

Clean Air Conversation

Summary of responses received

Transport for Greater Manchester

July 2019

Quality information

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Revision History

Revision	Revision date	Details	Authorised	Name	Position
1	06/07/2019	Revised following client comments	09/07/2019	Tamsin Stuart	Regional Director
2	08/08/2019	Revised following client comments	08/08/2019	Tamsin Stuart	Regional Director
3	13/08/2019	Revised following client comments	13/08/2019	Tamsin Stuart	Regional Director

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Executive Summary

Introduction

Greater Manchester has identified 250 points on 152 stretches of road that are likely to have levels of NO₂ (more than 40 μ g/m³) in breach of legal limits beyond 2020 if no action is taken.

This includes busy stretches of local roads in all 10 local authority areas; as indicated in red on the map below. It doesn't include motorways and some major trunk roads, which are managed by Highways England. Owing to exceedances across a number of Greater Manchester authorities, the Government has instructed these (and many other UK local authorities) to take quick action to reduce NO₂ emissions in the shortest possible time.



The 'Greater Manchester Clean Air Plan to tackle nitrogen dioxide exceedances at the roadside' (the GM CAP) proposals have been developed to help the 10 local authorities to achieve legal levels of NO_2 by 2024. These include:

- The introduction of a Clean Air Zone (CAZ) across the whole of Greater Manchester in two phases from 2021 and 2023;
- A multi-million pound funding package to help upgrade the city-region's bus, coach, minibus, HGV, taxi and van fleets;
- Trebling the number of Electric Vehicle (EV) public charging points; and
- Helping Greater Manchester switch to greener transport.

A conversation took place between Monday 13 May and Sunday 30 June 2019. Responses were captured via:

- Online questionnaire (2,947 responses);
- Paper questionnaire (30 responses);
- Letter (2 responses); and
- Email (308 responses).

Amongst the responses there were a number of organisations that represent different groups and businesses. In particular the Federation of Small Business (FSB) conducted a survey of its members about the introduction of the CAZ and shared the results. It was also evident two campaigns had been orchestrated:

- **Taxi**: there were approximately 170 emails received from Taxi drivers / operators that were identical.
- Clean Air Parents' Network: 23 identical emails were received from members of this group.

How respondents would be affected by the proposals

Of those responding to the survey 91% of businesses and 15% of individuals had one or more vehicles that would be affected by the introduction of the CAZ. When asked whether they thought their vehicles would be compliant (when the proposals are introduced), only 13% of business and 17% of individuals thought they would.

Air Pollution

Air pollution was a concern for respondents; individuals were most concerned. Businesses were less concerned about air pollution in Greater Manchester and less likely to agree that it needs to be improved.

Just over half of businesses agreed that the CAP would have a positive impact on the quality of life for people living in Greater Manchester, but only a quarter thought it would have a positive impact on the economy. Individuals were much more likely to agree that there would be positive impacts; however less than half agreed there would be a positive impact on the economy.

	Individuals	Business
Highly concerned about air pollution in Greater Manchester	75%	54%
Agree air quality in Greater Manchester needs improving	80%	55%
Positive impact of CAP on air quality	79%	61%
Positive impact of CAP people's health	75%	56%
Positive impact of CAP quality of life	67%	47%
Positive impact of CAP on Greater Manchester's economy	42%	24%
Positive impact of CAP your business (business only)	-	17%

This needs to become a priority ... this plan doesn't go far enough, the changes need to be implemented sooner and include personal cars too (Individual, inside GM, under 35, male)

How can you expect the whole of GM's selfemployed to suddenly change their vans for expensive Euro 6 vans ... It's going to cripple a lot of small self-employed business. (Business, inside GM, Van)

This is basically the whole of Greater Manchester. That's FAR too big ... why isn't it ... targeting the worst areas, rather than a blanket scheme over a massive area? (Individual, inside GM, 35 - 65, male)

Overall Support of the GM Clean Air Plan (CAP)

Respondents were asked to show their support for the CAP using a scale of 0 to 10, where 0 = no support and 10 = fully support. Responses were polarised; individuals who in the main did not have affected vehicles supported the proposals, whereas business, who almost all had affected vehicles, did not support them.

The graph below shows the scores given and the trend for each type of respondent.

Support of the CAP (%)



68% of individuals supported the proposals giving a score of 7 or greater. This includes 41% who gave a maximum score of 10.

Key comments supporting the CAP:

- Support effort to improve air quality
- Proposals should go further
- Proposals should include cars

Excluding personal vehicles seems as though it's going to miss out a huge source of pollution. (Individual, inside GM, under 35, female) 38% of business supported the proposals giving a score of 7 or greater. Just under half gave a score of 0-3.

Key modifications required to the CAP:

- Extend the timescales of the CAZ
- Reduce the boundary of the CAZ
- Improve Public Transport
- Improve cycling and walking infrastructure

The current public transport is simply not good enough to encourage me, and others, out of their cars. Trams are expensive, overcrowded and often impacted by delays / cancellations. Buses are unreliable and expensive. The trains are simply embarrassing. (Individual, outside GM, 35 - 65, male)

Clean Air Zone (CAZ)

A third of respondents provided a comment about the proposed boundary of the CAZ. Of individuals providing a comment, almost a half referenced their agreement with the boundary. Conversely, over a quarter of businesses felt the boundary was too wide and half thought the boundary should only cover the city centre or specific areas with poor air quality.

Almost half of respondents provided a comment about the timescales for the introduction of the CAZ. Of those providing a comment, three-fifths of businesses thought the timescale was too soon and they needed longer to prepare. A fifth of businesses felt the introduction of the CAZ would cause people to go out of business. On the other hand, two-fifths of individuals felt the proposals should be brought forward and implemented sooner.

Bour	ndary	Timescale		
Positive	Negative	Positive	Negative	
 Agree with the boundary Boundary should be wider Should include the Strategic Road Network (SRN) 	 Area is too big Should just be those areas with poor air quality 	 Should be brought forward 	 Too soon Unfair to businesses Will cause people to go out of business 	
Greater Manches includes many rura areas I believe th and businesses will proposal whom may the city or eve	It does need to ha better if it is hav effect on people' compensation fo public transport lin th	large, and to happe small tra funds to vehicles o vehicles (Individual Unfair as it effeo It should be re ar	ne er for	

Clean Air Zone: Penalty Payment

Non-compliant vehicles would be subject to the following daily penalty, once the CAZ is introduced:

- Buses and coaches £100 per day;
- HGVs £100 per day;
- Vans, minibuses, motorhomes and motorised horseboxes £7.50 per day; and
- Taxis and Private Hire Vehicles (PHVs) £7.50 per day.

Whilst there will be some exemptions granted for certain types of vehicle, those with noncompliant vehicles who do not pay the penalty will be liable to receiving a proposed Penalty Charge Notice (PCN) of £120 per day.

The table below shows the proportion feeling the daily penalty for each type of vehicle is too much and too little or about right (some respondents did not know which is not shown in the table). It also includes the most frequently mentioned comments given by respondents to explain the reason for their score.

In general, businesses felt the penalties were too much and individuals thought they were too little or about right.

		Individuals	Business	
Buses and	Too much	37%	60%	 Costs will be passed on to customer Against daily penalty Daily penalty is too much/ high
coaches	Too little / about right	55%	24%	Gives companies a choiceEnough to encourage change
HGVs	Too much	33%	60%	 Against all daily penalties Costs will be passed on to customers Will cause companies to go out of business
	Too little / about right	60%	24%	 Enough to encourage change without causing bankruptcy Encourage green investment
	Too much	29%	57%	Daily penalty is too much/ highUnfair on business
Vans	Too little / about right	57%	30%	 Not enough to force change Enough to encourage change without causing bankruptcy
Taxi and PHVs	Too much	27%	68%	 Unfair on business Daily penalty is too much/ high Will cause companies to go out of business
FUNS	Too little / about right	68%	25%	Daily penalty is too littleNot enough to force changeNot a financial burden
	Too much	36%	74%	 Excessive for forgetting to pay Stealth tax / money making scheme
PCN	Too little / about right	54%	13%	 Something needs to be done Enough to encourage change without causing bankruptcy

Clean Air Zone: Funding

The proposals include funds to support the upgrade of vehicles which are registered in Greater Manchester:

- £59 million for Freight (includes HGVs, vans and minibuses);
- £29 million for Buses; and
- £28 million for Taxis and PHVs.

Respondents were asked to what extent they thought cleaning up the bus fleet, commercial vehicles and Taxis and PHV is a priority for improving air quality in Greater Manchester.

Three-quarters of individuals thought it was important to clean up these vehicles (82% bus; 77% HGVs and vans; and 73% Taxi and PHV).

Businesses thought it was less of a priority, but around half still felt it was important (58% bus; 51% HGVs and vans; and 42% Taxi and PHV).

Below is a summary of the number of respondents that have an affected vehicle. It shows that very few respondents with affected vehicles expect to be compliant when the CAZ is introduced.

Almost half did not think they will take any action to become compliant before the introduction of the CAZ. A fifth of those eligible for the Freight Fund or the Taxi Fund thought they would seek to retrofit or replace some or all their vehicles as did a third of those eligible for the Bus fund.

		Freight	Bus	Taxi
No. Respondents with vehicle		426	34	318
Proportio	n who will be all compliant	9%	0%	14%
Action	Retrofit or replace some or all vehicles	21%	33%	22%
likely to	No action	48%	32%	45%
take	Don't know	31%	35%	33%
Would take loan	Yes	61%	50%	71%
	No	39%	50%	29%

Of those likely to act, most would require funding and over a half would take a loan as well.

The figures in this table need to be treated with caution as they are based on the response received to the survey. It is not known how representative the sample is and for some questions, the number of respondents answering is very low.

A large proportion have stated they do not intend to act, or do not know what they will do and, therefore, the proportions seeking funding could substantially change once the CAZ is introduced.

Supporting Greater Manchester to switch to greener transport

The proposed CAP includes giving support and advice for residents, schools, organisations and businesses to use less-polluting modes of transport and could include further activity to improve cycling/ walking infrastructure. Respondents were asked whether they felt these measures were important, whether they would help them move to greener travel and how likely they would be to take part and access this support or advice. In summary:

Businesses

- Half (51%) thought these measures were important;
- Just over two-fifths (42%) felt the measures would help their business move to greener travel; and
- A third said they were likely to take part.

Individuals

- Three-fifths thought these measures were important;
- Over a half (55%) said they would help them move to greener travel; and
- Over one-third (37%) said they were likely to take part.

Electric Vehicles (EV)

Part of the CAP includes providing 300 new double headed electric vehicle charging points and activity to promote the use of electric vehicles.

60% of respondents (excluding bus operators) felt installing more charging points across Greater Manchester was important to improve air quality.

Just 5% of respondents currently have EVs. Of those without one:

- 40% of individuals and 20% of businesses would consider getting an EV.
- Suggested locations for charging points included:
 - Public car parks;
 - Service stations;
 - Taxi ranks;
 - Retail centres;
 - Hospitals;
 - Workplace;
 - New housing developments;
 - My road (shared use); and
 - Schools.

The main reasons for not moving towards EVs included:

- High cost of EV purchase;
- Lack of charging points; and
- Battery life.

Summary

In general, those without affected vehicles were most supportive of the proposals, believing they would have a positive impact. Women, those aged under 35 and those who were vulnerable to air pollution were the most supportive. Many suggested they should go further and/or be introduced sooner. Many felt the proposal should include private cars.

Conversely, those with affected vehicles, which comprised the clear majority of the business respondents, were against the CAZ and felt it would have a negative impact.

Although many were against the CAZ, many also suggested that if it had to be introduced, it should be contained to Manchester City Centre and other key areas where pollution is particularly high and also include private cars.

Responses received for each type of respondent incudes:

• Taxi / PHV: Although many did feel these vehicles were very polluting and did a lot of miles, they were also thought to be necessary, particularly for vulnerable groups such as the elderly and those with a disability. Individuals were concerned the costs would be passed on and therefore limit people's ability to travel.

Taxi and PHV drivers/operators generally felt the CAZ was unfair and would cause many to go out of business. Most had vehicles that were not compliant. Only around a quarter thought they would act to become compliant. Many felt they needed longer to comply and were not in a position to be able to replace their vehicle(s).

Half of Taxi and three-quarters of PHV drivers also used their vehicles for personal use. Two thirds of Taxi and the majority of PHV drivers did not have another vehicle available to them.

• **HGVs and Vans:** Although individuals in particular felt these vehicles were polluting and did a lot of mileage, both individuals and businesses felt these vehicles were vital to the economy and were making necessary journeys. Individuals and businesses were equally concerned that the costs would be passed on to customers.

As with Taxi/PHV drivers respondents with these vehicles felt the daily penalty was unfair and would have a large impact on their ability to operate. Very few respondents in this group had compliant vehicles and just a third of van drivers' thought they would act to become compliant.

This group in particular raised concerns about the lack of a second-hand market of compliant vehicles and that there aren't enough (affordable) new vehicles. This coupled with the added impact of the depreciation expected on their current vehicle(s) resulting from the implementation of the CAZ means becoming compliant would be very difficult for this group, particularly within the timeframe.

- Bus: Although many thought buses were very polluting and did need to be cleaned up, many also raised that buses take a lot of cars off the road and have the potential to reduce car use even more and therefore should be encouraged. Therefore, concerns were raised that introduction of the CAZ could have a negative effect such as increased bus fares and reduced services, which would be counter-productive to the overall goal of the CAP.
- Individuals with affected vehicles: Individuals with motorhomes, motorised horseboxes and other affected vehicles were generally against the proposals. Many had questions about when they would get penalised for example, if just driving a short distance to the garage. Many of these vehicles were not used every day and therefore the benefit of including these vehicles was not recognised by these respondents.

Table of Contents

Exec	utive Summary	
1.	Introduction	15
1.1	Background	. 15
1.2	The Proposals	. 15
1.3	Objectives	. 15
1.4	The Questionnaire	. 16
1.5	Questionnaire Distribution	. 16
1.6	Response	. 16
1.7	Format of Report	. 17
2.	Methodology	18
2.1	Types of Respondent	. 18
2.2	Data Processing	. 19
2.3	Analysis and Reporting	. 19
3.	Respondent Profile	20
3.1	Overall	
3.2	Individuals	
3.3	Businesses, Organisations and Schools	. 22
4.	Air Pollution	25
4.1	Air Pollution in Greater Manchester	
4.1.1	Concern about Air Pollution	
4.1.2	Extent Air Quality Needs to be Improved in Greater Manchester	
4.2	Impact of Air Pollution in Greater Manchester	
4.3	Cleaning up the Dirtiest Vehicles	
4.3.1	Importance of Cleaning up the Dirtiest Vehicles	. 29
4.3.2	Cleaning up the Bus Fleet in Greater Manchester	. 30
4.3.3	Cleaning up HGVs, Vans, Minibuses, Coaches and Other Commercial Vehicles in	
	er Manchester	
4.3.4	Cleaning up Taxis and PHVs	. 35
5.	Overall Support for the CAP Proposals	38
5.1	Process and Selection	. 38
5.2	Support for the Proposal	. 44
5.3	Modifications to the Proposal	. 44
6.	Clean Air Zone (CAZ)	51
6.1	Boundary	. 51
6.2	Timescales for Introduction	. 56
6.3	Penalty Payment	. 60
6.3.1	Bus and Coach Daily Penalty of £100 per day by 2021	. 61
6.3.2	HGV Daily Penalty of £100 per day by 2021	. 64
6.3.3	Van Daily Penalty of £7.50 per day by 2023	. 66
6.3.4	Taxi and PHV Daily Penalty of £7.50 per day by 2021	. 69
6.3.5	Penalty Charge Notice (PCN) at £120 per day	
6.4	Exemptions	. 75
7.	Funding	78
8.	Buses and Coaches	79
8.1	Vehicles	. 79

8.2	Non-compliant Vehicles	80
8.3	Funding	81
8.4	Loan	82
8.5	Other Forms of Financial Support	82
9.	Taxis	83
9.1	Licencing	83
9.2	Vehicles	84
9.3	Non-compliant Vehicles	85
9.4	Funding	86
9.5	Loan	87
9.6	Other Forms of Financial Support	87
10.	Private Hire Vehicles (PHV)	89
10.1	PHV Licencing	89
10.2	Vehicles	90
10.3	Non-compliant Vehicles	91
10.4	Funding	92
10.5	Loan	
10.6	Other Forms of Financial Support	94
11.	Heavy Goods Vehicles (HGV)	95
11.1	Vehicles	95
11.2	Non-compliant Vehicles	96
11.3	Funding	97
11.4	Loan	98
11.5	Other Forms of Financial Support	98
11.0		
12.	Vans, Minibuses, Horseboxes and Other Specialist Vehicles	99
-		99
12. 12.1 12.2	Vans, Minibuses, Horseboxes and Other Specialist Vehicles Use of Vehicle	99 99 99
12.12.112.212.3	Vans, Minibuses, Horseboxes and Other Specialist Vehicles Use of Vehicle Vehicles Non-compliant Vehicles	99 99 99 101
12 . 12.1 12.2 12.3 12.4	Vans, Minibuses, Horseboxes and Other Specialist Vehicles Use of Vehicle	99 99 99 101 103
12. 12.1 12.2 12.3 12.4 12.5	Vans, Minibuses, Horseboxes and Other Specialist Vehicles Use of Vehicle Vehicles Non-compliant Vehicles Funding Loan	99 99 99 101 103 103
12 . 12.1 12.2 12.3 12.4 12.5 12.6	Vans, Minibuses, Horseboxes and Other Specialist Vehicles Use of Vehicle Vehicles Non-compliant Vehicles Funding Loan Other Forms of Financial Support	99 99 101 103 103 104
12. 12.1 12.2 12.3 12.4 12.5 12.6 13.	Vans, Minibuses, Horseboxes and Other Specialist Vehicles Use of Vehicle Vehicles Non-compliant Vehicles Funding Loan Other Forms of Financial Support Individuals with Affected Vehicles	99 99 101 103 103 104 105
12 . 12.1 12.2 12.3 12.4 12.5 12.6 13 . 13.1	Vans, Minibuses, Horseboxes and Other Specialist Vehicles Use of Vehicle Vehicles Non-compliant Vehicles Funding Loan Other Forms of Financial Support Individuals with Affected Vehicles Vehicles	99 99 101 103 103 104 105 105
12. 12.1 12.2 12.3 12.4 12.5 12.6 13. 13.1 13.2	Vans, Minibuses, Horseboxes and Other Specialist Vehicles Use of Vehicle Vehicles Non-compliant Vehicles Funding Loan Other Forms of Financial Support Individuals with Affected Vehicles Vehicles Non-compliant Vehicles	99 99 99 101 103 103 104 105 105 106
12. 12.1 12.2 12.3 12.4 12.5 12.6 13. 13.1 13.2 13.3	Vans, Minibuses, Horseboxes and Other Specialist Vehicles Use of Vehicle Vehicles Non-compliant Vehicles Funding Loan Other Forms of Financial Support Individuals with Affected Vehicles Vehicles Non-compliant Vehicles Funding	99 99 101 103 103 104 105 105 106 107
12. 12.1 12.2 12.3 12.4 12.5 12.6 13. 13.1 13.2 13.3 13.4	Vans, Minibuses, Horseboxes and Other Specialist Vehicles Use of Vehicle	99 99 99 101 103 103 104 105 105 106 107 107
12. 12.1 12.2 12.3 12.4 12.5 12.6 13. 13.1 13.2 13.3 13.4 14.	Vans, Minibuses, Horseboxes and Other Specialist Vehicles Use of Vehicle	99 99 101 103 103 103 104 105 105 106 107 107 108
12. 12.1 12.2 12.3 12.4 12.5 12.6 13. 13.1 13.2 13.3 13.4 14. 15.	Vans, Minibuses, Horseboxes and Other Specialist Vehicles Use of Vehicle Vehicles Non-compliant Vehicles Funding Loan Other Forms of Financial Support Individuals with Affected Vehicles Vehicles Non-compliant Vehicles Funding Loan Comments on the Funds Moving to Greener Transport	99 99 99 101 103 103 104 105 105 105 107 107 107 108 111
12. 12.1 12.2 12.3 12.4 12.5 12.6 13. 13.1 13.2 13.3 13.4 14. 15.	Vans, Minibuses, Horseboxes and Other Specialist Vehicles Use of Vehicle	99 99 99 101 103 103 104 105 105 106 107 107 107 108 111
12. 12.1 12.2 12.3 12.4 12.5 12.6 13. 13.1 13.2 13.3 13.4 14. 15. 15.1 15.2	Vans, Minibuses, Horseboxes and Other Specialist Vehicles Use of Vehicle Vehicles Non-compliant Vehicles Funding Loan Other Forms of Financial Support Individuals with Affected Vehicles Vehicles Non-compliant Vehicles Funding Loan Comments on the Funds Moving to Greener Transport Importance of Measures Business	99 99 99 101 103 103 103 104 105 105 105 107 107 107 107 111 111
12. 12.1 12.2 12.3 12.4 12.5 12.6 13. 13.1 13.2 13.3 13.4 14. 15.1 15.1 15.2 15.3	Vans, Minibuses, Horseboxes and Other Specialist Vehicles Use of Vehicle Vehicles Non-compliant Vehicles Funding Loan Other Forms of Financial Support. Individuals with Affected Vehicles Vehicles Non-compliant Vehicles Funding Loan Comments on the Funds Moving to Greener Transport Importance of Measures Business Schools and Individuals	99 99 99 101 103 103 104 105 105 105 107 107 107 107 107 111 112 113
12. 12.1 12.2 12.3 12.4 12.5 12.6 13. 13.1 13.2 13.3 13.4 14. 15.1 15.2 15.3 15.4	Vans, Minibuses, Horseboxes and Other Specialist Vehicles Use of Vehicle	99 99 99 101 103 103 103 104 105 105 105 107 107 107 107 111 111 112 113 114
12. 12.1 12.2 12.3 12.4 12.5 12.6 13. 13.1 13.2 13.3 13.4 14. 15.1 15.2 15.3 15.4 16.	Vans, Minibuses, Horseboxes and Other Specialist Vehicles Use of Vehicle Vehicles Non-compliant Vehicles Funding Loan Other Forms of Financial Support. Individuals with Affected Vehicles Vehicles Non-compliant Vehicles Funding Loan Comments on the Funds. Moving to Greener Transport Importance of Measures Business Schools and Individuals Comments about the Measures Electric Vehicles (EV)	99 99 99 101 103 103 104 105 105 105 107 107 107 107 107 111 111 112 114 121
12. 12.1 12.2 12.3 12.4 12.5 12.6 13.1 13.2 13.3 13.4 14. 15.1 15.2 15.3 15.4 16.1	Vans, Minibuses, Horseboxes and Other Specialist Vehicles Use of Vehicle Non-compliant Vehicles Funding Loan Other Forms of Financial Support. Individuals with Affected Vehicles Vehicles Non-compliant Vehicles Funding Loan Comments on the Funds. Moving to Greener Transport Importance of Measures Business Schools and Individuals Comments about the Measures. Electric Vehicles (EV) Use of EVs	99 99 99 101 103 103 103 104 105 105 105 105 107 107 107 107 107 111 111 112 113 114 121
12. 12.1 12.2 12.3 12.4 12.5 12.6 13. 13.1 13.2 13.3 13.4 14. 15.1 15.2 15.3 15.4 16.	Vans, Minibuses, Horseboxes and Other Specialist Vehicles Use of Vehicle Vehicles Non-compliant Vehicles Funding Loan Other Forms of Financial Support. Individuals with Affected Vehicles Vehicles Non-compliant Vehicles Funding Loan Comments on the Funds. Moving to Greener Transport Importance of Measures Business Schools and Individuals Comments about the Measures Electric Vehicles (EV)	99 99 99 101 103 103 103 104 105 105 105 105 107 107 107 107 111 111 112 113 114 121 122

Appendix A : Questionnaire (separate document) Appendix B : Coded Data (separate document) Appendix C : Data Tables (separate document)

1. Introduction

1.1 Background

Pollution from road traffic is linked to a wide range of serious illnesses and conditions. It contributes to the equivalent of 1,200 deaths a year in Greater Manchester alone.

Many local roads in Greater Manchester have levels of harmful nitrogen dioxide (NO²) which are above legal limits.

Owing to exceedances across a number of Greater Manchester authorities, the Government has instructed these, and indeed many other UK local authorities, to take quick action to reduce NO² emissions in the shortest possible time. NO² emissions are mainly produced by older diesel engines.

Following the initial instruction, it was agreed that all ten Greater Manchester local authorities would work together to develop proposals. As air pollution does not respect boundaries, this coordinated approach is the most effective way to deal with a problem that affects all parts of Greater Manchester.

1.2 The Proposals

The 'Greater Manchester Clean Air Plan to tackle NO_2 exceedances at the roadside' (the GM CAP) proposals have been developed to help the city region to achieve legal levels of NO^2 by 2024. These include:

- The introduction of a Clean Air Zone (CAZ) across the whole of Greater Manchester in two phases from 2021 and 2023;
- A multi-million pound funding package to help upgrade the city-region's bus, coach, minibus, HGV, taxi and van fleets;
- Trebling the number of Electric Vehicle public charging points; and
- Helping Greater Manchester switch to greener transport.

Given the wide-ranging nature of the measures proposed, an essential part of the development of the proposals has been to seek the views of people living, working and commuting in and around Greater Manchester. This includes individuals, businesses and representative groups.

1.3 Objectives

Between 13 May and 30 June 2019, an informal consultation called the 'Greater Manchester Clean Air Conversation' took place. The Conversation's overall research objective was to gain an understanding of respondents' sentiments towards the measures, and how they believe the measures will affect them. The conversation's specific key objectives are listed below:

- Understand the likely behaviour change response to the measures and the impact this might have on different timescales for delivering them;
- Gauge the understanding of and sentiment towards poor air quality as an issue;
- Provide an opportunity for residents, businesses and visitors to give their views on the GM CAP at a formative stage;
- Understand in more detail the impact the measures would have on those who respond, identifying differences by demographics and geography; and

• Understand the impacts on groups who are deemed to be most affected.

The analysis of the conversation will be used to develop the more detailed proposals. A statutory consultation on the detailed proposals is planned for later in 2019.

1.4 The Questionnaire

A copy of the questionnaires used for the Conversation can be found in **Appendix A**. It included questions on:

- Attitude towards air pollution;
- The clean air proposals that are being taken forward;
- The boundary of the proposed CAZ and the timescale for its implementation;
- Vehicles that would be affected;
- Daily penalties;
- Funding and exemptions;
- Other potential mitigatory measures such as Personalised Travel Planning;
- EVs;
- Expected impact of the proposals; and
- Profiling information.

1.5 Questionnaire Distribution

The questionnaire was available online via the Transport for Greater Manchester (TfGM) website. Hardcopies were also available via each of the ten districts and from TfGM itself.

Letters and emails were also accepted via dedicated postal and email addresses.

The Conversation was promoted across Greater Manchester through events, the cleanairgm.com website, social media and advertising in local papers. As well as this, representative bodies across Greater Manchester supported the promotion by engaging with their members to increase awareness of the conversation. There was also some marketing activity outside of Greater Manchester to promote the Conversation to those who may not be based in Greater Manchester, but regularly travel into the city region.

1.6 Response

The Conversation commenced on Monday 13 May and closed on Sunday 30 June 2019. Responses were captured via:

- Online questionnaire (2,947 responses);
- Paper questionnaire (30 responses);
- Letter (2 responses); and
- Email (308 responses).

1.7 Format of Report

Following this introduction:

- Section 2: describes the methodology;
- Section 3: discusses the profile of respondents;
- Section 4: discusses air pollution in Greater Manchester;
- Section 5: describes the overall support for the proposals;
- Section 6: details respondents views on the proposed CAZ;
- Section 7 to14: discuss the funding requirement for each type of affected vehicle;
- Section 15: describes respondents' reaction to the proposed measures; and
- Section 16: looks at EVs.

2. Methodology

Summary

- Respondents: Open to all
- Consultation period: Monday 13 May and closed midnight Friday 30 June
- Data collection method: Self-completion online survey, paper, letter and email
- Total Sample: 2,977 questionnaires and 310 letters and emails

2.1 Types of Respondent

Several different types of respondent engaged with the conversation, using the methods summarised in section 1.6. **Table 2.1** shows the response by different type of respondent (covering all response mechanisms).

Table 2.1: Type of Respondent

	Questionnaire	Letter/ email*
Business based in Greater Manchester (including self-employed and sole traders, Taxi and Private Hire Vehicle (PHV)	485	204
Business based outside Greater Manchester that travels into Greater Manchester (including self-employed, sole traders, Taxi and PHV)	47	1
Organisation based in Greater Manchester (e.g. charities, trade organisations, government bodies)	25	18
Organisation outside Greater Manchester (e.g. charities, trade organisations, government bodies)	6	2
School or place of education in Greater Manchester	4	0
School or place of education outside Greater Manchester whose staff travel into Greater Manchester	1	0
Greater Manchester resident	2,087	84
Individual who does not live in Greater Manchester, but works within Greater Manchester	131	0
Individual who does not live in Greater Manchester, but visits Greater Manchester for purposes other than work	159	0
Councillor / elected official within Greater Manchester	31	0
Councillor / elected official outside Greater Manchester	1	1
Total	2,977	310

*for those responding by letter and email, it has been assumed respondents are based in Greater Manchester unless stated otherwise For analysis purposes businesses, organisations and schools have been grouped together and are referred to collectively as business. Residents, individuals and councillors are collectively referred to as individuals throughout the report.

It was evident in the email responses received that two campaigns had been orchestrated:

- **Taxi**: there were approximately 170 emails received from Taxi drivers / operators that were identical.
- Clean Air Parents' Network: 23 identical emails were received from members of this group.

In addition, the Federation of Small Business (FSB) conducted a survey of its members about the introduction of the CAZ and shared the results for inclusion in this analysis.

2.2 Data Processing

Response data was downloaded from the Conversation's online portal and collated with data from all submitted paper copies of the questionnaire to make one final dataset.

Data was cleaned to ensure accuracy. All free-text responses and letters and emails were grouped into themes to allow meaningful analysis. Letter and email responses were combined with the free text comments given in the questionnaire for analysis purposes.

Where possible, free text responses have been analysed by topic rather than response to a particular question to allow meaningful analysis and avoid double counting where respondents have given the same response to several questions.

2.3 Analysis and Reporting

The Conversation was open to all and, therefore, respondents were self-selecting. This, coupled with the fact that respondents could choose which of the questions they answered, means that the results and responses should be viewed as indicative of the wider population and any identified sub-groups rather than representative. The profile of respondents is detailed in the next section.

As respondents were not obliged to answer all questions in the questionnaire, the percentages shown only include those that responded to each question.

Where percentages do not sum to 100% in the main body of the report, this is due to rounding. A * denotes less than 0.5%.

Definitions:

- **Compliant**: respondents who stated they would be fully compliant by the time the CAZ is introduced;
- **Non-compliant**: respondents thought they would have one or more non-compliant vehicle when the CAZ is introduced or did not know;
- Taxi: Hackney;
- **PHV**: Private Hire Vehicle; and
- CAZ: Clean Air Zone.

A large volume of data was received and therefore the following chapters summarise the main findings and highlight pertinent differences between groups. A full set of tables are available in **Appendix C**.

3. Respondent Profile

3.1 Overall

Of the 2,977 respondents to the survey, 81% were individuals, including 13% who had a vehicle that could be affected by the proposals. **Figure 3.1** shows the types of vehicles whose owners or users are represented in the survey response. Many of the business had one or more vehicles that would be affected, namely:

- Taxi (36%);
- PHV (29%); and
- Van (30%).

Only 2% of the businesses responding did not have a vehicle that could be affected by the introduction of a CAZ.

Figure 3.1: Respondent Segment



Base: all respondents (2,977)

3.2 Individuals

In total, 2,409 individuals completed the survey, including 31 councillors or Members of Parliament. **Figure 3.2** illustrates the demographic profile of respondents and compares the profile to census data for Greater Manchester.

Almost two-thirds (63%) of respondents were aged 35-64, which over-represents this age group. Those aged under 35 and over 65 were under-represented (29% and 8% respectively).

Males were slightly over-represented (59%).

The proportion of those from a Black or Minority Ethnic group (BME) in the sample reflected the population as a whole (18%).

13% of respondents had a limiting long-term illness. Respondents were also asked if they had a condition which made them vulnerable to air pollution; 22% did.



Figure 3.2: Demographic Profile of Individual Respondents Compared to Census Data

Base: all individuals (2,409)

As shown in **Figure 3.3**, most individuals lived within Greater Manchester (83%). Of these, respondents lived in the following districts:

- Manchester (28%);
- Trafford (13%);
- Salford (12%);
- Stockport (12%);
- Bury (8%);
- Tameside (7%);
- Wigan (6%);
- Bolton (6%);
- Oldham (5%); and
- Rochdale (4%).



Figure 3.3: Respondent Location

The majority of respondents (85%) had access to a motor vehicle. A total of 375 individuals (15%) had one or more vehicles that could be affected by the introduction of the CAZ. Of the 375 individuals affected, the split by vehicle type is below:

- Motorhome (39%);
- Motorised horsebox (38%);
- Van (28%); and
- Minibus (3%).

The majority (93%) of these vehicles were thought to be non-compliant.

3.3 Businesses, Organisations and Schools

Overall, 568 businesses, organisations and schools responded to the survey, of which most (84%) were based within Greater Manchester.

- Manchester (40%);
- Bury (11%);
- Wigan (10%);
- Salford (8%);
- Stockport (7%);
- Bolton (7%);
- Oldham (5%);
- Trafford (4%);
- Tameside (4%); and
- Rochdale (3%).



Figure 3.4: Business and Organisation Location

Businesses have been classified into the following Standard Industry Classifications (SIC):

- Transportation and Storage (72%);
- Construction (5%);
- Other Service Activities (5%);
- Wholesale and Retail Trade; Repair of Motor Vehicles and Motorcycles (4%);
- Manufacturing (3%);
- Professional, Scientific and Technical Activities (1%);
- Administrative and Support Service Activities (1%);
- Education (1%);
- Human Health and Social Work Activities (1%);
- Arts, Entertainment and Recreation (1%);
- Water Supply; Sewerage, Waste Management and Remediation Activities (1%);
- Agriculture, Forestry and Fishing (1%);
- Electricity, Gas, Steam and Air Conditioning Supply (*%);
- Accommodation and Food Service Activities (*%);
- Information and Communication (*%);
- Real Estate Activities (*%); and
- Unknown (4%).

The types of businesses responding to the survey are not representative of the profile of business within Greater Manchester.

Three-fifths (61%) of business were sole traders, with the remaining classed as:

- Small (18%);
- Medium (11%); and
- Large (10%).

Almost all (91%) had one or more vehicles that could be affected by the CAZ. Just 13% of these thought their vehicles were compliant. The majority (87%) thought their vehicle was currently non-compliant or did not know. **Figure 3.5** shows the type of vehicle respondents operate and whether they are likely to be compliant by the time the CAZ is introduced.

Figure 3.5: Vehicles Compliant and Non-Compliant for Businesses (%)



4. Air Pollution

Key Findings

- Individuals were generally concerned about air pollution in Greater Manchester (75%) and felt it needed to be improved (80%). They were generally quite positive about the proposals and their potential impact on health (79%), air quality (76%) and quality of life (67%).
- Businesses were less concerned about air pollution (54%) and were less inclined to feel it needs improving (55%).
- Individuals didn't think that the proposal would have a negative effect on the economy overall; 42% thought it would be positive.
- However, businesses thought the proposals would have a negative effect on the economy (54%), and two-thirds (66%) felt they would have a negative impact on their business.
- Three-quarters of individuals thought it was important to clean up buses (82%), HGVs and vans (77%), and Taxi and PHV (73%). In contrast, businesses thought it was less of a priority (58%, 51% and 42% respectively).

4.1 Air Pollution in Greater Manchester

4.1.1 Concern about Air Pollution

To put the survey into context, respondents were first asked how concerned they are about air pollution in Greater Manchester, using a scale of 0-10 (where 0 was not at all concerned and 10 was extremely concerned).

Individuals were the most concerned about air pollution, with three-quarters (75%) giving a score of 7 or above. Businesses were less concerned, with only half (54%) giving a score of 7 or above.

Figure 4.1: Concern about Air Pollution by Segment (%)



The larger the company, the more likely they were to be concerned with air pollution. Half (49%) of sole traders gave a score of 7 or above, compared to 59% of micro, small or medium companies, and 72% of large companies.

Those businesses whose vehicles were compliant were more likely to give a score of 7 or above (69%) than those with non-compliant vehicles (50%).

Of individuals, younger respondents (under 35) were most concerned with air pollution (84% giving a score of 7 or more).

Those with a condition that made them vulnerable to air quality were also very concerned (86% giving a score of 7 or more).

Respondents living within Greater Manchester were slightly more concerned (76%) than those living outside of it (62%).

4.1.2 Extent Air Quality Needs to be Improved in Greater Manchester

Respondents were also asked to what extent they agree or disagree that the air quality needs to be improved in Greater Manchester. Most individuals (80%) agreed (59% strongly) that air pollution does need improving. Just over half (55%) of businesses agreed with the statement.



Figure 4.2: Level of Agreement that Air Quality Needs to Change (%)

Strongly Agree Agree Neither Aagree nor Disagree Disagree Strongly Disagree

Younger respondents (aged under 35) and women were the most likely to agree that air quality needs to be improved in Greater Manchester (89% and 87% respectively).

Those with non-compliant vehicles were less likely to agree (48% of business and 54% of individuals agreed).

4.2 Impact of Air Pollution in Greater Manchester

Respondents were asked what they thought the impact of the clean air proposals would be. **Figure 4.3** shows individuals were generally positive about the impact the proposals would have on their health and wellbeing:

- Air quality in Greater Manchester (79%);
- The health of people in Greater Manchester (76%); and
- The quality of life for those living and working in Greater Manchester (67%).



Those aged under 35, women and those who were vulnerable to air quality answered more positively than others. In particular, 85% of those vulnerable to air quality thought the proposals would have a positive impact on the health of people in Greater Manchester, and 77% thought it would improve the quality of life for those living and working in Greater Manchester.

However, businesses were less positive. Over half agreed that the impact would be positive on the health of people in Greater Manchester (56%) and air quality in Greater Manchester (60%), and 47% agreed the proposals would improve the quality of life for those living and working in Greater Manchester.

In particular, those operating PHVs, Taxis and vans did not feel the proposals would have a positive impact, with 54%, 43% and 43% respectively saying they thought the proposals would have no impact or a negative impact on the health of people in Greater Manchester, and 50%, 39% and 38% respectively saying they thought the proposals would have no impact or a negative impact on air quality in Greater Manchester.

Figure 4.4 shows what impact respondents felt the proposals would have on the economy, with both individuals (35%) and businesses (54%) stating there would be a negative effect.

Those with vans were particularly negative, with 69% saying they thought the proposals would have a negative (33%) or very negative (36%) impact on the economy.

Businesses and organisations were asked what impact the proposals would have on them. Two-thirds (66%) of businesses thought the plans would have a negative effect. Just 17% thought they would have a positive effect, and 18% thought they would have no impact.



Figure 4.4: Impact of the Proposals Economically (%)

Bus operators (73%), coach operators (83%) and those with vans (77%) were most likely to say the proposals will have a negative impact on their business.

Organisations thought they would be less affected, with only 28% feeling the proposals would have a negative impact. However, the number of organisations in the sample is small and, therefore, this figure needs to be used with caution.

4.3 Cleaning up the Dirtiest Vehicles

4.3.1 Importance of Cleaning up the Dirtiest Vehicles

Respondents were asked to what extent they thought cleaning up Greater Manchester's

- Bus fleet;
- HGVs, vans, minibuses and coaches and other commercial vehicles (collectively referred to as HGVs and vans below); and
- Taxis and PHVs

is a priority for improving air quality in Greater Manchester.

Three-quarters of individuals thought it was important or very important to clean up these vehicles (82% bus; 77% HGVs and vans; and 73% Taxi and PHV).

Businesses thought it was less of a priority (58% bus; 51% HGVs and vans; and 42% Taxi and PHV).

Figure 4.5: How Important is it that Different Vehicle Types are Cleaned Up? (%)



Those aged under 35 (88%) and those vulnerable to air quality (88%) were more concerned about cleaning up Greater Manchester's bus fleet than any other type of vehicle (75% and 81% respectively thought it was important to clean up Taxis and PHV).

The reasons why respondents felt cleaning up the dirtiest vehicles was a priority is described in the following section.

4.3.2 Cleaning up the Bus Fleet in Greater Manchester

Overall, 1,876 respondents commented on why they thought it was important or not important to clean up the Greater Manchester bus fleet. **Table 4.1** shows the most common themes raised by individuals and businesses. A full list of responses can be found in **Appendix B**.

Table 4.1: Comments on Cleaning up Buses

	Individual	Business	Total
Buses cause too much pollution / high fuel use / drive long hours and routes / idle too often	38%	30%	37%
There is a large amount of buses	15%	10%	14%
Buses should be hybrid / electric	12%	6%	11%
Buses are old / need updating	10%	9%	10%
Buses are widely used / take people out of cars	8%	13%	9%
Public transport should be encouraged further	10%	4%	9%
Public transport needs to be improved / quicker / cheaper	10%	2%	8%
Buses mainly are within the city centre so therefore are priority	8%	7%	8%
Improving air quality is important /needed / should be a priority (General)	8%	4%	7%
Buses are bad for health	7%	2%	6%
Bus companies should be doing more	6%	4%	5%
Too many vehicles on the roads (General)	5%	3%	5%
Base	1,514	362	1,876

Buses - a priority for improvement

Many of the priorities for both business and individuals were the same. The most common responses included:

• **Buses cause too much pollution (37%)**. This was the most commonly mentioned theme for both businesses (30%) and individuals (38%). Respondents felt buses used large amounts of fuel and drove long hours and often idled, contributing to high pollution output. Five of the bus operators also commented on the amount of pollution produced by their vehicles.

"It is a main source of pollution on our busy corridors. Buses quite often sit with idling engines and omit fumes at public waiting spaces like bus shelters." [Individual, inside Greater Manchester, 35 - 64, female]

"Heavy pollution comes from the larger vehicles and buses are on the go all day long. They also stop frequently with their engines idling again polluting the atmosphere." [Individual, inside Greater Manchester, 35 - 64, male] "[They] spend the whole operating day in urban / densely populated environments where air quality will be affected the most" [Business, outside Greater Manchester, HGV]

• There is a large amount of buses (14%). The next most common reason for why buses should be a priority was the large number of buses in Greater Manchester (15% individuals, 10% business). Many people felt that there were too many buses in the region, in particular the city centre, and therefore it is important to prioritise them.

"There are a large number of buses / coaches operating within Greater Manchester (with high concentrations on some congested roads) and therefore improving their performance will have a significant impact in key geographic areas" [Individual, inside Greater Manchester, 35 - 64, male]

"Because there's 100s of fleets driving round Monday to Sunday day and night which is a lot to be on the road and makes a massive impact" [Individual, inside Greater Manchester, under 35, female]

• **Buses are old or need updating (10%)**. Businesses (9%) and individuals (10%) thought that buses in Greater Manchester were old or needed updating. They thought that much of the region's current fleet was not as modern as it could be and needed to be either replaced or have technology fitted to reduce pollution output. Individuals also thought buses should be electric / hybrid, with a further 12% suggesting this change.

"Some buses are really old and following them you can see fumes coming out of the exhausts when following. The fleets are older than most other commercial vehicles and are on the roads of Manchester constantly" [Individual, inside Greater Manchester, under 35, male]

"I think all buses should go 100% electric and that would help the carbon footprint around Manchester decrease a huge amount. This is the solution to your problem." [Business, inside Greater Manchester, Taxi]

"Improving the bus fleet has the potential to dramatically improve pollution per passenger mile ratios and make taking the bus a more attractive and comfortable proposition."[Individual, inside Greater Manchester, under 35, male]

Buses - not a priority for improvement

• Buses are widely used / take people out of cars (9%). Both businesses (13%) and individuals (8%) stated that buses took people out of cars and therefore were not a priority for improving air quality. Some felt that the popularity of buses helped reduce private car use and therefore were not only less damaging to the environment but contributed to improving it.

"Buses carry large numbers of people. Their use contributes significantly to reducing pollution and congestion" [Individual, inside Greater Manchester, 35 - 64, Prefer not to say]

"Public transport is used to carry many passengers therefore it already helps reduce air pollution by reducing how many people use their car." [Business, inside Greater Manchester, PHV]

"Buses help in their own way against emissions. Every passenger on a bus is one less car on the road." [Business, outside Greater Manchester, HGV]

Buses - general comments

Individuals frequently made two further comments about public transport in general:

• **Public transport needs to be encouraged further (10%)**. Individuals felt that public transport services needed to be utilised by the public more as they reduce the amount of private car journeys.

"Encourage people to use public transport to get more cars off the roads." [Individual, inside Greater Manchester, 35 - 64, female]

"Because we need to encourage more people to use public transport instead of driving and as such the quality of the buses need improving in every way" [Individual, inside Greater Manchester, under 35, male]

• **Public transport needs to be improved / quicker / cheaper (10%).** Similarly, improvements to public transport were mentioned by individuals. These improvements included making the services more frequent, quicker and cheaper and making improvements to cleanliness to persuade more people to use them instead of their cars.

"If we want people to move away from using their own vehicles, then there should cleaner and cheaper public transport solution for them to use." [Individual, inside Greater Manchester, under 35, female]

4.3.3 Cleaning up HGVs, Vans, Minibuses, Coaches and Other Commercial Vehicles in Greater Manchester

Overall, 1,615 comments were made about cleaning up HGVs, vans, minibuses, coaches and other commercial vehicles responses (referred to as commercial vehicles for the remainder of this section). **Table 4.2** shows the most common themes raised by individuals and businesses. A full list of responses can be found in **Appendix B**.

Table 4.2: Comments on Cleaning up Commercial Vehicles

	Individual	Business	Total
These vehicles cause too much pollution / high fuel use / drive long hours	44%	27%	41%
There is a large amount of these vehicles	16%	14%	16%
These vehicles are old/need updating	12%	11%	12%
Improving air quality is important /needed / should be a priority (General)	11%	7%	11%
These vehicles are vital to the local economy	6%	10%	7%
These vehicles make necessary journeys	6%	5%	6%
All vehicles should be included / charged	4%	5%	5%
Improving air quality is unimportant / shouldn't be a priority (General)	4%	5%	4%
Public money / government should support/assist/subsidise small businesses	3%	7%	4%
Base	1,296	319	1,615

Commercial vehicles - a priority for improvement

The most frequently mentioned comments for why commercial vehicles should be a priority for improving air quality included:

• They cause too much pollution (41%). This was the most frequently mentioned comment for both individuals (44%) and businesses (27%). It was felt the long journeys and time spent idling led to high fuel use and, therefore, high pollution levels. The heavy loads some of these vehicles carry was also mentioned as a contributor to their pollution production.

"Very polluting vehicles with engines in constant use all day" [Individual, inside Greater Manchester, over 65, female]

"Many of these seem to be poorly maintained and appear to have excess emissions because of this. Overloaded HGVs seem to be a particular problem as the excessive load this puts on the engines creates black smoke in the exhaust" [Individual, inside Greater Manchester, 35 - 64, male]

• There are a large number of these vehicles operating in Greater Manchester (16%). Many individuals (16%) and businesses (14%) felt that there are too many of these commercial vehicles in the region, particularly in the city centre, so many felt it is important to prioritise them.

"There are lots of HGV's, vans, minibuses, coaches and other commercial vehicles running all day in busy main roads." [Individual, inside Greater Manchester, 35 - 64, female]

"There are large numbers of commercial vehicles, with concentrations on main / congested roads, and therefore improving their performance should have a significant impact on air pollution" [Individual, inside Greater Manchester, 35 - 64, male]

"Given the number of the above vehicles currently on our roads, most of which have significant emissions, reducing the emissions has to be a priority" [Individual, inside Greater Manchester, 35 - 64, female]

• **These vehicles are old / need updating (12%)**. Both business (11%) and individuals (12%) felt the current vehicles in this classification were often older models or could benefit from being replaced or retrofitted with new technologies to reduce pollution.

"All polluting vehicles should be encouraged and supported to upgrade to make sure they are sustainable for the future." [Individual, inside Greater Manchester, under 35, female]

"Some of the vehicles used by some companies are old and some not adequately maintained. Bottom line is of course a priority, but companies need to be forced to factor in the cost of cleaner greener means of transporting goods." [Individual, inside Greater Manchester, 35 - 64, female]

"They are often old and dirty vehicles and can spend all day on the road." [Individual, inside Greater Manchester, 35 - 64, male]

Commercial vehicles - not a priority for improvement

Respondents made two main comments as to why it was not a priority to clean up these vehicles.

• These vehicles are vital to the local economy (7%). Both business (10%) and individuals (6%) stated that these vehicles are vital to the local economy and, therefore, should not be a priority for improvement. Some felt that without these vehicles, local businesses would not be able to operate.

"Imperative to Greater Manchester businesses network. Many small local businesses (HGV / coach companies and retailers etc.) will suffer if the costs of converting vehicles / replacing them are passed on" [Individual, inside Greater Manchester, under 35, female]

"Logistics we need our shops, restaurants hotels supermarkets stocked up with goods" [Business, inside Greater Manchester, Taxi]

"This would have a very big impact on the local business in the towns" [Business, inside Greater Manchester, Van]

• **These vehicles make necessary journeys (6%)**. As with the questions about buses, respondents felt that because these vehicles made necessary journeys, they were not a priority for improvement.

"These are vital to our everyday survival. If these HGV drivers didn't deliver the goods they transport, things would grind to a halt. Everything from building supplies, medical care, food you name it these guys are the ones who deliver it. Seven days a week, 24 hours a day. We do not need to penalise them we need to help them" [Individual, inside Greater Manchester, 35 - 64, female]

Commercial vehicles - other comments

 Public money / government should support / assist / subsidise small businesses (4%). In the responses to this question, HGV and van operators in particular (10% and 12% respectively) raised that funding would be needed for smaller operators and businesses. It was felt that small businesses with these vehicles would need support to make their fleets compliant.

"A lot of sole traders use older vans as they can't afford to upgrade, so any financial help would be appreciated." [Business, outside Greater Manchester, Van]

"Help small business owners who can't afford to upgrade" [Business, inside Greater Manchester, Van]

4.3.4 Cleaning up Taxis and PHVs

Overall, 1,721 respondents commented on why they thought it was important or not important to clean up Greater Manchester Taxis and PHVs. **Table 4.3** shows the most common themes raised by individuals and businesses. A full list of responses can be found in **Appendix B**.

Table 4.3: Comments on Cleaning up Taxis and PHVs

	Individual	Business	Total
Taxis or PHVs should be prioritised or cause too much pollution or drive too many miles	38%	21%	34%
There is a large amount of Taxis/PHVs	19%	8%	17%
Improving air quality is important/needed/should be a priority (General)	10%	8%	9%
Taxis/PHVs are old/need updating	9%	5%	8%
This will cause Taxis drivers to go out of business / kill the trade	3%	17%	6%
Taxis/PHVs are necessary	5%	6%	6%
All vehicles should be included/charged	6%	5%	6%
Taxis/PHVs do not cause that much pollution / most are hybrid	5%	6%	5%
Taxi/PHVs should be electric / hybrid	5%	3%	5%
Base	1,348	373	1,721

Taxis and PHVs - are a priority for improvement

The most frequently mentioned comments for why Taxi and PHVs should be a priority for improving air quality were largely the same as for buses and commercial vehicles. They included:

• They cause too much pollution (34%). Individuals (38%) in particular raised this, as well as 21% of businesses. This theme was not the most popular for Taxi and PHV operators, although some did raise it (16% and 14% respectively). It was also mentioned by 17% of respondents (including 19% of individuals) that there are a lot of taxis in the area.

"These vehicles do a lot of miles, often and low speeds or idling. They produce a lot of air pollution." [Individual, outside Greater Manchester, 35 - 64, male]

"These are high mileage vehicles who do mainly short journeys and have excessive idling contributing highly to poor air quality" [Individual, inside Greater Manchester, 35 - 64, female]

"Taxis often idle or wait with their engines running or drive around aimlessly looking for passengers. This is such unnecessary pollution and should be avoided" [Individual, inside Greater Manchester, under 35, female] • **Taxis / PHVs are old / need updating (8%)**. As with buses and commercial vehicles, respondents felt many vehicles were ready to be updated. A further 5% also felt that Taxis and PHVs should be electric or hybrid.

"It seems that there are still a lot of older private hire/minicabs on the roads which will have higher polluting engines" [Individual, outside Greater Manchester, under 35, male]

"Emissions from older taxis, which a lot of them are, is historically high, they should have cleaner engines" [Individual, inside Greater Manchester, 35 - 64, female]

Taxis and PHVs - not a priority for improvement

• **Taxis / PHVs are necessary (6%)**. Several raised the fact that Taxis and PHVs were relied upon by many members of society and in particular the elderly or disabled. Taxis in particular raised this as a concern (10%).

"Essential transport at times of crisis for those without cars, e.g. hospital visits, links to public transport hubs with heavy luggage etc., and keeping individuals safe at night. Many drivers don't make a fortune!" [Individual, inside Greater Manchester, 35 - 64, female]

"They provide an essential service for the elderly infirm and vulnerable people. They don't carry a heavy load and journeys tend to be shorter." [Business, inside Greater Manchester, PHV]

"They provide an important service for many segments of society but should be encouraged to make their vehicles cleaner for the benefit of us all." [Individual, inside Greater Manchester, 35 - 64, female]

• **Taxis / PHVs do not cause that much pollution (5%)**. 6% of businesses and 5% of individuals disagreed with the most popular response, stating they did not feel these vehicles cause that much pollution and many are already hybrid or electric. This was particularly prevalent for PHVs, of which 12% believed that their vehicles did not cause that much pollution (just 5% of Taxis gave this response).

"Smaller vehicles are likely to produce less pollution. Many taxies are greener already e.g. Uber often uses hybrids." [Individual, inside Greater Manchester, under 35, female]

"As taxis and PHVs are moving to hybrid and electric power much sooner than other road users, those drivers are already making steps to reduce air pollution and using more economically friendly vehicles." [Business, inside Greater Manchester, PHV]

Taxis and PHVs - other comments

A quarter of Taxis (24%) and PHVs (27%) felt that if Taxis and PHVs were included in the proposals, it would "kill the trade" and many would go out of business.

"Due to the fact that these are self-employed individuals trying to feed their families driving vehicles same as the general public. Only difference is that they have stickers on them. In my opinion just the fact that a car is licensed does not mean you can fine them when the same car that is driven by a member of the general public does not warrant a fine." [Business, inside Greater Manchester, Taxi]

"Forcing taxis to be changed could lead to putting people out of work." [Individual, inside Greater Manchester, 35 - 64, male]

"Taxi drivers work mostly for themselves and there aren't enough excess earnings to cover new / updating vehicles and earn an income. Many, including myself, are
seriously considering a change of career, purely because of the proposals" [Business, inside Greater Manchester, Taxi]

5. Overall Support for the CAP Proposals

Key Findings

- Individuals generally supported the proposals (68%), whereas only 38% of businesses did.
- Views were polarised between those who supported the proposals, many of which thought they should go further, and suggested cars should also be included, and those who strongly objected to them; viewed the proposals as a money-making scheme.
- Respondents raised concerns that the daily penalty would be passed on to customers, and some felt the CAZ would be counter-productive in terms of encouraging more public transport use.
- The perceived increased fares were also felt to reduce mobility for vulnerable groups, such as older people and those with disabilities.

5.1 Process and Selection

Respondents were informed that several options had been developed before the proposal presented in the Conversation was settled on. Respondents had the opportunity to comment on the selection process. Overall, 1,771 respondents provided a free text comment about the process and selection that took place when planning the CAZ proposals. **Table 5.1** presents the common responses that were provided. The main themes that emerged will be discussed for individuals and business respondents separately, providing supporting quotes and comments on any notable relationships from the cross-tabulations that can be found in **Appendix B**.

		Individual	Business	Total
	Oppose/reject the proposals / not needed / it is a tax on the poor / working class (general comments)	24%	36%	27%
	Support the proposals or effort to improve air quality or health or safety	22%	21%	22%
	Information is unclear / lacking detail / confusing	11%	10%	11%
Process and	Proposals do not go far enough / should go further (general comments)	11%	3%	9%
election	More consideration / consultation needed with businesses or organisations	4%	17%	7%
	Unfair to charge those who are not using their vehicle for work purposes	7%	3%	7%
	Greater Manchester should work with other cities or towns or authorities on the proposals	4%	3%	4%
	Want to see more information about targets or calculations used in designing the proposals	4%	3%	4%

Table 5.1: Comments on the Selection Process

		Individual	Business	Total
	Proposals should start on a smaller scale before expanding/rolling out to whole of Greater Manchester	2%	5%	3%
	The proposals should be implemented on a national scale	3%	3%	3%
	Preferred second proposal – Greater Manchester - wide CAZ and ultra-low emissions zone within inner ring road / city centre	2%	1%	2%
	Preferred first proposal – Greater Manchester-wide CAZ for all non-compliant vehicles including cars within inner ring road	2%	0%	2%
	Proposals should include a CAZ or ultra-low emissions zone inside the M60 boundary	1%	2%	1%
	Concerns/doubts about the proposal's effectiveness/ability to improve air quality	10%	10%	10%
Concerns about the	Concerns that proposals were designed based on political agenda rather than scientific facts	7%	6%	6%
proposals	Concerns/doubts about the implementation / enforcement of the CAZ	6%	6%	6%
	Concerns that privately-owned cars will be included in the CAZ in the future	5%	2%	4%
	The proposals should include non-compliant privately-owned cars	28%	22%	26%
	The proposals should not include motorhomes or motorised horseboxes	10%	2%	8%
Modes ncluded in	The proposals should not include Taxis or PHVs	1%	19%	5%
the proposals	The proposals should not include buses or coaches or minibuses	4%	2%	3%
	The proposals should include aeroplanes or air travel	3%	2%	3%
	The proposals should not include vans or HGVs	2%	3%	2%
Base		1,395	376	1,771

Individuals

The main themes for the 1,395 individuals who provided responses about the process and selection of the proposals were:

• The proposals should include non-compliant privately-owned cars (28%). This was the most commonly given response from individuals. Many felt that private cars were the main contributor to air quality issues in Greater Manchester, with key issues being vehicle idling, unnecessary and single-occupant car journeys. However, 7% of individuals and 6% of respondents overall, felt that the proposals were designed based on political agenda rather than scientific facts, and many felt that the decision not to include private cars in the proposals was a politically-motivated decision to avoid "driver backlash".

"It's unbelievable that an authority would propose a CAP which doesn't do anything at all to reduce the use of private cars. Diesel private cars in particular cause a considerable portion of the dangerous particulates in the air. The refusal to even impose the restrictions against old cars undermines the plan. This sends out a signal that ordinary people don't need to make any changes to improve air quality." [Individual, inside Greater Manchester, under 35, male]

"I think a political decision has been made to not charge cars, which will mean we miss the deadline and fail residents. I think the charge should include private cars and [that] there should be an ultra-low emissions zone." [Individual, inside Greater Manchester, 35 - 64, male]

"It is particularly irrational to cover PHVs, which are cars used as public transport by many people, while excluding private cars." [Individual, inside Greater Manchester, over 65, male]

• Oppose / reject the proposals / not needed / It is a tax on the poor / working class (24%). Almost a quarter of individuals provided general comments in opposition of the proposals, with many feeling that it was another attempt at a congestion charge or that it was just a money-making scheme. As discussed in later sections of the report, many individuals felt that measures should be taken to improve air quality, including improving public transport and traffic flow to reduce vehicle idling.

"This is a back-door congestion charge, emphatically rejected in a referendum several years ago. It is an attempt to recoup money that will be lost as petrol and diesel cars diminish in number." [Individual, inside Greater Manchester, 35 - 64, male]

"This is nothing more than a stealth tax to grab even more money from hardworking people to waste on even more stupid half-baked schemes." [Individual, inside Greater Manchester, under 35, male]

• Support the proposals or effort to improve air quality or health or safety (22%). Just over a fifth of individuals provided general comments in support of the proposals, acknowledging and appreciating the urgency to act as outlined in the Conversation materials. Some individuals commented on how they were experiencing respiratory conditions and felt that this was due to poor air quality, whilst others discussed the importance of improving air quality for children and future generations.

"I support anything that will help to improve air quality and the general quality of the spaces we live and work in." [Individual, inside Greater Manchester, under 35, male]

"I think the plan is welcome and I hope the outcomes result in a cleaner environment for future generations." [Individual, inside Greater Manchester, over 65, male]

• Information is unclear / lacking detail / confusing (11%). Individuals raised several queries and felt that the information provided in the Conversation materials were unclear and lacking detail, particularly the information provided about the funding available to upgrade vehicles, how the zone will be effectively enforced, why private cars were not included in the proposals, and why the timescales were different for some vehicle types. Some also wanted to see more information about the targets and calculations used when designing the proposals, with 4% of individuals commenting on this.

"(I) don't understand what the above really means and it hasn't been publicised enough, I only heard about this through work outside of Manchester" [Individual, inside Greater Manchester, 35 - 64, female]

"I own a 2012 campervan, which will be non-compliant... what if I simply wish to drive out of the Greater Manchester region to visit the Lakes / Wales etc.? Will I be charged for this? If I am returning to Wigan from trip, will I be charged to return to my home? Would simply driving the camper to, for example, the garage for a service incur charges?" [Individual, inside Greater Manchester, 35 - 64, male]

• **Proposals do not go far enough / should go further (11%)**. This was another key response, with 11% of individuals providing general comments about how they felt the proposals should go further to effectively address air quality issues. 10% of individuals were concerned about the effectiveness of the proposals in their current form. Many felt that they should impose further restrictions and address all forms of air pollution from various sources, and 3% of individuals felt that the proposals should be implemented on a national scale.

"A national policy would be preferable rather than several areas each with a different policy, especially if you live in one area, but work in another." [Individual, Inside Greater Manchester, 35 - 64, male]

"I think proposals are too narrow in scope. By focusing just on road traffic pollution, we are missing the impacts of pollution from homes, industry and other transit modes. Whilst the proposals are a start, much more could be done." [Individual, Inside Greater Manchester, 35 - 64, male]

• The proposals should not include motorhomes or motorised horseboxes (10%). For individuals, these were the modes that most felt should not be included in the proposals. Some considered it to be unfair to penalise people for using their vehicle for non-commercial purposes (7% of individuals stating this), and some felt that charging these vehicles could have a negative impact on tourism, as well as physical and mental health.

"I think proposing such high fees is ridiculous and will prevent people from participating in leisure activities with the horses and family... People may be affected by pollution but making it too expensive for people to do their hobby will likely result in people suffering with depression, mental health issues, and obesity." [Individual, Outside Greater Manchester, 35 - 64, male]

• The proposals should not include buses or coaches or minibuses (4%). Although only 4% of individuals provided this response, this was frequently discussed by those who felt that private cars should be included in the proposals, as well as those who expressed concerns about the proposals potentially encouraging more private car use. These individuals felt that buses, coaches and minibuses should not be included and should instead be improved and promoted.

"It is deeply concerning that the proposals to improve air quality is focused on charging buses and coaches and not private motorists who are the primary cause of air pollution. All measures should be aimed at cars / vans / HGVs and should

completely omit charging public transport." [Individual, Inside Greater Manchester, under 35, male]

"Buses are part of the solution to air pollution, but this charge may mean higher fares for passengers. One bus has the potential to take 80+ cars off the road, yet they are exempt." [Individual, Inside Greater Manchester, 35 - 64, male]

Younger individual respondents were more supportive than older individual respondents, with 29% of those aged under 35 providing general supportive comments and only 17% providing general comments in opposition. In comparison, 22% of those aged over 65 provided general supportive comments, with 26% providing general comments in opposition. Younger individuals also felt that private cars should be included in the proposals, with 36% of those aged under 35 stating this compared to 21% of those aged over 65.

Only 172 of the 1,395 individual respondents lived outside Greater Manchester, but there were some notable findings when comparing their location to their responses. Of those living outside Greater Manchester, 16% felt that private cars should be included in the proposals compared to 29% of those who live inside Greater Manchester. Those living outside Greater Manchester also felt more strongly about excluding motorhomes and motorised horseboxes from the proposals (36% compared to 7% for those inside Greater Manchester), as well as feeling that it was unfair to penalise those who are using their vehicle for leisure purposes (20% compared to 6% of those inside Greater Manchester).

Businesses

A total of 376 business respondents provided a free text comment about the process and selection of the proposals. Some of the main themes remain the same as those for individuals, but the order is different in terms of the most common responses given:

• Oppose/reject the proposals / not needed / it is a tax on the poor / working class (36%). Over a third of businesses provided general comments in opposition to the proposals. Many of the reasons given were the same as those provided by individuals, that is was an unnecessary scheme and that money could be better spent.

"The monitoring infrastructure (ANPR) will cost millions to put in place, monitor and maintain. If everyone becomes compliant, who pays for it? The taxpayers! ... Surely the millions would be better spent on helping businesses and owners invest in more efficient vehicles as opposed to decimating an industry, creating hardship for thousands, increasing costs of goods etc. for residents and businesses." [Business, outside Greater Manchester, multiple vehicle types]

• The proposals should include non-compliant privately-owned cars (22%). Just over a fifth of businesses felt that private cars should also be included in the proposals. Many of the reasons remain the same as those given by individuals, but a key difference is that businesses felt it would be unfair to only target and include commercial vehicles.

"Greater Manchester is targeting commercial / business vehicles unfairly as private vehicles are not included regardless of age. The grant / loans on offer to upgrade to compliant vehicles is not enough." [Business, inside Greater Manchester, Taxi]

"Why aren't privately owned vehicles being included in the charging structure as they too contribute to the poor air quality in Greater Manchester?" [Business, outside Greater Manchester, HGV]

• Support the proposals or effort to improve air quality or health or safety (21%). As with individual respondents, just over a fifth of businesses expressed supportive comments about the proposals. The reasons given were the same as those provided by individuals, recognising the need to address air quality issues and acknowledging how the responsibility should be shared by all in Greater Manchester.

"As a small business, we completely agree that we all have to play out part in protecting the environment in which we love and work." [Business, inside Greater Manchester, Van]

• The proposals should not include Taxis or PHVs (19%). Just under a fifth of business respondents felt that Taxis and PHVs should not be included in the proposals. Some Taxi drivers made comparisons to how such vehicles are exempt in London, and some also emphasised how they are relied upon by many disabled travellers who are unable to travel by other means. Others felt that Taxis and PHVs should be excluded from the proposals due to the lack of compliant vehicles available on the market. It should be noted that the campaign run by Taxi drivers (see section 2.1) has resulted in many responses specifically regarding Taxis.

"Being a taxi driver, I feel the Hackney carriage should be exempt like [in] London, because we are the providers of wheelchair-accessible services... Even if we try to move to Euro 6 emissions vehicles, there aren't enough vehicles to make the switch in such a short space of time." [Business, inside Greater Manchester, Taxi]

 More consideration / consultation needed with businesses or organisations (17%). These business respondents felt that more consideration and consultation should have been undertaken in the process and selection stage of the proposals. A number of these businesses felt that the severity of the potential consequences for businesses had been overlooked or underestimated, with many feeling that the CAZ would put a lot of people out of business.

"The proposal selected has the potential to cripple our small business. More due diligence should have taken place into researching businesses that would have been affected outside of Manchester." [Business, outside Greater Manchester, HGV]

"Although we have been told about the plans on when this will come into force and this is so that the council[s] can meet their targets by 2024 there seems to be little thought about business owners and the impact on them. You state that there may be grants available for the upgrade of vehicles, but do not give any further information about this as this is still yet to be discussed. How are business owners meant to be able to see if this is going to be a feasible change, without having all the facts before hand" [Business, inside Greater Manchester, HGV, Van]

There were some notable findings when comparing responses with the type of vehicles the businesses operate. The majority of businesses with licenced minibuses provided general comments in opposition to the proposals (73%), whereas businesses with Taxis provided the most supportive comments (28%). In terms of opinions on whether to include private cars in the proposals, 39% of business respondents with PHVs felt this should happen, compared to only 11% of Taxis. However, the small sample size must be appreciated for some of the vehicle types.

5.2 Support for the Proposal

Respondents were asked to what extent they support the proposals to tackle NO_2 exceedances at the roadside, using a scale of 0 to 10 (where 0 is no support and 10 is full support). Over two-thirds (68%) of individuals supported the proposals (giving a score of 7 or more), but only 38% of businesses did.

Figure 5.1: Level of Support



As with previous questions, younger respondents (78%), women (76%) and those vulnerable to air quality (77%) were the most supportive of the proposals (giving a score of 7 or more).

Those individuals with a vehicle that is likely to be affected by the introduction of the CAZ were less likely to support the proposals, with over a quarter (28%) giving no support to the proposals and just a third (33%) supporting the proposals.

Businesses with non-compliant vehicles generally did not support the proposals, with 38% giving a score of two or less. PHV (43%) and bus operators (38%) in particular were against the proposals. Sole traders (37%) and large companies (33%) were also less likely to support the proposals than micro, small and medium sized companies (28%). (*n.b. note the number of large companies in the sample is small*).

5.3 Modifications to the Proposal

A total of 1,527 respondents provided a free text comment about modifications that could be made to the proposals to make people more likely to support them. **Table 5.3** presents the common responses that were provided. Some of these themes have emerged in other questions and are discussed in more detail in other sections of this report. The cross tabulations can be found in **Appendix B**.

Table 5.3 Comments on Modifications to the Proposals

		Individual	Business	Total
	Oppose the proposals (general comments)	11%	7%	10%
	Information is unclear/confusing / need more details and assurances	10%	5%	9%
	More funding / support needed for upgrading to compliant vehicles	5%	10%	7%
	Proposals do not go far enough/should go further (general comments)	9%	1%	6%
	Unfair to businesses/organisations / need more consideration	4%	9%	6%
Process and	Consider all forms of air pollution / other issues need addressing	5%	3%	5%
selection	Should be exemptions for specific vehicles / organisations / residents	5%	4%	4%
	Charge less/reduce the penalty	3%	4%	4%
	Support the proposals (general comments)	3%	3%	3%
	Provide more support / incentives rather than charging vehicles	4%	2%	3%
	Concerns that proposals are not significant enough to meet targets / improve air quality	3%	2%	3%
	Charge more/increase the penalty	1%	1%	1%
Boundary and	Zone/areas covered is too big	4%	3%	4%
zone	Zone/areas covered should be wider or cover as far as possible	4%	1%	3%
	Timescales are too soon/need longer	3%	49%	16%
Timescale	Timescales should be reduced/implement sooner	5%	1%	4%
	Proposals should include non-compliant privately-owned cars	22%	9%	18%
	The proposals should not include motorhomes or motorised horseboxes	6%	0%	4%
Modes included in the	The proposals should not include Taxis/PHVs	0%	6%	2%
proposals	The proposals should include trains or aeroplanes/air travel	2%	0%	2%
	The proposals should not include vans or HGVs	1%	1%	1%
	The proposals should not include buses, coaches or minibuses	1%	0%	1%
	Improve public transport	27%	4%	20%
Alternatives to car use	Improve active travel facilities / infrastructure	16%	1%	11%
	More promotion of cleaner / alternate modes of travel to car use	7%	2%	6%

		Individual	Business	Total
	Bus or taxi passengers will be charged more / operators will pass on the charge or services will be reduced	3%	1%	2%
	Need a larger EV network / charging points for EVs	5%	4%	5%
	Discourage or reduce car use	6%	2%	5%
	Need prices of compliant vehicles and retrofitting to reduce	4%	5%	4%
Roads and vehicles	Reduce idling of cars to improve air quality	5%	3%	4%
	Increase road capacity	2%	1%	2%
	Implement car-free days / zones / corridors	3%	0%	2%
	Charge / restrict single-occupant vehicles / needless travel	2%	0%	2%
	Introduce more green space / protect green belt	5%	1%	4%
Other suggestions	Provide more support / advice on how people / businesses / organisations can reduce pollution	3%	1%	3%
	Restrict development / building in / around Greater Manchester	2%	1%	2%
	Other	10%	7%	9%
Base		1,098	429	1,527

Individuals

The main themes for the 1,098 individual respondents were:

• **Improve public transport (27%)**. This was the most frequently given response by individuals, sharing how they felt air pollution throughout Greater Manchester would improve as a result of making public transport cheaper, quicker, more reliable and frequent, and increasing the capacity and coverage of buses, trams and trains with a more integrated approach. This was frequently discussed in relation to the perceived need to discourage and reduce the amount of private car usage and providing a viable alternative.

Respondents felt that the money raised through the CAZ should be prioritised for improving both public transport and active travel infrastructure.

"Focus on improving access to public transport above everything else. Manchester lags behind other cities so much in this respect, and I think it is the reason so many people drive. If public transport was cheaper and more streamlined, it would maybe reduce people's reliance on cars." [Individual, inside Greater Manchester, under 35, female]

"Improve the public transport network. People don't get trams and buses because they are full. It is quicker and cheaper to go by taxi and car than by public transport." [Individual, inside Greater Manchester, 35 - 64, female]

- **Proposals should include non-compliant privately-owned cars (22%)**. As discussed in other sections of the report, this was a key theme that came up throughout. People felt that air quality would be most effectively and quickly improved by including private cars in the proposals.
- **Improve active travel facilities / infrastructure (16%)**. To complement the theme of improving public transport, 16% felt that it was important to improve active travel infrastructure to provide people with healthy and viable alternatives to travelling by car. In addition, 7% felt that both public transport and active travel options should be promoted more to improve air quality, as well as physical and mental wellbeing.

"[There should be] more emphasis on discouraging private car use in Greater Manchester and much more funding for green public transport and active travel (cycling and walking)." [Individual, inside Greater Manchester, under 35, female]

"More emphasis on using alternative modes of transport (walking, cycling, public transport) as opposed to cars. This is the biggest issue with the most potential for a positive impact." [Individual, inside Greater Manchester, under 35, male]

- **Oppose the proposals (11%)**. As discussed in the process and selection section of the report (Section 5.1), numerous general comments of opposition were received from both individual and business respondents. Although the question asked what modifications could be made to make people more supportive of the proposals, 11% of individuals explained how they opposed them and felt that they were a waste of resources and another attempt at a congestion charge.
- Information is unclear/confusing / need more details and assurances (10%). This theme was raised in the process and selection section, with 11% of individuals feeling that the conversation materials were lacking in detail. Similarly, 10% stated that they would be more supportive of the proposals if more information and assurances were provided, such as reassurance that private cars would not be included in the proposals, and more detail on how the scheme will be enforced and the calculations and assumptions used when designing the proposals.

"[I would be more supportive if there were] guarantees that private vehicles wouldn't be encompassed at a future date." [Individual, outside Greater Manchester, 35 - 64, male]

"Clarify the amount of pollution generated by non-vehicular polluters. Then we can see if the motorist is being unfairly targeted." [Individual, inside Greater Manchester, over 65, male]

• **Discourage / reduce car users (6%)**. This theme was raised by 6% of individuals, but many discussed it in relation to improving public transport and active travel options, as well as why private cars should be included in the proposals due to many considering them to be the worst polluters. However, 5% felt that the issue was more specifically about vehicle idling because of congestion, roadworks, traffic-calming measures and other factors.

"We need drastic change to combat the climate emergency and the public health crisis. If disincentivising people to drive helps to reduce car use, this would also solve problems of congestion, and if drivers are encouraged to switch to active travel modes for their journeys, this will impact on the costs of public health in Greater Manchester." [Individual, inside Greater Manchester, 35 - 64, female]

"There are more cars on the road than any other type of vehicle. Standing at the bus stop, 90% of cars that pass me have a single occupant. You need to address this more than anything you've proposed. People won't like it, but tough measures are required. Make it difficult for people to use cars." [Individual, inside Greater Manchester, 35 - 64, male]

- The proposals should not include motorhomes / motorised horseboxes (6%). As discussed in the process and selection section of this report, many respondents felt that motorhomes and motorised horseboxes should not be included in the proposals, and that vehicles being used for leisure purposes should not be included. To complement this, 6% of individuals said that they would be more supportive of the proposals if motorhomes and motorised horseboxes were not included.
- Need a larger EV network / charging points (5%). This is also covered in the EVs section of this report, but 5% said they would be more supportive of the proposals if more charging points were installed than proposed. It was also suggested that more should be done to support the development of EVs in terms of their range and battery capacity, as well as the amount and variety of vehicle models available.

"[You should] help with research into battery technology / development to improve the range of EVs." [Individual, inside Greater Manchester, 35 - 64, male]

"[There should be] more electric charging points for each borough, 10 times what is currently being proposed." [Individual, inside Greater Manchester, under 35, male]

• Introduce more green space / protect green belt (5%). Although only 5% of individuals commented on this, they emphasised the importance of green space due to its ability to absorb and capture carbon dioxide (CO₂) and NO₂, as well as the role it can play in people's physical and mental wellbeing. Many suggested that more trees and green space should be added throughout Greater Manchester, whilst others expressed concerns about development taking place on areas of green belt. In relation to this, 2% of individuals felt that development in and around Greater Manchester should be restricted.

"We need green space and trees to absorb carbon. We need green spaces and wildlife to keep us happy and mentally and physically well. The housing explosion in Manchester and plans to build houses on green spaces and green belt is ill advised and will counteract the clean air plans." [Individual, inside Greater Manchester, 35 - 64, female]

"Include in this plan, the wide-scale planting of more trees, which absorb CO₂ *and trap* NO₂*." [Individual, inside Greater Manchester, unknown age and gender]*

"Focus on improving access to public transport above everything else. Manchester lags behind other cities so much in this respect, and I think it is the reason so many people drive. If public transport was cheaper and more streamlined, it would maybe reduce people's reliance on cars." [Individual, inside Greater Manchester, under 35, female]

• **Consider all forms of air pollution / other issues need addressing (5%)**. This was not a main theme, but 5% commented on the need to address all forms of air pollution from various sources rather than just NO₂ from vehicles. Wood-burning stoves was a common source of air pollution that individuals discussed, but emissions from aircraft and industrial processes were also considered to be important.

"Greater clarity about other pollution sources, such as motorways, gas-fired heating and cooking facilities, wood-burning stoves, diesel generators in factories, NHS and aircraft. The issue cannot be solved by looking at road vehicles in isolation." [Individual, inside Greater Manchester, over 65, female]

Younger individual respondents felt stronger about the need to improve public transport and active travel infrastructure, with 29% and 22% (respectively) of those aged under 35

suggesting this, compared to 18% of those aged over 65 for both suggestions. Those aged under 35 also felt stronger about the need to promote cleaner modes of travel (8%) and to include private cars in the proposals (29%), compared to 5% and 18% respectively for those aged over 65.

Only 116 of the 1,098 individual respondents lived outside Greater Manchester, but there were some notable findings when comparing their location to their responses. Of those living outside Greater Manchester, 14% felt that the proposals should include private cars, and 14% felt that motorhomes and motorised horseboxes should not be included in the proposals. Those living inside Greater Manchester felt more strongly about including private cars in the proposals (23%), but their opinion was not as strong about excluding motorhomes and motorised horseboxes (5%). Similar results were found of those inside and outside Greater Manchester regarding the need to improve public transport (27% and 22% respectively), but those inside Greater Manchester felt stronger about the need to improve active travel infrastructure (17% compared to 8% of those outside Greater Manchester).

Businesses

A total of 429 business respondents provided a free text comment for this question. The main six themes that were raised by businesses only contained one of the same themes as individuals – that the proposals should include non-compliant privately-owned cars:

• **Timescales are too soon/need longer (49%)**. This was by far the most common theme that emerged from business respondents. As discussed in the timescales section of the report, responses from Taxi drivers have had a significant impact of the amount who felt the proposed timescales are too soon. Many shared how they felt this way because of the cost of upgrading their vehicles and how much funding and support will be made available to assist them. Some suggested that a phased approach should be used, setting timescales and requirements based on the standards of vehicles (some suggested timescales for Euro 5 first) or by the size of a business and the number of vehicles it has.

"Manchester businesses that are working towards compliance, but are not fully compliant, should have a grace period to comply i.e. by 2021, a certain proportion of a company's vehicles should be compliant in order to avoid tariffs, and by 2022, this proportion of compliant vehicles should have increased." [Business, inside Greater Manchester, multiple vehicle types]

• More funding / support needed to upgrade to compliant vehicles (10%). This was the second-most frequent theme discussed by businesses, and it is closely linked with comments made about timescales and how the proposals are unfair to businesses. A few businesses wanted further details and assurances about the proposals (5%), with much of this being in relation to funding for those who need to upgrade to compliant standards. However, 10% felt that the amount of funding outlined in the Conversation materials would not be sufficient to assist those across Greater Manchester with their vehicle upgrades.

"Increase the loan / grant money available... Grants are needed, not loans. The funds afforded should be greater... I do not believe that £59m is nearly enough to encourage businesses to make the change and to continue operating." [Business, inside Greater Manchester, multiple vehicle types].

• Unfair to businesses/organisations / need more consideration (9%). This theme reinforces the findings from the process and selection and timescales and impacts sections. These businesses stated that they would support the proposals more if they were fairer and more considerate to businesses, with some feeling that the potential impacts on businesses had not been fully appreciated. Some business respondents also felt it was unfair to include them if they have only recently updated their vehicles, especially those who have upgraded to compliant vehicles without financial support.

"Even if businesses could afford to replace their vehicles, there simply are not enough in circulation for purchase before 2021." [Business, inside Greater Manchester, multiple vehicle types]

"Give me a rebate in some form for already using clean vehicles instead of funding people who don't." [Business, inside Greater Manchester, van]

- **Proposals should include non-compliant privately-owned cars (9%)**. It was found that 22% of individuals felt that private cars should also be targeted by the CAZ, and this opinion was shared by 9% of business respondents for many of the same reasons. However, businesses also felt it would be unfair to target commercial vehicles but exclude private vehicles that were considered to contribute most to poor air quality.
- Oppose the proposals (7%). As previously discussed in the report, individuals were
 more supportive of the proposals than businesses. In response to this question, 7% of
 business respondents reiterated their criticism of the proposals and how they felt the
 plans should be renounced.

"We do not support charging money to enter certain zones, as in London. Manchester has already voted and rejected this in the past and will do so again. This is not London." [Business, inside Greater Manchester, van]

• The proposals should not include Taxis/PHVs (6%). This theme is also discussed in the process and selection section. Many business respondents felt that it would be unfair to include Taxis and PHVs in the proposals when private cars have been excluded. Others felt that they should be exempt because of comparisons made to London, and because many disabled travellers are reliant upon them for transport (particularly Taxis). It should be noted that the campaign run by Taxi drivers (see section 2.1) has resulted in many responses specifically regarding Taxis.

The low base must be appreciated when comparing responses to the types of vehicles that businesses operate, but those with Taxis felt strongest that the timescales were too short (74%). As discussed throughout the report, the large amount of responses from Taxi drivers has particularly affected the number of respondents who feel that the timescales are too short. Coach operators had the second-highest amount for this opinion (45%). Businesses with HGVs and vans were the most likely to feel the proposals were unfair to businesses (27% and 25% respectively).

6. Clean Air Zone (CAZ)

Key Findings

- Respondents were polarised in their views with many (mainly individuals) agreeing with the boundary or wanting it to go further.
- On the other hand, significant numbers (mainly businesses) felt the boundary was too wide and should be concentrated on specific areas of high pollution or not introduced at all.
- Many businesses felt that the timescales were too soon and that they would struggle to become compliant in time. Many businesses felt the CAZ was unfair.
- Individuals were most likely to agree with the daily penalties with over half saying they felt the penalties were too low or about right (55% Bus, 60% HGV, 65% Vans and 68% Taxi).
- Businesses thought the daily penalties were too much, particularly those with noncompliant vehicles (67% Bus, 67% HGV, 63% Vans and 75% Taxi).
- There were considerable concerns from everyone that the daily penalties would be passed down to customers.

6.1 Boundary

A total of 937 respondents provided a free text comment about the proposed boundary for the CAZ. **Table 6.1** presents the most common responses provided. A full list of responses can be found in **Appendix B**.

Table 6.1: Comments on the Boundary and Zone

	Individual	Business	Total
Zone/boundary/areas covered is fair / appropriate / reasonable	43%	21%	39%
Zone/areas covered should just be those with poor air quality / city centre and towns / high-risk areas	23%	49%	28%
Zone or areas covered is too big	18%	29%	20%
Zone/areas covered should be wider/cover as far as possible	13%	4%	12%
The motorway network and major roads (SRN) should be included	8%	5%	8%
The motorway network and major roads (SRN) should not be included	4%	2%	4%
Suggest that a specific location should be included	5%	3%	4%
Suggest flexibility / exemptions for those living / working close to the boundary	3%	5%	3%
Base	764	173	937

Individuals

The five main themes raised by individuals' included:

• **Zone/boundary/areas covered is fair / appropriate / reasonable (43%)**. This was the most common response given by individuals. Some shared how they felt that some areas have poorer air quality than others but acknowledged the potential difficulty of enforcing multiple CAZs. Most individuals who gave this response emphasised the importance of the boundary covering the entirety of Greater Manchester to prevent the redistribution of poor air quality to other areas within the county.

"There are clearly some highly polluted and congested hotspots across Greater Manchester... [but] it will be difficult to target those hotspots, and this could lead to the movement of traffic and congestion to rat runs through residential areas. On balance, I believe that the county-wide CAZ is probably the best solution." [Individual, inside Greater Manchester, 35 - 64, male]

"I think the boundary makes sense. As you say, there are air pollution issues across Greater Manchester. Though it is especially noticeable in the City Centre (Oxford Road, Oldham Road, Great Ancoats), there is no point moving the problem out to other areas of Greater Manchester." [Individual, inside Greater Manchester, under 35, female]

• Zone/areas covered should just be those with poor air quality / city centre and towns / high-risk areas (23%). Almost a quarter of individuals felt that the zone(s) should be limited to the areas where there are current exceedances in NO₂ levels, focusing primarily on the city centre and towns where population density, as well as congestion and emission levels, is higher. Many felt that including rural areas was unfair and unnecessary considering the lower levels of traffic, coupled with the lack of transport options and coverage in these areas. Several respondents also emphasised the importance of implementing a CAZ or Ultra Low Emission Zone (ULEZ) around areas that they considered to be high-risk and sensitive, such as schools and hospitals.

"Seems strange to cover the whole of Greater Manchester rather than focus on the town and city centres where the exceedances are, coupled with the high population figures. Satellite CAZs across the region seems more sensible to me." [Individual, inside Greater Manchester, 35 - 64, female]

"Would have thought the whole administrative boundary is too large an area to apply effectively, and it covers many areas of greenbelt that would not necessarily be naturally at-risk of high pollution." [Individual, inside Greater Manchester, 35 - 64, male]

"There should be ULEZs around town centres and severe restrictions for private car vehicles around hospitals, schools, workplaces and universities." [Individual, inside Greater Manchester, 35 - 64, male]

• **Zone/areas covered is too big (18%)**. Just under a fifth of individuals considered the zone to cover too large an area. As discussed previously, many respondents felt that the zone(s) should be limited to the areas with the poorest air quality or even the M60 boundary, with many feeling that the focus should be on the city centre or starting on a smaller scale before expanding to the entirety of Greater Manchester.

"I think that the boundary is too broad and includes some very rural farming communities, particularly in Irlam and areas of Rochdale." [Individual, inside Greater Manchester, 35 - 64, female]

"I would have started smaller, with the city centre and inner ring road to test, trial and prove the concept. Then expand to cover the area." [Individual, inside Greater Manchester, 35 - 64, male]

"The boundary is massive and indiscriminate in its application. It will affect businesses as well as individuals and encourage companies to re-locate outside of Greater Manchester if implemented." [Individual, inside Greater Manchester, under 35, male]

• **Zone/areas covered should be wider / cover as far as possible (13%)**. To ensure that air quality issues are effectively addressed in Greater Manchester and the surrounding areas, 13% of individuals felt that the boundary should be as wide as possible. As discussed in the process and selection section, 3% of respondents overall felt that the proposals should be implemented on a national scale.

"The boundary should be drawn as wide as possible, to ensure the maximum improvement in air quality." [Individual, inside Greater Manchester, 35 - 64, male]

"Will there be a knock-on effect to surrounding areas, in that vehicles may be driven and parked at the border? I feel an integrated approach with surrounding councils is important for the region, not just the Greater Manchester area." [Individual, outside Greater Manchester, 35 - 64, female]

• The motorway network and major roads (i.e. SRN) should be included (8%). Complementing the above responses about the zone covering the widest possible area, 8% of individuals felt that the SRN should be included in the zone to effectively improve air quality throughout Greater Manchester.

"I agree with the principle of the CAZ covering the whole of Greater Manchester. However, the same should apply to Highways England's roads in the region. If the purpose of the CAZ is to improve air quality to prevent health issues from developing, this should be extended to all major roads - some people live along them." [Individual, inside Greater Manchester, under 35, female]"

"The whole county needs to be included. The exclusion of the SRN is not satisfactory. Highways England should be pressed to adopt the same restrictions on the roads that are managed by them within the region." [Individual, inside Greater Manchester, 35 - 64, male]

• The motorway network and major roads (i.e. SRN) should not be included (4%). Conversely, 4% of individuals expressed their support for the proposals not including the SRN in the zone. They feel that to include it would be unfair to those who only travel through Greater Manchester without leaving it within the county, and some shared concerns about the potential redistribution of traffic with drivers avoiding the penalty if it was included.

"If it covers traffic on the motorway network that is simply passing through and not stopping, that would be very unfair. Those motorists may not qualify for area-specific grants for vehicle renewal. Also, communicating the charge to them would be very difficult." [Individual, inside Greater Manchester, 35 - 64, male]

"A portion of the M6 is contained within the western edge of the Greater Manchester zone. This could easily lead to many vehicles leaving the motorway just before this point accessing urban and country roads outside the zone and re-joining further up... It would seem to make sense to allow traffic to pass freely on the motorways within the zone." [Individual, outside Greater Manchester, 35 - 64, male]

The younger the individual, the more likely they were to feel that the proposed boundary was appropriate or that it should be extended to cover as wide an area as possible. Of those aged under 35, 51% felt that the boundary was appropriate compared to 38% of those aged over 65. Of those aged under 35, 22% felt that the zone(s) should be limited to the areas with the poorest air quality compared to 30% of those aged over 65.

When considering the location of individuals, those that live inside Greater Manchester were more likely to feel that the boundary is appropriate than those who live outside Greater Manchester (47% compared with 20%). Of those who live outside Greater Manchester, 32% felt that the proposed zone is too large, and 29% felt that it should be limited to the areas with the poorest air quality. Of those who live inside Greater Manchester, 16% felt that the proposed zone is too large, and 22% felt that it should be limited to the areas with the poorest air quality. However, the numbers of those supporting a larger zone were similar. This reflects how those who live within Greater Manchester are more supportive of the proposed boundary and zone and acknowledge the reasons for making it county-wide.

Businesses

A total of 173 businesses provided a free text comment about the boundary and zone. Some of the main themes remain the same as those for individuals, but the order is different in terms of the most common responses given:

• Zone/areas covered should just be those with poor air quality/city centre and towns/high-risk areas (49%). Although just 23% of individuals commented on this, it was the most common response from businesses, though it was given for many of the same reasons. Business respondents felt that it would be particularly unfair on smaller businesses if the zone covered the entire county, especially for businesses with limited funds, large fleets, those who only travel short distances and those that only operate in rural areas where the air quality is not perceived to be poor.

"The boundary should not include areas where the pollution levels are currently compliant... Imposing such a zone on rural areas will have an adverse effect on small family businesses who travel limited miles within compliant areas to undertake their trade and contribute little to poor air quality. Such a penalty system will result in many small businesses folding, who cannot afford to upgrade their fleet, even with grant assistance." [Business, inside Greater Manchester, Van]

"It incorporates too large an area and will affect too many people, it incorporates many areas that do not have emission problems or only have problems because of nearby motorway traffic at rush hour periods." [Business, inside Greater Manchester, no vehicle in scope]

• **Zone/areas covered is too big (29%)**. As with the responses from individuals, this was a common response from businesses who felt that the CAZ should be implemented on a smaller scale to limit the impact on businesses. This also reinforces how businesses feel that the CAZ should only cover the areas with the poorest air quality. Many business respondents also shared concerns about how some businesses could potentially relocate outside of Greater Manchester because of the county-wide boundary, as well as deterring businesses from travelling into Greater Manchester to conduct business. It was believed that such a large zone could have a detrimental impact on Manchester's economy.

"Unfortunately, the boundary is too big and would mean that the maximum [amount of] businesses are affected, and a lot of people would lose their livelihood." [Business, inside Greater Manchester, Taxi]

"This boundary is far too big, as the identified areas of concern are much more localised and could surely be addressed by better traffic flow measures being implemented. All the burden is again being loaded on to business rather than spread out over all motor vehicles. No other authority to press has put forward such a large geographic area that will affect so many businesses and affect so many jobs" [Business, outside Greater Manchester, HGV, Van]

• **Zone/boundary/areas covered is fair / appropriate/reasonable (21%).** Despite this being the most common response given by individuals (43%), only 21% of business

respondents felt that the boundary and zone coverage was appropriate. These businesses felt that it was important to cover the entire county to avoid shifting air quality issues to other areas within Greater Manchester. Most businesses, both from inside and outside Greater Manchester, who support the proposed boundary also emphasised the importance of funding to assist them to upgrade their vehicles to compliant standards.

"We support the whole Greater Manchester boundary. Otherwise you just shift dirty vehicles to other areas." [Business, inside Greater Manchester, Van]

"The proposals should include all non-Euro 6 vehicles within the M60 boundary where I feel the most congestion is. I also feel there is a lot older non-Euro 6 cars, taxis and small van than HGVs... I would say most large HGVs come from outside the Greater Manchester area to collect and deliver in the area, so any support available to help upgrade vehicles should be opened up to these companies." [Business, outside Greater Manchester, HGV, Van]

• The motorway network and major roads (i.e. SRN) should be included (5%). A small proportion of business respondents felt that the SRN should also be included in the zone if the proposals are to effectively and fairly address air quality issues.

"Surely extremely busy motorways such as the M6, M60, M61 and M62 should come within the scope of the CAZ? Just because they are administered by the Highways Agency [England] should not mean that they can continue to produce high levels of pollution, often in urban and residential areas and alongside areas the scheme intends to improve." [Business, inside Greater Manchester, no vehicle in scope]

 Suggest flexibility / exemptions for those living / working close to the boundary (5%). Many shared concerns and queries about whether there would be flexibility for those who live or work just inside or outside of the boundary and how the penalty would apply to them. Some businesses also queried whether they would be eligible to apply for funding that would be provided to assist companies to upgrade their vehicles.

"The boundary should be flexible for operators of cross-boundary bus services." [Business, outside Greater Manchester, Bus operator]

"We are a business based outside of the Greater Manchester zone, but have a high dependency on customer based within the Greater Manchester zone... The timescale to introduce the zone for a business based outside of the Greater Manchester zone... is worrying, with no [information about] funding for businesses outside of the Greater Manchester zone." [Business, outside Greater Manchester, HGV, Van]

Although the base is low, and caution needs to be taken when interpreting results, there were some notable findings when comparing responses with the type of vehicles the businesses operate.

- Most bus operators and coach operators felt that the zone(s) should be limited to the areas with the poorest air quality, scoring 82% and 67% respectively.
- Almost a fifth (19%) of HGV businesses felt that there should be some level of flexibility / exemption for that operating close to the boundary.
- When comparing the responses from drivers of PHV and Taxis, 19% and 33% respectively considered the boundary and zones covered to be appropriate. It was also found that 68% of PHV drivers and 41% of Taxi drivers felt that the zone(s) should be limited to the areas with the poorest air quality.
- In terms of businesses that had no vehicles in scope for the scheme, 41% considered the boundary to be appropriate, and 29% felt that SRN should be included in the zone.

6.2 Timescales for Introduction

A total of 1,400 respondents provided a free text comment about the proposed timescales and potential impacts of the CAZ. **Table 6.2** presents the common responses that were provided. A full list of responses can be found in **Appendix B**

Table 6.2: Comments on the Timescales

		Individual	Business	Total
Timescale	Timescales are too soon or need longer	12%	62%	30%
	Timescales should be reduced / proposals need implementing sooner	42%	4%	29%
	Timescales are fair / appropriate / reasonable	6%	2%	5%
	Concerns that the price of goods / food will increase as a result / business passing on the penalty	10%	6%	9%
	Bus passengers will be charged more/bus operators will pass on the penalty or services will be reduced	8%	2%	6%
Impact of proposals on	Concerns about redistributing traffic / congestion / air quality problems to surrounding areas	7%	1%	5%
the public	Unfair on those who rely on Taxis / PHVs / public transport – disabled / elderly	2%	6%	4%
	Taxi / PHV operators will pass the penalty charges on to the customer	4%	3%	4%
	Will increase the number of people using cars / make traffic and congestion worse	3%	1%	2%
	Unfair to small businesses / independent traders	9%	19%	12%
	Some businesses / organisations will go out of business	8%	18%	11%
	Need prices of compliant vehicles and retrofitting to reduce	3%	15%	8%
Impact of	Unfair to those who need to upgrade their vehicles or non-compliant vehicles will be devalued	5%	13%	8%
proposals on businesses	Unfair to businesses/organisations (general comments)	4%	9%	6%
	Unfair to those who have recently upgraded vehicle(s) without financial support / should be reimbursed	1%	5%	3%
	Unfair to businesses/organisations with large fleets	1%	4%	2%
	Proposals do not consider the additional costs when buying a new vehicle	1%	2%	1%
Other		14%	9%	12%
Base		900	500	1,400

Individuals

The five main themes for the 900 individual respondents were:

• **Timescales should be reduced / proposals need implementing sooner (42%)**. This was the most frequently given response by individuals, with many emphasising the urgency with which they feel air quality issues need to be addressed and referring to the impact on health.

"The timescale for the introduction and scope of the zone is not nearly ambitious enough. By your own estimates, pollution accounts for the equivalent of 1,200 deaths per year... Serious consideration should be given to accelerating the timescale of the program and widening the scope to limit the total number of vehicles on the road, not just the most polluting ones." [Individual, Inside Greater Manchester, unknown age and gender]

• **Timescales are too soon or need longer (12%)**. Those who felt the timescales were too soon discussed how residents and businesses should be allowed more time to upgrade their affected vehicles. Although this was the second most popular response by individuals, it is significantly lower than those who feel the proposals should be implemented sooner.

"The timescale is too soon. A lot of residents and businesses will not have the time or finances to purchase compliant vehicles." [Individual, inside Greater Manchester, 35 - 64, male]

• Concerns that the price of goods / food will increase as a result / business passing on the penalty (10%). This concern was raised by individuals who were anticipating how prices would be raised as a result of businesses attempting to offset the penalty.

"This will result in increased cost of goods in Manchester, resulting in the poor being priced out of basic food and other goods." [Individual, inside Greater Manchester, 35 - 64, unknown gender]

"Deliveries would cost a fortune; therefore, prices would be raised on products." [Individual, inside Greater Manchester, under 35, female]

• Unfair to small businesses / independent traders (9%). Although this point was raised more by business respondents (19%), individuals reflected the concern about the potential impacts on small businesses and their ability to achieve compliance in the time given.

"I think for small businesses and taxi drivers who depend on their vehicle for their livelihood, it's quite a big ask to expect them to change their vehicle by 2021. It all depends on the level of funds / grants they can get from central government, otherwise they might go out of business." [Individual, inside Greater Manchester, 35 -64, female]

"I fear that the charges will badly affect small businesses within Greater Manchester and discourage others from carrying out business within Greater Manchester. It will increase costs for businesses within Greater Manchester due to increased delivery costs and discourage visitors due to increased taxi costs and bus costs." [Individual, inside Greater Manchester, 35 - 64, female]

• Bus passengers will be charged more / bus operators will pass on the penalty or services will be reduced (8%). As well as sharing concerns about the price of goods and food being raised when the CAZ is introduced, individuals were concerned that bus operators may choose to reduce their services or increase their fares to manage the cost of the penalty rather than updating their vehicles. There were also concerns

expressed about Taxi and PHV drivers passing on the penalty to their customers, and this was commented on by 4% of individuals.

"It's obvious that bus operators will either reduce their fleet numbers or increase fares to pay for the CAZ charge. This will have the effect of forcing more people into using cars, so therefore, it follows that this will increase emissions. It seems to me that the current proposals are going to have completely the opposite effect to what is intended." [Individual, inside Greater Manchester, 35 - 64, male]

"Concerned that charging buses and, to a lesser extent, taxis will mean costs being passed on to customers through increased fares, which in turn might result in those customers choosing to use private cars instead." [Individual, outside Greater Manchester, 35 - 64, male]

Younger individuals were more likely to feel the timescales were appropriate, with 9% of those aged under 35 compared to just 2% of those aged over 65 feeling the timescales were appropriate. Suggestions to implement the proposals sooner were given by 50% of those aged under 35, 39% of those aged 35-64, and 43% of those aged over 65. Older respondents were more likely to feel the timescales should be extended, with 20% of over 65s stating this compared with just 9% of those aged under 35.

Individual respondents living inside Greater Manchester were more likely to feel that the CAZ should be implemented sooner, with 47% compared to 19% of those who live outside Greater Manchester. Equally, 27% of those located outside Greater Manchester felt that the timescales should be longer compared to 10% of those located inside Greater Manchester. In terms of concerns about the potential redistribution of traffic and air quality issues to surrounding areas as a result of the CAZ, only 6% of those living inside Greater Manchester shared this concern, compared to 17% of those living outside Greater Manchester.

Businesses

A total of 500 business respondents provided a free text comment about the timescales of the proposed CAZ and the potential impacts of the scheme.

• **Timescales are too soon or need longer (62%)**. Only 12% of individuals felt that the proposed timescales were too soon, whereas it was the most common theme (62%) by far for business respondents. Most businesses discussed how they felt it was unrealistic to expect them to change their vehicles in the proposed timeframe, especially for those who had large fleets of vehicles. Many of the responses expressed doubts and concerns about the level of support and funding that they would receive to help them upgrade to compliance. Some also discussed how vehicle leases and business contracts were a key factor which determined how regularly they update their vehicles and the financial viability of doing so.

"It's too soon for people to purchase compliant vehicles, if going ahead, should be at least 2025 to give people a chance to replace vehicles" [Business, inside Greater Manchester, Taxi, PHV]

"I am being given two years to update 160 vehicles that have to be suitable for the new requirements. This means I will have to look for vehicles that are at least £6,000. I am expected to pay at least £960,000 in two years. I know that this is impossible for my company to do." [Business, inside Greater Manchester, PHV, Licenced Minibus]

• Unfair to small businesses / independent traders (19%). Only 9% of business respondents provided general comments about how the implementation of the CAZ would be unfair to businesses, but 19% stated that it would be particularly unfair to smaller businesses. Some felt that larger businesses and organisations would be able to afford such upgrades to their vehicles, but smaller businesses are more limited with their finances and resilience to change.

"The multi-million pound companies like DPD and DHL have funds to make required adjustments. Smaller businesses that are just reaching the VAT threshold do not have the capital to survive such drastic changes in such short timescale." [Business, inside Greater Manchester, Van]

"The car owners were excluded from the charge to help get votes for the politicians, to help keep them in jobs. This will kill the taxi industry, and when that falls, it will bring down other small business too." [Business, inside Greater Manchester, Taxi]

• Some businesses/organisations will go out of business (18%). Most businesses felt that the proposed timescales are too soon, and if they are implemented as proposed, 18% of business respondents felt that some would go out of business as a result of the implementation of the CAZ. As discussed in the boundary section, many expect some businesses to relocate as a result, but others shared how the costs to upgrade their vehicles would be too significant, even if loans are provided to cover a proportion of the costs.

"At 58 years of age after 32 years as a cabbie, instead of looking towards retirement, this scheme would force me into unwanted debt if I wanted to continue serving my regular wheelchair passengers." [Business, inside Greater Manchester, Taxi]

"We are a local coach company running 12 coaches and have been in existence for over 50 years transporting more than 1,000 pupils to and from school each day. To upgrade our fleet would involve an investment of £2.4 million just to meet Euro 6 standards. Those sorts of costings would put us out of business." [Business, inside Greater Manchester, multiple vehicle types]

 Need prices of compliant vehicles and retrofitting to reduce (15%). Several businesses commented on how Euro 6 and EV prices were currently too expensive to be realistic for most businesses to consider upgrading to, with compliant models only recently entering the market for some types of vehicles. Businesses also felt that there would not be a large enough supply of compliant vehicles to meet the demand, and retrofitting was not yet a possibility for all types and models of vehicles.

"Most small traders do not have the funds to purchase alternate vehicles until the second-hand vehicle prices drop to a reasonable level." [Business, inside Greater Manchester, Van]

"EVs could have been an option, but that's not a viable option due to their high cost, low range and lack of charging infrastructure." [Business, inside Greater Manchester, Taxi]

"The van market is not ready. Euro 6 only really came into the mainstream for vans towards the end of 2017. Most new van purchases are for longer periods [of] 5-6 years, and there will not be a set of realistic options for operators by then." [Business, inside Greater Manchester, HGV]

"There may be a possible option of fitting kits to convert Euro 5 to 6, but these have not yet been approved for all makes of vehicle, and there is not yet a timescale available to confirm when this will be done." [Business, inside Greater Manchester, Coach Operator]

• Unfair to those who need to upgrade their vehicles or non-compliant vehicles will be devalued (13%). Complementing the points made above, businesses expressed concerns about how the market value of their non-compliant vehicles would decrease significantly, while the price for compliant vehicles would increase. Others discussed how further costs are involved when purchasing another vehicle, and they felt that the proposals should take these additional costs into consideration.

"[There are] no viable options to retrofit older pre-Euro 6 vehicles other than to replace and buy new. Old vehicles have no commercial value in the local area for resale to realistically offset the cost of new Euro 6 vehicles. High demand will increase the value of second-hand Euro 6 vehicles." [Business, outside Greater Manchester, HGV, Van]

"You need to remember that traders who purchase a van put in between £2,000-£3,000 in auto security such as extra locks, alarms, trackers and internal racking and vehicle signage. All this can't be transferred to a new vehicle. This must be considered before forcing drivers to have the stark choice of paying thousands for upgrades to current vehicles or selling it for a new weak market value to get a new vehicle for an inflated market value price." [Business, inside Greater Manchester, Van]

Again, the low base must be acknowledged when comparing responses to the types of vehicles that businesses operate, but 78% of those with Taxis felt that the timescales were too soon. However, it must be noted that 232 of the 500 business respondents had a Taxi, so this has significantly affected the amount of those who feel that the timescales were too soon. When considering this opinion for businesses with other types of vehicles, 51% of PHV, 70% of coach operators, and 60% of bus operators felt that the timescales were too soon.

The largest proportion who felt it was unfair to small businesses were van owners (39%), and 40% of businesses with HGVs felt it was unfair to those who need to upgrade their vehicles, potentially because of the high costs involved to replace these vehicles.

For those who felt some would go out of business, this response was given by 50% of coach operators, 30% of bus operators, and 41% of licenced minibus drivers.

Only 32 business respondents expressed concerns for the disabled and elderly who rely on their transport services, but 27 of these respondents were those who have Taxis, with 9% of those with this vehicle type raising the concern.

6.3 Penalty Payment

Non-compliant vehicles would be subject to the following daily penalty, once the CAZ is introduced:

- Buses and coaches £100 per day;
- HGVs £100 per day;
- Vans, minibuses, motorhomes and motorised horseboxes £7.50 per day; and
- Taxis and PHV £7.50 per day.

There is also a proposed Penalty Charge Notice (PCN) of £120 per day for non-compliant vehicles that do not pay the daily penalty.

Respondents were asked their opinions on the level of the proposed daily penalty for noncompliant vehicles, as well as the proposed PCN for not paying. **Figure 6.1** shows that individuals were more likely to consider the daily penalty to be about right or too little for all modes (55% Bus, 60% HGV, 65% Vans and 68% Taxis), whereas business respondents were more likely to feel the daily penalty is too much (60%, 60%, 57% and 68% respectively).

The following trends are true for all four modes:

• Sole traders most likely to consider daily penalty to be too much (60%, 61%, 64% and 81% respectively);

- Businesses with non-compliant vehicles consider the daily penalty too much (67%, 67%, 63% and 75% respectively); and
- Individuals aged under 35 most likely to say the daily penalty is too little (18%, 26%, 36% and 39% respectively).



Figure 6.1: Penalty Payments

Respondents were asked why they felt the daily penalty for each mode was too much, about right or too little. The following sections summarise the comments received for each vehicle type.

6.3.1 Bus and Coach Daily Penalty of £100 per day by 2021

Overall, the penalty for buses and coaches was considered too much by 60% of businesses. All bus and coach operators thought the daily penalty was too much.

Individuals were more divided with over a third (37%) feeling the penalty was too much. The primary reasons for this were a fear that the costs would be passed on to customers by way of fare increases, and people also felt that TfGM should be encouraging people to use buses rather than driving. Over half (55%) of individuals thought the penalty was about right or too little.

Table 6.3 shows the main comments received. A full list of comments received can be found in **Appendix B**.

Table 6.3: Comments on Bus and Coach Daily Penalty

		Individual	Business	Total
	Costs will be passed on to customers	26%	22%	25%
	They should not pay at all / against all penalties	17%	20%	18%
	Buses benefit the environment by taking people out of cars / public transport should be encouraged / improved	16%	8%	14%
legative	Tax on goods / Stealth tax / Congestion charge / money making scheme / money won't be used as stated	9%	10%	9%
Comments	Penalty too much for this vehicle	6%	16%	8%
	Unfair on businesses	5%	12%	6%
	Unfair on businesses with this type of vehicle	3%	10%	4%
	Will cause debts for residents	5%	7%	5%
	Will cause unemployment	5%	7%	5%
	Will cause companies to go out of business	5%	7%	5%
Positive Comments	Gives companies a choice / need to encourage green investment	18%	5%	15%
	Penalty should differ by location or vehicle type	15%	9%	14%
	They cause a lot of pollution	11%	10%	11%
	Not enough to force change	12%	3%	11%
	Enough to encourage change without causing bankruptcy	12%	3%	10%
	Owned by larger companies who can afford the penalty	9%	6%	9%
	Not a financial burden	9%	2%	8%
Base		1,566	343	1,909

The two most frequently mentioned comments were raised by both business and individuals:

• **Costs will be passed down to customers (25%)**. The most often mentioned comment by both businesses (22%) and individuals (26%) was concern that bus companies could increase fares to cover the penalty. This is also evident in comments regarding causing debts for residents (5%) and the potential effect on the poorest / most vulnerable members of society (3%).

"Extra costs to firms will likely be passed on to customers, with such types of transport therefore becoming more expensive to use" [Individual, outside Greater Manchester, 35 - 64, male]

"Bus fares are already high and the penalty payment of £100 per day will be reimbursed by fare being increased for passengers" [Individual, inside Greater Manchester, 35 - 64, female]

"It will just push up prices you want to encourage people onto public transport then make it more economic for them to use it" [Individual, outside Greater Manchester, 35 - 64, unknown gender]

• **Buses should not pay at all (18%)**. Both individuals (17%) and businesses (20%) stated they were against the penalty in general.

"Anything is too much! Where are the operators meant to find this money?" [Individual, outside Greater Manchester, 35 - 64, female]

"Unaffordable for most small businesses" [Organisation, inside Greater Manchester, PHV]

Individuals

The following points were made most by individuals:

• **Penalty is at a level that gives companies a choice (18%)**. Individuals felt that the penalty was set at a level that gives companies a choice. In part, this was due to the belief that buses are high polluting vehicles (11%). However, 12% of individuals believe it is not high enough to force the changes.

"These vehicles are operated on a profit-making basis. Taking £100 of that profit would likely make the operators think seriously about changing their fleet" [Individual, outside Greater Manchester, 35 - 64, male]

"Bus companies are likely to run a lot of the same model of bus so as long as the daily charge amounts to enough over their fleet they should be incentivised to upgrade their vehicles" [Individual, inside Greater Manchester, Under 35, male]

• Buses benefit the environment by taking people out of cars / public transport and should be encouraged (16%). Some individuals disagreed with the penalty, highlighting the importance of public transport, including buses, as being an important part of the transport network and having subsequent environmental benefits by allowing people to freely travel without using private cars. Along with the above statements about costs being passed to customers, it was also feared that the potential penalty for buses could increase private car use (4%).

"Public transport should be made as inexpensive as possible in order to cut down on the number of cars on the road" [Individual, inside Greater Manchester, under 35, female]

"Buses can transport 70 people and are therefore part of the solution and NOT the problem" [Individual, outside Greater Manchester, 35 - 64, male]

"If we are trying to encourage the use of public transport, any additional costs which might or would be passed on to passengers in the form of increased fares, would have a negative impact." [Individual, inside Greater Manchester, over 65, male]

Businesses

• **Proposed daily penalty too much (16%)**. Many businesses stated they felt that the penalty was too much for buses, whilst also stating that the penalty was unfair both for bus owners (10%) and for businesses in general (12%).

"I understand the incentive, but just seems unfair and likely could be passed on to passengers if companies still haven't upgraded the full fleet when implemented. Also, if you compare to £7.50, it seems ridiculously high £50 would seem more fitting in a

comparison. Especially since many of these vehicles are part of the public transportation network reducing other vehicles." [Business, inside Greater Manchester, Van]

Other Comments

Outside of the most often stated comments, people in favour of higher penalties felt that buses tend to be dirty, take up a lot of space or complained about them idling with the engine running (11%).

"By far they are the biggest polluters in the city centre. They need to switch to electric, or not come directly into the centre. Sitting idle in traffic is ridiculous." [Individual, inside Greater Manchester, under 35, female]

"I think these are the biggest polluters, when you walk past old buses and coaches you can see and smell the fumes. If the penalty was any less I think they would ignore it or just increase fares to cover the cost. "[Individual, inside Greater Manchester, 35 - 64, female]

6.3.2 HGV Daily Penalty of £100 per day by 2021

Businesses located outside of Greater Manchester were most likely to state that the proposed HGV daily penalty is too much (74% compared to 59% from within Greater Manchester). Women and individuals aged 35 and under were least likely to believe the proposed penalty is too much (27% and 23% respectively).

Table 6.4 shows the main comments received. A full list of comments received can be found in **Appendix B**.

Table 6.4: Comments on HGV Daily Penalty

		Individual	Business	Total
	They should not pay at all/against all penalties	25%	40%	28%
	Costs will be passed on to customers	17%	19%	17%
	Tax on goods/Stealth tax/Congestion charge/money making scheme/money won't be used as stated	14%	16%	14%
Negative Comments	Unfair on businesses	9%	16%	10%
Commento	Unfair on businesses with this type of vehicle	6%	16%	8%
	Will cause companies to go out of business	5%	13%	7%
	Will cause unemployment	5%	8%	5%
	Will cause debts for residents	4%	6%	5%
	These vehicles are vital to the economy	3%	8%	4%
	Enough to encourage change without causing bankruptcy	25%	11%	22%
	Gives companies a choice/need to encourage green investment	19%	9%	17%
Positive	Not enough to force change	17%	7%	15%
Comments	Not a financial burden	16%	6%	14%
	They cause a lot of pollution	14%	7%	13%
	Penalties should differ by location or vehicle type	14%	7%	13%
	Owned by larger companies who can afford the penalty	10%	4%	9%
Base		1,518	338	1,856

Of the comments received, two were in the top five for both individuals and businesses.

• **HGV's should not pay at all (28%)**. This was the most common response by both individuals (25%) and businesses (40%), despite 60% of individuals feeling the HGV penalty was too low or about right.

"Unaffordable. Will put people out of business" [Business, inside Greater Manchester, HGV, Van]

"HGV owners are already under lots of pressure and taxes, they operate in a highly competitive industry and with the uncertainty of Brexit and the cost that may bring, it seems an awful lot for these companies to carry" [Individual, outside Greater Manchester, 35 - 64, male]

"This would impact on business; think about construction, manufacturing etc. We have a housing crisis and need to build more homes, subjecting construction companies to additional cost is going to mean they pass this on to customers" [Individual, inside Greater Manchester, under 35, male]

• **Costs will be passed down to customers (17%)**. As with buses, individuals (17%) and businesses (19%) were concerned that this penalty would be passed on to customers, with 5% also feeling that this could cause debts for residents of Greater Manchester.

"People will always take the path of least resistance. So, this may just see these vehicles passing the cost on to passengers and not upgrading their vehicles" [Individual, inside Greater Manchester, 35 - 64, male]

"Again, fear that costs will be indirectly passed on through the goods transported and as such, there will be little impact on the organisations running the polluting the vehicles. Would like to see Greater Manchester based companies supported by the monies raised to help make their fleets greener" [Individual, inside Greater Manchester, 35 - 64, female]

Individuals

Many of the 1,518 individuals were positive about the daily penalty, feeling it was:

• Enough to encourage change without causing bankruptcy (25%) and Gives companies a choice (19%). Individuals felt the penalty should encourage change, and some also felt that HGVs are owned by large companies who can afford any penalties or upgrades (10%). A small number of individuals also felt that more should be done to encourage freight onto rail (2%).

"National operators can afford payments and also to move vehicles around country" [Individual, inside Greater Manchester, under 35, male]

"It might make suppliers and logistics providers think twice about how they distribute their goods in terms of looking at consolidation options" [Individual, inside Greater Manchester, fewer than 35, female]

"This seems fair to me, as high polluting vehicles, and is an amount which would be significant enough to make private companies seriously consider updating their fleet to less polluting vehicle in the shortest time possible" [Individual, inside Greater Manchester, 35 - 64, male]

Businesses

Businesses on the other hand felt the penalty was a:

• **Tax on goods (16%)**. Some businesses felt that the daily penalty would simply be a tax on goods (this was also stated by 14% of individuals). 13% of business also stated that the penalty could cause businesses to close.

"There currently is not an electric or hybrid HGV on the road in the UK. This therefore is purely a tax on commercial goods being moved and delivered throughout the Greater Manchester area discouraging business and impacting employment. I again can understand restriction in city / town centre areas, but not the wider area" [Individual, outside Greater Manchester, 35 - 64, male]

"Smaller companies struggle to make a decent profit as it is, larger companies may be able to budget for this, but this expense will always end up going onto the public who but the goods that the lorry has brought in" [Individual, inside Greater Manchester, under 35, female]

6.3.3 Van Daily Penalty of £7.50 per day by 2023

The proposed daily penalty for vans, minibuses, motorhomes and motorised horseboxes (collectively referred to as vans below) were least likely of all modes to be considered too much overall. However, 57% of businesses felt the penalty was too much. Just 10% of all respondents who stated they had a van, horsebox, motorhome or other vehicle chargeable in this section had a compliant vehicle. **Table 6.5** shows the main comments received. A full list of comments received can be found in **Appendix B**.

Table 6.5: Comments on Van Daily Penalty

		Individual	Business	Total
Negative Comments	Unfair on businesses	9%	18%	10%
Comments	Costs will be passed on to customers	8%	8%	8%
	Daily penalty too much for this vehicle	5%	22%	8%
	Tax on goods / Stealth tax / money making scheme / money won't be used as stated	7%	12%	8%
	Private vehicles / shouldn't be charged	9%	2%	8%
	They should not pay at all / against all penalties	5%	8%	5%
	Unfair on businesses with this type of vehicle	2%	10%	3%
Positive	Not enough to force change	17%	5%	15%
comments	Enough to encourage change without causing bankruptcy	15%	9%	14%
	Penalty is too low	11%	2%	9%
	Fine / something needs to be done	7%	5%	7%
	Not a financial burden	7%	2%	6%
	They cause a lot of pollution	5%	4%	5%
	Penalties should differ by location or vehicle type	5%	2%	5%
	Gives companies a choice / need to encourage green investment	5%	2%	5%
	arging suggestion/ reward rather than punish / charge by ner than emission	3%	5%	4%
Base		1,479	326	1,805

Individuals

Individuals were evenly split regarding the level of the van penalty, with 29% stating that the penalty is too much and an equal 29% stating it was too low. This is evidenced in the comments, with the most popular comment made by individuals being that it is not high enough to force change (17%) and it is enough to encourage change (15%).

• Not enough to force change (17%). Along with the 17% of individuals who felt the penalty wasn't high enough to force change, 11% also stated that the van penalty was too low with 7% feeling the potential penalty is not a financial burden and 5% stating that vans cause a lot of pollution.

"The daily charge for the London ULEZ is higher than this and whilst it has had a "significant" impact on reducing the number of higher polluting vehicles, it has not completely deterred users from entering the zone. I believe therefore that £7.50 being less than this will have an even lesser impact" [Individual, inside Greater Manchester, 35 - 64, female]

"I think £7.50 is too small and messy a number. I think a nice whole round number like £10 will stick in people's mind a lot better and will encourage faster upgrades.

After all, £7.50 is just two or three coffees" [Individual, inside Greater Manchester, unknown age and gender]

"£7.50 a day is simply too affordable and some of these vehicles create extremely noxious emissions" [Individual, inside Greater Manchester, under 35, male]

"That amount is obviously too little for vehicles responsible high ratio of pollution" [Individual, inside Greater Manchester, under 35, male]

• Enough to encourage change without causing bankruptcy (15%). Conversely an almost equal number of individuals felt that the penalty was at a level that would encourage a shift to compliant vehicles, a sentiment also mentioned by 9% of businesses. A further 5% stated that the penalty level would give companies a choice between the daily penalty and upgrading to a compliant vehicle.

"They'll make loads of profit I expect. And it can easily offset the cost of changing to an environmentally friendly vehicle" [Individual, inside Greater Manchester, under 35, female]

"Enough to encourage services to consider the environment without potentially harming businesses, trade and construction" [Individual, inside Greater Manchester, under 35, male]

Businesses

Many of the businesses stated that they felt the van penalty was too much.

• **Penalty is too much (22%)**. The most common statements from businesses were that the daily penalty for vans is too much and that the penalty is unfair on businesses (18%), in particular businesses with non-compliant vehicles (9%).

"Penalise businesses? Great idea when the economy is dire" [Individual, outside Greater Manchester, 35 - 64, male]

"It's a deterrent not punitive. If the money was in the work, we would all have brand new vehicles." [Individual, inside Greater Manchester, 35 - 64, female]

"Sole trader van owners would be hit hard by a £7.50 per day (maybe £40/week) charge. Schools and charities often use minibuses to take children, elderly and disabled out (often on activities to improve their mental and physical health) and it would seem wrong to inhibit this. Most motorhomes and horseboxes are only used occasionally mostly in the rural area of Greater Manchester and likely to be for only short distances within the 'zone'. However delivery vans owned by large companies should be charged at least £7.50/day" [Individual, inside Greater Manchester, over 65, female]

"This still seems somewhat high, we are Manchester not London. Minibuses seems silly. People may just use multiple cars instead increasing pollution again" [Individual, inside Greater Manchester, 35 - 64, male]

• This is a tax on goods / congestion charge (12%). As with HGVs, many viewed the penalty as a form of tax or money-making scheme.

"it's just another tax on us and it could send companies down we already have a problem not knowing what and how businesses will be affected when we exit Europe" [Business, inside Greater Manchester, Van]

Other Comments

Eight percent of respondents also commented about motorhomes or horseboxes. It was felt that these are primarily owned by individuals rather than businesses and, as such, the

penalty would be unfair. However, there were some respondents who felt that owners of these vehicles are wealthy and able to afford the fee.

"Motorhomes are used for pleasure and rarely drive compared to other vehicles. Why punish someone for pleasure?" [Individual, outside Greater Manchester, under 35, male]

"Because charging more would hinder smaller businesses, I'm only really thinking about people who make a living with vans. I don't really include them with minibuses, motorhomes or horseboxes, I'd charge them more - a motorhome is a luxury, so you have a choice to use it and pay the charge, or not. If you own a horse, you can afford to pay more than £7.50. No thoughts about minivans." [Individual, inside Greater Manchester, 35 - 64, male]

6.3.4 Taxi and PHV Daily Penalty of £7.50 per day by 2021

The proposed Taxi and PHV daily penalty was the most likely to be considered to be too low by individuals, but only 10% of businesses stated this, with 68% of businesses stating the penalty is too much. Younger individuals (aged under 35) were significantly less likely to state the penalty was too much (20%) than the individuals aged 65 and over (30%).

Table 6.6 shows the main comments received. A full list of comments received can be found in **Appendix B**.

Table 6.6: Comments on Taxi and PHV Penalty

		Individual	Business	Total
	Costs will be passed on to customers	22%	13%	20%
	Unfair on businesses with this type of vehicle	9%	48%	18%
	Penalty too much for this vehicle	5%	23%	9%
	Different charging suggestion / reward rather than punish / charge by mileage rather than emission	7%	10%	8%
	Tax on goods / Stealth tax / Congestion charge / money making scheme / money won't be used as stated	6%	11%	7%
Negative	Will adversely affect poorest / elderly / youngest people (less able to afford charges/price increases)	5%	14%	7%
Comments	Will cause companies to go out of business	3%	18%	6%
	Unfair on businesses	5%	8%	6%
	They should not pay at all / against all penalties	4%	5%	4%
	Timescales are too soon / cannot afford to change vehicle in time	2%	12%	4%
	Charged vehicles must go places, private cars have a choice / Performing an essential service	2%	7%	3%
	Will cause unemployment	2%	5%	3%
	Penalty is too low	30%	8%	25%
	Not enough to force change	25%	6%	21%
	Not a financial burden	19%	5%	16%
	Enough to encourage change without causing bankruptcy	17%	6%	14%
Positive Comments	Gives companies a choice / need to encourage green investment	13%	4%	11%
	They cause a lot of pollution	13%	4%	11%
	Penalties should differ by location or vehicle type	10%	2%	8%
	Vehicles leave their engines running / Driver behaviour causes extra pollution	8%	2%	7%
	Owned by larger companies who can afford the penalty	5%	1%	4%
Base		1,509	424	1,933

Individuals

• **Taxi / PHV Penalty too low (30%)**. Many of the comments received from individuals stated that the penalty for taxis were too low (30%). Comments also included that the penalty is not enough to force change (25%) and that it wouldn't pose enough of a financial burden to Taxis and PHVs (19%).

"Taxis loiter and idle with their engines running generating a cloud of fumes where they wait. The number of in and out trips they make per day will mean a small addition to their running costs when considered per journey, but I expect a full £7.50 will be charged to customers per journey. Increasing this charge will mean that customers think twice before taking a taxi and it will force taxi drivers to consider whether they can pass the charge onto customers at the full rate" [Individual, outside Greater Manchester, under 35, male]

"This sort of penalty should be per trip. A van / taxi driving around the city centre all day could easily make enough money to cover such a small fee" [Individual, inside Greater Manchester, under 35, female]

"They are part of businesses with profits, the proposed penalty seems low to what the vehicle could be generating in profit per day" [Individual, inside Greater Manchester, under 35, male]

"If your business model doesn't work using a compliant vehicle, then it's not a good business model. I know it's harsh for small firms, but we all need to get with the programme" [Individual, inside Greater Manchester, 35 - 64, female]

• **Costs will be passed down to customers (22%)**. However, as with other modes, there was a fear of the penalty simply being passed on to customers, with the recent changes at Manchester Airport being cited as an example.

"Fares [sic] will increase just like pick-up / drop-off at the airport" [Individual, inside Greater Manchester, 35 - 64, male]

"This cost will be passed on to the consumer. At this level, it can be passed on without making the charge too high. If charges become too high, business will suffer" [Individual, inside Greater Manchester, Over 65, female]

"This will be passed onto their fares. Maybe less than 50p per trip? It wouldn't prevent them in the slightest. Who gets a cab but worries about 50p extra?" [Individual, outside Greater Manchester, 35 - 64, male]

"So, they take it seriously and change. Otherwise it becomes part of their business expenses like tax, insurance and fuel" [Individual, inside Greater Manchester, 35 - 64, female]

"Will not impact taxis whatsoever. The goal of the charge cannot be to make money, but to dissuade driving. Taxi charges should only apply to non-accessible taxis to avoid added costs for those who rely on taxi services" [Individual, inside Greater Manchester, under 35, male]

Businesses

• **Unfair on these businesses (48%)**. Almost half stated that the daily penalty was unfair for those with Taxis or PHVs, and a further 8% stated it was unfair on business in general.

"The taxi trade is already at breaking point to add £2,737.50 per year in charges or asking them to get into debt £35,000 diesel or £67,000 electric by 2021" [Business, inside Greater Manchester, Taxi]

"This money is going to help bus and cycling improvements not taxis or private hire. Some money earned from the scheme should go into providing cheaper EVs for taxi drivers. The charges are ridiculous, taxi drivers are expected to pay the charge of ferrying passengers into the city" [Business, inside Greater Manchester, Taxi, Van]

• **Timescales are too soon / cannot afford to change vehicle in time (12%)**. Whilst not considered by individuals, businesses felt that the taxi penalty would be implemented too soon.

"At least the owners need time to save some money" [Business, inside Greater Manchester, Taxi]

"I believe that it is unrealistic to expect these vehicles to be upgraded by the proposed target date and that it will be highly damaging to businesses if this level of penalty payment is imposed with an unrealistic timescale" [Individual, inside Greater Manchester, 35 - 64, female]

Other Comments

Taxis and PHV were mentioned as often being the only alternative option to driving due to issues with public transport routes. However, driver behaviour was also mentioned by 8% of individuals, with people feeling drivers often sit idling unnecessarily.

"Too many taxis parked up all day in centre all with engine running" [Business, inside Greater Manchester, HGV, Van]

Taxis and PHV were also considered vital for the disabled and the elderly (7%).

"Again, disabled people like me depend on private hire / Uber for day-to-day tasks like the school run. The payment would end up being paid by the user when prices are already increasing to use them." [Individual, inside Greater Manchester, under 35, female]

6.3.5 Penalty Charge Notice (PCN) at £120 per day

Figure 6.2 shows 54% of individuals either agreed or felt the PCN was too low. However, businesses were much more likely to consider the PCN to be too much (74%).




Table 6.7 shows the main comments received. A full list of comments received can be found in **Appendix B**.

Table 6.7: Comments on PCN

	Individual	Business	Total
Excessive for forgetting to pay	15%	35%	19%
Tax on goods / Stealth tax / Congestion charge / money-making scheme / money won't be used as stated	13%	17%	14%
Different charging suggestion / reward rather than punish / charge by mileage rather than emission	11%	13%	12%
Will cause debts for residents	3%	8%	4%
Unfair on businesses	2%	11%	4%
Will adversely affect poorest / elderly / youngest people (less able to afford charges / price increases)	3%	6%	3%
If people can't afford £, they won't have £ [PCN]	2%	6%	3%
Fine / something needs to be done	21%	5%	18%
Enough to encourage change without causing bankruptcy	12%	3%	10%
Not enough to force change	6%	1%	5%
Fine needs to be higher to stop people deliberately not paying [PCN]	5%	1%	4%
Base	1,301	323	1,624

The two most frequently mentioned comments were raised by both business and individuals:

• **Excessive for forgetting to pay (19%)**. Both businesses (35%) and individuals (15%) commented that the PCN of £120 was excessive in the case of a driver forgetting to pay.

"So, a charge of £120 on top of the £100 already paid. This is a potential of almost half of an HGV daily earnings. Once again, no company can sustain this. This really is a sure-fire way to eliminate haulage from the Greater Manchester area. Instead of backing small business and enabling them to flourish and grow, what we are doing is killing them dead in the water" [Business, inside Greater Manchester, HGV, Van]

"Mistakes happen and where this is genuine, families on low income will be further pushed into further financial poverty" [Business, inside Greater Manchester, PHV]

"This is far too much of a penalty charge for someone to pay. They should be warned at first then half of this should be about right" [Individual, inside Greater Manchester, 35 - 64, male]

• **Tax on goods / congestion charge (14%)**. Similar to the other daily penalties, a proportion of respondents (13% of individuals, 17% of businesses) felt that the PCN was a tax rather than having an environmental benefit.

"I'm not entirely convinced that this isn't just another form of taxation... there isn't enough clarity on what this will be spent on and experience tells me that a fair bulk of it will be swallowed up by 'administration fees'" [Individual, inside Greater Manchester, 35 - 64, female]

"Penalty charges are a method of generating large amounts of revenue for local authorities and a charge of £120 is not in proportion to the perceived "offence". A more realistic figure would be approximately 30% of this figure; this would cover the cost of administering the charge and provide some income." [Individual, inside Greater Manchester, unknown age and gender]

Individuals

• Fine, acceptable / Something needs to be done (21%). A fifth of individuals felt that the PCN was acceptable and necessary to ensure people pay. 5% felt that it should be higher to stop people deliberately not paying. However, business did not agree, with just 5% giving this comment.

"Providing the whole proposal is implemented in a sound, fair, reasonable and proportionate way, there should be no excuse for not paying the charge. Fraudulent abuse should be charged much more harshly" [Individual, inside Greater Manchester, 35 - 64, male]

"Much of this money will be re-invested into the scheme and other Greater Manchester initiatives, seems like a good idea and so this extra penalty will benefit those who abide by the laws" [Individual, inside Greater Manchester, 35 - 64, male]

Business

• **Different charging suggestion (13%)**. Mentioned by both individuals (11%) and businesses (13%), several respondents had alternative suggestions for the charging model.

"Could start with £50 in first 3 days, £80 first week and then after if not paid £120. Basically, increasing the amount if not paid in time" [Individual, inside Greater Manchester, under 35, female]

"If this was changed to per fortnight or monthly, then I would absolutely agree. Per day is simply unreasonable, especially if the recipients are unavailable to receive the notices. For example, hospital stays or holidays abroad" [Individual, inside Greater Manchester, under 35, male] "Should be staggered depending on vehicle emissions. Unreasonable to charge same for an HGV and a car" [Individual, inside Greater Manchester, 35 - 64, female]

Other Comments

In this section, respondents stated they were unclear whether £120 would be added daily and were unsure how long people would have to pay the initial penalty. Some questioned how they would be informed that they are required to pay the daily.

"It's a ridiculous charge that probably won't be administered properly and charge notices will be incorrectly issued" [Individual, inside Greater Manchester, 35 - 64, unknown gender]

6.4 Exemptions

Two-fifths (39%) of respondents felt there were other vehicles that should be exempt from the daily penalty if the CAZ was introduced.

As can be seen in **Table 6.8**, individuals were most likely to state that motorhomes or horseboxes (24%) should be exempt from daily penalty, whereas businesses considered disabled transportation (43%) to be most worthy of exemption. It should be noted that a large proportion of the respondents who made those specific suggestions own one of those vehicles (136 individuals and 77 Taxis).

Table 6.8: Comments on Exemptions

		Individual	Business	Total
Agree with current pr	oposals	9%	3%	7%
All vehicles should be	e included	6%	2%	5%
	Motorhomes / Horseboxes / leisure vehicles	24%	2%	15%
	Taxis	6%	24%	13%
	All of them	16%	7%	13%
/ehicles in current proposals	PHVs	5%	21%	11%
	Buses and coaches	9%	4%	7%
	Privately owned vans / Light Goods Vehicles (LGV)	8%	5%	7%
	Vans / LGVs	6%	4%	5%
	Disabled / Elderly / Children transportation	12%	42%	23%
Specific exemptions	Emergency services	10%	3%	7%
	Vintage / historical vehicles	6%	3%	5%
	Charity owned / operated vehicles	6%	1%	4%
Base		781	493	1,274

Respondents were asked why they felt these vehicles should be exempt.

• **Disabled / Elderly / Children transportation (23%)**. Respondents felt that accessible transport was vital for the wellbeing of some residents of Greater Manchester and should therefore be exempt. Businesses (42%) including many Taxi drivers, who commented that their vehicles are wheelchair accessible and that London has exempted them from the ULEZ.

"Because they are a vital part of the elderly community, taking them to various locations in their wheelchairs. These vehicles are a lifeline for a lot of people living in nursing homes and are disabled. Also, as it is currently happening in London, 25,000 wheelchairs taxis are exempt from the congestion charges over there. Why can't we do it over here?" [Business, inside Greater Manchester, PHV]

"What if a disabled person needed a taxi as there only form of transport, taxi drivers will rightly pass the costs on and your stupid idea hurts the disabled" [Individual, inside Greater Manchester, under 35, male]

"We draw your attention to the exemption applied to the London hackney trade from their ULEZ. The Greater Manchester hackney trade wishes to strike the same deal. We shall negotiate a move towards modernisation with our respective regulatory bodies in exchange for our recognition as a 'specialist' vehicle within the wording set out and applied to vehicles which are exempt from the zone as Disability Tax exempt. This would allow us to be removed from the CAZ plan and give us the time necessary to financially plan for a cleaner future. There is only something around 2,200 vehicles. Of these around 10% will be compliant in 2021. Others will quickly follow suit through incentive and financial penalty when working in neighbouring areas. This is the only common-sense approach to be taken with our trade. It has been applied in London and we expect it to be applied in Greater Manchester" [Organisation, inside Greater Manchester, Taxi]

• **Motorhomes / horseboxes and leisure vehicles (15%)**. The main reasons given for motorhomes and horseboxes being given exemptions were due to the low number of these vehicles on the road and the low mileage they do (53%), as well as these vehicles being predominantly owned by members of the public rather than businesses (33%). It was also noted by 10% of respondents that these vehicles are very expensive to replace or retrofit.

"A motorhome is not normally daily transport; they are used for domestic use only. A motorhome is normally parked up until it is used to travel out of the CAZ" [Individual, inside Greater Manchester, 35 - 64, male]

"As explained earlier, there are very few on the road, they don't do many miles in total and regarding Motorhomes they are mainly owned by older people who just don't have the income to buy new ones but treat them as their 'pride and joy' - Infinitely better than vegetating and ending up in a care home!" [Individual, inside Greater Manchester, over 65, male]

"They are adapted vehicles, which are generally not used on a frequent basis, but the charges may make usage prohibitive. There is no alternative to their use. We cannot take horses on public transport" [Individual, outside Greater Manchester, 35 - 64, female]

• **Taxis (13%) and PHVs (11%)**. Respondents felt that the penalty could cause companies to go out of business (28% Taxis, 30% PHV), with 25% each also stating they were against all penalties. It should be noted that the campaign by Taxis referred to in **section 2.1** has influenced the response to this question.

"Livelihood of taxi driver depends on it, taxis are needed as form of public transport" [Business, inside Greater Manchester, Taxi]

"Taxis and Uber are often [the] most effective transport system for those with limited transport options" [Individual, inside Greater Manchester, under 35, female]

"Taxis provide a service to the public. There should be an exemption for taxis that have remaining time on their taxis before the vehicle reaches an age of 12 years old. As many drivers cannot afford to buy a new cab. Or the council[s] should provide some funding to help drivers buy a cab that will be eligible for the exemption of the daily penalty charge. As the business is already slow, this is really unfair on cab drivers" [Business, inside Greater Manchester, Taxi]

7. Funding

The proposals include funds to support the upgrade of vehicles which are registered in Greater Manchester:

- £59 million for Freight (includes HGVs, vans and minibuses);
- £29 million for Bus; and
- £28 million for Taxi and PHV.

In the following sections, we explore the number of vehicles that are expected to be compliant or non-compliant when the CAZ is introduced, as well as the expected action of each of the different vehicle types. **Table 7.1** summarises the finding by fund. Over two-thirds of respondents did not intend to take any action or did not know what they are going to do when the CAZ is introduced.

Table 7.1 Summary of Action Likely to be Taken and Fund Requirements

			Fund	
		Freight	Bus	Taxi
Number of resp	oondents	426	34	318
Estimated num	ber of vehicles	1,400-1,700	570-810	2,080-3,080
Proportion all c	compliant	9%	0%	14%
Action likely to	Retrofit or Replace some or all vehicles	21%	33%	22%
take	No action	48%	32%	45%
	Don't know	31%	35%	33%
Number of veh	icles need funding for	600-820	130-170	330-470
Would take loan	Yes	61%	50%	71%
	No	39%	50%	29%

The figures in this table and the following section need to be treated with caution as they are based on the response received to the survey. It is not known how representative the sample is and for some questions the number of respondents answering is very low.

A large proportion have stated they do not intend to act or do not know what they will do and therefore the proportions seeking funding could substantially change once the CAZ is introduced.

The estimated number of vehicles is based on answers given by respondents and may not reflect the views of other businesses and individuals across Greater Manchester.

8. Buses and Coaches

This section summarises the findings of the survey responses provided by bus and coach operators. A total of 34 bus and coach operators responded to the survey. None of the larger operators responded to the survey; therefore, the results below need to be treated with caution.

Key Findings	
Number of bus and coach operators	34
Estimated number of vehicles	570-810
Proportion with all compliant vehicles	0
Expected Action Retrofit or replace	35%
No action	32%
Don't Know	35%
Estimated number of vehicles requiring funding*	135-155
Estimated proportion of bus fleet in sample requiring	
funding*	20%-24%
*Caution should be taken with these figures as the number of c	operators included is low

and the large operators are missing. A large proportion have stated they do not intend to act or do not know what they will do and therefore this proportion could substantially change once the CAZ is introduced.

8.1 Vehicles

Table 8.1 shows the number of vehicles each operator owned or leased. Just under half operated just one bus. A quarter had fleets of 20 or more vehicles. An estimate of the number of buses in each category is also included in the table below. This has been calculated by taking the mid-point of each range and assuming that the average fleet for the 20+ category is 30 to 50** buses. Using these assumptions, the estimated number of buses represented by the survey, ranges between 570 and 810. It is, however, important to note that the average fleet size for the 20+ category is dictated by the fact that the largest operators did not respond the survey.

Fleet Size	Bus Operators	Coach Operators	Assumed Average No. of Vehicles	Estimated No. of Vehicles
1	12	2	1	14
2-4	4	1	3	15
5-9	2	3	7	35
10-19	4	6	14.5	145
20+	8	4	30-50**	360-600
Base	30	16	-	570-810

Table 8.1: Number of Responses by Fleet Size and Estimated Number of Vehicles

* Operators were often operated both bus and coach – there are 34 individual companies in this sample

** Estimated based on the size of company responding.

Most respondents indicated that they operate as sole trader (50%) or micro / small / medium business (40%). Only three respondents classed themselves as a large business.

Only five of the interviewed operators are based outside Greater Manchester.

8.2 Non-compliant Vehicles

Out of the 34 operators, all stated that one or more of their vehicles would not be compliant when the CAZ is introduced.

Respondents were asked if they intended to take any action before the introduction of the CAZ in 2021. **Figure 8.1** shows a third (n=12) did not know what they were going to do and a further third (n=11) stated they did not intend to replace or retrofit any of their vehicles.

Six respondents thought they would replace some of their vehicles and a further two thought they would replace all of them. The response did not vary by size of operator.

Figure 8.1: Action Expected to Take* (n)



Base: 34

**respondents could give more than one response*

A total of 11 out of the 34 operators indicated that they have no intention to replace or retrofit vehicles.

Table 8.2 summarises the reasons given for not wanting to act by business size. The most frequent reason for not taking any action is the cost of replacing the vehicle, which was mentioned in almost two-thirds of responses.

Reason \ Business size	Sole trader	Micro/ Small/ Medium	Large	Total
Don't want to replace my vehicle(s)	0	2	0	2
I am not planning to replace my vehicle(s) until after this time	1	2	0	3
Cost of replacing vehicle(s)	3	4	0	7
Waiting for better/ more appropriate model to be released	0	2	0	2
The vehicle(s) won't be frequently entering or traveling within the Clean Air Zone	0	1	1	2
l'd rather pay a daily penalty	1	1	0	2
Other	0	1	0	1
Base	4	6	1	11

Table 8.2: Reason for Not Taking Action by Business Size*

*respondents could give more than one response

The survey suggests that bus companies located outside Greater Manchester are unlikely to take any action following the introduction to the CAZ in Greater Manchester.

All operators located outside Greater Manchester stated that they do not intend to take any action before the introduction of the programme. In contrast, almost half of bus operators in the region indicated that they plan to take some action.

8.3 Funding

Those that stated they would retrofit or replace some or all their vehicles were asked how many vehicles they would apply for funding for. The survey indicated that the four operators who require funding to retrofit vehicles intend to adapt 35 vehicles. In addition, nine operators specified that they will request funding to replace between 100 - 120 vehicles.

In total, 20%-24% of vehicles will require funding for retrofitting or replacement. However, caution should be taken with these figures as the number of operators included is low and a large proportion have stated that they do not intend to act or do not know what they will do and, therefore, this proportion could substantially change once the CAZ is introduced.

Number of Vehicles	Retrofit	Replace	Assumed Average No. of Vehicles	Estimated No. of vehicles requiring funding
1	0	2	1	2
2-4	2	1	3	9
5-9	0	1	7	7
10-19	2	4	14.5	87
20+	0	1	30-50	30-50
Total*	4	9	-	135-155

Table 8.3: Number of Vehicles Requiring Funding by Business Size

*several operators did not answer this question

8.4 Loan

Only five of the operators that responded would take a Greater Manchester loan to help cover the costs of upgrading vehicles to become fully compliant.

Two of the operators that responded would need loans to cover 50% to 75% of the vehicle values (one sole trader and one Micro / Small / Medium), and one would need a loan to cover 75% to 100% of the total cost (large operator). Two operators did not know how much they would need.

In terms of length of time they would need to pay back the loan, one of the loans will need 4 to 5 years, whilst three loans will be repaid in more than five years. Others were unsure about the payback period.

8.5 Other Forms of Financial Support

Other forms of financial support mentioned in the survey included lowering the daily penalty, additional government funds, interest-free loans and subsidies to purchase EVs.

Some respondents stated that the cost of retrofitting or purchasing new vehicles is unaffordable.

"Yes, more help need to upgrade and gov funds needed" [Business, inside Greater Manchester, multiple vehicle types]

"Exemption to penalty, retrofit costs for total fleet and loss of efficiencies from interworking of services" [Business, outside Greater Manchester, Bus operator]

"Make it cheaper to buy EVs" [Business, inside Greater Manchester, Bus operator]

"Likely to not be sufficient to be helpful. How much land is needed to charge up a fleet of buses that require charging, it's not just changing the bus it's upgrading the depot! ... Invest / fund the infrastructure first before forcing people to change their vehicle. Can the grid support it?" [Individual, inside Greater Manchester, no vehicle in scope]

9. Taxis

This section discusses responses from Taxis¹, of which there were 207.

Key Findings	
Number of drivers/ operators	201
Estimated number of vehicles	890-1250
Proportion with non-compliant vehicles	62%
Expected Action Retrofit or replace	23%
No action	45%
Don't Know	33%
Estimated number of vehicles requiring funding*	130-170
Estimated proportion of Taxis in sample requiring funding*	14%-15%

*Caution should be taken with these figures as it's not known how representative the sample is and a large proportion have stated they do not intend to act or do not know what they will do and therefore this proportion could substantially change once the CAZ is introduced.

9.1 Licencing

As shown in the table below, all but three Taxi drivers that responded obtained their licence within Greater Manchester. The majority were licenced in Manchester.

Table 9.1: Licencing Authority

	Ν	Percent
Manchester	104	50
Wigan	17	8
Stockport	8	4
Salford	7	3
Tameside	5	2
Bury	4	2
Trafford	4	2
Bolton	3	1
Outside Greater Manchester	3	1
Oldham	1	*
Rochdale	1	*
Operator (not a driver)	43	21
No response given	7	3
Base	207	

¹ Excluding private hire vehicles which are analysed in Section 9

Almost half (45%) of the Taxi drivers that responded said they use their vehicle for personal use and, of those that do, 93% use their vehicle at least once a week. Two-thirds (66%) of those who used their Taxi for personal use, had no other vehicle available.

The following section focuses on responses from Taxis and operators based in Greater Manchester, representing 97% (201 respondents) of the overall sample.

9.2 Vehicles

Table 9.2 shows the Taxi respondents by fleet size; over 75% of respondents operate a single taxi and almost 10% had 2 - 4 taxis. 9% stated they had a large number of Taxis (with over 20 vehicles).

An estimate of the number of Taxis represented in the survey has been produced. This has been done by taking the mid-point of each range and assuming that the 20+ category corresponds to 30 to 50 vehicles. The estimated number of taxis in the survey is between 890 and 1,250.

Fleet size	No. of Responses	Average No. of Vehicles	Estimated No. of Vehicles
1	151	1	151
2-4	19	3	57
5-9	6	7	42
10-19	7	14.5	102
20+	18	30-50	540-900
Total	201	-	890-1,250

Table 9.2: Number of Responses by Fleet Size and Estimated Number of Vehicles

Euro 5 or earlier diesel Taxis and Euro 3 or earlier petrol Taxis will be considered noncompliant with the scheme requirements by 2021. The percentage of vehicles meeting the emissions standard is presented **Figure 9.1**.

Most respondents will not be fully compliant when the CAZ is introduced; 47% of respondents will not have any compliant Taxis, with an additional 15% with at least one non-compliant vehicle. A quarter (24%) did not know.



Figure 9.1: Percentage of Compliant / Non-compliant Vehicles (%)

Base: 201

9.3 Non-compliant Vehicles

Those with non-compliant Taxis were asked if they intended to take any action in advance of the introduction of the scheme in 2021.

Most Taxis either do not intend to take any action before 2021 (45%) or are unsure about which action, if at all, to take (33%).

Figure 9.2: Action Expected to Take* (%)



Base: 169

*respondents could give more than one response

Table 9.3 lists the reasons for not taking any action by business size. The most frequent justification for all business sizes was the cost of replacing vehicles (88%). In addition, over one in five respondents stated that they have no intention of replacing vehicles and/or that they are waiting for a more appropriate model to be released.

Reason \ Business size	Sole Trader	Micro / Small / Medium	Large	Total
Don't want to replace my vehicle(s)	10	5	0	15
I am not planning to replace my vehicle(s) until after this time	10	1	1	12
Cost of replacing vehicle(s)	48	15	2	65
Due to lease agreement	8	4	1	13
Waiting for better / more appropriate model to be released	11	4	1	16
I'd rather pay a daily penalty	2	1	0	3
I don't think I would need a vehicle for business by the time the CAZ begins	1	0	0	1
Other	5	1	0	6
Base	56	15	3	74

Table 9.3: Reason for Not Taking Action by Business Size (n)*

*respondents could give more than one response

9.4 Funding

Those who intended to retrofit or replace their vehicles were asked whether they would require funding. Almost all stated they would require funding. As shown in **Table 9.4**, an estimated number of vehicles requiring funding has been calculated, applying the methodology explained in **Section 8**.

 Table 9.4: Responses and Estimated Number of Vehicles Requiring Funding, by Fleet

 Size

		Retrofit			Replace	
No. of vehicles	No. of Responses	Assumed No. of vehicles	Estimated No. of vehicles	No. of Responses	Assumed No. of Vehicles	Estimated No. of Vehicles
1	9	1	9	11	1	11
2-4	3	3	9	2	3	6
5-9	0	0	0	4	7	28
10-19	0	0	0	2	14.5	29
20+	0	0	0	2	30-50	60-100
Total	13	0	18	21	0	130-170

An estimated 13 respondents stated that they require funding to comply with the proposed regulations by retrofitting their engines and/or exhausts (1.5% to 2.0% of the total). In addition, funding to replace roughly 15% of respondent's vehicles will be needed.

Taxi companies operating a smaller fleet are more likely to retrofit their vehicles than larger operators, which only consider requesting funding to replace older vehicles.

9.5 Loan

Funding available for the scheme is not expected to cover the cost of upgrading all Taxis to become fully compliant. If Greater Manchester had a loan available to help cover the cost of upgrading vehicles, it would be taken in over two-thirds cases. **Table 9.5** presents the number of instances in which a loan would be required by business size.

	Numb	er of Respo	nses	% of Thos	% of Those with Non-compliar Vehicle	
Take Loan	Sole Trader	Micro / Small / Medium	Large	Sole Trader	Micro / Small / Medium	Large
Yes	17	4	2	13%	14%	20%
No	7	2	2	6%	7%	20%
Base	24	6	4	127	29	10

Table 9.5: Number of Respondents Taking a Loan

Table 9.6 details the proportion of vehicle loan costs Taxi drivers / operators stated they would need to borrow.

Table 9.6: Proportion of Loan Required for those Indicating Need for a Loan

Proportion of Vehicle	N
1% – 25%	2
25% - 50%	3
50% – 75%	6
75% - 100%	9
Don't know	1
Base	21

In terms of payback period, four to five years or over five years were the only options selected.

9.6 Other Forms of Financial Support

Other forms of financial support mentioned in the survey included grants, interest-free loans, help converting to Liquefied Petroleum Gas (LPG) and capping the cost of new EVs.

"Definitely grants. Also, as majority of taxi drivers are Muslims they are not allowed to partake in loans that are based on interest. They should be offered interest-free loans!" [Business, inside Greater Manchester, Taxi] "We are barely making a living, we are in no position to take on £58,000 loans. I would not be able to get a loan that size; we need the authorities to provide appropriate lump sum grants" [Business, inside Greater Manchester, Taxi]

"Yes. Cost of EVs should be capped. Drivers should be subsided" [Business, inside Greater Manchester, multiple vehicle types]

10. Private Hire Vehicles (PHV)

The following section presents findings of the survey responses obtained from PHV and licenced mini buses.

Key Findings		
Number of PHV of	lrivers/ operators	165
Estimated number	er of vehicles	1,190-1,830
Proportion with a	Il compliant vehicles	19%
Expected Action	Retrofit or replace	28%
	No action	42%
	Don't Know	31%
Estimated number	er of vehicles requiring funding*	370-510
Estimated propor	tion of PHVs in sample requiring funding*	28%-31%

10.1 PHV Licencing

CAZ is introduced.

Table 10.1 shows all but six of the PHV drivers that responded obtained their licence within Greater Manchester. The majority were licenced in Manchester or Bury (21% and 19% respectively).

Table 10.1: Licencing Authority

	Ν	Percent
Manchester	35	21
Bury	32	19
Salford	14	8
Bolton	13	8
No response given	11	7
Oldham	6	4
Wigan	6	4
Trafford	3	4
Stockport	2	1
Tameside	2	1
Rochdale	1	1
Outside Greater Manchester	6	4
Operator (not driver)	36	22
Base	167	

Almost three-quarters (71%) of the PHV drivers said they use their vehicle for personal use and, of those that do, 97% use their vehicle at least once a week. Most (83%) of those who use their PHV for personal use, have no other vehicle available.

The following section focuses on responses from PHV and operators based in Greater Manchester, representing 97% (201 surveys) of the overall sample.

10.2 Vehicles

Most of the respondents indicated that they operate a business with a single vehicle (almost 70%) or as a large business with over 20 vehicles. **Table 10.2** illustrates the respondents' breakdown by fleet size.

An estimate of the number of PHVs represented in the survey has been calculated by taking the mid-point of each range and assuming that the 20+ category corresponds to 30 to 50 vehicles. As shown below, the estimated number of PHVs in the survey is between 1,190 and 1,830.

Fleet Size	No. of Responses	Average No. of Vehicles	Estimated No. of Vehicles
1	109	1	109
2-4	5	3	15
5-9	5	7	35
10-19	5	14.5	73
20+	32	30-50	960-1,600
Total	156	-	1,190-1,830

Table 10.2: Number of Responses by Fleet Size and Estimated Number of Vehicles

As shown in **Figure 10.1**, amongst the 156 PHV drivers / operators surveyed, 57% specified they will have one or more non-compliant vehicles (Euro 5 or earlier vehicles) when the CAZ is introduced and a further 25% did not know.

Figure 10.1: Respondents' Fleet Compliance Breakdown



Base: 156

10.3 Non-compliant Vehicles

Those with non-compliant vehicles were asked if they intended to take any action before the introduction of the CAZ in 2021.

Just over two-fifths (42%) do not intend to take any action. A fifth (19%) would replace some or all their vehicles and 9% would look to retrofit their vehicles. Almost a third (31%) did not know what action they would take.

Figure 10.2: Action Expected to Take (%)*



Base: 134

*respondents could give more than one response

Table 10.3 summarises the reasons given for not taking any action in advance of the implementation of the CAZ by business size. The vast majority of survey participants (91%) selected the cost of replacing the vehicles as one of the reasons for not taking any action towards compliance.

Table 10.3: Reason for Not Taking Action by Business Size*

Reason \ Business size	Sole Trader	Micro / Small / Medium	Large	Total
Don't want to replace my vehicle(s)	2	4	0	6
I am not planning to replace my vehicle(s) until after this time	3	2	1	6
Cost of replacing vehicle(s)	35	12	2	49
Due to lease agreement	1	3	1	5
Waiting for better / more appropriate model to be released	1	4	0	5
I'd rather pay a daily penalty	0	1	0	1
Other	2	0	0	2
Base	37	14	3	54

*respondents could give more than one response

10.4 Funding

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The survey asked PHV drivers/operators whether funding would be required to retrofit or replace vehicles. Among the respondents willing to act, 11 expressed their intention to retrofit their vehicles, while 22 preferred to replace the non-compliant vehicles. Almost all would require funding support. As shown in **Table 10.4**, an estimated number of vehicles requiring funding has been calculated applying the methodology explained in **section 8**.

	Retrofit		Replace			
No. of Vehicles	No of Responses	Assumed No. of Vehicles	Estimated No. of Vehicles	No. of Responses	Assumed No. of Vehicles	Estimated No. of Vehicles
1	7	1	7	10	1	10
2-4	1	3	3	3	3	9
5-9	0	7	0	4	7	28
10-19	1	14.5	14.5	0	14.5	0
20+	2	30-50	60-100	5	30-50	150-250
Total	11		85-125	22		197-297

Table 10.4: Action by Business Size: Retrofitting / Replacing

Eleven respondents stated they required funding to retrofit their vehicles to become compliant (7% of the total). In addition, 22 stated they would need funding to replace their vehicles (16% of the total).

10.5 Loan

The survey indicated that 26 drivers/operators would use a potential Greater Manchester loan scheme to cover the remaining cost of upgrading vehicles to become fully compliant. **Table 10.5** presents the number of drivers/operators willing to take a loan to help cover the costs by business size.

	Number of Responses			%	of Non-Compliant	Non-Compliant		
	Sole Trader	Micro / Small / Medium	Large	Sole Trader	Micro / Small / Medium	Large		
Yes	16	5	5	18%	17%	38%		
No	3	2	2	3%	7%	15%		
Base	19	7	7	90	29	13		

Table 10.5: Respondents Willing to Take a Loan, by Business Size

Respondents were asked to indicate what percentage of the vehicle value they would be willing to borrow applying for a loan through this scheme. As shown in **Table 10.6**, most felt they would need to borrow at least 50% of their vehicles value.

Table 10.6: Proportion of Loan Required for those Indicating Need for a Loan

Proportion of Vehicle	Ν
1% – 25%	1
25% – 50%	4
50% – 75%	6
75% - 100%	11
Don't know	3
Base	25

Table 10.7 shows that among the respondents expressing the intention to take a loan, the majority expect to be able to pay back the loan in 4-5 years; whilst one respondent indicated that the loan would need to be repaid over a period of more than five years. Seven respondents were unable to estimate the approximate payback period.

Table 10.7: Greater Manchester Loan Scheme Payback Period per Business Size

Payback time	N
1 year or less	1
2-3 years	3
4-5 years	16
More than 5 years	1
Don't know	7

10.6 Other Forms of Financial Support

Other forms of financial support mentioned in the survey were interest-free loans, tax breaks, discounts to purchase new vehicles and a grant for each vehicle that needs to be replaced / retrofitted. The high cost of EVs and hybrids was also highlighted as a barrier to becoming compliant.

"Interest free loans not means tested" [Business, inside Greater Manchester, multiple vehicle types]

"Yes. Ask car dealers to sell EVs cheaper. There is no justification whatsoever for them to be this expensive. None of this "clean air" spectacle would be necessary if there were affordable electric cars available. Then cars would naturally change to electric when owners naturally replace their vehicles at their end-of-life." [Business, inside Greater Manchester, PHV]

"Pay the existing finance of on my vehicle and I will upgrade to Euro 6." [Business, inside Greater Manchester, PHV]

"Just give us more time to save and upgrade our vehicles. London were given a 10 year notice we are only being given two years" [Business, inside Greater Manchester, PHV]

11. Heavy Goods Vehicles (HGV)

Key Findings

Number of HGV op	43	
Estimated number	340-420	
Proportion with all c	compliant vehicles	9%
Expected Action	Retrofit or replace	66%
	No action	16%
	Don't Know	32%
Estimated number of	200-280	
Estimated proportion	59%-67%	

*Caution should be taken with these figures as the sample is very small, and it's not known how representative the sample is. A large proportion have stated they do not intend to act or do not know what they will do and therefore this proportion could substantially change once the CAZ is introduced.

11.1 Vehicles

Of the 62 HGV respondents, the majority were based in Greater Manchester (69%). **Figure 11.1** presents the number of responses by fleet size for these operators. The most common fleet size is one vehicle, representing over a third of the sample.

An estimate of the number of vehicles captured by the survey is also provided in the table. This has been calculated by assuming that the average number of vehicles in each category corresponds to its mid-point figure. The 20+ category has been assumed to represent 20 to 50 vehicles. Based on these assumptions, the number of vehicles captured in the survey is between 340 and 420.

Fleet Size	No. of Responses	Average No. of Vehicles	Estimated No. of Vehicles
1	15	1	15
2-4	7	3	21
5-9	9	7	63
10-19	8	14.5	116
20+	4	30-50	120-200
Total	43	-	340-420*

Table 11.1: Number of Responses by Fleet Size and Estimated Number of Vehicles - HGV

*Rounded to the nearest 10

Figure 11.1 illustrates the share of operators with a fully compliant fleet and with some or all non-compliant vehicles.

Most respondents (70%, n=30), had at least one non-compliant vehicle, just 4 (9%) thought they would be fully compliant when the CAZ is introduced. A fifth (21%, n=9) did not know if they would be compliant in time.





Base: 43

11.2 Non-compliant Vehicles

HGV operators with non-compliant vehicles were asked what action they intended to take in advance of the introduction of the scheme. 17 respondents thought they would replace some or all their vehicles and a further four thought they would retrofit. Six did not think they would take any action and 12 did not know.

Figure 11.2: Action expected to take (n)*



Base: 38

*respondents could give more than one response

Table 11.2 lists the reasons for not taking any action (respondents could give more than one response). As previously, the cost of replacing vehicles is the most common response given to this question (n=4). It is also worth noting that the proportion of business willing to act in advance of the implementation of the scheme is higher than for other modes.

Table 11.2: Reason for Not Taking Action by Business Size*

Reason \ Business size	Sole trader	Micro/ Small/ Medium	Large	Total
Don't want to replace my vehicle(s)	0	1	0	1
Cost of replacing vehicle(s)	2	2	0	4
Other	0	1	0	1
Total surveys	2	4	0	6

*respondents could give more than one response

11.3 Funding

The number of respondents requiring funding to retrofit or replace vehicles for this category is presented in **Table 11.3**. As per other modes, the table suggests that most vehicles will require funding. An estimated total number of vehicles is also provided based on the fleet size of each operator. According to this calculation, 200 to 280 HGVs would require funding to replace vehicles, whilst 19 HGVs will need to be retrofitted.

In the table, operators' that were unsure which action to take are excluded from the calculations. This should be taken into consideration when expanding the sample to all HGV operators affected by the scheme.

Table 11.3: Responses and Estimated Number of Vehicles Requiring Funding,	by Fleet
Size	

	Retrofit			Replace		
No. of vehicles	No. of responses	Assumed No. of vehicles	Estimated No. of vehicles	Number of responses	Assumed number of vehicles	Estimated number of vehicles
1	1	1	1	4	1	4
2-4	1	3	3	5	3	15
5-9	0	7	0	5	7	35
10-19	1	14.5	15	2	14.5	29
20+	1	30-50	0	4	30-50	120-200
Total	4	-	19	20	-	200-280*

*Rounded to the nearest 10

The table demonstrates an overall preference for replacing vehicles over retrofitting. Based on the fleet estimates provided in the table, circa 10 times more vehicles will have to be replaced than retrofitted. Fleet size does not appear to be a contributing factor to the likelihood of replacing or retrofitting vehicles.

11.4 Loan

Funding available for the scheme is not expected to cover the cost of upgrading all HGVs to become fully compliant. If Greater Manchester had a loan available to cover the full cost, it would be taken in almost two-thirds (n=10) of cases. **Table 11.4** presents the number of instances in which a loan would be required by business size.

	No. of Responses			% of Non-Compliant		
Take Loan	Sole Trader	Micro / Small / Medium	Large	Sole Trader	Micro / Small / Medium	Large
Yes	1	8	1	11%	32%	25%
No	1	4	1	11%	16%	25%
Base	2	12	2	9	25	4

Table 11.4: No. of Respondents Taking a Loan

Half of respondents mentioned that the loan should cover between 75% and 100% of the overall costs of the scheme; whilst three businesses were unsure about the proportion of the total cost that the loan should cover.

In terms of payback period for the loan, the most common options were four to five years and over five years. Three operators stated that they were uncertain about how many years would be needed to repay the borrowed funds.

11.5 Other Forms of Financial Support

Other forms of financial support mentioned by this group include including grants to operators outside of Greater Manchester, a generous scrappage scheme and discounts to purchase new vehicles.

"Extending financial support to operators outside of Greater Manchester zone that are reliant upon Greater Manchester zone business" [Business, outside Greater Manchester, multiple vehicle types]

"It is currently not possible to retrofit a system to trucks for Euro 6. The full payment of a new truck would be needed. This would be £220,000 per vehicle for our company" [Business, outside Greater Manchester, multiple vehicle types]

"Subsidy towards the cost of a replacement vehicle" [Business, inside Greater Manchester, multiple vehicle types]

12. Vans, Minibuses, Horseboxes and Other Specialist Vehicles

This section summarises the responses from business that own vans, unlicensed minibuses, horseboxes and other specialist vehicles. Collectively, these vehicles are referred to as vans throughout.

Key Findings		
Number of busines	ses with vans	150
Estimated number	of vehicles	770-990
Proportion with all o	compliant vehicles	12%
Expected Action	Retrofit or replace	37%
· ·	No action	35%
	Don't Know	33%
Estimated number	of vehicles requiring funding*	130-170
	on of vans in sample requiring funding*	16%-17%

*Caution should be taken with these figures as it's not known how representative the sample is. A large proportion have stated they do not intend to act or do not know what they will do and therefore this proportion could substantially change once the CAZ is introduced.

12.1 Use of Vehicle

Almost a third (30%) of van owners used their vehicle for personal use. Of those that do, all but two use their vehicle at least once a week. Approximately a half (46%) of these respondents had no other vehicle available for personal use.

12.2 Vehicles

Out of the 178 respondents who fit into this category, 150 companies are based in Greater Manchester. **Table 12.1** presents the breakdown of the responses by vehicle type and fleet size. Please note a business could have more than one type of vehicle. The number of responses from companies operating a van is significantly higher.

The fleet size breakdown indicates that most businesses operate a single vehicle, with a relatively small number of cases in which the fleet exceeds 20 vehicles compared to other modes.

As per the other vehicle types, an estimate of the number of vans and minibuses represented by the survey is also included in the table. This estimate has been produced by taking the mid-point of each range and assuming that the 20+ category corresponds to 30 to 50 vehicles. Under these assumptions, the respondents had between 610 to 770 vans, between 120 and 160 minibuses and 40-60 horseboxes.

Fleet Size	No. of Responses	Average No. of Vehicles	Estimated No. of Vehicles
1	77	1	77
2-4	32	3	96
5-9	10	7	70
10-19	9	14.5	131
20+	8	30-50	240-400
Total	136	-	610-770

Table 12.1: Number of Responses by Fleet Size and Estimated Number of Vehicles - Vans

Table 12.2: Number of Responses by Fleet Size and Estimated Number of Vehicles Minibuses

Fleet size	No. of Responses	Average No. of Vehicles	Estimated No. of Vehicles
1	5	1	5
2-4	5	3	15
5-9	2	7	14
10-19	2	14.5	29
20+	2	30-50	60-100
Total	16	-	120-160

Table 12.3: Number of Responses by Fleet Size and Estimated Number of Vehicles Motorhomes and Horseboxes

Fleet size	No. of Responses	Average No. of Vehicles	Estimated No. of Vehicles
1	6	1	6
2-4	1	3	3
5-9	0	7	0
10-19	0	14.5	0
20+	1	30-50	30-50
Total	8	-	40-60

As part of the proposed CAZ included in the Conversation, daily penalty for vans would not come into effect until 2023 to allow time for replacement and retrofitting of vehicles. Euro 5 or earlier diesel LGVs and Euro 3 or earlier petrol LGVs will be considered non-compliant with the scheme requirements.

Figure 12.1 summarises the share of vans compliant with the scheme when it is implemented. It is apparent from the breakdown that the restrictions would affect most businesses.

• **Vans:** Just 13% thought they would be compliant by 2023, and 58% stated one or more of their vehicles would be non-compliant. A high proportion did not know (29%).

- **Minibuses:** Half of minibuses did not know if they would be compliant. Seven felt at least one of their vehicles would be non-compliant. Just one thought they would be fully compliant by 2023.
- Horseboxes: of the nine businesses with horseboxes just one thought they would be compliant by 2023, four thought one or more of their vehicles would be non-compliant and four did not know.



Figure 12.1: Compliant / Non-Compliant Vehicles (% / N)

12.3 Non-compliant Vehicles

Those with non-compliant vehicles were asked what action they intended to take in advance of the introduction of the scheme. Responses to this question are summarised in **Figure 12.2** by business size.

As it is the case for other modes, most respondents indicated that they either don't know what action, if any, they will take (33%) or do not intend to replace or retrofit any vehicles (35%). Just over a third (36%), indicated that they plan to replace or retrofit some or all their vehicles.

Figure 12.2: Action Expected to Take (%) *



Base: 147

*respondents could give more than one response

Table 12.4 lists the reasons for not taking any action by business size, allowing more than one option per survey. As previously, the cost of replacing vehicles is the most common response given to this question (84% of surveys).

Table 12.4: Reason for not Taking Action by Business Size*

Reason	Ν
Don't want to replace my vehicle(s)	13
Don't know	1
I am not planning to replace my vehicle(s) until after this time	6
Cost of replacing vehicle(s)	42
Due to lease agreement	3
Waiting for better/ more appropriate model to be released	7
The vehicle(s) won't be frequently entering or traveling within the CAZ	2
I'd rather pay a daily penalty	2
I don't think I would need a vehicle for business by the time the CAZ begins	1
Other	7
Base	50

*respondents could give more than one response

12.4 Funding

The number of business requiring funding to retrofit or replace vehicles for this category is presented in **Table 12.5**. As per other modes, the table suggests that most vehicles will require funding to retrofit or replace vehicles. An estimated total number of vehicles is also provided based on the fleet size of each operator. According to this calculation, 370 to 510 vans would require funding to replace vehicles, whilst 53 vans will need retrofitting.

It is, however, important to note that these totals are only representative of the survey sample, and that a substantial proportion of respondents are unsure which action to take. Therefore, the actual number of vehicles requiring funding if the scheme was implemented could substantially change once the CAZ is introduced.

Table 12.5: Responses and Estimated Number of Vehicles Requiring Funding by Fleet Size

	Retrofit			Replace		
No. of Vehicles	No. of Responses	Assumed No. of Vehicles	Estimated No. of Vehicles	No. of Responses	Assumed No. of Vehicles	Estimated No. of Vehicles
1	4	1	4	12	1	12
2-4	2	3	6	9	3	27
5-9	2	7	14	5	7	35
10-19	2	14.5	29	6	14.5	87
20+	3	30-50	0	7	30-50	210-350
Total	13	-	53	40	-	370-510 [*]

*Rounded to the nearest 10

12.5 Loan

Funding available for the scheme is not expected to cover the cost of upgrading all vans to become fully compliant. If Greater Manchester had a loan available to cover the full cost, it would be taken in over two-thirds of cases. **Table 12.6** presents the number of instances in which a loan would be required by business size.

When considering the percentage of total survey respondents willing to take a loan in the table below, it is important to note that a substantial share of respondents indicated that they were unsure about which action to take if the scheme was implemented.

Table 12.6: Number of Respondents Taking a Loan

	Number of Responses			% of Total Surveys		
Take loan	Sole Trader	Micro / Small / Medium	Large	Sole Trader	Micro / Small / Medium	Large
Yes	7	18	3	11%	25%	27%
No	5	6	4	8%	8%	36%
Base	12	24	7	63	73	11

Respondents were asked to indicate what percentage of the vehicle value they would be willing to borrow applying for a loan through this scheme. As shown in **Table 12.6**, most felt they would need to borrow at least 50% of their vehicles value.

Proportion of vehicle	Ν
1% – 25%	1
25% – 50%	6
50% – 75%	5
75% - 100%	9
Don't know	7
Base	28

Table 12.7: Proportion of Loan Required for those Indicating Need for a Loan

In terms of payback time, most respondents (almost 60%) estimated that the loan should be for four to five years.

12.6 Other Forms of Financial Support

Other forms of financial support mentioned in the survey included fuel rebates, significant grants, interest-free loans, additional support for small businesses and provision of compliant vehicles. Respondents also proposed incentives to purchase EVs.

A reduction of the daily penalty for non-compliant vehicles was also suggested.

"buy me a new van or pay for the upgrade of my existing van, I am a sole trader who uses my van outside of rush hour and the vehicle is only used two or three days a week, I have a low income because of my disabilities but still try to make a living myself rather than living on benefits" [Business, inside Greater Manchester, Van]

"I just purchased my vehicle. If you must do this then I think that anyone receiving working tax credits in their family OR have only one or two vehicles and are not VAT registered should have all upgrades or vehicle swaps including all security devices, vehicle signage and internal racking, changed for free" [Business, inside Greater Manchester, Van]

"Scrappage scheme to offset the inevitable reduction in residual value of noncompliant vehicles in the local market. Any support needs to be applicable to (compliant) used vehicles, not just new vehicles - the additional cost of a new vehicle would be more than any support payment available" [Individual, inside Greater Manchester, no vehicle in scope]

"Make electric cars cheaper for the general public" [Individual, inside Greater Manchester, no vehicle in scope]

13. Individuals with Affected Vehicles

Individuals with motorised horseboxes, motorhomes and other types of vehicle that are classed as LGVs would be affected by the introduction of the CAZ. This section summarises the responses from individuals that own horseboxes, motorhomes and other affected vehicles. Collectively, these vehicles are referred to as affected vehicles throughout this chapter.

Key Findings	
Number of individuals with affected vehicles	264
Estimated number of vehicles	286
Proportion with all compliant vehicles	9%
Expected Action Retrofit or replace	37%
No action	15%
Don't Know	28%
Estimated number of vehicles requiring funding*	31
Estimated proportion of individuals in sample requiring fur	nding* 12%

*Caution should be taken with these figures as it's not known how representative the sample is. A large proportion have stated they do not intend to act or do not know what they will do and therefore this proportion could substantially change once the CAZ is introduced.

13.1 Vehicles

Overall, 375 individuals had an affected vehicle, of which 264 were based in Greater Manchester. The following chapter concentrates on those based in Greater Manchester. These respondents had:

- Motorhome (43%);
- Van (36%);
- Horsebox (25%); and
- Minibus (4%).

Respondents could have more than one type of vehicle, but it is assumed each respondent only had one of each type of vehicle.

The Conversation materials proposed that the daily penalty for these affected vehicles would not come into effect until 2023 to allow time for replacement and retrofitting of vehicles. Euro 5 or earlier diesel and Euro 3 or earlier petrol will be considered non-compliant with the scheme requirements.

Table 13.1 presents a summary of vehicle compliance by type.

	Compliant	Non-Compliant	Don't Know	Base
Horseboxes / motorhomes	5%	75%	21%	178
Minibus	18%	64%	18%	11
Van	56%	16%	28%	95

Table 13.1: Compliance of Vehicles

13.2 Non-compliant Vehicles

Those with non-compliant vehicles were asked what action they intended to take in advance of the introduction of the scheme.

Over half (57%) did not intend to replace or retrofit their vehicles and over a quarter (28%) did not know what action they would take. Just 14% thought they would replace or retrofit their vehicles to become compliant.

Figure 13.1: Action Expected to Take (%) *



Base: 335

*respondents could give more than one response

Table 13.2 lists the reasons for not taking any action by business size, allowing more than one option per survey. As previously, the cost of replacing vehicles is the most common response given to this question (79%).

Table 13.2: Reason for Not Taking Action by Business Size*

Reason	%
Cost of replacing vehicle(s)	79
Don't want to replace my vehicle(s)	37
I am not planning to replace my vehicle(s) until after this time	16
The vehicle(s) won't be frequently entering or traveling within the CAZ	14
Waiting for better / more appropriate model to be released	4
Due to lease agreement	1
I'd rather pay a daily penalty	1
I don't think I would need a vehicle for business by the time the CAZ begins	1
Other	14
Base	134
*respondents could give more than one response	

*respondents could give more than one response

13.3 Funding

Individuals were also asked if they would apply for funding to help them become compliant. 14 respondents stated they would like funding to help retrofit their vehicles and 17 stated they would apply for funding to replace their vehicles.

13.4 Loan

Just 20 individuals thought they would consider applying for a loan from Greater Manchester to help cover the costs. A total of ten respondents would seek a loan up to 50% of the vehicles value and four would apply for 50-100% of the vehicles value. Five did not know.

Most individuals would require more than four years to repay the loan.

14. Comments on the Funds

All respondents were asked whether they had any comments on the funds set out in the clean air proposals, and 1,123 comments were made overall. **Table 14.1** shows the most common themes raised by individuals and businesses. A full list of responses can be found in **Appendix B**.

Table 14.1: Comment on the Funds

	Individual	Business	Total
There is not enough or won't be enough funding	9%	23%	13%
Funds should go towards or prioritised to improving public transport	13%	4%	11%
General - Oppose the scheme	10%	5%	9%
The funds should be transparent to the public or information of where the money comes / goes should be public	7%	7%	7%
Funds should be prioritised for replacing vehicles	6%	9%	7%
General - Support the scheme	6%	4%	6%
General - Providing funding is good / needed	5%	5%	5%
Funds should go towards or prioritised to cycle and pedestrian infrastructure	6%	2%	5%
Funds should be available to or prioritise small businesses	5%	3%	5%
Funding needs to be tested / established before the start of the scheme	5%	3%	4%
Funds should go towards or prioritise car owners / used to incentivise improving private cars	5%	3%	4%
Base	848	275	1,123

Concern about Amount of Funds

• There is not enough or won't be enough funding (13%). The most frequently mentioned theme was a concern that there is not enough funding available. A tenth of individuals (9%) and nearly a quarter of businesses (23%) believed that the funding outlined in the proposals is not sufficient in supporting the region in implementing the CAZ.

"In the grand scheme of things, it probably won't be enough, and each vehicle owner will get a few pounds which won't begin to cover the cost of upgrades etc." [Business, outside Greater Manchester, Van]

"The funding bid is not enough to mitigate the financial hardship this scheme will cause. For those who are to upgrade several vehicles to Euro 6, a contribution of $\pounds 2k + \pounds 3k$ will not be sufficient." [Business, inside Greater Manchester, Van]

Prioritisation of Funds

Some respondents elaborated on where they thought funding was best allocated and given:

• **Funds should go towards or prioritised to improving public transport (11%)**. The most popular response of where funding should be distributed to was improving public transport. This was more important to individuals (13%) than to businesses (4%). Individuals under 35, in particular, felt it was a priority to provide funding to improve
public transport services within Greater Manchester, with a fifth (20%) of their responses stating it. Individuals without a vehicle in scope (14%) more often stated that it was an important use for funding than individuals that had a vehicle in scope (2%).

"Crucial that funding is directed towards vehicles that support public transport." [Individual, inside Greater Manchester, 35 - 64, female]

"It would be good if more money was ploughed back into improving public transport and offering incentives for people to switch to public transport from cars. What about increased funding for electric car charging points?" [Individual, inside Greater Manchester, over 65, female]

"Maybe use them before implementing the scheme to improve public transport, assess public transport, then decide whether it is fit for purpose enough to roll out the scheme." [Individual, inside Greater Manchester, 35 - 64, male]

• **Funds should be prioritised for replacing vehicles (7%)**. The next most popular choice for where funding should be allocated for both individuals (6%) and businesses (9%) was for it to contribute to replacing vehicles. This included aiding people upgrade or retrofit cars to make them compliant with the scheme and less polluting.

"The cost of new vehicles should be completely covered by the government if you are serious about this being a pollution issue and not another money-making scheme" [Individual, inside Greater Manchester, Under 35, male]

"The funds should enable older vehicles to be replaced by newer vehicles; which may bring benefits other than improvements in air quality. These benefits should be taken into account when determining how funds are allocated." [Individual, inside Greater Manchester, 35 - 64, male]

• Funds should be available to or prioritise small businesses (5%). Both individual respondents (5%) and business respondents felt that small businesses needed to be supported and receive funding. Coach (14%) and HGV (12%) operators were the most likely to feel that small businesses should get priority when asked about funding. However, it should be noted that there was a high number of small business in this sample.

"I would hope that funds will become available to support small local businesses like ours that have been around for almost 50 years - contributing to the local economy and providing employment." [Business, inside Greater Manchester, Coach operator]

"They should give greater assistance to small businesses, charities and private individuals. The large PLC's that operate the majority of bus services have national fleet renewal policies anyway." [Individual, inside Greater Manchester, 35 - 64, male]

General Comments

• **General - Support the scheme (6%)**. General comments supporting the proposals made up 6% of the individual responses and 4% of business responses to the funds. These people felt that the proposals for the CAZ were a good idea and a positive step for Greater Manchester.

"I think it is really pleasing that thought is being given to mitigate pollution in this way. As a general principle, I think that it is important to make it as easy as possible for people to 'do the right thing'." [Individual, inside Greater Manchester, under 35, male]

"I think it's a good idea, encouragement towards good practises is generally preferable and more effective than discouragement from bad ones" [Individual, inside Greater Manchester, under 35, male]

• **General - Oppose the scheme (9%)**. Conversely, the third most popular theme was general comments opposing the proposals. Some, especially individuals (10%), thought the proposals were not suitable and felt it would not benefit the city and region.

"We do not support charging money to enter certain zones as in London. Manchester has already voted and rejected this in the past and will do so again. This is not London." [Business, inside Greater Manchester, Van]

"Nope. When you implement this nonsensical idea, you will all be able to blame everyone else for the failure and total gridlock you aim to create." [Individual, inside Greater Manchester, 35 - 64, male]

"They would be a waste of public money Listen to the public - There should be no CAZ" [Individual, inside Greater Manchester, under 35, male]

• **General - Providing funding is good / needed (5%)**. A consistent theme throughout the responses was that funding is a good idea and that it is needed for implementation if the CAZ in Greater Manchester. Both individuals (5%) and businesses (5%) felt that it was important.

"Really good to see support for those who would be affected. I hope they will be easy to navigate and those who most need them have priority" [Individual, inside Greater Manchester, under 35, female]

"It's brilliant that some funding is coming from central government. If fines were higher and applied to all diesel vehicles and older petrol vehicles, including everyone's privately owned cars, this could generate a lot of funding too." [Individual, inside Greater Manchester, 35 - 64, female]

"I think the more funds that are available will definitely take more pollutant vehicles off the roads" [Business, outside Greater Manchester, HGV, Van]

15. Moving to Greener Transport

Key Findings

- Overall, 60% of individuals and 51% of businesses thought it was important to provide support and advice to help people use less-polluting transport.
- Just a third (33%) of business thought they would take part in such a programme. However, the business category was heavily dominated by those that use Taxis, PHV, HGV, vans on a daily basis and therefore might not see how this package could be relevant to them.
- Around a third (37%) of individuals would take part in such a programme.
- Just less than half (45%) thought planning events at schools would encourage behaviour change, but only 39% thought they would take part.
- Those aged under 35, women, and those vulnerable to air quality were the most likely to be enthusiastic about measures to encourage everyone to play their part in reducing air pollution.

The CAP includes giving support and advice for residents, schools, organisations and businesses to use less-polluting modes of transport. This could include helping people to use their car less, especially for shorter journeys, helping businesses to change their fleet so it is cleaner, or to change company cars to electric. It could also include activities like:

- Working with businesses to promote cycle to work schemes;
- Promoting and supporting car share and car club schemes;
- Promoting bike rental schemes across Greater Manchester;
- Further work to improve cycle lanes and cycle routes across Greater Manchester;
- Further work to improve the walking network across Greater Manchester by having more high-quality footpaths and improving road crossings;
- Giving advice to businesses about how they could upgrade their fleet; and
- Giving support for businesses to help them encourage and provide incentives for greener staff travel.

Respondents were asked whether they felt these measures were important, whether they would help them move to greener travel and how likely they would be to take part and access this support or advice.

15.1 Importance of Measures

All respondents were asked to what extent they thought that giving support and advice for residents, schools and businesses to use less polluting transport was a priority for improving air quality in Greater Manchester. **Figure 15.1** shows that 58% thought it was very important (37%) or important (21%). More individuals rated it as important (60%) than businesses (51%).

Figure 15.1: Level of Importance (%)



Individuals aged under 35 and those aged 65 or over were more likely to say providing support and advice was important (67% and 69% respectively) than those in the middle age group (58%).

Table 15.1 shows that the larger the company, the more likely it is they think providing support and advice is important; 63% of large companies said it important or very important compared to 46% of sole traders.

	Sole Trader	Micro / Small / Medium	Large
Very important	27%	31%	26%
Important	19%	29%	37%
Somewhat important	25%	19%	17%
Not at all important	18%	14%	17%
Don't know	12%	7%	3%
Base	328	177	35

Table 15.1: Level of Importance of Support and Advice by Business Size

Businesses with compliant vehicles (76%) and businesses with currently no vehicles (63%) were more likely to rate giving advice as important compared to businesses with non-compliant vehicles (46%).

15.2 Business

Of the 540 businesses that responded, 42% stated that providing support and advice to their business would help them to use greener travel.

The main reason businesses did not think providing support and advice would help them to use greener travel included:

- It would not be helpful (46%);
- They already use less polluting means of travel where possible (24%); and
- The measure needs to provide different types of support (22%).

Businesses were asked how likely they would be to take part in the scheme, which focusses on helping businesses to change their fleet, so it is cleaner, or to change company cars to EVs. A third (33%) stated that they would likely take part in the scheme with just under a third (32%) stating they would be unlikely to take part in the scheme.

15.3 Schools and Individuals

Schools and individuals were asked if giving advice would encourage the use of sustainable travel modes more. Just over half (55%) did not think it would.

Those who did not think providing travel planning advice would help were asked why they thought this. **Table 15.2** shows just over a third (37%) don't think this would be helpful with just under a third (32%) stating that they already travel using sustainable travel modes or do not have a have a car. 16% of comments related to issues with public transport, such as poor reliability and the cost of using it.

	%
I don't think this is a helpful package	37
I already travel by public transport, walking and cycling / I do not have a car	32
The package needs to provide different types of support	15
No direct public transport routes	4
Public transport is unreliable or infrequent	3
Public transport needs improvement and better infrastructure	3
Public transport is too expensive	3
Journey takes too long on public transport	2
I have a disability	2
Cycling on the roads is too dangerous	1
Public transport - Safety issues	1
Walking is inconvenient	1
Other	18

Table 15.2: Why Would Providing Advice Not Help to Reduce Car Use? *

Base: 1,279

*Respondents could provide more than one answer

Respondents who stated that providing advice would encourage the use of sustainable travel modes were asked how likely they would be to take part in the scheme. Overall, 37% stated they would be likely to take part and 40% stated they would be unlikely to take part. Again, those aged under 35 (43%) were more likely to take part compared to respondents aged 35 to 64 (35%), showing that those under 35 are more willing to be given advice on travel options.

Schools and individuals within Greater Manchester were asked if travel planning and events at schools would encourage staff, students and parents to travel using sustainable travel options; 45% thought it would. Again, those under 35 were more likely to give a positive answer (53% saying yes, compared to 43% of 35-64 year olds and 42% of those aged 65 or

more). Women were also more likely to state 'yes' (52%) than men (43%). This could highlight that school runs are a key area to develop in terms of sustainable travel options.

When asked how likely they would be to take part in the scheme, 39% said they were likely to take part. There was very little difference in response between those aged under 35 (42%) and those aged 35-64 (40%) being likely to take part. Just 28% of those aged 65 or over were likely to take part.

15.4 Comments about the Measures

Overall, 1,278 respondents provided a free text comment about measures to support residents, businesses and schools to use greener transport.

Table 15.3 presents the common responses that were provided. A full list of comments can be found in **Appendix B**.

The main themes which were mentioned are shown below with the % of responses mentioning each theme shown in brackets.

- Ways that supporting and improving public transport would help deliver on the measures (28%);
- The advice isn't necessary, and time and money could be spent elsewhere (11%);
- Targeting a specific set of people or businesses e.g. schools, business, car drivers (10%);
- Improve infrastructure and promote walking and cycling (8%); and
- Other comments in support of the measures and how or who needs to implement them (16%).

		Individuals	Business	Total
	Costs too much	16%	3%	14%
	Needs improving	15%	7%	14%
	Improve or provide infrastructure including ticketing	9%	1%	8%
Public transport	Public transport is unreliable	7%	3%	7%
	Improve frequency / capacity	7%	3%	7%
·	Improve public transport connectivity / more routes	Inprovingor provide infrastructure g ticketing9%ansport is unreliable7%frequency / capacity7%public transport ivity / more routes7%awareness or promote ease knowledge3%oo long3%oncerns2%or knowledge is not needed 	3%	7%
		3%	3%	3%
	Takes too long	3%	0%	3%
	Safety concerns	2%	2%	2%
Advice unnecessary / spend money elsewhere	Advice or knowledge is not needed or not a barrier	13%	9%	13%
	Waste of time or money or not working	11%	18%	12%
	Focus measures on school runs	14%	11%	13%
Target specific groups	Focus measures on businesses – general	3%	1%	2%

Table 15.3: Comments on Measures

	Focus measures on businesses - flexible working	2%	1%	2%
	Discourage car use	7%	4%	7%
Improve infrastructure and promote walking / cycling	More segregated cycle routes / cycle lanes / improve infrastructure	12%	4%	11%
	Cycling is dangerous or safety concerns	9%	3%	8%
	Promote cycling	3%	1%	3%
	More pedestrianised routes	3%	1%	3%
	Promote walking	2%	3%	2%
Other comments	These are important or good idea	11%	9%	10%
	Educate on air pollution	12%	10%	12%
	Driving is easier or more convenient	11%	3%	10%
	Other comments	18%	22%	19%
Base		1,119	159	1,278

Of those who gave a comment, 10% stated the measures suggested were a good idea.

"I think this is somewhat important, but I don't think lack of knowledge is one of the biggest barriers to active travel and public transport. I think it is more important to have good cycling infrastructure, pleasant streets, and cheap, reliable, pleasant and accessible public transport. People also need to be actively discouraged from, for example, driving to school, when it is a short distance." [Individual, inside Greater Manchester, 35 - 64, male]

"I think giving advice is a good idea, however if the transport system is so flawed then people won't listen. Education is good, but it must be supported by a good network for transport, something we sorely lack. [Individual, inside Greater Manchester, under 35, male]

"I think people generally have an impression of how a subject functions, whereas after some education they're often surprised at the ease of function". [Individual, inside Greater Manchester, 35 - 64, male]

"Giving advice is great but you also need to give them clear paths of how to change in their area rather than it being generic. People won't pay attention or fall back into old habits quickly" [Individual, inside Greater Manchester, under 35, female]

"I think it was shown when there were more 'travel planners' this did make a difference. It is not a once and for all effort as staff change, situations change so an element of mentoring is important if people are to be encouraged to consider transport choices more" [Individual, inside Greater Manchester, over 65, female]

Some of those who mentioned it was a good idea felt that additional investment was required for active travel and public transport and most other comments wanted to see similar types of improvements elsewhere for measures to be effective or felt the advice would not be useful or used.

Public Transport

Of those who gave a comment, 37% included a reference to improving public transport to support and deliver the measures. Most respondents who commented about public transport wanted to see improvements, whilst some wanted awareness and promotion of public transport increased.

Most comments about public transport came from individuals and examples of their comments are shown below, although as shown in the comments provided about connectivity, businesses and specifically their employees are affected too

• **Improve public transport generally (14%)**. Those respondents who felt public transport needed improving often compared public transport to car use and what public transport would need to deliver to give up their car.

"People will generally only listen if they can benefit in some way. Our public transport is not extensive enough, integrated enough or affordable enough to convince someone who can easily drive without paying penalties" [Individual, inside Greater Manchester, under 35, male]

"I'm a teacher. There isn't a viable public transport option for me to get to work for 7am." [Individual, inside Greater Manchester, 35 - 64, female]

"I think most people will be aware of their most optimal public transport options. Buses are infrequent and unreliable - unlike trams - so it's not clear when they will arrive. For people new to an area, they can't easily see somewhere on a map where their local bus goes and where the bus stops are. There are still too many places not reached by the tram network." [Individual, inside Greater Manchester, under 35, male]

• Reliability (7%), Connectivity (7%) and Travel Time (3%). Some respondents were more specific about challenges they face with public transport or reasons they do not use it or use it more frequently, such as reliability particularly for travelling to work, connectivity and travel time which were sometimes combined. Respondents compared the time it took by car compared to public transport and commented on occasions commented about the practicalities of their daily life and how public transport is impractical in their situation.

"I would not give up my car to take a chance on a bus turning up on time and being late for work. If you want to reduce pollution, then make a better public transport system and the car use will fall. I avoid the buses as they are late and the tram because of overcrowding." [Individual, inside Greater Manchester, under 35, male]

"Most people use their own transport because they cannot rely on a public service, e.g. Buses don't turn up on time, trains are cancelled. You can not advise or recommend a service to someone if, that service does not exist". [Individual, outside Greater Manchester, over 65, male]

"I have a business in Trafford and employ people from around Greater Manchester. We don't have any company vehicles, but people still need to get to work. The Manchester public transport system is a hub and spoke model: you can get into the city centre quite easily from most places around Greater Manchester.....for those of us who don't need to go into the city centre on a daily basis - how do you get around Greater Manchester using public transport?......here it's all about how you get into the city, not about how you move around between the different boroughs." [Individual, inside Greater Manchester, 35 - 64, female] "Helping people plan a journey that will take about three times longer using public transport rather than using a car will not encourage people to use public transport. It will only highlight just how bad public transport is in Greater Manchester and why a car is much quicker." [Individual, inside Greater Manchester, 35 - 64, female]

"Nobody wants to be told by a government official how they should or should not get to work and perform their daily duties. Try taking shopping for a family of four on a bus or a bike. Or better still, spend two hours on a bus twice a day so that you can go to work forgoing valuable time with your family." [Individual, inside Greater Manchester, 35 - 64, male]

• **Cost (14%)**. These respondents commented that public transport is expensive relative to their own car use, and some respondents compared a journey with multiple occupants in a car against the cost of public transport for all occupants.

"It's about price. To encourage public transport, you have to make it a clear cheaper alternative. You can't go from door to door, you can't listen to your radio, you can't sit on heated comfy leather seats, but you can compete on price." [Individual, inside Greater Manchester, under 35, male]

"Need to make public transport cheaper - cheaper if two people to use a car and park or use a taxi" [Individual, inside Greater Manchester, 35 - 64, male]

"The costs of public transport and the risks tend to outweigh the costs and risks of using your own vehicle." [Individual, inside Greater Manchester, under 35, female]

• **Ticketing (8%)**. Respondents are keen to see an integrated, simplified ticketing service.

"First put coordinated single fair (i.e. Oyster card or similar travel cards) in place. Then...give advice and travel plans. With current public transport set up it's a waste of time and money." [Individual, inside Greater Manchester, 35 - 64, male]

"My work relocated to Exchange Quay a year ago. The advice given was next to useless and is no better than what you can get on Google maps. Spend the money on something useful like train, tram and bus timetable and ticketing integration" [Individual, inside Greater Manchester, under 35, male]

Spend Time and Money Elsewhere

Of those who gave a comment, 13% felt that advice would not have any impact, is not required and money could be spent better elsewhere (12%).

"I'm not sure this will have much impact, those that are interested in doing their bit already are. Most others aren't interested as there is no benefit for themselves. There needs to be financial advantages, today the buses, trains and trams are comparable in cost to driving, so what is the incentive for someone to leave their car at home?" [Individual, inside Greater Manchester, 35 - 64, male]

"Advice is worthless; I cycle to work, but shared roads, pollution and theft remain the biggest problems I face. Many people will not risk those threats and advice cannot mitigate them." [Individual, inside Greater Manchester, 35 - 64, male]

"Stop spending money on advice and start spending money on action. Improve public transport links, cycle lanes, cycle parking, have more pedestrian routes and areas." [Individual, inside Greater Manchester, under 35, female]

Focus the Measures on Specific Types of People

Some of those who gave a comment suggested specific types of people within Greater Manchester should receive targeted advice and support rather than focusing on everyone. The main groups of people these were:

- Schools, specifically parents (13%);
- Businesses (2%); and
- Car drivers (7%).

Schools

There were 13% of respondents who commented about schools and these were mainly about the school run, some respondents advocated a ban on all vehicles outside schools, whilst others referenced the school run issue but felt it wasn't a quick or easy solution and extra support was needed.

"Need to create no-car zones around schools to aid clean air and improve safety around schools. My kids' school is a nightmare with inconsiderate parents trying to get as close to school gates as possible. Ban cars from schools during drop-off and pick-up times" [Individual, outside Greater Manchester, 35 - 64, male]

"Parents on linked trips need greater support - often school run trips immediately followed by the commute to work are given as a reason for not using other modes of sustainable travel." [School, inside Greater Manchester, Van]

"Some schools discourage parking nearby - this results in quiet roads becoming congested and polluted - and we are asking children to walk and breathe this! The school's admission policy should aim to have children going to schools that are in walking distance. Currently you do nothing to discourage parents from choosing schools that necessitate a car drive. You should introduce more school buses." [Individual, inside Greater Manchester, over 65, female]

Businesses

Of people commenting about businesses, the main themes were car sharing (2%) and flexible-working (2%).

"There is also a role for businesses to offer more flexible working, which would give parents more time to walk their children to school. Walking bus schemes and courses for children and parents to get more confident riding a bike." [Individual, inside Greater Manchester, 35 - 64, female]

"Car share schemes, walk to school projects and more available and flexible public transport would assist greatly" [Individual, inside Greater Manchester, 35 - 64, male]

"Encourage more companies to encourage staff to work at home. It's a benefit for companies, individuals and the community as a whole as it takes traffic off the road, reduces stress, improves wellbeing and increases productivity." [Individual, inside Greater Manchester, 35 - 64, male]

Car Drivers

7% of those who commented felt that car drivers needed more education and advice commented on encouragement to use alternatives on shorter journeys and to slowly change behaviour to effect a cultural change by making car use less convenient.

"We need to open peoples' eyes to the problems and encourage them to think about whether they do need to drive when it's only a 20 minute walk etc, we need to change behavioural patterns where jumping in the car is easier (it often is) but walking / cycling is so much better for us all" [Individual, inside Greater Manchester, under 35, male]

"I think you need to make it mandatory and make it more difficult for people to use their cars until you do that people will continue. Make areas car-free." [Individual, inside Greater Manchester, 35 - 64, female]

"We are the only household on our road who do not run a car. If we are to tackle air pollution and climate catastrophe, we need to radically change people's behaviour. More should be done to discourage driving and make it less convenient than using trams / buses or walking" [Individual, inside Greater Manchester, under 35, male]

Improve and Promote Walking and Cycling

Of those who gave a comment, a number suggested improvements to cycling and walking infrastructure (11% and 3% respectively) and were keen for active travel to be promoted (3% and 2% respectively) and improved in order for measures to be a success.

"I would use the money to try and pedestrianise more of Greater Manchester. Or focus this work solely on business and schools" [Individual, inside Greater Manchester, 35 - 64, female]

"Further work (needed) to improve the walking network across Greater Manchester by having more high quality footpaths and improving road crossings is a priority for me. There are a number of spots on the journey to school that do not have any footpaths at all, so as a pedestrian with two young children I have to run alongside traffic going 30 mph!" [Individual, inside Greater Manchester, 35 - 64, female]

"What is really needed is safe, protected cycling infrastructure, banning pavement parking and introducing filtered neighbourhoods and school streets" [Individual, inside Greater Manchester, 35-64, female]

"Existing cycling infrastructure needs to be upgraded and expanded to cover the whole of Greater Manchester. Not just a very few selected areas. To protect cyclists from air pollution, you need to create genuine traffic free routes away from roads. The new cycle lanes along Wilmslow Road and Oxford Road are very good but do expose cyclists to far too much pollution." [Individual, inside Greater Manchester, under 35, male]

Other Comments

Several respondents gave ad-hoc comments sometimes about their personal experience and some referenced the long-term ambition of changing habits.

"Advice can be given, but it needs to be easily accessible and easy to use. For example trying to use the journey planner info is not helpful. I want to know how long something is going to take and what the cost is, and maybe start to compare this to if you used car approach, i.e. show the reasons why." [Individual, inside Greater Manchester, 35 - 64, female]

"A longer-term program of communications will be key to help the changes have any lasting effect. You are asking people to change the habits of a lifetime." [Individual, inside Greater Manchester, over 65, male]

Summary

Whilst people supported the principle of measures, many had concerns about the alternatives to car use, mainly considered to be public transport and others wanted specific groups of people targeted to change their behaviour and support these measures, notably, parents of school children, businesses offering flexibility for employees and car drivers changing the perceived habitual behaviour of using a their vehicle for every journey and encouraging walking and cycling with improved, safer infrastructure. The following comments from respondents capture themes coming out of the comments about measures to support use of greener transport.

"I would travel by public transport if it was reliable, quick and cheap. However, my 20-mile journey work would involve two buses and a train, take over two hours and cost over £15 due to different counties." [Individual, inside Greater Manchester, 35 - 64, female]

"The Combined Authority must think the public are...incapable of finding out this information themselves. The Mancunian public avoid public transport because it is slow, impractical and expensive. It is in ALL scenarios quicker to get between two places by motorcar, rather than public transport. [Individual, inside Greater Manchester, 35 - 64, female]

"Advice can only help insofar as there are viable alternatives. We need to improve Greater Manchester's public transport to make it cheaper, faster, more reliable, more frequent and integrated at all levels. Too many people drive because there are no alternatives... This requires investment.....so that children can walk, cycle or scoot to their school safely and easily." [Individual, inside Greater Manchester, 35 - 64, male]

"I don't feel that giving advice is likely to make much impact. Most people already know that using cars is a bad idea but until they are forced from it, or presented with compelling alternatives, I doubt much will change. We need high quality, safe, reliable, regular and above all cheap public transport to be in place, and then we need punitive costs for using private vehicles where it can be avoided." [Individual, inside Greater Manchester, 35 - 64, male]

"Persuading people not to jump in their car to drive less than a mile is vital. Breaking this habit will, I hope, make people think about other things they do in a car that could be achieved using other forms of transport." [Individual, outside Greater Manchester, 35 - 64, male]

16. Electric Vehicles (EV)

Key Findings

- Very few respondents currently owned an EV (5%).
- Once the charging points have been installed, 40% of individuals and 20% of businesses said they were likely to consider buying or leasing an EV in the future.
- The high cost of EVs and concerns about the battery life and charging points were the main barriers to purchasing an EV.

Part of the CAP includes £25 million to install another 600 rapid charging points (300 double headed charges) across the 10 council areas of Greater Manchester. Some of these charging points are planned for use by electric Taxis and PHVs only.

There will also be activity to promote the use of electric vehicles across Greater Manchester such as holding events which will allow people to test-drive the latest models and learn about the support available to upgrade to an electric vehicle.

Respondents were asked about their current use of EVs, their likelihood of buying or leasing an EV once the charging points have been installed and where they felt the points should be placed.

16.1 Use of EVs

Individuals were asked if they currently own or lease an EV; the majority (95%) did not. For those individuals that do, respondents aged 35 and over were significantly more likely to own or lease an EV (5.5% of 35-64 year olds and 6.5% of those aged 65 or over) than those aged under 35 (2.2%). This may be due to the associated costs of EVs and may be more accessible to individuals with more disposable income.

Of businesses, 11% owned or leased an EV. Large businesses were more likely to own or lease one (32%) compared to other business sizes (12% of micro, small and medium business and 9% of sole traders). However, the number of large business in the sample is small and therefore these figures should be used with caution.

Businesses and individuals who do not own or lease an EV were asked if they would consider buying or leasing one once the 600 charging points had been installed. 40% of individuals and 20% of business said they were likely to consider buying or leasing an EV in the future.

Figure 16.1: Likely to purchase an EV (%)



Very likely Likely Neither likely nor unlikely Unlikely Very unlikely Don't know

There was very little difference in propensity to buy or lease an EV by size of company. 23% of Taxis, 19% of PHV and 16% of vans said they were likely to consider buying or leasing an EV.

Of individuals, 40% stated that they were likely to purchase or lease an EV.

Just over half (53%) of respondents who had a limiting long-term illness were unlikely to consider buying or leasing an EV. Currently, those with an eligible disability may have access to mobility vehicles through the Government Mobility Scheme². It may be that EVs are not covered under this scheme and may not be suitable for respondents with a disability.

16.2 Charging Points

All respondents except bus operators were asked where they thought charging points for EVs should be installed. Respondents were provided with a list of key areas and the option to provide alternative suggestions.

Table 16.1 provides a breakdown of locations that businesses and individuals think charging points should be installed. The top four locations for businesses were public car parks (72%), service stations and taxi ranks (67% each) and retail centres (65%).

For individuals, the key locations identified were public car parks (88%), retail centres (82%) service stations (75%) and the workplace (72%).

² <u>https://www.motability.org.uk/about/Vehicles-available/cars</u>

Table 16.1: Charging points location (%) Location

Location	Business	Individual
Public car parks	72	88
Service stations	67	75
Taxi ranks	67	52
Retail centres	65	82
Hospitals	54	63
Workplace	53	72
New housing developments	46	67
My road (shared use)	41	41
Schools	34	43
Base	510	2,265

Respondents could provide more than one answer

Respondents were asked to what extent they thought the installation of more charging points across Greater Manchester was a priority to help improve air quality. **Figure 16.2** shows overall, 60% of respondents thought it was 'very important' (37%) or 'important' (23%).

Figure 16.2: To What Extent are Additional Charging Points Important to Air Quality



Base: 2,919

Slightly more individuals thought it was important to install EV points (61%) than businesses (56%). There was little notable difference between business size on this matter.

16.3 Comments about EVs

Businesses and individuals were given the opportunity to provide comments about EV charging points. Overall, 1,375 respondents provided a free text comment which represents almost half (47%) of individuals and just over a third (38%) of businesses.

Although respondents were asked for further comments about the provision of EV charging points, many of the respondents commented about EVs rather than the charging points.

Table 16.2 presents the common responses that were provided. The main themes that emerged will be discussed as a combined set of total responses with supporting quotes and comments as businesses and individuals gave similar comments. Where businesses and individuals differed this will be noted.

The numbers in brackets for each theme refers to the percent of comments based on the total sample.

		Individual	Business	Total
Electric vehicles	High cost of EVs	19%	12%	18%
	Concerns over battery life or charging	12%	13%	12%
	Focus on other sustainable measures	11%	2%	10%
	Need to incentivise or encourage people to move to EVs	7%	7%	7%
	General positive - great idea or useful	6%	6%	6%
	Still causes congestion or encourages car use	6%	3%	5%
	General negative - not important or useless	5%	8%	5%
	Already thinking of owning or already own an EV	3%	1%	3%
	Want to see more EVs or better range	1%	9%	2%
Charging	Make more available or have infrastructure in place	27%	32%	28%
points	Environment - Negative environmental impacts	8%	6%	8%
	Location - Install at specified locations - petrol stations or new developments	7%	6%	7%
	Need to be accessible to everyone or convenient location	7%	5%	7%
	Environment - Concerns over electricity source or capacity	6%	3%	5%
	Location - Difficult to install - housing types	5%	2%	5%
	Location - Do not install at specified locations	2%	0%	2%
	Charging points are misused	3%	2%	3%
	Payment - Free to charge or cheaper rates	2%	3%	2%
ase		1,138	219	1,357

Table 16.2: Proportion of Comments Provided for EVs and Charging Points

Of those who referenced EVs rather than the charging points, the two main themes were concerns that EVs are expensive and the battery life for EVs isn't sufficient. Nearly half of the comments about EVs were on these two themes.

• **High vehicle cost (18%)**. This was the most frequently mentioned comment about EVs, for both businesses (12%) and individuals (19%).

"Doesn't matter how many charging points you have, it won't make a difference if the cost of the vehicle is £60,000 and they can only travel 60 miles per full charge." [Business, inside Greater Manchester, Taxi]

"I think this is important, but I also think that the cost of buying an EV for personal use is still too high for the average person to easily choose this option. I think it's easier and cheaper for people to switch to cycling and using the bus / tram / train for journeys rather than making the.... Commitment to purchasing an EV". [Individual, inside Greater Manchester, under 35, female]

• **Battery range and charging (12%)**. The next most common theme for business (13%) and individuals (12%) was the perceived low range of EVs.

"In our case, we regularly do a particular journey of 235 miles - I cannot do that in an *EV* without stopping for about an hour to recharge, something that would be a major inconvenience." [Individual, inside Greater Manchester, over 65, male]

"I would fear for not being able to charge my battery and it running out on a journey, how would it be topped up?? This will prevent people from investing until they are confident in it working". [Individual, inside Greater Manchester, under 35, female]

"Until capacity improves, and maintenance or replacement of battery terminals is reduced significantly, building more charging points is largely a waste of expense". [Individual, inside Greater Manchester, 35 - 64, male]

The following quote summarises the concerns voiced about EVs themselves:

"Charging infrastructure is only one of the barriers to EV ownership, upfront cost, uncertainty over servicing costs (battery replacement) and residuals and vehicle range also need to be addressed" [Individual, inside Greater Manchester, 35 - 64, male]

Charging Points

Of those who referenced charging points, the main theme was the number of charging points and whether the infrastructure was ready for an increase in demand:

• Availability and infrastructure (28%). Over 10% of the total sample commented that the availability of charging points will be crucial to the uptake of EVs. Some people voiced a specific concern about the number of additional charging points proposed, whilst others made a more general statement that availability of charging points is an important factor and that these need to be available and visible before EV purchases will increase.

"600 points throughout the Greater Manchester area seems somewhat inadequate for the proposed plans" [Business, inside Greater Manchester, Taxi]

"I think getting more people to buy / lease electric cars is really important, but generally getting people out of cars all together has the greatest co-benefits. If I were to buy a car in the next few years, I would prefer it to be an electric car, and the availability of charging points would have a big impact on this". [Individual, inside Greater Manchester, under 35, female]

"I used to own an electric car (Nissan Leaf) and had to get rid of it due to poor charging infrastructure. The charging points were usually blocked by petrol / diesel cars. Install more rapid chargers - for charge and go options. Also, you needed too many cards for different chargers - not all chargers accepted the Greater Manchester 'Charge your Car' card." [Individual, inside Greater Manchester, 35 - 64, female]

• Location of charging points (7%). The comments about location of points had two points of view. Firstly, overcoming issues for people with on-street parking only, and secondly, to avoid locations which would create additional congestion as people specifically chose to park in a location with a charging point even if their destination was not that specific location.

"In addition to a set number of charging points per head of population in residential areas, you also need to support those in terraced streets who wish to install their own electric charging points. This could include dedicated spaces for those who have installed outside their homes using kerb style charging points". [Individual, inside Greater Manchester, 35 - 64, male] "Drivers going to charging points, situated in locations that provide other services such as health centres or retail centres, solely to charge their vehicles would put enormous strain on the parking facilities for those wishing to utilise the primary function of the location". [Individual, inside Greater Manchester, 35 - 64, male]

• **Negative environmental impact:** A number of respondents were concerned about the negative environmental impacts of EVs (8%) and the source of the electricity (5%).

"The energy cost and pollution generated over the full life cycle (of an EV and battery) is significantly in excess of that from diesel - i.e. from build to disposal. If we encourage EVs all we do is move pollution impact of these vehicles. If everyone moves to electric cars then more power stations will be required". [Individual, inside Greater Manchester, unknown age and gender]

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