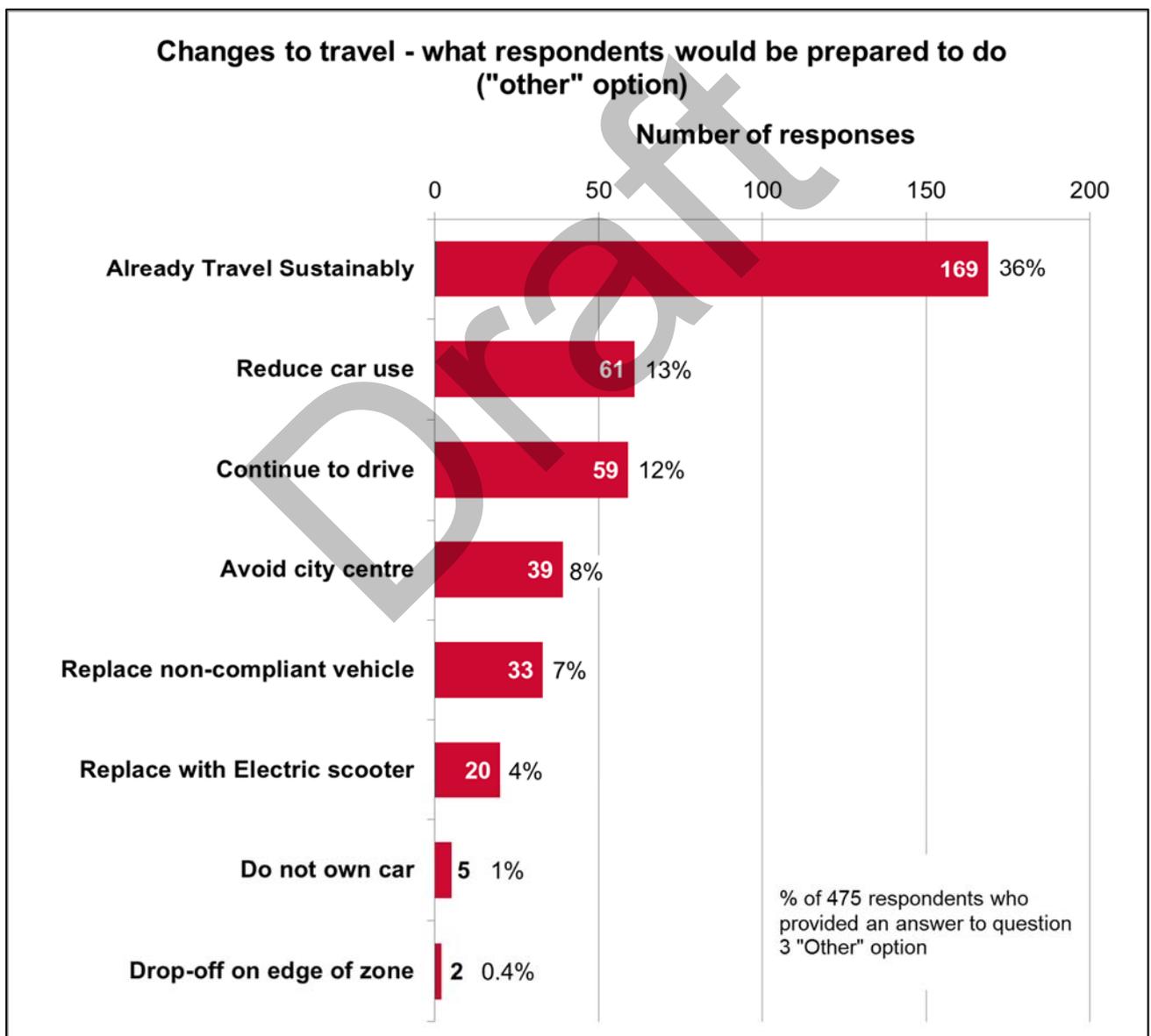
- Drive a different route to avoid central Bristol (970 respondents; 36%);
- Use a train instead of driving (932 respondents; 34%);
- Use an electric vehicle (865 respondents; 32%);
- Work from home to avoid driving in central Bristol (848 respondents; 31%).

612 (23%) said they would replace their non-compliant vehicle with a compliant one; 248 (9%) said they would car share; and 199 (7%) said they would use a motorbike/moped.

291 respondents (11%) selected “other”. A larger number (475 respondents) specified other travel options in the “other, please specify” free text box for this question (Figure 22). Of these:

- 169 (36%) said they already travelled sustainably;
- 61 (13%) said they would reduce their car use;
- 59 (12%) said they would continue to drive;
- 39 (8%) said they would avoid the city centre;
- 33 (7%) said they would replace their non-compliant vehicle;
- 20 (4%) said they would use an electric scooter instead;
- 5 (1%) said they do not own a car;
- 2 (0.4%) said they would get dropped off on the edge of the zone.

**Figure 22: Other changes to travel behaviour specified as free text**



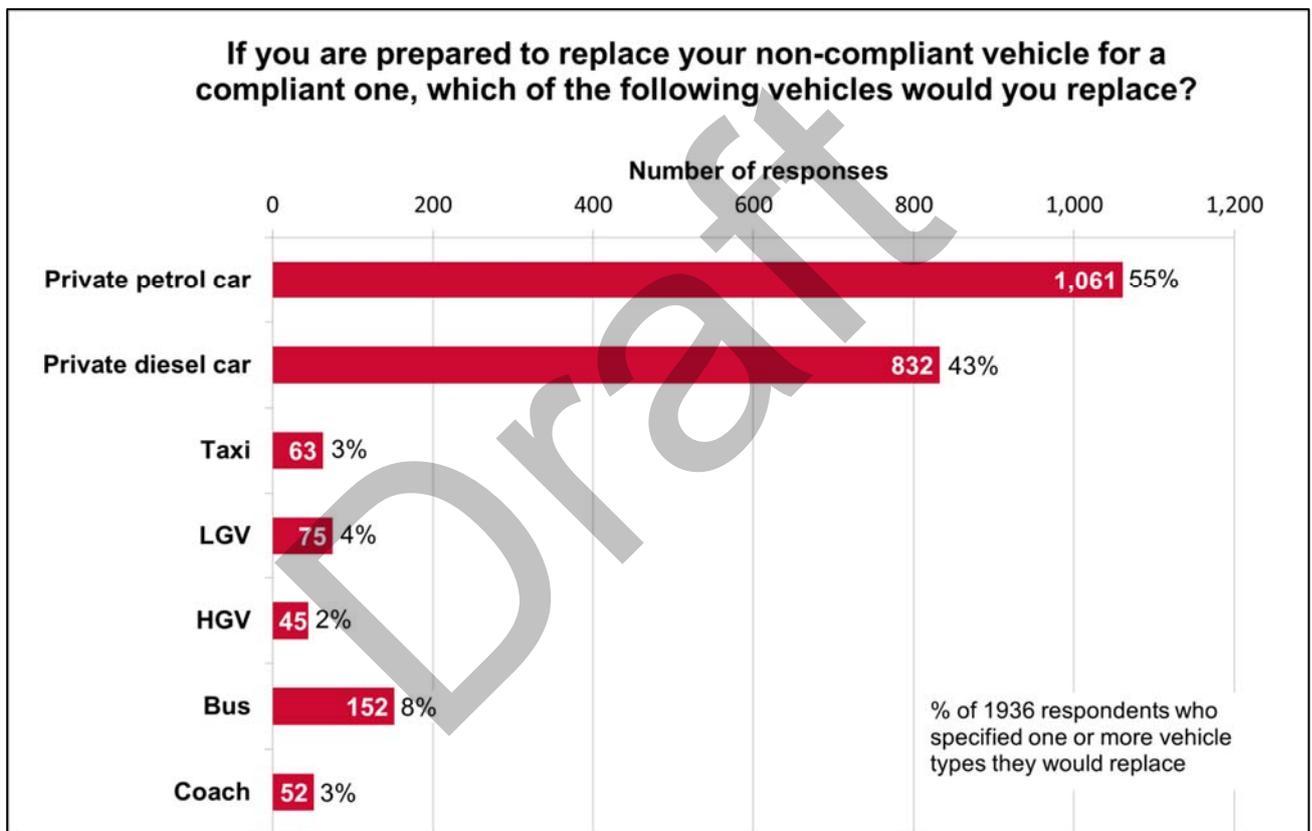
## 5.5 Willingness to replace a non-compliant vehicle with compliant one

In the response to Question 3<sup>21</sup>, 612 respondents (14% of the 4,225 respondents to the survey) said they would replace their non-compliant vehicle with a compliant one<sup>22</sup>.

The follow-up Question 4 asked respondents ‘If you are prepared to replace your non-compliant vehicle for a compliant one, which of the following vehicles would you replace?’ 1,936 respondents (46% of the 4,225 respondents to the survey) specified one or more vehicle types they would replace. This is more than three times the number who said they would replace their vehicle in Question 3.

Of the 1,936 respondents to Question 4, 1,061 (55%) said they would replace their private petrol car and 832 (43%) would replace their private diesel car. Much lower numbers would replace other vehicle types (Figure 23).

**Figure 23: Types of non-compliant vehicles respondents would replace**



<sup>21</sup> Question 3: If you are prepared to change how you travel in central Bristol, which of the following would you be prepared to do? (Answer options include ‘replace your non-compliant vehicle for a compliant one’)

<sup>22</sup> 612 respondents is 23% of the 2,708 respondents who answered Question 3 (Figure 21)

## 6 Survey views on whether each option is a good way to improve air quality

### 6.1 Overview

Respondents were asked:

- Do you agree or disagree that 2020 option 1 is a good way to improve air quality in Bristol?
- Do you agree or disagree that 2020 option 2 is a good way to improve air quality in Bristol?

The question structure enabled respondents to agree with both options, disagree with both options or agree with one option and disagree with the other.

### 6.2 Comparison of level of support for option 1 and option 2

Of the 4,225 people who responded to the new Traffic Clean Air Zone options consultation:

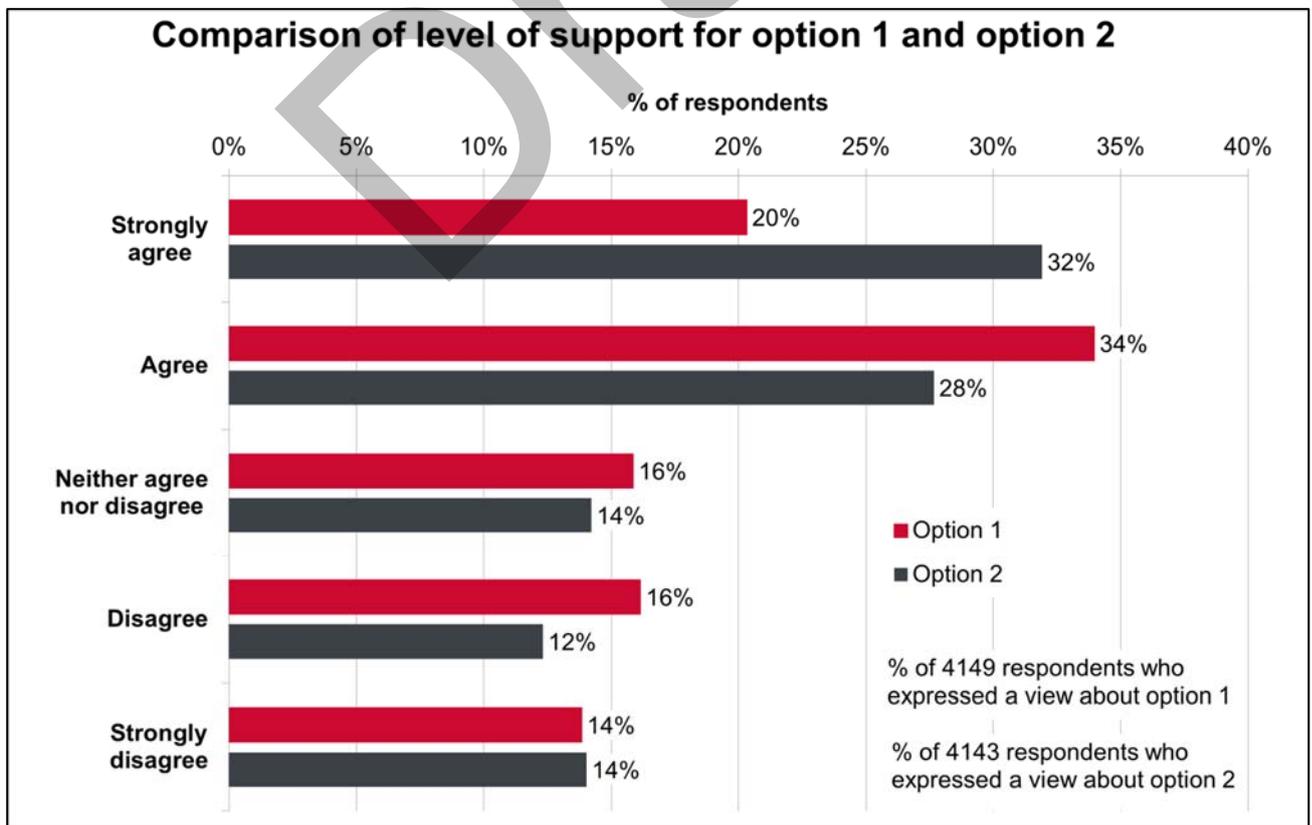
- 4,149 (98%) stated how strongly they agree or disagree that option 1<sup>23</sup> is a good way to improve air quality in Bristol. 76 people did not answer the question;
- 4,143 (98%) stated how strongly they agree or disagree that option 2<sup>24</sup> is a good way to improve air quality in Bristol. 82 people did not answer the question.

The majority of respondents agree or strongly agree with both options; 54% for option 1, 60% for option 2 (Figure 24). Support is higher for option 2 and more people strongly agree with option 2 than option 1 (32% strongly agree with option 2, 20% with option 1).

A higher proportion of respondents disagree or strongly disagree with option 1 (30%) than option 2 (26%). 16% neither agree nor disagree with option 1 and 14% with option 2.

Forecast compliance dates were not available during the consultation and reasons given as free text indicate that the higher level of support for option 2 is due in part to respondents' assumption that option 2 would be more effective than option 1 at improving air quality.

**Figure 24: Comparison of the views of all respondents on option 1 and option 2**



<sup>23</sup> Option 1 is a small CAZ D covering a central area of Bristol

<sup>24</sup> Option 2 is a small CAZ D surrounded by a medium CAZ C

### 6.3 Comparison of the views of all respondents and Bristol respondents

Figure 25 compares views of three groups of respondents on the merits of option 1 as a way to improve air quality in Bristol. The groups are 3,379 respondents living in Bristol, 397 respondents living outside Bristol and 373 respondents who did not give a postcode.

**Figure 25: Comparison of views on option 1 for Bristol and non-Bristol respondents**

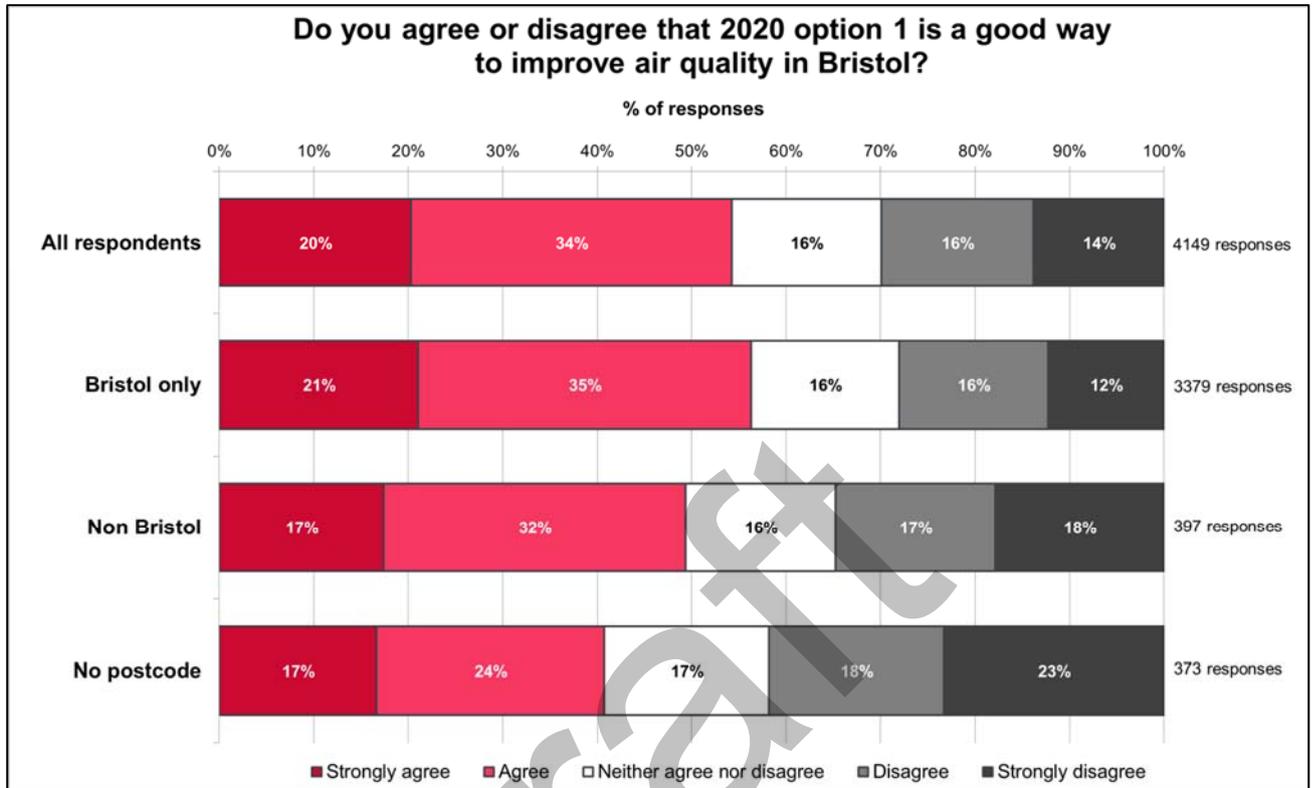
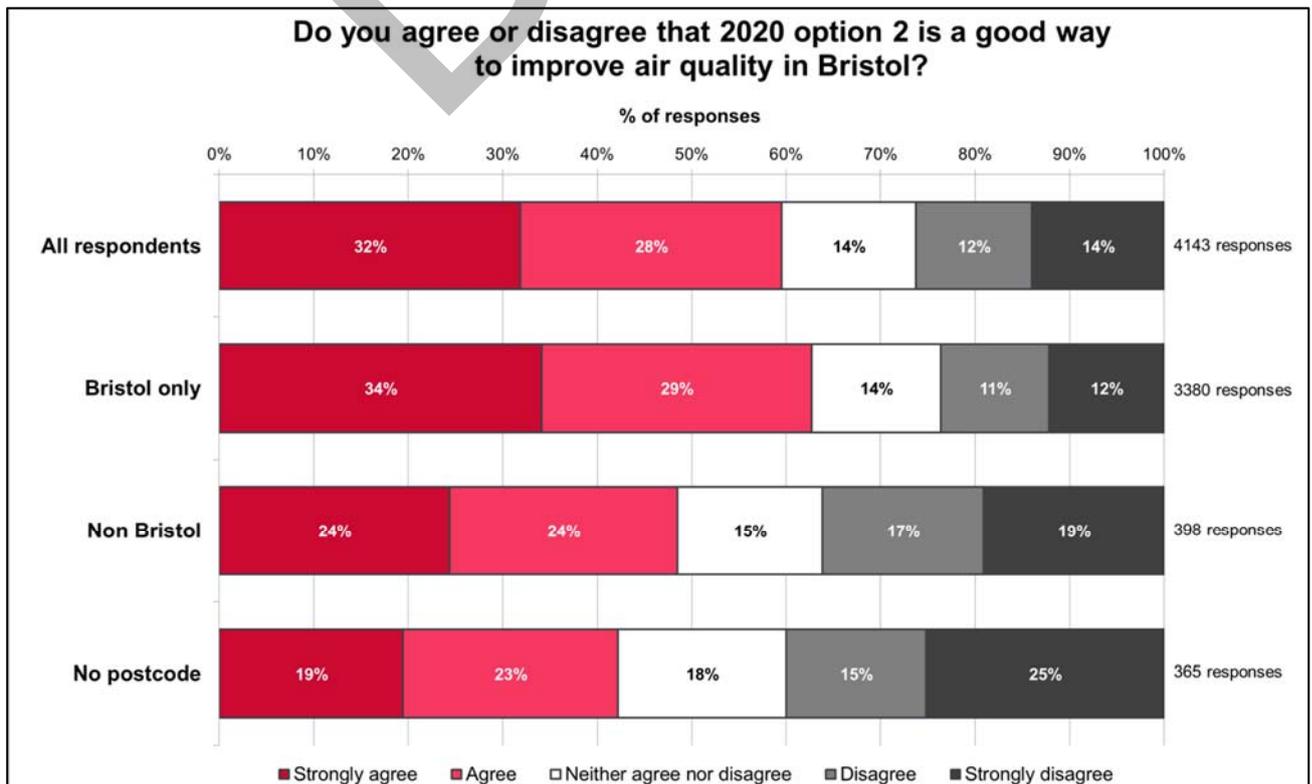


Figure 26 compares views of three groups of respondents on the merits of option 2 as a way to improve air quality in Bristol. The groups are 3,380 respondents living in Bristol, 398 respondents living outside Bristol and 365 respondents who did not give a postcode.

**Figure 26: Comparison of views on option 2 for Bristol and non-Bristol respondents**



For both options 1 and 2, Bristol respondents are more supportive<sup>25</sup> of the CAZ proposals as a good way to improve air quality, than respondents from outside Bristol or respondents who did not state their postcode. The difference is more marked for option 2 than option 1.

- For option 1, 56% of Bristol respondents agree or strongly agree, compared to 49% for non-Bristol respondents and 41% for people who didn't give a postcode.
- For option 2, 63% of Bristol respondents agree or strongly agree, compared to 48% for non-Bristol respondents and 42% for people who didn't give a postcode.

More Bristol respondents agree and strongly agree for option 2 than option 1, and the proportion of strongly agree is substantially higher (34% for option 2; 21% for option 1).

For non-Bristol respondents and respondents without postcodes, the proportion of agree plus strongly agree is similar for options 1 and 2, but a higher proportion strongly agree.

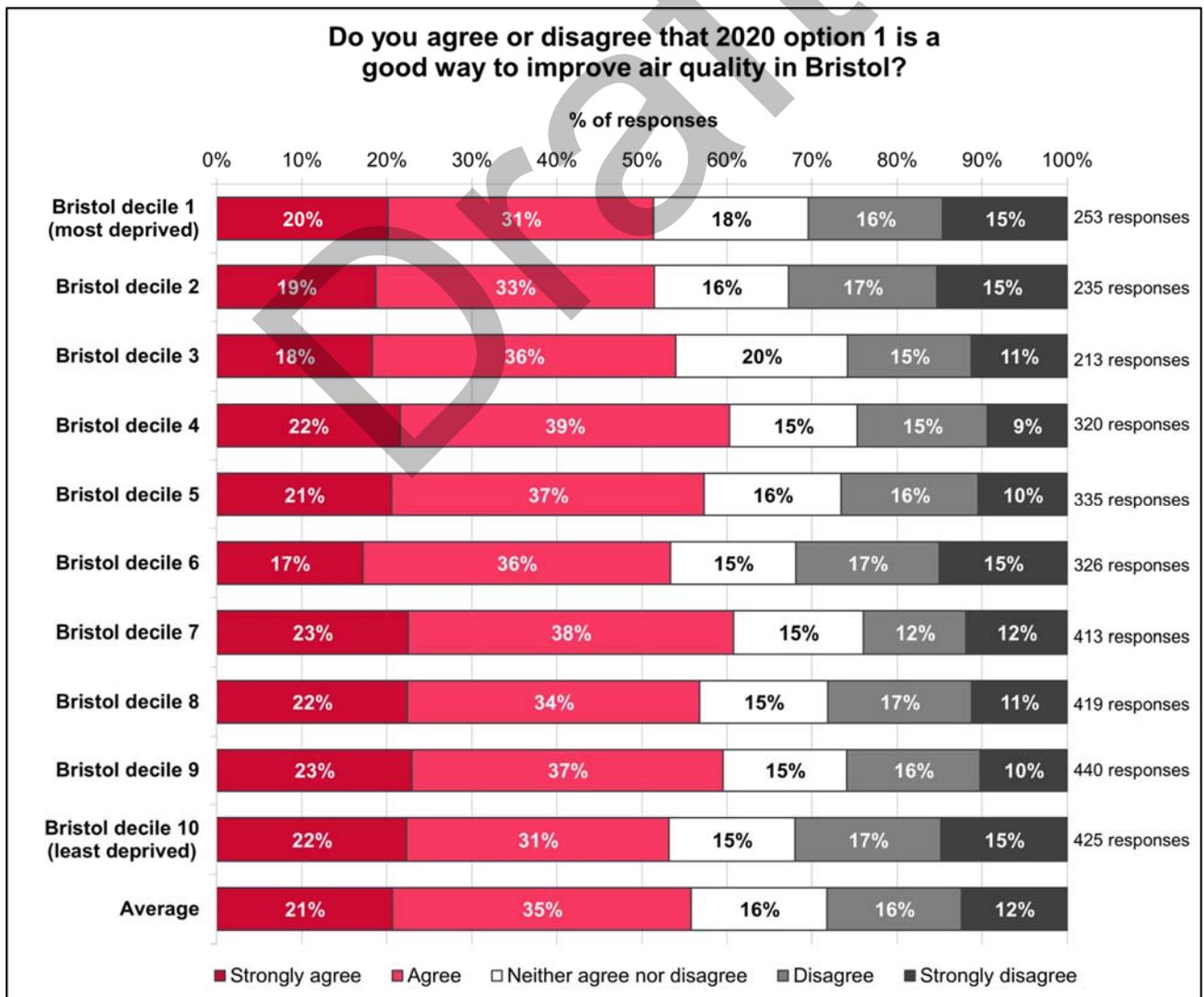
The reasons why people agreed or disagreed is discussed in Section 6.5

## 6.4 Differences in views on the options by level of deprivation

### 6.4.1 Option 1

Figure 27 shows the proportion of Bristol respondents in each deprivation decile who agree or disagree that option 1 (small CAZ D) is a good way to improve air quality.

**Figure 27: Views on option 1 in areas with different levels of deprivation**



<sup>25</sup> Supportive - defined as agree and strongly agree that an option is a good way to improve air quality

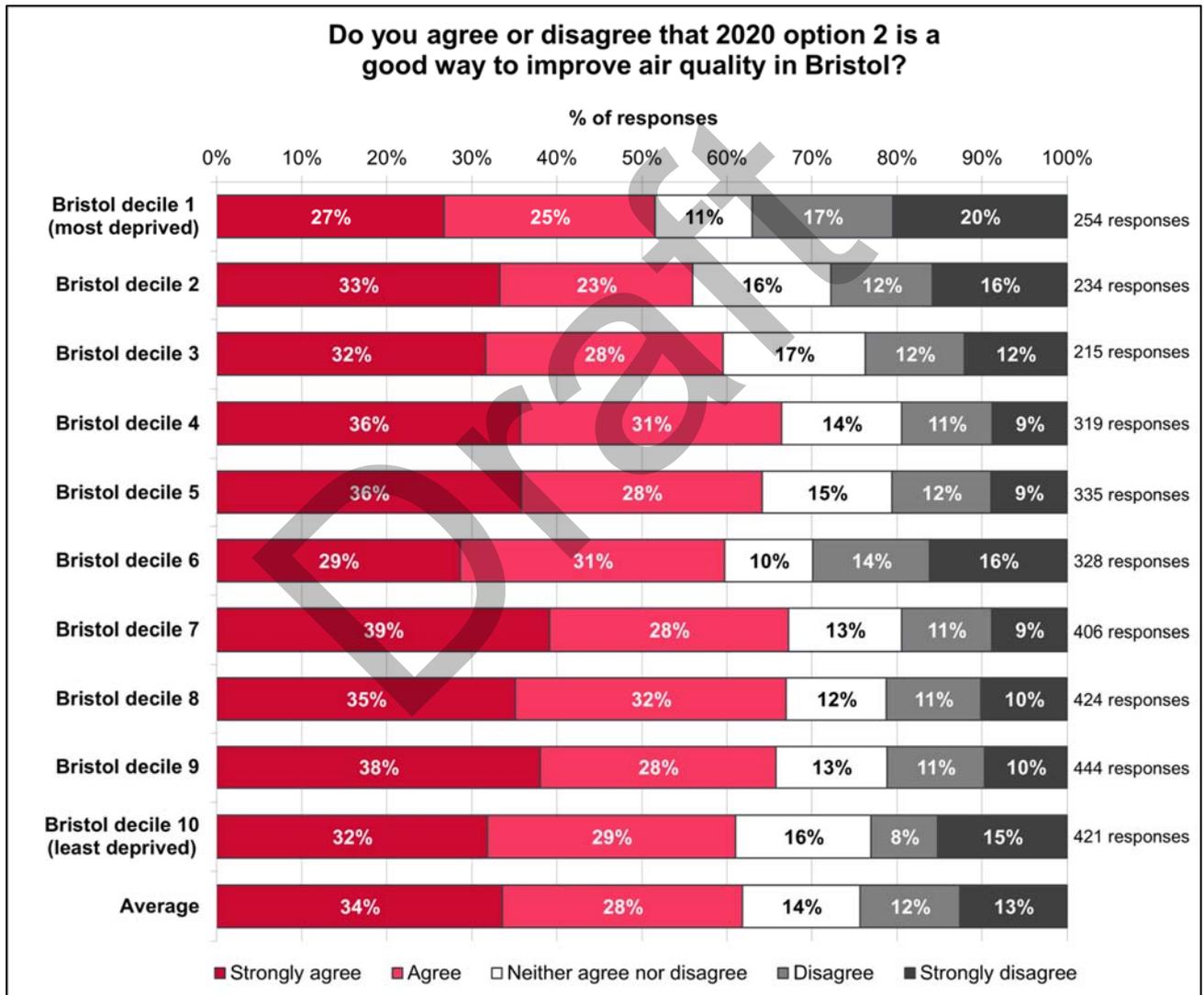
Figure 27 shows that more than half of respondents in all deprivation deciles agree or strongly agree that **option 1** is a good way to improve air quality. The lowest support for option 1 is in the most deprived 20% of areas; 51% agree or strongly agree in both deciles 1 and 2, which compares to an average of 56% across all deciles).

There is no consistent trend in the views of respondents on the merits of option 1 across the other deprivation deciles (deciles 3 to 10); with support being lower than the average for option 1 in deciles 3, 6 and 10

### 6.4.2 Option 2

Figure 28 shows the proportion of Bristol respondents in each deprivation decile who agree or disagree that option 2 (small CAZ D surrounded by a medium CAZ C) is a good way to improve air quality.

**Figure 28: Views on option 2 in areas with different levels of by deprivation**



There is higher support for option 2 than option 1 for respondents in all deprivation deciles.

More than half of respondents in all deprivation deciles agree or strongly agree **option 2** is a good way to improve air quality. Similarly to option 1, the lowest support for option 2 is in the most deprived 20% of Bristol. (52% agree or strongly agree in decile 1 and 56% in decile 2. This compares to an average of 62% across all deciles.)

As with option 1, there is no consistent trend in the views of respondents on the merits of option 2 across the other deprivation deciles (deciles 3 to 10); with support being lower than the average for option 2 in deciles 3, 6 and 10.

## 6.5 Reasons why respondents agree/disagree each option is a good solution

### 6.5.1 Overview

In Questions 6 and 8, respondents were invited to explain why they agree or disagree that each option is a good way to improve air quality in Bristol.

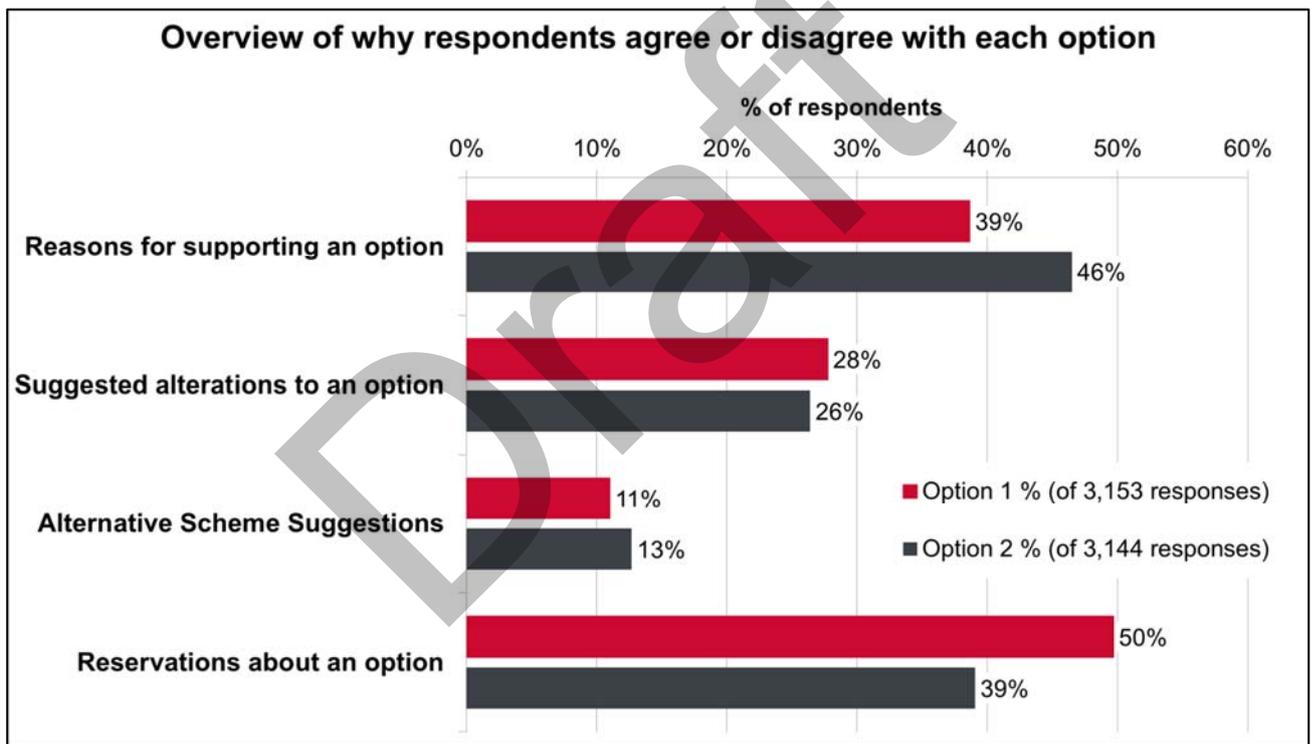
Of the 4,225 respondents to the survey, 3,153 (75%) provided free text feedback on option 1 (Question 6) and 3,144 (74%) provided free text feedback on option 2 (Question 8).

For both options, the comments address the following four themes:

- reasons for support of an option;
- suggested alterations to an option;
- alternative scheme suggestions;
- reservations about an option.

Figure 29 compares the proportion of comments on each theme for the two options.

**Figure 29: Main themes why respondents agree or disagree with each option**



39% (1,217) of respondents to Question 6 provided reasons why they support option 1. This compares to 46% (1,460) of respondents to Question 8 who explained why they support option 2.

50% (1,565) of respondents expressed criticisms or reservations about parts of the proposed option 1 CAZ. (Criticisms made up the highest number of comments for option 1.) 39% (1,240) of respondents shared criticisms or reservations about option 2.

For both options, there was a wide range of suggestions for how the options could be refined or developed further.

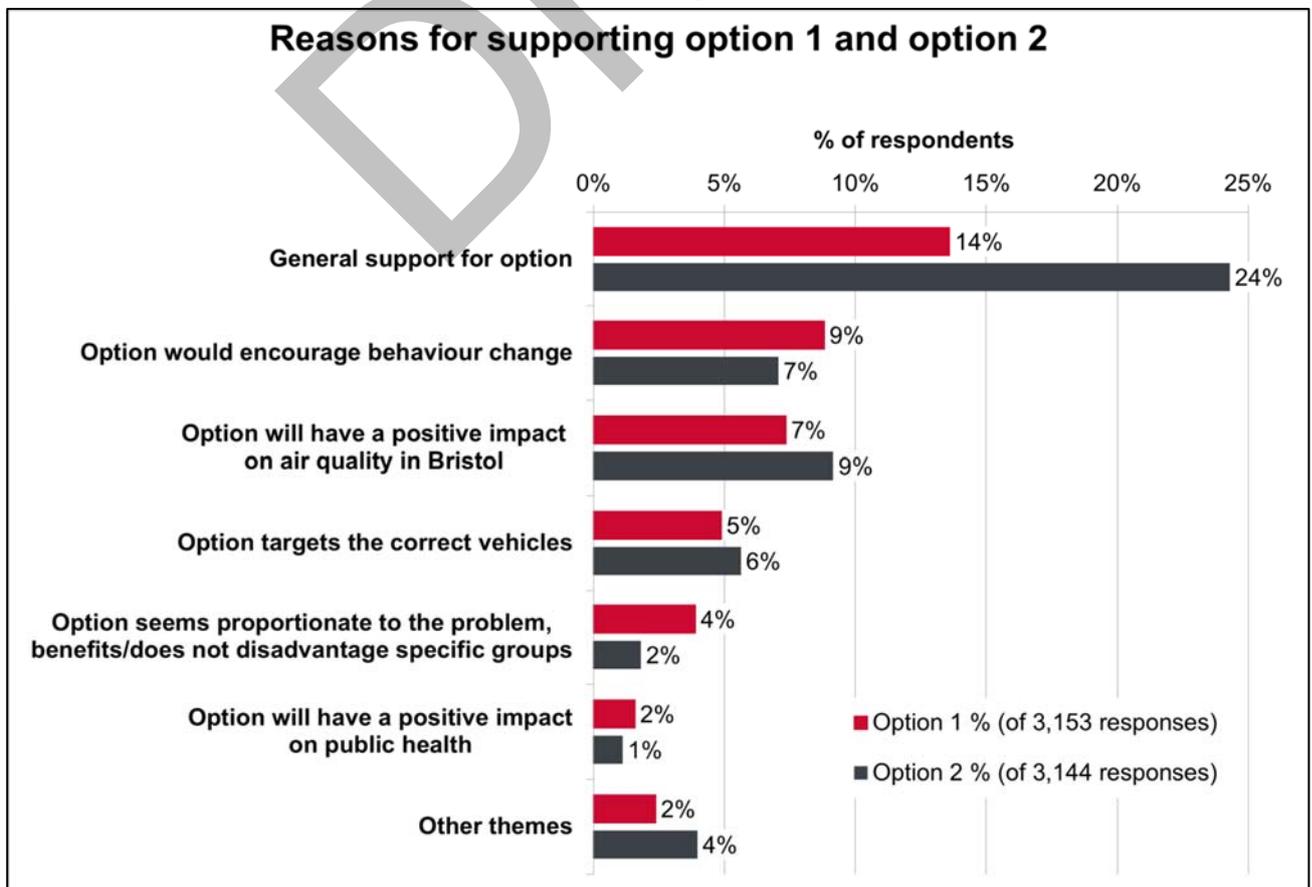
For each of the four main themes shown in Figure 29, a breakdown of the most frequently mentioned issues and topics is provided below, based on the free text responses to Questions 6 and 8.

### 6.5.2 Reasons for supporting option 1 and option 2

1,217 (39%) respondents stated why they think option 1 is a good way to improve air quality in Bristol. 1,460 (46%) said why they think option 2 is a good solution (Figure 30). Of these:

- 428 (14%) respondents expressed **general support** for option 1; 763 (24%) did so for option 2;
- 277 (13%) respondents suggested that option 1 would **promote behaviour change**, while 221 (7%) suggested that option 2 would – such as encouraging vehicle upgrades (i.e. a move away from diesel vehicles and faster investment in cleaner coaches, buses, taxis, larger vehicles and commercial vehicles), as well as having positive impacts for active modes and encouraging the use of public transport;
- 231 (7%) respondents believed option 1 would have a **positive impact on air quality**, and 287 (9%) thought that option 2 would. Comments included how the option is a good step forward or the more effective option at delivering improved air quality;
- 153 (5%) respondents thought option 1 **targets the correct vehicles** and 176 (6%) felt that option 2 did – with general comments such as the option targets the ‘most polluting’ or ‘right’ vehicle types. There were also more specific comments supporting the targeting of buses, HGVs, commercial/business operators, LGVs and taxis;
- 122 (4%) respondents provided comments that option 1 was proportionate and either **benefitted or minimised disbenefits** to specific groups; 56 (2%) said this of option 2;
- 49 (2%) respondents believed that option 1 would have a **positive impact on health**, and 34 (1%) thought option 2 would;
- 74 respondents (2%) commented on other themes for option 1 and 124 (4%) commented on other themes for option 2.

Figure 30: Reasons for supporting option 1 and option 2



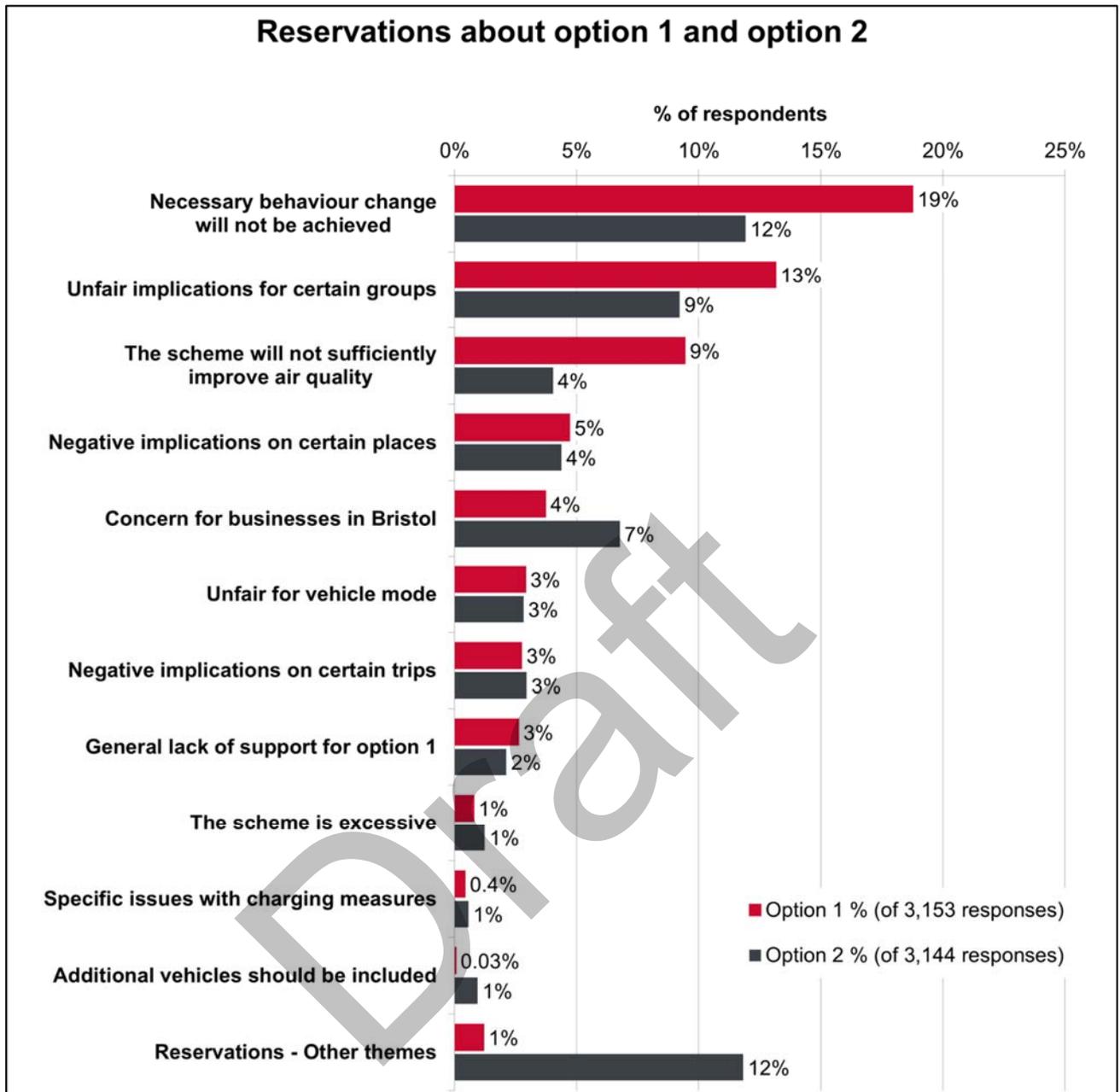
### 6.5.3 Reservations with parts of option 1 and option 2

1,565 (50%) respondents expressed reservations about option 1 and 1,240 (39%) described reservations about option 2 (Figure 31). Of these:

- 591 (19%) respondents were concerned that **option 1 would not achieve the necessary behaviour change**, while 374 (12%) had these concerns about **option 2**. Reasons included concern that the proposals would relocate traffic onto other routes, that existing public transport would not be able to support the behaviour change, that costs would be passed on to consumers, and non-compliant vehicles would continue driving (business as usual), and that the proposals do not do enough to discourage people from driving;
- 414 (13%) respondents were concerned about the **unfair implications option 1 would have on certain demographics**, and 289 (9%) were concerned about **option 2**. Concerns included impacts on lower income groups, individuals with disabilities, Bristol residents, commuters, and healthcare/hospital patients;
- 297 (9%) respondents did not think **option 1 would sufficiently improve air quality** and 126 (4%) respondents did not think **option 2** would. Comments included how long it would take to achieve compliance and a perception that the proposals do not go far enough to improve air quality, traffic congestion and public health;
- 148 (5%) respondents commented that **option 1 will have negative implications on certain places**, and 137 (4%) said that **option 2** would;
- 117 (4%) respondents outlined concerns that **option 1 would have negative implications on businesses in Bristol**, and 212 (7%) respondents thought **option 2** would. Concerns included the impact on small businesses that deliver into the city, that people will be more likely to visit elsewhere for shopping and leisure facilities and concern that businesses would transfer to Cribbs Causeway;
- 91 (3%) respondents commented that **option 1 would be unfair towards certain types of vehicle**, and 88 (2%) respondents said that **option 2** would be;
- 86 (3%) respondents were concerned that **option 1 would have negative implications on certain trips**, and 92 (3%) respondents showed concern that **option 2** would;
- 82 (3%) respondents expressed **a general lack of support for option 1**, and 66 (2%) for **option 2**;
- 13 (0.4%) respondents expressed **specific issues with charging measures for option 1**, and 17 (1%) for **option 2**;
- 1 respondent (0.03%) said that **additional vehicles need to be charged in option 1**, and 29 (1%) said this for **option 2**.

Figure 31 illustrates the reservations expressed by respondents about options 1 and 2.

**Figure 31: Reservations about option 1 and option 2**



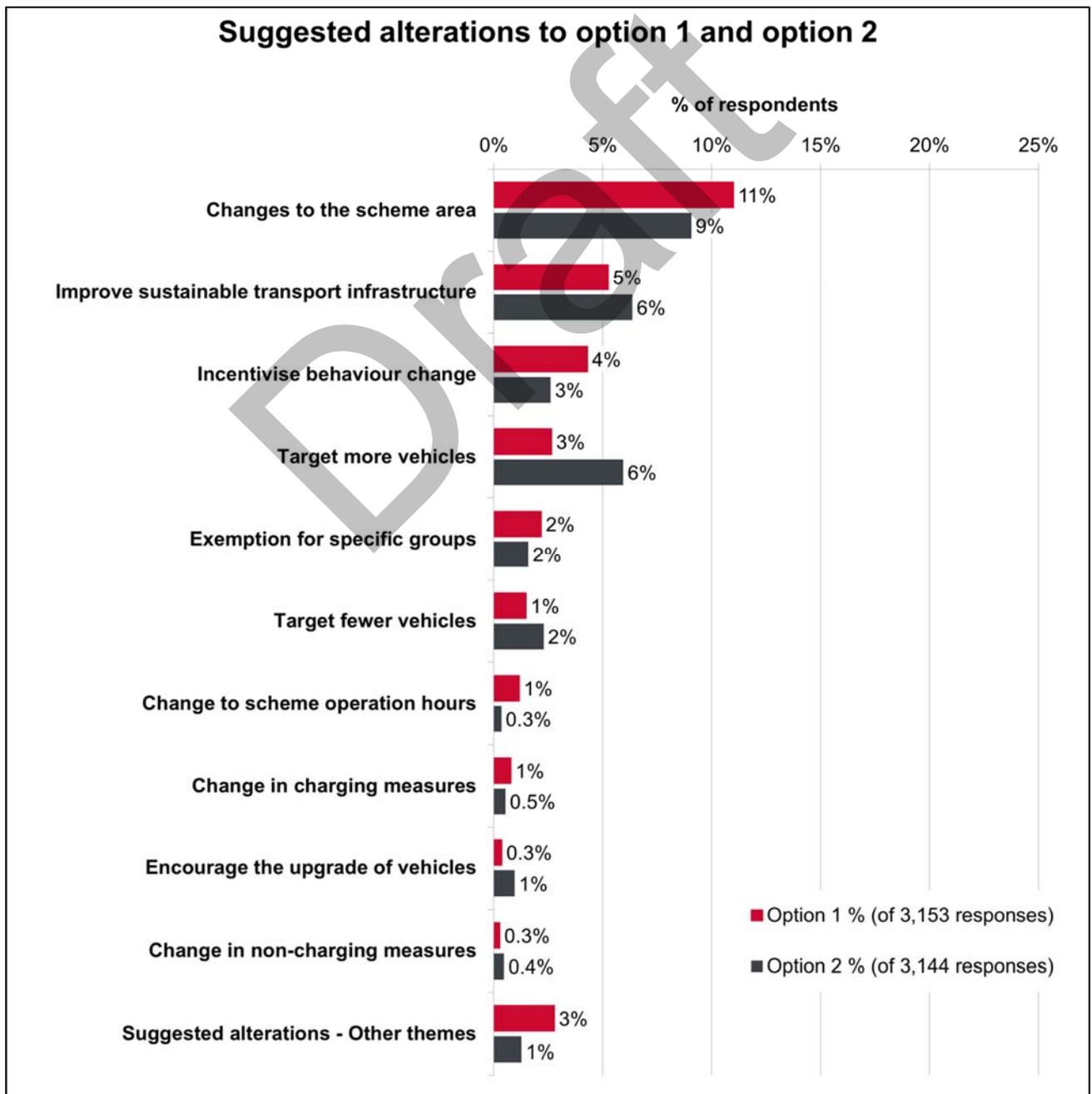
#### 6.5.4 Suggested alterations to option 1 and option 2

873 (28%) respondents suggested alterations to option 1, and 828 (26%) suggested alterations to option 2 (Figure 32). These included:

- 346 (11%) respondents suggested **changes to the scheme area of option 1**, and 284 (9%) for **option 2**;
- 165 (5%) respondents in response to **option 1** and 199 (6%) in response to **option 2** said that the **sustainable transport infrastructure should be improved**;
- 135 (4%) respondents said that **option 1 should do more to incentivise behaviour change** and 81 (3%) respondents thought that **option 2** should– including incentivising the use of public transport, focusing more on promoting cycling and walking and encouraging a behaviour shift towards electric vehicles;
- 83 (3%) respondents stated that option 1 should **target more vehicles** and 186 (6%) that **option 2** should;

- 68 (2%) respondents suggested **exemptions for certain groups for option 1**, and 49 (2%) respondents for **option 2**;
- 46 (1%) respondents stated that **option 1 should target fewer vehicles** and 71 (2%) respondents said that **option 2** should – including not charging/banning diesels, as well as excluding buses and newer diesels;
- 24 respondents (3%) suggested **changes to the charging measures in option 1**, while 16 (1%) suggested this for **option 2**;
- 11 (0.3%) respondents stated that **option 1 should include measures to encourage the upgrade of vehicles**, and 29 (1%) said that **option 2** should;
- 8 respondents (0.3%) suggested **changes to non-charging measures in option 1** and 14 respondents (0.4%) in **option 2**;
- 87 (3%) respondents suggested **other alterations for option 1**, and 39 (1%) wanted **other alterations for option 2**.

Figure 32: Suggested alterations to option 1 and option 2

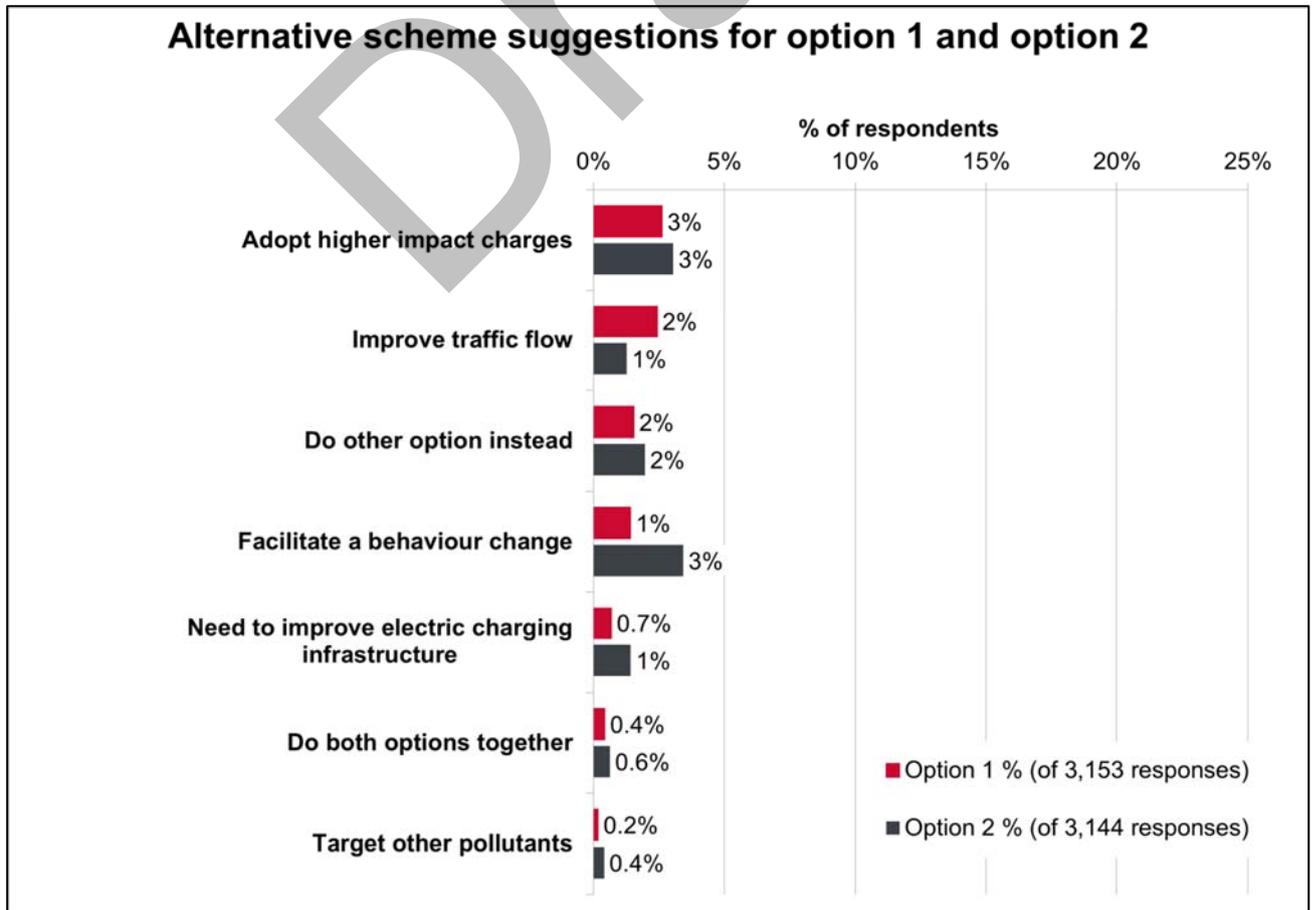


### 6.5.5 Suggestions for an alternative scheme to option 1 and option 2

345 (11%) respondents provided **suggestions for an alternative scheme to option 1**, and 397 (13%) **for option 2** (Figure 33). Of these:

- 82 (3%) respondents believed that **higher impact charges should be brought in as part of option 1**, and 95 (3%) as part of **option 2** – particularly charging or banning all cars and a ban on all “polluting” vehicles;
- 76 (2%) respondents made suggestions to **improve traffic flows to improve air quality in Bristol** as an alternative to **option 1** and 39 (1%) proposed this for **option 2**;
- 48 (2%) respondents stated that **option 2 should be implemented instead** or **option 2 is preferable to option 1**, and 61 (2%) respondents said the opposite, that **option 1 should be implemented instead** or **option 1 is preferable to option 2**;
- 44 (1%) respondents stated **option 1 should focus on facilitating behaviour change as a way to improve air quality in Bristol**, and 107 (3%) said that **option 2** should – particularly a shift towards travel by public transport and active travel modes, as well as the need for vehicle upgrades;
- 5 (0.2%) respondents stated that **other pollutants should be targeted as a way to improve air quality in Bristol** for **option 1**, and 12 (0.4%) for **option 2**;
- 19 (1%) respondents believed that **no action is required** to improve air quality in response to option 2;
- 79 respondents (3%) gave **other suggestions for option 1**, and 30 (1%) for **option 2**.

Figure 33: Suggestions for an alternative scheme to option 1 and option 2



## 7 Survey views on financial assistance to replace non-compliant vehicles

### 7.1 Overview

To explore the potential of types of financial support to encourage vehicle owners to replace or convert non-compliant vehicles to a less polluting option, respondents were asked:

- How much they would potentially need to borrow as a loan to change their non-compliant vehicle if a charging CAZ is brought in; and
- Whether they would replace their non-compliant vehicle if a £2,000 grant or mobility credit was available and a charging CAZ is introduced.

### 7.2 Loans

Respondents were asked to state what level of loan they think they might borrow (noting that a loan would need to be paid back), selecting from the following suggested loan amounts for each type of vehicle:

- Private cars, LGVs, private hire vehicles: loan options of £1,000, £2,000, £3,000;
- Hackney carriages (taxi): options of £4,000, £5,000, £6,000;
- HGVs: options of £10,000, £13,000, £16,000;
- Buses and coaches: options of £20,000, £25,000, £30,000.

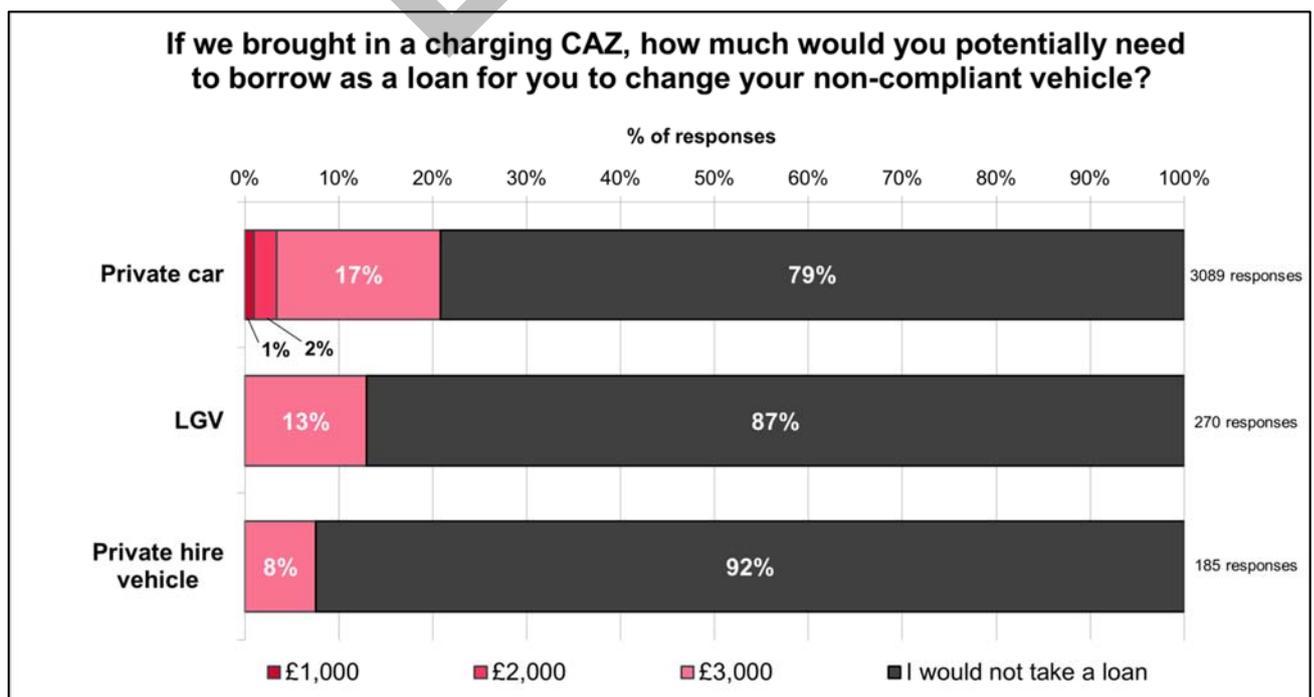
For each vehicle type, respondents could select one of the following if they did not select a loan amount:

- I would not take a loan; or
- I don't have this vehicle.

In order to determine if people who own each vehicle type would take loans, respondents who selected 'I don't have this vehicle' have been removed from the following analysis.

For all vehicle types, the majority of respondents would not take a loan. Of those who would take a loan, the majority selected the highest loan amount. Owners of private cars (21%) and LGVs (13%) are the most likely to take a loan. Figures 34, 35, 36 and 37 show a breakdown of the results by vehicle category.

**Figure 34: Views on loans for private cars, LGVs and private hire vehicles**

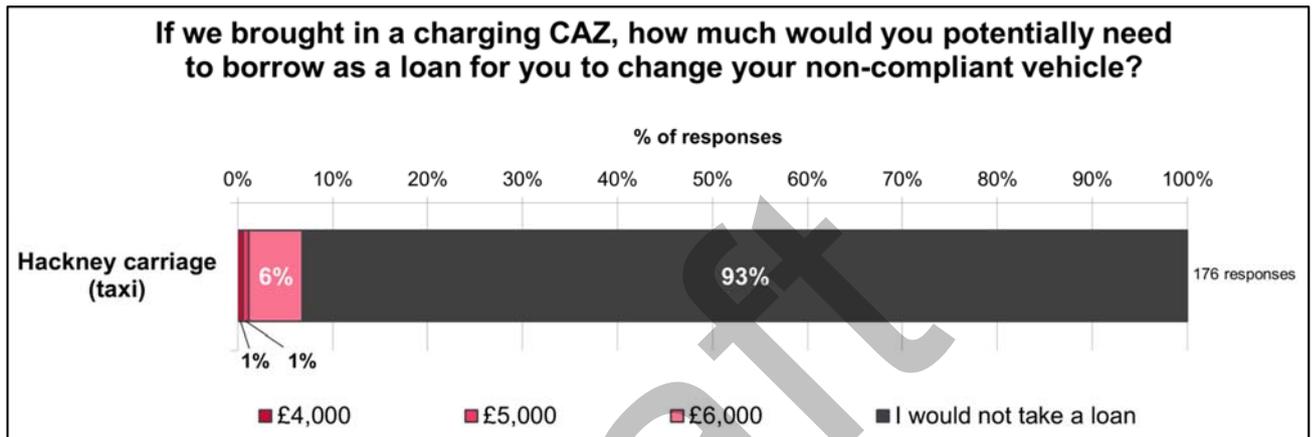


**Private cars:** of the 3,089 respondents who selected one of the options for a private car, 29 (1%) said they would take a £1,000 loan, 76 (2%) a £2,000 loan, and 538 (17%) a £3,000 loan. 2,446 (79%) respondents said they would not take a loan.

**LGVs:** of 270 respondents who selected one of the options for LGVs, none said that they would take a £1,000 or a £2,000 loan, 35 (13%) said they would take a £3,000 loan, and 235 (87%) said they would not take a loan.

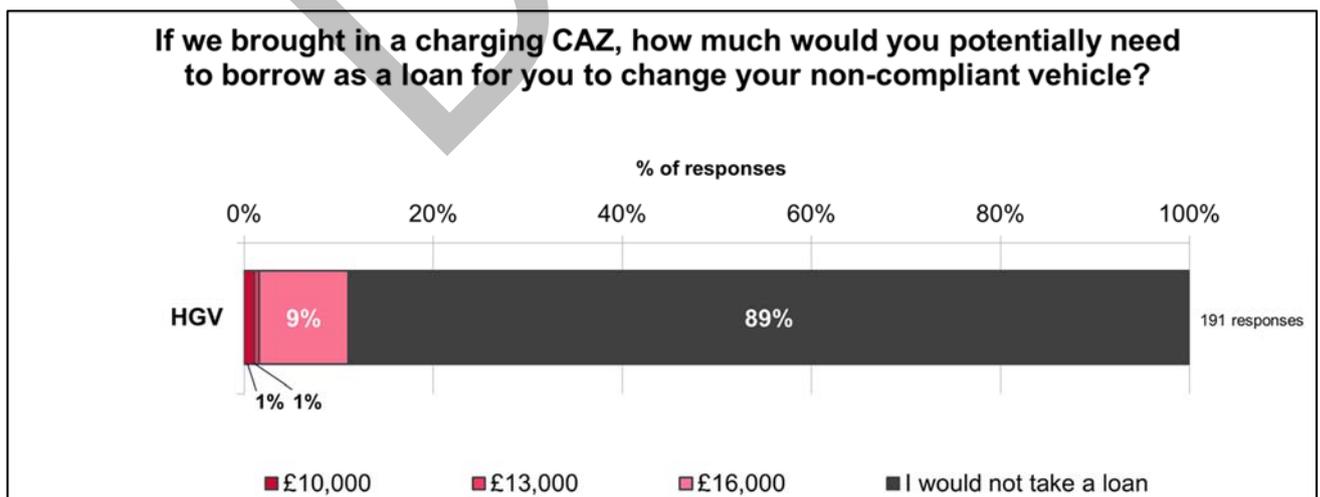
**Private hire vehicles:** Of 185 respondents who selected an option for private hire vehicles, none said they would take a £1,000 or £2,000 loan, 14 (8%) said they would take a £3,000 loan and 171 (92%) said they would not take a loan.

**Figure 35: Views on loans for hackney carriages (taxis)**



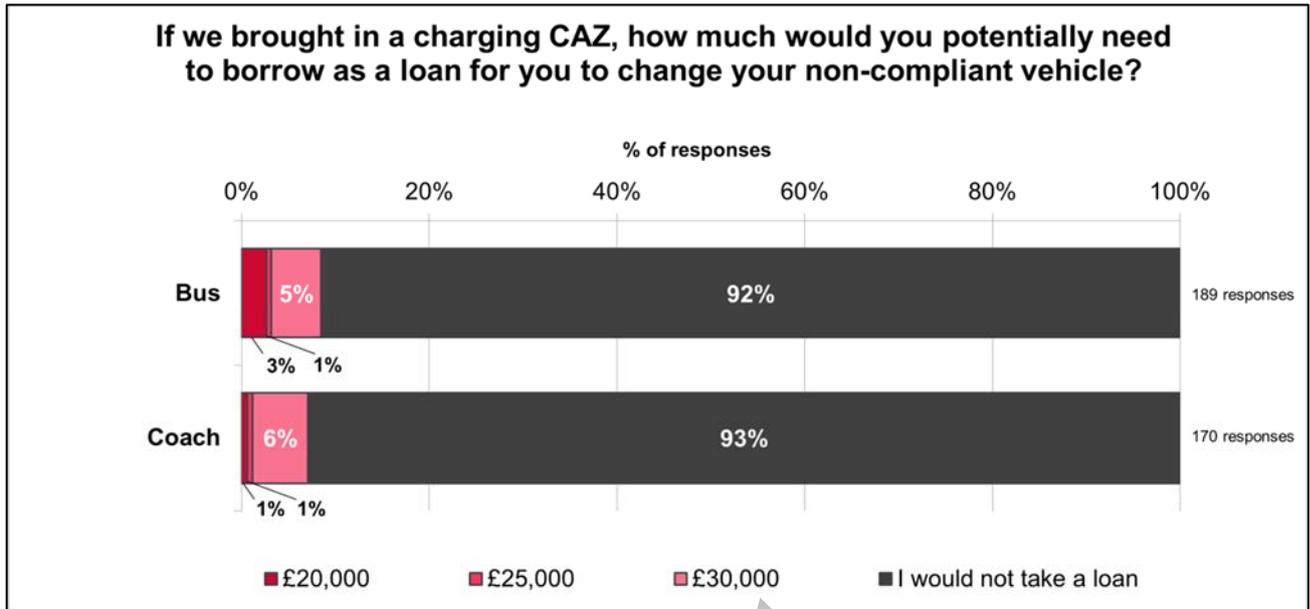
**Hackney carriage (taxi):** of 176 respondents who selected an option for hackney carriages, 1 (1%) said they would take a £4,000 loan, 1 (1%) said they would take a £5,000 loan, 10 (6%) said they would take a £6,000 loan, and 164 (93%) said they would not take a loan.

**Figure 36: Views on loans for HGVs**



**Heavy Goods Vehicles (HGVs):** of 191 respondents who selected an option for HGVs, 2 (1%) said they would take a £10,000 loan, 1 (1%) said they would take a £13,000 loan, and 18 (9%) said they would take a £16,000 loan. 170 (89%) said they would not take a loan.

**Figure 37: Views on loans for buses and coaches**



**Buses:** of 189 respondents who selected an option for buses, 5 (3%) said they would take a £20,000 loan, 1 (1%) said they would take a £25,000 loan, and 10 (5%) said they would take a £30,000 loan. 173 (92%) said they would not take a loan.

**Coaches:** of the 170 respondents who selected an option for coaches, 1 (1%) said they would take a £20,000 loan, 1 (1%) a £25,000 loan, and 10 (6%) a £30,000 loan. 158 (93%) said they would not take a loan.

### 7.3 Grants and mobility credits

Respondents were asked whether they would replace their non-compliant vehicle if a £2,000 grant<sup>26</sup> or mobility credit<sup>27</sup> was available. The question asked about four vehicle types; petrol cars, diesel cars, LGVs and taxis.

Respondents were much more likely to use a grant than a mobility credit for all four vehicle types. More than half of people who stated their intentions would use a grant to replace a petrol car (52%) or diesel car (57%). Fewer respondents would use a grant to replace an LGV (35%) or taxi (22%). This level of uptake for grants is much higher than for loans for all four vehicle types.

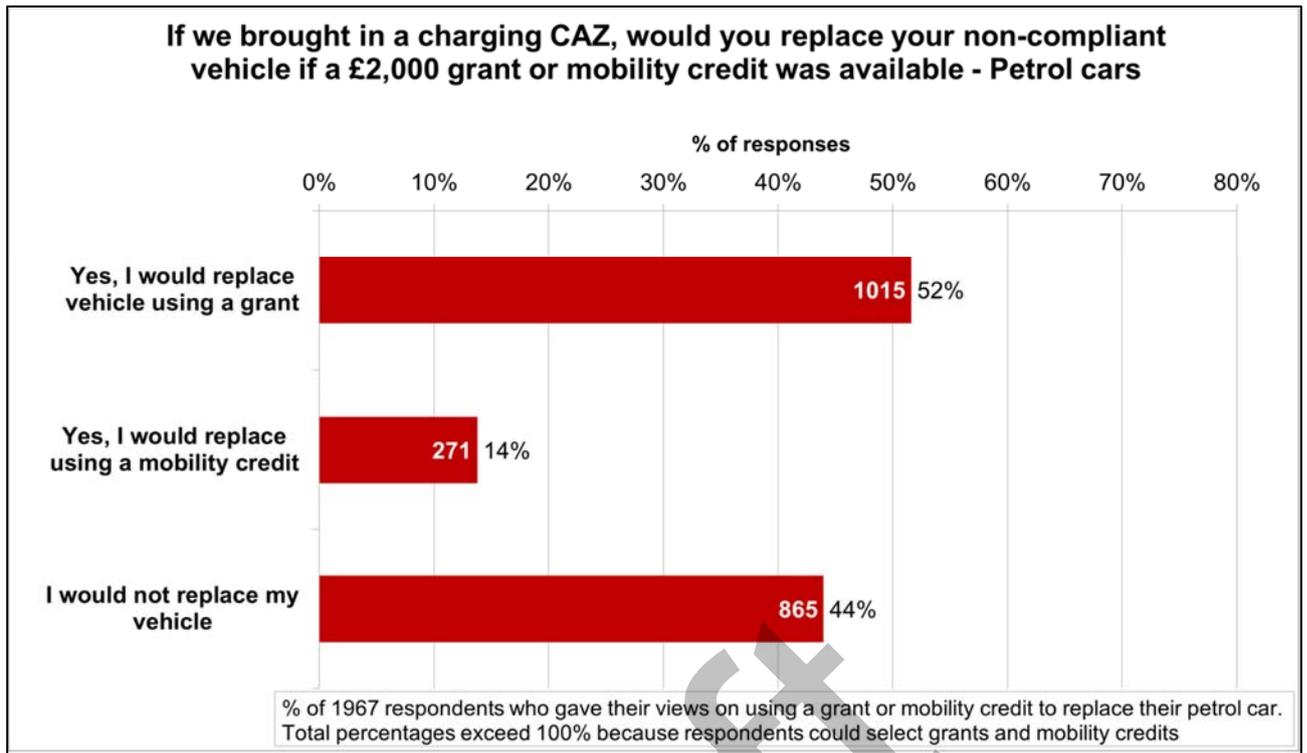
**Petrol cars:** 1,967 respondents stated their intentions for petrol cars (Figure 38), of whom:

- 1,015 (52%) said they would replace their vehicle using a £2,000 grant;
- 271 (14%) said they would replace it using a £2,000 mobility credit;
- 865 (44%) said they would not replace their vehicle.

<sup>26</sup> A **grant** is money provided by the government to replace or convert a non-compliant vehicle.

<sup>27</sup> A **mobility credit** is money provided by the government to change your mode of transport. The money can be spent on other transport options, for example potentially supporting the purchase of a new bike or towards public transport fares.

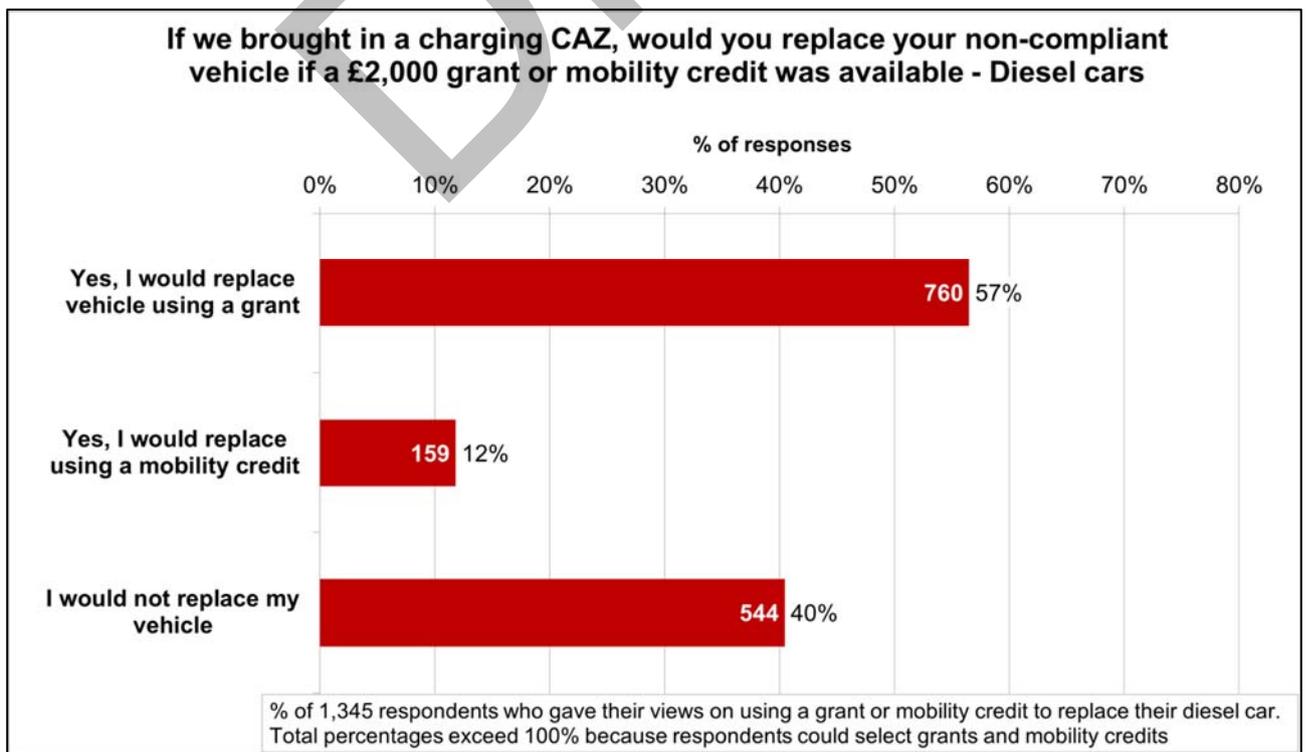
**Figure 38: stated uptake of loans and mobility credits for petrol cars**



**Diesel cars:** 1,345 respondents stated their intentions for diesel cars (Figure 39), of whom:

- 760 (57%) said they would replace their vehicle using a £2,000 grant;
- 159 (12%) said they would replace it using a £2,000 mobility credit;
- 544 (40%) said they would not replace their vehicle.

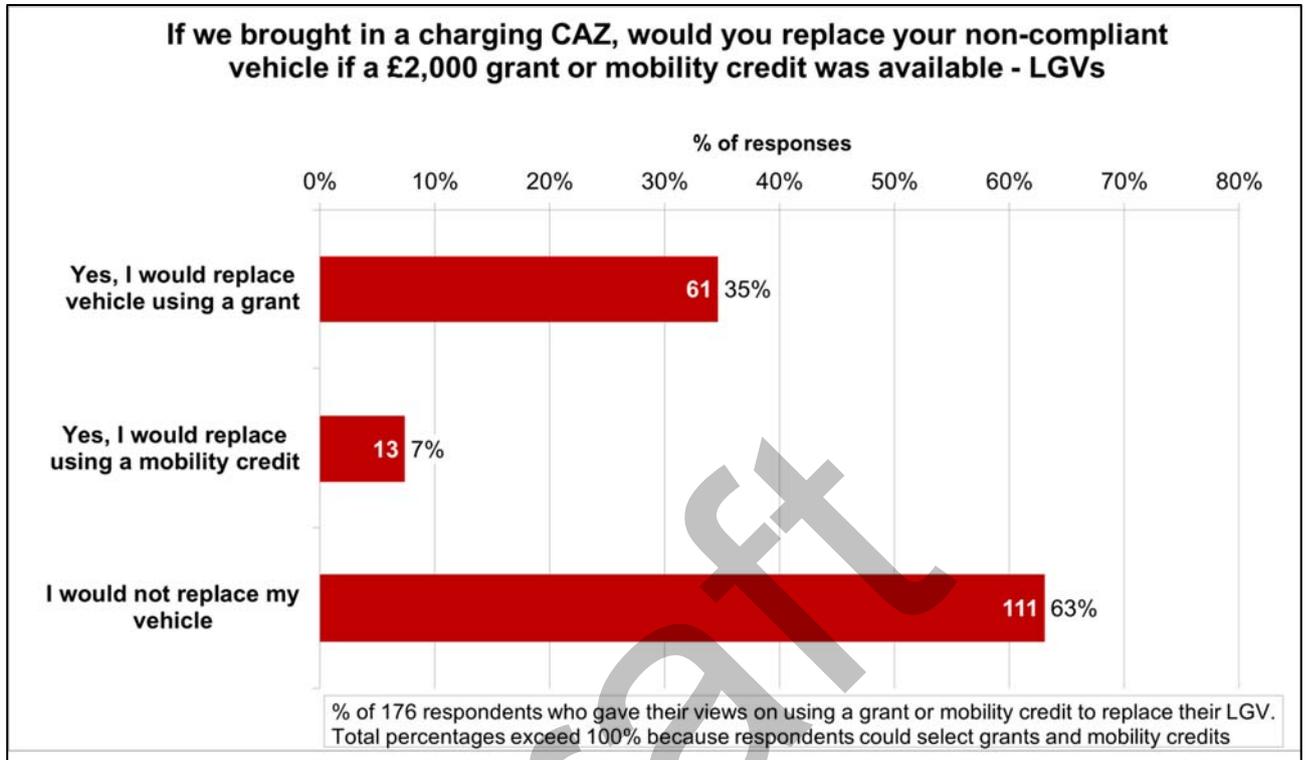
**Figure 39: stated uptake of loans and mobility credits for diesel cars**



**LGVs:** 176 respondents stated their intentions for LGVs (Figure 40), of whom:

- 61 (35%) said they would replace their vehicle using a £2,000 grant;
- 13 (7%) said they would replace it using a £2,000 mobility credit;
- 111 (63%) said they would not replace their vehicle.

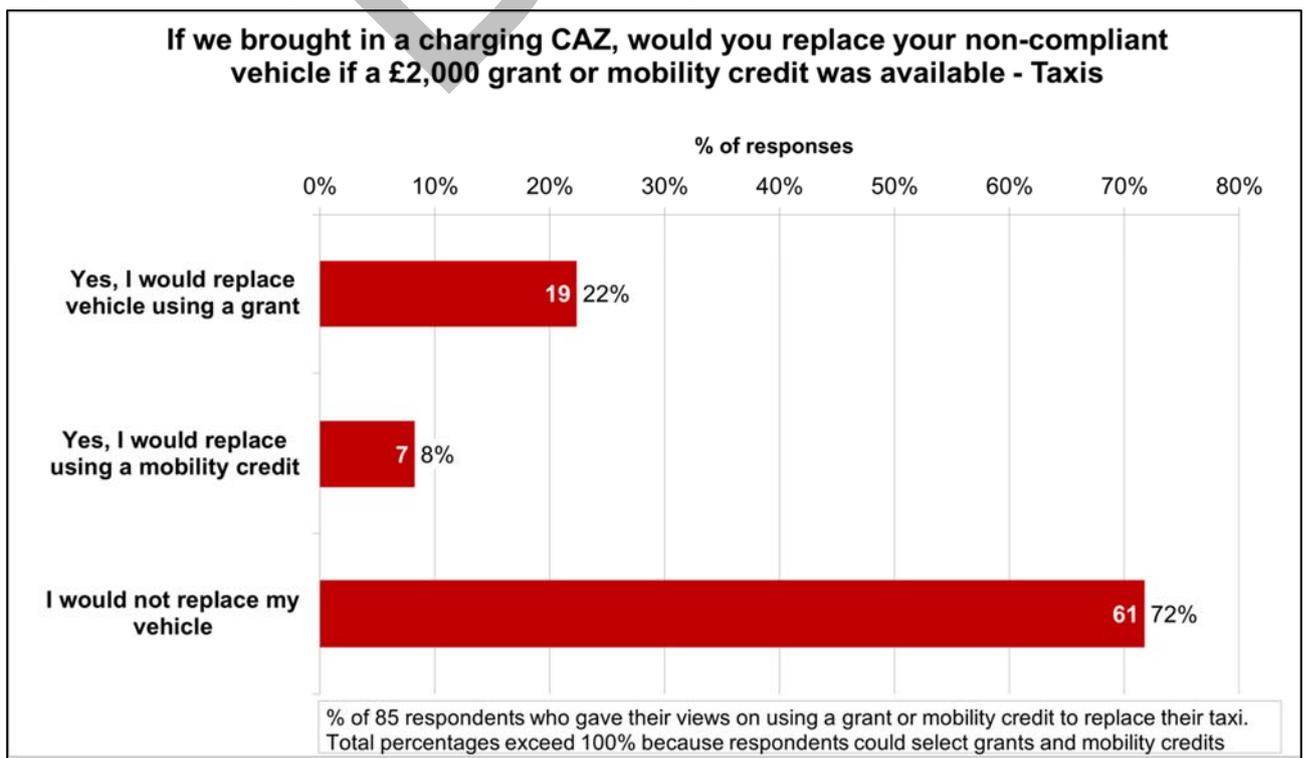
**Figure 40: stated uptake of loans and mobility credits for LGVs**



**Taxis:** 85 respondents stated their intentions for taxis (Figure 41), of whom:

- 19 (22%) said they would replace their vehicle using a £2,000 grant;
- 7 (8%) said they would replace it using a £2,000 mobility credit;
- 61 (72%) said they would not replace their vehicle.

**Figure 41: stated uptake of loans and mobility credits for taxis**



## 7.4 Difference in views on grants and mobility credits compared a loan

### 7.4.1 Petrol cars

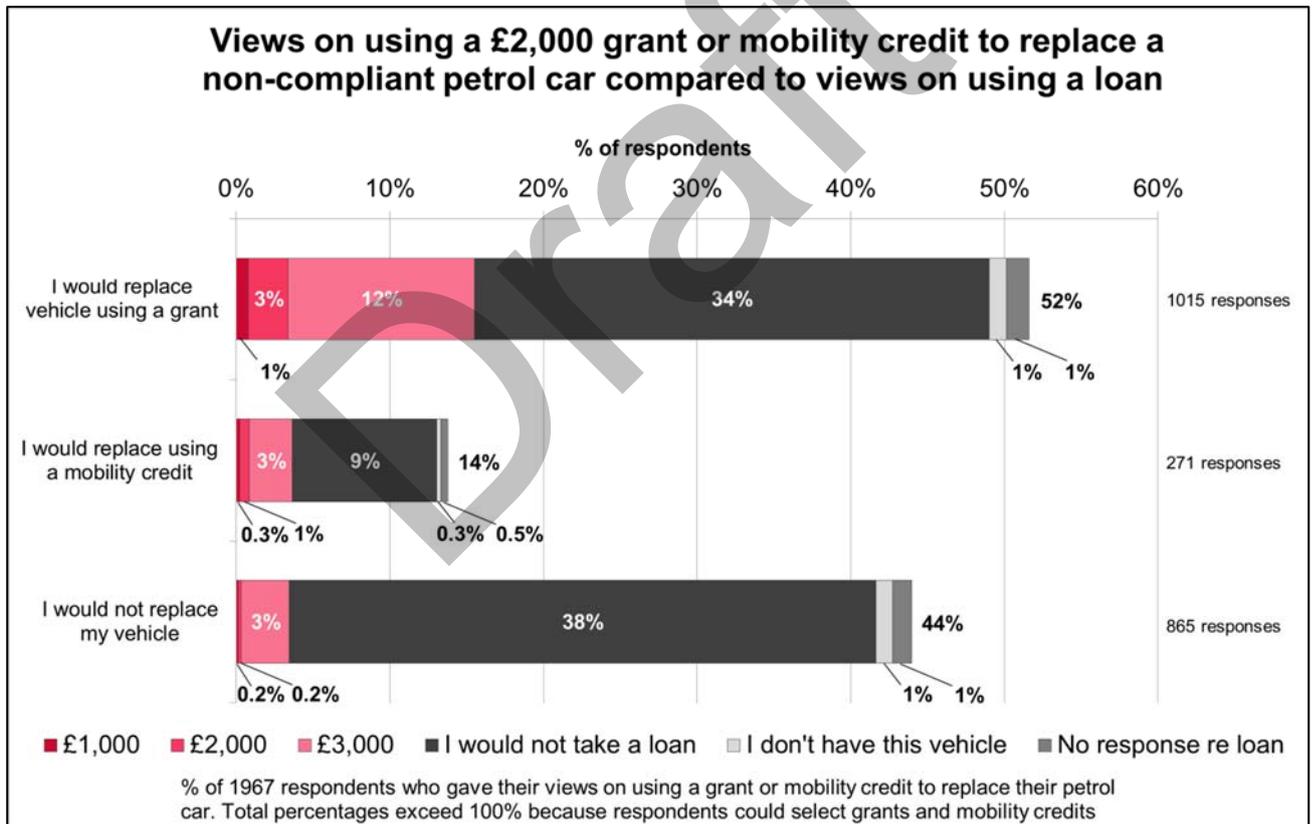
For the 1,967 respondents who gave their views on using a grant or mobility credit to replace their non-compliant petrol car, Figure 42 shows how many would consider using a loan. (All percentages are percentages of the 1,967 who stated their views for a petrol car.)

Of the 1,015 respondents (52%) who said they would replace their petrol car using a grant, the majority (34% of 1,967 respondents) would not take a loan. Of those that would also take a loan, the highest proportion (12%) would take the highest suggested loan amount of £3,000, 2% would take a loan of £2,000 and 1% would take a loan of £1,000.

Of the 271 respondents (14%) who said they would replace their petrol car using a mobility credit, the majority would not take a loan. Of those that would also take a loan, the highest proportion (3%) would take the highest loan amount of £3,000.

Of the 865 respondents (44%) who said they would not replace their vehicle using a grant or mobility credit, the majority also would not take a loan. 61 respondents (3%) would take a loan of £3,000.

**Figure 42: views on loans for respondents who stated they would use a grant or mobility credit to replace a non-compliant petrol car**



### 7.4.2 Diesel cars

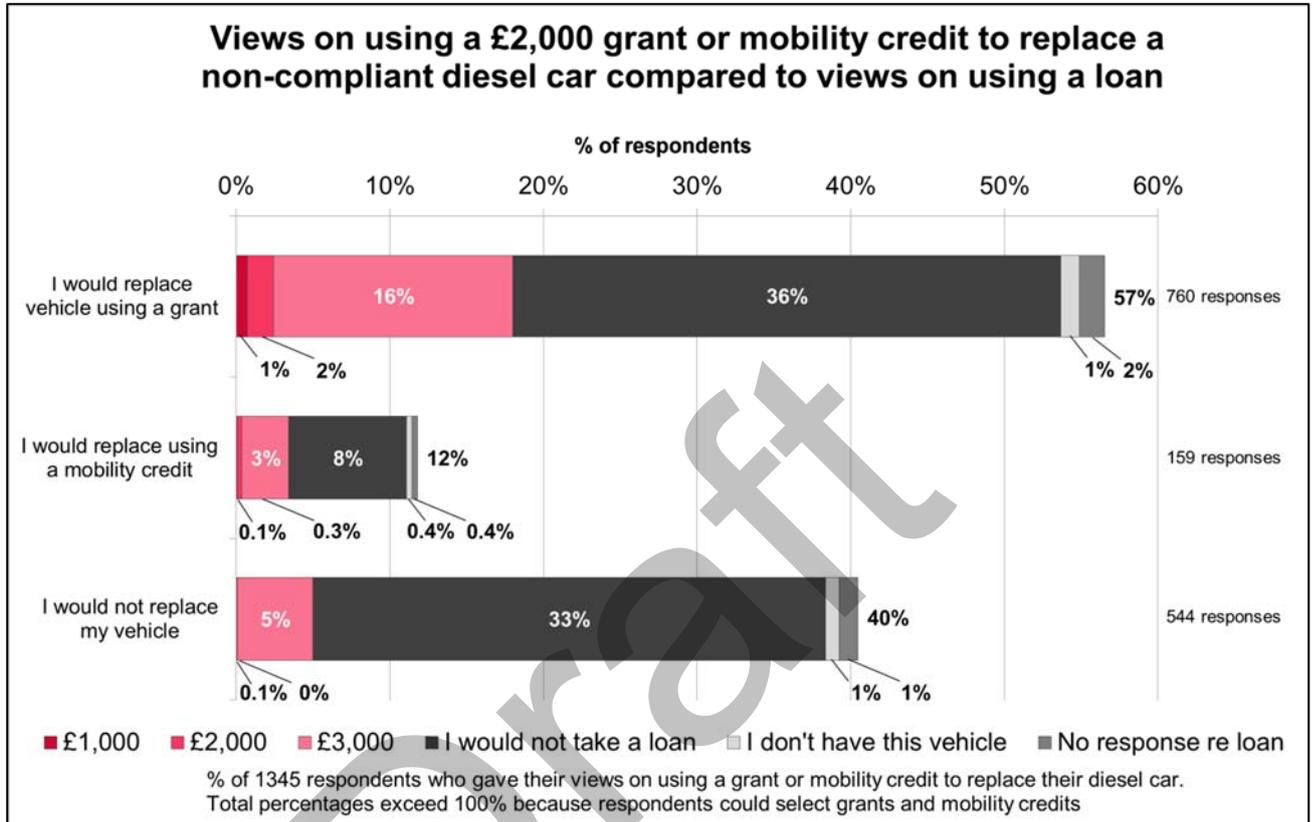
For the 1,345 respondents who gave their views on using a grant or mobility credit to replace their non-compliant diesel car, Figure 43 shows how many would consider using a loan. (All percentages are percentages of the 1,345 who stated their views for a diesel car.)

The 760 respondents (57%) who said they would replace their diesel car using a grant responded similarly to those with petrol cars, with the majority opting not to take a loan. Of those that would also take a loan, the highest proportion (16%) would take the highest suggested loan amount of £3,000, 2% would take a loan of £2,000 and 1% would take a loan of £1,000.

Of the 159 respondents (12%) who said they would replace their diesel car using a mobility credit, the majority would not take a loan. Of those that would also take a loan, the highest proportion (3%) would take the highest loan amount of £3,000.

Of the 544 respondents (40%) who said they would not replace their vehicle, the majority also would not take a loan. 66 respondents (5%) said they would take a £3,000 loan.

**Figure 43: views on loans for respondents who stated they would use a grant or mobility credit to replace a non-compliant diesel car**



### 7.4.3 LGVs

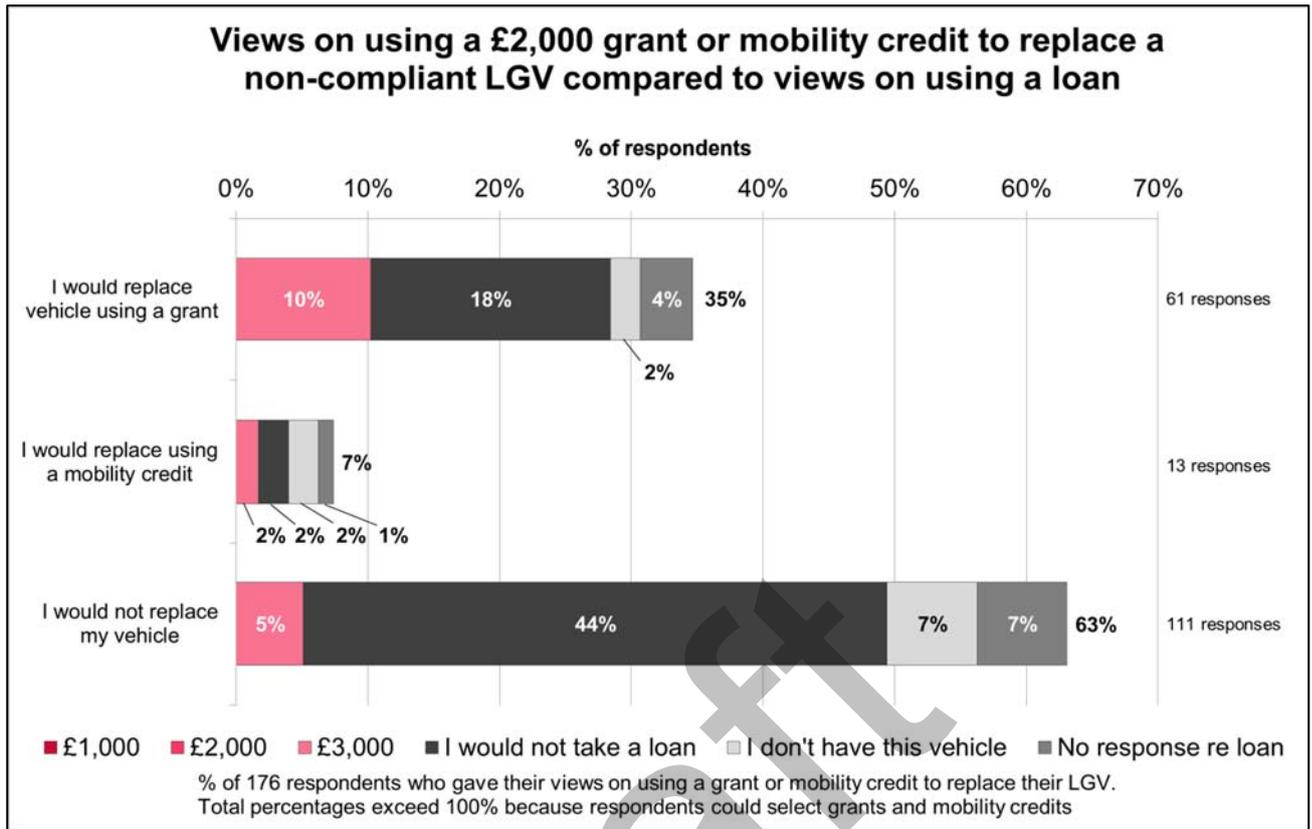
For the 176 respondents who gave their views on using a grant or mobility credit to replace their non-compliant LGV, Figure 44 shows how many would consider using a loan. (All percentages are percentages of the 176 who stated their views for an LGV.)

Of the 61 respondents (35%) who said they would take a grant to replace their LGV, a higher proportion (10% of 176 respondents) said they would take a £3,000 loan than those replacing private cars, The proportion who would not take a loan is 18%.

Of the 13 respondents (7%) who said they would replace their LGV using a mobility credit, a similar proportion said they would take a £3,000 loan as would not take a loan (2%).

Of the 111 respondents (63%) who said they would not replace their vehicle, the majority also would not take a loan. Nine respondents (5%) said they would take a £3,000 loan.

**Figure 44: views on loans for respondents who stated they would use a grant or mobility credit to replace a non-compliant LGV**

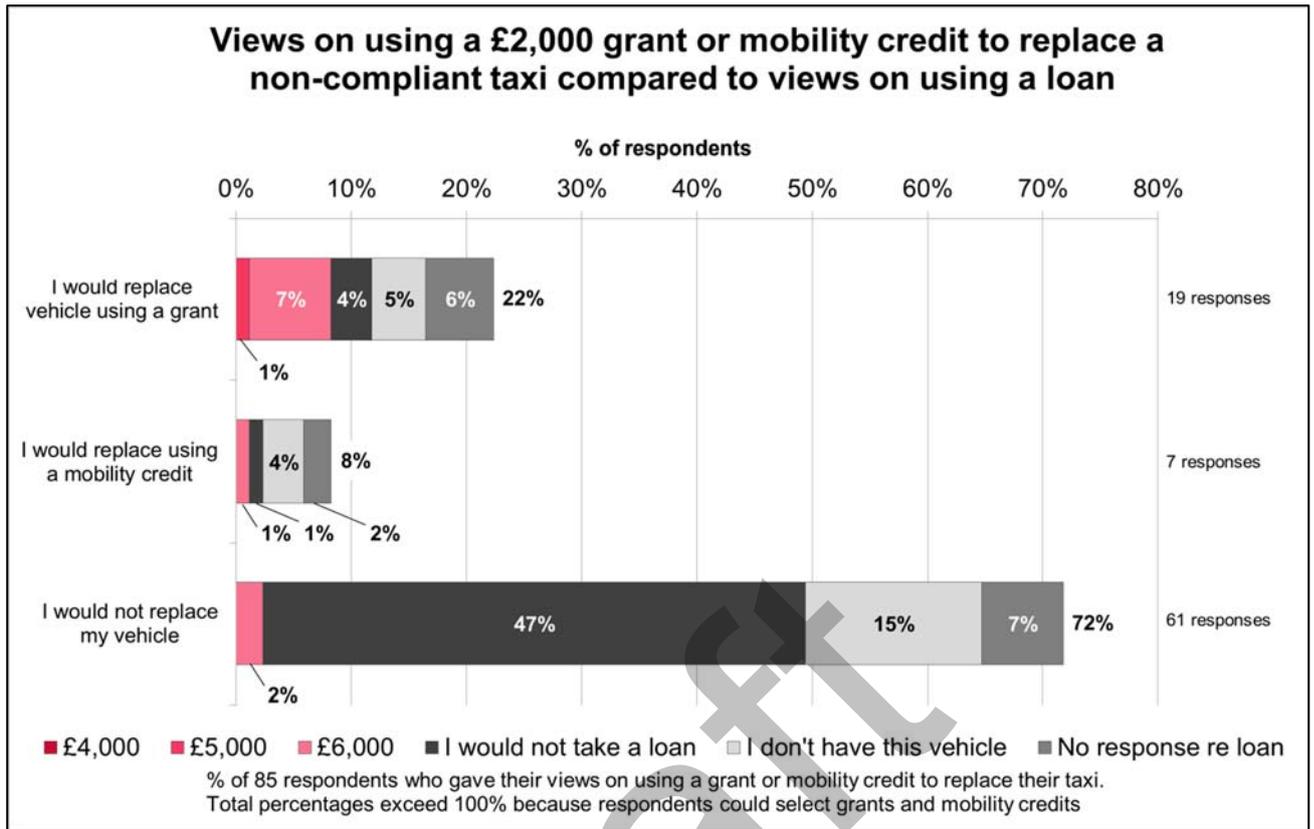


#### 7.4.4 Taxis

For the 85 respondents who gave their views on using a grant or mobility credit to replace their non-compliant taxi, Figure 45 shows how many would also consider using a loan. (All percentages are percentages of the 85 who stated their views for a taxi.)

The proportions should be interpreted with some caution because of the small number of respondents (85) who gave their views for taxis.

**Figure 45: views on loans for respondents who stated they would use a grant or mobility credit to replace a non-compliant taxi**



## 8 Survey views on exemptions and concessions for selected groups

### 8.1 Overview

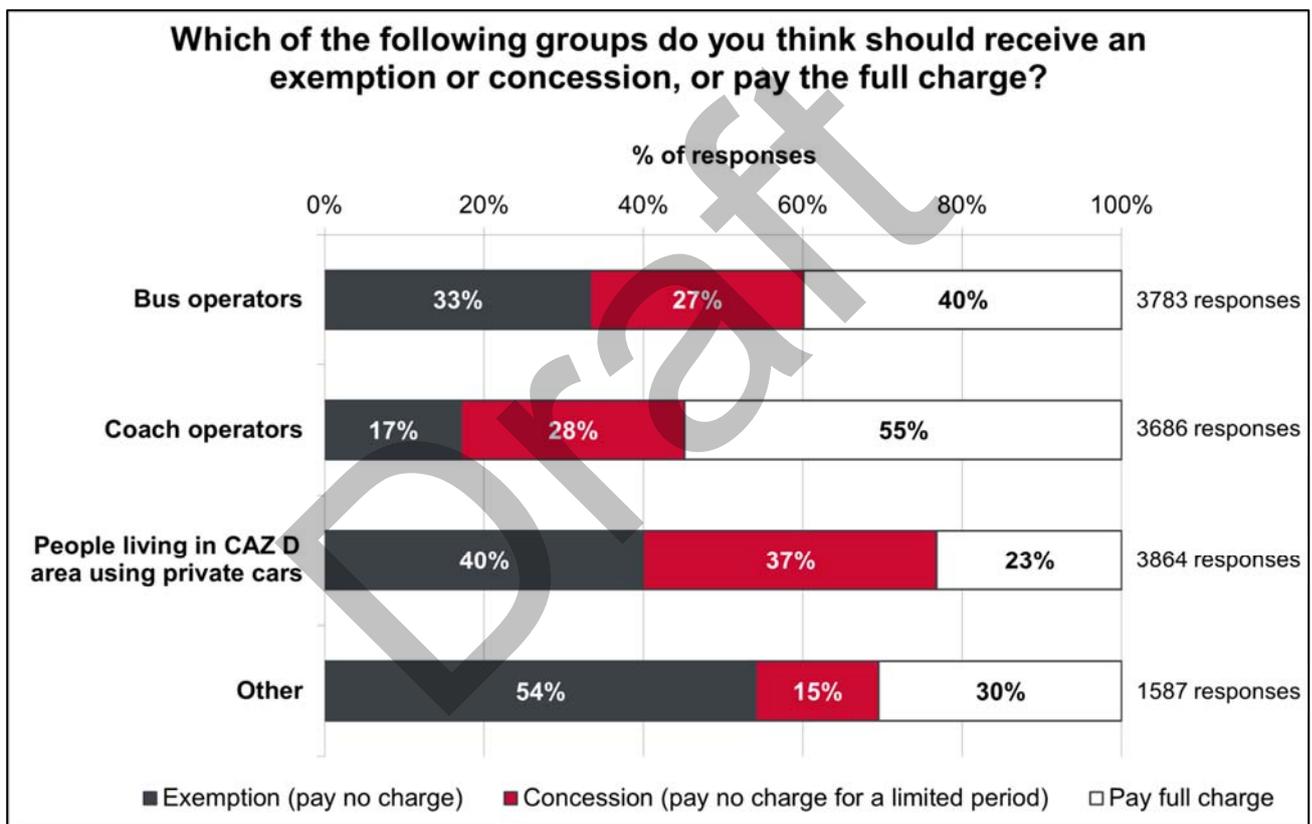
Respondents were asked whether some vehicle users in particular situations should be offered concessions or exemptions if a charging CAZ is needed (Question 11).

- An exemption means that drivers of a non-compliant vehicle in a specific situation would not pay the charge.
- A concession means that drivers of a non-compliant vehicle in a specific situation would not pay the charge for a limited period (to be determined) when the scheme first starts.

Respondents were asked to give their views on four groups: bus operators, coach operators, people living in the CAZ D area using private cars, and ‘other’ specified by the respondent<sup>28</sup>.

4,053 (96%) respondents provided views on exemptions and concessions (Figure 46).

**Figure 46: Views on which groups should receive an exemption or concession**



<sup>28</sup> The consultation explained that, following feedback to the 2019 Traffic Clean Air Zones consultation, exemptions are being considered for emergency service vehicles, NHS patient transport ambulances, community transport vehicles and vehicles registered for the disabled passenger vehicle tax class. Concessions are being considered for low income households, small businesses and taxi owners. Potential exemptions and concessions would be finalised as part of the full business case for the preferred scheme in early 2021.

## 8.2 Bus operators

Of 3,783 respondents who gave a view on concessions and exemptions for bus operators:

- 1,260 (33%) said they should receive an exemption;
- 1,014 (27%) supported a concession;
- 1,509 (40%) said they should pay the full charge to drive a non-compliant vehicle in the proposed charging zones.

## 8.3 Coach operators

Of the 3,686 respondents who gave a view on coach operators:

- 631 (17%) said they should receive an exemption (approximately half the proportion for bus operators);
- 1,033 (28%) respondents said coach operators should receive a concession (similar to the proportion for bus operators);
- 2,022 (55%) respondents said coach operators they should pay full charge.

## 8.4 People living in CAZ D area using private cars:

3,864 respondents gave a view on people living in the CAZ D area using private cars. Over three quarters of the respondents thought this group should receive either an exemption or concession:

- 1,545 (40%) said CAZ D area residents using private cars should receive an exemption;
- 1,423 (37%) said they should receive a concession;
- 896 (23%) said they should pay a full charge.

## 8.5 Other groups suggested by respondents

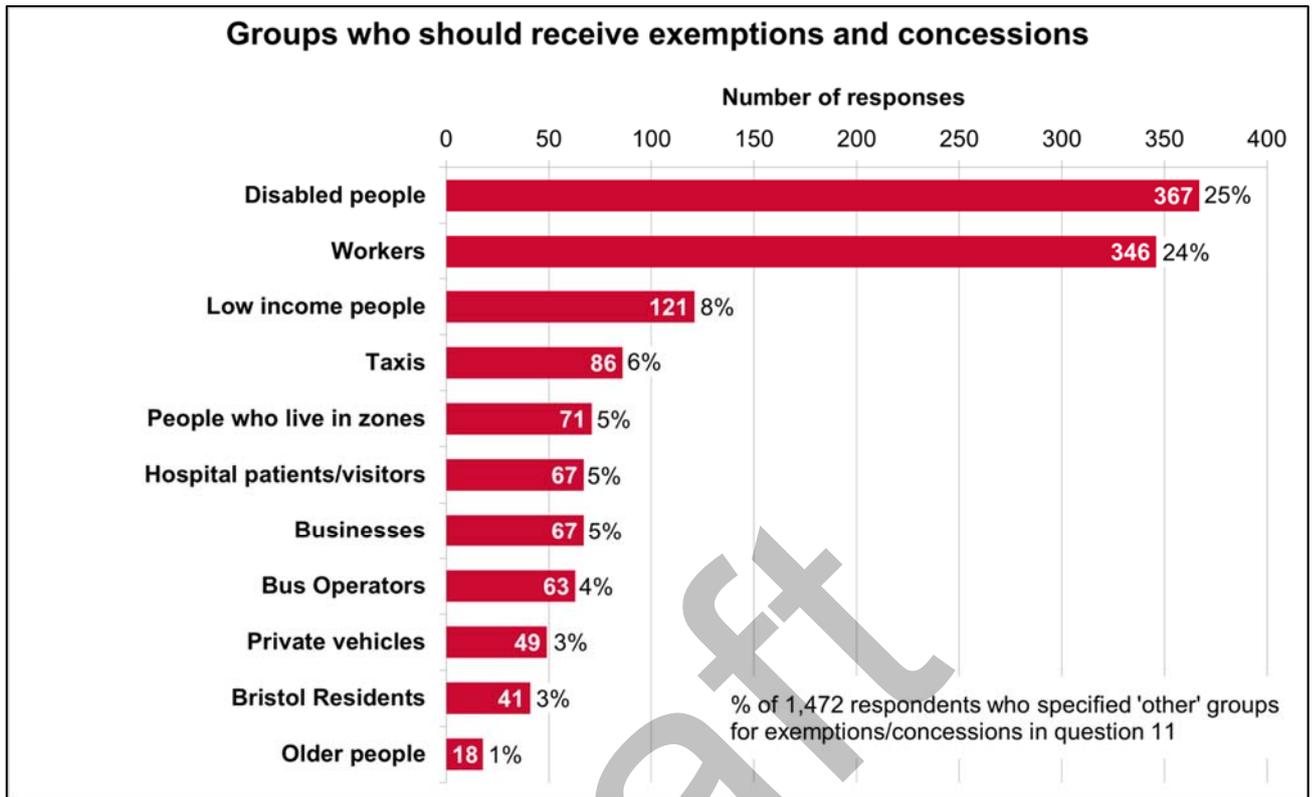
1,472 respondents provided free text answers for the 'other' category. Of these, the most frequently suggested were disabled people, people who need to drive for work, people on low incomes, people living in CAZ areas, hospital users and taxis. This aligns with several of the concessions and exemptions being considered following the 2019 consultation.

The breakdown of 'other' groups that respondents said should receive exemptions and concessions is provided below and in Figure 47.

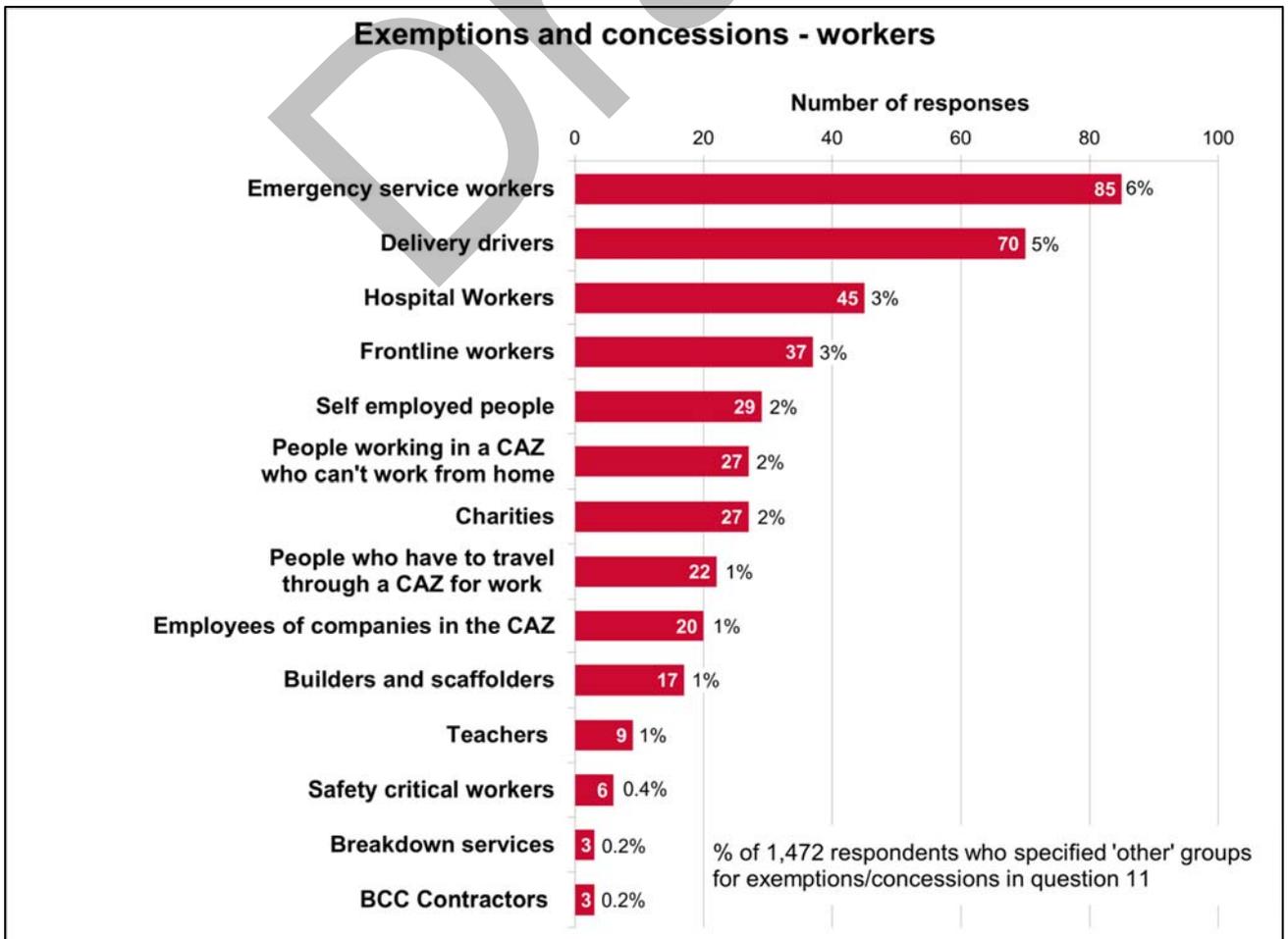
- 367 (25%) said **disabled people** should receive exemptions/concessions;
- 346 (24%) said **workers** should be eligible, including **emergency service workers, delivery drivers, hospital workers** and **frontline workers**. The full breakdown is shown in Figure 48;
- 121 (8%) said that **people on low incomes** should be eligible;
- 86 (6%) said that **taxis** should be exempt or receive concessions;
- 71 (5%) said that **people who live in the CAZ** should be eligible;
- 67 (5%) said that **patients and visitors to hospitals** should be eligible;
- 67 (5%) said that **businesses** should be exempt or receive concessions;
- 63 (4%) said that **bus operators** should be exempt or receive concessions – this was in addition to the respondents covered in Section 8.2 above;
- 49 (3%) said that **private vehicles** should be exempt or receive concessions, including **classic cars, camper vans** and **hybrid/electric vehicles**;
- 41 (3%) said that **Bristol residents** should be exempt or receive concessions;
- 18 (1%) said that **older people** should be exempt or receive concessions.

Other groups specified include parents, out-of-town drivers, community transport, hire cars, religious groups, and volunteers.

**Figure 47: Other groups suggested by respondents for exemptions and concessions**



**Figure 48: Types of worker respondents identified for exemptions/concessions**



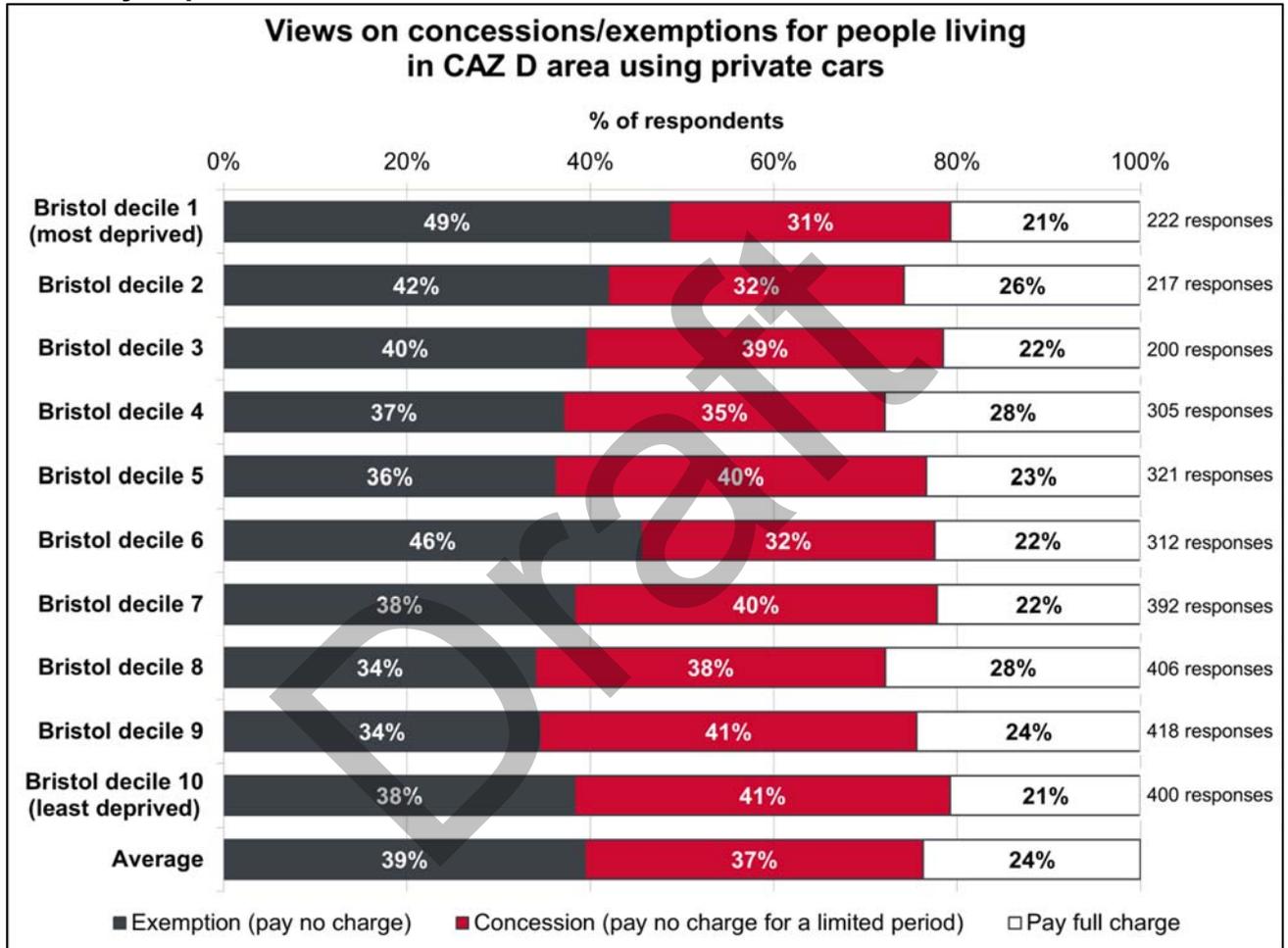
### 8.6 Views on exemptions and concessions from areas of different deprivation

Figure 49 shows how support for people living in the CAZ D area to be eligible for an exemption or concession varies for respondents in different deprivation deciles.

The most deprived 10% of Bristol (decile 1) has the highest proportion of respondents who support people living in the CAZ D area receiving an exemption (49% compared to an average of 39%). The decile with the second highest support is decile 6 (46%).

However, there is no overall trend between deprivation and the support for exemptions or concession, with most deciles showing similar views to the average.

**Figure 49: Concessions/exemptions for people living in a CAZ D using private cars  
Views by deprivation decile**



## 9 Survey responses: other comments and suggestions

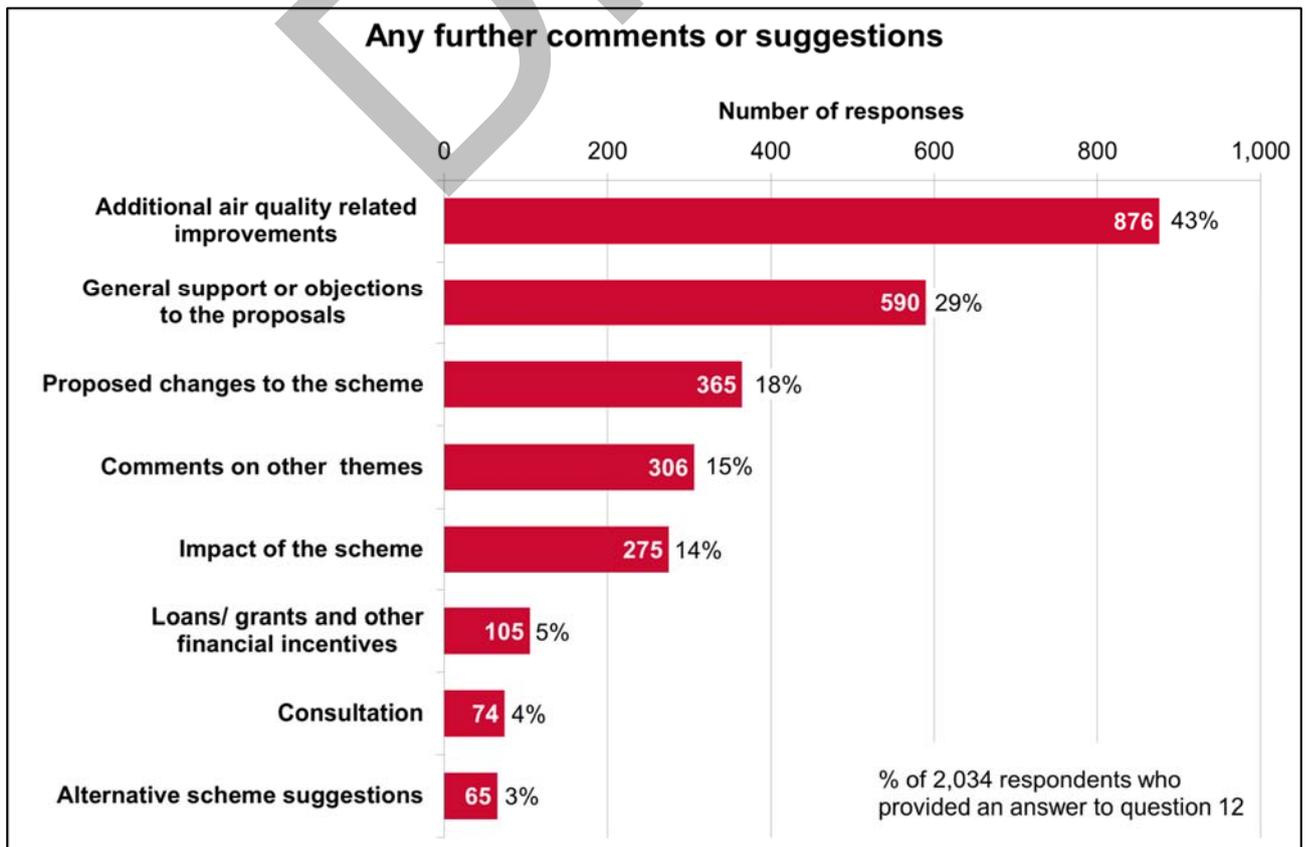
### 9.1 Overview

Respondents were invited to provide any other comments or suggestions about the new Traffic Clean Air Zone proposals as free text (Figure 50).

Of the 2,034 (48%) respondents who provided further comments on the proposals:

- 876 (43%) made suggestions for **additional measures to improve air quality**. The main comments included requests for more public transport improvements (434 respondents, 21%), more improvements to facilitate cycling and walking (215 responses, 11%), encouraging the use of electric vehicles (136 responses, 7%), and improving the traffic and road layout (88 responses, 4%);
- 590 (29%) made comments detailing **general support or objection to the proposals and/or air quality improvements**. Most of these comments stated respondents' concerns that the proposals are not ambitious enough or would not achieve improved air quality fast enough, but generally support the need to improve air quality in Bristol;
- 365 (18%) **suggested changes to the proposals**, specifically changes to the scheme boundaries, alternative charges and timeframes, which vehicles should be targeted and inclusion of exemptions and concessions;
- 275 (14%) identified concern about **impacts** on specific groups, journeys and places;
- 105 (5%) commented on **loans, grants and other financial incentives**;
- 65 (3%) outlined **alternative scheme suggestions** to a CAZ, such as pedestrianising the city centre, implementing more road closures, or bringing in a congestion charge;
- 74 (4%) commented on aspects of **the consultation**, such as the questionnaire, the consultation process and information provided;
- 306 (19%) commented on **other themes**.

**Figure 50: other comments or suggestions about the options - main themes**



Sections 9.2 to 9.7 provide a breakdown of each of the main themes.

## 9.2 Additional measures to improve air quality

Of the 2,034 respondents that provided further comments on the proposals, 876 (43%) suggested additional measures as a way to improve air quality in Bristol:

- 434 (21%) suggested improvements to public transport in Bristol;
- 215 (11%) suggested improvement to active transport modes;
- 136 (17%) made suggestions to encourage the use of electric vehicles;
- 92 (5%) provided suggestions on how to get people to stop driving or drive less;
- 88 (4%) suggested improvements to traffic management and road layout;
- 38 (2%) suggested improvements to parking infrastructure in Bristol;
- 34 (2%) made suggestions that Bristol learn from other cities / schemes;
- 16 (1%) showed support for car sharing schemes;
- 8 (0.2%) suggested incentives for businesses to change their practices;
- 3 (0.1%) made suggestions to encourage fleet changes;
- 5 (0.2%) made suggestions to implement freight consolidation schemes.

## 9.3 General support or lack of support for the proposals

590 (29%) respondents expressed general support, or lack of support, for the proposals or air quality improvements:

- 251 (12%) expressed general support for the proposals and improving air quality;
- 140 (7%) wanted the proposals and air quality improvements to be enacted more quickly;
- 84 (4%) showed concern that the proposals are not ambitious enough;
- 70 (3%) provided general negative comments relating to the proposals;
- 43 (2%) did not support the proposals due to the charges and impact of the changes.

## 9.4 Suggested changes to the proposals

365 (23%) respondents proposed changes to any traffic CAZ scheme:

- 80 (4%) recommended that any scheme includes certain exemptions or concessions;
- 72 (4%) suggested scheme boundary changes;
- 59 (3%) suggested that any scheme should target a certain vehicle type;
- 41 (2%) suggested schemes should not target a particular vehicle type;
- 41 (2%) suggested general alterations to charges/bans for vehicles in Bristol;
- 18 (1%) suggested alterations to the scheme timeframe;
- 7 (0.3%) suggested the need for a scrappage scheme;
- 98 (5%) proposed other suggested changes.

## 9.5 Potential impacts of an air quality improvement scheme

275 (14%) respondents made comments **regarding the potential impacts of an air quality improvement scheme**:

- 164 (8%) expressed concern that any proposals may have a negative impact on certain groups (low income groups, people with disabilities, hospital staff and patients, and older people);
- 65 (3%) suggested potential implications for businesses and the economy;
- 33 (2%) showed concern for effects on traffic, parking pressure and air quality resulting from displacement;
- 18 (1%) commented on the potential behaviour change due to the scheme;
- 98 (5%) gave feedback on other impacts of any scheme.

## 9.6 Loans, grants and other financial incentives

105 (5%) made comments about **loans, grants and other financial incentives**:

- 61 (3%) suggested negative impacts of the financial incentives;
- 48 (2%) suggested positive impacts of the financial incentives.

## 9.7 Alternative scheme suggestions

65 (3%) respondents made suggestions for alternative schemes:

- 19 (1%) suggested pedestrianising or banning all vehicles from the city;
- 17 (1%) suggested implementing more road closures;
- 13 (1%) requested the implementation of a congestion charge;
- 10 (0.5%) commented that no action was required.

## 9.8 Other themes

306 (15%) respondents commented on other themes:

- 84 (4%) provided comments about Bristol's roads, congestion and traffic management;
- 51 (3%) suggested other environmental ideas;
- 49 (2%) gave comments about public transport;
- 30 (1%) commented on other pollution sources not tackled by the traffic CAZ;
- 30 (1%) gave arguments for not changing vehicles;
- 28 (1%) commented on active modes of transport;
- 28 (1%) gave comments that were outside the scope of the consultation;
- 19 (1%) commented on parking in Bristol.

## 10 Other correspondence on the Traffic Clean Air Zones Consultation

### 10.1 Overview

19 letters and emails were received, providing responses to the consultation. Of these:

- 18 were from businesses and organisations<sup>29</sup> (see Table 3 for details); and
- One was from a member of the public.

**Table 3: Business and organisations replying by letter or email**

Type of organisation	Name of company/organisation
Transport operators	First West of England Enterprise Holdings Eagle Coaches
Transport/environment interest groups	Client Earth Extinction Rebellion Bristol Bristol Clean Air Alliance Bristol Walking Alliance Bristol Civic Society British Vehicle Renting and Leasing Association Military Vehicle Trust
Emergency services	South Western Ambulance Service
Healthcare providers	NHS organisations (University Hospital Bristol NHS Foundation Trust, Weston NHS Foundation Trust, North Bristol NHS Trust)
Business groups	Business West
Businesses	UPS Hammerson plc SeeTru Limited
Local authorities	North Somerset Council Wraxall & Failand Parish Council
Equalities organisations	Black South West Network

Analysis followed a similar approach to analysis of the feedback in free text questions of the questionnaire. Respondents' comments were grouped and categorised. Where duplicate letters and emails were submitted (for example via both hard copy and email), or where respondents submitted a second response that added information to or updated their first, this was combined as a single response in the analysis.

<sup>29</sup> Some of the correspondence was on behalf of multiple businesses/organisations

Within the letters and emails, respondents often commented on multiple issues. The letters and emails identified several of the same themes that were included in the free text responses to the survey.

Comments are categorised into the following five main themes<sup>30</sup>:

- 16 respondents (84%) **suggested alterations** to the proposals;
- 11 respondents (58%) expressed **support** for the proposals;
- 11 respondents (58%) commented on their **reservations** about the proposals;
- 5 respondents (26%) said that **further information was required** to determine the most effective way to reduce air pollution.

Each of these is summarised in the following Sections 10.2 to 10.5.

## 10.2 Suggested alterations to the proposals

16 respondents (84%) **suggested alterations** to the proposals:

- 10 (53%) suggested exemptions and concessions for specific groups or vehicles. These included residents from BAME communities, healthcare workers, emergency vehicles, HGVs, coaches, and commercial vehicles;
- 5 (26%) suggested **the boundary for option 1 (small CAZ D) needs to be reduced**, and 4 (21%) that the **option 2 (medium CAZ C) boundary should be reduced**;
- 3 (16%) suggested **increasing the option 1 (small CAZ D) boundary** and 2 (11%) recommended **increasing the option 2 (medium CAZ C) boundary**;
- 4 (21%) suggested that **sustainable transport infrastructure should be improved**, including public transport, active travel methods, and electric vehicle infrastructure;
- 3 (16%) said that **behaviour change should be incentivised**;
- 3 (16%) **suggested changes to grants and funding**, particularly for replacing commercial vehicles;
- 1 respondent said that there should be **higher impact charges**;
- 1 respondent said that there should be **fewer exemptions**;
- 1 respondent said that the **timeline for implementation should be longer** to enable businesses to prepare.

## 10.3 Support for the proposals

11 respondents (58%) expressed **support** for the proposals:

- 8 (42%) expressed **general support for option 1**;
- 4 (21%) expressed **general support for option 2**;
- 3 (16%) specified that **option 2** would have a **positive impact on air quality and public health** in Bristol;
- 3 (16%) expressed support for the **non-charging measures** such as the financial incentives to replace vehicles;
- 2 (11%) said that option 1 seemed proportionate to the problem and did not disadvantage specific groups.

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<sup>30</sup> Because respondents commented on multiple issues, the total number of comments is greater than the 41 letters and emails.

## 10.4 Reservations with the proposed options

11 respondents (58%) expressed their **reservations** about the proposals:

- 4 (21%) said that the **traffic would be pushed elsewhere**, causing issues in those areas;
- 4 (21%) were concerned that **option 2** would **negatively impact businesses**, and 2 (11%) were also concerned that **option 1** would do this;
- 2 (11%) were concerned **neither of the options would improve air quality sufficiently**;
- 2 (11%) said that there were unfair implications for certain groups, including residents from the BAME community and people on lower incomes;
- 2 (11%) were concerned that the proposals would have **negative implications for journeys to the hospital**.

## 10.5 Further information required

5 respondents (26%) said that **further information was required** to determine the most effective way to reduce air pollution, including:

- Identifying the root cause of air pollution in the impacted areas;
- Information about the air quality and traffic modelling;
- How businesses would be affected by the proposals.

## 11 How will this report be used?

This consultation report describes the consultation methodology and the feedback received, which will be considered by Cabinet before they make a decision on a preferred CAZ option to present to government as part of an Outline Business Case. The results of the consultation have also been considered to inform the preferred option to be recommended to Cabinet for approval. The results will also be used to shape the more detailed engagement strategy that will be part of the Full Business Case process.

### How can I keep track?

You can always find the latest consultations online at [www.bristol.gov.uk/consultationhub](http://www.bristol.gov.uk/consultationhub) where you can also sign up to receive automated email notifications about consultations and engagements.

Decisions related to the proposals in this consultation will be made publicly at the Cabinet meeting on 25 February 2021.

You can find forthcoming meetings and their agenda at [democracy.bristol.gov.uk](http://democracy.bristol.gov.uk)

Any decisions made by Cabinet will also be shared at [democracy.bristol.gov.uk](http://democracy.bristol.gov.uk)

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